

**FISCAL YEAR 2008**  
**JULY 1, 2007 – JUNE 30, 2008**

**UNIFIED WORK PROGRAM**

**FOR THE**

**RICHMOND AREA METROPOLITAN**

**PLANNING ORGANIZATION**

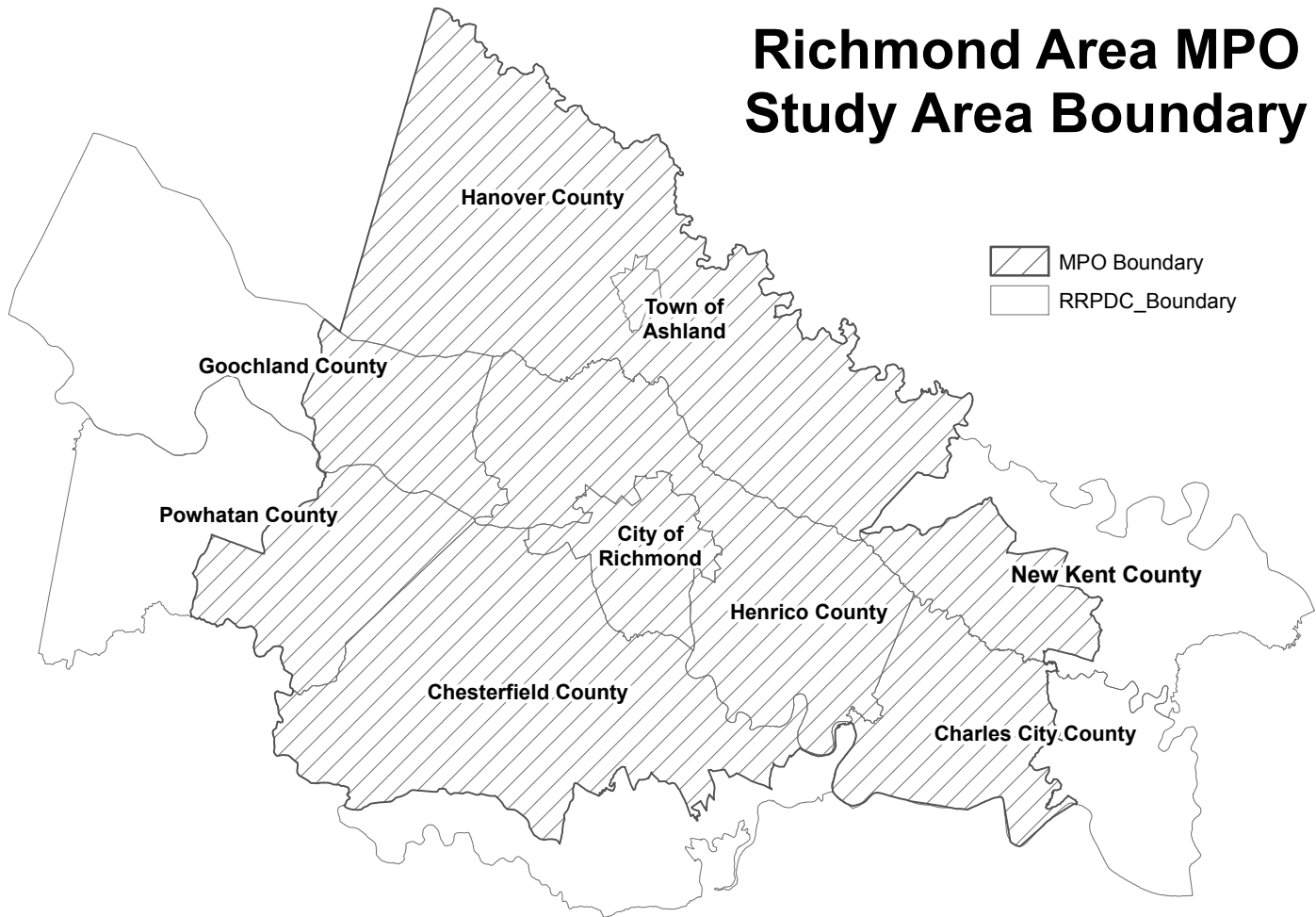
Approved as a Final Report by the Richmond Area Metropolitan Planning Organization, April 12, 2007.



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.

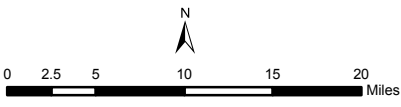
**MPO AMENDMENT ACTIONS**

- 9/27/07: FY 07 FTA Section 5303 carryover funds programmed on task 1.1; PL funds shifted among tasks 1.1, 2.1, and 5.5; descriptions revised for tasks 2.1 and 5.5.
- 4/10/08: 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, 3.3, 4.1, 5.2, 6.1 and 7.1); to transfer \$100,000 in PL funds to FY 09; and to program \$125,000 in STPG funds for task 5.5, RRPDC consultant (funds carried over from FY 07 to FY 08).

# Richmond Area MPO Study Area Boundary



 MPO Boundary  
 RRPDC\_Boundary



Prepared by:  
Richmond Regional Planning District Commission, April 2006

## **RICHMOND AREA MPO MISSION STATEMENT AND PLANNING PRIORITIES**

### **Mission Statement**

The following mission statement was unanimously approved by the MPO on November 18, 2004:

To serve as the federal and state designated regional transportation planning organization that serves as the forum for cooperative transportation decision-making to assure excellence in mobility and safety within and through the Richmond region.

### **Planning Priorities**

Section 450.308(c) of the Metropolitan Planning regulations states that Transportation Management Area (TMA) designated MPO's shall include a discussion of the planning priorities facing the metropolitan planning area. The following identifies the FY 08 UWP major planning priorities. Further discussion of these priorities is provided in the various work tasks.

