

**FISCAL YEAR 2006**  
**JULY 1, 2005 – JUNE 30, 2006**

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

Approved as a Final Report by the Richmond Area Metropolitan Planning Organization, April 14, 2005.

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

**MPO AMENDMENT ACTIONS**

- February 2, 2006: MPO action to add UWP task 5.5, Regional Mass Transit Study

## **RICHMOND AREA MPO PLANNING PRIORITIES**

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

1. Task 1.1, MPO Maintenance/Special Studies – Conduct various administrative and technical activities in support of the MPO process and special studies as needed.
2. Task 1.2, MPO Citizen Participation – Continuing support for the MPO's Citizens Transportation Advisory Committee, developing effective and useful background information materials on the MPO process, posting plans, studies, reports and other information on the RRPDC/MPO web site, conducting outreach activities to involve minority and low income citizens in the MPO process, and conducting MPO annual public review meetings (new activity).
3. Task 2.2, Long-Range Transportation Plan (LRTP) – Initiate work on the next (year 2029/2030) LRTP update including review of 2026 modeling procedures and programs, and assessing feasibility of "Viper" or similar travel demand model software.
4. Task 3.1, Congestion Management System (CMS) – Conduct new process using a standing CMS review group to guide and document the on-going alternatives analysis of congested corridors, and develop and implement a new methodology for conducting travel time runs.
5. Task 4.1, Transportation Improvement Program (TIP) – Maintain current TIP by processing amendments as requested and tracking previous allocations of Regional STP and CMAQ funds. Work with VDOT to develop process for close-out of TIP projects (to show funds remaining after project completion). Also, provide for the interim/transition process for RSTP and CMAQ funded projects review and programming and for the implementation of the competitive RSTP and CMAQ project review and selection process starting with FY 08 allocations.
6. Task 5.2, Elderly and Disabled Transportation Needs and Services – Continuing support for the MPO's Elderly and Disabled Advisory Committee.
7. Task 5.9, Public Transportation Needs Assessment for Disadvantaged Population Groups – Complete assessment of public transportation needs for transportation disadvantaged groups in the MPO study area, review various public transportation alternatives, and provide a report on which alternatives may be appropriate and feasible.

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

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

The following documents cooperative work efforts provided for in the MPO’s FY 06 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 various special studies including the Richmond/Hampton Roads High Speed Passenger Rail Study VDRPT Technical Advisory Committee and the Richmond/Tri-Cities ITS Regional Architecture Study (staffs currently developing follow-up work using respective TACs and coordinating work efforts through VDOT). VDOT Richmond District staff also serves on both the Richmond Area and Tri-Cities Area MPOs policy boards and TACs.
- 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.

- 3.1 Congestion Management System (CMS)/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.
- 6.1 Intermodal Planning – A joint Richmond Area and Tri-Cities Area MPOs Intermodal Advisory Task Force was established in February 2002; however, further work to establish this committee has not moved forward. RRPDC and Crater PDC staffs have held information meetings with some of the region’s leading proponents of this task force; however, RRPDC and Crater PDC staffs did not see the need to move forward with the primary task of the task force, which is to provide further consideration on the Intermodal Study’s conclusion that the region did not have sufficient demand to warrant a major regional (Central Virginia) intermodal facility. In FY 05, reports were made public on Norfolk-Southern (NS) railroad’s plans to build a rail intermodal facility just off of Route 460 near I-295 in Prince George County (authority for facility was included in NAFTA federal legislation).
- 6.2 VDOT Statewide Freight Transportation Planning – VDOT has initiated a statewide study of essential freight infrastructure across the state and incorporating that information into statewide plans. VDOT is in the initial stages of developing this study’s work scope and process. Staff anticipates that it will involve RRPDC and Crater PDC staffs in some advisory capacity.
- 7.1 Air Quality Plan and Program Activities – As part of VDOT’s work to conduct LRTP modeling activities for both the Richmond Area and Tri-Cities Area MPOs, VDOT conducts the air quality conformity analysis process for both MPOs. As part of VDEQ’s work to develop the State Implementation Plan (SIP) for the Richmond Nonattainment Area, VDEQ serves as lead staff for MRAQC, the CAAA Section 174 lead planning organization. Local elected officials representing each nonattainment area plus representatives from both MPOs, VDOT, and VDEQ also serve on the LPO.

## FREQUENTLY USED MPO TERMS AND ABBREVIATIONS

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

**NAAQS** National Ambient Air Quality Standards; defined by EPA.

### **Regionally Significant**

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

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

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

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

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

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

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

### **Transportation Plan**

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

**TAZ (Transportation or Traffic Analysis Zone)**

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

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

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

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

**MPO STANDING COMMITTEES**

**CTAC** Citizens Transportation Advisory Committee

**EDAC** Elderly and Disabled Advisory Committee

**TAC** Technical Advisory Committee

**FEDERAL STATE AND REGIONAL AGENCIES**

**CRAC** Capital Region Airport Commission

**EPA** Environmental Protection Agency

**FAA** Federal Aviation Administration

**FHWA** Federal Highway Administration

**FRA** Federal Railroad Administration

**FTA** Federal Transit Administration

**GRTC** GRTC Transit System (formerly Greater Richmond Transit Company)

**MRAQC** Metropolitan Richmond Air Quality Committee

**RideFinders** A public nonprofit corporation that provides carpool/vanpool matching and other commuter and transportation services.

|              |   |
|--------------|---|
| <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>TEA-21</b>       | Transportation Equity Act for the 21 <sup>st</sup> Century; signed into law on June 9, 1998. Authorizes federal funds for highways, highway safety, transit, and other surface transportation programs for the next 6 years. Builds on and continues many of the initiatives established in the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991. |
| <b>SAFETEA-LU</b>   | Safe, Accountable, Flexible, Efficient Transportation Act: A Legacy for Users; federal transportation reauthorization signed into law on August 10, 2005.   |

