

**FISCAL YEAR 2007**  
**JULY 1, 2006 – JUNE 30, 2007**

**UNIFIED WORK PROGRAM**  
**FOR THE**  
**RICHMOND AREA METROPOLITAN**  
**PLANNING ORGANIZATION**

Approved as a Final Report by the Richmond Area Metropolitan Planning Organization, April 13, 2006.

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**

- 6/8/06: Tasks 5.3 and 5.5 revised to address FTA review comments.
- 6/15/06: Task 5.5 revised to establish study area (TAC action on behalf of MPO).
- 9/14/06: Task 5.4, revised budget to \$375,700; deleted section 5309 Congressional Earmark as funding source and replaced with GRTC Operating Funds (funding amount shown “as needed”); and deleted previous last paragraph under Section E explaining use of Section 5309 Congressional Earmark funds.
- 12/14/06: FY 06 FTA Section 5303 carryover funds programmed (\$98,589) on task 1.1; \$65,000 in PL funds shifted from task 1.1 to task 5.5 (\$55,000 for consultant and \$10,000 for RRPDC staff).
- 2/8/07: \$60,000 in PL funds shifted to task 4.1 from tasks 1.1 (\$10,000), 2.2 (\$20,000) and 3.1 (\$30,000).
- 4/12/07: MPO action to shift PL funds among various RRPDC staff work tasks (1.1, 1.2, 1.3, 2.1, 2.2, 2.5, 3.1, 3.2, 3.3, 4.1, 5.2, 5.5, 5.6, 6.1, and 7.1) and consultant work task (5.5), and to transfer \$95,500 in RRPDC staff PL funds and \$190,000 in consultant PL funds to FY 2008.

## **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 07 UWP major planning priorities. Further discussion of these priorities is provided in the various work tasks.

1. SAFETEA-LU – On August 10, 2005, SAFETEA-LU (Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users) was signed into law. The metropolitan planning provisions of SAFETEA-LU retain most of the previous planning provisions from TEA-21; however, there are significant changes in several areas. These new provisions are identified and discussed under various work tasks in the UWP. Further modifications to task work elements and end products may be necessary as draft and final regulations are issued implementing SAFETEA-LU. Note that the MPO must have a SAFETEA-LU compliant LRTP and TIP on July 1, 2007. Otherwise these documents can not be amended or adjusted after July 1, 2007 without being in compliance with all SAFETEA-LU provisions.
2. Task 1.1, MPO Maintenance/Special Studies – Conduct various administrative and technical activities in support of the MPO process and special studies as needed. This task also provides for RRPDC staff participation on various state and regional advisory committees.
3. 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.
4. Task 2.2, Long-Range Transportation Plan (LRTP) Update – Work on the next LRTP update (i.e., 2031 LRTP) was initiated in FY 06 and it is scheduled to be completed in FY 07.
5. Task 3.1, Congestion Management System (CMS) Update – Work on the CMS Update will be conducted as an element of the 2031 LRTP. Reviews of congested corridors are also being conducted to identify and evaluate transportation system management/low-cost alternatives to address congestion and safety issues.

6. Task 4.1, Transportation Improvement Program (TIP) – Maintain current TIP by processing amendments and adjustments as requested and tracking previous allocations of Regional STP and CMAQ funds. Work with VDOT to develop process for close-out of TIP projects (to show funds remaining after project completion). Also, provide for the interim/transition process for RSTP and CMAQ funded projects review and programming and for the implementation of the competitive RSTP and CMAQ project review and selection process starting with FY 08 allocations.
7. Task 5.2, Elderly and Disabled Transportation Needs and Services – Continuing support for the MPO’s Elderly and Disabled Advisory Committee.
8. Task 5.5, Regional Mass Transit Study – Conduct a comprehensive study providing for the development of a regional mass transit system.
9. Task 5.6, Human Services Public Transportation Coordination Plan – Develop and adopt a coordinated public transit human services transportation plan for the coordination of transportation resources provided through multiple federal programs. This plan should enhance transportation access for elderly, disabled, and low-income individuals, minimize duplication of services, and encourage the most cost effective transportation program possible.

**DOCUMENTATION OF  
RICHMOND AREA MPO AND TRI-CITIES AREA MPO  
TRANSPORTATION PLANNING COORDINATION**

Article I of the draft “Memorandum of Understanding for Coordination of Regional Transportation and Air Quality Planning and Programming in the Richmond Area MPO and the Tri-Cities Area MPO Study Areas and the Richmond Nonattainment/Maintenance Area for Ozone Air Quality Standards Superseding the Memorandum of Understanding for January 9, 1992” states that the Richmond Area and Tri-Cities Area MPOs “monitor the coordination of Geographic Information System applications use for transportation planning and programming, cooperate in the sharing of information relating to the development of the long-range transportation plans and transportation improvement programs, coordinate estimation and forecasts of socio-economic data at the traffic analysis zone level, coordinate travel demand model development for the two transportation study areas, and participate on projects of mutual interest.” The MOU provides that documentation of cooperation between the Richmond Area and Tri-Cities Area MPOs shall be included in their respective annual planning work programs.

The following documents cooperative work efforts provided for in the MPO’s FY 07 UWP.

- 1.1 MPO Maintenance/Special Studies – Staff for the Richmond Area and Tri-Cities Area MPOs share information of interest including MPO and TAC meeting agendas, work program and TIP documents, correspondence for various work program and study activities, etc. Staffs for these two MPOs also participate on the Richmond/Hampton Roads High Speed Passenger Rail Study VDRPT Technical Advisory Committee.
- 1.3 Unified Work Program (UWP) – The Richmond Area and Tri-Cities Area MPOs have an agreed procedure for the distribution of FHWA/PL funds that VDOT allocates to the Richmond Urbanized Area (which includes both MPOs).
- 2.1 Socioeconomic Data – Base year and forecast year data for the Richmond Area and Tri-Cities Area MPOs is jointly developed with common agreed-to base and forecast years and demographic factors.
- 2.2 Long-Range Transportation Plan (LRTP) – The LRTP model developed and maintained by VDOT covers both the Richmond Area and Tri-Cities Area MPO’s study areas.
- 3.3 Intelligent Transportation Systems (ITS) – The Richmond/Tri-Cities Areas Intelligent Transportation Systems (ITS) Architecture Report and Deployment Plan is maintained and updated through each MPO’s respective Technical Advisory Committee. VDOT Richmond District ITS staff serves as lead for advising each MPO as to ITS projects and programs recommended for each MPO’s review and incorporation into their respective LRTPs and TIPs.

- 5.8 Richmond Area Rail Studies – Work on rail studies which cover both MPOs is generally conducted by consultants under contract to VDRPT with technical advisory committees established to provide project review and comment. Staffs from the Richmond Area and Tri-Cities Area MPOs, along with appropriate local government and other agency staffs, serve on the studies’ technical advisory committees.
  
- 6.2 VDOT Statewide Freight Transportation Planning – VDOT has initiated a statewide study of essential freight infrastructure across the state and incorporating that information into statewide plans. Staff anticipates that it will involve RRPDC and Crater PDC staffs in some advisory capacity.
  
- 7.1 Air Quality Plan and Program Activities – As part of VDOT’s work to conduct LRTP modeling activities for both the Richmond Area and Tri-Cities Area MPOs, VDOT conducts the air quality conformity analysis process for both MPOs. As part of VDEQ’s work to develop the State Implementation Plan (SIP) for the Richmond Nonattainment Area, VDEQ serves as lead staff for MRAQC, the CAAA Section 174 lead planning organization. Local elected officials representing each nonattainment area plus representatives from both MPOs, VDOT, and VDEQ also serve on the LPO.

## FREQUENTLY USED MPO TERMS AND ABBREVIATIONS

<b>Attainment</b>	A term that means an area is in compliance with the National Ambient Air Quality Standards (NAAQS) and/or the Clean Air Act (CAA). There are six atmospheric pollutants covered under the CAA. The Richmond area (i.e., Cities of Richmond, Colonial Heights, Hopewell, and Petersburg, and the counties of Charles City, Chesterfield, Hanover, Henrico and Prince George) is designated as a nonattainment area for ozone air quality standards.
<b>Highway Trust Fund (HTF)</b>	Provides dedicated funding for federal highway and mass transit programs. Revenues placed in the HTF come from the federal gasoline tax plus other user fees. The HTF consists of separate highway and mass transit accounts.
<b>MPO</b>	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.
<b>NAAQS</b>	National Ambient Air Quality Standards; defined by EPA.
<b>Obligations</b>	Commitments made by USDOT agencies to pay out money for federal-aid transportation projects. The TIP serves as the MPO's program of transportation projects for which federal funds have been obligated.
<b>Regionally Significant</b>	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.
<b>SIP</b>	State Implementation Plan; identifies control measures and process for achieving and maintaining NAAQS; eligible for CMAQ funding.
<b>Study Area</b>	The area projected to become urbanized within the next 20 years; defines the area for MPO plans, programs, and studies.
<b>"3-C" Process</b>	("Continuing, Cooperative and Comprehensive") Language from federal legislation establishing MPOs and used in reference to the regional transportation planning and programming process.