1. Task 2.2, Long-Range Transportation Plan (LRTP) Update – Work on the 2031 LRTP is scheduled to be completed by April 2008. While the region continues to grow and develop, it is facing challenges in expanding its transportation network to serve these new areas while also maintaining existing services and facilities. In addition, there is a growing need for a more balanced transportation system and finding the appropriate means and resources to fund these needs.
2. Task 3.1, Congestion Management System (CMS) Update – Work on the CMS update will be conducted as an element of the LRTP. While most of the region does not face congestion problems similar to other large urban areas, congestion will become a greater issue as the region continues to grow and develop. Provisions for adequate transportation facilities and services are not keeping pace in many parts of the region commensurate with its growth. The CMS provides for an assessment of current trends and looks at long-term development and its impact on the transportation network.
3. Task 5.5, Regional Mass Transit Study (RMTS) – The RMTS is scheduled to be completed by February 2008. It is being conducted in coordination with the GRTC Comprehensive Operations Analysis, which will include recommendations for service expansion into new markets, new special services (e.g., niche markets), and service to new areas. The RMTS will provide a comprehensive study for the development and implementation of a regional mass transit system for the Richmond region. It will address all surface public transportation modes; provide recommendations for dedicated, on-going funding

programs to meet capital and operating needs; provide recommendations for supportive land uses; and provide recommendations for the Human Services Public Transportation Coordination Plan.

4. Task 5.6, Human Services Public Transportation Coordination Plan – This plan will provide an assessment of public transportation services available to the region’s elderly and disabled, their travel and mobility needs, and provide strategies to address gaps between available services and needs.

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

Article I of the “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 08 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 is conducting a statewide study of essential freight infrastructure across the state and incorporating that information into statewide plans. RRPDC and Crater PDC staffs, along with staffs from other MPOs across the state, assist VDOT in an 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 (replaced ISTEA). 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 (replaced TEA-21).

## **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 \$200,800 (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 MPO planning and programming provisions under SAFETEA-LU were published in the

## **FY 08 UWP Task 1.1**

Federal Register on June 9, 2006 and the final regulations were published on February 14, 2007.

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 November 3, 2005 and took action at its May 10, 2006 meeting to adopt a revised Memorandum of Understanding (MOU) for Regional Air Quality and Transportation Planning Coordination. This formal action by MRAQC to adopt the revised MOU

## **FY 08 UWP Task 1.1**

(adopted by the MPO in February 2003) and adoptions by other signatory parties provides for completion of corrective action number one.

Staff has also recently addressed corrective action number two (plan to address ways to engage in the transportation planning process) by adopting a new *MPO Public Participation Plan* (replaces the MPO Public Participation Guidelines) and by providing for outreach activities and public review notices to groups and organizations that represent the Hispanic community (see UWP task 1.2).

VDOT's Richmond District Office and Transportation and Mobility Planning Division (TMPD) will provide oversight, guidance and support for the federally mandated metropolitan transportation planning and programming process. VDOT Richmond District and 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.

### **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 08 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 08 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 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>②④</sup></u>	<u>5303</u>	<u>SPR<sup>①</sup></u>	<u>C.O. 5303<sup>③</sup></u>	<u>TOTAL</u>
RRPDC	340,056	4,108	----	147,641	491,805
VDOT	----	----	<u>201,000</u>	----	<u>201,000</u>
<b>TOTAL</b>	<b>\$340,056</b>	<b>\$4,108</b>	<b>\$201,000</b>	<b>\$147,641</b>	<b>\$692,805</b>

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

② 9/27/07 – MPO action to shift \$23,000 to task 2.1 for RRPDC staff, and to shift \$50,000 to task 5.5 for RRPDC consultant.

③ 9/27/07 MPO action to add \$147,641 in FY 07 FTA Section 5303 carryover funds.

④ 4/10/08 MPO action to subtract \$101,000 in PL funds (\$100,000 transferred to FY 09 and \$1,000 shifted to other staff work tasks).

**F. Schedule**

Ongoing 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 various locations (e.g., 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 Public Participation Plan*.

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, etc.). In response to these new requirements, the MPO took action at its April 12, 2007 MPO meeting to adopt the *MPO Public Participation Plan*. This plan builds on the MPO's previously adopted "Guidelines for Public Participation." The plan includes activities for consultation with interested parties and federal, state, and local agencies as part of the LRTP and TIP development process. It also provides for outreach activities that include activities to inform and seek comments from minority and low-income groups and limited English-speaking population groups. It also provides for information, (meeting agendas and notices, reports, studies, etc.) to 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. Citizens Transportation Advisory Committee (CTAC) – Provide administrative and technical support of the MPO CTAC.

## **FY 08 UWP Task 1.2**

2. Web Site – Post meeting agendas and minutes, notices, reports, newsletters, plan documents, and other information on the Richmond Regional PDC web site.
3. Information Requests – Respond to requests for information on plans, studies, reports, and data.
4. Newsletter – Prepare articles and information for RRPDC newsletter.
5. Public Reviews – Conduct annual MPO review meetings providing initial citizen input for MPO plans and programs. Also, conduct other public review meetings as necessary for the LRTP/CMS and TIP. Review meetings include outreach activities for low-income and minority communities and limited English-speaking groups. Prepare notice for public reviews advertised in newspapers, posted on web site, and submitted to interested parties and others. Draft documents or summaries distributed to area libraries and posted on web site.
6. Visualization Techniques – Provide for use of appropriate visualization techniques when presenting and describing MPO plans and programs.
7. Consultation with Interested Parties/Agencies – Conduct consultation activities with various interested parties and government agencies as part of the TIP and LRTP development process.
8. Evaluations – Conduct evaluation activities to determine the effectiveness of public review/input activities.
9. MPO Orientation Meeting – Conduct periodic orientation meeting for new MPO and MPO committee members.
10. MPO Background Information – Develop, publish, and distribute/post on web site, background information materials on the MPO.
11. Notices – Provide/distribute notice for all MPO and MPO committee meetings to area news media and interested parties. When appropriate, prepare and distribute press releases.

### **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	88,000	35,000	\$123,000

① 4/10/08 MPO action to subtract \$12,000 in PL funds (shifted to other staff work tasks).