### **FUNDING PROGRAMS**

|                    |  |
|--------------------|--|
| <b>SPR</b>         | State Planning and Research; funds allocated to VDOT in support of MPO program activities.   |
| <b>Local Match</b> | 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. |
| <b>RRPDC</b>       | Funds from the RRPDC (state appropriations and local dues) provided in addition to required local match funds (sometimes noted as RRPDC overmatch).  |

|                     |   |
|---------------------|---|
| <b>PL</b>           | Planning funds available from FHWA for MPO program activities.  |
| <b>CMAQ</b>         | 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.   |
| <b>STP Pilot</b>    | State Transportation Planning Grant Pilot Program Funds from state's 2004 general budget on a pilot basis to MPOs and PDCs for four categories of transportation planning activities as follows: <ul style="list-style-type: none"> <li>• Planning for special transportation needs of unique sectors of the community</li> <li>• Local transportation planning for alternative modes</li> <li>• Linking transportation and land use</li> <li>• Prioritizations of local or regional transportation plan recommendations</li> </ul> |
| <b>Section 5303</b> | Planning funds available from the FTA for MPO program activities.   |
| <b>TEIF</b>         | 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**

|             |   |
|-------------|---|
| <b>ACG</b>  | Address Coding Guide  |
| <b>ADT</b>  | Average Daily Traffic; used in conjunction with current and projected traffic volumes.  |
| <b>CAO</b>  | Chief Administrative Officer  |
| <b>CARE</b> | 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. |
| <b>CMS</b>  | Congestion Management System  |
| <b>COA</b>  | Comprehensive Operational Analysis  |
| <b>CTB</b>  | Commonwealth Transportation Board   |

|                  |   |
|------------------|---|
| <b>EJ</b>        | Environmental Justice   |
| <b>FY</b>        | Fiscal Year (July 1 to June 30).  |
| <b>GASB</b>      | Government Accounting Standards Board; private, non-profit organization established in 1984; responsible for setting generally accepted accounting principals for state and local governments   |
| <b>GASB # 34</b> | 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.        |
| <b>GIS</b>       | Geographic Information System   |
| <b>I/M</b>       | Inspection and Maintenance  |
| <b>MSA</b>       | 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 \$136,900. 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 have been continued as part of the Transportation Equity Act for the 21st Century (TEA-21); signed into law on June 9, 1998. The MPO is charged with developing transportation plans and programs, which provide for the development of transportation facilities which function as a "seamless" intermodal system. The process for developing these plans must consider all modes of transportation, and must, to the maximum extent feasible, be continuing, cooperative, and comprehensive (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;

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- (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). Staff has also requested VDEQ (as staff to MRAQC) review and action to adopt a revised Memorandum of Understanding (MOU) for Regional Air Quality and Transportation Planning Coordination. This will provide formal action for execution of the MOU adopted by the MPO in February 2003 and allow other signatory parties to execute this MOU (corrective action number one). VDOT is currently working to address corrective actions three and four and these may carry over into FY 2006. Staff anticipates that work on corrective action two will carry over into FY 2006.

In FY 05, VDOT initiated a new program making \$1.6 million in state funds available under the new State Transportation Planning Grant Pilot Program. These state funds were made available to PDCs and MPOs across the state on a competitive basis for proposals that best meet one or more of the following four categories:

- 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

The Richmond Area MPO took action at its March 10, 2005 meeting to endorse the following three applications:

- Regional Comprehensive Transit Plan
- Safe Routes to Schools
- Travel Demand Forecasting and Land Use Build-out Model

Should the MPO be awarded one or more of these grant applications, a significant amount of RRPDC staff time will be required to administer these programs and to provide for staff participation in support of these studies (state funds made available under these applications will be used for consultant services).

**B. End Products**

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

**C. Work Elements**

Work activities include the following:

1. Provide for general maintenance and administration of the MPO “3-C” process, MPO, and MPO committees and work groups, including direct costs to support the process.
2. Provide for the preparation and documentation of MPO meetings and other committee meetings as appropriate.
3. Perform review activities under various local, state, and federal programs including Commonwealth Intergovernmental Review Process, State Route projects and Environmental Impact Statements and Assessments.
4. Coordinate review and presentation activities with RRPDC and other regional, local and state agencies involved with transportation planning and programming.
5. Prepare various reports including VDOT and VDRPT Quarterly Progress Reports, and MPO financial and work progress reports.
6. Provide for contract administration of PL, Section 5303, 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

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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.
17. Maintain current highway facilities inventory and monitor regional travel patterns [VDOT].
18. Provide traffic data forecasts for design of highway facilities [VDOT].
19. Provide technical assistance to RRPDC, local jurisdictions, and other agencies concerning transportation [VDOT].
20. Review site plans as requested [VDOT].
21. Perform and/or assist in special projects, studies, evaluations, and other activities upon direction of MPO and MPO Committees.

**D. Agency Participation**

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

**E. Budget, Staff and Funding**

|       | <u>PL</u>   | <u>5303</u> | <u>RRPDC</u> | <u>SPR</u>     | <u>TOTAL</u>   |
|-------|-------------|-------------|--------------|----------------|----------------|
| RRPDC | 458,732     | 21,030      | 800          | ----           | 480,562        |
| VDOT  | <u>----</u> | <u>----</u> | <u>----</u>  | <u>125,000</u> | <u>125,000</u> |
| TOTAL | \$458,732   | \$21,030    | \$800        | \$125,000      | \$605,562      |

**F. Schedule**

On-going activity.

## 1.2 MPO Citizen Participation

### A. Background

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

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

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

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

It should be noted that the MPO took action in FY 05 to expand EDAC's membership to 18 organizations. This expansion allows for the addition of groups that represent low-income persons and additional organization for the elderly and disabled (thereby allowing for a more comprehensive representation of elderly and disabled needs). Further information and work activities for EDAC are noted under UWP task 5.2.

### B. End Products

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

**C. Work Elements**

Work activities include the following:

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

**D. Agency Participation**

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

**FY 06 UWP Task 1.2**

**E. Budget, Staff and Funding**

|             | <u>PL</u>   | <u>5303</u> | <u>RRPDC</u> | <u>SPR</u>   | <u>TOTAL</u> |
|-------------|-------------|-------------|--------------|--------------|--------------|
| RRPDC Staff | 72,000      | 10,000      | 30,000       | ----         | 112,000      |
| VDOT        | <u>----</u> | <u>----</u> | <u>----</u>  | <u>5,600</u> | <u>5,600</u> |
| TOTAL       | \$72,000    | \$10,000    | \$30,000     | \$5,600      | \$117,600    |

**F. Schedule**

On-going activity.

**1.3 Unified Work Program (UWP)**

**A. Background**

This task provides for the maintenance of the adopted UWP and for the annual preparation of the MPO's work program for the upcoming fiscal year (i.e., July 1, 2006 to June 30, 2007). 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. This task also provides for development and submission of applications for State Transportation Planning Grant funds (pilot program for FY 05; VDOT may continue in FY 06).

**B. End Products**

1. Maintain/amend the FY 05 UWP.
2. FY 07 UWP document.
3. Applications for federal and state MPO transportation planning funds and State Transportation Planning Grant funds (if VDOT continues this program).
4. Prepare/update staff work assignments and schedules.

