

**METROPOLITAN WASHINGTON
COUNCIL OF GOVERNMENTS**

**NATIONAL CAPITAL REGION
TRANSPORTATION PLANNING BOARD**

FY 2005

**UNIFIED PLANNING WORK PROGRAM
FOR TRANSPORTATION PLANNING
FOR THE
WASHINGTON METROPOLITAN REGION**

March 17, 2004

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1. INTRODUCTION

Purpose

The **FY 2005 Unified Planning Work Program (UPWP) for Transportation Planning for the Washington Metropolitan Region** incorporates in one document all federally assisted state, regional, and local transportation planning activities proposed to be undertaken in the region from July 1, 2004 through June 30, 2005. The UPWP provides a mechanism for the coordination of transportation planning activities in the region, and is required as a basis and condition for all federal funding assistance for transportation planning by the joint planning regulations of the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA).

This work program describes all transportation planning activities utilizing federal funding, including Title I Section 112 metropolitan planning funds, Title III Section 5303 metropolitan planning funds, and Federal Aviation Administration Continuing Airport System Planning (CASP) funds. It identifies state and local matching dollars for these federal planning programs, as well as other closely related planning projects utilizing state and local funds.

The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) and the Clean Air Act Amendments of 1990 (CAAA) created a number of planning requirements. On October 28, 1993, the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) issued final regulations regarding metropolitan planning.

The Transportation Equity Act for 21st Century (TEA-21), which became law on June 9, 1998, reaffirms the structure of the metropolitan planning process, and increases federal financial support for it. Most of the modifications to the process are aimed at streamlining and strengthening the provisions included in ISTEA in 1991. The National Capital Region Transportation Planning Board (TPB) has developed this work program to address the final regulations regarding metropolitan planning and the requirements in TEA-21.

On September 21, 1994, the TPB adopted the initial financially-constrained Long Range Transportation Plan for the National Capital Region (CLRP) as required by the final regulations. On September 30, 1996, FHWA and FTA issued a joint "Certification Review" of the TPB planning process and found that " the metropolitan planning process fully meets all the requirements of the October 28, 1993 Federal metropolitan planning regulations, 23 CFR Part 450, Subpart C." On July 15, 1998 the TPB approved the document: *1997 Update to the Financially Constrained Long Range Transportation Plan for the National Capital Region*, which summarizes the first three-year update to the 1994 plan. On January 19, 2000, FHWA and FTA presented their final Certification Report on the TPB planning process and found that " the metropolitan planning process fully meets all the requirements of the October 28, 1993 Federal

metropolitan planning regulations, 23 CFR Part 450, Subpart C." On October 18, 2000 the TPB approved the *2000 Financially Constrained Long Range Transportation Plan for the National Capital Region*, which is the second three-year update to the CLRP. On June 9, 2003, FHWA and FTA transmitted their final Certification Report on the TPB planning process which found that " the metropolitan planning process fully meets all the requirements of the October 28, 1993 Federal metropolitan planning regulations, 23 CFR Part 450, Subpart C." On December 17, 2003, the TPB approved the *2003 Financially Constrained Long Range Transportation Plan for the National Capital Region*, which is the third three-year update to the CLRP.

The Clean Air Act Amendments (CAAA) of 1990 require that the transportation actions and projects in the CLRP and Transportation Improvement Program (TIP) support the attainment of federal health standards for ozone. The CLRP and TIP have to meet specific requirements as specified by the Environmental Protection Agency (EPA) regulations issued on November 24, 1993, with amendments on August 15, 1997 and supplemental guidance on May 14, 1999, regarding criteria and procedures for determining air quality conformity of transportation plans, programs and projects funded or approved by the FHWA and FTA. These conformity requirements are also addressed in this document.

This document details the planning activities that must be accomplished to address the annual planning requirements such as preparing the TIP and a Congestion Management System. It describes the tasks required to meet the approval dates for the region's CLRP and the TIPs, and outlines the activities for the subsequent years.

This UPWP builds upon the previous UPWP, and is the result of close cooperation among the transportation agencies in the region. This UPWP was prepared with the involvement of these agencies, acting through the TPB, the TPB Technical Committee and its subcommittees.

Responsibilities for Transportation Planning

The National Capital Region Transportation Planning Board (TPB) is the organization responsible for conducting the continuing, cooperative, comprehensive (3-C) transportation planning process for the Washington metropolitan region in accordance with requirements of Section 134 (Title 23 U.S.C) of the Federal Highway Act of 1962, and Section 8 of the Federal Transit Act. The TPB is the official Metropolitan Planning Organization (MPO) for transportation planning for the Washington metropolitan region, designated by the Governors of Maryland and Virginia and the Mayor of the District of Columbia, under Section 134 of the Federal Aid Highway Act, and the Joint Planning regulations of FTA and FHWA.

The TPB is composed of representatives from the 19 cities and counties, including the District of Columbia, that are members of the Metropolitan Washington Council of Governments(COG), the City of Manassas, the St. Charles Urbanized Area of Charles

County, the two state and the District transportation agencies, the Washington Metropolitan Area Transit Authority (WMATA), the Metropolitan Washington Airports Authority (MWAA), four federal agencies, the General Assemblies of Maryland and Virginia, and private transportation service providers. When matters of particular importance are before the TPB, a special voting procedure may be invoked that weights the votes of local jurisdiction members according to population.

Figure 1 lists the organizations represented on the TPB and its Technical Committees, and Figure 2 shows the geographical location of each of the participating local jurisdictions. The TPB also serves as the transportation policy committee of COG. This relationship serves to insure that transportation planning is integrated with comprehensive metropolitan planning and development, and is responsive to the needs of the local governments in the area.

Policy coordination of regional highway, transit, bicycle, pedestrian and intermodal planning is the responsibility of the TPB. This coordinated planning is supported by the state transportation agencies (STAs), FTA, FHWA, and the member governments of COG. The TPB coordinates, reviews and approves work programs for all proposed federally assisted technical studies as part of the UPWP. The relationship among land use, environmental and transportation planning for the area is established through the continuing, coordinated land-use, environmental and transportation planning work programs of COG and TPB. Policy coordination of land use and transportation planning is the responsibility of COG, through its Metropolitan Development Policy Committee (MDPC) and the Transportation Planning Board. COG's regional land use cooperative forecasts are consistent with the adopted regional Long Range Transportation Plan.

The chairman of the TPB and the state transportation directors are members of the Metropolitan Washington Air Quality Committee (MWAQC), which was formed under the authority of the governors of Maryland and Virginia, and the mayor of the District of Columbia to recommend the region's air quality plans. These recommendations will be forwarded to the governors and mayor for inclusion in the State Implementation Plans (SIPs) they submit to EPA.

The roles and responsibilities involving the TPB, state and local government transportation agencies, and other MPOs for cooperatively carrying out transportation planning and programming in the Washington region have been established over several years. The responsibilities for the primary planning and programming activities are indicated in Figure 3. Two agreements involving the TPB and the Fredericksburg Area MPO in Virginia and Charles and Calvert Counties in Maryland are included in the Appendix.

Figure 1
ORGANIZATIONS REPRESENTED ON
THE TPB AND/OR ITS TECHNICAL COMMITTEES

VIRGINIA

Arlington County	Northern Virginia Planning District
Fairfax County	Commission
Loudoun County	Northern Virginia Transportation
Prince William County	Commission
City of Alexandria	Virginia Department of Transportation
City of Fairfax	Virginia Department of Rail and Public
City of Falls Church	Transportation
City of Manassas	Virginia Department of Aviation
City of Manassas Park	Virginia General Assembly
	Potomac and Rappahannock
	Transportation Commission

MARYLAND

Frederick County	City of Greenbelt
Montgomery County	City of Rockville
Prince George's County	City of Takoma Park
St. Charles Urbanized Area of Charles Co	The Maryland-National Capital Park and
City of Bowie	Planning Commission
City of College Park	Maryland Department of Transportation
City of Frederick	Maryland General Assembly
City of Gaithersburg	

DISTRICT OF COLUMBIA

D.C. Council
D.C. Department of Transportation
D.C. Office of Planning

REGIONAL, FEDERAL AND PRIVATE SECTOR

Washington Metropolitan Area Transit	National Capital Planning Commission
Authority	National Park Service
Metropolitan Washington Airports	Private Transportation Service Providers
Authority	
Federal Highway Administration	
Federal Transit Administration	

**Figure 2
Membership of the
National Capital Region
Transportation Planning Board**

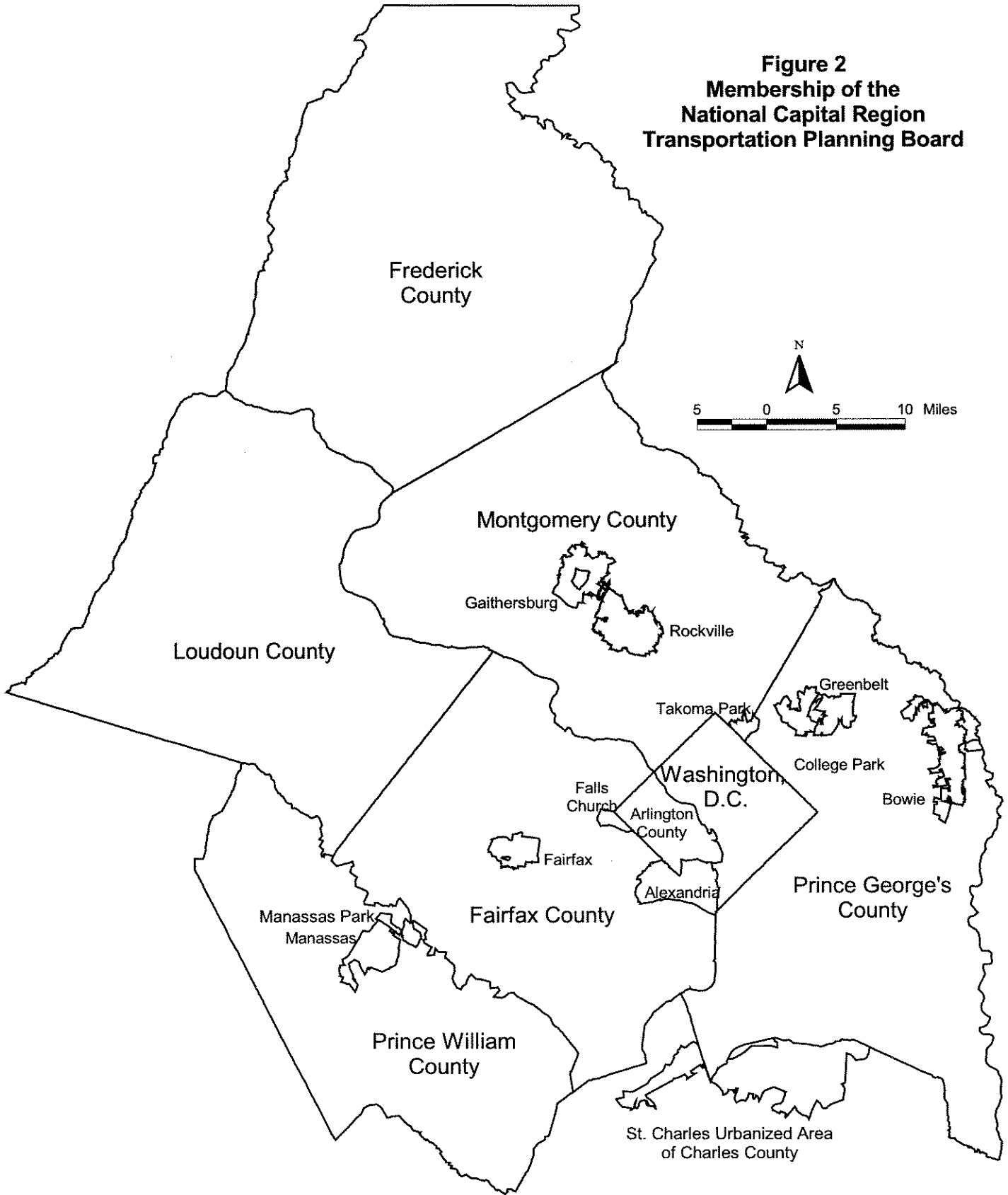


Figure 3

TRANSPORTATION PLANNING AND PROGRAMMING RESPONSIBILITIES

Responsibility	Agencies
UPWP Development	TPB, STAs, WMATA, Local Govts
CLRP Development	
LRP Inputs/Update	STAs, WMATA, Local Govts, NVTC/PRTC, MWA
Project Selection	TPB, STAs, WMATA, and Local Govts
Planning Certification	TPB, STAs
Air Quality Conformity	TPB, Fredericksburg Area MPO
Financial Plan	TPB, STAs, WMATA
Transportation/Land-Use Planning	TPB, MDPC, Local Govts
Public Involvement Process	TPB
TIP Development	
TIP Inputs	STAs, WMATA, Local Govts, NVTC/PRTC, MWA
Project Selection	TPB, STAs, WMATA
Planning Certification	TPB, STAs
Air Quality Conformity	TPB, Fredericksburg Area MPO
Financial Plan	TPB, STAs, WMATA, Local Govt., NVTC/PRTC
Transit Financial Capacity	TPB, WMATA, Local Govts
ADA Transit Planning	WMATA, Frederick County, TPB
Access to Jobs Planning	WMATA, human services agencies, TPB
Private Enterprise Participation	TPB, WMATA, Local Govts, NVTC/PRTC
Public Involvement Process	TPB
Congestion Management System	TPB, STAs, WMATA
Air Quality 2005 Attainment Plan	MWAQC, TPB, STAs WMATA, state AQ agencies
Corridor Studies	STAs, WMATA, TPB
Travel Demand Forecasting	TPB
Travel Monitoring	TPB, STAs, WMATA, Local Govts

The operators of publicly owned transit services are directly involved in all aspects of this regional planning and programming process. The Washington Metropolitan Area Transit Authority (WMATA) is a voting member on the TPB. To coordinate the various transit activities with the regional planning and programming, WMATA, the local transit operators, the commuter rail operators, and other transit agencies within the region are represented on the Technical Committee and its subcommittees.

During FY 2005, the regional planning priority will be to complete the Regional Mobility and Accessibility Study of integrated land use and transportation scenarios and to address the remaining challenges from the TPB vision. The TPB technical planning procedures will also continued to be strengthened to address the provisions of TEA-21. In addition to these activities directly involving the TPB, a number of corridor studies and other planning studies are underway throughout the region (see Figure 4).

Total Proposed Funding by Federal Source for FY 2005

Proposed federal funding for the transportation planning activities in this UPWP relies upon five sources: FTA Section 5303, FHWA Section 112, FAA Continuous Airport System Planning (CASP), FHWA State Planning and Research (SPR) and special federal funding. The proposed funding amounts (including state and local matching funds) for the TPB work program are shown in Table 1 on page 1-13.

Funding levels for this UPWP are slightly lower than those for FY 2005. The FY 2005 Basic Program funding level in Table 1 under the "FTA Section 5303" column has decreased about 5 percent from the FY 2004 level, and funding under the "FHWA Section 112" column has decreased about 3 percent from FY 2004. The total budget for the Basic Program is about 2.5 percent less than the FY 2004 total.