**F. Schedule**

Ongoing 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, 2008 to June 30, 2009). 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 08 UWP.
2. FY 09 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 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 08 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<sup>①</sup></u>	<u>5303</u>	<u>TOTAL</u>
RRPDC	\$35,000	14,000	\$49,000

① 4/10/08 MPO action to add \$5,000 in PL funds (shifted from other RRPDC work tasks).

**F. Schedule**

On-going activity for adopted UWP/RRPDC Work Program

October 2007 to May 2008 for FY 08 RRPDC Work Program.

January 2008 to April 2008 for FY 09 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 completed work on the draft *2000 and 2031 Socioeconomic Data Report*, base year (2000) and forecast year (2031) data for the *2031 Long-Range Transportation Plan* (LRTP) update and other MPO plans and studies. The final draft report was presented for review and action at the June 26, 2007 MPO meeting (following MPO action to amend the 2026 LRTP to include a supplement to meet federal SAFETEA-LU planning requirements). At the MPO meeting, concerns were expressed over how realistic the population forecasts were noting that they appeared to be too low. The MPO deferred action on the report to the August 9 MPO meeting. At the August meeting, the MPO took action directing staff to proceed with the development of revised year 2031 population and population based forecasts using recently available Virginia Employment Commission (VEC) forecasts and other adjustments (i.e., extending VEC forecasts to December 2031 and increasing the population forecast by ten percent as permitted by VDOT policy). As a result of the MPO's action, RRPDC staff will develop, in coordination with area local governments, revised 2031 population and population based forecasts (i.e., group quarters population, single and multi-family population, total housing units, single and multi-family population, total housing units, single and multi-family housing units, total students, students grades K-12 by school location, and total households). Note that local government staffs will have lead responsibility in distributing the revised 2031 population forecasts to their jurisdiction's TAZ, and RRPDC staff will then use various factors to develop and distribute (as a proportion of the TAZ population forecast) population based forecasts for each jurisdiction at the TAZ level. A revised final draft "2000 and 2031 Socioeconomic Data Report" will be developed and submitted for TAC review and recommendation and for MPO review and action.

In late FY 2008 or early FY 2009, the MPO will need to initiate work on its next LRTP update. RRPDC staff will work with VDOT and Crater PDC staffs to identify the data to be required for this next update.

The RRPDC will work with area local governments to coordinate the development of socioeconomic data and forecasts. Data previously required for the LRTP and prepared by area local governments is as follows:

## FY 08 UWP Task 2.1

- 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 previously 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 recommendation, and for MPO review and action.

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. “2000 and 2031 Socioeconomic Data Report”
2. Initial review efforts to develop base year and forecast year socioeconomic data report for use in the next LRTP (late FY 08/early FY 09).
3. Updates for minority and low-income population groups for environmental justice assessments as appropriate.
4. Use of CTPP in support of various plans, studies, and reports.
5. Staff involvement in review activities for the year 2010 census.

**C. Work Elements**

RRPDC and local government staff work elements for the year *2000 and 2031 Socioeconomic Data Report* are as follows (responsible staff noted in brackets):

1. Using recent (i.e., May 2007) VEC forecasts for 2030, develop updated year 2031 forecasts (adjusted and extended to December 2031) at the jurisdiction level and distribute to TAC. In addition, these forecasts are increased by ten percent as permitted by VDOT policy. [RRPDC]
2. Using the RRPDC provided jurisdiction 2031 population forecasts, distribute to the TAZ level [Local Governments]
3. Provide written justification on need to increase jurisdiction's 2031 population forecast by ten percent over the 2030 VEC forecast and adjusted for December 2031. [Local Governments]
4. Develop year 2031 population based forecasts at the TAZ level for the following demographic factors:
  - Group quarters population
  - Single and multi-family population
  - Total housing units
  - Single and multi-family housing units
  - Total students
  - Students grades K-12 (by school location)
  - Total households[RRPDC]
5. Develop and submit revised draft "2000 and 2031 Socioeconomic Data Report" for TAC review and recommendation action. [RRPDC]
6. Submit revised final draft "2000 and 2031 Socioeconomic Data Report" for MPO review and action and post on RRPDC web site. [RRPDC]

Other RRPDC staff work elements are as follows:

1. Maintain CTPP data and staff expertise and capabilities in applying CTPP to plan and study activities.
2. 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.

**FY 08 UWP Task 2.1**

3. 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).
- 4 Staff involvement in review activities for the year 2010 census.

VDOT and other 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>①②</sup></u>
RRPDC	\$52,000

① 9/27/07 MPO action to add \$23,000 in PL funds (shifted from task 1.1).

② 4/10/08 MPO action to add \$2,000 in PL funds (shifted from other staff work tasks).

**G. Schedule**

1. August to October 2007 – Revised 2031 population and population based forecasts developed and distributed to TAZs.
2. November 2007 – TAC review and recommendation of revised final draft “2000 and 2031 Socioeconomic Data Report.
3. December 2007 – MPO review and action on revised final draft *2000 and 2031 Socioeconomic Data Report*.
4. Ongoing staff activities in support of other task work elements.

## 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.

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 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. Draft regulations implementing SAFETEA-LU were issued on June 9, 2006 and final regulations were published in the Federal Register on February 14, 2007 (regulations take effect on March 16, 2007). The LRTP is required to have at least a 20-year planning horizon (as of the effective date of the plan, which is based on the date of federal approval of the air quality conformity analysis). The LRTP shall include both long-range and short-range strategies/actions that lead to the development of an integrated multimodal transportation system to facilitate the safe and efficient movement of people and goods in addressing current and future transportation demand. The MPO, along with VDOT and GRTC, shall validate data utilized in preparing other existing modal plans for providing input to the LRTP. The LRTP shall be based on the latest available estimates and assumptions for population, land use, travel, employment, congestion, and economic activity. MPO planning regulations specify certain minimum requirements for LRTP content which are summarized as follows (see section 450.322 (f) and (h) of the MPO planning regulations):

- a. Projected transportation demand of persons and goods.
- b. Existing and proposed transportation facilities that should function as an integrated metropolitan transportation system.

