

FISCAL YEAR 2005
JULY 1, 2004 – JUNE 30, 2005

UNIFIED WORK PROGRAM

FOR THE

RICHMOND AREA METROPOLITAN

PLANNING ORGANIZATION

Approved as a Final Report by the Richmond Area Metropolitan Planning Organization, April 8, 2004.

Prepared by the Richmond Regional Planning District Commission staff through a cooperative process involving the City of Richmond, Counties of Charles City, Chesterfield, Goochland, Hanover, Henrico, New Kent, Powhatan, and the Town of Ashland, the Virginia Department of Transportation, the Virginia Department of Rail and Public Transportation, the Virginia Department of Aviation, the Richmond Metropolitan Authority, the Capital Region Airport Commission, the Greater Richmond Transit Company, the Federal Highway Administration, the Federal Transit Administration, and RideFinders, Inc., on behalf of the Richmond Area Metropolitan Planning Organization.

MPO AMENDMENT ACTIONS

- February 10, 2005: MPO action to shift PL funds among various RRPDC staff work tasks (tasks 1.1, 2.1, 2.5, 3.1, 4.1, 5.2, and 6.1)
- April 14, 2005: MPO action to shift PL and RRPDC overmatch funds among various RRPDC staff work tasks (tasks 1.1, 1.2, 1.3, 2.1, 2.2, 2.5, 3.1, 3.2, 4.1, 5.2, 5.9, 6.1, and 7.1) and to reduce RRPDC overmatch funds budget from \$372,300 to \$269,000.

RICHMOND AREA MPO PLANNING PRIORITIES

Section 450.314 (a) of the Metropolitan Planning regulations states that Transportation Management Area (TMA) designated MPO's shall discuss the planning priorities facing the metropolitan planning area. The following identifies the FY 2005 UWP major planning priorities. Further discussion of these priorities is provided in the various work tasks.

1. Task 1.1, MPO Maintenance/Special Studies – Conduct various administrative and technical activities in support of the MPO process and special studies as needed.
2. Task 1.2, MPO Citizen Participation – Continuing support for the MPO's Citizens Transportation Advisory Committee, developing effective and useful background information materials on the MPO process, posting plans, studies, reports and other information on the RRPDC/MPO web site, conducting outreach activities to involve minority and low income citizens in the MPO process, and conducting MPO annual public review meetings (new activity).
3. Task 2.2, Long-Range Transportation Plan (LRTP) – Initiate work on the next (year 2029/2030) LRTP update including review of 2026 modeling procedures and programs, and assessing feasibility of "Viper" or similar travel demand model software.
4. Task 3.1, Congestion Management System (CMS) – Initiate new process for using a standing CMS review group to guide and document the on-going alternatives analysis of congested corridors.
5. Task 4.1, Transportation Improvement Program (TIP) – Maintain current TIP by processing amendments as requested and tracking previous allocations of Regional STP and CMAQ funds, and developing the upcoming TIP. Note that the next TIP will be in a new format to accommodate electronic submission of projects and for posting on the web site, and will include project obligations funding information (to be provided by VDOT for all projects).
6. Task 5.2, Elderly and Disabled Transportation Needs and Services – Continuing support for the MPO's Elderly and Disabled Advisory Committee.
7. Task 5.9, Public Transportation Needs Assessment for Disadvantaged Population Groups – Conduct an assessment of public transportation needs for transportation disadvantaged groups in the MPO study area. Based on this assessment, staff will review various public transportation

alternatives and provide a report on which alternatives may be appropriate and feasible.

8. Task 6.1, Intermodal Transportation Development – Working through the Intermodal Advisory Task Force, provide for review of recommendations provided in the *Richmond Regional Intermodal Transportation Study* and report on the demand and need for a regional intermodal transportation facility.

FREQUENTLY USED MPO TERMS AND ABBREVIATIONS

MPO Metropolitan Planning Organization. The Richmond Area MPO's membership includes the following local governments and agencies: Ashland, Charles City, Chesterfield, Goochland, Hanover, Henrico, New Kent, Powhatan, Richmond, CRAC, GRTC, RMA, RRPDC, VDOT, RideFinders, FHWA, FTA, and VDA; serves as the forum for cooperative transportation decision making in the Richmond area.

NAAQS National Ambient Air Quality Standards; defined by EPA.

Regionally Significant

Term used for air quality conformity analysis to define highway and rail facilities covered by this analysis. Regionally significant projects are those projects on a facility that serves regional transportation needs and would normally be included in the modeling of a metropolitan area's transportation network. This includes, as a minimum, all principal arterial highways and all fixed guide-way transit facilities that offer a significant alternative to regional highway travel.

SIP State Implementation Plan; identifies control measures and process for achieving and maintaining NAAQS; eligible for CMAQ funding.

Study Area The area projected to become urbanized within the next 20 years; defines the area for MPO plans, programs, and studies.

"3-C" Process ("Continuing, Cooperative and Comprehensive") Language from federal legislation establishing MPOs and used in reference to the regional transportation planning and programming process.

TCM Transportation Control Measures (for Air Quality Control); eligible for CMAQ funding.

TDM Transportation Demand Management; various transportation control strategies and measures used in managing highway demand.

TIP Transportation Improvement Program; a staged, multiyear, intermodal program of transportation projects that is consistent with the transportation plan.

Transportation Plan

The MPO's adopted Long-Range Transportation Plan; serves as the initial step and framework in developing a regionally based network of transportation facilities and services that meets travel needs in the most efficient and effective manner possible.

TAZ (Transportation or Traffic Analysis Zone)

Generally defined as areas of homogeneous activity served by one or two major highways. TAZs serve as the base unit for socioeconomic data characteristics used in various plans and studies.

Urbanized Area Term used by the U.S. Census Bureau to designate urban areas. These areas generally contain population densities of at least 1,000 persons per square mile in a continuously built-up area of at least 50,000 persons. Factors such as commercial and industrial development, and other types and forms of urban activity centers are also considered.

UWP Unified Work Program; MPO's program of work activities noting planning priorities, assigned staffs, work products, budgets, and funding sources.

VOC Volatile Organic Compounds; emissions from cars, power plants, etc; when VOCs react with oxides of nitrogen (NOx) in the presence of heat and sunlight to produce ground level ozone or smog.

MPO STANDING COMMITTEES

- CTAC** Citizens Transportation Advisory Committee
- EDAC** Elderly and Disabled Advisory Committee
- TAC** Technical Advisory Committee

FEDERAL STATE AND REGIONAL AGENCIES

- CRAC** Capital Region Airport Commission
- EPA** Environmental Protection Agency
- FAA** Federal Aviation Administration
- FHWA** Federal Highway Administration
- FRA** Federal Railroad Administration
- FTA** Federal Transit Administration
- GRTC** GRTC Transit System (formerly Greater Richmond Transit Company)
- MRAQC** Metropolitan Richmond Air Quality Committee

RideFinders	A public nonprofit corporation that provides carpool/vanpool matching and other commuter and transportation services.
MARAD	Maritime Administration
RMA	Richmond Metropolitan Authority
RRPDC	Richmond Regional Planning District Commission
USDOT	United States Department of Transportation
VDA	Virginia Department of Aviation
VDEQ	Virginia Department of Environmental Quality
VDOT	Virginia Department of Transportation
VDRPT	Virginia Department of Rail and Public Transportation
VTRC	Virginia Transportation Research Council

FEDERAL LEGISLATION

ADA of 1990	Americans with Disabilities Act
CAAA of 1990	Clean Air Act Amendments
TEA-21	Transportation Equity Act for the 21 st Century; signed into law on June 9, 1998. Authorizes federal funds for highways, highway safety, transit, and other surface transportation programs for the next 6 years. Builds on and continues many of the initiatives established in the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991.

FUNDING PROGRAMS

SPR	State Planning and Research; funds allocated to VDOT in support of MPO program activities.
Local Match	Funds required by recipients of PL and Section 5303 funds for matching federal and state grant funds. Section 5303 and PL funds require a 10% match, with VDOT/VDRPT providing 10% and the remaining 80% provided by the federal source.
PL	Planning funds available from FHWA for MPO program activities.

CMAQ Congestion Mitigation/Air Quality; federal funding program created under ISTEA (1991). Directs funding to projects that contribute to meeting National Ambient Air Quality Standards. CMAQ funds generally may not be used for projects that result in the construction of new highway capacity for single occupant vehicles. CMAQ funds may be available for eligible planning activities that lead to and result in project implementation.

Section 5303 Planning funds available from the FTA for MPO program activities.

TEIF Transportation Efficiency Improvement Fund; purpose of program is to reduce traffic congestion by supporting transportation demand management programs designed to reduce use of single occupant vehicles and increase use of high occupancy vehicle modes; operated by the Commonwealth Transportation Board.

OTHER TERMS AND ABBREVIATIONS

ACG Address Coding Guide

ADT Average Daily Traffic; used in conjunction with current and projected traffic volumes.

CAO Chief Administrative Officer

CARE Community Assisted Ride Enterprise; program operated by GRTC providing demand-response paratransit service for the elderly and disabled in the City of Richmond and Henrico County.

CMS Congestion Management System

COA Comprehensive Operational Analysis

CTB Commonwealth Transportation Board

EJ Environmental Justice

FY Fiscal Year (July 1 to June 30).

GASB Government Accounting Standards Board; private, non-profit organization established in 1984; responsible for setting generally accepted accounting principals for state and local governments

GASB # 34 GASB's Statement Number 34 "Basic Financial Statements and Management's Discussion and Analysis for State and Local

Governments”; requires state and local governments to report the value of their infrastructure assets including roads, bridges, sewer and water facilities, etc.