Figure 4
TRANSPORTATION AND AIR QUALITY PLANNING ACTIVITIES
WITHIN THE WASHINGTON METROPOLITAN AREA 2004

<u>Name</u>	<u>Primary Agencies</u>	<u>Schedule</u>	<u>Products</u>
Regional			
Regional Mobility and Accessibility Study	TPB	2005	Report
2004 Update of Long-Range Transportation Plan	TPB, state DOTs, WMATA, local govts.	2004	CLRP
Woodrow Wilson Bridge Congestion Management	VDOT, MDOT, DDOT WMATA, federal agencies local governments	on-going	Program
Regional Mobility Initiative	WMATA	2004	Plans
Strategic Alliances and Risk Assessment Study	WMATA	2004	Report
ITS Architecture Update	WMATA	2004	Report
Virginia			
I-66 Location/ Environmental Study	VDOT, VDRPT, local govts, regional and federal agencies	2005	NEPA Document
Capital Beltway EIS	VDOT, VDRPT	2004	NEPA Document
I-95/I-395/I-495 Interchange Congestion Management Program	VDOT, VDRPT, NOVA Counties, WMATA, PRTC, NVTC, TPB	on-going	Program
Tri-County Parkway	VDOT, Federal agencies Local Govts	2004	NEPA doc
US 1 Location Study	VDOT, Local Govts	2004	EA

Figure 4 **PLANNING ACTIVITIES 2004** (Continued)

<u>Name</u>	<u>Primary Agencies</u>	<u>Schedule & Products</u>	
Dulles Corridor Rail	WMATA	2004	EIS
Columbia Pike Alternatives Analysis	WMATA	2005	Report
Route 1-Richmond Highway Feasibility Study	WMATA	2004	Report
Maryland			
Capital Beltway Study	MDOT, VDOT, Montgomery Prince George's Counties	2005	DEIS
I-270 Multi-Modal Corridor Study (includes Corridor Cities Transitway)	MDOT, Montgomery & Frederick Counties	2005	FEIS
MD 210 Study	MDOT, Prince George's County	2004	FEIS
Bi-County Transitway Study (Bethesda to Silver Spring/ Silver Spring to New Carrollton)	MDOT/MTA	2006	AA/DEIS
Southern Maryland Mass Transportation Analysis	MDOT/MTA	2004	DEIS
MD 5/US 301 Corridor Transit Service Staging Plan	MDOT/MTA	2004	Report
Inter-County Connector Study	MDOT/SHA, Montgomery and Prince George's Counties	2005	FEIS

Figure 4 **PLANNING ACTIVITIES 2004** (Continued)

<u>Name</u>	<u>Primary Agencies</u>	<u>Schedule & Products</u>	
District of Columbia			
Anacostia Riverwalk Trail Demonstration Project	DDOT, FHWA,OP	2004	Demo Trail Construction
Theodore Roosevelt Memorial Bridge Study	DDOT/FHWA	2004	Report
14th Street Bridge Feasibility Study	FHWA, DDOT, VDOT	2004	EA
Metropolitan Branch Bicycle and Pedestrian Right-of-Way Study	DDOT	2004	Report
Alternative to Barney Circle Freeway/Anacostia Middle Crossing Study	DDOT	2004	Report
Baltimore/Washington MAGLEV Deployment	DDOT, MDOT	2004	EIS
Pennsylvania Avenue Traffic Mitigation Study/Downtown Congestion Study	DDOT	2004	Report
DC Multi-Corridor Alternatives Analysis	WMATA	2004`	Plan
Bicycle Plan Update	DDOT	2004	Plan
Transportation Vision Plan Update	DDOT	2004	Report
ITC/New York Avenue Study	DDOT	2004	Report

Figure 4 **PLANNING ACTIVITIES 2004 (Continued)**

<u>Name</u>	<u>Primary Agencies</u>	<u>Schedule & Products</u>	
L'Enfant Promenade Design Study	EFLHD-FHWA ,DDOT	2004	Report & EA
Tour Bus Study	NCPC/DDOT	2004	Report
Truck Freight Study	USDOT/DDOT	2004	Report
Assessment of Efficiency in Parking Pricing and Procedures	DDOT	2004	Report
Whitehurst Freeway/Theodore Roosevelt Bridge/M Street/Lower K Street Renewal and Environmental Study	DDOT	2004	Report
K Street Busway Study	WMATA	2004	Report
Neighborhood Transportation Planning Studies	DDOT	2004	Studies
Traffic Calming Studies	DDOT	2004	Reports
Streetscape Studies	DDOT	2004	Reports
Parking Studies	DDOT	2004	Reports

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TABLE 1
FY 2005 TPB PROPOSED FUNDING BY FEDERAL STATE AND LOCAL SOURCES
(July 1, 2004 to June 30, 2005)

	FTA SECT 5303 80% FED & 20% STA/ LOC	FHWA SECT 112 80% FED & 20% STA/ LOC	FAA CASP 90% FED & 10% LOC	TOTALS
ALLOTMENTS PROVIDED BY DDOT				
NEW FY 2005	393,700	1,217,600		1,611,300
UNOBLIGATED FY 2003	28,200	60,500		88,700
CARRYOVER FY 2004	18,891	58,555		77,446
SUBTOTAL	440,791	1,336,655		1,777,446
ALLOTMENTS PROVIDED BY MDOT				
NEW FY 2005	695,700	2,353,400		3,049,100
UNOBLIGATED FY 2003	53,900	125,700		179,600
CARRYOVER FY 2004	33,564	113,577		147,141
SUBTOTAL	783,164	2,592,677		3,228,700
ALLOTMENTS PROVIDED BY VDOT				
NEW FY 2005	596,100	1,776,200		2,372,300
UNOBLIGATED FY 2003	48,700	112,800		161,500
CARRYOVER FY 2004	37,096	148,317		185,413
SUBTOTAL	681,896	2,037,317		2,533,800
TPB BASIC PROGRAM				
TOTAL NEW FY 2005	1,685,500	5,347,200		7,032,700
TOTAL UNOBLIGATED FY 2003	130,800	299,000		429,800
SUBTOTAL	1,816,300	5,646,200		7,462,500
TOTAL CARRYOVER FY 2004	89,551	320,449		410,000
TOTAL BASIC PROGRAM	1,905,851	5,966,649		7,872,500
GRAND TOTAL	1,905,851	5,966,649	418,000	8,290,500

"New FY2005 funds" refer to newly authorized funds for the FY2005 UPWP

"Unobligated FY2003 funds" refer to unexpended funds from the completed FY2003 UPWP

"Carryover FY2004 funds" are programmed from the FY 2004 UPWP to complete specific work tasks in the FY2005 UPWP

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2. PROPOSED FY 2005 TPB WORK PROGRAM AND BUDGET

Program Structure and Work Item Budgets

The FY 2005 work Program comprises six major work activities and follows the same structure as the FY 2004 program. The tasks to be completed under each of the work activities are described in the following sections. The staff of the COG/TPB Department of Transportation Planning will carry out these activities, with the assistance of staff in other COG departments and supplementary consultant support.

The work program has been structured to clearly identify the specific work products to be developed, the linkages between them, and the TPB entity responsible for oversight of the products. The relationship and interactions of the six major work activities are shown in Figure 5 on page 2-3.

The first major activity, **Policy Products (I)** includes the preparation of the policy and planning products necessary for conducting an effective transportation planning process for the region. The UPWP, the transportation improvement program (TIP) and the financially-constrained long-range plan (CLRP) are also required by federal law and regulations. As shown in the figure, the CLRP also includes specific activities such as the regional congestion management system (CMS), regional management, operations and emergency preparedness, the financial plan and the bicycle and pedestrian program. Public participation applies to all of the policy products. Access to Jobs planning addresses the TEA-21 requirement for regional coordination of non-emergency transportation services and job access planning.

The second major activity, **Technical Products (II)** includes forecasting applications such as air quality conformity and regional studies to provide the substantive inputs for the policy products. As shown in the figure, **Methods (III)**, such as the development of networks and travel demand models, interact with **Data (IV)**, which provides empirical travel information from congestion monitoring and survey and analysis activities. Both products and methods activities provide input for the technical products.

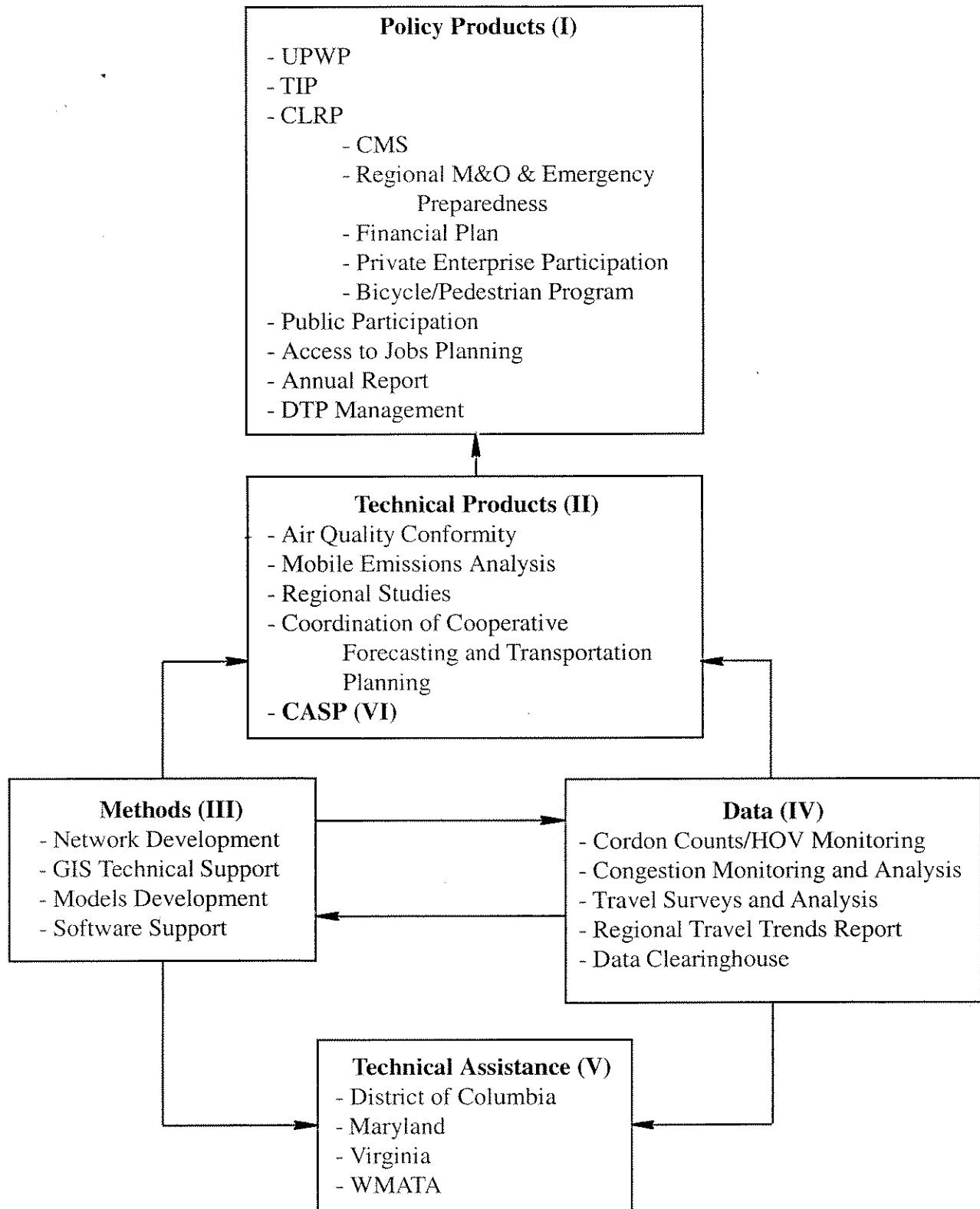
The **Technical Assistance (V)** activity responds to requests for applying methods and data from state and local governments and transit operating agencies. **Continuous Airport System Planning (CASP) (VI)** is a technical product that also utilizes the methods and data work activities for airport and airport-serving facilities in the region.

The proposed budget levels by funding source, which include FTA and FHWA funds together with state and local match, are shown in Table 2 on page 2-5. The TPB committee or subcommittee responsible for the specific work activities listed in Table 2 are shown in Figure 6 on page 2-7. A detailed breakdown of staffing and other budgetary requirements is provided in Table 3 on page 2-6.

Funding for the TPB Basic Work Program is lower than the FY 2004 level, and the FY 2005 UPWP continues the work activities in the FY 2004 UPWP. The structure and content of this work program are summarized as follows:

- **Under Category I (Plans, Programs and Coordination)**, all of the activities have been conducted on an annual basis in previous years.
- **Under Category II (Forecasting Applications)**, activities relating to Air Quality Conformity (item II.A), Mobile Emissions Analysis (item II.B), and Coordination of Cooperative Forecasting and Transportation Planning (item II.D) have been conducted on an annual basis in previous years. Regional Studies (item II.C), is an activity in response to the TPB action on November 15, 2000.
- **Under Category III (Development of Networks/Models)**, all of the activities have been conducted on an annual basis in previous years.
- **Under Category IV (Travel Monitoring)**, all of the activities have been conducted on an annual basis in previous years.
- **Category V relating to Technical Assistance and Continuous Airport System Planning (CASP)** represent the continuation of activities that are conducted each year.

Figure 5
How FY2005 UPWP Work Items are Related



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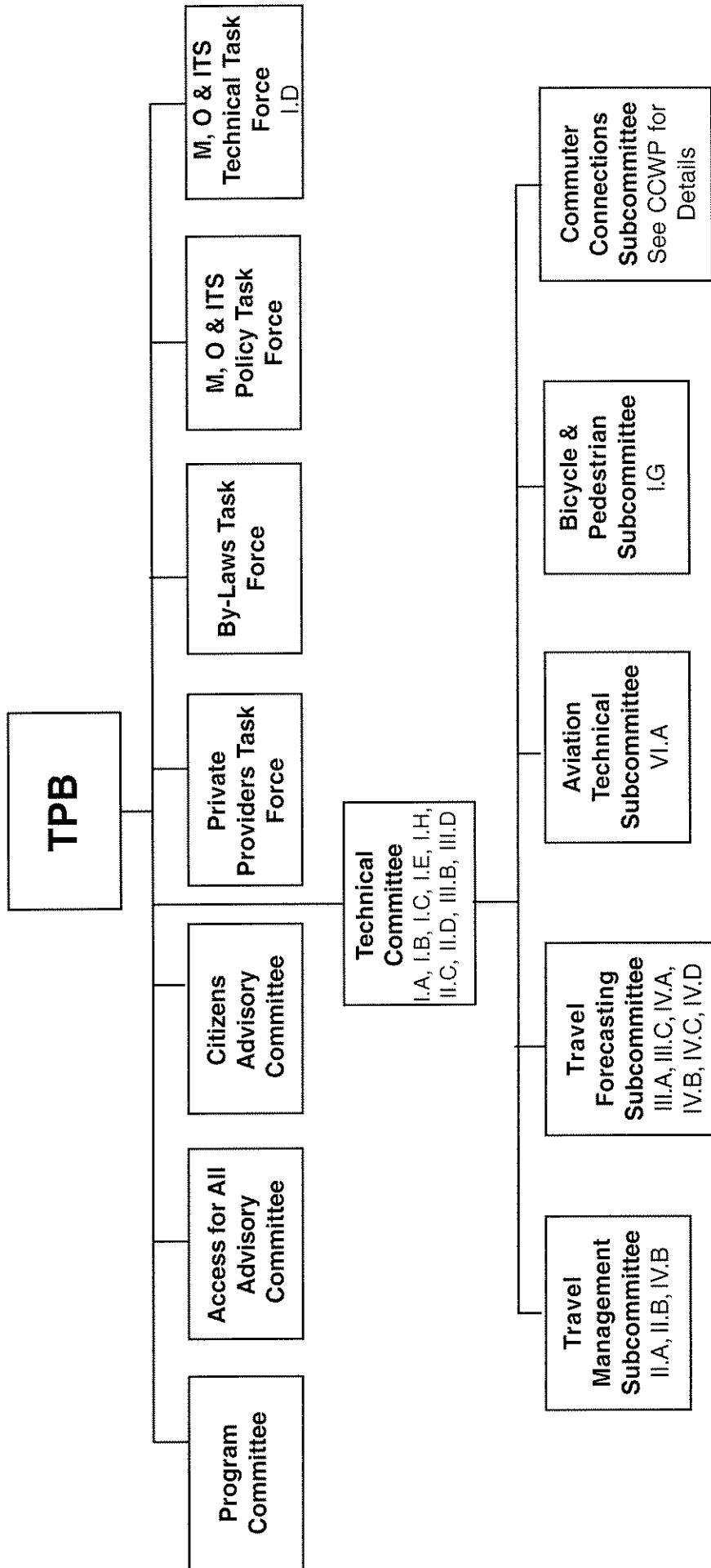
TABLE 2
TPB FY 2005 WORK PROGRAM BY FUNDING SOURCES