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- c. Including locally preferred alternatives selected from an Alternatives Analysis under the FTA Capital Investment Grant program as part of the MPO's adopted LRTP (note this includes consideration of financial capacity, air quality conformity, and environmental justice requirements).
- d. Operational and management strategies.
- e. Consideration of the results of the congestion management process.
- f. Assessment of capital investment and other strategies to preserve the existing and projected future metropolitan transportation infrastructure and provide for multimodal capacity increases based on regional priorities and needs.
- g. Design concept and design scope descriptions of all existing and proposed transportation facilities in sufficient detail, regardless of funding source.
- h. Discussion of types of potential environmental mitigation activities and potential areas to carry out these activities. Such discussion shall be developed in consultation with federal and state land management, wildlife and regulatory agencies.
- i. Pedestrian walkway and bicycle transportation facilities (in accordance with 23 U.S.C. 217 (g)).
- j. Transportation and transit enhancement activities.
- k. A financial plan that demonstrates how the adopted transportation plan can be implemented.
- l. A safety element that summarizes the priorities, goals, or projects for the MPO study area contained in: 1) State's Strategic Highway Safety Plan, and 2) emergency relief and disaster preparedness plans, strategies, and policies that support homeland security and safeguard the personal security of all motorized and non-motorized users.

MPO planning regulations specify certain requirements for the LRTP development process, which includes the following (see Section 450.322 (g), (i), (j), and (l)):

- a. The MPO shall consult with state and local agencies responsible for land use management, natural resources, environmental protection, conservation, and historic preservation concerning LRTP development.
- b. The MPO shall provide citizens and other interested parties with reasonable opportunity to comment on the LRTP (see MPO Public Participation Plan).
- c. FHWA and FTA must make a conformity determination on the LRTP.

Under Federal Executive Order 12898, issued in 1994, MPOs must assess the impact of proposed projects on the region's low-income and minority communities. Such an environmental justice assessment will be conducted as part of the LRTP development process with the analysis and results included in the LRTP.

VDOT staff is responsible for development of the LRTP travel demand model. VDOT will utilize the same model used for the 2026 LRTP for the 2031 LRTP. VDOT staff will provide technical documentation for TAC and public review. Note that the model covers the Richmond Area MPO and Tri-Cities Area MPO study areas since both study areas are within the Richmond Urbanized Area. Also 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 of reach MPO's study area.

In FY 2007, RRPDC staff is planning to develop a revised 2026 LRTP that will be SAFETEA-LU compliant by July 1, 2007 (based on recommendations provided by VDOT at its August 23, 2006 videoconference with MPOs, FHWA, FTA, and VDRPT) and proceed with preparing and completing an updated 2031 LRTP by April 2008. This two track approach (i.e., revising the 2026 LRTP and preparing the 2031 LRTP update) is necessary due to staff getting a late start on the 2031 LRTP update (the LRTP project manager started work at the RRPDC on September 18, 2006 after the previous LRTP project manager left on March 31, 2006); the uncertainty involved in federal requirements for the LRTP (final regulations were issued on February 14, 2007); and the federal requirement for a SAFETEA-LU compliant LRTP by July 1, 2007.

It is anticipated that work on the 2031 LRTP completed in FY 2007 will be as follows:

- Year 2000 (base year) and 2031 (forecast year) socioeconomic data in final draft form.
- Establishment of the 2031 LRTP Advisory Committee.
- Establish the LRTP public participation process (overall process requirements established as part of the MPO Public Participation Plan, which is scheduled for final action at the April 12, 2007 MPO meeting; specific plan review, development and public participation activities will be identified in the 2031 LRTP update scope of work).
- Establish 2031 LRTP Update scope of work and schedule.

**B. End Product**

1. Amendments to the 2026 LRTP as necessary.

2. Development and adoption of the 2031 LRTP.

**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].
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].

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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. Review highway construction plans for conformance with the adopted Transportation Plan [VDOT and RRPDC].
4. 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>①</sup></u>	<u>5303</u>	<u>TOTAL</u>
RRPDC	195,000	40,000	\$235,000

① 4/10/08 MPO action to add \$60,000 in PL funds (shifted from other staff work tasks).

**F. Schedule**

1. 2031 LRTP – Scheduled for completion by April 2008.
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>
RRPDC	\$70,000

<sup>①</sup> 4/10/08 MPO action to subtract \$5,000 in PL funds (shifted to other RRPDC staff work tasks)..

**F. Schedule**

Ongoing

**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 as an element of the LRTP update. In addition, the new MPO planning regulations require the MPO to address congestion management through a process that provides for safe and effective integrated management and operation of the multimodal transportation system, based on a cooperatively developed and implemented metropolitan-wide strategy of new existing transportation facilities eligible for funding under title 23 U.S.C. and title 49 U.S.C. Chapter 53, through the use of travel demand reduction and operational management strategies (see Section 450.320 (a) of the MPO planning regulations). MPO planning requirements for development of a “Congestion Management Process” (or CMP) is summarized as follows (see Section 450.320 (b)):

- a. Development of a CMP should result in multimodal system performance measures and strategies that can be reflected in the LRTP and the TIP.
- b. The level of system performance deemed acceptable by state and local transportation officials may vary by facility type, location, and/or time of day.
- c. Consideration should be given to strategies that manage demand, reduce single occupant vehicle (SOV) travel, and improve transportation system management and operations.
- d. Where the addition of general purpose lanes is determined to be an appropriate congestion management strategy, explicit consideration is to be given to the incorporation of appropriate features with the SOV project to facilitate future demand management strategies and operational improvements that will maintain the functional integrity and safety of those lanes.
- e. The CMP shall be developed, established, and implemented as part of the MPO planning process including coordination with transportation system management and operations activities.

The following summarizes other/additional CMP requirements as stated in the MPO planning regulations (see section 450.320 (c)):

- a. Methods to monitor and evaluate the performance of the multimodal transportation system, identify the causes of recurring and non-recurring

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congestion, identify and evaluate alternative strategies, provide information supporting the implementation of actions, and evaluate the effectiveness of implemented actions.