**C. Work Elements**

Work activities include the following:

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

6. Prepare work tasks and budgets.
7. Identify funding sources and amounts.
8. Prepare final work program document.
9. Secure needed approvals from MPO, VDOT, VDRPT, FHWA, FTA, and other agencies/organizations as appropriate.
10. Secure commitments for local match funds as appropriate.
11. Conduct State and Regional Intergovernmental Review process and submit grant applications.
12. Distribute final UWP document.
13. Amend adopted UWP as per MPO action.
14. Prepare and update staff work assignments, direct costs, and schedule.
15. Develop and submit for MPO endorsement applications reviewed and recommended by TAC for state funds available under the State Transportation Planning Grant program (VDOT discretionary grant pilot program in FY 05; subject to VDOT continuation). MPO endorsed applications to be submitted for VDOT consideration and action

**D. Budget, Staff and Funding**

|       | <u>PL</u>       | <u>5303</u>     | <u>RRPDC</u>   | <u>SPR</u>     | <u>TOTAL</u>    |
|-------|-----------------|-----------------|----------------|----------------|-----------------|
| RRPDC | 35,000          | 10,000          | 5,000          | ----           | 50,000          |
| VDOT  | ----            | ----            | ----           | <u>5,600</u>   | <u>5,600</u>    |
| TOTAL | <u>\$35,000</u> | <u>\$10,000</u> | <u>\$5,000</u> | <u>\$5,600</u> | <u>\$55,600</u> |

**E. Schedule**

On-going activity for adopted UWP/RRPDC Work Program

October 2005 to May 2006 for FY 07 RRPDC Work Program.

January 2006 to April 2007 for FY 07 UWP.

December 2005 to March 2006 for State Transportation Planning Funds Grant applications.

**2.0 LONG RANGE PLANNING AND SURVEILLANCE**

**2.1 Socioeconomic Data Development**

**A. Background**

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

The RRPDC works with area local governments to coordinate the development of socioeconomic data and forecasts. This data will be used in developing the upcoming LRTP which will require consultation with VDOT and the Tri-Cities Area MPO to establish the LRTP model base year and forecast year. Data required for the LRTP and prepared by area local governments is anticipated as follows:

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

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

- Total households
- Total employment
- Retail employment
- Automobiles

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

## **FY 06 UWP Task 2.1**

be required based on expansion of the MPO study area in the region's outlying jurisdictions (i.e., Charles City, Goochland, New Kent, and Powhatan).

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 to be conducted under this UWP work task.

### **B. End Products**

1. Base year and forecast year socioeconomic data report for use in the next LRTP.
2. Updates for minority and low income population groups for environmental justice assessments.
3. Use of CTPP in support of various plans, studies, and reports.

### **C. Work Elements**

RRPDC work elements are as follows:

1. Development of total households, employment (retail and total) and automobile base year data and forecasts by TAZ for use in the next LRTP.
2. Development of regional and jurisdiction level control totals for socioeconomic data and forecasts.
3. Provide administrative and technical support for Socioeconomic Data work group meetings including preparing and submitting meeting agendas and summaries, and other activities necessary for support of this committee.
4. Prepare and submit base year and forecast year socioeconomic data report for Socioeconomic Data work group review and recommendation and for TAC review and final approval.
5. Utilize CTPP data in support of various plans, studies, and reports.

VDOT and local government work elements are as follows:

1. Development of population (total, group quarters, and single and multi-family), housing units (total and single and multi-family housing units), and students by school location (grades K-12 for both public and private institutions and

**FY 06 UWP Task 2.1**

college/post-secondary) base year data and forecasts for use by TAZ [local government work element].

2. Work in coordination with RRPDC staff to provide for the distribution of forecasted socioeconomic data at the TAZ level (includes forecasted data developed by the RRPDC) [local government work element].
3. Participation by appropriate local staff on the Socioeconomic Data work group [local government work element].
4. 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</u>   | <u>RRPDC</u> | <u>SPR</u>   | <u>TOTAL</u> |
|-------|-------------|--------------|--------------|--------------|
| RRPDC | 30,000      | 10,000       | ----         | 40,000       |
| VDOT  | <u>----</u> | <u>----</u>  | <u>5,600</u> | <u>5,600</u> |
| TOTAL | \$30,000    | \$10,000     | \$5,600      | \$45,600     |

**F. Schedule**

1. July 2005 to February 2006 for base year and forecast year socioeconomic data report.
2. Ongoing for other 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. Note that work on the next LRTP must be completed by April 2007 (i.e., FY 2007)

Work should begin in late FY 05 to develop the next LRTP's base year and forecast year socioeconomic data, establish the MPO study area (provide for expansion if appropriate), and to review 2026 LRTP modeling procedures and programs to identify needed changes or improvements (note that the 2026 LRTP was developed with a new plan model software, TP+; previous LRTPs were developed using MINUTP). Note that Article I of the MPO's Memorandum of Understanding (MOU) for Coordination of Regional Transportation and Air Quality Planning and Programming states that TAC is required to assure that the travel demand model used to forecast travel conditions in the Richmond Area and Tri-Cities Area MPO study areas is commensurate in scope and end product to the complexity of transportation problems and needs for each MPO's study area.

In conjunction with VDOT staff, RRPDC will assess the feasibility of Viper or similar travel demand model software in conducting regional level analysis of plan (including modal) alternatives. Staff's assessment should include an estimate of required staff resources and direct costs. (Note this work activity is shown in the FY 05 UWP and will likely carry over to FY 06).

For FY 06, staff will develop and submit for MPO review and action the draft LRTP work scope and schedule and proposal for establishment of the LRTP Task Force. The draft scope and task force proposal will first be submitted for CTAC and TAC review and recommendation. Staff will also initiate work on the LRTP with citizen review and input workshops and provide for an assessment of previous LRTP goals and objectives. Another early work activity will be development of the LRTP's financial capacity projections (work to be conducted by VDOT in consultation with RRPDC and Crater PDC staffs).

**B. End Product**

1. Amendments to the 2026 LRTP as necessary.
2. Report on 2026 LRTP modeling procedures and programs for TAC review, comment, and action.
3. Report assessing the feasibility of Viper or similar travel demand model software in conducting regional level analysis of plan (including modal alternatives (report to be submitted to TAC).
4. MPO adopted LRTP work scope and schedule
5. Establishment of LRTP Task Force.