WORK ACTIVITY	TOTAL COST	FTA/STATE/ LOCAL	FHWA/STATE/ LOCAL	OTHER FUND
I. PLANS, PROGRAMS AND COORDINATION				
A. Unified Planning Work Program (UPWP)	67,100	16,331	50,769	
B. Transp Improvement Program (TIP)	143,800	35,000	108,800	
C. Constrained Long-Range Plan	384,500	93,584	290,916	
D. Operations, Coordination/Emergency Preparedness	344,000	83,726	260,274	
E. Financial Plan	51,600	12,559	39,041	
F. Private Enterprise Participation	17,400	17,400		
G. Bicycle and Pedestrian Program	61,200	14,895	46,305	
H. Access to Jobs Planning	50,300	12,243	38,057	
I. Public Participation	169,100	41,157	127,943	
J. Annual Report	76,000	18,498	57,502	
K. DTP Management	426,300	103,757	322,543	
Subtotal	1,791,300	449,150	1,342,150	
II. FORECASTING APPLICATIONS				
A. Air Quality Conformity	296,500	72,165	224,335	
B. Mobile Emissions Analysis	394,300	95,969	298,331	
C. Regional Studies	598,700	145,718	452,982	
D. Coord Coop Forecasting & Transp Planning	166,300	40,476	125,824	
Subtotal	1,455,800	354,328	1,101,472	
III. DEVELOPMENT OF NETWORKS/MODELS				
A. Network Development	619,000	150,659	468,341	
B. GIS Technical Support	438,700	106,775	331,925	
C. Models Development	636,700	154,967	481,733	
D. Software Support	100,600	24,485	76,115	
Subtotal	1,795,000	436,886	1,358,114	
IV. TRAVEL MONITORING				
A. Cordon Counts	362,300	88,180	274,120	
B. Congestion Monitoring and Analysis	351,000	85,430	265,570	
C. Travel Surveys and Analysis				
Household Travel Survey	515,100	125,370	389,730	
2000 Census Journey to Work Analysis	244,600	59,533	185,067	
Regional Travel Trends Report	142,500	34,683	107,817	
D. Regional Trans Data Clearinghouse	60,700	14,774	45,926	
Subtotal	1,676,200	407,971	1,268,229	
Core Program Total (I to IV)	6,718,300	1,648,334	5,069,966	
V. TECHNICAL ASSISTANCE				
A. District of Columbia	217,500	26,183	191,317	
B. Maryland	411,600	49,549	362,051	
C. Virginia	390,300	46,985	343,315	
D. WMATA	134,800	134,800		
Subtotal	1,154,200	257,517	896,683	
Total, Basic Program	7,872,500	1,905,851	5,966,649	
VI. CONTINUOUS AIRPORT SYSTEM PLANNING - CASP				
A. 2004 Regional Air Passenger Survey	215,000	-	-	215,000
B. Ground Access Update Element	203,000	-	-	203,000
Subtotal	418,000	-	-	418,000
GRAND TOTAL	8,290,500	1,905,851	5,966,649	418,000

TABLE 3

WORK ACTIVITY	DIRECT SALARIES DTP STAFF	DIRECT SALARIES OTHER COG STAFF	M & A 27%	LEAVE BENEFITS 18%	FRINGE BENEFITS 16%	INDIRECT COSTS 42%	DATA & PC COSTS	CONSULTANT	DIRECT COSTS	TOTAL
I. PLANS, PROGRAMS AND COORDINATION										
A. Unified Planning Work Program	25,518	206	6,946	5,881	6,168	18,782	100	0	3,500	67,100
B. Transportation Improvement Program	52,276	2,859	14,886	12,604	13,220	40,255	200	0	7,500	143,800
C. Constrained Long-Range Plan	135,045	17,741	41,252	34,927	36,634	111,551	1,250	0	6,100	384,500
D. Operation, Coordination/Emergency Preparedness	125,749	12,716	37,386	31,653	33,201	101,096	150	0	2,050	344,000
E. Financial Plan	19,491	1,311	5,617	4,755	4,988	15,188	100	0	150	51,600
F. Private Enterprise Participation	6,803	206	1,892	1,602	1,680	5,117	100	0	0	17,400
G. Bicycle and Pedestrian Program	23,803	544	6,574	5,566	5,838	17,776	100	0	1,000	61,200
H. Access to Jobs Planning	1,877	18,500	5,502	4,658	4,886	14,877	0	0	0	50,300
I. Public Participation	49,394	920	13,585	11,502	12,064	36,735	100	30,000	14,800	169,100
J. Annual Report	20,559	0	5,551	4,700	4,930	15,011	100	0	25,150	76,000
K. DTP Management	77,867	15,631	25,245	21,374	22,419	68,265	0	0	195,500	426,300
Subtotal	538,382	70,633	164,434	139,221	146,027	444,653	2,200	30,000	255,750	1,791,300
II. FORECASTING APPLICATIONS										
A. Air Quality Conformity	87,446	21,171	29,327	24,830	26,044	79,303	15,080	0	13,300	296,500
B. Mobile Emissions Analysis	120,069	20,797	38,034	32,202	33,776	102,849	11,730	20,000	14,843	394,300
C. Regional Studies	205,513	25,000	62,239	52,695	55,271	168,302	15,080	12,000	2,600	598,700
D. Coord Coop Forecasting and Transp Plng	39,852	25,289	17,588	14,891	15,619	47,561	5,500	0	0	166,300
Subtotal	452,880	92,257	147,187	124,618	130,711	398,014	47,390	32,000	30,743	1,455,800
III. DEVELOPMENT OF NETWORKS/MODELS										
A. Network Development	241,782	0	65,281	55,271	57,973	176,529	19,163	0	3,000	619,000
B. GIS Technical Support	148,471	0	40,087	33,940	35,600	108,401	49,500	0	22,700	438,700
C. Models Development	234,884	0	63,419	53,694	56,319	171,493	25,491	25,000	6,400	636,700
D. Software Support	37,103	0	10,018	8,482	8,896	27,090	4,747	0	4,264	100,600
Subtotal	662,240	0	178,805	151,388	158,789	483,513	98,901	25,000	36,364	1,795,000
IV. TRAVEL MONITORING										
A. Cordon Counts	91,381	0	24,673	20,890	21,911	66,719	10,000	0	126,727	362,300
B. Congestion Monitoring and Analysis	106,792	0	28,834	24,413	25,606	77,971	15,935	50,000	21,450	351,000
C. Travel Surveys and Analysis	189,589	0	51,189	43,340	45,459	138,423	37,000	0	57,200	562,200
D. Regional Trans Data Clearinghouse	16,285	0	4,397	3,723	3,905	11,890	15,500	0	5,000	60,700
Subtotal	404,047	0	109,093	92,365	96,881	295,002	78,435	50,000	210,377	1,336,200
Core Program Total (I to IV)	2,057,549	162,890	599,519	507,592	532,408	1,621,182	226,926	137,000	533,234	6,378,300
V. TECHNICAL ASSISTANCE										
A. District of Columbia	86,166	0	23,265	19,698	20,661	62,911	2,500	0	2,300	217,500
B. Maryland	164,311	0	44,364	37,561	39,398	119,966	5,296	0	704	411,600
C. Virginia	75,791	0	20,464	17,326	18,173	55,336	2,000	65,000	66,210	320,300
D. WMATA	13,338	0	3,601	3,049	3,198	9,738	0	101,675	200	134,800
Subtotal	339,606	0	91,694	77,634	81,429	247,952	9,796	166,675	69,414	1,084,200
BASIC PROGRAM TOTAL	2,397,155	162,890	691,212	585,226	613,837	1,869,135	236,722	303,675	602,648	7,462,500

Figure 6
**TPB Committee Structure
 and FY2005 Work Activity Oversight**



Name
 Work Activities as
 Designated in the
 FY2005 UPWP

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I. PLANS, PROGRAMS AND COORDINATION

A. THE UNIFIED PLANNING WORK PROGRAM (UPWP)

The Unified Planning Work Program (UPWP) for the Metropolitan Washington Region describes all transportation planning activities utilizing federal funding, including Title I Section 134 metropolitan planning funds, Title III Section 8 metropolitan planning funds, and Federal Aviation Administration Continuing Airport System Planning (CASP) funds. The UPWP identifies state and local matching dollars for these federal planning programs, as well as other closely related planning projects utilizing state and local funds.

The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) and the Clean Air Act Amendments of 1990 (CAAA) created a number of new planning requirements. On October 28, 1993, the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) issued final regulations regarding metropolitan planning. The Transportation Equity Act for the 21st Century (TEA-21), which became law on June 9, 1998, streamlined and strengthened the planning process. The final regulations regarding metropolitan planning and the new requirements in TEA-21 are addressed in this document. In 1994, the TPB developed and adopted the first financially-constrained Long Range Transportation Plan for the National Capital Region (CLRP) as required by the final regulations. The documentation of the first three-year update in 1997 of the CLRP was approved by the TPB in 1998, the second update was approved in October 2000, and the third update was approved in December 2003.

The Environmental Protection Agency (EPA) issued on November 24, 1993, with amendments on August 15, 1997, May 14, 1999 and June 14, 1999, regulations regarding criteria and procedures for determining air quality conformity of transportation plans, programs and projects funded or approved by the FHWA and FTA. These conformity requirements are also addressed in this document. Under these regulations, the State Implementation Plans (SIP) for improving air quality for the region must be adopted by the states and submitted to EPA by specified dates.

The FY 2005 UPWP defined by this document details the planning activities to be accomplished between July 2004 and June 2005 to address the annual planning requirements such as preparing the Transportation Improvement Program, addressing federal environmental justice requirements, and assessing Air Quality Conformity. It describes the tasks required to meet approval dates for the region's SIPs, and outlines the activities for the subsequent years.

In addition, this document describes the integration of program activities and responsibilities of the TPB Technical Committee and its subcommittees for various aspects of the work program. It provides an overview of the regional planning priorities and describes the major transportation planning and air quality planning studies being conducted throughout the region over the next two years. It also describes the planning

roles, responsibilities and procedures, as required by the final regulations, involving the TPB and the states, the publicly owned operators of mass transit services, the state air quality agencies, and another MPO to the south of the Washington metropolitan region.

During FY 2005 certain amendments may be necessary to reflect changes in planning priorities and inclusion of new planning projects. Under this task, Department of Transportation Planning (DTP) staff will identify and detail such amendments for consideration by the TPB as appropriate during the year.

In the second half of FY 2005, staff will prepare the FY 2006 UPWP. The document will incorporate suggestions from the federal funding agencies, state transportation agencies, transit operating agencies, local governments participating in TPB, and the public through the TPB's public involvement process. The new UPWP will be presented in outline to the TPB Technical Committee and the TPB in January 2005, as a draft to the Technical Committee in February 2005 and as a final document for adoption by the Technical Committee and the TPB in March 2005. The approved UPWP will be printed, distributed to the TPB, and made available to the public.

This task will also include the preparation of monthly progress reports for each of the state agencies administering the planning funding, and the preparation of all necessary federal grant submission materials.

Oversight:	Technical Committee
Cost Estimate:	\$67,100
Products:	UPWP for FY 2006, amendments to FY 2005 UPWP, monthly progress reports and state invoice information, federal grant materials
Schedule:	Draft: February 2005 Final: March 2005

B. THE TRANSPORTATION IMPROVEMENT PROGRAM (TIP)

As required under the final planning regulations, the Transportation Improvement Program (TIP) for the Metropolitan Washington Area is a six year program of highway, transit, bicycle and pedestrian, congestion mitigation/air quality, safety and transportation enhancement projects. The TIP is updated each year and must be approved by the TPB and the governors of Maryland and Virginia and the mayor of the District of Columbia. The TIP is required as a condition for all federal funding assistance for transportation improvements within the Washington Metropolitan Statistical Area.

The new TIP will include all projects to be carried out within two 3-year periods, beginning with FY 2006-08 and then followed by FY 2009-11. Projects for funding and implementation in the first year of the program are placed in the annual element.

TIP documentation will describe major projects from the previous TIP that were implemented and identify significant delays in the implementation of major projects. The air quality conformity report will describe progress in implementing transportation emission reduction measures (TERMs) required for improving air quality.

Citizens, affected public agencies, representatives of transportation agency employees, private providers of transportation, freight shippers, users of public transit, and all other interested parties will be given an opportunity to review and comment on the proposed TIP as described under the TPB's adopted public involvement process. To facilitate public review, the TIP and CLRP inputs and project descriptions will be accessible electronically through the Internet. The database application for TIP project data, CLRP projects, and air quality conformity data will continue to be improved to facilitate reviewing the TIP and CLRP information. Interactive means of sharing the information in the TIP and CLRP such as querying capabilities and specialized maps or graphs will be available.

The TIP Schedule and Project Selection

The FY 2005-10 TIP is scheduled to be adopted by the TPB in July 2004. In December 2004, TPB will issue a solicitation document requesting project or action input for the new TIP. Draft versions of the TIP will be prepared for review by the TPB Technical Committee, the TPB, and the public between May and July. These versions will be prepared with the assistance of and in cooperation with the transportation implementing agencies in the region, including the state departments of transportation, the District of Columbia Department of Transportation, the National Park Service, the Washington Metropolitan Area Transit Authority (WMATA) and other public transit operators, and local government agencies.

The TPB will select in consultation with the states all transit, highway, congestion mitigation/air quality, and safety and enhancement projects (excluding those on the National Highway System (NHS) or the Bridge and Interstate Maintenance programs) undertaken within the Washington Transportation Management Area (TMA). The states will select in cooperation with the TPB all projects on the NHS or funded under the Bridge and Interstate Maintenance programs undertaken within the Washington TMA.

Projects included in the TIP will be reviewed for consistency with the policies and facilities delineated in the adopted financially-constrained Long Range Transportation Plan (CLRP) for the region. Only projects, or phases of projects, that have full funding anticipated to be available within the time period contemplated for completion are included in the TIP. As described under Task I.F, a financial plan will be prepared to demonstrate how the TIP can be implemented, and indicate the sources of public, private and innovative funding.

During the year certain amendments may be needed in the FY 2005-10 TIP to reflect changes in priorities or the introduction of new project elements. Such amendments will

be identified and detailed for consideration by the TPB as appropriate during the fiscal year.

Annual Listing of TIP Projects that Have Federal Funding Obligated

TEA-21 requires that the TPB must publish or otherwise make available an annual listing of projects, consistent with the categories in the TIP, for which federal funds have been obligated in the preceding year. With the assistance of and in cooperation with the transportation implementing agencies in the region, TPB will prepare a listing of projects for which federal funds have been obligated in FY 2004.

Oversight:	Technical Committee
Cost Estimate:	\$143,800
Products:	Draft FY 2006-11 TIP, amendments to FY 2005-10 TIP; TIP projects with obligated federal funding in preceding year
Schedule:	Final TIP Draft for Public Comment: June 2005 TIP projects with obligated federal funding in preceding year: June 2005

C. CONSTRAINED LONG-RANGE TRANSPORTATION PLAN (CLRP)

In September 1994, the TPB adopted the initial financially-constrained Long-Range Transportation Plan (CLRP) for the National Capital Region for the year 2020. The CLRP, which under the final planning regulations must be updated at least every three years, also is updated annually (sometimes more frequently) with amendments. These amendments adjust the phasing or other aspects of some of the projects or actions in the plan, include new projects with identified new funding sources, or change specific projects as new information on them became available.

In July 1997, the TPB approved the second three-year update of the plan which was documented in a comprehensive report: *1997 Update to the Financially Constrained Long Range Transportation Plan for the National Capital Region*. In October 2000, the TPB approved the third three-year update of the plan. In December 2003, the TPB approved the third three-year update of the plan.

The 2004 Update of the CLRP

The Transportation Vision, which was adopted by the TPB in October 1998, contains a vision statement, long-range goals, objectives, and strategies to guide transportation planning and implementation in the region. It addresses the seven new planning factors in TEA-21. The Vision is the TPB Policy Element of the 2004 update of the

CLRP.

In January 2004, TPB issued a solicitation document requesting project or action input for 2004 update of the CLRP. Draft versions of the CLRP will be prepared for review by the TPB Technical Committee, the TPB, and the public between May and July. The TPB is scheduled to adopt the 2004 CLRP in July 2004. In January 2005, TPB will issue a solicitation document requesting project or action input for 2005 CLRP. Draft versions of the CLRP will be prepared for review by the TPB Technical Committee, the TPB, and the public between May and July 2005.

Documentation of the 2004 CLRP

The 2004 CLRP will be documented. It will describe how the plan addresses the TPB Vision goals, objectives and strategies. It will describe the relationship of the transportation strategies and improvements and the development framework as depicted in the regional activity centers map. It will present a regional job accessibility analysis and describe the impacts on low-income and minority populations. It will also present the forecasted travel demand and transportation system performance impacts.

To facilitate public access to the new document, it will be placed on the TPB web page. In addition, the project descriptions with informative maps and graphics from the plan will be accessible through the Internet.