- b. Definition of congestion management objectives and appropriate performance measures to assess the extent of congestion and support the evaluation of the effectiveness of congestion reduction and mobility enhancement strategies. Such measures shall be developed in consultation with operators of major modes of transportation.
- c. Establishment of a coordinated program for data collection and system performance monitoring. To the extent possible, this data collection program should be coordinated with existing data sources (including archived operational/ITS data) and coordinated with area operations managers.
- d. Identification and evaluation of the anticipated performance and expected benefits of appropriate congestion management strategies.
- e. Identification of an implementation schedule, implementation responsibilities, and possible funding sources for each strategy/combination of strategies proposed for implementation.
- f. Implementation of a process for periodic assessment of the effectiveness of implemented strategies.

It is anticipated that the Richmond Nonattainment Area for ozone air quality standards will be redesignated in FY 2008 to maintenance status. As a result, a number of additional CMP requirements will not apply to the Richmond Area MPO (see Section 450.320 (d) and (e) of the MPO planning regulations).

Section 450.320 (f) of the MPO planning regulations states that state laws, rules, or regulations pertaining to congestion management systems may constitute the CMP if the FHWA and FTA find that the state law, rules, or regulations are consistent with and fulfill the intent of the MPO planning requirements. Staff is not aware of this being the case; however, staff will work with VDOT to incorporate VDOT CMP planning, operational, and management activities into the MPO's process.

### **B. End Products**

1. CMS element work scope as part of the upcoming 2031 LRTP Update.
2. 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.

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3. GPS travel time runs, vehicle occupancy counts, and development of other data for the next CMS update.

**C. Work Elements**

1. 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.
2. Conduct CMP development requirements as per the new MPO planning regulations (see description of requirements as described in Background section above).
3. 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.
4. Conduct GPS travel time runs over the region’s interstate/expressway road network (initiate when required for the next LRTP update).

**D. Agency Participation**

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

**E. Budget, Staff and Funding**

PL<sup>①</sup>

RRPDC \$65,000

① 4/10/08 MPO action to subtract \$35,000 in PL funds (shifted to other RRPDC staff work tasks).

**F. Schedule**

On-going activity

1. CMS update – conducted in conjunction with 2031 LRTP update.
2. GPS travel time runs – conducted in conjunction with the next LRTP update (if needed).

## 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 was required for the LRTP and CMS updates. In FY 08, staff time will be required for work on the 2031 LRTP update, completion of the Regional Mass Transit Study, and other priority work tasks. Staff recommends this work task be dropped from the next UWP unless there is sufficient time and qualified staff available to conduct that study.

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A minor amount of staff time has been programmed in the FY 08 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</u>
RRPDC	\$5,000

### **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.

Note that RRPDC staff has not been able to conduct this work activity since it was first conducted by VDOT’s study consultant due to limited staff resources. With the recent increase in FHWA/PL funds and FTA Section 5303 funds as a result of SAFETEA-LU, the RRPDC has added a new Senior Planner position under the Urban Transportation Planning Division and this new position has been budgeted for the FY 2008 UWP. While there are other new work requirements as a result of SAFETEA-LU, staff anticipates that work on this task should proceed in FY 2008. Staff may also require consultant assistance in conducting this work task. This need should be addressed as part of staff’s mid-year review of the FY 08 UWP budget and work activities progress.

**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:

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>
RRPDC	\$5,000

<sup>①</sup> 4/10/08 MPO action to subtract \$45,000 in PL funds (shifted to other RRPDC staff work tasks).

**F. Schedule**

1. Annual review and report on Architecture Report and Deployment Plan – November 2008 to March 2009.
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 four-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.

There are a number of federal-aid highway programs (i.e., administered by FHWA) which, in order to be eligible for use by the implementing agency, must be programmed in the TIP. This includes the following:

1. Equity Bonus
2. Interstate Maintenance (IM)
3. National Highway System (NHS)
4. Bridge
5. Surface Transportation Program (STP)
6. Regional Surface Transportation Program (STP subprogram for urbanized areas with greater than 200,000 population)
7. Highway Safety Improvement Program (HSIP)
8. Congestion Mitigation and Air Quality Improvement (CMAQ)
9. Recreational Trails
10. Safe Routes to Schools
11. Rail-Highway Grade Crossing
12. Highway Priority Projects (Congressional Earmarks)
13. Transportation Enhancements
14. Transportation, Community, and System Presentation Program (TCSP)
15. Scenic Byways
16. Federal Lands Highway Program (FLHP)

There are also funds available under federal-aid transit programs (i.e., administered by FTA) which, in order to be eligible for use by the implementing agency, must be programmed in the TIP. This includes the following:

1. Sections 5307 and 5340 – Urbanized Areas
2. Section 5308 – Clean Fuels Grant Program
3. Section 5309 – Capital Investment Grants “New Starts”
4. Section 5309 and 5318 – Bus and Bus Facility Grants
5. Section 5310 – Elderly and Persons with Disabilities
6. Section 5316 – Job Access and Reverse Commute (JARC)

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7. Section 5317 – New Freedom Program
8. Section 5320 – Transit in the Parks

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 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:

- 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.
- The TIP must be developed through the MPO's recently adopted *Public Participation Plan* (scheduled for action at the April 12, 2007 MPO meeting). The *Public Participation Plan* meets new SAFETEA-LU requirements.
- 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 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-

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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.
- 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 four years. The Richmond Area MPO's TIP is currently scheduled to be updated on an annual basis based on VDOT’s annual preparation of the state’s Six-Year Improvement Program.
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.