<b>TCM</b>	Transportation Control Measures (for Air Quality Control); eligible for CMAQ funding.
<b>TDM</b>	Transportation Demand Management; various transportation control strategies and measures used in managing highway demand.
<b>TIP</b>	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**

<b>CTAC</b>	Citizens Transportation Advisory Committee
<b>EDAC</b>	Elderly and Disabled Advisory Committee
<b>TAC</b>	Technical Advisory Committee

**FEDERAL STATE AND REGIONAL AGENCIES**

<b>CRAC</b>	Capital Region Airport Commission
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<b>EPA</b>	Environmental Protection Agency
<b>FAA</b>	Federal Aviation Administration
<b>FHWA</b>	Federal Highway Administration
<b>FRA</b>	Federal Railroad Administration
<b>FTA</b>	Federal Transit Administration
<b>GRTC</b>	GRTC Transit System (formerly Greater Richmond Transit Company)
<b>MRAQC</b>	Metropolitan Richmond Air Quality Committee
<b>RideFinders</b>	A public nonprofit corporation that provides carpool/vanpool matching and other commuter and transportation services.
<b>MARAD</b>	Maritime Administration
<b>RMA</b>	Richmond Metropolitan Authority
<b>RRPDC</b>	Richmond Regional Planning District Commission
<b>USDOT</b>	United States Department of Transportation
<b>VDA</b>	Virginia Department of Aviation
<b>VDEQ</b>	Virginia Department of Environmental Quality
<b>VDOT</b>	Virginia Department of Transportation
<b>VDRPT</b>	Virginia Department of Rail and Public Transportation
<b>VTRC</b>	Virginia Transportation Research Council

### **FEDERAL LEGISLATION**

<b>ADA of 1990</b>	Americans with Disabilities Act
<b>CAAA of 1990</b>	Clean Air Act Amendments
<b>ISTEA</b>	Intermodal Surface Transportation Efficiency Act; passed in 1991; reauthorized federal surface transportation programs for highways, highway safety and transit for a six-year period, 1992 to 1997. ISTEA provided for significant expansion of MPO planning and programming authority and responsibilities.



**TEA-21** Transportation Equity Act for the 21<sup>st</sup> 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.

**SAFETEA-LU** Safe, Accountable, Flexible, Efficient Transportation Act: A Legacy for Users; federal transportation reauthorization signed into law on August 10, 2005.

## **FUNDING PROGRAMS**

**SPR** State Planning and Research; federal 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.

**RRPDC** Funds from the RRPDC (state appropriations and local dues) provided in addition to required local match funds (sometimes noted as RRPDC overmatch).

**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.

**STP Grant** State Transportation Planning Grant Pilot Program Funds from state's 2004 general budget available on a pilot basis to MPOs and PDCs for four categories of transportation planning activities as follows:

- Planning for special transportation needs of unique sectors of the community
- Local transportation planning for alternative modes
- Linking transportation and land use
- Prioritizations of local or regional transportation plan recommendations

**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 (for transit studies)

**CTB** Commonwealth Transportation Board

**EJ** Environmental Justice

**FFY** Federal Fiscal Year (October 1 to September 30)

**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.

<b>NHS</b>	National Highway System
<b>NOx</b>	Nitrogen Oxides
<b>RFP</b>	Request for Proposals; process used for reviewing and selecting proposals for consultant study activities. (Goods and non-professional services)
<b>RFQ</b>	Request for Qualifications (Consultant Services).
<b>SIP</b>	State Implementation Plan (for attainment and maintenance of air quality standards)
<b>SOV</b>	Single Occupant Vehicles
<b>STP</b>	Surface Transportation Program
<b>SYIP</b>	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.
<b>TDP</b>	Transit Development Program
<b>TMA</b>	Transportation Management Area (i.e. MPO's greater than 200,000 in population).
<b>VMT</b>	Vehicle Miles Traveled

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**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; State Transportation Planning Grant Pilot Program contract and work tasks administration (if grant funds are awarded); 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.

The initial estimate for all staff work task direct costs is estimated at approximately \$190,000 (not including consultant services). 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.

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 were continued as part of the Transportation Equity Act for the 21st Century (TEA-21); signed into law on June 9, 1998. On August 10, 2005, President Bush signed into law the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). SAFETEA-LU guarantees funding for highways, highway safety, and public transportation totaling \$244.1 billion and represents the largest surface transportation investment in U.S. history. SAFETEA-LU builds on the two landmark bills that brought surface transportation into the 21st century by shaping the highway program to meet the Nation's changing transportation needs—the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) and the Transportation Equity Act for the 21st Century (TEA-21). The planning provisions of SAFETEA-LU retain and revise metropolitan and statewide transportation planning statutory requirements. Most of the provisions mirror previous law, but key statutory changes are included. And, although most of the transportation planning requirements became effective immediately when SAFETEA-LU was signed into law on August 10, 2005, many of these provisions require rulemaking to implement the changes. Draft regulations implementing SAFETEA-LU are expected in the spring of 2006 with final regulations expected in late 2006/early 2007. Note that USDOT has issued notice that these new federal

## **FY 07 UWP Task 1.1**

requirements will be effective on July 1, 2007. During FY 07, staff will review various draft and final federal regulations and guidance related to MPO planning and programming requirements and make changes to the MPO's work program procedures and activities as appropriate. New SAFETEA-LU provisions as currently understood by staff are noted and addressed in various work tasks throughout the UWP.

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 (i.e., "3-C" process). 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 was conducted in May 2004. The FHWA and FTA issued a joint certification of the MPO on August 19, 2004 conditionally certifying the MPO subject to five specific corrective actions as follows:

- (1) VDOT, the Richmond Metropolitan Planning Organization (MPO) and the Tri-Cities MPO are required to develop an agreement and assure the development of an overall transportation plan per 23 CFR 450.310(g) for the entire Richmond and Tri-Cities region;
- (2) The MPO must submit a plan that addresses ways to engage limited English speaking citizens and communities in the transportation planning process;
- (3) VDOT is required to assist the MPO in completing its process for assessing and documenting the distributional effects of the transportation investments in the Richmond metropolitan area;
- (4) VDOT is required to assist the MPO in providing to the Federal Team the current documented procedures used to fulfill DBE requirements as it pertains to local agencies' receipt of federal funds; and
- (5) The MPO must develop an alternative process for distributing sub-allocated RSTP funds.

In FY 05, the MPO took action at its December 9, 2004 meeting to approve a new process for RSTP project review and selection (corrective action number five). In FY 06, the MPO took action at its July 14, 2005 meeting to accept and agree to VDOT's responses to corrective actions three and four. The Metropolitan Richmond Air Quality Committee (MRAQC) was reconstituted in 2004 with committee members and alternates appointed in 2004 and early 2005. MRAQC held its first meeting on

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November 3, 2005 and is scheduled to take action at its April 6, 2006 meeting to adopt a revised Memorandum of Understanding (MOU) for Regional Air Quality and Transportation Planning Coordination. This will provide formal action for execution of the MOU adopted by the MPO in February 2003 and allow other signatory parties to execute this MOU (corrective action number one). Staff plans to address corrective action number two (plan to address ways to engage limited English speaking citizens and communities in the transportation planning process) in late FY 06 and early FY 07.

VDOT's Transportation and Mobility Planning Division (TMPD), located in VDOT's central office, will provide statewide oversight, guidance and support for the federally mandated metropolitan transportation planning and programming process. TMPD will provide technical assistance to VDOT District Planning Managers, local jurisdictions, regional agencies and various divisions within VDOT, in the development of transportation planning documents for the MPO areas. TMPD will participate in special studies as requested. VDOT has programmed \$500,000 for statewide funding for MPO program support work by central office staff.

### **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.

## **FY 07 UWP Task 1.1**

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, state program funds, 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, meeting reporting requirements, and other activities and services necessary and appropriate for staffing the MPO.
12. Provide staff assistance for and participation in 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.



**FY 07 UWP Task 1.1**

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.
22. Review draft and final federal regulations and guidance related to MPO planning and programming requirements and update/revise the MPO’s work program, procedures and activities as appropriate addressing new SAFETEA-LU and other federal requirements.

**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<sup>②③④</sup></u>	<u>5303</u>	<u>SPR<sup>①</sup></u>	<u>C.O. 5303<sup>②</sup></u>	<u>TOTAL</u>
RRPDC	332,074	23,169	----	98,589	453,832
VDOT	----	----	<u>177,000</u>	----	<u>177,000</u>
TOTAL	<u>\$332,074</u>	<u>\$23,169</u>	<u>\$177,000</u>	<u>\$98,589</u>	<u>\$630,832</u>

① Provides for VDOT Richmond District support on all MPO work tasks.

② 12/14/06 MPO action to shift \$65,000 in PL funds to task 5.5 (\$10,000 for RRPDC staff and \$55,000 for study consultant) and to add \$98,589 in FY 06 FTA Section 5303 carryover funds.

③ 2/8/07 MPO action to shift \$10,000 to task 4.1.

④ 4/12/07 MPO action to subtract \$50,000 in PL funds (shifted to other staff work task and portion transferred to FY 08).

**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 SAFETEA-LU 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.

Final action was taken at the July 21, 2004 MPO meeting to adopt revisions to the MPO's "Guidelines for Public Participation." One of the major new work activities established by these guidelines is for the MPO to annually conduct a series of meetings to obtain public comments for MPO consideration in developing the LRTP, TIP, and UWP, and to also provide to the public an update on the region's air quality status.

As part of the MPO Certification Review (letter issued by FHWA/FTA on August 17, 2004) the MPO was directed to submit a plan that addresses ways to engage limited English-speaking citizens and communities in the transportation planning process (certification review corrective action number two). Work on this activity was initiated in early FY 05 (initial discussions held with CTAC); however, staff has not been able to follow up with further work and discussion. It is anticipated that this task will be addressed and completed in late FY 06 or early FY 07.

It should be noted that SAFETEA-LU has expanded public participation requirements for the TIP and LRTP (i.e., additional consultations, development of public participation plan, employing visualization techniques). Further information on activities to meet these new requirements is provided in UWP tasks 2.2 (LRTP) and 4.1 (TIP). SAFETEA-LU also requires that public information be made available in an electronically accessible format. Staff currently posts MPO plans, programs, reports, and other materials on the RRPDC web site and submits agendas, correspondence and other information by e-mail.

**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).
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 implementation of outreach activities to low-income, minority, and limited English-speaking citizens and communities as part of the MPO’s annual public involvement outreach meetings.

**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<sup>①</sup></u>	<u>5303</u>	<u>TOTAL</u>
RRPDC	95,000	26,000	\$121,000

① 4/12/07 MPO action to subtract \$5,000 in PL funds (shifted to other staff work tasks and portion transferred to FY 08).

**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, 2007 to June 30, 2008). The UWP also identifies the region's planning priorities, documents cooperation between the Richmond Area and Tri-Cities Area MPOs on various work activities and notes various transportation study activities as informational items.