GIS	Geographic Information System
I/M	Inspection and Maintenance
MSA	Metropolitan Statistical Area. The Richmond/Petersburg MSA includes the cities of Colonial Heights, Hopewell, Petersburg, and Richmond; the counties of Charles City, Chesterfield, Dinwiddie, Goochland, Hanover, Henrico, New Kent, Powhatan, and Prince George; and the Town of Ashland.
NHS	National Highway System
NOx	Nitrogen Oxides
RFP	Request for Proposals; process used for reviewing and selecting proposals for consultant study activities. (Goods and non-professional services)
RFQ	Request for Qualifications (Consultant Services).
SIP	State Implementation Plan (for attainment and maintenance of air quality standards)
SOV	Single Occupant Vehicles
STP	Surface Transportation Program
SYIP	Six Year Improvement Program; annual document approved by the CTB. Provides the state’s list of federal and state funded transportation projects and programs administered by VDOT and VDRPT.
TDP	Transit Development Program
TMA	Transportation Management Area (i.e. MPO’s greater than 200,000 in population).
VMT	Vehicle Miles Traveled

TABLE OF CONTENTS

FY 2005 UNIFIED WORK PROGRAM WORK TASKS AND BUDGET/FUNDING INFORMATION

I.	TASKS	<u>Page(s)</u>
1.0	MAINTENANCE OF THE MPO	
1.1	MPO Maintenance/Special Studies	10-13
1.2	MPO Citizen Participation.....	14-16
1.3	Unified Work Program	17-18
2.0	LONG RANGE PLANNING AND SURVEILLANCE	
2.1	Socioeconomic Data Development.....	19-21
2.2	Long-Range Transportation Plan (LRTP) Update.....	22-24
2.4	City of Richmond – Update of the Transportation Element of the City Master Plan.....	25-26
2.5	Transportation Data Base Development/GIS	27-28
2.9	Richmond Regional Bicycle and Pedestrian Plan.....	29-30
3.0	MANAGEMENT SYSTEMS/SHORT RANGE PLANNING	
3.1	Congestion Management System (CMS)/Intelligent Transportation Systems (ITS).....	31-33
3.2	Access Management Studies	34-36
3.3	Richmond/Tri-Cities Areas ITS Regional Architecture Study	37-39
4.0	TRANSPORTATION PROJECT PROGRAMMING	
4.1	Transportation Improvement Program (TIP).....	40-46
5.0	TRANSIT PLANNING	
5.2	Elderly and Disabled Transportation Needs and Services	47-48
5.3	Downtown Circulator Study, Phase II.....	49-50
5.9	Public Transportation Needs Assessment for Disadvantaged Population Groups.....	51-53
6.0	INTERMODAL PLANNING	
6.1	Intermodal Transportation Development.....	54-56
7.0	AIR QUALITY PLANNING	
7.1	Air Quality Plan and Program Activities.....	57-59
II.	BUDGET/FUNDING INFORMATION	
1.	Agency Budget Summary Sheet.....	60
2.	Funding Sources Summary Sheet.....	61

1.0 MAINTENANCE OF THE MPO

1.1 MPO Maintenance/Special Studies

A. Background

This task provides the administrative and technical support needed to maintain the MPO and MPO process, and provides for special studies and reports as directed by the MPO. Major work activities include program administration (e.g. agendas, minutes, mailing, monthly reports, program management and administration, etc.); PL/Section 5303 grant administration; pass through contracts; participation on advisory committees; special studies and projects; review/comment on pass-through work tasks; federal/state regulations and requirements; federal/state legislation review; training, workshops and conferences; and computer program support.

Under the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991, the MPO's planning and programming responsibilities had been significantly increased and its scope has become broader and more comprehensive. Most of these requirements have been continued as part of the Transportation Equity Act for the 21st Century (TEA-21); signed into law on June 9, 1998. The MPO is charged with developing transportation plans and programs, which provide for the development of transportation facilities which function as a "seamless" intermodal system. The process for developing these plans must consider all modes of transportation, and must, to the maximum extent feasible, be continuing, cooperative, and comprehensive. As a TMA level MPO, the process must also consider the results of the Congestion Management System in the planning and programming of transportation projects.

The MPO's Triennial Certification review with FHWA and FTA is tentatively scheduled for early May 2004 (i.e., FY 04). Based on comments and findings from this review, changes to various MPO work tasks may be necessary.

The initial estimate for all staff direct costs (for all staff work tasks) is estimated at approximately \$137,600. Staff direct costs are reviewed by the Technical Advisory Committee (TAC) as part of the UWP development process and are reported to VDOT and VDRPT as part of its submission of quarterly work progress reports.

B. End Products

A well functioning MPO process which involves the MPO as the policy body for transportation planning in the Richmond Area and provides for a multi-modal, continuing, comprehensive, and cooperative transportation planning and programming process

C. Work Elements

Work activities include the following:

1. Provide for general maintenance and administration of the MPO “3-C” process, MPO, and MPO committees and work groups, including direct costs to support the process.
2. Provide for the preparation and documentation of MPO meetings and other committee meetings as appropriate.
3. Perform review activities under various local, state, and federal programs including Commonwealth Intergovernmental Review Process, State Route projects and Environmental Impact Statements and Assessments.
4. Coordinate review and presentation activities with RRPDC and other regional, local and state agencies involved with transportation planning and programming.
5. Prepare various reports including VDOT and VDRPT Quarterly Progress Reports, and MPO financial and work progress reports.
6. Provide for contract administration of PL, Section 5303, and third party agreements.
7. Participate in work tasks including preparation and/or review and comment on Request for Proposals, consultant review selection, and documentation.
8. Maintain up-to-date information and literature on transportation planning and programming in the Richmond area.
9. Review and comment as appropriate on legislative and regulatory activities affecting transportation planning and programming, and perform activities necessary to ensure MPO compliance with applicable state and federal rules and regulations.
10. Attend seminars, meetings, workshops, and conferences related to MPO activities. Attend and participate on various VDOT, VDRPT, VTRC, and other advisory committees, task forces, regional and transportation planning associations (e.g., VAPDC, VASITE, ITSVA), etc.
11. Provide for use of legal counsel and audit services, under the direction of the RRPDC Executive Director, for administering federal and state contracts,

FY 05 UWP Task 1.1

meeting reporting requirements, and other activities and services necessary and appropriate for staffing the MPO.

12. Provide staff assistance for special studies, projects and programs in response to requests by area local government, MPO member organizations, and others as determined by the RRPDC Executive Director.
13. Collect and update files and reports as necessary, with traffic count information from VDOT, RMA, and local government sources.
14. Staff support for purchase, maintenance, upgrading, and repair of computers. Also, share in attributable costs for support of computer network and support activities.
15. Develop various maps in GIS format for MPO special studies/major projects and presentations.
16. Respond to information requests from area local governments, VDOT, VDRPT, GRTC, and other government agencies.
17. Maintain current highway facilities inventory and monitor regional travel patterns [VDOT].
18. Provide traffic data forecasts for design of highway facilities [VDOT].
19. Provide technical assistance to RRPDC, local jurisdictions, and other agencies concerning transportation [VDOT].
20. Review site plans as requested [VDOT].
21. Perform and/or assist in special projects, studies, evaluations, and other activities upon direction of MPO and MPO Committees.

D. Agency Participation

RRPDC, VDOT, VDRPT, Local Governments, GRTC, CRAC, RMA, FHWA, FTA, FRA, EPA, VDEQ, VDA, RideFinders, Port of Richmond.

E. Budget, Staff and Funding

	<u>PL^{①②}</u>	<u>5303</u>	<u>RRPDC^②</u>	<u>SPR</u>	<u>TOTAL</u>
RRPDC	340,611	33,681	124,000	----	498,292
VDOT	<u>----</u>	<u>----</u>	<u>----</u>	<u>183,000</u>	<u>183,000</u>
TOTAL	\$340,611	\$33,681	\$124,000	\$183,000	\$681,292

NOTES: ^②2/10/05 MPO action to add \$10,000 in PL funds (shifted from other staff work tasks).

^②4/14/05 MPO action to add \$45,000 in PL funds (shifted from other staff work tasks) and to add \$50,600 in RRPDC overmatch funds.

F. Schedule

On-going activity.

1.2 **MPO Citizen Participation**

A. Background

This task provides staff support to ensure an active and involved citizen participation program, which meets federal and state requirements for public involvement in the transportation planning process. It should be noted that TEA-21 requires a high level of citizen involvement in the MPO process, including public meetings to review the TIP and transportation plan documents.

The MPO's current citizen participation process includes the use of two active and involved committees (i.e. CTAC and EDAC); annual public meetings for the TIP and LRTP; posting of MPO/MPO committee meetings and agendas and plan/document summaries on the RRPDC/MPO web site; submitting draft TIP's and other documents as directed by the MPO for public review and making these documents accessible to the public at area local libraries; providing opportunity for open public comment at all regularly scheduled MPO, TAC, CTAC and EDAC meetings; and other activities documented in the MPO's Guidelines for Public Participation Activities and Procedures.

Note that the revised "MPO Guidelines for Public Participation" will be submitted for MPO review and authorization to proceed to the 45-day public review period at the April 8, 2004 (FY 04) MPO meeting. Staff anticipates that the revised guidelines will be ready for final MPO review and action by the July 8, 2004 MPO meeting. The revised guidelines address corrective actions noted from the last MPO certification review which have previously been incorporated into the MPO's public participation procedures and activities. The revised guidelines also provide for a major new activity, MPO Annual Public Information and Input meetings.

Comments received during this period will be documented and submitted, along with staff response comments and revisions as appropriate, for MPO consideration and final action on the revised Guidelines document.

B. End Products

A functional and viable citizen participation program, which provides for a well informed public and for public input to the "3-C" transportation planning and programming process.

C. Work Elements

Work activities include the following:

1. Provide staff support for the Citizens Transportation Advisory Committee (CTAC).

FY 05 UWP Task 1.2

2. Respond to public requests concerning the status of transportation projects, traffic data, and information on MPO transportation plans, programs, studies, reports, and data.
3. Conduct public meetings and other citizen involvement activities for MPO plan and program activities.
4. Maintain and update as necessary staff activities and procedures for the MPO Guidelines for Public Participation.
5. Electronic dissemination of articles and information via the RRPDC web site.
6. Posting of MPO/MPO Committee agendas, meetings minutes, notices, reports, newsletters, plan documents and summaries, on the RRPDC web site.
7. Develop, publish, and distribute background information materials on the MPO “3-C” study process.
8. Conduct an annual series of information meetings on MPO plans and programs, providing for early citizen input on the MPO’s Transportation Improvement Program (TIP), Long-Range Transportation Plan (LRTP), and Unified Work Program (UWP). These meetings will also provide information on the status of the region’s air quality and efforts being made by area agencies to improve air quality.
9. Provide for MPO review and action on the revised “MPO Guidelines for Public Participation” and provide for its implementation (i.e., develop detailed procedures and activities documents).
10. Web Site – Assist in developing a new format utilizing new software for the RRPDC web site. Assist in web site design and provide staff support for transfer and posting of plans, studies, reports, agendas, schedules, and other information to the new web site.

D. Agency Participation

RRPDC, VDOT, VDRPT, Local Governments, GRTC, CRAC, FHWA, FTA, VDEQ, RMA, RideFinders, CTAC At-Large Organizations.

E. Budget, Staff and Funding

	<u>PL^①</u>	<u>5303</u>	<u>RRPDC^①</u>	<u>SPR</u>	<u>TOTAL</u>
RRPDC Staff	68,000	20,000	17,000	----	105,000
VDOT	----	----	----	<u>5,400</u>	<u>5,400</u>
TOTAL	<u>\$68,000</u>	<u>\$20,000</u>	<u>\$17,000</u>	<u>\$5,400</u>	<u>\$110,400</u>

FY 05 UWP Task 1.2

NOTE: ^①4/14/05 MPO action to add \$4,000 in PL funds (shifted from other staff work tasks) and to reduce RRPDC overmatch funds by \$32,000.

F. Schedule

On-going activity.

1.3 Unified Work Program (UWP)

A. Background

This task provides for the maintenance of the adopted UWP and for the annual preparation of the MPO's work program for the upcoming fiscal year (i.e., July 1, 2005 to June 30, 2006). The UWP also identifies the region's planning priorities and notes various transportation study activities as informational items.