The Congestion Management System Element

The Congestion Management System (CMS) is an integral part of the transportation planning process in the region and is an element of the CLRP. The CMS element of the CLRP provides information on transportation system performance, usage, and efficiency, and provides information on the potential impact of proposed strategies to alleviate congestion. In October 1997, as required by federal regulations, the CMS for the Washington metropolitan area was fully operational. In FY98, a CMS component was added to the CLRP and TIP project submission forms to document that serious consideration has been given to strategies that provide the most efficient and effective use of existing and future transportation facilities, including alternatives to highway capacity increases for single-occupant vehicles (SOVs).

In FY2001, the CMS element of the CLRP document was updated with current information on congestion management strategies that have been considered or implemented. In FY2005, the CMS element will be updated with current information on the transportation system's performance. Regional travel trends will be described to depict changes in travel patterns and key indicators over time. This travel trend information will be based upon the transportation system conditions and travel data developed under work item IV.B. Congestion Monitoring and Analysis. Improvements to the congestion management system documentation process and submission forms for

the CLRP and TIP will be undertaken on as appropriate.

To ensure coordination and compatibility between the CLRP and other long-range transportation planning activities throughout the region, senior staff will participate in relevant state-level long-range planning and CMS activities and studies.

Oversight:	Technical Committee; Travel Management Subcommittee (CMS element)
Cost Estimate:	\$384,500
Products:	Documentation of 2004 CLRP and draft 2005 CLRP amendments; maps and related materials accessible to the public via the Internet.
Schedule:	2004 documentation December 2004 draft 2005 CLRP amendments June 2005

D. TRANSPORTATION OPERATIONS COORDINATION AND EMERGENCY PREPAREDNESS PLANNING

Management, operations, and emergency preparedness considerations are key elements in the overall design of the region's transportation systems, and must be reflected in the metropolitan transportation planning process. The federal TEA-21 legislation included a planning factor that requires statewide and regional transportation plans to "Promote efficient system management and operation". Topics for regional "management and operations" (M&O) planning include traffic safety and flow, coordination between highway and transit operations, coordination among public safety and transportation agencies, traffic signalization, and planning for non-recurring special events, severe weather, or major disasters or emergencies.

Under this work task, TPB will provide opportunities for coordination and collaborative enhancement of transportation technology and operations in the region, advised by its Management, Operations, and Intelligent Transportation Systems (MOITS) Policy and Technical Task Forces. Major topics to be addressed include the following:

- *Traffic Signals:* Assist member agencies in the exchange and coordination of inter- jurisdictional traffic signal operations information and activities.
- *Traveler Information:* Coordinate enhancement of the collection, processing, and delivery of real-time roadway and transit condition information, including potential regional "511" telephone information systems.
- *Safety:* Examine safety issues in relationship to MOITS.

- *ITS Architecture:* Update the regional ITS architecture in accordance with federal law and regulations; help provide coordination of the use of the regional ITS architecture as guidance to regional MOITS project implementation.
- *Performance Measure Development:* Continue development and refinement of performance measures, costs, benefits, and evaluation information for a MOITS orientation for regional transportation planning.
- *Member Agency Activities:* Work as needed with the MOITS activities of the state and D.C. departments of transportation, the Washington Metropolitan Area Transit Authority, and other member agencies.
- *National issues:* Monitor national emerging MOITS activities for potential application in the region.
- *Emergency Transportation Coordination Planning:* Continue efforts to facilitate the improvement of communications (both technical and procedural aspects) for coordination of decision making in emergencies among the region's transportation operating agencies and other key entities; address potential MOITS activities in regional emergencies.

Oversight:	TPB MOITS Policy and Technical Task Forces
Cost Estimate:	\$344,000
Products:	Agendas, minutes, summaries, outreach materials as needed; white paper(s) on technical issues as needed; revised regional ITS architecture; review and advice to MOITS planning activities around the region
Schedule:	Monthly

E. FINANCIAL PLAN

As required under federal planning regulations, both the TIP and the financially-constrained long-range transportation plan (CLRP) for the Washington region must have a financial plan that demonstrates how they can be implemented and show the sources of funding expected to be made available to carry them out. During FY 2004, financial plans for the FY2005-10 TIP and the 2004 CLRP were prepared.

The Transportation Improvement Program

The preparation of the financial plan for the FY 2006-2011 TIP will be similar to that for the FY 2005-10 plan. Since TEA-21 funding is apportioned to states, financial summaries for all TIP projects from agencies in the District of Columbia, Maryland and Virginia as well as WMATA and other transit agencies will be prepared. All projects submitted by these agencies will be grouped by the proposed TEA-21 program funding categories under Surface Transportation (Title I) and Transit (Title III).

The funds programmed in the TIP for each state by TEA-21 program category will be compared with the information provided by the states and transit operators on the estimated available Federal and State funds for the program period. The regional TIP financial plan will be based upon the information that the states use to develop each of the state TIPs. Only projects for which construction and operating funds can reasonably be expected to be available will be included. In the case of new funding sources, strategies for ensuring their availability will be identified by the implementing agency and included in the financial plan for the TIP. The product will be a financial plan that addresses the six-year period of the TIP, and it will be incorporated as a main section of the TIP for review by the public and approval by the Technical Committee and the TPB.

The financial plan will also respond to FTA Circular 7008.1, which requires that the TIP include a determination of the financial capacity of FTA grantees to meet public transportation operating costs and capital requirements. There are two aspects to financial capacity: the general *financial condition* of the public transportation operating enterprise and its non-federal funding entities; and the *financial capability* of the agency and its funding entities, which includes the sufficiency of their funding sources to meet future operating deficits and capital costs.

2005 Amendments to the Constrained Long Range Plan

During FY 2003, an extensive financial analysis for the three-year update of the CLRP was prepared, including new revenue projections, revised cost estimates for system maintenance and rehabilitation, and cost estimates for the new system expansion projects. All cost and revenue estimates were through 2030. During FY 2005, the financial plan will be updated for any 2005 amendments to the CLRP.

Oversight:	Technical Committee
Cost Estimate:	\$51,600
Products:	Financial plan for 2005 CLRP amendments Financial plan for the FY 2006-2011 TIP
Schedule:	June 2005

F. PRIVATE ENTERPRISE PARTICIPATION

In June 1987, the TPB adopted its Private Enterprise Participation Policy and Procedures designed to afford maximum opportunity to private providers to participate in the development and provision of mass transportation services in the region. In April 1994, the Federal Transit Administration (FTA) rescinded its private participation guidance and changed the federal requirements regarding private enterprise participation. During FY95, the TPB reviewed its policy and revised it in light of the new requirements. Under this task, DTP staff will conduct the activities as specified in the policy adopted on July 19, 1995 by the TPB.

The following activities are anticipated:

1. The procedures for involving private transportation providers in urban mass transportation and the activities accomplished will be documented as a section of the Transportation Improvement Program (TIP).
2. To facilitate early consultation, COG will conduct an annual forum for key transit staff from the local jurisdictions and WMATA to meet with interested private providers to discuss in general terms their plans for major bus service changes and expansions.
3. Private transit providers will be afforded the opportunity to present their views on the CLRP, the TIP, and the Unified Planning Work Program while these documents are in a draft stage.
4. Support will be provided to the Private Providers Task Force. This group will be the vehicle through which the above tasks are accomplished, and will advise the TPB of the private provider perspective on transit service through its chairman, who is a non-voting member of the TPB. Minutes will be prepared for Task Force meetings, as well as other documentation as required.
5. Through their representation on the TPB, private transit and taxicab providers will be encouraged to contribute to the shaping of policies and strategies for the CLRP that promote effective, competitive provision of transit services, particularly in growing suburban areas and activity centers. This contribution will be reflected in the minutes and mailouts for TPB meetings, and in documentation prepared by the Private Providers Task Force.

Oversight: Transportation Planning Board

Cost Estimate: \$17,400

Product: Documentation on Private Provider Involvement
Schedule: Annual Transit Forum - May 2005
Draft in TIP for Public Comment - June 2005

G. BICYCLE AND PEDESTRIAN PROGRAM

This program will emphasize activities that ensure the integration of bicycle and pedestrian needs and bicycle planning in the overall regional planning and programming processes. This will be done with the advice of the Bicycle and Pedestrian Subcommittee and the oversight of the TPB Technical Committee.

Based upon a review of the regional bicycle plan, a list of bicycle and pedestrian improvements or projects will be recommended as priorities for inclusion in the region's Transportation Improvement Program (TIP) for FY2006-2011. Information (including updates, corrections, or amendments as necessary) will also be maintained on the bicycle and pedestrian projects in the region's financially Constrained Long-Range Plan (CLRP) and in the Priorities 2000 reports. These reports, developed with a federal grant under the Transportation and Community and System Preservation (TCSP) Pilot Program describe greenway and circulation system projects, many of which are bicycle and pedestrian related.

Information on regionally significant bicycle and pedestrian improvements which are included in a local plan, both funded and unfunded, will be made available in the form of an on-line, queryable database. This database will help answer questions of all kinds concerning planned bicycle and pedestrian projects, both for policymakers and the general public.

A one-day TPB workshop will be conducted to address issues of concern to bicycle and/or pedestrian planners and engineers in the region.

The implementation of the adopted bicycle-related transportation emissions reduction measures (TERMs) will be monitored and reviewed, and the Subcommittee will advise on their progress to the TPB Technical Committee and other subcommittees as necessary. The adopted bicycle-related TERMS include M-70a (providing bicycle parking at key points around the region) and M-70b (outreach to employers to provide bicycle commuting information to their employees). Advice on any new or additional bicycle-related TERMS will be provided as necessary.

Staff will continue to compile bicycle and pedestrian activity data from a variety of sources including COG's cordon count program, the COG Household Travel Survey, the upcoming 2000 Census results, and spot counts from member jurisdictions.

Currently, bicycle routing information to commuter park-and-ride lots is available on the Commuter Connections web page. An implementation plan and budget for an on-line

bicycle routing capability, which would be based on the GIS data on bicycle facilities already gathered from the member jurisdictions will be developed for possible operation by the Commuter Connections program. Bicycle routing capability would provide the public with recommended bicycle routes based on bicycle level of service data, a service similar to that provided for motorists by Mapquest.

Coordinate the third campaign of "Street Smart," which is scheduled to be held in spring 2005. This regional public outreach effort is designed to promote bicycle and pedestrian safety through a comprehensive program of radio and other media activities.

Oversight: Bicycle and Pedestrian Subcommittee

Cost Estimate: \$61,200

Product: Bicycle and pedestrian project submissions from the regional bicycle plan for the FY 2006-20011 TIP. Update of regional bicycle and pedestrian plan and on-line database of regionally significant bicycle and pedestrian projects.

Schedule: December 2004 and June 2005

H. ACCESS TO JOBS PLANNING

The Transportation Equity Act for the 21st Century (TEA-21) encourages MPOs to coordinate the design and delivery of non-emergency transportation services provided by non-U.S. DOT agencies and nonprofit organizations. It also established two discretionary grant programs, Job Access and Reverse Commute. The U.S. DOT Job Access and Reverse Commute programs will complement several ongoing federal initiatives to promote enhanced Welfare-to-Work opportunities. Under these two grant programs, the U.S. DOT will make grants to assist qualified entities in financing eligible projects for transportation capital and operating costs, promotion of transit use by welfare recipients, and subsidies for reverse commute programs and services. In urbanized areas with a population of at least 200,000 population, such as the Washington metropolitan area, qualified entities will be selected among applicants by the MPO.

Although Job Access and Reverse Commute grants may not be used for planning or coordination activities, qualified entities must demonstrate that appropriate coordination has taken place in the preparation of applications, which includes a coordinated public transit-human services transportation planning process involving the MPO.

COG Department of Human Services, Planning and Public Safety (HSPPS) staff will assist TPB staff in providing technical support for the TPB's coordination of non-emergency transportation services and job access planning responsibilities, including

providing technical assistance and input on job access and reverse commute programs approved for funding by U.S. DOT and operating in the Washington metropolitan area.

HSPPS staff will coordinate with the TPB Access For All Advisory Committee to involve leaders of low- income, minority and disabled community groups in the coordination and planning of workforce development and job access activities. In FY 2005, staff will update the regional public transit-human services job access plan developed in FY 2004.

Oversight:	Technical Committee
Cost Estimate:	\$50,300
Products:	Update of the regional public transit-human services job access plan
Schedule:	June 2005

I. PUBLIC PARTICIPATION

Background

TEA-21 requires participation by interested parties in the development of the CLRP and the TIP. Citizens, freight shippers, public transit users, affected public agencies, representatives of transportation agency employees, private providers of transportation, and other interested persons must be given a reasonable notice of and opportunity to comment on the development of both the CLRP and the TIP. During FY93, the TPB changed its bylaws to foster greater public involvement in several ways, including establishing the TPB Citizens' Advisory Committee (CAC) for interested citizens and public groups. The TPB News, a monthly newsletter, was inaugurated to inform as wide a group as possible of the activities of the TPB and CAC. Currently, over 2,500 persons are on the mailing list.

On September 21, 1994, in response to the final planning requirements issued on October 28, 1993, the TPB adopted a proactive public involvement process incorporating its current involvement activities and adding new ones. This policy has eleven general requirements and criteria and eight specific activities.

Since 1994 a number of public involvement activities have been carried out, including the regular TPB-related ones, the special activities in conjunction with the vision planning process, the outreach efforts associated with major investment studies (MISs), the activities associated with the state transportation plans, a citizen advisory committee in Northern Virginia, and other citizen input to local governments and other agencies. In FY98, a two-stage evaluation of the region's extensive experience with public participation activities was initiated. In the first stage, a consultant documented

the activities that have been in use throughout the region and reviewed the experience with such efforts elsewhere across the country. The consultant also interviewed decision-makers and stakeholder representatives to elicit strengths and weaknesses of the public participation techniques that have been used and to obtain suggestions for improving them.

In early FY99, the consultant completed the report: *Assessment of Public Involvement in Transportation Planning for the Washington Metropolitan Region*, and presented it to the TPB in October 1998. The report contained a comprehensive set of findings regarding public involvement activities in the region and recommended several improvements and changes. The TPB Bylaws Task Force reviewed the findings and recommendations of the report and developed suggested changes to the TPB public involvement process for consideration by the Board in spring 1999. Following extensive discussion and public input, the TPB on October 20, 1999 adopted a set of revisions to the process.

FY 2005 Activities

Staff will support the TPB public involvement process and conduct the activities as specified in it. The appointed 15-member Citizens Advisory Committee will hold at least six of its 11 meetings outside of the COG offices. Staff will assist the CAC chair in preparing meeting agenda, assembling, and mailing meeting materials and preparing the CAC chair's report to the TPB. The CAC chair will also provide to the TPB an evaluation of the CAC activities by the end of November each calendar year for the first three years, and every three years thereafter. Staff will support the CAC and conduct the eight activities as specified in the adopted involvement process.

All public involvement efforts will be coordinated with the public outreach activities for all 2005 CLRP amendments and the new TIP. To obtain input from groups not traditionally involved in the regional planning process, enhanced outreach activities such as meetings and forums with goods and freight interests and stakeholder organization leaders will be conducted to obtain a wide a range of input for the planning process.

Working with staff of the state DOTs and the District of Columbia, staff will coordinate the TPB public involvement process with the state public involvement processes wherever possible to enhance public consideration of the issues, plans, and programs and reduce redundancies and costs.

TPB Access for All Advisory Committee

In 2000, under a Title VI and Environmental Justice Challenge Grant, an advisory committee to the TPB was established to involve recognized leaders of low-income, minority and disabled community groups. The mission of the committee is to identify projects, programs, services and issues that are important to these communities and are in need of improvement. The structure and purpose of the advisory committee was

modeled after successful advisory committees established in 1999 to guide the TPB's Transportation and Community Systems Preservation (TCSP) Grant on Greenways and Circulation Systems.

On November 15, 2000, the TPB appointed Vice Chair, Peter Shapiro to chair the Access for All Advisory (AFA) Committee. The committee involves other TPB members and implementing agencies, including the Washington Metropolitan Area Transit Authority (WMATA), the Virginia Department of Transportation (VDOT), the Maryland Department of Transportation (MDOT), and the District of Columbia Department of Transportation (DDOT). During 2001, The committee held several meetings and discussed various programs and issues. It developed a 2001 report with recommended near-term projects for funding by the transportation agencies to consider in the next TIP. The report also identified longer-term issues for further discussion. The report was presented to the TPB in February 2002. In early 2003, TPB appointed Mayor Kathy Porter as chair. In FY 2005, staff will be responsible for organizing and staffing the advisory committee, conducting research on issues, and writing a 2004 report on priority projects, programs, services and issues.