**B. End Products**

1. Maintain/amend the FY 07 UWP.
2. FY 08 UWP document.
3. 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 and final initial work programs.
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 07 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 and post on RRPDC web site.
13. Amend adopted UWP as per MPO action.
14. Prepare and update staff work assignments, direct costs, and schedule.

**D. Agency Participation**

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

**E. Budget, Staff and Funding**

	<u>PL</u> <sup>①</sup>	<u>5303</u>	<u>TOTAL</u>
RRPDC	25,000	13,000	\$38,000

<sup>①</sup> 4/12/07 MPO action to subtract \$5,000 in PL funds (shifted to other staff work tasks and portion transferred to FY 08).

**F. Schedule**

On-going activity for adopted UWP/RRPDC Work Program

October 2006 to May 2007 for FY 07 RRPDC Work Program.

January 2007 to April 2007 for FY 08 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. In FY 06, RRPDC staff is scheduled to complete a review of year 2000 base year data and to develop year 2031 forecasts (note that action was taken by the MPO's Technical Advisory Committee on January 19, 2006 to establish the base and horizon years for the upcoming LRTP as 2000 and 2031 respectively). This data and forecasts will be reviewed by the Socioeconomic Data Work Group (made up of planners and demographers from each local government and RRPDC staff) and should be submitted for TAC review and approval in late FY 06.

The RRPDC works with area local governments to coordinate the development of socioeconomic data and forecasts. This data will be used in developing the upcoming LRTP. Data required for the LRTP and prepared by area local governments is as follows:

- Total population
- Group quarters population
- Single and multi-family population
- Total housing units
- Single and multi-family housing units
- Total students
- Students grades K-12 (by location of school)
- College students (by location of school)

Data required for the LRTP and prepared by RRPDC staff is as follows:

- Total households
- Total employment
- Retail employment
- Automobiles

The methodology for development of base year and forecast year socioeconomic data is developed in consultation with a work group of area local planners and demographers, VDOT, and Crater PDC staff (i.e., Socioeconomic Data work group). The RRPDC staff is responsible for developing a final report which is submitted for TAC review and approval (final action). Note that a proposal to expand the MPO study area in New

## **FY 07 UWP Task 2.1**

Kent County will be presented for review and action at the April 13, 2006 meeting. Staff is assuming this expansion will be approved by the MPO and VDOT, and is preparing data for the expanded study area.

Work activities related to maintaining and updating, as appropriate, census tract or block group 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 also conducted under this UWP work task.

### **B. End Products**

1. Base year and forecast year socioeconomic data report for use in the 2031LRTP (late FY 06/early FY 07).
2. Updates for minority and low income population groups for environmental justice assessments as appropriate.
3. Use of CTPP in support of various plans, studies, and reports.

### **C. Work Elements**

RRPDC work elements are as follows:

1. Complete any remaining work for the Socioeconomic Data Report; submit for TAC review and approval; and, post on RRPDC web site.
2. Maintain CTPP data and staff expertise and capabilities in applying CTPP to plan and study activities.
3. Staff support for work by RRPDC and local government staffs in reporting and distributing 2000 census data in support of MPO plan and program activities.
4. Maintain and update as needed, census level tract data from year 2000 census for minority and low-income population groups (environmental justice data required for analysis of transportation investments in MPO study area).

VDOT and local government work elements are as follows:

1. Participation by appropriate local staff on the Socioeconomic Data work group [local government work element].
2. Compile data for use in various special studies (e.g., Environmental Impact Statements and Assessments, etc.) [VDOT work element].



**D. Agency Participation**

RRPDC, VDOT, Local Governments, Crater PDC.

**E. Budget, Staff and Funding**

	<u>PL<sup>①</sup></u>	<u>5303</u>	<u>TOTAL</u>
RRPDC	25,000	5,000	\$30,000

① 4/12/07 MPO action to subtract \$5,000 in PL funds (shifted to other staff work tasks and portion transferred to FY 08).

**G. Schedule**

Ongoing activities.

## 2.2 Long-Range Transportation Plan Update

### A. Background

The MPO took 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.

There are several significant new provisions under SAFETEA-LU that are applicable to the LRTP. Based on interim guidance issued by USDOT, these new provisions include the following:

- LRTP must be SAFETEA-LU compliant by July 1, 2007 in order for it to be amended or updated.
- LRTP to be updated on a four-year cycle (previously was three years).
- LRTP to address potential environmental mitigation activities including potential sites and activities (to be developed in consultation with federal and state wildlife, land management, and regulatory agencies) and include intermodal connectors as transportation facilities.
- Transit operators are to be included in the cooperative development of funding estimates for the financial plan section.
- Consultation with state and local agencies responsible for land use management, natural resources and environmental protection, and historic preservation.
- Representatives of users of pedestrian walkways, bicycle transportation facilities, and the disabled are specifically added as parties to be provided the opportunity to participate in the planning process.
- The public participation plan is to be developed in consultation with interested parties in order to provide reasonable opportunities for all parties to comment.

## FY 07UWP Task 2.2

- Public meetings are to be conducted at convenient accessible locations at convenient times, employ visualization techniques to describe plans, and make public information available in an electronically accessible format (e.g., web site).

Staff has developed a draft scope of work and schedule that anticipates completion of the LRTP by March 2007. For FY 06, staff anticipates completion of the following work activities (note that some of these activities may carry over to early FY 07):

- Reviewing the current MPO study area boundary and providing for its expansion as recommended by TAC local government representatives.
- Establishing the LRTP base (2000) and horizon (2031) years.
- Completion of year 2000 and 2031 socioeconomic data for use in reviewing the LRTP travel demand model (see UWP task 2.1 Socioeconomic Data)
- Development of the draft LRTP work scope and schedule.
- Consulting with interested parties in developing the LRTP public participation plan.
- Submitting initial requests for data from VDOT, VDRPT, and area transportation agencies needed for development of various sections of the LRTP.
- Conducting the initial round of citizen review and input meetings.

Staff is proposing that MPO staff develop the capability to conduct quick response LRTP alternatives analysis (e.g., TP+, Cube, Viper, etc.). Such a resource will provide the MPO with the ability to promptly review various plan alternatives and assess these impacts at a regional level. VDOT will continue to serve as lead staff for the LRTP travel demand and air quality conformity analysis models. Model software acquired by staff should be capable of interfacing with VDOT travel demand models. (VDOT utilizes TP+ software). Note that Article I of the MPO's Memorandum of Understanding (MOU) for Coordination of Regional Transportation and Air Quality Planning and Programming states that TAC is required to assure that the travel demand model used to forecast travel conditions in the Richmond Area and Tri-Cities Area MPO study areas is commensurate in scope and end product to the complexity of transportation problems and needs for each MPO's study area.

### **B. End Product**

1. Amendments to the 2026 LRTP as necessary.

2. Development and adoption of the 2031 LRTP.
3. Development of staff capability for conducting quick response LRTP alternatives analysis.

**C. Work Elements**

Major work activities for the 2031 LRTP conducted by RRPDC and VDOT staffs include the following:

1. Establish LRTP task force [RRPDC].
2. Submit LRTP scope of work and schedule for task force review and recommendation and for MPO review and action [RRPDC].
3. Conduct citizen review and input workshops with results and findings presented for LRTP Advisory Committee review and consideration. Citizen review workshops/meetings and conducted at key phases in the LRTP development process [RRPDC].
4. Provide for periodic status reports to CTAC and EDAC [RRPDC].
5. Incorporate new SAFETEA-LU requirements (e.g., environmental mitigation activities, consultation with state and local land management, historic, and resource agencies, etc.) [RRPDC with assistance from VDOT].
6. Conduct data collection and analysis for socioeconomic, highway, transit, bicycle and pedestrian, multimodal, ITS, and land use data [RRPDC, GRTC, and VDOT].
7. Develop section on ITS and other technology alternatives for reducing congestion [RRPDC and VDOT].
8. Conduct CMS assessment including update of transportation network data, existing system characteristics, current and forecasted traffic volumes/congestion locations [RRPDC and VDOT].
9. Project financial resources [conducted by RRPDC in consultation with VDOT and GRTC].
10. Develop list of financially constrained transportation projects [RRPDC].
11. Conduct environmental justice assessment [RRPDC].
12. Conduct air quality conformity analysis [VDOT].

**FY 07UWP Task 2.2**

13. Provide technical documentation of plan development activities and make this information available for public review [technical documentation and summary reports to be developed by appropriate lead staff/agencies; VDOT and RRPDC].
14. Provide briefings to MPO, CTAC, and EDAC at important steps in the LRTP process [RRPDC].
15. Action on final draft LRTP tentatively scheduled for March 2007.
16. Prepare executive summary of final adopted plan (late FY 07/early FY 08).

Other LRTP related work activities include the following:

1. LRTP Amendments – Prepare and submit amendments to the 2026 LRTP as needed. (All amendments must be SAFETEA-LU compliant after July 1, 2007.) [RRPDC and VDOT]
2. Functional Classification – Review requests for function classification and reclassification and submit for MPO review and action.
3. LRTP Travel Demand Model – Conduct appropriate review and start-up activities for purchase, development, and training in use of quick response LRTP alternatives analysis model software (e.g., TP+, Cube, or similar model software needed for regional level analysis of plan modal alternatives) and budget direct costs for purchase of model software and staff training.
4. Review highway construction plans for conformance with the adopted Transportation Plan [VDOT and RRPDC].
5. 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<sup>①②</sup></u>	<u>5303</u>	<u>TOTAL</u>
RRPDC	100,000	20,000	\$120,000

① MPO action on 2/8/07 to shift \$20,000 to task 4.1.

② 4/12/07 MPO action to subtract \$15,000 in PL funds (shifted to other staff work tasks and portion transferred to FY 08).

**F. Schedule**

1. 2031 LRTP – July 1, 2006 to June 30, 2007 (schedule to be developed in conjunction with work scope).
2. Other work activities – ongoing.