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4. **Project Priorities** – The TIP must include a priority list of projects to be carried out over a four-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 or agreements that distribute sub-allocated STP or funds under 49 U.S.C. 5307 to individual jurisdictions or modes within the metropolitan planning area by predetermined percentages or formulas are inconsistent with legislative provisions that require the MPO, in cooperation with the state and public transportation operator, to develop a prioritized and financially constrained TIP, and shall not be used unless they can be clearly shown to be based on considerations required to be addressed as part of the MPO's planning process.
5. **Included Projects** – The TIP shall include capital and non-capital surface transportation projects (or phases of projects) within the boundaries of the metropolitan planning area proposed for funding under 23 U.S.C. and 49 U.S.C. Chapter 53 (including transportation enhancements, Federal Lands Highway program projects, safety projects included in the state's Strategic Highway Safety Plan, trails projects, pedestrian walkways, and bicycle facilities), except the following do not necessarily have to be included:
  - a. Safety projects funded under 23 U.S.C. 402 and 49 U.S.C. 31102;
  - b. Metropolitan planning projects funded under 23 U.S.C. 104 (f), 49 U.S.C. 5305 (d), and 49 U.S.C. 5339;
  - c. State planning and research projects funded under 23 U.S.C. 505 and 49 U.S.C. 5305 (e);
  - d. At the discretion of the state and MPO, state planning and research projects funded with National Highway System, STP, and/or Equity Bonus funds;
  - e. Emergency relief projects (except those involving substantial functional, locational, or capacity changes);
  - f. National planning and research projects funded under 49 U.S.C. 5314; and
  - g. Project management oversight projects funded under 49 U.S.C. 5327.
6. **Project Selection** – All federally funded projects, except NHS, Bridge, Interstate Maintenance and Federal Lands Highway Program projects are to be selected by the MPO in consultation with the state and public transportation operator (GRTC) from the approved TIP and in accordance with the TIP priorities. Projects that are on the NHS and projects funded under the Bridge and Interstate Maintenance programs are to be selected by the state in cooperation with the MPO from the

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approved TIP. Federal Lands Highway program projects shall be selected in accordance with procedures developed pursuant to 23 U.S.C. 204. The TIP serves as the project selection document.

7. Transportation Plan Consistency – All federally funded TIP projects must be consistent with the MPO's adopted Transportation Plan. As a management tool for monitoring progress in implementing the transportation plan, the TIP should:
  - a. Identify criteria and process for prioritizing implementation of transportation plan elements (including multimodal trade-offs) for inclusion in the TIP and any changes in priorities from the previous TIP; and
  - b. List major projects from the previous TIP that were implemented and identify any significant delays in the planned implementation of major projects.
8. 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.
9. Agencies/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.
10. 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.
11. MPO Certification – In TMA's, the USDOT Secretary shall certify the planning process at least once every four years. A joint FHWA/FTA review was conducted in May 2004, and on August 19, 2004 the MPO was conditionally certified, subject to five corrective action issues.
12. The state, public transportation operator and MPO shall, on an annual basis and within 90 days following the end of a program year, cooperatively develop a listing of projects (including investments in pedestrian walkways and bicycle

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transportation facilities) for which funds under 23 U.S.C. or 49 U.S.C. Chapter 53 were obligated in the preceding program year. This listing shall be prepared in accordance with Section 450.314 (a) of the MPO planning regulations and shall include all federally funded projects authorized or revised to increase obligations in the preceding program year, and shall at a minimum include the TIP information under Section 450.324 (e) (1) and (4) and identify for each project the amount of federal funds requested in the TIP, the federal funding that was obligated during the preceding year, and the federal funding remaining and available for subsequent years. This listing shall be made available public review in accordance with the MPO's public participation criteria for the TIP.

13. 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.

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. SAFETEA-LU compliant TIP – This work is to be conducted in FY 2007. RRPDC and VDOT staffs will work to add one additional year to the current FY 06 – FY 08 TIP (i.e., add FY 09) and conduct consultation requirements with interested parties and government agencies. Staff anticipates that projects included for FY 09 funding will be administrative/adjustment type projects not subject to public review requirements. The MPO is scheduled to meet on June 28, 2007 to approve a revised TIP (i.e., FY 06 – FY 09) that is SAFETEA-LU compliant.
2. Initiating work on the next TIP (FY 07 – FY 10), VDOT, GRTC, and the MPO are to submit projects to be included in this TIP. Staff expects work on this TIP should be initiated in early FY 2008.
3. MPO's annual Statement of Certification
4. Annual listing of obligated projects from preceding program year.
5. 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.
6. Development and submission of the MPO's list of regional priority transportation projects.

**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).
6. Public Review – Conduct public review process for final 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.

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

16. Annual listing of obligated projects from the preceding program year.

**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</u> <sup>①</sup>	<u>5303</u>	<u>TOTAL</u>
RRPDC	145,000	22,000	\$167,000

<sup>①</sup> 4/10/08 MPO action to add \$25,000 in PL funds (shifted from other RRPDC staff work tasks).

**F. Schedule**

1. FY 07/10 TIP – August 2007 to November 2007.
2. TIP Amendments/Adjustments – On-going activity
3. Regional Priority Projects – July 2007 to November 2007
4. FY 09 to FY 12 RSTP/CMAQ Project Review and Selection – November 2007 to March 2008

**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</u> <sup>①</sup>	<u>TOTAL</u>
RRPDC	30,000	10,000	\$40,000

<sup>①</sup> 4/10/08 MPO action to add \$3,000 in PL funds (shifted from other RRPDC staff work tasks).

**F. Schedule**

Ongoing 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
  - Review all existing routes, including: design, running time, on time performance, layover points, time points, passenger/operator schedules, transfer activity, and vehicle assignments

## FY 08 UWP Task 5.4

- 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

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**

Draft COA report expected due date: October 2007

Final COA report expected due date: November/December 2007

## 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 an on-call consultant team made available by VDRPT with work reviewed by a special purpose MPO study advisory committee

## FY 08 UWP Task 5.5

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. The consultant team will also provide presentations to joint meetings of the MPO's CTAC and EDAC at key points in the study process; three such meetings are anticipated.

Note that action was taken at the August 9, 2007 MPO meeting to direct the development of revised 2031 population and population based forecasts (see UWP task 2.1, Socioeconomic Data Development; Section A., Background). Work on the RMTS had been proceeding in FY 2007 based on use of data and forecasts developed for the *2000 and 2031 Socioeconomic Data Report*. As a result, the RMTS work has been extended to April 2008 (previously scheduled in the UWP for completion by February 2008) and some of the consultant's work will need to be revised and redone. Note that the development of a preferred transit alternative is dependent upon the VDOT travel demand model, which needs final MPO approved base year (2000) and forecast year (2031) socioeconomic data to run the model. The study consultant's report on amending the consultant services agreement, extending it to April 2008, providing for additional funding (just under \$50,000), and incorporating additional work activities into the scope of work was submitted to the MPO on August 3, 2007. At the August 9, 2007 MPO meeting, action was taken to direct that the consultant services agreement for work on the RMTS be extended with additional funding provided as appropriate.