Oversight:	Transportation Planning Board
Cost Estimate:	\$169,100
Products:	A proactive public involvement process that provides complete information, timely public notice, full public access to key decisions, and supports early and continuing involvement of the public in developing plans and TIPs; and the monthly TPB News. Access for All report on projects, programs, services and issues important to low-income, minority and disabled communities. December 2004
Schedule:	On-going activity with forums and meetings linked to schedules for new TIP preparation and 2005 CLRP

J. TPB ANNUAL REPORT

Each year, DTP staff prepares a Transportation Special Report (*The Region*). This year's report will cover the main activities completed in 2004 and the 2004 CLRP. About 4,000 copies of the report will be printed and distributed around the end of FY 2005.

Oversight: Transportation Planning Board
Cost Estimate: \$76,000
Product: *Region* magazine
Schedule: June 2005

K. DTP MANAGEMENT

This activity includes all department-wide management activities not attributable to specific project tasks in the DTP work program. Examples include the following:

1. Supervision of the preparation, negotiation, and approval of the annual work program and budget, involving the State Transportation Agencies, the Technical Committee, the Program Committee, and the TPB.
2. Day-to-day monitoring of all work program activities and expenditures by task.
3. Day-to-day management and allocation of all staff and financial resources to insure that tasks are completed on schedule and within budget.
4. Preparation for and participation in regular meetings of the TPB, the Program Committee, the Technical Committee, and the State Technical Working Group.
5. Attendance at meetings of other agencies whose programs and activities relate to and impact the TPB work program, such as local government departments.
6. Response to periodic requests from TPB members, federal agencies, Congressional offices, media, and others for information or data of a general transportation nature.
7. Review of transportation proposals of regional importance submitted to COG/TPB through the intergovernmental review process. Where significant regional impacts are likely, staff will obtain Technical Committee and Board review and approval of comments prepared.

In addition to salaries, nominal amounts are earmarked for travel related to non project specific meetings attended by the senior staff, data processing for financial monitoring and analysis, and conferences such as FTA and FHWA seminars on federal regulations and financial management. These activities represent three to four percent of the total amount allocated for DTP Management.

Oversight: Transportation Planning Board

Cost Estimate: \$426,300

Products: Materials for the meetings of the TPB, the Program Committee, the Technical Committee, and the State Technical Working Group; responses to information requests from elected officials, federal agencies and media; and participation in external meetings related to TPB work program.

Schedule: Ongoing throughout the year

II. FORECASTING APPLICATIONS

A. AIR QUALITY CONFORMITY

This work area is designed to ensure that TPB plans, programs and projects meet air quality requirements. The 1990 Clean Air Act Amendments require the performance of detailed technical analysis at the systems level to assess conformity of transportation plans and programs. Procedures and definitions for conducting the analysis, originally issued as EPA regulations in the November 24, 1993 FEDERAL REGISTER, were amended and issued in the August 15, 1997 FEDERAL REGISTER; additional federal guidance was also published at various times since then by the EPA, FHWA and FTA.

A work program to analyze the 2004 constrained long range plan and the FY 2005-10 TIP for air quality conformity consistent with these regulations has now been drafted for review and comment. The current schedule for adoption of the updated plan and TIP calls for most of the work activities to be performed in FY2004, with the final report, response to comments and adoption in July 2004. Subsequent major activities in FY2005 will include development and execution of a work program for the conformity assessment of the 2005 CLRP and FY2006-11 TIP.

In addition, in 2004 EPA is expected to complete its nonattainment designations (geographic area and severity classification) for '8 hour' ozone and 'particulate matter 2.5 microns or less' (PM2.5) categories. Eight hour ozone designations are expected in April and PM2.5 designations are expected in December 2004, with effective dates occurring within 60 days of each designation. The Washington area is expected to be designated as nonattainment for both pollutants. If this does occur, the TPB will have 12 months to demonstrate conformity of its plans and programs according to forthcoming requirements associated with each pollutant, or otherwise face a conformity lapse. While specific work activities cannot be described until EPA establishes conformity criteria for each pollutant, this work element is being planned to address such technical and consultation activities.

TPB procedures to address interagency and public consultation requirements, also originally specified in the November 1993 regulations, were formally adopted by the Board initially in September 1994. The current version of the consultation procedures, amended to reflect additional requirements in the August 15, 1997 regulations, was adopted by the TPB in May 1998. These procedures address preparation of the annual UPWP and TIP and any updates to the regional plan or programs. The procedures involve timely announcement of upcoming TPB activities relating to conformity and distribution of relevant material for consultation purposes.

The FY 2005 air quality conformity work program will include the following tasks.

1. Complete conformity analysis of the 2004 constrained long range plan and the

FY 2005-10 TIP, including addressing any emissions mitigation measures, finalizing a draft report to document procedures and results and to address comments and testimony received, and documenting and organizing all data files for use in subsequent regional and corridor / subarea planning studies.

2. Execute technical and consultation activities to meet conformity requirements associated with 8 hour ozone and PM2.5 nonattainment designations.
3. Execute TPB interagency and public consultation procedures; this includes funding for review and coordination work on the part of COG/DEP staff to reflect MWAQC's involvement in the public and interagency consultation process.
4. Prepare and execute a work program for analysis of the 2005 constrained long range plan and the FY 2006-11 TIP, using updated project inputs, planning assumptions, travel demand models, software, and emissions factor model, as each update is incorporated into the transportation and air quality planning process; prepare a draft report on the conformity assessment.
5. Coordinate project solicitation, documentation, and emissions reduction analysis associated with CMAQ projects.
6. Perform incidental air quality conformity reviews (non-systems level), as required throughout the year.

Oversight:	Technical Committee and Travel Management Subcommittee, in consultation with MWAQC committees
Cost Estimate:	\$296,500
Products:	Final report on Air Quality Conformity Determination of 2004 CLRP and FY 2005-10 TIP, including assessment with respect to the 8 hour ozone standard and PM2.5 standard; Draft report on Air Quality Conformity Assessment of 2005 CLRP and FY 2006-11 TIP
Schedule:	June 2005

B. MOBILE EMISSIONS ANALYSIS

FY2004 work activities included the preparation of required elements of a state air quality implementation plan (SIP) to meet severe area requirements for ozone, using EPA's Mobile6 emissions factor model and TPB's Version 2.1 travel demand model and other updated data sets and planning assumptions. These work activities will produce updated mobile source emissions budgets and transportation emissions reduction measure (TERM) analyses in the course of meeting attainment requirements by the year 2005.

In FY2005 work activities will shift to address new (forthcoming) EPA nonattainment designations and requirements for 8 hour ozone and particulate matter 2.5 microns or less (PM2.5) standards. The mobile source emissions inventory development process will be similar to that conducted previously, e.g., application of TPB's travel demand estimates and EPA's Mobile6 emissions factor model, but will now address additional pollutants and precursors. FY2005 work activities will continue to address TERM analyses and research into development of refined data inputs to the Mobile6 model. The work program will include the following tasks:

1. Using MOBILE6, with consultant assistance as needed, (1) review and update as needed mobile source emissions inventories for use in analysis of attainment of the 8 hour ozone standard and PM2.5 standard, and (2) develop emissions factors for use in CLRP/TIP air quality conformity analysis, likely 2005, 2015, 2025 and 2030 forecast years, and other years to be determined according to the region's forthcoming nonattainment designations.
2. Analyze new transportation emissions reduction measures, as well as examine previous proposals, and evaluate their effectiveness and cost-effectiveness in reducing emissions
3. Participate in state and MWAQC technical and policy discussions, public forums and hearings.

For the above work elements, in conjunction with DTP staff and in consultation with the TPB, provide funding to COG's Department of Environmental Programs for the following activities: (1) provision of data, progress reports and written reports in response to TPB requests relating to air quality work activities; (2) provision of timely updates to the TPB and its committees on the status of emissions and emissions reduction research / implementation strategies associated with all emissions source categories; and (3) provision of assistance and review to TPB in development of emissions factors required for mobile source emissions inventories associated with air quality conformity and SIP planning.

- Continue research activities (as needed) to explore the possibilities: (1) of obtaining vehicle registration data in categories more closely aligned to the vehicle categories used in Mobile6, (2) of obtaining odometer data, along with vehicle identifier code and gross vehicle weight rating data, from the air

management agencies in order to develop refined VMT data by vehicle weight class for the Washington region, and (3) implementing a Washington regional emissions trading program for transportation.

- Provide support to Commuter Connections staff in developing implementation plans for adopted, as well as future, TERMS adopted by the TPB.
- Address VMT tracking requirements as per Clean Air Act requirements.

Oversight:	Technical Committee and Travel Management Subcommittee, in consultation with MWAQC committees
Cost Estimate:	\$394,300
Products:	Mobile source emissions inventories to meet 8 hour ozone and PM2.5 requirements; report on TERM evaluation; comparison of estimated and observed VMT results.
Schedule:	June 2005

C. REGIONAL STUDIES

Regional Mobility and Accessibility Study

In FY2005, under the direction of the TPB, and with technical insight and guidance from a Joint Technical Working Group composed of members from the TPB Technical Committee, the Planning Directors' Technical Advisory Committee and the MWAQC Technical Advisory Committee, staff will analyze alternative transportation and land use scenarios specified for the Regional Mobility and Accessibility Study. Staff will complete the modeling of the travel demand and air quality impacts of specified alternative transportation and land use scenarios will be modeled using the Version 2.1 travel demand forecasting model and the Mobile 6 air quality model.

Once the travel demand and air quality impacts of the alternatives have been modeled, measures of effectiveness approved by the TPB will be used to evaluate the travel demand effects, land use, environmental and other impacts of the alternative scenarios. Based on the modeling and the evaluation of the alternative scenarios, up to two "composite scenarios" will be defined, further analyzed and evaluated.

Staff will prepare a draft report and coordinate the review of this draft report by all citizens advisory, technical, and policy committees participating in this study. After

review of the draft report by all relevant policy and technical committees, staff will present a draft final report and all comments received to the TPB.

Oversight:	Technical Committee, Joint Technical Working Group
Estimated Cost:	\$598,700
Products:	Improving Mobility and Accessibility Study Report
Schedule:	June 2005

D. COORDINATION OF COOPERATIVE FORECASTING AND TRANSPORTATION PLANNING PROCESSES

In FY2005, staff will continue to work with COG's Cooperative Forecasting Subcommittee and Planning Directors Technical Advisory Committee to update and refine COG's Cooperative Forecasts of future land activity. Staff will work with these committees to ensure that regional transportation system assumptions are explicitly considered in the development of these updated land activity forecasts. Staff will update and maintain Cooperative Forecasting land activity databases that are used as input into COG/TPB travel demand forecasting models. This work will include development of Round 7 population, household and employment forecasts for both COG member and non-member jurisdictions in the expanded cordon area and preparation of Cooperative Forecasting land activity data files for the 2191 Transportation Analysis Zone (TAZ) system.

Staff will work with the Cooperative Forecasting Subcommittee and the Planning Directors Technical Advisory Committee to assess the effects of significant TIP and CLRP changes on future land activity forecasts as part of the process to update COG's Cooperative Forecasts. Staff will also work with these committees to document key land use and transportation assumptions used in developing the Round 7 Cooperative Forecasts and responding to public comments on these forecasts.

Oversight:	TPB Technical Committee, Planning Directors Technical Advisory Committee.
Estimated Cost:	\$166,300
Products:	Update and maintenance of Cooperative

Forecasting Land Activity Data Files,
Documentation of key cooperative forecasting
land-use and transportation assumptions.

Schedule: May 2005

III. DEVELOPMENT OF NETWORKS AND MODELS

A. NETWORK DEVELOPMENT

During FY2004, a series of transit and highway networks were developed for an expanded cordon to meet the time-of-day requirements of the Version 2.1 travel demand models supporting the air quality conformity analysis of the TIP and CLRP. COG's GIS, ARC/INFO, was employed to link together a series of attributes needed to create networks in TP+ for the modeling process. Use was made of ARC/INFO to graphically depict these networks, thereby facilitating the development effort. To support the TIP and CLRP Conformity process, several networks were developed for 2005, 2015, 2025, and 2030.

FY2005 efforts will focus on the development of TP+ highway and transit networks on the expanded cordon using information gathered electronically and/or in paper format. This process will make use of available information in COG's GIS and the Data Clearinghouse to facilitate development of networks in Version 2.1 model format supporting 1) air quality conformity analysis and 2) scenario testing as part of TPB regional studies.

Activities in FY2005 will begin with the compilation of the latest available transit route and schedule information (from the above sources) in the peak and off-peak formats required for the Version 2.1 travel demand model. All traffic count data will be converted to AWDT format for use in highway networks required for these models. A set of TP+ networks for highway and transit will be coded from this information depicting current year conditions.

Using these networks as a starting point, a series of FY2006-2011 TIP and Plan Conformity networks will be developed for the following analysis years: 2005, 2015, 2025, and 2030, and other years to be determined by the requirements of the new eight-hour air quality standard. Tasks involved are as follows:

- receive and organize project inputs to the FY2006-2011 TIP and amended CLRP;
- code, edit, and finalize networks for highway, HOV, and transit;
- develop transit fare matrices consistent with these networks.

Finally, documentation and training in the development of these highway and transit networks will be provided.

Oversight:	Travel Forecasting Subcommittee
Cost Estimate:	\$619,000

Products: Series of updated transportation networks by mode, including technical training and documentation

Schedule: June 2005

B. GIS TECHNICAL SUPPORT

In FY2005, staff will continue to provide on-going data maintenance and technical support to staff using the COG/TPB GIS for the development and display of data used in various TPB planning activities, including, the TIP and CLRP, the Bicycle Program, Cooperative Forecasting, Regional Studies, Network and Models Development, Congestion Monitoring and Analysis, and the Regional Transportation Data Clearinghouse.

Staff will continue to enhance the methodology for seamless editing of regional highway and transit networks and provide ongoing maintenance of existing GIS network editing tools. New GIS applications will also be developed to facilitate the edit checking and analysis of highway, transit and HOV networks and travel demand forecasts. Staff will also add new land use and transportation databases to the COG/TPB GIS as these new databases become available.

Staff will provide GIS training on the use of GIS software applications and databases for transportation planning to COG/TPB and local agency staff. In addition to technical support and training activities, staff will also provide on-line and other access to COG/TPB GIS metadata, databases, and applications for state and local transportation planners. Staff will update COG/TPB GIS user documentation and training materials, as required.

Because GIS has become a key component of local, regional, and state transportation planning activities, staff will continue to coordinate its GIS efforts with state DOTs, WMATA, and the local governments through quarterly meetings of COG's GIS Committee and other activities. Staff will also work with local and state agency staff to facilitate GIS data sharing via the Internet.

Staff will also continue to maintain and update COG/TPB GIS hardware and software as required. This will include upgrades to ArcGIS and Oracle software and additional GIS hardware to accommodate greater use of GIS by COG/TPB and local agency staff.

Oversight: Technical Committee

Estimated Cost: \$438,700

Products: Updated GIS software, databases, User documentation, Training materials, Report on FY 2005 GIS activities

C. MODELS DEVELOPMENT

During FY2004, the Transportation Research Board (TRB) Committee reviewing the TPB travel demand modeling process completed a report which made recommendations for improvements in several areas. Examples of these were to take measures to improve Root Mean Square Error (RSME), incorporate bus speeds in transit networks as a function of highway congestion, improve the speed feedback process, review the use of adjustment factors in an effort to reduce their use, and to begin development of an explicit forecasting model for commercial vehicle trips. The TRB Committee also expressed a view that more effort was needed to improve model validation in the area of transit ridership forecasting.

In response to these recommendations, TPB staff undertook to implement several changes in FY2004. These included beginning the migration of transit sub-models to the new TP+ software platform, beginning a sampling plan for collection of truck and commercial vehicle trip data, implementing a methodology to estimate bus speeds as a function of highway speeds in transit network coding, improving the speed feedback of the Version 2.1 model to ensure that speeds employed in mode choice modeling were consistent with speeds employed in other steps of the modeling process, and incorporating refinements to the emissions post-processor. These updated modeling procedures incrementally advance the practice of travel demand modeling in the Washington region, consistent with the TPB Travel Forecasting Subcommittee's policy adopted in 1998. Additionally, TPB staff obtained FTA's SUMMIT software package employed in evaluation of transit environmental impact studies to better understand how the software responds to various components of the travel demand forecasting procedures.