**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 update information placed in the Richmond Area MPO GIS data base for use in preparing MPO plans, programs, and studies.

4. GIS support as follows:
  - a. Serve as agency GIS program manager which includes:
    - Maintaining agency GIS server
    - Guide other staff GIS work by determining work procedures, providing necessary training and promoting GIS program efficiency.
    - Oversee development of map products by conducting initial review meetings with assigned staff, providing assistance when necessary, reviewing final draft map products, and filing/storing final map products in GIS server files.
  - b. Provide technical assistance to staff and outside jurisdictions/agencies (when requested) for developing maps and data linked to GIS maps.
  - c. Staff support for development of maps and data linked to GIS map system. Includes staff work in support of the LRTP, CMS, TIP, MPO annual public review meetings, and other staff plan and study work tasks.
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<sup>①</sup></u>	<u>5303</u>	<u>TOTAL</u>
RRPDC	30,000	3,000	\$43,000

① 4/12/07 MPO action to subtract \$40,000 in PL funds (shifted to other staff work tasks and portion transferred to FY 08).

**F. Schedule**

On-going



**3.0 MANAGEMENT SYSTEMS/SHORT RANGE PLANNING**

**3.1 Congestion Management System (CMS) Update**

**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.

In FY 05, the MPO initiated a new process using a 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 is to perform the federally required on-going CMS alternatives analyses of congested corridors using the MPO's adopted CMS Toolbox of Strategies. This group is comprised of locality and agency members of the MPO's Technical Advisory Committee in addition to staff from VDOT's Richmond District Planning and Traffic Engineering, Residencies, and Smart Traffic Center.

In FY 05, the work group conducted several initial meetings to establish criteria and procedures to:

- Identify where recurring and non-recurring congestion exists both at specific points and along corridors included in the CMS roadway network.
- Identify and prioritize congested corridors for CMS alternatives analysis.

Work on completing the CMS criteria and procedures was delayed in late FY 05 due to the resignation of the CMS lead staff/project manager. When this position was filled (in October 2005) other work priorities required the attention of staff who also serves as the CMS project manager. Work on the CMS is expected to resume in late FY 06.

Also, note that SAFETEA-LU has expanded the scope of the CMS to include additional considerations for management and operations (i.e., there must be a "process that provides for effective management and operation" to address congestion management). Further review of federal requirements will be needed to identify, program, and staff these new work activities. Staff will consult with VDOT, RMA, City of Richmond, Henrico County, and Town of Ashland traffic engineering staffs (i.e., those jurisdictions and agencies responsible for highway systems operations) to document current procedures and activities and determine what will be required to meet these new federal requirements.

**B. End Products**

1. Issue reports from the CMS review group documenting alternatives analysis.
2. CMS element work scope as part of the upcoming 2031 LRTP Update.
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.

**C. Work Elements**

1. Provide administrative support for the CMS review work group.
2. Utilize CMS analysis and traffic projections from the 2026 LRTP as a starting point for the CMS review group’s on-going work to analyze congested corridors. Use updates for the 2031 LRTP if available.
3. Develop and issue reports from the CMS work group documenting alternatives analyses.
4. Prepare and publish 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.
5. Review new SAFETEA-LU requirements related to the development of a process that provides for effective management and operations to address congestion management, and program work activities as appropriate in the UWP.
6. Conduct GPS travel time runs over the region’s interstate/expressway road network.

**D. Agency Participation**

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

**E. Budget, Staff and Funding**

	<u>PL</u> <sup>①②</sup>	<u>5303</u>	<u>TOTAL</u>
RRPDC	40,000	6,000	\$46,000

① MPO action on 2/8/07 to shift \$30,000 to task 4.1.

② 4/12/07 MPO action to subtract \$30,000 in PL funds (shifted to other staff work tasks and portion transferred to FY 08).

**F. Schedule**

On-going activity

1. CMS update – conducted in conjunction with 2031 LRTP Update.
2. CMS Corridor Review – ongoing.

### 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 resumed in late FY 04. At New Kent County's request, staff conducted a study of economic/business impacts of access controls (conducted in place of staff developing proposed access management standards). Work on access management standards for Charles City County was scheduled for the FY 05 and FY 06 UWPs; however, other work priorities did not allow staff to initiate this work. For FY 07, staff time will be required for the LRTP and CMS updates. As a result, staff will not be able to conduct this work until FY 08 (depending on staff resources and capabilities).

A minor amount of staff time has been programmed in the FY 07 UWP for addressing questions on previously conducted studies and for review of related matters.

**B. End Product**

Limited technical assistance to area local governments in addressing access management related matters.

**C. Work Tasks**

1. Staff will be available to address questions and provide limited technical assistance for previously conducted access management studies.
2. Review other access management related matters and address as appropriate (time and budget permitting).

**D. Agency Participants**

RRPDC, VDOT, FHWA, local governments.

**E. Budget, Staffing, Funding**

	<u>PL<sup>①</sup></u>	<u>TOTAL</u>
RRPDC	\$4,000	\$4,000

<sup>①</sup> 4/12/07 MPO action to subtract \$500 in PL funds (shifted to other staff work tasks and portion transferred to FY 08).

**F. Schedule**

Ongoing activity.

**3.3 Intelligent Transportation Systems (ITS) Update**

**A. Background**

The MPO took action at its July 21, 2004 meeting to accept the *Richmond Regional ITS Architecture Report* and the *Richmond Regional ITS Architecture Deployment Plan Report*. Note that the Tri-Cities Area MPO also took action to accept reports since both cover the Richmond and Tri-Cities areas. The ITS Architecture Report identifies the region’s framework for institutional agreements and technical integration of ITS. It defines the pieces of the region’s systems (e.g., traffic signal operations, freeway management, emergency management, public transit operations, etc.) and the information exchanged between them. The *ITS Architecture Deployment Plan* outlines the vision for ITS deployment and identifies and prioritizes projects and “market packages” that are needed to implement the ITS architecture on a high, medium, and low priority basis. It helps to prioritize funding decisions by having a comprehensive shared approach to regional ITS programs so that the infrastructure can be incrementally built out over a 20-year time horizon and allow integration among key foundations of the system as it grows and expands.

As part of the MPO’s July 21, 2004 action on ITS, the MPO’s Technical Advisory Committee (TAC) was designated with conducting annual reviews of these documents with VDOT providing technical assistance of these services and with TAC and RRPDC staff reporting on the implementation status of ITS projects and providing recommendations for updates and/or changes to the region’s ITS architecture report and deployment plan. It was recommended that such reviews be conducted at the January TAC meeting (based on work by VDOT staff to prepare proposed projects for consideration in the upcoming VDOT Six-Year Improvement Plan). The MPO took further action to direct that it be provided with an annual report on ITS applications and implementation including the status of ITS projects, funding, and new technologies.

**B. End Product**

Annual review and report on the *Richmond Regional ITS Architecture Report* and *Richmond Regional ITS Architecture Deployment Plan Report*.

**C. Work Elements**

Work activities conducted by RRPDC staff with assistance from VDOT and in coordination with Tri-Cities Area MPO include the following:

**FY 07 UWP Task 3.3**

1. Conduct annual review of the *Richmond Regional ITS Architecture Report* and the *Richmond Regional ITS Architecture Deployment Plan* in coordination with Tri-Cities Area MPO, with VDOT providing technical assistance of the reviews and with TAC and RRPDC staff reporting on the implementation status of ITS projects and recommendations for updates and/or changes to the region’s ITS architecture report and deployment plan.
2. As part of its annual report to the MPO, provide a report on ITS applications and implementation including the status of ITS projects, funding, and new technologies.

**D. Agency Participation**

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

**E. Budget, Staff and Funding**

	<u>PL<sup>①</sup></u>	<u>5303</u>	<u>TOTAL</u>
RRPDC	10,000	7,000	\$17,000

<sup>①</sup> 4/12/07 MPO action to subtract \$20,000 in PL funds (shifted to other staff work tasks and portion transferred to FY 08).

**F. Schedule**

1. Annual review and report on Architecture Report and Deployment Plan – November 2007 to March 2008.
2. Other ITS development/support activities – ongoing.

**4.0 TRANSPORTATION PROJECT PROGRAMMING**

**4.1 Transportation Improvement Program (TIP)**

**A. Background**

The TIP programs highway and transit projects for which funds have been or are scheduled to be obligated 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 VDOT Six Year Improvement Program (SYIP) based on 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.

Note that SAFETEA-LU provides several significant changes to the TIP development process and document content which includes the following:



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- The TIP must be updated at least every four years and contain at least four years of projects and strategies. Staff recommends that the TIP be updated annually based on state's current process to annually adopt the SYIP.
- A "participation plan" must be developed and utilized providing reasonable opportunities for interested parties to comment on the content of the TIP. Further, the participation plan must be developed in consultation with all interested parties. The participation plan must be in place prior to MPO adoption of the TIP. Note that after July 1, 2007, TIPs that are not SAFETEA-LU compliant can not be amended or adjusted.
- Visualization techniques shall be employed to describe the TIP.
- The TIP shall be made available in electronically accessible formats (such as the RRPDC web site).
- SAFETEA-LU specifies that the development of the annual listing of obligated projects "shall be a cooperative effort of the state, transit operator, and MPO" and also shall include two new project types: "investments in pedestrian walkways and bicycle transportation facilities" for which federal funds have been obligated in the preceding year.
- The TIP will contain: priority list of projects and strategies for four years; financial plan; and description of work (type of work, termini, length, etc.) of each project in the TIP.

An integral component of the TIP development process is VDOT's Six Year Improvement Program (SYIP) review and development process. VDOT has recently developed and implemented a new prioritization process for proposed projects, which features the following:

- Objective scoring method for proposed projects – Measures include vehicle volume; percentage of heavy trucks; flow rate; utilization of existing state-owned right-of-way; bridge conditions; and various other non-quantifiable factors.
- Information driven process – Allows for consideration of "soft factors: such as regional support; ability to leverage other funding sources; project phasing; and route continuity.