**C. Work Elements**

Work activities by RRPDC and VDOT staffs include the following:

1. Review of 2026 LRTP modeling procedures and programs and submission of report for TAC review and action (draft report to be prepared in consultation with Crater PDC staff) [RRPDC and VDOT].
2. Report assessing the feasibility of Viper or similar travel demand model software in conducting regional level analysis of plan (including modal alternatives [RRPDC and VDOT].
3. Complete review of current study area boundaries with appropriate jurisdiction staffs and submit proposed changes for TAC review and recommendation and for MPO review and action [RRPDC in consultation with VDOT and with Crater PDC staff for any proposed boundary changes in Chesterfield County].
4. Annual citizen review meeting for input on the LRTP (conducted as part of UWP task 1.2) [RRPDC]. Conduct other public review meetings as needed.
5. Develop and submit LRTP work scope and schedule and proposed LRTP Task Force for MPO review and action. Draft scope and schedule to be developed in consultation with VDOT and Crater PDC staff. Draft scope, schedule, and Task Force to be submitted for TAC and CTAC review and recommendation to the MPO [RRPDC and VDOT].
6. Conduct LRTP work activities based on work scope and schedule [RRPDC and VDOT].
7. Conduct initial citizen review and input workshops with results and findings presented for LRTP Task Force and MPO review and consideration [RRPDC].

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8. Develop and submit LRTP financial capacity projection for LRTP Task Force review and recommendation and for MPO review and action [prepared by VDOT in consultation with RRPDC and Crater PDC staffs].
9. Review and submit for MPO approval requests for functional classifications/reclassifications for study area roads [RRPDC].
10. Conduct technical documentation activities and make available for public review and information [RRPDC and VDOT].
11. Review highway construction plans for conformance with the adopted Transportation Plan [VDOT and RRPDC].
12. 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</u>       | <u>5303</u>     | <u>RRPDC</u>   | <u>SPR</u>      | <u>TOTAL</u>     |
|-------|-----------------|-----------------|----------------|-----------------|------------------|
| RRPDC | 70,000          | 10,000          | 5,000          | ----            | 85,000           |
| VDOT  | <u>----</u>     | <u>----</u>     | <u>----</u>    | <u>36,500</u>   | <u>36,500</u>    |
| TOTAL | <u>\$70,000</u> | <u>\$10,000</u> | <u>\$5,000</u> | <u>\$36,500</u> | <u>\$121,500</u> |

**Schedule**

July 1, 2005 to June 30, 2006 (schedule to be developed in conjunction with work scope).

**2.4 City of Richmond – Update of the Transportation Element of the City Master Plan (RMSTP – Richmond Multi-modal Strategic Transportation Plan)**

**A. Background**

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

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

Key points to focus on include but are not limited to:

- Richmond Area MPO adoption of the Long-Range Plan...expand executive summary
- GRTC Electric Streetcar
- Economic Development...tremendous growth and development experienced by the City of Richmond
- Shockoe Bottom Transportation Plan
- Desmin Parking Study
- Downtown Plan

This UWP task was added to the FY 03 UWP by MPO amendment action on December 12, 2002. It was further amended on December 11, 2003 with the addition of funds previously programmed for the Downtown Transit Center Need and Location Study (task 5.4, deleted from the UWP). Work on this task is scheduled to begin in April 2005 and should be completed by April 2006.

**B. End Product**

Update of the Transportation Element of the City Master Plan and create the new Richmond Multi-modal Strategic Transportation Plan (RMSTP)

**C. Work Elements**

1. Data Collection:
  - a) Review of City Master Plan, Richmond Downtown Plan, census information, economic development and planning projects, regional plans, VDOT six-year plan, other city plans and other documents that include appropriate projections relevant to transportation planning, economic development, and analysis of land use patterns.
  - b) Interviews with city staff, GRTC, RideFinders, Port of Richmond, Capital Region Airport Commission, Greyhound, Capital Region Taxicab Association, Richmond Renaissance, VCU, Neighborhood Teams, VDOT, VDRPT, and other organizations.
  - c) Collection of transportation data.
2. Analysis of information gathered.
3. Development of multimodal goals, policies and recommendations of specific transportation improvement projects and their relationship to land use. Specific recommendations will be needed pertaining to GRTC operations in downtown and the full build-out of the Main Street Station.
4. Development of maps, which are compatible with ARCGIS software, and provide in a digital format.
5. Financial analysis of recommendations and establishment of project prioritization system.
6. Community charettes and presentations including City of Richmond Planning Commission, Richmond City Council, and others.

**D. Agency Participation**

RRPDC, City of Richmond, DPW, Traffic Engineering, DCD, ED, RPD, GRTC, Port of Richmond, Capital Region Airport Commission, Greyhound, Capital Region Taxicab Association, Richmond Renaissance, Shockoe Bottom Merchants, Residents Associations and the City Neighborhood Teams, VDOT, VDRPT, Richmond Metropolitan Convention and Visitors Bureau, VCU, and many other organizations. (Note that the City will establish a Project Advisory Committee (PAC) that will meet on a regular basis.)

**E. Budget, Staff and Funding**

City of Richmond Consultant \$162,000

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

**FY 06 UWP Task 2.4**

FTA Section 5313b: \$8,000

VDRPT/MTTF-Tech: \$1,000

City Staff\*: \$1,000

\* In-kind match

MPO Adoption 7/04; Regional STP funds: \$52,000 (FTA \$41,600, VDRPT \$10,400)

**F. Schedule**

April 2005 to April 2006.

**2.5 Transportation Data Base Development/GIS**

**A. Background**

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

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

**B. End Products**

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

**C. Work Elements**

1. Development of transportation data for use in various reports, studies, plans and programs.
2. Develop, print and distribute informational reports on transportation plans, programs, activities, and data.
3. Work with VDOT to develop a Richmond Area MPO GIS data base for use in preparing MPO plans, programs, and studies. Provide for a final report which identifies data, program features, procedures for data entry updates and quality control, and availability to local governments and others.

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</u> | <u>5303</u> | <u>RRPDC</u> | <u>TOTAL</u> |
|-------|-----------|-------------|--------------|--------------|
| RRPDC | \$55,000  | \$5,000     | \$20,000     | \$80,000     |

**F. Schedule**

On-going

**3.0 MANAGEMENT SYSTEMS/SHORT RANGE PLANNING**

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

**A. Background**

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

In FY 05, the MPO initiated a new process using a CMS review group to guide and document the on-going alternatives analysis of congested corridors (as established by the CMS or needed due to upcoming TIP programming requirements). The group's primary responsibility will be to perform the federally required on-going CMS alternatives analyses of congested corridors using the MPO's adopted CMS Toolbox of Strategies. This group will be made up of locality and agency members of the MPO's Technical Advisory Committee, in addition to staff from VDOT's Richmond District Planning and Traffic Engineering, Residencies, and Smart Traffic Center. In FY 05, the work group will conduct several initial meetings to establish criteria and procedures to:

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

Following these initial meetings, the work group will conduct reviews of the identified congested corridors and produce reports that provide a "menu" of viable strategies for alleviating/reducing congestion. These corridor reviews will be initiated in FY 05 and will continue into FY 06.