B. End Products

1. Maintain/amend the FY 05 UWP.
2. FY 06 UWP document.
3. Applications for federal and state transportation planning funds.
4. Prepare/update staff work assignments and schedules.

C. Work Elements

Work activities include the following:

1. Review VDOT, VDRPT, FHWA, FTA, EPA, and other state and federal agency information and requirements, plus other materials relating to UWP preparation.
2. Solicit input for proposed work tasks from TAC and through the MPO's annual public information and input meetings.
3. Prepare a preliminary staff budget and list of proposed work tasks for the Commission's annual initial work program.
4. Solicit local government, GRTC, VDOT, and VDRPT input on proposed transportation planning studies of interest to the MPO (funded with federal transportation funds other than FHWA/PL and FTA Section 5303). Includes studies programmed in the Transportation Improvement Program (TIP).
5. Identify and document planning priorities.
6. Prepare work tasks and budgets.
7. Identify funding sources and amounts.
8. Prepare final work program document.

FY 05 UWP Task 1.3

9. Secure needed approvals from MPO, VDOT, VDRPT, FHWA, FTA, and other agencies/organizations as appropriate.
10. Secure commitments for local match funds as appropriate.
11. Conduct State and Regional Intergovernmental Review process and submit grant applications.
12. Distribute final UWP document.
13. Amend adopted UWP as per MPO action.
14. Prepare and update staff work assignments, direct costs, and schedule.

D. Budget, Staff and Funding

	<u>PL^①</u>	<u>5303</u>	<u>RRPDC^①</u>	<u>SPR</u>	<u>TOTAL</u>
RRPDC	22,000	5,000	28,000	----	55,000
VDOT	----	----	----	5,400	5,400
TOTAL	<u>\$22,000</u>	<u>\$5,000</u>	<u>\$28,000</u>	<u>\$5,400</u>	<u>\$60,400</u>

NOTE: ^①4/14/05 MPO action to add \$4,000 in PL funds (shifted from other staff work tasks) and to add \$11,000 in RRPDC overmatch funds.

E. Schedule

On-going activity for adopted UWP.

November 2004 to May 2005 for FY 06 UWP.

2.0 LONG RANGE PLANNING AND SURVEILLANCE

2.1 Socioeconomic Data Development

A. Background

As part of the MPO's regional transportation planning process, socioeconomic data is developed by area local governments and RRPDC staff for use in various VDOT, MPO, and local plan and study activities including plan model data input, EIS, corridor studies, air quality conformity analysis, transit studies, responding to information requests for market and other demographic studies, etc. The latest data update was completed in 2003 when the MPO took action at its October 9, 2003 meeting to approve 2000 base year data and 2026 socioeconomic forecasts. This data had been previously reviewed by the Socioeconomic Data Work Group (made up of planners and demographers from each local government and RRPDC staff) and accepted by the MPO Technical Advisory Committee (TAC).

Several area local governments develop and maintain this data (i.e., population and housing units) on a continuing basis and report it to the RRPDC on an annual basis. However, some area local governments do not conduct such annual updates. As a result, there has been inconsistent reporting of data from various jurisdictions in the region. In addition, the RRPDC staff has been responsible for preparing employment data and forecasts which requires an extensive commitment of staff time and resources. For FY 05, the RRPDC is planning to conduct a review of previous staff and local government activities/reports to develop base year and forecast year data for population, households, housing units, total employment, retail employments, automobiles, and students by zone of school, and provide a report with recommendations for future development of this data. At a minimum, staff will need to review and update the current base year (i.e., 2000) data and develop new forecast year data (i.e., 2029 or 2030) for the next LRTP update. Work to develop a report on recommended socioeconomic data and forecast procedures and activities will be conducted through the Socioeconomic Data Work Group and submitted as a draft final report for TAC review and final action.

Work activities related to maintaining and updating, as appropriate, census tract level data for minority and low income population groups (for environmental justice assessments) and assessing information available from the Census Transportation Planning Package (CTPP) are to be conducted under this UWP work task.

B. End Products

1. Review and update 2000 and 2026 socioeconomic data and forecasts for use in the next LRTP update.
2. Report to TAC on recommended methodologies for development of future base year and forecast year socioeconomic data.

3. Report to TAC on the CTPP and potential applications.
4. Use of CTPP in support of various plans, studies, and reports.

C. Work Elements

RRPDC work elements are as follows:

1. Review of previous staff and local government activities to develop base year and forecast year data for population, households, housing units, employment, and student data items/sub-items, and provide recommendations for development of these data items/sub-items in the future. Staff will utilize the Socioeconomic Data Work Group to develop this report and provide a final report for review and action by the MPO's Technical Advisory Committee (TAC). Conducting this work task is contingent upon the RRPDC Principal Planner position for the Planning and Information Systems Division being filled.
2. Provide administrative and technical support for Socioeconomic Data Work Group meetings including preparing and submitting meeting agendas and summaries, and other activities necessary for support of this committee.
3. Review and update 2000 and 2026 socioeconomic data and forecasts for use in the next LRTP update.
4. Review CTPP data and develop a report for TAC on potential applications.
5. Utilize CTPP data in support of various plans, studies, and reports.

VDOT and local government work elements are as follows:

1. Local governments are encouraged to continue development of TAZ level data as part of their jurisdiction's data review and development activities; however, since all local governments in the MPO study area do not maintain population and other socioeconomic data on a continuing basis, staff does not expect to receive and publish an annual data report.
2. VDOT work element is to compile data for use in various special studies (e.g., Environmental Impact Statements and Assessments, etc.).

D. Agency Participation

RRPDC, VDOT, Local Governments.

E. Budget, Staff and Funding

	<u>PL^{①②}</u>	<u>RRPDC^②</u>	<u>TOTAL</u>
RRPDC	\$28,000	\$18,000	\$46,000

NOTE: ^①2/10/05 MPO action to subtract \$10,000 in PL funds (shifted to other staff work tasks).

^②4/14/05 MPO action to subtract \$2,000 in PL funds (shifted to other staff work tasks) and to add \$1,000 in RRPDC overmatch funds.

F. Schedule

July 2004 to June 2005

2.2 Long-Range Transportation Plan Update

A. Background

The MPO is scheduled to take action to adopt the *2026 Long-Range Transportation Plan* (LRTP) and *Congestion Management System* (CMS) on April 8, 2004. The LRTP serves as the framework and initial step in developing the region’s network of transportation facilities and services. The LRTP uses a balanced, multimodal approach (i.e. automobile, buses, car and vanpools, light and commuter rail, bicycles, congestion and transportation demand management, truck and rail cargo, etc.) to address the region’s long term (20 years) projected travel needs, and provides for the consideration of impacts on the natural and human environment. Projects proposed in the LRTP must be within projected levels of available financial resources and must also meet federal air quality, environmental justice, and planning requirements. Highway and public transportation projects and programs must be consistent with the MPO’s final adopted LRTP to be eligible for federal-aid funds.

For FY 05, work will begin on the next LRTP update (for 2029 or 2030). Work to develop the LRTP base and forecast year socioeconomic data will be conducted as part of UWP task 2.1. The 2026 LRTP was developed with a new plan model TP+ (previous LRTPs were developed using MINUTP). A review of 2026 LRTP modeling procedures and programs to identify improvements and any additional data needs is needed. In addition, the current travel survey data should be reviewed to determine if a new survey is needed, if the current data is still acceptable, or if use of CTPP and other sources can help to meet current modeling requirements.

In conjunction with VDOT staff, RRPDC will assess the feasibility of Viper or similar travel demand model software in conducting regional level analysis of plan (including modal) alternatives. Staff’s assessment should include an estimate of required staff resources and direct costs.

Work should also be initiated on the 2029/2030 initial draft LRTP scope of work and schedule. Task 2.2 also provides for the preparation of technical and other reports to assure documentation. Such documentation should be understandable for the general public, and should be made available consistent with the MPO’s public participation policies.

B. End Product

1. Amendments to the 2026 LRTP as necessary.
2. Review of 2026 LRTP modeling procedures and programs including assessment of current travel survey and origin-destination (O-D) data.

3. Report assessing the feasibility of Viper or similar travel demand model software in conducting regional level analysis of plan (including modal) alternatives.
4. 2026 LRTP Executive Summary.

C. Work Elements

Work activities by RRPDC and VDOT staffs include the following:

1. Review of 2026 LRTP modeling procedures and programs including assessment of current travel survey and O-D data, network counts, mode split model, and interaction/coordination with conformity analysis model [RRPDC and VDOT]
2. Report assessing the feasibility of Viper or similar travel demand model software in conducting regional level analysis of plan (including modal) alternatives.
3. Prepare, print, and distribute 2026 LRTP Executive Summary [RRPDC].
4. Annual citizen review meeting for input on the LRTP (conducted as part of UWP task 1.2) [RRPDC].
5. Review and submit for MPO approval requests for functional classifications/reclassifications for study area roads [RRPDC].
6. Conduct technical documentation activities and make available for public review and information [RRPDC].
7. Review highway construction plans for conformance with the adopted Transportation Plan [VDOT and RRPDC].
8. Maintain/update computer software, staff training, and direct costs [VDOT].

D. Agency Participation

RRPDC, VDOT, VDRPT, VDEQ, local governments, CRAC, GRTC, RMA, Port of Richmond, FHWA, FTA, and RideFinders.

E. Budget, Staff and Funding

	<u>PL^①</u>	<u>5303</u>	<u>RRPDC^①</u>	<u>SPR</u>	<u>TOTAL</u>
RRPDC	24,000	5,000	1,000	----	30,000
VDOT	<u>----</u>	<u>----</u>	<u>----</u>	<u>29,000</u>	<u>29,000</u>
TOTAL	\$24,000	\$5,000	\$1,000	\$29,000	\$59,000

NOTE: ^①4/14/05 MPO action to subtract \$1,000 in PL funds (shifted to other staff work tasks) and to reduce RRPDC overmatch funds by \$9,000.

Schedule

July 1, 2004 to June 30, 2005.

2.4 City of Richmond – Update of the Transportation Element of the City Master Plan

A. Background

In 1997, the City of Richmond contracted with Michael Baker Jr., Inc. for the development of the Transportation Element of the City Master Plan. The document analyzed the existing conditions of the various modes of travel within the city, developed multimodal goals/objectives/policies and developed recommendations for implementation. This document was incorporated into the city's Master Plan document in 2001.

Since seven years have passed and considerable development has occurred, the city is interested in updating the Transportation Element of the Master Plan. The city would also like to make sure that the various modes link together within the city and the region so that travel for the city's residents and visitors is seamless and user friendly. The city would like to update the 1997 document analyzing the existing conditions, projecting for future growth and development and developing recommendations for implementation. The document should include a financial plan and establish priorities for implementation. This document will be used in the planning and programming of funds.

This UWP task was added to the FY 03 UWP by MPO amendment action on December 12, 2002. It was further amended on December 11, 2003 with the addition of funds previously programmed for the Downtown Transit Center Need and Location Study (task 5.4, deleted from the UWP). Work on this task is scheduled to begin in May 2004 and should carry over to FY 05.