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- VDOT review teams – One team for interstate projects (statewide) and one team per VDOT construction district for primary system projects. Review teams include the district administrator; construction, preliminary engineering, and maintenance managers; district planner; Transportation Mobility Planning Division (TMPD) district coordinator; and staff person from TMPD’s statewide planning office.

This process was used prior to the fall 2005 preallocation public hearings and may be modified for future SYIPs.

Significant changes have also been made as part of the MPO’s process in reviewing and selecting RSTP and CMAQ funded projects (note that the MPO has lead authority for the review and selection of RSTP and CMAQ funded projects). Based on the August 19, 2004 FTA/FHWA certification review corrective action number five and programmatic recommendation number one, a new review and selection process for RSTP and CMAQ funded projects was adopted by the MPO on December 9, 2004. This new process provided interim procedures for programming FY 06 and FY 07 RSTP and CMAQ funds (funds to be used for existing projects with limited ability to program any new projects). The competitive review and selection process is to be fully implemented starting with the programming of FY 08 RSTP and CMAQ funded projects.

Essential elements of the TIP previously required under ISTEA and TEA-21 are as follows (note that SAFETEA-LU provisions will modify several of these elements):

1. Approval and Updates – The TIP must be approved by the MPO and the Governor, and must be updated at least every two years (expanded to four years under SAFETEA-LU). The Richmond Area MPO’s TIP is currently scheduled to be updated on an annual basis.
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 dis-

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tribute 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 (note that SAFETEA-LU has several new federal-aid programs).
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, 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 – Assessment and documentation of the distributional effects of the metropolitan transportation investments are provided through the MPO's LRTP and VDOT's use of the NEPA process. The NEPA process that is completed by VDOT (or project administrator) address project specific Environmental Justice (EJ) analysis and documentation. With a regional level assessment of EJ covered by the LRTP and with project level EJ analysis covered by the NEPA process, an EJ component is not required at the TIP level.
10. MPO Certification – In TMA's, the USDOT Secretary shall certify the planning process at least once every three years (to be changed to four years under SAFETEA-LU). A joint FHWA/FTA review was conducted in May 2004, and

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on August 19, 2004 the MPO was conditionally certified, subject to five corrective action issues.

11. 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)).
12. 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.
13. 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.
14. 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.

Note that the TIP is posted on the RRPDC's web site and updates are made when the TIP is amended or adjusted (i.e., changes which the RRPDC staff is authorized to make to the TIP).

### **B. End Products**

1. Development and adoption of the FY 06-08 TIP (work initiated in FY 05) 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 07-10) in compliance with all SAFETEA-LU requirements (TIP must be SAFETEA-LU compliant by July 1, 2007; otherwise, it cannot be adjusted or amended) and providing for its completion and adoption by the MPO by May 2007.
3. Maintenance activities in support of the current TIP including processing of TIP amendment and adjustment 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. Amendments/Adjustments – Based on requests from VDOT, local governments, GRTC, and other transportation agencies, RRPDC staff prepares and submits proposed amendments for TAC review and recommendation and for MPO action. Based on action taken at the July 14, 2005 MPO meeting, RRPDC staff is authorized to make certain changes to the TIP consultation with and written agreement from local government/agency TAC members and VDOT. Note that VDOT is responsible for advising the MPO as to the availability and amount of federal transportation funds to be obligated and this information is needed before proposed amendments/adjustments can be submitted for appropriate review and action.
2. Regional Surface Transportation Program (RSTP)/Congestion Mitigation/Air Quality (CMAQ) Tracking Sheets – Maintain record of RSTP and CMAQ funds allocated for area projects including record of past and current allocations and project close-out (showing funds remaining after project completion).
3. RSTP/CMAQ Project Selection – Conduct process for preparing and selecting RSTP and CMAQ projects and program selected projects in the TIP. Note that the MPO is in the final year of the interim phase and should fully transition to the MPO approved competitive selection process with projects funded by FY 08 RSTP and CMAQ allocated funds.
4. TIP Participation Plan – (new SAFETEA-LU requirement) – Develop participation plan that specifies procedures and process for providing reasonable opportunity for interested parties to comment on the content of the TIP. This plan must be developed in consultation with all interested parties and must be in place prior to MPO adoption of the TIP.
5. TIP Development – Prepare the four-year list of proposed projects and strategies based on submissions by area local governments, VDOT, VDRPT, GRTC, CRAC, and RideFinders. Conduct various documentation requirements for incorporation into the TIP document. Note that the annual listing of obligate projects “shall be a cooperative effort of the state, transit operator, and MPO” and also shall include two new project types: “investments in pedestrian walkways and bicycle transportation facilities” for which federal funds have been obligated in the preceding year (SAFETEA-LU requirement).

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6. Public Review – Conduct public review process for draft TIP document and air quality conformity analysis findings. Adopted TIP document, RSTP and CMAQ allocations, and regional priority projects should be posted in the RRPDC web site.
7. Visualization Techniques – (new SAFETEA-LU requirement) – Visualization techniques shall be employed to describe the TIP.
8. Conformity Analysis – Coordinate work by VDOT to review and analyze projects in the TIP for conformity to air quality requirements. Also, provide administrative assistance for work by the Interagency Consultation Group to conduct the conformity analysis process.
9. Regionally Significant Projects – Coordinate identification of all regionally significant public and private transportation projects and submit to VDOT for air quality analysis purposes.
10. Federal Transportation Administration (FTA) Section 5310 Projects – Provide information on Section 5310 funds program to area local governments and human service agencies. Action taken by the MPO to endorse requests for Section 5310 funding. Projects selected by the CTB and programmed in VDOT’s Six Year Improvement Program. Selected projects are then reviewed by VDOT and recommended by VDOT for programming in the TIP given sufficient funds for obligation purposes. (Note that under SAFETEA-LU, FTA Section 5310 funds as well as Section 5316 Job Access and Reverse Commute and Section 5317 New Freedom programs will be subject to a locally developed, coordinated public transit – human services transportation plan; see UWP task 5.6.).
11. Enhancement Projects – Action taken by the MPO to endorse requests for transportation enhancement program funds. Projects are selected by the CTB and programmed in VDOT’s Six Year Improvement Program. Selected projects are then reviewed by VDOT and recommended by VDOT for programming in the TIP given sufficient funds for obligation purposes.
12. Regional Priority Projects – Prepare and provide list of the region’s priority projects to CTB for consideration during the annual financial planning and programming funds allocation meeting. MPO develops its list of proposed projects based on input from TAC, CTAC, and EDAC, and based on the report of the Executive Committee. Staff will attempt to expand background information to better describe project need (e.g., current and/or projected traffic volume).
13. Major Projects Status – Prepare report documenting the implementation status of major highway and transit projects programmed in the TIP.

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- 14. Coordinate listing and description of progress in the implementation of TCM's (if appropriate).
- 15. TIP Availability in Electronically Accessible Format – (new SAFETEA-LU requirement) – Post MPO adopted TIP and other appropriate documents on the RRPDC web site.
- 16. Prepare and process MPO Statement of Certification and supporting documentation for the area's "3-C" Transportation Planning Process.

**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<sup>①②</sup></u>	<u>5303</u>	<u>TOTAL</u>
RRPDC	210,000	18,000	\$228,000

① MPO action on 2/8/07 to shift \$60,000 to task 4.1 from various tasks.

② 4/12/07 MPO action to add \$40,000 in PL funds (shifted from other staff work tasks).

**F. Schedule**

- 1. FY 07/09 TIP – January 2005 to FY 07.
- 2. TIP Amendments/Adjustments – On-going activity
- 3. Regional Priority Projects – July 2006 to November 2006
- 4. FY 08 to FY 11 RSTP/CMAQ Project Review and Selection – October 2006 to January 2007
- 5. TIP Participation Plan – August 2006 to November 2006.

**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, disabled, and low income groups and advises the MPO on plans, studies, issues, and other matters related to the planning of public transportation services. 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 a review committee for work on UWP task 5.6, Human Services Public Transportation Coordination Plan (see UWP task 5.6).

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 and serving on advisory committees involved with specialized transportation needs and services.

In FY 05, 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 will provide updates to this report based on information received from other study and work tasks.

Staff also prepares and submits 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.



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2. Staff participation on the Red Cross Transportation Advisory Committee and other human/social service agency/organization advisory committees.
3. Update the *Transportation Operators Inventory* of private and human service agencies' transportation services based on information received in the course of other study and work activities.
4. Coordinate submission of GRTC and CARE reports, proposed policies, and other items for EDAC review and comment, and recommendation. Note that at the request of GRTC, EDAC comments and recommendations are to be submitted directly to GRTC for its review and action as deemed appropriate by GRTC, and to the MPO for its review and information.
5. Provide periodic status reports on various UWP work tasks and activities for EDAC review, information, and action as appropriate.

### 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>5303</u>	<u>PL<sup>①</sup></u>	<u>TOTAL</u>
RRPDC	30,000	8,000	\$38,000

<sup>①</sup> 4/12/07 MPO action to add \$4,000 in PL funds (shifted from other staff work tasks).

### 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 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 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, and any fatal flaws that would prevent this project from moving forward. The Phase II study was not intended to constitute an official FTA-approved NEPA alternatives analysis process. If the City of Richmond wishes to further pursue this project with the use of federal funding, it is understood that the project would require a full alternatives analysis in accordance with all applicable federal requirements.

The Downtown Richmond Streetcar Study Phase II report was completed in September 2004. The study’s remaining funds are being used for follow-up work activities related to the further examination of downtown circulator concepts.

**B. Work Elements**

1. Complete follow-up work activities associated with the downtown circulator study concept (e.g., develop proposals for City of Richmond staff and elected officials).
2. Incorporate downtown circulator concepts into upcoming GRTC comprehensive operations analysis.

**5.4 GRTC Comprehensive Operations Analysis**

**A. Background**

GRTC Transit System (GRTC) will conduct a comprehensive operational analysis (COA). The last COA was completed in 2001. In order to improve service, detailed information needs to be collected on all of GRTC's existing transit services. An in-depth analysis needs to be undertaken to develop the actual services, including specific revisions to existing routes as well as the operational details of any proposed new services. These services need to be implemented in a strategic and comprehensive manner.