VDOT and RRPDC staff will also monitor the implementation of congestion-reducing strategies along corridors when such strategies have been implemented and provide periodic reports to the CMS work group, and if appropriate, to CTAC and the MPO.

Work under this task also provides for staff support and participation on the Richmond/Tri-Cities Areas Intelligent Transportation Systems (ITS) Regional Architecture Report and Deployment Plan. The MPO took action at its July 21, 2004 (FY 05) meeting to accept the Richmond Regional ITS Architecture Report and the Richmond Regional ITS Architecture Deployment Plan Report. The MPO also designated the Technical Advisory Committee (TAC) with conducting

annual reviews of these reports and directed that TAC and RRPDC staff, with assistance from VDOT, report on the implementation status of ITS projects, and also provide recommendations for changes and/or updates to the region's ITS Architecture Report and Deployment Plan. The MPO took further action to direct that the annual report on ITS applications and implementation include the status of ITS projects, funding, and new technologies.

**B. End Products**

1. Issue reports from the CMS review group documenting alternatives analysis.
2. CMS element work scope as part of the upcoming LRTP.
3. Annual report on the "State of the Transportation System" documenting the implementation of congestion reducing strategies and providing other information related to the overall operation of the region's transportation network.
4. GPS travel time runs based on new methodology, vehicle occupancy counts and development of other data for the next CMS update.
5. Annual report to MPO on ITS implementation status including projects, funding and new technologies.
6. Updates to ITS Architecture Deployment Plan Report (conduct in consultation with Crater PDC staff).

**C. Work Elements**

1. Administrative and technical support for the CMS review group.
2. Conduct on-going alternatives analysis of congested corridors utilizing CMS review group.
3. Develop and implement new methodology for conducting travel time runs.
4. Provide for development of CMS element work scope in the upcoming LRTP.
5. Prepare and publish report on the "State of the Transportation System" documenting implementation of congestion reduction strategies and providing other information, related to the overall operation of the region's transportation network.

**FY 06 UWP Task 3.1**

6. Develop and submit for MPO review and action, the ITS annual report on ITS projects, funding, and new technologies, and updates and/or changes to the Richmond Regional Architecture Deployment Plan Report and the ITS Architecture Report (VDOT to provide technical assistance for development of this report) (work element to be conducted in consultation with Crater PDC staff).

**D. Agency Participation**

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

**E. Budget, Staff and Funding**

|       | <u>PL</u>       | <u>5303</u>     | <u>RRPDC</u>   | <u>SPR</u>      | <u>TOTAL</u>     |
|-------|-----------------|-----------------|----------------|-----------------|------------------|
| RRPDC | 80,000          | 10,000          | 6,000          | ----            | 96,000           |
| VDOT  | <u>----</u>     | <u>----</u>     | <u>----</u>    | <u>10,100</u>   | <u>10,100</u>    |
| TOTAL | <u>\$80,000</u> | <u>\$10,000</u> | <u>\$6,000</u> | <u>\$10,100</u> | <u>\$106,100</u> |

**F. Schedule**

On-going activity

### 3.2 Access Management Studies

#### A. **Background**

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

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

In FY 2000, staff conducted a study of access management standards in Powhatan County. The study included research on access management principals and standards used in various states, which staff reviewed and presented to VDOT and county staff. Based on this research a review of current standards and practices, and the counties particular needs and preferences, a set of proposed standards and recommended techniques for managing access has been developed for the county (work was completed in FY 01). This work served as a model for a similar study for Goochland County, which the MPO accepted in June 2002. Staff initiated work on the New Kent access management study in early FY 03. Progress on this study was delayed due to New Kent's request for assistance on the comprehensive plan and the transportation element of the comprehensive plan. Staff turnover and the need to work on the LRTP further delayed progress, and work resumed in late FY 04 and was completed in FY 05. Work on the Charles City County Access Management Study is scheduled to be initiated in FY 06 (may continue into FY 07 depending on need for staff to work on other priority work tasks).

#### B. **End Product**

Utilize research from the Powhatan and Goochland counties access management standards studies on access management principals and techniques to reduce the proliferation of driveways, entrances, and crossovers and to enhance the functional

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

**A. Work Tasks**

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

**FY 06 UWP Task 3.2**

10. Provide technical assistance on previously completed access management studies by reviewing requests for assistance and responding with a recommended course of action.

**D. Agency Participants**

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

**E. Budget, Staffing, Funding**

|       | <u>PL</u> | <u>RRPDC</u> | <u>TOTAL</u> |
|-------|-----------|--------------|--------------|
| RRPDC | \$10,000  | \$20,000     | \$30,000     |

**F. Schedule**

July 2005 to June 2006

**4.0 TRANSPORTATION PROJECT PROGRAMMING**

**4.1 Transportation Improvement Program (TIP)**

**A. Background**

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

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

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

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

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

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

## FY 06 UWP Task 4.1

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

8. Public Review and Comment – The public, affected agencies, representatives of transportation agency employees, other affected employee representatives, private providers of transportation, and other interested parties must receive a reasonable opportunity to comment on the proposed program.
9. Environmental Justice – In FY 05 and early FY 06, RRPDC staff will work with VDOT staff to develop a process for assessing and documenting the distributional effects of transportation investments in the Richmond area (see discussion of the MPO's Triennial Certification review under UWP task 1.1, Background Section A, FHWA/FTA corrective action number three). Documentation of this assessment will be provided in the TIP.
10. MPO Certification – In TMA's, the USDOT Secretary shall certify the planning process at least once every 3 years. A joint FHWA/FTA review was conducted in September 2000, and on January 17, 2001 the MPO was conditionally certified, subject to five corrective action issues. The FHWA/FTA fully certified the MPO on April 2, 2002. The next MPO certification is tentatively scheduled for May 2004 (FY 04).

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

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

## **FY 06 UWP Task 4.1**

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

In FY 05, staff was advised by VDOT that the TIP will change from an allocation to an obligation document. Staff was also charged with the responsibility of inputting funds allocation information for proposed RSTP and CMAQ projects. A new format showing detailed project level information (including project descriptions, obligations, and funds obligated by funding source for the TIP's three-year period) was developed by staff and used for the FY 2005 – FY 2007 TIP (adopted by the MPO on July 21, 2004). It should be noted that VDOT will continue to show funds allocated by project as part of the Six-Year Improvement Program (SYIP) and staff will continue to track allocation of RSTP and CMAQ funds for current and previously programmed projects. VDOT has also indicated that entry of projects and project amendments should be done on-line/electronically. VDOT should develop procedures for this process in FY 05.