B. End Product

Update of the Transportation Element of the City Master Plan.

C. Work Elements

1. Data Collection:
 - a) Review of City Master Plan, Richmond Downtown Plan, census information, economic development and planning projects, regional plans, VDOT six-year plan, other city plans and other documents that include appropriate projections relevant to transportation planning, economic development, and analysis of land use patterns.
 - b) Interviews with city staff, GRTC, RideFinders, Port of Richmond, Capital Region Airport Commission, Greyhound, Capital Region Taxicab Association, Richmond Renaissance, VCU, Neighborhood Teams, VDOT, VDRPT, and other organizations.
 - c) Collection of transportation data.

2. Analysis of information gathered.
3. Development of multimodal goals, policies and recommendations of specific transportation improvement projects and their relationship to land use. Specific recommendations will be needed pertaining to GRTC operations in downtown and the full build-out of the Main Street Station.
4. Development of maps, which are compatible with ARCVIEW or similar GIS software, and provided in a digital format.
5. Financial analysis of recommendations and establishment of project prioritization system.
6. Community charettes and presentations including City of Richmond Planning Commission, Richmond City Council, and others.

D. Agency Participation

RRPDC, City of Richmond, GRTC, Port of Richmond, Capital Region Airport Commission, Greyhound, Capital Region Taxicab Association, Richmond Renaissance, Shockoe Bottom Merchants, Residents Associations and the City Neighborhood Teams, VDOT, VDRPT, Richmond Metropolitan Convention and Visitors Bureau, VCU, and many other organizations.

E. Budget, Staff and Funding

City of Richmond Consultant \$110,000

Regional STP funds: (Federal \$80,000, VDOT \$20,000)

FTA Section 5313b: \$8,000

VDRPT/MTTF-Tech: \$1,000

City Staff*: \$1,000

*In-kind match

F. Schedule

May 2004 to June 2005

2.5 Transportation Data Base Development/GIS

A. Background

Conducting the MPO's regional transportation planning and programming process involves extensive work efforts to develop data and information on the region's transportation network. While some of this information is developed by RRPDC staff, a great deal is developed by VDOT, VDRPT, consultants, area local governments, and others. Much of this information is of interest to area local governments, transportation agencies, business and marketing firms, educational institutions, citizens groups, and others. Responding to information requests involving certain data items often results in staff work to develop the appropriate information, refer the requesting organization/individual to another agency, or advising them that the information is not available. This UWP task provides for work by RRPDC staff to develop data bases and informational reports on the region's transportation system, and to develop and distribute reports, maps, and other information.

This UWP task also provides for staff development and maintenance of Geographic Information System (GIS) staff services. The use of GIS has become an integral part of the transportation planning process, providing an ability to work with map information and to graphically display various features, data, and other characteristics in various formats. The GIS system also provides staff the ability to link map and data information to conduct transportation systems analysis.

B. End Products

1. Informational reports, maps, inventories, and other documents, reporting on transportation activities and development.
2. GIS support for MPO plans, programs, studies, and other work activities.

C. Work Elements

1. Development of transportation data for use in various reports, studies, plans and programs.
2. Develop, print and distribute informational reports on transportation plans, programs, activities, and data.
3. Work with VDOT to develop a GIS data base program for use in preparing MPO plans, programs, and studies. A report which identifies data, program features, procedures for data entry updates and quality control, and availability to local governments and others will be prepared and presented to TAC for review and comment and for MPO information.

4. GIS support as follows:
 - a. Staff support for development of maps and data linked to GIS map system. Includes staff work in support of the LRTP, CMS, TIP (project location maps for major and priority projects, etc.), MPO annual public information and input meetings, and other staff, local, and VDOT plan and study activities.
 - b. Technical assistance to GRTC, RideFinders, and others in mapping data/information for analysis and display of data and/or features on a local, sub area, corridor, or regional basis.
5. Maintenance and support for the RRPDC’s street name clearing house program.

D. Agency Participation

RRPDC, VDOT, VDRPT, FHWA, FTA, local governments, GRTC, CRAC, RMA, RideFinders.

E. Budget, Staff and Funding

	<u>PL^{①②}</u>	<u>5303</u>	<u>RRPDC^②</u>	<u>TOTAL</u>
RRPDC	\$58,000	\$10,000	\$33,000	\$101,000

NOTES: ^①2/10/05 MPO action to subtract \$20,000 in PL funds (shifted to other staff work tasks).

^②4/14/05 MPO action to subtract \$22,000 in PL funds (shifted to other staff work tasks) and to reduce RRPDC overmatch funds by \$39,000.

F. Schedule

On-going

2.9 **Richmond Regional Bicycle and Pedestrian Plan**

A. Background

The VDOT has provided funds for conducting the Richmond Regional Bicycle and Pedestrian Plan. This study will be conducted by a VDOT consultant and the VDOT will also serve as the study project manager.

The end result of this study will be a detailed draft plan for each participating jurisdiction that it can consider for adoption as part of its comprehensive plan and considered for insertion in the region's long-range transportation plan (LRTP) as part of the LRTP Bicycle and Pedestrian element. The study will involve the RRPDC, VDOT, area local governments and FHWA.

Work on this plan will be conducted through an MPO special purpose study advisory committee of local government representatives and other groups and organizations (11/9/00 action by MPO to establish committee). The detailed study scope of work was set up through and approved by the study advisory committee (approved with modifications as discussed at the committee's March 9, 2001 meeting). Based on this action, VDOT negotiated a final contract with the study consultant and initiated work in mid-FY 02 (study kick-off committee meeting held on January 23, 2002). A discussion draft of the plan was presented to the study advisory committee on March 18, 2004. Work on the plan is expected to be completed in early FY 05 with the draft plan document presented for MPO review and action.

B. End Products

A detailed draft plan for each participating jurisdiction that it can consider for adoption as part of its comprehensive plan and can also be considered for insertion in the MPO's LRTP as part of the Bicycle and Pedestrian element.

C. Work Elements

The draft detailed work scope presented for action at the March 9, 2001 Committee meeting contained the following major work tasks:

1. Project kickoff events.
2. Establish vision and goals.
3. Assess existing conditions.
4. Assess latent demand for bicycling and walking.

5. Prepare draft regional network plan.
6. Prepare final regional network plans.

D. Agency Participation

VDOT, RRPDC, Local Governments, Richmond Area Bicycling Association, Sierra Club, CTAC representatives, GRTC, and RideFinders.

E. Budget, Staff and Funding

SPR

VDOT Consultant \$500,000

F. Schedule

FY 01 to FY 05.

3.0 MANAGEMENT SYSTEMS/SHORT RANGE PLANNING

3.1 Congestion Management System (CMS)/Intelligent Transportation Systems (ITS)

A. Background

The Congestion Management System (CMS) serves as a systematic process for addressing congestion by providing information on transportation system performance and proposing use of alternative strategies and programs to help alleviate congestion. Update work on the CMS is conducted in conjunction with the LRTP update (scheduled for adoption at the April 8, 2004 MPO meeting).

For FY 05, the MPO should initiated a new process for using a standing CMS review group to guide and document the on-going alternatives analysis of congested corridors (as established by the CMS or needed due to upcoming TIP programming requirements). The group's primary responsibility will be to perform the federally required on-going CMS alternatives analysis of congested corridors using the adopted CMS Toolbox of Strategies. This group will be made up of locality and agency members of the MPO's Technical Advisory Committee in addition to members of VDOT's Richmond District Traffic Engineering and Smart Traffic Center staff. The work group's duties would include:

- Establishing criteria to prioritize the congested corridors for further study. The corridors would then be recommended to TAC for review and approval.
- Establishing consensus on the guidelines and documentation procedures used to perform the work group's duties.
- Developing individual reports of the CMS alternatives analysis for each corridor studied – the report's main output would be a “menu” of viable strategies for alleviating congestion along the corridors.
- Monitoring the implementation of congestion reducing strategies along the corridors.

In FY 05, work will also be initiated for the next CMS update. A major component of the CMS is monitoring highway system performance. This is done by conducting travel time runs of the CMS highway network during peak hours and vehicle occupancy counts at selected locations. Travel time runs are conducted using Global Positioning System (GPS) units recording travel time data, which is downloaded into a GIS program for mapping and analysis. The current GPS units require extensive staff time to download, record, and map travel times, and need to be replaced with units that can easily function with ArcGIS or similar software. A preliminary cost estimate for these units is \$4,500 to \$6,000.

Work under this task also provides for staff support and participation on the Richmond/Tri-Cities Areas Intelligent Transportation Systems (ITS) Regional

Architecture study. A major requirement facing the region is the development of a regional ITS architecture. Federal regulations require this to be in place by April 8, 2005. VDOT has hired a consultant and initiated work on this study in FY 04. The MPO took action at its December 11, 2003 meeting to establish the ITS Regional Architecture Study Steering Committee and charged it with reviewing work conducted by the study consultants; providing comments on draft reports, technical documents, and other work as may be requested by VDOT; providing information and assistance as may be appropriated to the study; and providing its comments and recommendations on the draft final Regional ITS Deployment Plan for MPO review and consideration. This steering committee was established as a special purpose committee with membership from state and regional agencies and jurisdictions in both the Richmond Area and Tri-Cities Area MPOs. The study is scheduled to be completed in late FY 04 or early FY 05.

B. End Products

1. Establish CMS review group composed of VDOT, RRPDC, and other local governments and agencies to conduct on-going alternatives analysis of congested corridors.
2. Develop and issue reports from the CMS review group documenting alternatives analysis.
3. Annual report on the “State of the Transportation System” documenting the implementation of congestion reducing strategies and providing other information related to the overall operation of the region’s transportation network.
4. GPS travel time runs, vehicle occupancy counts and development of other data for the next CMS update.
5. Staff support and participation in the Richmond/Tri-Cities Areas ITS Regional Architecture Study.

C. Work Elements

1. Administrative and technical support for the CMS review group.
2. Conduct on-going alternatives analysis of congested corridors, and issue reports documenting this analysis.
3. Prepare annual “State of the Transportation System” report documenting the implementation of congestion reducing strategies and providing other information related to the overall operation of the region’s transportation network.

FY 05 UWP Task 3.1

4. Conduct GPS travel time runs, vehicle occupancy counts, and assemble/develop other data for use in the next CMS update and the “State of the Transportation System” report (if available and if appropriate).
5. Utilize CMS analysis and traffic projections for the 2026 LRTP as a starting point for CMS review group work to identify and analyze congested corridors.
6. Staff support and participation in the Richmond/Tri-Cities Areas ITS Regional Architecture Study and other ITS related activities and meetings.

D. Agency Participation

RRPDC, VDOT, Local Governments, GRTC, RideFinders, CRAC, RMA, FHWA, FTA, VDRPT.