This study will be conducted by a consultant under contract to GRTC. A technical committee will be established, and the consultant will meet with the committee on a regular basis to discuss project status and preliminary recommendations. Following completion of the draft and/or final report, the consultant will be available for presentations to the GRTC Board, MPO Board, and officials from each jurisdiction within GRTC's existing/proposed service area.

**B. End Product**

A COA that serves as GRTC's principal tool for strategic planning and operation of public transportation services in the region.

**C. Work Elements**

The following tasks are from GRTC's Request for Proposals (issued February 20, 2006) and are subject to change based on the final consultant services agreement:

1. Collect and analyze existing conditions data for GRTC services; Fixed Route Service, RideFinders, CVAN, and CARE.
  - Establish Technical Advisory Committee
  - Define service areas for all GRTC services
  - Review all current, applicable studies
  - Collect and analyze ridership/transfer information
    - Collect historic data for most current three-year period
    - Conduct on/off ridership counts
    - Collect data on transfer activity
  - Collect and analyze most current demographic information for service area
  - Conduct peer reviews

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- Review all existing routes, including: design, running time, on time performance, layover points, time points, passenger/operator schedules, transfer activity, and vehicle assignments
  - Determine efficiency through analysis of industry-wide performance standards
  - Collect financial information including: revenue/costs and capital needs for upcoming six-year period (as reported in GRTC Transit Development Program)
  - Collect data on fare structure and collection methods
  - Collect data on current GRTC fleet
2. Collect and analyze regional demographic data and transportation network/land development trends (existing and forecast).
- Utilize current Census data to develop demographic profiles for the region
  - Work with the MPO and local jurisdictions/agencies to assess regional transportation/development trends
3. Develop and conduct surveys (user/non-user) to determine attitudes towards various modes of public transportation, trip characteristics, demographic profiles, and other agreed upon information concerning public transportation users.
- Conduct user survey to determine:
    - Origins/destinations (i.e., trip characteristics)
    - User demographic profiles
    - Attitudes/satisfaction towards current services
  - Conduct non-user survey to determine:
    - Attitudes towards various modes of public transportation
    - Latent demand
    - Demographic profiles
    - Trip characteristics
4. Review and evaluate conformance to existing GRTC services and performance standards.
5. Develop recommendations to improve the efficiency and effectiveness of existing programs and services.

Develop recommendations for:

- Fare structure
- Service/performance standards
- Route structure and transfer activity

-- Several transfer center options will be developed to include: required route structure, transfer center locations, estimated costs; funding scenarios; impacts to GRTC operations, riders, and the community

- Schedules
- Vehicle assignment
- Departmental operations for all GRTC services
- Amenities
- Fleet mix

6. Develop recommendations for program and service expansion.

- Develop recommendations for expansion into new markets
- New special services (e.g., niche markets)
- Service to new areas

7. Develop implementation plan.

- Develop financial plan including: revenue, operating costs, capital costs, projected ridership and resulting farebox revenue
- Prioritize immediate (first year), short term (2-5 years) and long term (+5 years) recommendations which will include estimated costs and implementation schedules
- Explore new funding sources

**D. Agency Participation**

GRTC, consultant, RRPDC, VDRPT, FTA, transit services area local governments (i.e., City of Richmond, Henrico County, Chesterfield County, Hanover County, Goochland County, Powhatan County, Charles City County, New Kent County, and Town of Ashland)

**E. Budget, Staff and Funding**

Staff: GRTC staff with consultant

Specific funding sources by program and total amount of funds budgeted are as follows:

Budget: \$375,700

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Funding sources:

FY 06 VDRPT Technical Assistance Grant	\$150,000
FY 02 VDRPT Technical Assistance Grant	\$ 38,000
FY 07 FTA Section 5307 Funds	\$150,000
GRTC Operating Funds	(as needed)

**F. Schedule**

Study schedule (including project milestones) to be established as part of the GRTC consultant services agreement.

## 5.5 Regional Mass Transit Study

### A. **Background**

At the October 13, 2005, MPO meeting, action was taken to add “Regional Mass Transit Study” (RMTS) to the MPO’s list of Regional Priority Transportation Projects under the category of Other Priority Issues. In response to the MPO action, staff prepared and presented a draft scope of work for the RMTS at the December 8, 2005, MPO meeting and reported that it would develop a UWP amendment for MPO review and action so that the study would move forward. Note that the RMTS will be conducted in coordination with the GRTC Transit System Comprehensive Operations Analysis (COA). Work on the COA is expected to begin in the spring of 2006. It will be conducted as a consultant study administered by GRTC. The COA goal and strategies are identified in the COA scope of work as follows:

#### Goal

- Develop a principal tool for the strategic planning and operation of public transportation services in the region.

#### Strategies

- Collect and analyze existing conditions data for GRTC services:
  - Fixed Route Service
  - Ride Finders
  - C-Van
  - CARE
- Collect and analyze regional demographic data and transportation network/land development trends (existing and forecast).
- Develop and conduct surveys (user/non-user) to determine attitudes towards various modes of public transportation, trip characteristics, demographic profiles, and other agreed upon information concerning public transportation users.
- Review and evaluate conformance to existing service and performance standards.
- Develop recommendations to improve the effectiveness of existing programs and services.
- Develop recommendations for program and service expansion.
- Develop implementation plan.

GRTC has budgeted \$325,000 from several federal and local sources to conduct the COA. Data analysis recommendations and reports from the COA will be available for review and consideration in the RMTS.

Work on the RMTS is to be conducted by a consultant under contract to the RRPDC and under the direction of a special purpose MPO study advisory committee

composed of representatives from the MPO's Technical Advisory Committee (TAC), Citizens Transportation Advisory Committee (CTAC), and Elderly and Disabled Advisory Committee (EDAC). RRPDC staff will also provide technical assistance (in support of various consultant work tasks) and administrative support.

**B. End Products**

A comprehensive study providing for the development and implementation of a regional mass transit system based on the following study objectives:

- Produce a plan of action for the development and implementation of regional mass transit programs and services over mid-range (3 to 10 years) and long-range (10 to 25 years) time horizons with consideration given to corridor prioritization.
- Study will cover the entire Planning District 15 area and linkages to adjacent areas including metropolitan areas as appropriate for consideration of all public transportation modes.
- Study will address all surface public transportation modes (i.e. local and express bus, car and vanpool programs, ADA/specialized public transportation services, bus rapid transit, street car/trolley, light rail, and commuter rail).
- Study will provide recommendations for dedicated, on-going funding programs to meet capital and operating needs.
- Study will provide recommendations for supportive land-uses appropriate to enhancing public transportation services.
- Study will review and provide recommendations for the MPO's adopted Human Services Public Transportation Coordination Plan (see UWP task 5.6).

**C. Work Elements**

Work elements are identified as follows:

- **Area development and service demand**
  1. Develop demographic data (base year) and forecasts by TAZ for population, employment, auto availability, and income (COA work task).
  2. Review and assessment of user and non-user telephone surveys and other information developed as part of the COA.
  3. Review and assessment of data, analysis, recommendations, and other information provided in the "Richmond Rail Transit Feasibility Study" (approved by MPO on June 12, 2003) and the "Public Transportation for the Elderly, Disabled, and Low-Income: Phase I – Needs Assessment Report" (approved by the MPO on February 2, 2006).



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4. Review and assessment of findings and recommendations from the GRTC Transit System/Petersburg Area Transit (PAT) merger study.
  5. Review of MPO Human Services Public Transportation Coordination Plan.
  6. Local government land use plans:
    - a. Identify areas for future development and redevelopment
    - b. Identify major trip generators/attractors
  7. Conduct travel demand analysis:
    - a. Mode split (projected trips by public transportation and distribution by TAZ).
    - b. Demand estimate (to be modified based on analysis of various modal alternatives).
- **Assessment of Influencing Factors**
    1. Review and evaluate local ordinances.
    2. Report on state and federal legislative provisions related to transit services and programs.
    3. Report comparing typical highway construction and maintenance costs to typical capital and operating costs for local/express bus service, streetcar/trolley, light rail, bus rapid transit, and commuter/intercity rail.
    4. Report on economic, health, and environmental benefits of public transportation services.
    5. Report on existing funding policies and programs; level of funding effort by local, state and federal governments; and options for future funding programs.
    6. Report on existing institutional arrangements and options for future consideration.
    7. Report on public transportation needs and services for elderly, disabled, and low-income persons.
  - **Peer Group Review**
    1. Identify and select three to five regions with similar demographic characteristics.

2. Conduct comparative assessment of each region for the following:
  - a) Modal split.
  - b) Highway congestion levels (in urbanized area).
  - c) Public transit services and programs.
  - d) Funding programs and policies.
  - e) Federal, state, and local funding support for public transit services.
  - f) Transit service performance characteristics:
    - Hours of operation
    - Service times
    - Total route mileage
    - Total service mileage
    - Service area population density
    - Supportive land uses
    - Operating revenues
    - Fare/subsidy ratio
3. Comments and findings from each region on current public transportation services and programs that are working well and what they might consider doing differently in the future.

- **Analysis of Modal Alternatives**

1. Assess feasibility for following modes:
  - a) Local/Express bus service
  - b) Streetcar/Trolley
  - c) Light Rail/Bus Rapid Transit (BRT)
  - d) Commuter/Intercity Rail
2. Feasibility assessment of modes to include the following:
  - a) Projected demand
  - b) Service area/corridors
  - c) Institutional arrangements
  - d) Supportive land-uses
  - e) Supportive transit services (including car and vanpool programs)
  - f) Cost (capital and operating)
  - g) Funding strategies and programs
3. Assess feasibility and program/service alternatives for ADA/paratransit services.

- **Develop Preferred Alternative**

- **Final Recommend Plan and Program for Action**

**D. Agency Participation**

RRPDC, consultant (under contract to RRPDC), study advisory committee (representatives from TAC, CTAC, and EDAC), VDOT, VDRPT, GRTC, local governments, RideFinders, FHWA, FTA.