Also, note that FHWA advised the MPO in FY 05 that it needs to develop a new review and selection process for RSTP and CMAQ funded projects. This new process is based on corrective actions and recommendations issued by FHWA and FTA as part of the MPO's triennial certification review. The MPO took action at its December 9, 2004 meeting to adopt its new RSTP and CMAQ project review and selection process. This new process provides for 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.

Note that the TIP is posted on the RRPDC's web site and updates are made when the TIP is amended or other changes/updates are made available to RRPDC staff.

### **B. End Products**

1. Development and adoption of the FY 06-08 TIP (work initiated in FY 05) and the MPO's annual Statement of Certification, providing documentation demonstrating compliance with financial plan and environmental justice requirements, FTA financial capacity policy, and conformity to the Virginia State Implementation Plan (for air quality purposes).
2. Initiating work on the next TIP (FY 07-09).

## **FY 06 UWP Task 4.1**

3. Maintenance activities in support of the current TIP including processing of TIP amendment requests; maintenance of records tracking the programming of Regional STP and CMAQ funds; and a report on the implementation status of major projects from the previous TIP.
4. Development and submission of the MPO's list of regional priority transportation projects.
5. Report on the status of major projects in the region.

### **C. Work Elements**

Work activities include the following:

1. Amendments – Based on requests from VDOT, local governments, GRTC, and other transportation agencies, prepare and submit proposed amendments for TAC review and recommendation and for MPO action. Note that VDOT is responsible for advising the MPO as to whether or not federal transportation funds can be obligated and this information is needed before proposed amendments can be submitted for MPO 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 currently in an 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 Development – Prepare the three-year list of proposed projects based on submissions by area local governments, VDOT, VDRPT, GRTC, CRAC, and RideFinders. Conduct various documentation requirements for incorporation into the TIP document.
5. Public Review – Conduct public review process for draft TIP document and air quality conformity analysis findings. Adopted TIP document, RSTP and CMAQ allocations, and regional priority projects should be posted in the RRPDC web site.
6. Conformity Analysis – Coordinate work by VDOT to review and analyze projects in the TIP for conformity to air quality requirements. Also, provide

## FY 06 UWP Task 4.1

administrative assistance for work by the Interagency Consultation Group to conduct the conformity analysis process.

7. Regionally Significant Projects – Coordinate identification of all regionally significant public and private transportation projects and submit to VDOT for air quality analysis purposes.
8. 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.
9. Enhancement Projects – Action taken by the MPO to endorse requests for TEA-21 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
10. 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. Starting in FY 06, staff will expand background information to better describe project need (e.g., current and/or projected traffic volume).
11. Major Projects Status – Prepare report documenting the implementation status of major highway and transit projects programmed in the TIP.
12. Allocation of State and Federal Construction Program Funds – Prepare and submit report to the MPO comparing the allocation of state and federal funds in the VDOT Richmond District to other districts (task to be conducted, time permitting).
13. Coordinate listing and description of progress in the implementation of TCM's (if appropriate).
14. Conduct and document assessment of the distribution of impacts on different socioeconomic groups for investments (i.e., projects and programs) identified in the TIP.

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15. Prepare and process MPO Statement of Certification and supporting documentation for the area's "3-C" Transportation Planning Process.

**D. Agency Participation**

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

**E. Budget, Staff and Funding**

|       | <u>PL</u>        | <u>5303</u>     | <u>RRPDC</u>   | <u>SPR</u>      | <u>TOTAL</u>     |
|-------|------------------|-----------------|----------------|-----------------|------------------|
| RRPDC | 115,000          | 10,000          | 2,000          | ----            | 127,000          |
| VDOT  | <u>----</u>      | <u>----</u>     | <u>----</u>    | <u>27,500</u>   | <u>27,500</u>    |
| TOTAL | <u>\$115,000</u> | <u>\$10,000</u> | <u>\$2,000</u> | <u>\$27,500</u> | <u>\$154,500</u> |

**F. Schedule**

1. FY 06-08 TIP – FY 05 to November 2005 or February 2006 (VDOT currently developing new schedule).
2. FY 07/09 TIP – January 2005 to FY 07.
3. TIP Amendments – On-going activity

**5.0 TRANSIT PLANNING**

**5.2 Elderly and Disabled Transportation Needs and Services**

**A. Background**

The Elderly and Disabled Advisory Committee (EDAC) is composed of individuals and organizations representing the region's elderly, 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 the primary review committee for work on UWP task 5.9, Public Transportation Needs Assessment for Disadvantaged Population Groups (see UWP task 5.9).

This task provides RRPDC staff support to ensure an active and involved EDAC and to assist the committee in developing up-to-date information on transportation needs of elderly and disabled in the Richmond area, their transportation needs, and available transportation services and resources. This task also provides for staff participation in various study activities addressing the region's specialized transportation services. Note that in FY 05, action was taken to amend the MPO bylaws to expand EDAC's membership to 18 organizations. This expansion allows for the addition of groups that represent low-income persons and additional organizations for the elderly and disabled (thereby allowing for a more comprehensive representation of elderly and disabled needs). Based on MPO action in November 2004 (and following a second reading and final action to amend the MPO bylaws), the following organizations were given membership status on EDAC:

- Powhatan/Goochland Community Action Agency
- Quin Rivers Community Action Agency
- Richmond Community Action Agency
- Association for Retarded Citizens
- Circle Adult Day Services
- Greater Richmond Self Help for the Deaf and Hard-of-Hearing

In addition, the MPO bylaws were also amended to provide the EDAC Chairman with nonvoting membership status on the MPO.

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.

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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.
2. 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.
3. Provide periodic status reports on the Public Transportation Needs Assessment for Disadvantaged Population Groups (UWP task 5.9) for EDAC review and submit final draft report for EDAC, CTAC, and TAC review and recommendation to the MPO.

### **D. Agency Participation**

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

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

|       | <u>5303</u> | <u>PL</u> | <u>RRPDC</u> | <u>TOTAL</u> |
|-------|-------------|-----------|--------------|--------------|
| RRPDC | \$40,000    | \$5,000   | \$3,000      | \$48,000     |

### **F. Schedule**

On-going activity

### 5.3 Downtown Circulator Study, Phase II

#### A. **Background**

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

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

#### B. **End Products**

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

#### C. **Work Elements**

1. Conduct preliminary engineering activities for a steel-rail streetcar line in downtown Richmond.
2. Conduct the necessary public involvement process.