E. Budget, Staff and Funding

	<u>PL^{①②}</u>	<u>5303</u>	<u>RRPDC^②</u>	<u>SPR</u>	<u>TOTAL</u>
RRPDC	36,000	20,000	1,000	----	57,000
VDOT	<u>----</u>	<u>----</u>	<u>----</u>	<u>11,500</u>	<u>11,500</u>
TOTAL	<u>\$36,000</u>	<u>\$20,000</u>	<u>\$1,000</u>	<u>\$11,500</u>	<u>\$68,500</u>

NOTE: ^①2/10/05 MPO action to subtract \$10,000 in PL funds (shifted to other staff work tasks).

^②4/14/05 MPO action to subtract \$24,000 in PL funds (shifted to other staff work tasks) and to reduce RRPDC overmatch funds by \$25,000.

F. Schedule

On-going activity

3.2 Access Management Studies

A. Background

Access management provides a way to manage access to land development while simultaneously preserving the flow of traffic on the surrounding road system in terms of safety, capacity and speed. Access management provides for managing and planning the spacing and design of driveways, median openings, traffic signals, and interchanges. The goals of access management are as follows:

1. Improve safety while decreasing accident rates.
2. Reduce congestion by using the existing roadway network more efficiently.
3. Maintain desirable speeds along arterials.
4. Reduce interference with through traffic due to turns into or out of a site.
5. Optimize highway function and land use.
6. Provide sufficient spacing between at-grade intersections.
7. Provide adequate on-site storage areas.

In FY 2000, staff conducted a study of access management standards in Powhatan County. The study included research on access management principals and standards used in various states, which staff reviewed and presented to VDOT and county staff. Based on this research a review of current standards and practices, and the counties particular needs and preferences, a set of proposed standards and recommended techniques for managing access has been developed for the county (work was completed in FY 01). This work served as a model for a similar study for Goochland County, which the MPO accepted in June 2002. Staff initiated work on the New Kent access management study in early FY 03. Progress on this study was delayed due to New Kent's request for assistance on the comprehensive plan and the transportation element of the comprehensive plan. Staff turnover and the need to work on the LRTP further delayed progress, and work is scheduled to resume in late FY 04.

Staff has also been requested by Powhatan County to provide assistance in developing a computer program that would conduct the necessary calculations to determine justifications (i.e., lengths) for left and right turn lanes for proposed land developments. County staff has advised that VDOT will only administer VDOT access standards and policies, and the administration of system with a higher level of standards and policies falls on the county. As a result, county staff has requested that RRPDC staff provide assistance in developing an automated system that can calculate

turn lane and other requirements for proposed developments. The staff will give consideration to this request and provide the county with a recommendation on how to proceed.

B. End Product

Utilize research from the Powhatan and Goochland counties access management standards studies on access management principals and techniques to reduce the proliferation of driveways, entrances, and crossovers and to enhance the functional capacity of intersections on secondary, primary and arterial roads. Based on this research, standards will be presented for regulating and coordinating the various types of access connection points to the road system that can be used by the county in reviewing requests for new entrances and exits for residential subdivisions and businesses. This study will propose detailed and sophisticated techniques in access management for New Kent County and (time permitting) the initiation of work for Charles City County. Staff will also provide technical assistance to those jurisdictions where access management studies have been completed.

A. Work Tasks

1. Review with county, VDOT, and RRPDC staffs, study intent and scope of work.
2. Review and evaluate existing VDOT minimum standards for entrances and access points to different classification of roads.
3. Review and evaluate existing county policies concerning access to roads (distances between entrances, turn lane/taper lengths) and thoroughfare plan goals and objectives.
4. Utilize previously conducted research and examples of successful application of the concepts on access management (research from FHWA, States, and rural and urban localities).
5. Analyze issue areas in relation to road classification (arterial, primary, secondary roads), distances between entrances, turn lane/taper lengths, limiting entrances, sharing entrances, internal service drives, separation of intersections including those signalized, onsite internal vehicular circulation and storage, left turn lanes particularly for subdivisions, and median crossover separations.
6. Develop recommended standards to address above access management issue areas, including reasons for and benefits that would accrue from the recommendations.

FY 05 UWP Task 3.2

7. Review recommended standards with study participants (task 1) and selected local transportation/ planning department heads.
8. Assist in presentation of the findings to the County Board of Supervisors.
9. Present the access management standards to the MPO Board for acceptance of study document.
10. Provide technical assistance on previously completed access management studies by reviewing requests for assistance and responding with a recommended course of action.

D. Agency Participants

Goochland County, Charles City County, New Kent County, Powhatan County, RRPDC, VDOT, FHWA.

E. Budget, Staffing, Funding

	<u>PL^①</u>	<u>RRPDC^①</u>	<u>TOTAL</u>
RRPDC	\$9,000	\$3,000	\$12,000

NOTE: ^①4/14/05 MPO action to subtract \$11,000 in PL funds (shifted to other staff work tasks) and to reduce RRPDC overmatch funds by \$15,000.

F. Schedule

July 2004 to June 2005

3.3 Richmond/Tri-Cities Areas ITS Regional Architecture Study

A. Background

The Virginia Department of Transportation (VDOT), in conjunction with the MPOs for the Richmond and Tri-Cities areas, has initiated work to develop the region's intelligent transportation system (ITS) architecture. ITS is most simply defined as using technology to enhance mobility and safety. ITS uses a combination of technologies such as coordinated traffic signals, changeable message signs, closed-circuit television cameras, advanced traveler information systems, etc., to assist in better managing the agency's transportation network.

An ITS architecture provides guidelines for how these technologies should be deployed, implemented, operated, and maintained. The ITS Regional Architecture will serve a number of purposes including: providing a roadmap for future ITS deployments, satisfying federal requirements for future ITS funding, allowing for ITS projects to be mainstreamed into traditional transportation planning programs, and providing an inventory of existing deployments. By gaining input from a variety of stakeholders, the architecture will better define the relationships, interfaces, and interactions between various agencies. On the MPO level, once developed the architecture will be used to provide input into the Long-Range Transportation Plan, Congestion Management System, and other important planning activities.

The U.S. Department of Transportation (USDOT) policy on ITS Architecture and Standards, implementing Section 5206 (c) of the Transportation Equity Act for the 21st Century (TEA-21), was issued in 2000. This final USDOT rule requires that ITS projects funded under the federal highway trust fund and mass transit account conform to the Nation ITS Architecture, as well as to USDOT adopted ITS standards. USDOT's deadline for having this architecture in place is April 2005.

VDOT has obtained consultant services to conduct this study and work was initiated in FY 04. At the December 11, 2003 MPO meeting, action was taken to establish the ITS Regional Architecture Study Steering Committee, a joint Richmond Area MPO and Tri-Cities Area MPO special purpose committee, and charged it with reviewing work conducted by the study consultants; providing information and assistance as may be appropriate to the study; and providing its comments and recommendations on the draft final *Regional ITS Deployment* Plan for MPO review and consideration. Membership on the Steering Committee includes VDOT District staff, RRPDC and Crater PDC staffs, GRTC, Virginia State Police, City of Petersburg and other jurisdictions/agencies as determined by the Tri-Cities Area MPO, and most local jurisdictions from the Richmond Area MPO. Work on this study is scheduled to be completed in late FY 04 or early FY 05.

B. End Product

Draft final documents covering (at a minimum) the Richmond and Tri-Cities MPO study areas, to be reviewed and approved by the Richmond Area MPO and Tri-Cities Area MPO as follows:

1. Draft Regional ITS Architecture
2. Draft Regional ITS Deployment Plan

C. Work Elements

Major work elements include the following:

1. Establishment of steering committee and identification of study stakeholders.
2. Develop inventory of existing and planned ITS projects.
3. Conduct stakeholder interviews.
4. Develop baseline draft regional ITS architecture document.
5. Conduct regional ITS architecture review workshop.
6. Develop draft final Regional ITS Architecture.
7. Develop draft Regional ITS Deployment Plan.
8. Develop draft final Regional ITS Deployment Plan
9. Present draft final Regional ITS Deployment Plan for MPO Citizens Transportation Advisory Committee (CTAC) review and comment.
10. Present draft final Regional ITS Deployment Plan for MPO review and action.

D. Agency Participation

VDOT, RRPDC, Crater PDC, local governments, GRTC, Virginia State Police, FHWA.

E. Budget, Staff and Funding

Work to be completed by VDOT consultant in FY 04 (no SPR funds programmed for FY 05). Final draft study to be presented to MPO in late FY 04 or early FY 05.

F. Schedule

September 2003 to FY 05.

4.0 TRANSPORTATION PROJECT PROGRAMMING

4.1 Transportation Improvement Program (TIP)

A. Background

The TIP programs highway and transit projects that are allocated or scheduled to receive funds over a three-year period. Once approved as part of the TIP, federally funded projects can proceed to the next stage of implementation. Major highway projects that are funded by state, local, or other funding sources are included in the TIP for air quality conformity analysis or information purposes.

In the past, the TIP has programmed transportation projects on an administrative classification basis consistent with the Virginia Transportation Six Year Improvement Program (SYIP) under the following systems and programs:

1. NHS/Interstate and Non-Interstate
2. Primary
3. Secondary
4. Urban
5. TEA-21 High Priority
6. Priority Transportation Funds
7. FRANS (Reimbursement Notes)
8. General Funds
9. Toll Facilities Revolving Account
10. Congestion Mitigation/Air Quality (CMAQ) Program
11. Surface Transportation Program (STP)
12. Transportation Enhancement Program
13. Transportation Safety Program
14. Public Transportation
15. Airports
16. Local/Private Funded Projects

Project descriptions include implementing agency, location/service area, cost estimates, funding sources, amount of funds actually or scheduled for allocation, type of improvement, and other appropriate information. The TIP also includes a financial plan summary, GRTC's Financial Capacity documentation and certification, project implementation status, public participation and environmental justice assessment documentation and the MPO/State Statement of Certification.

Essential elements of the TIP previously required under ISTEA and continued under TEA-21 are as follows:

1. Approval and Updates – The TIP must be approved by the MPO and the Governor, and must be updated at least every two (2) years. The Richmond

FY 05 UWP Task 4.1

Area MPO's TIP is updated on an annual or biennial basis based on action by the Commonwealth Transportation Board (CTB) to review and approve federal and state projects, and state matching funds.