**E. Budget, Staff, and Funding**

Work on this UWP task is anticipated to take approximately 12 to 18 months (following authorization for consultant to proceed with study). Total cost for this study is anticipated to be approximately \$378,000 (i.e., \$330,000 budgeted for consultant services and \$48,000 budgeted for RRPDC staff) not including staff time for work conducted in FY 06 (primarily contract administration). Initial staff funding for this study was programmed in the FY 06 UWP (under task 1.1 Maintenance/Special Studies). State Transportation Planning Grant pilot program funds programmed in the FY 06 UWP will carry over to the FY 07 UWP. These state program funds must be expended by June 30, 2007.

**FY 07 UWP Budget and Funding Sources**

	<u>PL</u>	<u>5303</u>	<u>TOTAL</u>
RRPDC Staff	48,000 <sup>①③</sup>	30,000	\$78,000
	<u>State Transp. Plg.</u>	<u>PL</u>	<u>TOTAL</u>
RRPDC Consultant	125,000	15,000 <sup>②④</sup>	\$140,000

① MPO action on 12/14/06 to shift \$10,000 PL funds from task 1.1.

② MPO action on 12/14/06 to shift \$55,000 PL funds from task 1.1.

③ 4/12/07 MPO action to add \$30,000 in PL funds (shifted from other staff work tasks).

④ 4/12/07 MPO action to transfer \$190,000 in FY 07 consultant PL funds to FY 08.

**F. Schedule**

- February 2, 2006 MPO action to amend FY 06 UWP to add new UWP Task 5.5
- VDOT review and authorization to amend UWP following MPO action (authorization received from VDOT on March 13, 2006)
- May 11, 2006 RRPDC meeting action authorizing RRPDC Executive Director to file application for and to execute contract with VDOT for State Transportation Planning Grant pilot program funds contingent upon establishing a committee to help determine areas covered under the RMTS.

## FY 07 UWP Task 5.5

- Action at June 8, 2006 MPO meeting to approve amendments to UWP task 5.5 addressing FTA review comments (adding that consideration be given to corridor prioritization when developing recommendations for program and service expansion and any related implementation plans) and to designate the MPO Technical Advisory Committee (TAC) as the review committee to help determine rural areas to be covered in the RMTS (as per May 11, 2006 RRPDC action included in its resolution authorizing RRPDC administration of State Transportation Planning Grant Pilot Program Funds)
- Action at June 15, 2006 TAC meeting to establish spatial boundaries for the RMTS
- Revise UWP task 5.5 and RMTS Scope of Work (in VDOT/RRPDC State Transportation Planning Grant Pilot Program funds agreement) to include final changes to RMTS study area (based on action taken at the June 15 TAC meeting; mid- late June)
- Review and execute VDOT/RRPDC pass-through contracts for State Transportation Planning Grant pilot program funds and other appropriate funding sources (late August to September)
- Develop and review consultant work task order (consultant work tasks, estimated costs and hours) using VDRPT on-call consultant (October to early December)
- Prepare and execute RRPDC/VDRPT Memorandum of Understanding providing for pass-through of PL and STPG funds from RRPDC to VDRPT in order to pay for VDRPT on-call consultant services (October to December)
- Initiate study – mid-December 2006

Estimated that work on study by consultant will take approximately 12 to 18 months (following authorization for consultant to proceed with study).

**5.6 Human Services Public Transportation Coordination Plan**

**A. Background**

SAFETEA-LU requires that as a condition of federal assistance covering FTA Section 5310 (Elderly Individuals and Individuals with Disabilities Program) Section 5316 (Job Access and Reverse Commute Program) and Section 5317 (New Freedom Program, funding new ADA type paratransit services), that the region prepare a coordinated public transit human services transportation plan for the coordination of transportation resources provided through multiple federal programs. This plan should enhance transportation access for elderly, disabled, and low-income individuals, minimize duplication of services, and encourage the most cost-effective transportation program possible. Note that SAFETEA-LU requires this coordination plan to be developed by a process that includes representatives of public, private, and nonprofit transportation and human service providers and participation by the public. Also note that the requirement for having a Human Services Public Transportation Coordination Plan in place "...becomes effective in FFY 07 [federal fiscal year, which is October 1, 2006] as a condition of Federal assistance." Staff will make this a top priority for completion in early FY 07 (to have a draft coordination plan ready for review and action by the October 12, 2006 MPO meeting). Additional consideration for development of this plan is provided as part of UWP task 5.5, Regional Mass Transit Study.

Note that VDRPT staff and/or consultant assistance may be needed in late FY 06 and early FY 07 to identify and address FTA program requirements; identify and describe the various federal programs that may be covered in a regional Coordination Plan; provide information on public transportation program services review, evaluation, and coordination; and provide other technical assistances throughout the plan development process. It is also important to note that GRTC is the region's designated recipient for FTA Section 5316 funds.

**B. End Product**

An adopted Human Services Public Transportation Coordination Plan covering the MPO study area.

**C. Work Elements**

Work activities include the following:

1. Conduct review of federal requirements and programs directly and indirectly subject to the Coordination Plan.
2. Identify all participants in Coordination Plan process (including interested parties, transportation service providers, and others).

**FY 07 UWP Task 5.6**

3. Solicit comments and input from EDAC and TAC on service needs, available resources, and appropriate means for coordination.
4. Review proposed coordination alternatives and funding (federal and other) resources with MPO Executive Committee.
5. Develop draft Coordination Plan and present to TAC, EDAC, and interested parties for review and comment.
6. Develop a final draft Coordination Plan for MPO review and action.
7. Submit final MPO approved Coordination Plan to FTA and others.

**D. Agency Participation**

RRPDC, VDRPT, VDOT, GRTC, local governments, human service agencies/organizations, private and private non-profit paratransit service operators, FHWA, FTA.

**E. Budget, Staff and Funding**

	<u>PL</u> <sup>①</sup>	<u>5303</u>	<u>TOTAL</u>
RRPDC	10,000	25,000	\$35,000

<sup>①</sup> 4/12/07 MPO action to add \$5,000 in PL funds (shifted from other staff work tasks).

**F. Schedule**

Work to be initiated in FY 06 with draft plan presented for MPO review and action by October 2006.

## 5.8 Richmond Area Rail Studies

For FY 07, VDRPT is planning on conducting four rail studies that are within or include the Richmond area. The following provides a brief description for each of these studies:

### Richmond to Hampton Roads Passenger Rail Study

This study includes an Alternatives Analysis and Tier I Environmental Impact Statement (EIS) for potential passenger rail service between Richmond and Hampton Roads. This study addresses potential routes for higher speed passenger rail service in both the Richmond to Petersburg to Norfolk Corridor (using the Norfolk Southern rail line that parallels U.S. Route 460) and the Richmond to Williamsburg to Newport News corridor (using the CSX rail line parallel to Interstate 64). The study was initiated November 2003. In FY 07, VDRPT plans to complete a Tier I investigation and select a proposed route. The total cost of this study is \$1,560,000 (estimate provided by VDRPT in FY 06). VDRPT estimates study cost for FY 07 at \$300,000 (funding source to be determined).

### Richmond Area Rail and Grade Crossing Improvements

VDRPT is conducting a preliminary engineering study to identify short term rail and grade crossing improvements that can be made on the rail line between Staples Mill Station and Main Street Station in Richmond. The goal is to identify improvements that will result in at least 5 minutes of travel time savings between the two stations. This study began in October 2004 and is expected to be completed by May 2005. For FY 07, VDRPT plans to conduct engineering studies (to include traffic data) on closing Valley Road and Saint James Street crossings, and upgrading the Brook Road and Hermitage Road crossings. VDRPT will also work to update a previous report on crossing changes.

\$22,000 (FY 07) Virginia Transportation Act of 2000 (state)

### Acca Yard Rail Operations Study

The major impediment to improving the speed, frequency and reliability of passenger trains to Main Street Station is the CSX Acca Yard, which is located adjacent to Bryan Park in Richmond. Acca Yard is CSX's primary classification yard in the region, and there is a high volume of freight traffic into and out of this facility. Passenger trains traveling from Staples Mill to Main Street must travel directly through this yard. Speeds are restricted, and delays to both passenger and freight trains are common. This study will look at a variety of options for improving the movement of passenger trains through the yard, including the feasibility of upgrading tracks and building a bypass track. The study will also analyze CSX operations to determine if some of the functions of Acca Yard can be relocated to other facilities in order to free up capacity for passenger trains. Work on this study was initiated in late FY 05. For FY 07, VDRPT plans to conduct the following activities:

- Utilize a computer model to study existing and future rail operations.

## FY 07 UWP Task 5.8

- Perform comparisons of rail network performance, capacity, and proposed changes to infrastructure and train operations.

\$500,000      Multi-Modal Planning Funds

### **Southeast High Speed Rail Corridor Tier II EIS**

VDRPT is working with the North Carolina Department of Transportation to develop preliminary engineering and an EIS for the Petersburg to Raleigh segment of the high speed rail corridor. Note that notice was recently given in the Federal Register proposing that the corridor study area be extended to Richmond's Main Street Station. The cost of this extension is estimated to be \$1,500,000 (estimate provided in FY 06). VDRPT plans to complete a Tier II EIS to select a specific alignment of this corridor in FY 07. Work will focus on the Petersburg area where three alignments will be investigated and a station location should be determined.

\$750,000      Rail Enhancement Fund



**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.

Since the MPO's FY 02 action to establish this task force, RRPDC staff has not been able to initiate the MPO's charge for the task force due to pressing work priorities and limited staff resources available for this work task. Based on this lack of progress, the FY 07 UWP will not include work activities related to the Intermodal Advisory Task Force or the review of study findings

## FY 07 UWP Task 6.1

and recommendations presented in the Richmond Region Intermodal Study (which are now over five years old). Note that the 2031 LRTP Update provides for the development of intermodal data (including updates for freight rail services, truck, port, and airport services), which should adequately address SAFETEA-LU requirements. In addition, VDOT has become more active in addressing statewide multimodal freight transportation planning and providing for RRPDC staff participation (as part of the VTrans 2025 Multimodal Technical Advisory Committee) in support of VDOT multimodal planning activities.