3. Complete required environmental studies.

**D. Agency Participation**

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

**E. Budget, Staff and Funding**

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

**F. Schedule**

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

## 5.5 Regional Mass Transit Study

### A. **Background**

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

#### Goal

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

#### Strategies

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

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

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

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

**B. End Product**

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 services over short range (1 to 5 years), mid-range (5 to 10 years) and long-range (10 to 25 years) time horizons.
- Study will cover the entire MPO study area and adjacent areas as appropriate for consideration of 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.

**C. Work Elements**

Based on the draft work scope presented at the December 8, 2005 MPO meeting, 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" (action scheduled for the February 2, 2006 MPO meeting).
  4. Review and assessment of findings and recommendations from the GRTC Transit System/Petersburg Area Transit (PAT) merger study.

5. Local government land use plans:
  - a. Identify areas for future development and redevelopment
  - b. Identify major trip generators/attractors
6. Conduct travel demand analysis:
  - a. Mode split (projected trips by public transportation and distribution by TAZ).
  - b. Demand estimate (to be modified based on analysis of various modal alternatives).

- **Assessment of Influencing Factors**

1. Review and evaluate local ordinances.
2. Report on state and federal legislative provisions related to transit services and programs.
3. Report comparing typical highway construction and maintenance costs to typical capital and operating costs for local/express bus service, streetcar/trolley, light rail, bus rapid transit, and commuter/intercity rail.
4. Report on economic, health, and environmental benefits of public transportation services.
5. Report on existing funding policies and programs; level of funding effort by local, state and federal governments; and options for future funding programs.
6. Report on existing institutional arrangements and options for future consideration.

- **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
- **Develop Preferred Alternative**
- **Final Recommend Plan and Program for Action**

**D. Agency Participation**

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

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

Work on this UWP task is anticipated to take approximately 12 to 18 months (following authorization for consultant to proceed with study) and will carry over to the FY 07 UWP. Total cost for this study is anticipated to be approximately \$400,000 (i.e., \$275,000 budgeted for consultant services and \$125,000 budgeted for

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RRPDC staff). Initial staff funding for this study is currently programmed in the FY 06 UWP (under task 1.1 Maintenance/Special Studies) with additional PL and Section 5303 funds to be programmed in the FY 07 UWP. State Transportation Planning Grant pilot program funds programmed in the FY 06 UWP will carry over to the FY 07 UWP. These state program funds must be expended by June 30, 2007.

**FY 06 UWP Budget and Funding Sources:**

|                  | <u>PL</u>  |
|------------------|--|
| RRPDC Staff      | (Staff cost for FY 06 estimated at approximately \$30,000 to \$40,000 and will be charged under UWP task 1.1 MPO Maintenance/ Special Studies) |
|                  | State<br><u>Transp. Plg.</u>   |
| RRPDC Consultant | \$125,000  |

**FY 07 UWP Budget and Funding Sources (anticipated)**

|                  | <u>PL</u>                    | <u>5303</u> | <u>TOTAL</u> |
|------------------|------------------------------|-------------|--------------|
| RRPDC Staff      | \$40,000                     | \$55,000    | \$95,000     |
|                  | State<br><u>Transp. Plg.</u> | <u>PL</u>   | <u>TOTAL</u> |
| RRPDC Consultant | \$125,000                    | \$150,000   | \$275,000    |

**F. Schedule**

- MPO action to amend FY 06 UWP to add new UWP Task 5.5 scheduled for February 2, 2006
- VDOT review and authorization to amend UWP following MPO action
- RRPDC review and action at March 9, 2006, meeting authorizing RRPDC Executive Director to file application for and to execute contract with VDOT for State Transportation Planning Grant pilot program funds and for other grant program sources as appropriate
- Develop, review, and execute VDOT/RRPDC pass-through contracts for State Transportation Planning Grant pilot program funds and other appropriate sources (mid-March to early April)
- RRPDC conducts consultant review and selection process (mid-April to mid-June)
- RRPDC/consultant services contract development and submitted for VDOT review and authorization (late June to mid-July)

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- VDOT review and authorization to execute consultant services agreement (mid-July to late August)
- Initiate study – September 2006

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

**5.8 Richmond Area Rail Studies**

For FY 06, VDRPT is planning on conducting four rail studies that are within or include the Richmond area. The following provides a brief description for each of these studies:

**Richmond to Hampton Roads Passenger Rail Study**

This study includes an Alternatives Analysis and Tier I Environmental Impact Statement (EIS) for potential passenger rail service between Richmond and Hampton Roads. This study addresses potential routes for higher speed passenger rail service in both the Richmond to Petersburg to Norfolk Corridor (using the Norfolk Southern rail line that parallels U.S. Route 460) and the Richmond to Williamsburg to Newport News corridor (using the CSX rail line parallel to Interstate 64). The study was initiated November 2003, and is scheduled to be completed by June 2006. The total cost of this study is \$1,560,000. The sources of funding are as follows:

|           |  |
|-----------|--|
| \$960,000 | Virginia Transportation Act of 2000 (state)      |
| \$600,000 | System Planning and Research (SPR) funds (state) |

**Richmond Area Rail and Grade Crossing Improvements**

VDRPT is conducting a preliminary engineering study to identify short term rail and grade crossing improvements that can be made on the rail line between Staples Mill Station and Main Street Station in Richmond. The goal is to identify improvements that will result in at least 5 minutes of travel time savings between the two stations. This study began in October 2004 and is expected to be completed by May 2005.

|           |   |
|-----------|---|
| \$235,556 | Virginia Transportation Act of 2000 (state) |
|-----------|---|

**Acca Yard Rail Operations Study**

The major impediment to improving the speed, frequency and reliability of passenger trains to Main Street Station is the CSX Acca Yard, which is located adjacent to Bryan Park in Richmond. Acca Yard is CSX's primary classification yard in the region, and there is a high volume of freight traffic into and out of this facility. Passenger trains traveling from Staples Mill to Main Street must travel directly through this yard. Speeds are restricted, and delays to both passenger and freight trains are common. This study will look at a variety of options for improving the movement of passenger trains through the yard, including the feasibility of upgrading tracks and building a bypass track. The study will also analyze CSX operations to determine if some of the functions of Acca Yard can be relocated to other facilities in order to free up capacity for passenger trains. The study will begin in May 2005 and will be completed by June 2006.

|           |  |
|-----------|--|
| \$500,000 | System Planning and Research (SPR) funds (state) |
|-----------|--|

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

VDRPT is working with the North Carolina Department of Transportation to develop preliminary engineering and an EIS for the Petersburg to Raleigh segment of the high speed rail corridor. Discussions are also underway on an extension of this project that would extend this study to include the Richmond Main Street Station to Petersburg section of the corridor. The cost of this extension is estimated to be \$1,500,000. VDRPT has requested federal funding for this project through the Federal Railroad Administration. To date, this funding has not been secured.