### **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).
  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.

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5. Report on existing funding polices 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 VDRPT), 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 16 months (following authorization for consultant to proceed with study). Total funds budgeted for consultant services in FY 2007 are \$23,493 and \$365,000 budgeted in FY 2008 (total of \$388,493 budgeted for study consultant).

	<u>PL<sup>②</sup></u>	<u>5303</u>	<u>TOTAL</u>
RRPDC Staff	15,000	40,000	\$55,000
	<u>PL<sup>①</sup></u>	<u>STPG<sup>③</sup></u>	<u>TOTAL</u>
RRPDC Consultant	240,000	125,000	\$365,000

- ① 9/27/07 MPO action to add \$50,000 in PL funds for consultant (shifted from task 1.1 RRPDC staff).
- ② 4/10/08 MPO action to add \$2,000 in PL funds (shifted from other RRPDC staff work tasks).
- ③ 4/10/08 MPO action to program \$125,000 in STPG funds (carried over from FY 07 to FY 08).

**F. Schedule**

Study is scheduled to be completed by May 2008.

**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. VDRPT has taken the lead in preparing a Statewide Human Services Public Transportation Coordination Plan and providing assistance to PDCs and MPOs for their use in developing regional service coordination plans for their areas. VDRPT has made arrangements for its consultants to conduct a workshop for the Richmond area on May 2, 2007. Following this meeting, staff will work with EDAC, GRTC, and others to analyze service alternatives and develop a plan to address service needs.

Key/major work activities for the Human Services Public Transportation Coordination Plan area as follows:

1. Assessment of available services
2. Assessment of needs
3. Strategies to address gaps for target populations

Much of the work to identify available services and to assess needs was conducted as part of the MPO's study, *Public Transportation for the Elderly, Disabled, and Low-Income: Phase I - Needs Assessment Report* (study approved at the February 2, 2006 MPO meeting).

**B. End Product**

An adopted Human Services Public Transportation Coordination Plan covering the MPO study area and PD 15.

**C. Work Elements**

Work activities include the following:

## FY 08 UWP Task 5.6

1. Following the May 2, 2007 VDRPT sponsored workshop, review previous MPO reports and studies to determine need for updated/supplemental information for conducting assessment of available services and needs, and conduct necessary activities to complete these assessments.
2. Review proposed coordination alternatives and funding (federal and other) resources with MPO Executive Committee.
3. Develop draft Coordination Plan and present to TAC, EDAC, and interested parties for review and comment.
4. Develop a final draft Coordination Plan for MPO review and action.
5. Submit final MPO approved Coordination Plan to GRTC (designated recipient) and others as appropriate.

### 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	4,000	40,000	\$44,000

<sup>①</sup> 4/10/08 MPO action to subtract \$2,000 in PL funds (shifted to other RRPDC staff work tasks).

### F. Schedule

Work initiated in FY 07 with draft plan presented for MPO review and action in early FY 09.

**5.8 Richmond Area Rail Studies**

For FY 08, 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:

**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 08, VDRPT plans to conduct the following activities:

- Utilize a computer model to study existing and future rail operations.
- Perform comparisons of rail network performance, capacity, and proposed changes to infrastructure and train operations.

\$100,000 (FY 07)      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 Tier II EIS for the Petersburg to Raleigh segment of the high speed rail corridor. Note that notice has been published in the Federal Register extending the corridor study area to Richmond's Main Street Station. The cost of this extension is estimated to be \$2,700,000 of which \$1,500,000 will be provided from the Rail Enhancement Fund. VDRPT and NCDOT plan to complete the Tier II EIS of this corridor in FY 09. Work will focus on the Petersburg area where three alignments will be investigated and a station location should be determined.

\$750,000 (FY 07)      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.

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 did not include work activities related to the Intermodal Advisory Task Force or the review of study findings and recommendations presented in the Richmond Region Intermodal Study (which are now over six 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.

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### B. End Products

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

### C. Work Elements

1. Monitor and report as appropriate on various intermodal planning and programming activities.
2. Provide staff assistance for VDOT statewide intermodal planning activities.
3. Develop and incorporate freight transportation planning activities into LRTP.
4. Participate on VDOT advisory groups involved in statewide multimodal 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<sup>①</sup></u>
RRPDC	\$35,000

<sup>①</sup> 4/10/08 MPO action to add \$8,000 in PL funds (shifted from other RRPDC staff work tasks).

### F. Schedule

Ongoing

**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). At its May 10, 2006 meeting, action was taken to approve proposed control strategies (as part of the extension of the Richmond nonattainment area into the newly added areas, which are the City of Petersburg, Prince George County, and the remaining area of Charles City County; previously only a small part of Charles City County was in the nonattainment/maintenance area). MRAQC also took action to approve

## **FY 08 UWP Task 7.1**

contingency measures (required as part of the contingency plan included in VDEQ's request for redesignation of the Richmond nonattainment area to attainment/maintenance status). In FY 2008, additional meetings of MRAQC may be needed should there be issues with VDEQ's submission to EPA for designation of the Richmond area to attainment/maintenance status.

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**

**FY 08 UWP Task 7.1**

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

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

PL<sup>①</sup>

RRPDC            \$25,000

① 4/10/08 MPO action to subtract \$5,000 in PL funds (shifted to other RRPDC staff work tasks).