2. Scope of TIP – The TIP must include all projects within the MPO's Study Area (including pedestrian walkways and bicycle transportation facilities) to be funded under Title 23 and the FTA.
3. Financial Plan – The TIP must include a financial plan component or element. The financial plan must demonstrate how the TIP can be implemented, and indicate resources from public and private sources that are reasonably expected to be made available to carry out the plan.
4. Project Priorities – The TIP must include a priority list of projects to be carried out in each 3-year period, and a financial plan that demonstrates how it can be implemented. Projects within a funding category for a particular year can serve as an indicator of priority, such that first year projects are the highest priority, second year projects are the next highest priority, etc. Procedures that distribute sub-allocated CMAQ, STP or Section 5307 funds to individual jurisdictions or modes by predetermined percentages or formulas are inconsistent with federal planning provisions that require MPO's to develop a prioritized and financially reasonable TIP, unless they can be shown to be based on considerations required as part of the MPO's planning process. Such procedures otherwise ignore the dynamics of the planning process, hinder response to high priority problems identified through the planning process, and frustrate the flexibility features of ISTEA/TEA-21.
5. Project Selection – All federally funded projects, except NHS, Bridge, and Interstate/Interstate Maintenance projects, are to be selected by the MPO in consultation with the state from the approved TIP and in accordance with the TIP priorities. Projects that are NHS Interstate, NHS Non-Interstate, statewide STP and Bridge funded are to be selected by the state in cooperation with the MPO from the approved TIP. The TIP serves as the project selection document.
6. Transportation Plan Consistency – All federally funded TIP projects must be consistent with the MPO's adopted Transportation Plan.
7. Air Quality Conformity – The MPO, along with FHWA and FTA, must make a conformity determination for projects listed in the proposed TIP, or for amendments that add or delete regionally significant projects. Conformity is generally defined in the CAAA as conforming to the adopted State Implementation Plan's purpose for eliminating and reducing the severity and number of NAAQS violations and achieving attainment status. In other words,

FY 05 UWP Task 4.1

the implementation of TIP projects must be shown to serve as part of the region's effort to improve air quality.

8. Public Review and Comment – The public, affected agencies, representatives of transportation agency employees, other affected employee representatives, private providers of transportation, and other interested parties must receive a reasonable opportunity to comment on the proposed program.
9. Environmental Justice – The TIP documentation includes an assessment of the distribution of impacts on different socioeconomic groups for investments identified in the TIP. The RRPDC conducts this assessment for RSTP and CMAQ projects. VDOT is responsible for conducting this assessment for those projects for which it has lead authority for project selection.
10. MPO Certification – In TMA's, the USDOT Secretary shall certify the planning process at least once every 3 years. A joint FHWA/FTA review was conducted in September 2000, and on January 17, 2001 the MPO was conditionally certified, subject to five corrective action issues. The FHWA/FTA fully certified the MPO on April 2, 2002. The next MPO certification is tentatively scheduled for May 2004 (FY 04).

New provisions under TEA-21 that are now part of the TIP development process are as follows:

1. The MPO 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. The purpose of this provision is to enhance public awareness of which projects are being implemented in the region (see 23 U.S.C. 134(h) (7) (B); 49 U.S.C. 530 (C) (5) (B)).
2. Freight shippers, providers of freight transportation services, and representatives of users of public transit are added to the list of parties that must be given the opportunity for review and comment on plans and TIP's.
3. The TIP may include an additional list of "illustrative" projects. Such projects are intended to assist in the development of a vision-based program, and are not to be included in the fiscally constrained list of projects. Illustrative projects are defined as those projects that would be included in the TIP if additional resources would become available.
4. TEA-21 requires that each state develop a process for ensuring coordination with local elected officials in non-metropolitan areas in the development of the TIP.

FY 05 UWP Task 4.1

Draft federal planning regulations implementing these new TEA-21 provisions were published in the federal register in early FY 01. However, these draft regulations have been withdrawn. The VDOT and FHWA have advised that even though there are no current regulations implementing TEA-21, the MPO is required to abide by its provisions.

Staff has been advised by VDOT that the TIP format will be revised to start showing obligation information for each project, and that showing project allocations will now be optional (allocation of funds will be shown in the SYIP, Secondary System Programs, and other documents). This new format will be instituted with the FY 04/05 – FY 06/07 TIP. VDOT has requested that this TIP be approved by the MPO and submitted to VDOT by August 1, 2004

VDOT is also developing an electronic project submission system. VDOT conducted informational meetings with VDOT and MPO staffs on January 15, 2004, but is still working on the project submission format, MPO staff access, and other system operation needs. VDOT has also indicated that in the future, TIP amendments should be done on-line/electronically, and is developing procedures for this process.

It is also important to note that FHWA has indicated that the MPO needs to develop a new process for selecting RSTP funded projects. The MPO's Technical Advisory Committee is currently looking into this and should present its recommendations to the MPO in FY 05. TAC will also need to consider comments and findings from the MPO certification review before presenting its report to the MPO.

B. End Products

1. Development and adoption of the FY 04/05-06/07 TIP (work initiated in FY 04) and the MPO's annual Statement of Certification, providing documentation demonstrating compliance with financial plan and environmental justice requirements, FTA financial capacity policy, and conformity to the Virginia State Implementation Plan (for air quality purposes).
2. Initiating work on the next TIP (FY 05/06 – FY 07/08) as a new document or as an amendment to the current (FY 04/05 – 06/07) TIP, and adopting the MPO's annual Statement of Certification.
3. Maintenance activities in support of the current TIP including processing of TIP amendment requests; maintenance of records tracking the programming of Regional STP and CMAQ funds; and a report on the implementation status of major projects from the previous TIP.
4. Development and submission of the MPO's list of regional priority transportation projects.

5. Report on the status of major projects in the region.

C. Work Elements

Work activities include the following:

1. Document the TIP preparation process including project advancement, area priorities and use of the Long-Range Transportation Plan (LRTP) and Congestion Management System (CMS) for selecting and programming projects.
2. Prepare a 3-year List of Proposed Projects based on submissions from area local governments, VDOT, VDRPT, RMA, RideFinders, CRAC and GRTC that covers the following systems and funding programs:
 - NHS/Interstate and Non-Interstate System
 - Primary System
 - Secondary System
 - Urban System
 - TEA-21 High Priority
 - Priority Transportation Funds
 - FRANS (Reimbursement Notes)
 - General Funds
 - Toll Facilities Revolving Account Program
 - Congestion Mitigation/Air Quality Program
 - Surface Transportation Program
 - Transportation Enhancement Program
 - Transportation Safety Program
 - Public Transportation
 - Airports
 - Local/Private funded Projects
3. Coordinate submission of FTA Section 5310 project requests and submit for MPO endorsement action and final recommended projects for inclusion in the TIP. (RRPDC)
4. Coordinate submission of transportation enhancement projects and submit for MPO endorsement, and final recommended projects for inclusion in the TIP (RRPDC).
5. Coordinate identification of all regionally significant public and private transportation projects, and submit to VDOT for air quality analysis purposes (RRPDC).

FY 05 UWP Task 4.1

6. Coordinate listing and description of progress in the implementation of TCM's (if appropriate). (RRPDC and VDOT)
7. Develop annual list of projects for which Federal funds have been obligated (obligation amounts and funding sources to be provided by VDOT). Also, include list of other major projects from the previous TIP that were implemented, and identify significant delays in the planned implementation of these major projects. Publication and distribution (i.e. posting on the RRPDC/MPO web-site) will also be conducted as part of UWP task 1.2, MPO Citizen Participation. (RRPDC)
8. Prepare and submit the TIP financial plan and supporting documentation. (RRPDC and VDOT)
9. Conduct public review and comment activities, including one public meeting for the final draft TIP. (RRPDC)
10. Conduct and document assessment of the distribution of impacts on different socioeconomic groups for investments (i.e. projects and programs) identified in the TIP. (RRPDC and VDOT)
11. Prepare and process amendments to the TIP as approved by the MPO. Conduct conformity analysis and public participation as required. (RRPDC and VDOT)
12. Prepare and process MPO Statement of Certification and supporting documentation for the area's "3-C" Transportation Planning Process. (RRPDC and VDOT)
13. Prepare reports on the status of major projects including the implementation status of major highway and transit projects and programs currently underway.
14. Prepare and submit to the MPO a report on Virginia's Allocation of State and Federal Construction Program Funds. This report should focus on VDOT Richmond District funding for the various administrative system classifications as compared to funding for other VDOT Construction Districts (RRPDC and VDOT; staff time and funds permitting).

D. Agency Participation

RRPDC, VDOT, VDEQ, VDRPT, Local Governments, GRTC, FHWA, EPA, FTA, RideFinders, CRAC, paratransit and other transportation operators, freight shippers, providers of freight transportation services, and representatives of users of public transit.

E. Budget, Staff and Funding

	<u>PL^{①②}</u>	<u>5303</u>	<u>RRPDC^②</u>	<u>SPR</u>	<u>TOTAL</u>
RRPDC	140,000	20,000	9,000	----	169,000
VDOT	----	----	----	23,600	23,600
TOTAL	\$140,000	\$20,000	\$9,000	\$23,600	\$192,600

NOTES: ^①2/10/05 MPO action to add \$30,000 in PL funds (shifted from other staff work tasks).

^②4/14/05 MPO action to add \$10,000 in PL funds (shifted from other staff work tasks) and to reduce RRPDC overmatch funds by \$5,000.

F. Schedule

1. FY 04/05 – 06/07 TIP – FY 04 to September 2004
2. FY 05/06 - 07/08 TIP – October 2004 to FY 06
3. TIP Amendments – On-going activity

5.0 TRANSIT PLANNING

5.2 Elderly and Disabled Transportation Needs and Services

A. Background

The Elderly and Disabled Advisory Committee (EDAC) is composed of individuals and organizations representing the region's elderly and disabled, and advises the MPO on plans, studies, issues, and other matters related to the planning of public transportation services. It serves to advise the MPO on issues plans and studies, involving public transportation facilities and services for the elderly and disabled. It also assists GRTC by advising them of public transportation needs and issues of concern to the elderly and disabled community. EDAC will also serve as the primary review committee for work on UWP task 5.9, Public Transportation Needs Assessment for Disadvantaged Population Groups (see UWP task 5.9).

This task provides RRPDC staff support to ensure an active and involved EDAC and to assist the committee in developing up-to-date information on transportation needs of elderly and disabled in the Richmond area, their transportation needs, and available transportation services and resources. This task also provides for staff participation in various study activities addressing the region's specialized transportation services.

In FY 02, staff completed an update to the Transportation Operators Inventory. This report provides information on private, private non-profit, and social service agency transportation operators serving the Richmond area. Information shown in the inventory include the company/agency name, address and phone number, contact person, type of organization, service area and times, and number of vehicles. The inventory is used by local governments, GRTC, RideFinders, and area social service organizations as an information resource for contacting transportation operators. Staff is scheduled to begin work to update this report in FY 04. As a first step in its development, staff will review its content with EDAC to determine if it would be appropriate and feasible to gather other or additional information as part of this inventory. The final draft report will be submitted for EDAC and TAC review and recommendation and for MPO review and action. Work on this report is scheduled to start in late FY 04.

Staff is also preparing and submitting EDAC meeting agendas and agenda attachments to several EDAC members by e-mail. This format allows visually impaired committee members to receive and read these materials in an accessible format. Information posted on the RRPDC/MPO web site is also accessible to these members.

B. End Products

A functional and viable process that advises the MPO and GRTC on the special transportation needs of the elderly and disabled, and provides reports on elderly and disabled transportation needs and services.