### **B. End Products**

On-going technical support for regional and state multi-modal transportation planning activities.

### **C. Work Elements**

1. Review VDOT list of major employers (100 or more employees) in the Richmond region that generate freight traffic and provide verification to VDOT.
2. Review local freight movement data (for MPO study area/Richmond region at the five-digit zip code level) and provide for its use and analysis in various MPO plans, studies, and/or workshops.
3. Participate on VDOT advisory groups involved in statewide multi-modal planning (including truck, port, airport, and rail freight movement).

### **D. Agency Participation**

RRPDC, VDOT, VDRPT, Crater PDC, CRAC, Port of Richmond, local governments.

### **E. Budget, Staff and Funding**

	<u>PL</u> <sup>①</sup>	<u>TOTAL</u>
RRPDC	10,000	\$10,000

<sup>①</sup> 4/12/07 MPO action to add \$4,000 in PL funds (shifted from other staff work tasks).

### **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 designated as a Maintenance Area. Since that time however, EPA has designated the Richmond area (i.e., City of Richmond, Petersburg, Colonial Heights and Hopewell, and counties of Charles City, Chesterfield, Hanover, Henrico, and Prince George) to be a marginal nonattainment area for ozone air quality standards. The Richmond area nonattainment designation went into effect on June 15, 2004 with its status being set at a marginal level shortly after that time (Richmond was a moderate nonattainment area at one time under EPA's one-hour ozone air quality standards).

In FY 05, VDEQ reconstituted the Metropolitan Richmond Air Quality Committee (MRAQC) which is the Lead Planning Organization (LPO) under Section 174 of the CAAA. Appointments of local elected officials and agency members were made in FY 05 and MRAQC held its first meeting in November 2005 (FY 06) initiating work to develop the region's State Implementation Plan (SIP). One major concern for the MPO will be the development of the SIP's emissions budget for mobile sources which the MPO's LRTP and TIP will be required to meet. The TIP and LRTP must

demonstrate that they are in conformance with air quality requirements. Projects in the TIP and LRTP are modeled by computer simulation and emission that are projected to result from the draft TIP and LRTP are compared to the SIP emissions budget for mobile sources. This comparison must show that the draft TIP and LRTP are within the mobile source emissions budget limit..

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 made air quality conformity analysis a VDOT staff work activity (previously, 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</u> <sup>①</sup>	<u>5303</u>	<u>TOTAL</u>
RRPDC	12,000	4,000	\$16,000

<sup>①</sup> 4/12/07 MPO action to subtract \$8,000 in PL funds (shifted to other staff work tasks and portion transferred to FY 08).

**F. Schedule**

On-going activity

**AGENCY BUDGET SUMMARY SHEET**  
**FHWA PL/SPR; FTA SEC 5303; VDOT STATEWIDE TRANSPORTATION PLANNING GRANT**  
**FY 2007 UWP - RICHMOND AREA MPO**

Task No/ Abbrev	RRPDC					VDOT SPR (5)	OTHER	TOTAL						GRAND TOTAL	
	PL	5303	CO 5303	OMF (1)	STPG			PL	SPR (5)	5303	CO 5303	OMF (1)	STPG		OTHER
1.1 MPO Maint	332,074	23,169	98,589	-	-	177,000	-	332,074	177,000	23,169	98,589	-	-	-	630,832
1.2 Citi Partic	95,000	26,000	-	-	-	-	-	95,000	-	26,000	-	-	-	-	121,000
1.3 UWP	25,000	13,000	-	-	-	-	-	25,000	-	13,000	-	-	-	-	38,000
2.1 Data	25,000	5,000	-	-	-	-	-	25,000	-	5,000	-	-	-	-	30,000
2.2 LRTP	100,000	20,000	-	-	-	-	-	100,000	-	20,000	-	-	-	-	120,000
2.5 TD/GIS	30,000	3,000	-	-	-	-	-	30,000	-	3,000	-	-	-	-	33,000
3.1 CMS	40,000	6,000	-	-	-	-	-	40,000	-	6,000	-	-	-	-	46,000
3.2 Access Mgt	4,000	-	-	-	-	-	-	4,000	-	-	-	-	-	-	4,000
3.3 ITS	10,000	7,000	-	-	-	-	-	10,000	-	7,000	-	-	-	-	17,000
4.1 TIP	210,000	18,000	-	-	-	-	-	210,000	-	18,000	-	-	-	-	228,000
5.2 E&D TNS	8,000	30,000	-	-	-	-	-	8,000	-	30,000	-	-	-	-	38,000
5.3 Dwt .Cir (2)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.4 COA (2)	-	-	-	-	-	-	375,700	-	-	-	-	-	-	375,700	375,700
5.5 RMTS	48,000	30,000	-	-	-	-	-	48,000	-	30,000	-	-	-	-	78,000
5.5 RMTS (3)	15,000	-	-	-	125,000	-	-	15,000	-	-	-	-	125,000	-	140,000
5.6 HSPTCP	10,000	25,000	-	-	-	-	-	10,000	-	25,000	-	-	-	-	35,000
5.8 Rail (4)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6.1 Int. Modal	10,000	-	-	-	-	-	-	10,000	-	-	-	-	-	-	10,000
7.1 Air Q. Plg.	12,000	4,000	-	-	-	-	-	12,000	-	4,000	-	-	-	-	16,000
<b>TOTAL (\$)</b>	<b>974,074</b>	<b>210,169</b>	<b>98,589</b>	<b>-</b>	<b>125,000</b>	<b>177,000</b>	<b>375,700</b>	<b>974,074</b>	<b>177,000</b>	<b>210,169</b>	<b>98,589</b>	<b>-</b>	<b>125,000</b>	<b>375,700</b>	<b>1,960,532</b>

- NOTES:
- (1) RRPDC Over Match Funds (OMF) (local funds; over and above required local match).
  - (2) Work conducted by GRTC staff and/or consultant (UWP information item).
  - (3) Work conducted by RRPDC consultant.
  - (4) Work conducted by VDRPT consultants and staff (UWP information item).
  - (5) Provides for VDOT Richmond District staff support on all MPO work tasks.

**FUNDING SOURCES SUMMARY SHEET**  
**FHWA PL/SPR; FTA SEC 5303; VDOT STATEWIDE TRANSPORTATION PLANNING GRANT**  
**FY 2007 UWP - RICHMOND AREA MPO**

Task No./ Abbrev.	PL		SPR (5)		5303		CO 5303		RRPDC	VDOT	OTHER		TOTAL		GRAND
	Federal	State/Local	Federal	State	Federal	State/Local	Federal	State/Local	OMF (1)	STPG (6)	Federal	State/Local	Federal	State/Local	TOTAL
1.1 MPO Maint	265,659	66,415	141,600	35,400	18,535	4,634	78,871	19,718	-	-	-	-	504,665	126,167	630,832
1.2 Citi Partic	76,000	19,000	-	-	20,800	5,200	-	-	-	-	-	-	96,800	24,200	121,000
1.3 UWP	20,000	5,000	-	-	10,400	2,600	-	-	-	-	-	-	30,400	7,600	38,000
2.1 Data	20,000	5,000	-	-	4,000	1,000	-	-	-	-	-	-	24,000	6,000	30,000
2.2 LRTP	80,000	20,000	-	-	16,000	4,000	-	-	-	-	-	-	96,000	24,000	120,000
2.5 TD/GIS	24,000	6,000	-	-	2,400	600	-	-	-	-	-	-	26,400	6,600	33,000
3.1 CMS	32,000	8,000	-	-	4,800	1,200	-	-	-	-	-	-	36,800	9,200	46,000
3.2 Access Mgt	3,200	800	-	-	-	-	-	-	-	-	-	-	3,200	800	4,000
3.3 ITS	8,000	2,000	-	-	5,600	1,400	-	-	-	-	-	-	13,600	3,400	17,000
4.1 TIP	168,000	42,000	-	-	14,400	3,600	-	-	-	-	-	-	182,400	45,600	228,000
5.2 E&D TNS	6,400	1,600	-	-	24,000	6,000	-	-	-	-	-	-	30,400	7,600	38,000
5.3 Dwt .Cir (2)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.4 COA (2)	-	-	-	-	-	-	-	-	-	-	270,400	105,300	270,400	105,300	375,700
5.5 RMTS	38,400	9,600	-	-	24,000	6,000	-	-	-	-	-	-	62,400	15,600	78,000
5.5 RMTS (3)	12,000	3,000	-	-	-	-	-	-	-	125,000	-	-	12,000	128,000	140,000
5.6 HSPTCP	8,000	2,000	-	-	20,000	5,000	-	-	-	-	-	-	28,000	7,000	35,000
5.8 Rail (4)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6.1 Int. Modal	8,000	2,000	-	-	-	-	-	-	-	-	-	-	8,000	2,000	10,000
7.1 Air Q. Plg.	9,600	2,400	-	-	3,200	800	-	-	-	-	-	-	12,800	3,200	16,000
<b>TOTAL (\$)</b>	<b>779,259</b>	<b>194,815</b>	<b>141,600</b>	<b>35,400</b>	<b>168,135</b>	<b>42,034</b>	<b>78,871</b>	<b>19,718</b>	<b>-</b>	<b>125,000</b>	<b>270,400</b>	<b>105,300</b>	<b>1,438,265</b>	<b>522,267</b>	<b>1,960,532</b>

- NOTES:
- (1) RRPDC Over Match Funds (OMF) (local funds; over and above required local match).
  - (2) Work conducted by GRTC staff and/or consultant (UWP information item).
  - (3) Work conducted by RRPDC consultant.
  - (4) Work conducted by VDRPT consultants and staff (UWP information item).
  - (5) Provides for VDOT Richmond District staff support on all MPO work tasks.
  - (6) All state funds.