The FY2005 effort in Models Development will focus on the following tasks:

- Completing the migration of the transit sub-models to the TP+ software platform;
- Beginning a longer term upgrade of transit modeling by starting work on a nested logit mode choice model, updating fare matrix procedures, and examining ways to better model and constrain the demand for transit park-n-ride facilities;
- Completing a design for sampling truck and commercial vehicle traffic counts, to be followed in coming years by the development of new truck and commercial vehicle forecasting models;
- Continuing to seek ways to reduce the use of adjustment factors in the

modeling process;

- Continuing the effort to maintain consistent treatment of speeds in all steps of the modeling process, including both the mode choice model and the emissions post-processor;
- Begin efforts to develop a framework for tour-based and/or activity-based models in the future;
- Continuing to gain familiarity with the SUMMIT software package employed by the FTA in reviewing transit environmental impact studies;
- Continuing the development of a more formal airport access demand model; and
- Participation on a national MPO panel being established to recommend practices in travel demand modeling.

Staff will continue to review best practice in travel demand modeling through participation in the Travel Model Improvement Program (TMIP), Transportation Research Board, and literature reviews. Staff will provide documentation and applicable training for all products from the models development program.

Oversight:	Travel Forecasting Subcommittee
Cost Estimate:	\$636,700
Products	Recommendations for continued updating of the travel demand modeling process, documentation of all activities
Schedule:	June 2005

D. SOFTWARE SUPPORT

This work element supports the maintenance of the COG/TPB microcomputer-based travel demand forecasting model set as used in applications work and maintenance of the mobile source emissions factor model as used in air quality conformity and state implementation plan (SIP) work. Development and testing of revisions and upgrades to software currently in use and the testing of new software and data storage, retrieval and transfer systems for possible adoption are included in work done under this element. Training of DTP staff in use of models and adopted systems is also included in this element.

Staff monitors the development of microcomputer hardware and other microcomputer-based transportation software as well as data storage, retrieval and transfer systems and evaluates such software and systems through in-house testing on a demonstration basis or through acquisition as warranted.

Oversight:	TPB Technical Committee
Cost Estimate:	\$100,600
Products:	Operational travel forecasting model set (current model set plus new software selected/installed in FY 2005). Operational emissions factor model. Operational data storage and retrieval systems. Operational data transfer systems to serve inside and outside users.
Schedule:	June, 2005

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IV. TRAVEL MONITORING

A. CORDON COUNTS

During FY2004, data collection was conducted in the Spring for a report to be prepared in FY2005 entitled, "2004 Performance of Regional High-Occupancy Vehicle Facilities on Interstate Highways in the Washington Region: An Analysis of Passenger and Vehicle Volumes." Also during FY2004, data collection was completed in the Summer for the External Truck Origin / Destination Survey. Documentation of this survey was completed at the close of FY2004. The multi-year schedule of activities for the Cordon Count program is shown in the accompanying figure. The schedule of activities in most instances involves processing of data and report writing during the first half of a fiscal year for data collected in the second half of the preceding fiscal year, followed by data collection for another activity in the second half of the new fiscal year. This schedule of activities reflects the consensus of the TPB Technical Committee during its review of the travel monitoring program in FY2000.

In the fall of FY2005, staff will prepare a technical report documenting the performance of regional high-occupancy vehicle facilities in the Washington region, as measured in the spring of FY2004. The task includes merging of all data collected in spring 2004, summarizing the data for documentation, and preparation of a report.

In spring of 2005, staff will collect truck and commercial vehicle classification count data as developed in a sampling plan specified as part of FY2004 models development activities. Data obtained in this project is to serve as the starting point for developing a synthetic origin – destination pattern of internal truck and commercial vehicle travel by weight group, in lieu of a major new internal truck and commercial vehicle survey. The latter was last attempted in 1996, and, consistent with experience around the country, fell short of meeting the needs of developing an observed truck origin – destination travel pattern, suitable for the updating of medium and heavy truck forecasting models or for creating a commercial vehicle forecasting model recommended by the TRB Committee reviewing the TPB travel demand modeling process and the joint TPB / MWAQC Mobile 6 Task Force. It is envisioned that the approach taken to estimate a synthetic origin – destination pattern from these truck counts will be similar to efforts conducted in other metropolitan areas employing this technique. The synthetic pattern will be developed in FY2006 using the count data obtained from this project in FY2005.

Oversight: Travel Forecasting Subcommittee

Cost Estimate: \$362,300

**Figure 7
Cordon Count/HOV Monitoring Schedule**

Activity	FY 2004 (prior year)	FY 2005	FY 2006
External Truck Origin/Destination Survey - Data Collection - Technical Memorandum	█		
Regional HOV Monitoring - Data Collection - Report	█	█	
Truck Counts - Data Collection - Report		█	█
Metro Core Cordon Count - Data Collection - Report			█

Congestion Monitoring Schedule

Activity	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010
Freeway peak period congestion		█			█		
Freeway off-peak congestion			█				
Arterial highway congestion	Yr 2 of 3	Yr 3 of 3	Yr 1 of 3	Yr 2 of 3	Yr 3 of 3	Yr 1 of 3	Yr 2 of 3

Note: Freeway off-peak congestion monitoring will be changed to a 5 year interval for the next round and start in FY 2006.
 Freeways: Data collection in Spring; report preparation and review in Summer/Fall of next fiscal year.
 Arterials: Data collection in Fall/Winter; report preparation and review in Winter/Spring of same fiscal year.

Products: Report on the Regional HOV Monitoring Project;
Truck and Commercial Vehicle Classification Count Data

Schedule: report – Spring 2005; data files – June 2005

B. CONGESTION MONITORING AND ANALYSIS

During fiscal years FY 2000 through FY 2002, staff completed one cycle of arterial highway congestion monitoring on 363 miles of arterial highways. In FY 2003 and FY 2004, the second cycle of data collection and analysis was completed on two thirds of the routes. In FY 2005 staff will revisit the routes studied in FY 2002 and complete the final year of the second cycle of data collection. Staff will report on the findings of the FY 2005 survey and will compare the second cycle of data with the first cycle and report on the changes to the routes studied over time.

For the limited access highways in the region we perform an aerial survey to study the performance of the system during the peak period. Congestion observed during the peak periods on a regular basis, i.e., excluding that caused by incidents, is called recurring congestion. The first such survey was conducted in Spring 1992 and has been repeated every three years (1996, 1999, 1999, and 2002). The data provided by these surveys are used to identify the location and extent of freeway congestion and are reported as part of the Congestion Management System (CMS). This performance assessment of the region's freeway system will be repeated during Spring 2005. Staff will develop a request for proposal and a consultant will be selected to perform the aerial survey during Spring 2005. Data collection and analysis will be completed in FY 2005. The final report will be completed in FY 2006.

Total Cost: \$ 351,000

Oversight:: Travel Forecasting Subcommittee

Products: Arterial Travel Time Report
Data files of traffic densities (to be analyzed in FY 2006)

Schedule: June 2005.

C. TRAVEL SURVEYS AND ANALYSIS

1. Household Travel Survey

In FY 2005, staff will continue to provide data files, user documentation and technical support to the users of COG/TPB travel survey databases. This work will include special tabulations from these travel survey databases to support other COG/TPB transportation planning activities and update of user documentation as required.

Staff will complete the design of a large-sample methodologically enhanced activity based regional household travel survey. Methodological enhancements to be considered in this design include: (1) development of a GIS-based housing unit sample frame that would enable selection of survey households by land use area type, (2) development of a multi-modal data collection survey methodology that permits household recruitment and diary retrieval by mail, telephone, Internet and in-person contacts, (3) a GPS vehicle tracking add-on sub-sample, and (4) a follow-up survey of non-responding households and household members.

Data collection for significant pretest of this methodologically enhanced activity-based regional household survey will begin in the spring of 2005 using the FY 2004 carryover funding. If additional funding for this effort can also be identified, data collection for a full-blown large sample household travel survey will also begin.

Estimated Cost:	\$175,100 FY 2005 funds, \$340,00 FY 2004 funds
Oversight:	Travel Forecasting Subcommittee
Products:	Regional Household Travel Survey Design
Schedule:	December 2004

2. Census Journey to Work Analysis

In FY 2005 staff will tabulate and analyze Census Transportation Planning Package (CTPP) worker flow data collected in the 2000 Census by small area Transportation Analysis Zones (TAZs). These tabulations will analyze TAZ to TAZ worker flows by commuting mode, income, and vehicle availability and travel time. Staff will also prepare technical report summarizing major findings of the CTPP 2000 Journey to Work analysis.

Staff will also develop trip conversion factors to convert the CTPP 2000 journey-to-work worker flow data into daily Home-Based-Work (HBW) "commuting" trips at the TAZ level in a format consistent with that used by COG/TPB travel demand forecasting models. These trip conversion factors will be applied to the CTPP 2000 data and a TAZ-level database for the travel model refinement and validation efforts will be built. Staff will

also use the analysis of the CTPP 2000 data to suggest refinements to the current COG/TPB 2191-TAZ-area system.

Oversight:	Travel Forecasting Subcommittee
Estimated Cost:	\$244,600
Products:	Technical Memoranda and Report
Schedule:	June 2005

3. Regional Travel Trends Report

In FY 2005, staff will prepare a policy report summarizing changing travel trends and commuting patterns in the region. This report will analyze COG/TPB travel data collected in FY 2004 and prior fiscal years. Travel data in the Regional Transportation Data Clearinghouse, Cordon Count reports, Travel Surveys, and Freeway Aerial Surveillance studies and other existing COG/TPB data sources will be used in preparing this report. The report will also analyze regional demographic and economic changes in the region and attempt to explain how these changes are influencing current travel trends in the region. This will be a policy level summary report that will be directed to informing the TPB and other policy officials on how travel trends in the region are changing and offering some explanation of why these trends are changing.

Oversight:	TPB Technical Committee
Estimated Cost:	\$142,500
Products:	Policy Report
Schedule:	June 2005

D. REGIONAL TRANSPORTATION DATA CLEARINGHOUSE

Efficient access to a comprehensive data set on observed and forecast vehicular and passenger movements on the region's transportation system is vitally important for transportation planning, air quality analysis, models development, congestion management and project evaluations.

Staff will continue and expand formal arrangements with local, state, WMATA, and other regional agencies to transfer data to and from the Regional Data Clearinghouse. Staff will also update Clearinghouse databases with FY 2003-FY 2004 highway and transit, as they become available. Additionally, staff will add transportation-related 2000

Census data to the Clearinghouse by TAZ. Staff will also continue to develop the data infrastructure necessary to incorporate ITS data into the Clearinghouse and refine procedures for filling gaps where current data might not be available. Staff will also update the Regional Transportation Clearinghouse user manuals and documentation.

Once the Regional Clearinghouse database has been updated with FY03-04 data, staff will distribute a draft CD-ROM version of the updated Clearinghouse database with associated documentation to state and local transportation agency Clearinghouse contacts for their review. After this local review has been completed and all comments have been addressed, staff will distribute the final FY 2004 Clearinghouse database to all TPB participating agencies.

Estimated Cost:	\$60,700
Oversight:	Travel Forecasting Subcommittee
Products:	Updated Clearinghouse Database and Documentation
Schedule:	June 2005

V. TECHNICAL ASSISTANCE

The TPB work program includes an activity for responding to requests for technical assistance from state and local governments and transit operating agencies. This activity takes the form of individual technical projects in which the tools, techniques, and databases developed through the TPB program are used to support corridor, project, and sub-area transportation and land use studies throughout the region.

Technical assistance projects anticipated in FY2005 are described below. Total funds allocated to the District of Columbia, Maryland, Virginia, and WMATA for technical assistance in FY2005 are shown in Table 2.

A. DISTRICT OF COLUMBIA

Program Development

This project is set up to account for staff time spent in developing scopes of work for requested projects and in administering the resulting work program throughout the year. Work activities involve meeting with DDOT staff to discuss proposed projects, drafting and finalizing work statements and tasks, creating project accounts when authorized, and progress reporting throughout the projects.

Cost Estimate:	\$10,000
Product:	specific scopes of work
Schedule:	on-going activity

Miscellaneous Services and Data Requests

This project establishes an account to address requests from DDOT which are too small or too short-lived to warrant separate scopes of work. Requests may include staff time to participate in technical review committees and task forces and execution of small technical studies.

Cost Estimate:	\$39,500
Schedule:	on-going activity

Machine Volume Counts for Highway Performance Monitoring System (HPMS) and

National Highway System (NHS)

Perform and report on up to one hundred and thirty-eight (138) one way location, 168-hour (seven day), machine traffic counts. These counts are to include HPMS Representative Legs that are on the NHS. Counts are to avoid proximity to holidays or unusual days; will be reported in 15 minute increments (in TSA approved Excel format) with hourly and daily summaries; and will include daily (for weekdays) 10 to 24 hour factors (ratios of 7 am to 1 pm and 2 pm to 6 pm to 24 hour volumes); daily (for all days of the week) peak hour volumes, times and K factors; directional splits and peak hour (by direction and two way) to 24 hour factors.

Cost Estimate:	\$168,000
Product:	Data file and analysis
Schedule:	June 2005

TOTAL DC COST ESTIMATE: \$217,500

B. MARYLAND

Program Development/Management

This project is set up to account for staff time spent in developing detailed scopes of work for requested projects and in administering and reporting on the resulting work program throughout the year. Work activities involve meeting with requesting agencies to discuss proposed projects, drafting and finalizing work statements and tasks, creating projects when authorized, and progress reporting throughout the project schedule.

Cost Estimate: \$20,000

Product: Detailed scopes of work as needed, progress reports.

Schedule: on-going activity

Miscellaneous Services

The miscellaneous account is a mechanism established to address requests from MDOT, Frederick, Montgomery and Prince George's counties which are too small or too short-lived to warrant separate work scopes. Authorizations to execute specific tasks are usually given by email or fax; this is particularly useful for quick turnaround. Past work has included requests for hard copy, plots, or electronic data files from any of the planning work activities at COG. Other requests have included participation in technical review committees and task forces and execution of small technical studies.

Cost Estimate: \$51,600

Schedule: on-going activity

MD SHA/MTA Technical Support - As part of technical assistance work activities in previous years staff installed the regional travel demand modeling process in the offices of SHA's Travel Forecasting Section. Staff has subsequently worked with SHA in executing alternatives at the regional level and has provided staff training to both SHA and MD MTA staff members.

As part of these previous work activities, staff updated the transportation networks, land activity data files and travel demand models in SHA's offices to reflect the latest regional data files and modeling procedures. In FY 2005 staff will continue to work with SHA and MTA staff in project planning to apply these modeling procedures and to provide specific project assistance as requested under categories of: project planning, feasibility studies in selected corridors, and other planning studies. Staff also reviews and provides comment on milestone documentation reports, e.g., draft environmental impact statements, alternatives retained for detailed study, for various project planning studies

in Maryland.

Cost Estimate: \$90,000

Schedule: As developed with SHA and MTA

Subregional Studies

These projects represent system level forecasting work which is performed in support of MDOT project planning activities. In recent years, COG staff developed and analyzed travel forecasts for various multimodal alternatives consisting of improvements to general use highway lanes, HOV lanes, rail and bus alternatives for different alignments in various corridors throughout Maryland. These activities will be carried out within this category on a project by project basis, involving separate scoping, budgeting and reporting.

Projects envisioned in FY 2005 include the following corridors:

Capital Beltway Corridor Transportation Study - Staff will continue to provide support to evaluate the potential for HOV, transit, and managed lanes in the Maryland Capital Beltway corridor using the regional travel demand forecasting process. Alternatives previously assessed include fixed guideway metrorail and light rail, express bus service on the proposed HOV lanes on the Beltway, and additional express bus service beyond that included in the CLRP - with and without use of HOV lanes.

COG/TPB's primary systems level work activities have been completed. Follow-up work tasks will represent refinements to these alternatives analyses and may include:

- a) participating in study team meetings,
- b) executing the travel demand model,
- c) using GIS to evaluate the travel demand results,
- d) presenting the results to the study team and other related forums as requested, and
- e) creating a summary report of the travel demand results.