**F. Schedule**

Ongoing activity

**AGENCY BUDGET SUMMARY SHEET  
FHWA PL/SPR & FTA SEC 5303; FEDERAL, STATE AND LOCAL FUNDS  
FY 2008 UWP - RICHMOND AREA MPO**

Task No/ Abbrev	RRPDC				VDOT SPR (5)	OTHER	TOTAL						GRAND TOTAL
	PL (7)	5303	CO 5303	OMF (1)			PL (7)	SPR (5)	5303	CO 5303	OMF (1)	OTHER	
1.1 MPO Maint.	340,056	4,108	147,641	-	201,000	-	340,056	201,000	4,108	147,641	-	-	692,805
1.2 Citizen Partic.	88,000	35,000	-	-	-	-	88,000	-	35,000	-	-	-	123,000
1.3 UWP	35,000	14,000	-	-	-	-	35,000	-	14,000	-	-	-	49,000
2.1 Data	52,000	-	-	-	-	-	52,000	-	-	-	-	-	52,000
2.2 LRTP	195,000	40,000	-	-	-	-	195,000	-	40,000	-	-	-	235,000
2.5 TD/GIS	70,000	-	-	-	-	-	70,000	-	-	-	-	-	70,000
3.1 CMS	65,000	-	-	-	-	-	65,000	-	-	-	-	-	65,000
3.2 Access Mgt.	5,000	-	-	-	-	-	5,000	-	-	-	-	-	5,000
3.3 ITS	5,000	-	-	-	-	-	5,000	-	-	-	-	-	5,000
4.1 TIP	145,000	22,000	-	-	-	-	145,000	-	22,000	-	-	-	167,000
5.2 E&D TNS	10,000	30,000	-	-	-	-	10,000	-	30,000	-	-	-	40,000
5.3 Dwt .Cir (2)	-	-	-	-	-	-	-	-	-	-	-	-	-
5.4 COA (2)	-	-	-	-	-	338,000	-	-	-	-	-	338,000	338,000
5.5 RMTS	15,000	40,000	-	-	-	-	15,000	-	40,000	-	-	-	55,000
5.5 RMTS (3) (6)	240,000	-	-	-	-	125,000	240,000	-	-	-	-	125,000	365,000
5.6 HSPTCP	4,000	40,000	-	-	-	-	4,000	-	40,000	-	-	-	44,000
5.8 Rail (4)	-	-	-	-	-	-	-	-	-	-	-	-	-
6.1 Intermodal	35,000	-	-	-	-	-	35,000	-	-	-	-	-	35,000
7.1 Air Q. Plg.	25,000	-	-	-	-	-	25,000	-	-	-	-	-	25,000
<b>TOTAL (\$)</b>	<b>1,329,056</b>	<b>225,108</b>	<b>147,641</b>	<b>-</b>	<b>201,000</b>	<b>463,000</b>	<b>1,329,056</b>	<b>201,000</b>	<b>225,108</b>	<b>147,641</b>	<b>-</b>	<b>463,000</b>	<b>2,365,805</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) \$125,000 in STPG funds carried over from FY 07 to FY 08 UWP (shown under Other funds)
  - (7) \$100,000 in FHWA/PL funds transferred to FY 09 UWP

**FUNDING SOURCES SUMMARY SHEET  
FHWA PL/SPR & FTA SEC 5303; FEDERAL, STATE AND LOCAL FUNDS  
FY 2008 UWP - RICHMOND AREA MPO**

Task No./ Abbrev.	PL (7)		SPR (5)		5303		CO 5303		RRPDC	OTHER		TOTAL		GRAND
	Federal	State/Local	Federal	State	Federal	State/Local	Federal	State/Local	OMF (1)	Federal	State/Local	Federal	State/Local	TOTAL
1.1 MPO Maint	272,045	68,011	160,800	40,200	3,286	822	118,113	29,528	-	-	-	554,244	138,561	692,805
1.2 Citi Partic	70,400	17,600	-	-	28,000	7,000	-	-	-	-	-	98,400	24,600	123,000
1.3 UWP	28,000	7,000	-	-	11,200	2,800	-	-	-	-	-	39,200	9,800	49,000
2.1 Data	41,600	10,400	-	-	-	-	-	-	-	-	-	41,600	10,400	52,000
2.2 LRTP	156,000	39,000	-	-	32,000	8,000	-	-	-	-	-	188,000	47,000	235,000
2.5 TD/GIS	56,000	14,000	-	-	-	-	-	-	-	-	-	56,000	14,000	70,000
3.1 CMS	52,000	13,000	-	-	-	-	-	-	-	-	-	52,000	13,000	65,000
3.2 Access Mgt	4,000	1,000	-	-	-	-	-	-	-	-	-	4,000	1,000	5,000
3.3 ITS	4,000	1,000	-	-	-	-	-	-	-	-	-	4,000	1,000	5,000
4.1 TIP	116,000	29,000	-	-	17,600	4,400	-	-	-	-	-	133,600	33,400	167,000
5.2 E&D TNS	8,000	2,000	-	-	24,000	6,000	-	-	-	-	-	32,000	8,000	40,000
5.3 Dwt .Cir (2)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.4 COA (2)	-	-	-	-	-	-	-	-	-	270,400	67,600	270,400	67,600	338,000
5.5 RMTS	12,000	3,000	-	-	32,000	8,000	-	-	-	-	-	44,000	11,000	55,000
5.5 RMTS (3) (6)	192,000	48,000	-	-	-	-	-	-	-	-	125,000	192,000	173,000	365,000
5.6 HSPTCP	3,200	800	-	-	32,000	8,000	-	-	-	-	-	35,200	8,800	44,000
5.8 Rail (4)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6.1 Int. Modal	28,000	7,000	-	-	-	-	-	-	-	-	-	28,000	7,000	35,000
7.1 Air Q. Plg.	20,000	5,000	-	-	-	-	-	-	-	-	-	20,000	5,000	25,000
<b>TOTAL (\$)</b>	<b>1,063,245</b>	<b>265,811</b>	<b>160,800</b>	<b>40,200</b>	<b>180,086</b>	<b>45,022</b>	<b>118,113</b>	<b>29,528</b>	<b>-</b>	<b>270,400</b>	<b>192,600</b>	<b>1,792,644</b>	<b>573,161</b>	<b>2,365,805</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 (for UWP task 5.5 show under Other funds source).
  - (7) \$100,000 in PL funds transferred to FY 09 UWP).