C. Work Elements

1. Provide administrative and technical staff support for the EDAC.
2. Update the transportation operators inventory of private and human service agencies' transportation services and submit the final draft report for TAC and EDAC review and recommendation, and for MPO review and action.
3. Provide periodic status reports on the Public Transportation Needs Assessment for Disadvantaged Population Groups (UWP task 5.9) for EDAC review and submit final draft report for EDAC, CTAC, and TAC review and recommendation to the MPO.

D. Agency Participation

RRPDC, GRTC, VDRPT, Local Governments, FTA, EDAC appointing organizations, private and human service agency transportation operators.

E. Budget, Staff and Funding

	<u>PL^{①②}</u>	<u>5303</u>	<u>RRPDC^②</u>	<u>TOTAL</u>
RRPDC	\$15,000	\$27,000	\$7,000	\$49,000

NOTES: ^①2/10/05 MPO action to add \$10,000 in PL funds (shifted from other staff work tasks).

^②4/14/05 MPO action to add \$5,000 in PL funds (shifted from other staff work tasks) and to add \$7,000 in RRPDC overmatch funds.

F. Schedule

On-going activity

5.3 Downtown Circulator Study, Phase II

A. Background

New development in downtown Richmond, the expansion of the regional Convention Center and the upcoming opening of Main Street Station have highlighted the importance of convenient, easy-to-use public transportation for employees, residents and visitors. Recognizing the need for mobility within the downtown, GRTC operated a rubber-tire trolley system until 1999, when funding for the program ran out. Community leaders have expressed interest in the establishment of a fixed-rail circulator system in the downtown. GRTC recently completed a Phase I feasibility study, called the “Downtown Richmond Streetcar Study,” describing an electric streetcar system that would provide an appropriate circulator system for downtown Richmond. At the request of the Richmond City Council, GRTC also commissioned a Phase II study to pursue public input to refine the route and operating characteristics, and to refine cost estimates and recommended funding mechanisms. GRTC anticipates that work on the Phase II study will be complete by June 30, 2004.

If the Richmond City Council elects to pursue the project further, and funding becomes available, GRTC will enlist the assistance of a professional consulting/engineering firm to undertake preliminary engineering activities. Pending Council approval and funding availability, this study may begin during FY 2005. GRTC will amend the Unified Work Program (UWP) to include a more detailed description of the project at that time. If the project moves forward, a steering committee with representation from local stakeholder groups (Richmond Renaissance, Historic Richmond Foundation, Museums on the Boulevard, downtown developers, Dominion Power, etc) will assist the consultant.

B. End Products

The end product will be preliminary engineering for the optimal steel-rail streetcar line linking important trip generators (Convention Center, Shockoe Slip, downtown employers, Main Street Station, etc) in downtown Richmond. The preliminary engineering study will be used to solicit federal, state and local funding for the project.

C. Work Elements

1. Conduct preliminary engineering activities for a steel-rail streetcar line in downtown Richmond.

2. Conduct the necessary public involvement process.
3. Complete required environmental studies.

D. Agency Participation

GRTC, VDRPT, RRPDC, the City of Richmond, Richmond Metropolitan Convention and Visitors' Bureau, Richmond Renaissance, Historic Richmond Foundation, Museums on the Boulevard.

E. Budget, Staff and Funding

Pending results of the Phase II study and approval by City Council.

F. Schedule

Pending results of the Phase II study and approval by City Council.

5.9 Public Transportation Needs Assessment for Disadvantaged Population Groups

A. Background

Public transportation services in the Richmond area are provided by GRTC Transit Systems (GRTC). GRTC operates local and express bus service and demand-response paratransit service (i.e., CARE or Community Assisted Ride Enterprise) in the City of Richmond and Henrico County. GRTC currently operates express bus service along two routes in Chesterfield County; however, the county has not committed to operating this service on a continuing basis. The county recently operated several local routes as part of the GRTC/Chesterfield Link bus service, which included route deviation service providing access to the elderly, disabled, and other riders within one-half mile of these local routes. However, these local routes were discontinued after approximately two years of service due to low ridership and lack of available funds (service operated on an experimental basis using CMAQ and other funding sources).

Public transportation needs for the elderly, disabled, and low income (i.e., disadvantaged population groups) who reside outside of the GRTC and CARE service area are met to some extent by social service organizations, churches and synagogues, private operators, and families and friends. Many of these organizations have conducted studies or assessments to determine the extent of needs in their areas or for their client groups, and have kept records on their use. In addition, it has been noted by some social services agencies that many elderly, disabled, and low income persons who reside within the GRTC and CARE service areas must call on friends, neighbors, private operators, or human service agencies/organizations for transportation because they are not able to use GRTC and/or CARE for various reasons.

The purpose of this UWP work task will be to conduct an assessment of public transportation needs for transportation disadvantaged groups in the MPO study area. Based on this assessment, staff will review various public transportation alternatives and provide a report on which alternatives may be appropriate and feasible.

RRPDC staff will work with area local governments, GRTC, VDRPT, human service organizations, and others to identify resources and information appropriate to this study. Staff will work through MPO standing committees (i.e., TAC, CTAC, and EDAC) to submit their comments and input at appropriate times. The final draft report will be reviewed by TAC, CTAC, and EDAC with their comments and recommendations being provided for MPO review and consideration when taking action on the final draft report.

B. End Product

1. A report on the public transportation needs for transportation disadvantaged groups (i.e., elderly, disabled, and low income) within and outside of the current GRTC and CARE service area.
2. A report on appropriate and feasible public transportation services for transportation disadvantaged groups within and outside of the current GRTC and CARE service area.

C. Work Elements

The primary emphasis of this UWP work task will be on gathering information from social service agencies and local governments detailing transportation needs of the transportation disadvantaged. Once this information is gathered and analyzed, staff will assess the feasibility of various transportation alternatives.

Major work elements to be conducted by the RRPDC staff are as follows:

1. Contact area social services organizations, local governments, and others to obtain reports, studies, and data on public transportation needs and services for elderly, disabled, and low income population groups.
2. Review census and other sources of demographic data on availability and applicability of these sources.
3. Review and analyze available information and prepare a report which assesses public transportation needs for transportation disadvantaged groups within and outside of the GRTC and CARE service area.
4. Prepare a report on appropriate and feasible public transportation services for transportation disadvantaged groups in areas within and outside of the current GRTC and CARE service area.

D. Agency Participation

RRPDC, VDRPT, VDOT, GRTC, local governments, area social services organizations and agencies, FTA, FHWA.

E. Budget, Staff and Funding

	<u>5303</u>	<u>RRPDC[Ⓞ]</u>	<u>TOTAL</u>
RRPDC	\$27,000	\$14,000	\$41,000

FY 05 UWP Task 5.9

NOTE: ^①4/14/05 MPO action to reduce RRPDC overmatch funds by \$37,900.

F. Schedule

July 2004 to June 2005 (may be continued into FY 06)

6.0 INTERMODAL PLANNING

6.1 Intermodal Planning

A. Background

In FY 02, the MPO completed work on the Richmond Regional Intermodal Study. The study had two major goals: first, to examine the potential for an intermodal freight center in the Richmond/Tri-Cities area; and second, to examine the region's freight transportation network (i.e. highways, rail, airport, and port) and provide recommendations to enhance and improve freight movement. The study was completed in two phases. The Phase 1 Report provided for the identification and collection of data while the Phase 2 Report provided for the development of freight forecasts and recommendations. Each transportation mode is addressed with recommendations provided for truck, rail, air, and port modes. It also concludes that the region does not need an intermodal facility at this time; however, it recommends the establishment of an Intermodal Committee charged with monitoring future demand for such a facility. Such a committee could also prove to be an effective liaison with the freight movement industry and providing for their input into the regional transportation planning process (one of the federal MPO planning requirements).

At the February 14, 2002 MPO meeting, action was taken to accept the study as work completed and for staff to prepare and present for MPO review, consideration, and action a proposal for the establishment of a joint Richmond Area MPO and Tri-Cities Area MPO Intermodal Advisory Task Force. Action was taken at the June 13, 2002 MPO meeting to establish a 46-member task force with representatives from the business community including shipping and freight operators, freight transportation modes (i.e., port, airport, rail, and truck), local and regional planning and economic development agencies, and state agencies. The task force was jointly established with representation from both the Richmond Area and Tri-Cities Area MPOs. It should be noted that due to the large size of this task force, consideration should be given to the establishment of a steering committee in order to provide for more effective participation of the member organizations. With the establishment of the task force, staff should be able to have an important liaison with the region's freight industry and receive effective input on the transportation improvements based on the freight community's perspective.

A major charge for the task force will be to provide further consideration and comment on the recommendations presented in the Intermodal Study. This committee will also advise the MPO on issues and concerns facing the freight industry including concerns dealing with congestion and proposed improvements to the region's transportation network.

B. End Products

1. Comments and recommendations from the Intermodal Advisory Task Force on the study findings and recommendations presented in the Richmond Regional Intermodal Study and submitted for MPO review, consideration, and action as appropriate.
2. An active and involved Intermodal Advisory Task Force advising the MPO on transportation issues and concerns facing the freight industry including concerns dealing with congestion and proposed improvements to the region’s transportation network.

C. Work Elements

1. Administrative and technical support for the Intermodal Advisory Task Force (member organizations to be jointly appointed by the Richmond and Tri-Cities Area MPOs).
2. Advisory Task Force review of study findings and recommendations presented in the Richmond Regional Intermodal Study with task force comments and recommendations presented for MPO review, consideration and action as appropriate.
3. Organize and conduct workshops with representatives from the freight community to solicit comments and suggestions on capital and/or operating improvements needed for the region’s transportation network.
4. Monitor and report to the MPO on service demand and need for a regional intermodal transportation facility.

D. Agency Participation

RRPDC, VDOT, VDRPT, Crater PDC, CRAC, Port of Richmond, local governments, members of the Intermodal Advisory Task Force

E. Budget, Staff and Funding

	<u>PL^{①②}</u>	<u>RRPDC^②</u>	<u>TOTAL</u>
RRPDC	\$5,000	\$6,000	\$11,000

NOTES: ^①2/10/05 MPO action to subtract \$10,000 in PL funds (shifted to other staff work tasks).

^②4/14/05 MPO action to subtract \$10,000 in PL funds (shifted to other staff work tasks) and to reduce RRPDC overmatch funds by \$12,000.

F. Schedule

On-going

7.0 AIR QUALITY PLANNING

7.1 Air Quality Plan and Program Activities

A. Background

The Clean Air Act Amendments (CAAA) of 1990 present serious air quality improvement challenges to almost all of the nations mid-size to major metropolitan areas. To meet this challenge, the state has pursued a program of reduction measures, which includes various stationary source control measures, stage 2-vapor recovery, clean fuels, and other measures.