Cost Estimate: \$25,000

I-270 / US15 Multimodal Corridor Study - This work element will continue to assess the potential travel demand relief associated with combination alternatives which have been carried forward and documented in the project's Draft Environmental Impact Statement. These alternatives include TDM, HOV, general use lane, and fixed guideway transit strategies. Refinements to analyses of these scenarios will be continued in FY2005.

Specific work tasks may include:

- a) participating in study team meetings,
- b) executing the travel demand model,
- c) using GIS to evaluate the travel demand results,
- d) presenting the results to the study team and other related forums as requested, and
- e) creating a summary report of the travel demand results.

Cost Estimate: \$25,000

Intercounty Connector Study (ICC) - In FY2003 and 2004 staff executed the systems level travel demand forecasts for the ICC, testing various scenarios for different corridors and forecast years. FY2005 activities will build upon those work activities.

Specific work tasks will include:

- a) participating in study team meetings,
- b) developing inputs to the travel demand model, either as TPB staff inputs or in concert with the project study team and consultants,
- c) executing the travel demand model,
- d) using GIS to evaluate the travel demand results,
- e) presenting the results to the study team and other related forums as requested,
- f) providing electronic files of work products to SHA's consultants for peak hour level of service analysis, and
- g) creating summary reports of the travel demand results.

Cost Estimate: \$125,000

Bi-County Transitway - Recent activities on this project planning study have primarily been conducted by consultants to the Maryland MTA. Those planning efforts have utilized TPB's Version 2.1 travel demand model. This project is designed to provide technical support to MTA and their consultants, both in their primary application of the travel demand models (assistance with development of model inputs and evaluation of model outputs) and in subsequent incorporation of new transit analysis features of the model now under development, e.g., submodal choice and mode of access submodels.

Cost Estimate: \$75,000

TOTAL V.B COST ESTIMATE: \$411,600

C. VIRGINIA

Program Development

This project is established to account for DTP staff time spent in developing scopes of work for requested projects and for administering the resultant work program throughout the year.

Work activities will involve meeting with VDOT and VDR&PT staff to discuss projects, draft and finalize work statements and tasks, create project accounts when authorized, and report progress on projects throughout the year.

Cost Estimate: \$10,000

Product: scopes of work, progress reports

Schedule: on-going activity

Miscellaneous Services

- A. This work element provides VDOT with the ability to undertake limited scope studies and or data gathering activities identified during its regional and sub-regional planning activity during fiscal year 2005. The Department is currently engaged in examining the merits and priority of a few competing projects which include: traffic volume studies in activity centers outside the Capital Beltway, strengthening of some components of the regional travel demand model, and enhancing the district-wide HOV traffic volume data collection program.
- B The miscellaneous account is also a mechanism established to address requests, which are too small or too short-lived to warrant separate work scopes. Authorizations to execute specific tasks are usually given by fax; this is particularly useful for quick turnaround. Work items include: requests for hard copy, plots, tape, or diskettes of data from any of the planning work activities at COG, participation in technical review committees and tasks forces and execution of small technical studies.

Cost Estimate: \$10,300 FY 2005 funds
 \$70,000 FY 2004 funds

Schedule: on-going activity

Northern Virginia HOV Facilities Monitoring and Data Collection

VDOT desires an abbreviated monitoring program of the system of limited access high-occupancy vehicle (HOV) facilities in Northern Virginia during the fall of fiscal year 2005. The HOV corridors to be monitored are:

- I-95 from Triangle, Prince William County to its interchange with the Capital Beltway at Springfield, Fairfax County;
- I-395 from the Capital Beltway to (and including) the 14th Street Bridge in the District of Columbia;
- I-66 from Gainesville, Prince William County to the District of Columbia end of the T. Roosevelt Bridge; and
- Virginia Route 267 (Dulles Toll Road) from the Fairfax County/Loudoun County line to I-66 (including Dulles Connector and Dulles Access Road).

Monitoring will consist of the following data collection projects:

- peak direction occupancy and classification counts (from 5 AM to 10 AM inbound and 3 PM to 8PM outbound) at a set of stations along these facilities. These stations will include the major count locations as specified by VDOT, and will be less than the usual number of locations.
- Off peak direction traffic volume and classification counts during the peak period (same as above) at selected locations to be performed in the spring of 2005 in Northern Virginia.
- Staff will also research, purchase, test, and perform travel time runs using GPS technology in Northern Virginia.

Data will be transmitted to VDOT after field data collection work, editing, and reasonableness checking have been completed.

Cost Estimate:	\$225,000
Products:	Data files transmitted to VDOT
Schedule:	Fall counts to be completed by Nov. 30, 2004 Spring counts to be completed by June 30, 2005

Springfield Interchange Data Collection

Aerial monitoring of the Springfield Interchange and associated freeway approach routes will take place in Spring 2005. Monitoring will take place on five randomly selected Tuesdays, Wednesdays, and Thursdays only (excluding days after federal holidays). Hours of monitoring are between 6:00 a.m. and 8:00 a.m. and between 4:00 p.m. and 6:00 p.m. Peak and non-peak flow directions will be monitored.

A consultant experienced in this type of activity will perform the aerial monitoring. The consultant is to provide hard copy maps and digital images of traffic, with congestion highlighted. Also to be provided by the consultant is a summary report documenting speeds and vehicle densities.

Cost Estimate: \$75,000

Products: Consultant report, aerial photographs (paper and digital), vehicle density maps

Schedule: Flights to be performed in the spring, no later than May 15, 2005

TOTAL V.C COST ESTIMATE: \$320,300

D. WMATA

Program Development

This project is established to account for DTP staff time spent in developing scopes of work for requested projects and for administering the resultant work program throughout the year. Work activities will involve meeting with WMATA staff to discuss projects, drafting and finalizing work statements and tasks, creating project accounts when authorized, and reporting progress on projects throughout the year. In addition, this project will provide staff with resources to attend required meetings at WMATA.

Cost Estimate:	\$10,000
Product:	specific scopes of work
Schedule:	on-going activity

Miscellaneous Services

This miscellaneous account is a mechanism established to address requests which are too small or too short-lived to warrant separate work scopes. Past work has included requests for hard copy, plots, tape, or diskettes of data from any of the planning work activities at COG.

Cost Estimate:	\$4,800
Schedule:	on-going activity

Parking Usage at Metrorail Stations

This is the second phase of a two-phase study to obtain usage information by time of day at all WMATA park-and-ride lots in the region. The first phase of the study will be conducted in the Spring of 2004, and this second phase will be conducted in the Fall of 2004 following an anticipated increase in parking fees in the Summer of 2004. The study will provide data input to the station access portion of work activity III C. Models Development. The study will include 48-hour tube counts at all entry and exit points of all WMATA park-and-ride lots. The data collected will provide vehicle entries and exits by time of day, which will yield the time that each facility fills up, based on known capacity. This data will be used to more accurately constrain auto access to the Metrorail system in the regional travel demand model. This study will include data collection and analysis.

This study will be conducted by COG/TPB staff with consultant assistance and technical guidance from WMATA.

Cost Estimate: \$65,000
Product: Report on lot usage in Spring and Fall 2004
Schedule: December 2004

Transit Modeling Enhancements and Validation

This project will include support for the transit modeling enhancements listed in work activity: III C. Models Development as well as a comprehensive validation of transit forecasting capabilities. There are three areas where technical assistance needs are anticipated: transit model improvements, data collection and processing, and sensitivity testing and analysis of transit alternatives.

A comprehensive transit validation is needed to assess the model's predictive abilities. Simulated transit trips should be compared with observed transit trips for rail and bus sub-modes. The sensitivity of the model to changes in downtown parking price, transit fares and station parking price, parking availability, rail and bus speeds, access times and modes, and transfers should also be assessed. Additional data collection needed to support the transit validation effort should be identified.

A final step in the validation process will be the application of the model to future year transportation scenarios to assess the sensitivity of the model to network changes. Network tests would analyze one or more fixed-guideway transit facilities and should also include elements of the WMATA 10-year Capital Improvement Program.

This project effort will involve WMATA staff, COG/TPB staff, and consultant assistance.

Cost Estimate: \$55,000
Product: Technical memoranda
Schedule: June 2005

TOTAL V.D COST ESTIMATE: \$134,800

VI. CONTINUOUS AIRPORT SYSTEM PLANNING PROGRAM

The goal of the CASP program is to provide a process and products that support the planning, development and operation of airport and airport-serving facilities in a systematic framework for the Washington-Baltimore region. The elements of the multi-year CASP work program to be performed during FY 2005 are as follows:

Process 2004 Regional Air Passenger Survey

The purpose of the Regional Air Passenger Survey is to collect information about travel patterns and user characteristics of air passengers using the three major commercial airports – Ronald Reagan Washington National Airport, Washington Dulles International Airport, and Baltimore/Washington International Airport – and to help determine airport terminal and groundside needs. Data from the air passenger surveys will provide the basis for analysis of major changes in airport use in the region. Hundreds of millions of dollars have recently been invested in facility improvements at these airports. The data produced by the 2004 air passenger survey will be invaluable in analyzing the effect of some of these improvements and for planning additional improvements.

The 2004 Regional Air Passenger Survey will be conducted in two phases, over the course of a twelve-month period. Phase I of the survey will include survey design, sample generation and data collection. Phase I will be jointly funded by the Metropolitan Washington Airports Authority (MWAA) and the Maryland Aviation Administration (MAA) of the Maryland Department of Transportation (MDOT). This project, Phase II of the survey, will include data keypunching, data editing, geocoding, data expansion, data tabulation, data analysis and preparation of a final survey report.

Cost Estimate: \$215,000

Ground Access Element Update

The purpose of this project is to update the Ground Access Element of the Regional Airport System Plan using the results of the most recent Regional Air Passenger Surveys, and the latest Regional Air Passenger Origin/Destination and Ground Access Forecasts. Ground access and landside congestion problems are expected to increase in the future. In turn, these ground access problems could have an adverse impact on airport use in the Washington region. This update would provide an analysis of current and forecast ground access problems at Ronald Reagan Washington National and Washington Dulles International airports, and for passengers traveling from the Washington region to Baltimore-Washington International airport. This plan element would integrate airport system ground access and facility planning into the overall regional transportation planning process for the National Capital region and would include recommendations for improving ground access to the region's airports.

Cost Estimate: \$203,000

TOTAL VI. COST ESTIMATE: \$418,000

**3. PROPOSED FY 2005 STATE TRANSPORTATION AGENCY
STATE PLANNING AND RESEARCH PROGRAMS (SPR)**

**District of Columbia Department of Public Works
SPR Program Elements Supporting the Washington Area Project
Work Program**

The following work program element descriptions identify the transportation planning activities proposed for the District of Columbia Statewide Planning Work Program for FY 2005 which support the Unified Planning Work Program for the Metropolitan Washington Region.

NEIGHBORHOOD TRANSPORTATION DEVELOPMENT BRANCH

Formulate plans and policies as they pertain to the development of transportation systems for individual wards in the District. Develop multi-modal transportation solutions. Prepare neighborhood components of the Capital Budget and the Capital Improvement Program.

PROJECT MANAGEMENT BRANCH

Provides strategic services necessary for the development of both long and short-range transportation plans and programs. Plans for the development of integrated modal improvements for bicyclists, pedestrians, and transit riders as well as for the automobile.

TRANSPORTATION POLICY BRANCH

Develops the State Transportation Programs and plans, budgets, allocates, and optimizes fiscal resources to meet Federal Highway-Aid and District capital program investment priorities. Prepares the capital budget, financial spending plans, and the Highway Trust Fund Cash Flow Pro forma.

DEVELOPMENT REVIEW BRANCH

Responsible for improving access to and movement within local area neighborhoods and increasing safety for all modes of traffic. Reviews and comments on transportation impacts of proposed development projects (Board of Zoning Adjustment, Zoning Commission, Large Tract Reviews, Planned Unit Development, Environmental Impact Statement Forms, Street and Alley Closings) and streetscape review.

TRANSPORTATION COMPLIANCE BRANCH

Ensures District compliance with all Federal-aid requirements and provides environmental planning and coordination. Assures that transportation projects meet federal environmental review requirements as a part of project development. Manages consultant contracts related to environmental studies and participation in the regional

process for air quality conformity determinations and state implementation plans for emissions reductions as required by the Clean Air Act. Responsible for the development, implementation and management of the State Planning & Research Program.

INFRASTRUCTURE MANAGEMENT BRANCH

Responsible for the classification of highways into functional systems providing a stable framework for planning, financing, and executing long-range programs, and for implementing transportation system management policies and actions. Provides up-to-date information on the physical characteristics and conditions of the D.C. Roadway System. Assist decision makers in finding optimum strategies for maintaining pavements in a serviceable condition over a period of time, improves the efficiency of decision making, and provides for safe and efficient movement of goods and people by identifying and prioritizing roadway segments for rehabilitation.

TRAFFIC SAFETY CHARACTERISTICS

Develops, implements, and manages the production of a viable and useable information system that provides knowledge about travel on the streets, highways and pathways of the District of Columbia. Improves data collection capabilities regarding traffic volumes, speed data, vehicle classification and weight-in-motion data.

PROGRAM FUNDING
Under Development

DISTRICT OF COLUMBIA DEPARTMENT OF TRANSPORTATION
FY 2005 SPR ELEMENTS SUPPORTING
THE WASHINGTON REGION UNIFIED PLANNING WORK PROGRAM

**Maryland Department of Transportation
State Highway Administration
State Planning and Research (SPR) Program Elements Supporting the
Washington Area Work Program**

I. Systems and Programming

A. Programs

1. Preparation of the Annual Statewide Transportation Improvement Program
 - Prepare and submit an annual program for use of available federal funds in accordance with Title 23 U.S.C and TEA-21 (and/or its successor).
 - Coordinate the STIP with the regional TIPs, CTP and local jurisdiction's highway improvement programs

2. Preparation and development of the 6 year Consolidated Transportation Program
 - Develop the FY 2005-2010 CTP.
 - Coordinate with appropriate State and local planning staffs, MPOs and State, county and municipal elected officials.
 - Prepare presentation materials for the annual tour.

3. Local Government Liaison
 - Coordinate between all levels of Federal, State, and local governments to ensure that transportation plans are compatible per the 3-C process.
 - Notify review agencies and review other agency plans and programs, via the State Clearinghouse process.
 - Coordinate and review county and municipal master plans.
 - Assess transportation impacts of proposed major development.

4. Long Range Planning
 - Update the Highway Needs Inventory (HNI).
 - Evaluate long-term highway needs and investment levels for various program categories and sub-categories.
 - Review and provide input on updates to the statewide long range plan.

II. Traffic

A. Traffic Monitoring Program

- Monitor the characteristics of highway traffic
- Enhance procedures to collect, process and disseminate traffic data.
- Ensure that the traffic monitoring system meets State needs and the requirements and guidelines of FHWA and AASHTO.
- Study, and as appropriate, implement methods to improve the efficiency and effectiveness of traffic monitoring through statistical analysis.
- Improve the monitoring of traffic on freeways, particularly in urban areas.
- Ensure the collection of traffic volume, classification and weight data on SHRP monitoring sites.

III. Metropolitan Planning Organization Liaison

A. Urbanized Areas

- Work with the MPOs in adhering to their planning process.
- Work with the MPOs in the development of the UPWPs, CLRPs, TIPs, clean air conformity determinations, and management systems.

IV. Highway Statistics

A. Mileage

1. Federal System

- Develop new Urban Boundaries for Federal Function Classification and NHS maps for distribution.
- Update and maintain statistical records summary tables.

V. Urban Transportation Planning

A. Elements of the Washington Region UTPP

1. 3-C Process

- Maintain inventory of regional transportation and socio-economic data; improve technical capabilities within the region; provide technical support to project planning activities, and conduct special studies.
- Develop necessary plans and programs to ensure certification of the regional transportation planning process.

- Develop new planning programs as required by TEA-21 (and/or its successor) and the Clean Air Act.
- Continuation of the campaign of public education and voluntary measures aimed at informing the general public about the regional air quality program, identifying voluntary measures that employers and individuals could take to reduce emissions.

Special Studies

- A. Ridesharing Coordination
 - Encourage ridesharing and transit usage.
 - Develop a network of ridesharing facilities to support Maryland’s planned HOV and transit networks.
 - Reduce reliance on single occupant vehicles for travel.
 - Expand the use of ridesharing facilities in Maryland.
 - Incorporate ridesharing strategies where appropriate as a travel demand measure.

- B. Preliminary Studies
 - Prepare engineering and feasibility studies.
 - Develop preliminary purpose and need statements.
 - Develop access control plans for selected primary corridors.
 - Prepare interstate access approval requests.

- C. Bicycle Affairs Coordination
 - Improve bicycle safety and educational awareness. Implement MDOT/SHA bicycle and pedestrian policies. Provide MDOT representation and staff support for the Maryland Bicycle Advisory Committee (MBAC).

Federal	\$6,425,386
State	\$1,740,895
Total	\$8,166,281

NOTE: The \$8,166,281 funding total is based on Maryland’s statewide SPR program. MDOT/SHA does not sub-allocate SPR funds to the individual MPOs. In general terms, approximately 35 percent of this statewide total is attributed to the Washington Region or \$2,858,198.

**VIRGINIA DEPARTMENT OF TRANSPORTATION
SPR PROGRAM ELEMENTS SUPPORTING THE WASHINGTON AREA
WORK PROGRAM**

The following work program element descriptions identify the Virginia Department of Transportation (VDOT) transportation planning activities proposed for FY 2005, in support of the Unified Planning Work Program for the Metropolitan Washington Region.

I. METROPOLITAN PLANNING

This element represents the various activities undertaken by the NoVA District (VDOT) Transportation Planning Section's staff (with support from the VDOT Central Office staff as needed) in the development and implementation of the Unified Planning Work Program. Planned work includes the Department's participation in all Transportation Planning Board and Metropolitan Washington Air Quality Committee functions. Specific elements that the Department's staff will be working on are listed below.

A. Plans, Program and Coordination

This activity includes participation in the development of the Transportation Improvement Plan (TIP); update of the current Constrained Long Range Plan (CLRP); amendments to the TIP and the CLRP, as needed, during fiscal year 2005; identification of Congestion Management Systems (CMS) elements of the various TIP and CLRP projects; develop, implement and operate aspects of the regional Management, Operations and Intelligent Transportation Systems (MOITS); coordinate Statewide and local jurisdictions' bicycle and pedestrian program as requested.

B. Forecasting Applications

Department staff will participate in: providing input to the conformity analysis of the TIP and CLRP; reviewing the conformity findings and adherence to the mobile source emissions budget; development and adoption of emission reductions measures (if needed) to help attain a positive conformity determination; inter-agency / inter-departmental consultations regarding mobile source emissions budget; development and implementation of the work scope for a Regional Mobility and Accessibility Study; technical review of other regional studies undertaken by the MPO; and review of updates to the regional cooperative forecast.

C. Development of Network and Models

This activity includes providing input to, and reviewing the development of, the

travel demand forecasting network for all of the analysis years; technical review of the results of the regional travel demand forecasting model; and development and coordination of technical enhancements to the regional forecasting model and software.

D. Travel Monitoring

The Department's staff will be involved in the review and approval of: the regional cordon count data and reports; aerial monitoring of congestion on the regional freeways; data collection and reporting of the arterial congestion in the region; household and workplace survey; and the vanpool survey.

E. District-wide Planning

Included in this work item are activities such as presentations to the regional and sub-regional planning boards (TPB, NVTA, etc.), technical report development and review, and agency policy input into planning deliberations.

II.SUBREGIONAL PLANNING

This element outlines specific studies undertaken by the Department's staff in the development and implementation of various Northern Virginia District-wide transportation planning activities using available SPR funds.

1. "MOBIS" (The MOBility Improvement Study, originally called the Choke Point Mitigation Study). Based on a review of data from other studies, a review of accident data, and information from other sources, the study will identify major choke points in the regional highway network. It will also identify potential improvements to mitigate the congestion caused by these choke points, perform travel forecasting to determine any negative impacts on nearby routes, and develop cost estimates for the identified improvements. The results of this effort will provide site-specific improvements for consideration when District staff and local jurisdictions develop inputs for the Six Year Program and local construction programs. Study completion is expected in July, 2005.
2. Tysons Circulation Improvements Needs Assessment. This effort will gather existing data on Tysons Corner mobility operations; complete supplemental traffic counts at intersections and access points of significant traffic generators (mall entrances, retail centers, service drives); and inventory existing lane assignments/markings, directional signage, and pedestrian crossings (both along mainlines and service drives). Using collected data, the study will analyze of short term improvement needs; make recommendations (including access management items); and provide cost estimates for improvements within VDOT's

responsibility. Study completion is anticipated in October, 2004.

3. Bike Rider Survey. In consultation with MWCOG / Commuter Connections, VDOT's Central Office, advocacy groups, and local jurisdictions, a web-based survey instrument will be developed and administered to better identify bicycle use in NoVA, particularly as a means of commuting to work. The results of this survey will give staff a broader understanding of the magnitude of cycling as a commuter means, in addition to helping identify the routes most frequently used or desired, so that trails projects can be prioritized based on usage data rather than rhetoric or best professional judgment. This study will be conducted by in-house staff over two fiscal years based on projected staff availability. October, 2005, is the anticipated completion date.
4. Carpooling Characteristics. Using Census data, MWCOG data and other available data, summarize carpooling data and transit characteristics data and compare with socio-economic data available from MWCOG or the Census to better identify commuter modes. The study will compare findings to 1980 and 1990 Census data to identify trends. Trends in HOV usage by socio-economic stratum and origin may also be identified. This study will be conducted over two fiscal years by in-house staff as time is available. The anticipated study completion date is March, 2005.
5. Subzone Traffic Forecasts. Using subzone land use data developed this past year, as well as Census data and data from MWCOG and local jurisdictions, develop sub-zone level traffic forecasts for all of NoVA. Such data will also be used to calculate the average trip length (in miles, minutes, or both) for every link in the transportation network (about 40,000 links) in order to do an analysis of trip length by roadway functional classification. The results of this study will help NoVA District, local jurisdictions, and MWCOG better understand current travel patterns, and more effectively prioritize proposed transportation improvements. This study will be conducted by in-house staff with December, 2005, being the anticipated completion date.
6. Analysis for Dulles Corridor Rapid Transit Project (DCRTP). Continue in-depth coordination between VDOT and the DCRTP Team as concepts are developed into more detailed designs, to insure compatibility with long term highway improvement plans. This study includes consultant support and will be conducted over a three-year period, with completion anticipated in July, 2006.
7. Consultant Services.

"On-call" consultant support (managed by VDOT's Central Office) may be used as funding is available to undertake short term, limited scope studies that the

Commonwealth identifies during fiscal year 2005. Since this consultant contract is centrally managed, and the Northern Virginia District shares consultant use with other VDOT Districts, no specific amount of funding is guaranteed to the District. Some examples of past studies using this consultant support include: operational analysis of selected near-term improvements to Route 7 and Route 123 in Tysons Corner, and a study of highway/rail co-location in Tysons Corner.

PROGRAM FUNDING

**VIRGINIA DEPARTMENT OF TRANSPORTATION
SPR ELEMENTS SUPPORTING THE WASHINGTON REGION
FY2005 UNIFIED PLANNING WORK PROGRAM**

Item	Work Element	Federal Funds	State Funds	Total
	Sub-regional Planning			
1	MOBIS	\$104,000	\$26,000	\$130,000
2	Tysons Circulation Improvement	\$32,000	\$8,000	\$40,000
3	Bike Rider Survey	\$16,000	\$4,000	\$20,000
4	Carpooling Characteristics	\$16,000	\$4,000	\$20,000
5	Sub-zone Traffic Forecasts	\$32,000	\$8,000	\$40,000
6	Analysis for Dulles Corridor RTP	\$136,000	\$34,000	\$170,000
	Total	\$336,000	\$84,000	\$420,00

APPENDIX

**METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS
NATIONAL CAPITAL REGION TRANSPORTATION PLANNING BOARD
777 North Capitol Street, N.E.
Washington, D.C. 20002**

**RESOLUTION ON AGREEMENT BETWEEN THE
NATIONAL CAPITAL REGION TRANSPORTATION PLANNING BOARD
AND THE FREDERICKSBURG AREA METROPOLITAN
PLANNING ORGANIZATION ON CONSISTENCY AND
CONFORMITY OF PLANS, PROGRAMS, AND PROJECTS**

WHEREAS, the National Capital Region Transportation Planning Board (TPB) is the officially designated Metropolitan Planning Organization (MPO) for the Metropolitan Washington area; and

WHEREAS, the Fredericksburg Area Metropolitan Planning Organization (FAMPO) is the officially designated Metropolitan Planning Organization for the Fredericksburg area; and

WHEREAS, Stafford County, Virginia is a member of the FAMPO, and is included in the Washington DC-MD-VA non-attainment area; and

WHEREAS, under the Clean Air Act Amendments of 1990, plans, programs, and projects for Stafford County are required to be included in the TPB's air quality conformity analysis and determination for the Washington non-attainment area; and

WHEREAS, under the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA)," if more than one metropolitan planning organization has authority within a metropolitan area or an area which is designated as a non-attainment area for ozone or carbon monoxide under the Clean Air Act, each metropolitan planning organization shall consult with the other metropolitan planning organizations designated for such area and the State in the coordination of plans and programs;" and

WHEREAS, on June 16, 1993 the TPB executed an agreement with the Fredericksburg Area Metropolitan Planning Organization to ensure consistency and conformity of the plans, programs, and projects of the TPB and FAMPO; and

WHEREAS, in a letter of October 4, 1994 the Federal Highway Administration advised the Virginia Department of Transportation that "Either all of Stafford County has to be in one or the other metropolitan planning area, or part of Stafford County can be in

FAMPO's metropolitan planning area and the other part in TPB's metropolitan planning area. None of the area of Stafford County can be in both metropolitan planning areas."; and

WHEREAS, Stafford County has requested that the County be designated as completely within the FAMPO's planning area;

NOW, THEREFORE BE IT RESOLVED THAT: the National Capital Region Transportation Planning Board (TPB) hereby executes amendments to its June 16, 1993 agreement, as defined in Attachment A, with the Fredericksburg Area Metropolitan Planning Organization (FAMPO), to reflect Stafford County's request, and ensure continued consistency and conformity of plans, programs, and projects of the TPB and FAMPO.

Adopted by the Transportation Planning Board at its regular meeting on December 21, 1994.

ATTACHMENT A

Agreement between the National Capital Region Transportation Planning Board (TPB) and the Fredericksburg Area Metropolitan Planning Organization (FAMPO) on Consistency and Conformity of Plans, Programs, and Projects

Recognizing that Stafford County, Virginia, is a member of the FAMPO and is included in the Washington DC-MD-VA non-attainment area for ozone, and has requested that it be designated as completely within the FAMPO's planning area, TPB and FAMPO have agreed upon the following procedures for ensuring consistency and conformity of their plans, programs, and projects:

1. The TPB agrees that Stafford County be designated as completely within the FAMPO's planning area and that Stafford County not be a part of the planning area covered by the TPB, and not be a member of the TPB. Transportation plans, programs and projects in Stafford County will be included in the Long-Range Transportation Plan and Transportation Improvement Program (TIP) developed by the Fredericksburg Area Metropolitan Planning Organization (FAMPO), and will not be included in the TPB's Long-Range Transportation Plan and six-year Transportation Improvement Program (TIP).
2. While TPB and FAMPO will develop their plans, programs, and projects separately, TPB and FAMPO will coordinate their data collection and analysis activities, and will consult with each other to ensure that their plans, programs, and projects are integrated and consistent.
3. In accordance with a mutually acceptable schedule, FAMPO will submit its plans, programs and projects for Stafford County to the TPB for inclusion in the TPB's air quality conformity analysis and determination for the Washington non-attainment area. In the event that the TPB is unable to make a conformity determination due to an issue relating to the plans, programs, or projects submitted by FAMPO for Stafford County, the TPB will return such plans, programs, or projects with a detailed explanation of the conformity issue for reconsideration by FAMPO.
4. Stafford County will be involved in all aspects of the TPB's air quality conformity analysis and determination.
 - Formal involvement for Stafford County will be provided through the Virginia Department of Transportation on the TPB, and through Stafford County's membership on MWAQC and its Technical Staff Coordination Committee (TSCC).

- Informal involvement by Stafford County will be provided through participation by representatives of Stafford County and FAMPO in COG and TPB committees and processes concerned with conformity, including receipt of all materials and participation in all meetings, discussions, and reviews.

**METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS
NATIONAL CAPITAL REGION TRANSPORTATION PLANNING BOARD
777 North Capitol Street, N.E.
Washington, D.C. 20002**

**RESOLUTION RESPONDING TO GOVERNOR SCHAEFER'S
LETTER CONCERNING THE METROPOLITAN PLANNING
BOUNDARY IN MARYLAND**

WHEREAS, the National Capital Region Transportation Planning Board (TPB) is the officially designated Metropolitan Planning Organization (MPO) for the Metropolitan Washington area; and

WHEREAS, the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 requires MPO boundaries to "at least include the boundaries of the non-attainment area, except as otherwise provided by agreement between the metropolitan planning organization and the Governor;" and

WHEREAS, in a letter of April 16, 1992, the Governor of Maryland presented a proposal to the TPB under which "the Washington area MPO boundaries should not be expanded to encompass Charles and Calvert Counties;" and

WHEREAS, on September 16, 1992, the Transportation Planning Board (TPB) requested that the Metropolitan Washington Air Quality Committee (MWAQC) consider and provide comments to the TPB on the implications of Governor Schaefer's request for air quality planning and conformity findings in the Metropolitan Washington Area; and

WHEREAS, there has been extensive coordination with the State Transportation Agencies and the State Air Quality Agencies, who are members of MWAQC, and with Federal Highway Administration (FHWA) and Federal Transit Administration (FTA); and

WHEREAS, on December 9, 1992, the MWAQC adopted a set of recommendations to the TPB on responding to Governor Schaefer's request; and has transmitted those recommendations to the TPB; and

WHEREAS, the "Interim Guidance on the ISTEA Metropolitan Planning Requirements" issued by the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) of April 6, 1992, contains the following guidance on Metropolitan boundaries:

"In non attainment areas, if the MPO and the Governor agree to exclude a portion of the nonattainment area, they must be able to demonstrate how conformity will be ensured in the excluded portion. Such proposals should be coordinated with FHWA, FTA, EPA, the state transportation agency, and the state air quality agency before a final decision is made".

NOW, THEREFORE, BE IT RESOLVED THAT: The National Capital Region Transportation Planning Board endorses the MWAQC recommendations as defined in Attachment A, agrees to respond favorably to the April 16, 1992 request of the Governor of Maryland, and also to transmit copies to the Federal Highway Administration, the Federal Transit Administration, and the Environmental Protection Agency.

Adopted by the Transportation Planning Board at its regular meeting on December 16, 1992.

ATTACHMENT A

Proposal for Satisfying Federal Metropolitan Planning Requirements for Charles and Calvert Counties

The TPB proposes the conformity procedures defined in parts 1-4 below. These procedures affirm the practices that have been used for the past two years for the Metropolitan Washington Region non-attainment area as a means for assuring conformity in Charles and Calvert Counties.

1. The TPB agrees with Governor Schaefer that Charles and Calvert Counties not be a part of the planning area covered by the TPB.
2. Transportation plans, programs and projects in Charles and Calvert Counties will be excluded from the TPB's Long-Range Transportation Plan and six-year Transportation Improvement Program (TIP), and included in the statewide Long-Range Transportation Plan and state-wide Transportation Improvement Program (STIP) developed by the State of Maryland.
3. Transportation plans, programs and projects in Charles and Calvert Counties will be included in the conformity analysis and determination carried out by the TPB for the Washington Metropolitan Statistical Area (MSA). Conformity determinations concerning proposed added projects will be based on a system level analysis for the non-attainment area.
4. Charles and Calvert Counties will be involved in all aspects of the conformity analysis and determinations.
 - Formal involvement for Charles and Calvert Counties will be provided through the Maryland Department of Transportation on the TPB, and through Charles and Calvert Counties' membership on MWAQC and its Technical Staff Coordination Committee (TSCC).
 - Informal involvement by Charles and Calvert Counties will be provided through participation by their representatives in COG and TPB committees and processes concerned with conformity, including receipt of all materials and participation in all meetings, discussions, and reviews.

These procedures are subject to amendment should they be found in conflict with the final rule on conformity promulgated by the U.S. Environmental Protection Agency.

TABLE A1