In FY 1995, the Metropolitan Richmond Air Quality Committee (MRAQC) was established as the Section 174 Lead Planning Organization (LPO) based on appointments by the Governor's office. Representation on MRAQC includes local elected officials from non-attainment area jurisdictions (i.e. Richmond, Henrico, Chesterfield, Hanover, Charles City, Colonial Heights and Hopewell), from the Richmond and Tri-Cities Area MPOs, the Crater and Richmond regional planning district commissions and agency representatives from VDOT and VDEQ. The role of the LPO is established and defined in general terms in Section 174 of the CAAA. It is also described in the Richmond Area and Tri-Cities Area Memorandum of Understanding (MOU) for Air Quality and Transportation Planning Coordination. Section 174 of the CAAA provides that the LPO shall prepare the state implementation plan (SIP) revisions, and determine those elements of the SIP to be implemented by the state, local governments, regional agencies, and others.

In FY 1997, VDEQ staff submitted a request to EPA for designating the area to attainment status. In November 1997 EPA issued notice in the Federal Register noting the Richmond Area to be in attainment status for ozone air quality standards, and was designed as a Maintenance Area.

On June 29, 2000, the state advised EPA of VDEQ recommendations for designation of areas (i.e. jurisdictions and portions of jurisdictions) subject to the revised NAAQS for ozone. For the Richmond area, this included all jurisdictions (i.e. Richmond, Colonial Heights, Chesterfield, Hanover, and Henrico) and portions of Charles City County that were in the previously designated non-attainment area. This recommended area designation was based on EPA's new 8-hour NAAQS for ozone, which was under court review and not resolved until recently. The resolution was based on a U.S. Supreme Court ruling on a challenge by the American Trucking Association (ATA) to the new 8-hour standards. The Supreme Court rejected the ATA challenge however; it also said that EPA's implementation policy for the ozone standard was unlawful and unreasonable, and that the agency must develop a reasonable interpretation. Based on this information, (Supreme Court action was taken in February 2000) VDEQ must wait for EPA guidance on how the new 8-hour standard will be implemented. The final

implementation guidance for the new eight-hour standards are due to be issued by EPA in December 2003 with final designation becoming effective by April 2004. The April 2004 date was set based on action by the U.S. Supreme Court, which upheld the new standards but directed EPA to develop new implementation guidance and regulations.

Note that VDEQ has submitted a letter to EPA on February 10, 2004 responding to EPA's proposed 8-hour ozone nonattainment area designations. EPA has proposed that all of Charles City County be included in the nonattainment area; however, both the MPO and VDEQ are on record requesting that the current maintenance area boundary for Charles City County also be used as the 8-hour ozone nonattainment area boundary as well. Note that there are no other boundary changes proposed that would affect the Richmond Area MPO. Inclusion of all of Charles City County in the nonattainment area would require expansion of the MPO study area to also cover all of Charles City County.

This work task also provides for RRPDC and VDOT staff work activities for conducting air quality conformity analysis in support of the TIP and LRTP. VDOT has recently made air quality conformity analysis a VDOT staff work activity (for the past several years, this work was conducted by consultants under contract to VDOT). RRPDC staff provides staff support for TIP, LRTP, and TIP/LRTP amendments (when appropriate) review and coordination.

Staff work activities includes identification of projects, project descriptions, submission of socioeconomic data and forecasts, coordinate/conduct project reviews with local staff and other administrative and coordination activities.

B. End Products

Administrative support for MPO activities involving development of the non-attainment area state implementation plan and air quality conformity analysis.

C. Work Elements

1. Monitor air quality data for the Richmond area, and review EPA and Virginia Department of Air Pollution Control reports, guidelines, regulations, etc.
2. Limited administrative support for MPO participation in developing the nonattainment area implementation plan. (VDEQ serves as lead staff to the MRAQC).
3. Review, comment, and conduct other activities necessary for the nonattainment area planning process.

4. Review and comment on the area’s emissions inventory, especially information relating to mobile sources and transportation control measures.
5. Computer modeling and other transportation planning activities for development of VMT data required for maintenance plan/nonattainment area plan implementation [VDOT].
6. Conduct air quality conformity analysis activities in support of the TIP and LRTP [RRPDC and VDOT].

D. Agency Participation

RRPDC, VDOT, VDRPT, VDEQ, MRAQC, GRTC, RideFinders, local governments, FHWA, EPA, FTA, and Tri-Cities MPO.

E. Budget, Staff, and Funding

	<u>PL^①</u>	<u>SPR</u>	<u>RRPDC^①</u>	<u>TOTAL</u>
RRPDC	12,000	----	8,000	20,000
VDOT	<u>----</u>	<u>68,585</u>	<u>----</u>	<u>68,585</u>
TOTAL	\$12,000	\$68,585	\$8,000	\$88,585

NOTE: ^①4/14/05 MPO action to add \$2,000 in PL funds (shifted from other staff work tasks) and to add \$2,000 in RRPDC overmatch funds.

F. Schedule

On-going activity

**AGENCY BUDGET SUMMARY SHEET
FHWA PL/SPR; FTA SEC 5303;RRPDC ADDITIONAL LOCAL FUNDS
FY 2005 UWP - RICHMOND AREA MPO**

Task No/ Abbrev	RRPDC				Local PL	VDOT SPR	OTHER	TOTAL						GRAND TOTAL
	PL	5303	CO 5303	OMF (1)				PL	SPR	5303	CO 5303	OMF	OTHER	
1.1 MPO Maint	340,611	33,681	-	124,000	-	183,000	-	340,611	183,000	33,681	-	124,000	-	681,292
1.2 Citi Partic	68,000	20,000	-	17,000	-	5,400	-	68,000	5,400	20,000	-	17,000	-	110,400
1.3 UWP	22,000	5,000	-	28,000	-	5,400	-	22,000	5,400	5,000	-	28,000	-	60,400
2.1 Data	28,000	-	-	18,000	-	-	-	28,000	-	-	-	18,000	-	46,000
2.2 LRTP	24,000	5,000	-	1,000	-	29,000	-	24,000	29,000	5,000	-	1,000	-	59,000
2.4 City MP (4)	-	-	-	-	-	-	110,000	-	-	-	-	-	110,000	110,000 (4)
2.5 TD/GIS	58,000	10,000	-	33,000	-	-	-	58,000	-	10,000	-	33,000	-	101,000
2.9 B & P Plan(2)	-	-	-	-	-	500,000	-	-	500,000	-	-	-	-	500,000 (2)
3.1 CMS/ITS	36,000	20,000	-	1,000	-	11,500	-	36,000	11,500	20,000	-	1,000	-	68,500
3.2 Access Mgt	9,000	-	-	3,000	-	-	-	9,000	-	-	-	3,000	-	12,000
3.3 ITS Arch (2)	-	-	-	-	-	-	-	-	-	-	-	-	-	- (2)
4.1 TIP	140,000	20,000	-	9,000	-	23,600	-	140,000	23,600	20,000	-	9,000	-	192,600
5.2 ED TNS	15,000	27,000	-	7,000	-	-	-	15,000	-	27,000	-	7,000	-	49,000
5.3 Dwt .Cir (3)	-	-	-	-	-	-	(5)	-	-	-	-	-	(5)	- (3)
5.9 Pub. Transp.	-	27,000	-	14,000	-	-	-	-	-	27,000	-	14,000	-	41,000
6.1 Int. Modal	5,000	-	-	6,000	-	-	-	5,000	-	-	-	6,000	-	11,000
7.1 Air Q. Plg.	12,000	-	-	8,000	-	68,585	-	12,000	68,585	-	-	8,000	-	88,585
TOTAL	757,611	167,681	-	269,000	-	826,485	110,000	757,611	826,485	167,681	-	269,000	110,000	\$2,130,777

- NOTES:
- (1) RRPDC Over Match Funds (OMF) (over and above required local match).
 - (2) Work conducted by VDOT consultant.
 - (3) Work conducted by GRTC consultant (UWP information item).
 - (4) Work conducted by City of Richmond consultant (UWP information item).
 - (5) Pending results of Phase II Study and approval by City Council.

FUNDING SOURCES SUMMARY SHEET
FHWA PL/SPR; FTA SEC 5303;RRPDC ADDITIONAL LOCALFUNDS
FY 2005 UWP - RICHMOND AREA MPO

Task No./ Abbrev.	PL		SPR		5303		CO 5303		RRPDC	OTHER		TOTAL		GRAND
	Federal	State/Local	Federal	State	Federal	State/Local	Federal	State/Local	OMF (1)	Federal	State/Local	Federal	State/Local	TOTAL
1.1 MPO Maint	272,489	68,122	146,400	36,600	26,945	6,736	-	-	124,000	-	-	445,834	235,458	681,292
1.2 Citi Partic	54,400	13,600	4,320	1,080	16,000	4,000	-	-	17,000	-	-	74,720	35,680	110,400
1.3 UWP	17,600	4,400	4,320	1,080	4,000	1,000	-	-	28,000	-	-	25,920	34,480	60,400
2.1 Data	22,400	5,600	-	-	-	-	-	-	18,000	-	-	22,400	23,600	46,000
2.2 LRTP	19,200	4,800	23,200	5,800	4,000	1,000	-	-	1,000	-	-	46,400	12,600	59,000
2.4 City MP (4)	-	-	-	-	-	-	-	-	-	88,000	22,000	88,000	22,000	110,000 (4)
2.5 TD/GIS	46,400	11,600	-	-	8,000	2,000	-	-	33,000	-	-	54,400	46,600	101,000
2.9 B & P Plan(2)	-	-	400,000	100,000	-	-	-	-	-	-	-	400,000	100,000	500,000 (2)
3.1 CMS/ITS	28,800	7,200	9,200	2,300	16,000	4,000	-	-	1,000	-	-	54,000	14,500	68,500
3.2 Access Mgt	7,200	1,800	-	-	-	-	-	-	3,000	-	-	7,200	4,800	12,000
3.3 ITS Arch (2)	-	-	-	-	-	-	-	-	-	-	-	-	-	- (2)
4.1 TIP	112,000	28,000	18,880	4,720	16,000	4,000	-	-	9,000	-	-	146,880	45,720	192,600
5.2 ED TNS	12,000	3,000	-	-	21,600	5,400	-	-	7,000	-	-	33,600	15,400	49,000
5.3 Dwt. Cir. (3)	-	-	-	-	-	-	-	-	-	-	-	-	-	(5) (3)
5.9 Pub. Transp.	-	-	-	-	21,600	5,400	-	-	14,000	-	-	21,600	19,400	41,000
6.1 Int. Modal	4,000	1,000	-	-	-	-	-	-	6,000	-	-	4,000	7,000	11,000
7.1 Air Q. Plg.	9,600	2,400	54,868	13,717	-	-	-	-	8,000	-	-	64,468	24,117	88,585
TOTAL	606,089	151,522	661,188	165,297	134,145	33,536	-	-	269,000	88,000	22,000	1,489,422	641,355	\$ 2,130,777

- NOTES:
- (1) RRPDC Over Match Funds (OMF) (over and above required local match).
 - (2) Work conducted by VDOT consultant.
 - (3) Work conducted by GRTC consultant (UWP information item).
 - (4) Work conducted by City of Richmond consultant (UWP information item).
 - (5) Pending results of Phase II Study and approval by City Council.