**5.9 Public Transportation Needs Assessment for Disadvantaged Population Groups**

**A. Background**

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

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

The purpose of this UWP work task will be to conduct an assessment of public transportation needs for transportation disadvantaged groups in the MPO study area. Based on this assessment, staff will review various public transportation alternatives and provide a report on which alternatives may be appropriate and feasible. Work on the assessment should be completed in late FY 05 to early FY 06.

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

**B. End Product**

1. A report on the public transportation needs for transportation disadvantaged groups (i.e., elderly, disabled, and low income) within and outside of the

## FY 06 UWP Task 5.9

current GRTC and CARE service area (to be completed in late FY 05 or early FY 06).

2. A report on appropriate and feasible public transportation services for transportation disadvantaged groups within and outside of the current GRTC and CARE service area (to be initiated in early/mid FY 06).

### C. Work Elements

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

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

1. Contact area social services organizations, local governments, and others to obtain reports, studies, and data on public transportation needs and services for elderly, disabled, and low income population groups.
2. Review census and other sources of demographic data on availability and applicability of these sources.
3. Identify transportation disadvantaged (TD) population groups (i.e., elderly, disabled, and low income) by location and by quantity in need of public transportation services.
4. Identify major travel destinations, travel times, trip purpose of TD groups.
  - Contact area human/social services agencies/organizations
  - Obtain existing reports, studies and data
  - Review/apply CTPP (Census Transportation Planning Package)
5. Provide reports to EDAC, TAC, and MPO on assessment of TD public transportation needs.
6. Assess service provision effort/coverage by current transportation service providers.
7. Conduct analysis comparing TD needs to available transportation services.
8. Identify deficiencies/inadequacies of existing transportation system to meet mobility needs of TD groups.
9. Prepare a report on appropriate and feasible public transportation services for TD groups in areas within and outside of the current GRTC and CARE service area.

**D. Agency Participation**

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

**E. Budget, Staff and Funding**

|       | <u>5303</u> | <u>PL</u> | <u>RRPDC</u> | <u>Total</u> |
|-------|-------------|-----------|--------------|--------------|
| RRPDC | \$40,000    | \$5,000   | \$2,000      | \$47,000     |

**F. Schedule**

July 2005 to June 2006

**6.0 INTERMODAL PLANNING**

**6.1 Intermodal Planning**

**A. Background**

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

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

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

**B. End Products**

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

**C. Work Elements**

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

**D. Agency Participation**

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

**E. Budget, Staff and Funding**

|       | <u>PL</u> | <u>5303</u> | <u>RRPDC</u> | <u>TOTAL</u> |
|-------|-----------|-------------|--------------|--------------|
| RRPDC | \$5,000   | \$5,000     | \$18,000     | \$28,000     |

**F. Schedule**

On-going

**6.2 VDOT Statewide Freight Transportation Planning**

Staff received a request from VDOT on March 17, 2005 to include the following efforts as separate line items in the FY 06 UWP to assist in addressing strategies identified in VTrans 2025, VDOT’s Statewide Multimodal Transportation Plan.

1. Solicit and document feedback from representative jurisdictions on the critical freight issues on local and regional transportation systems. VDOT will recommend a process to accomplish this task and request feedback prior to implementation
2. Review and verify employers within the MPO region that employ more than 100 persons and generate freight traffic. TMPD will provide the data from the Virginia Employment Commission for verification.

(Note: Work task background, description, end products, work elements, participating and lead agencies, and schedule to be submitted by VDOT.)

**A. Background**

**B. End Products**

**C. Work Elements**

**D. Agency Participation**

**E. Budget, Staff and Funding**

|      | <u>SPR</u> |
|------|------------|
| VDOT | \$10,100   |

**F. Schedule**

**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 is scheduled to meet and initiate work to develop the region's State Implementation Plan (SIP). One major concern for the MPO will be the development of the SIP's emissions budget for mobile sources which the MPO's LRTP and TIP will be required to meet. The TIP and LRTP must demonstrate that they are in conformance

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

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

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

**B. End Products**

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

**C. Work Elements**

1. Monitor air quality data for the Richmond area, and review EPA and Virginia Department of Air Pollution Control reports, guidelines, regulations, etc.
2. Limited administrative support for MPO participation in developing the nonattainment area implementation plan. (VDEQ serves as lead staff to the MRAQC).
3. Review, comment, and conduct other activities necessary for the nonattainment area planning process.
4. Review and comment on the area's emissions inventory, especially information relating to mobile sources and transportation control measures.
5. Computer modeling and other transportation planning activities for development of VMT data required for maintenance plan/nonattainment area plan implementation [VDOT].
6. Conduct air quality conformity analysis activities in support of the TIP and LRTP [RRPDC and VDOT].

**D. Agency Participation**

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

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

|       | <u>PL</u>   | <u>SPR</u>    | <u>5303</u> | <u>RRPDC</u> | <u>TOTAL</u>  |
|-------|-------------|---------------|-------------|--------------|---------------|
| RRPDC | 25,000      | ----          | 5,000       | 3,000        | 33,000        |
| VDOT  | <u>----</u> | <u>46,000</u> | <u>----</u> | <u>----</u>  | <u>46,000</u> |
| TOTAL | \$25,000    | \$46,000      | \$5,000     | \$3,000      | \$79,000      |

**F. Schedule**

On-going activity

**AGENCY BUDGET SUMMARY SHEET  
FHWA PL/SPR; FTA SEC 5303;RRPDC ADDITIONAL LOCAL FUNDS  
FY 2006 UWP - RICHMOND AREA MPO**

| Task No/<br>Abbrev  | RRPDC          |                |          |                | Local<br>PL | VDOT<br>SPR    | OTHER            | TOTAL          |                |                |          |                |                  | GRAND<br>TOTAL   |
|---------------------|----------------|----------------|----------|----------------|-------------|----------------|------------------|----------------|----------------|----------------|----------|----------------|------------------|------------------|
|                     | PL             | 5303           | CO 5303  | OMF (1)        |             |                |                  | PL             | SPR            | 5303           | CO 5303  | OMF            | OTHER            |                  |
| 1.1 MPO Maint       | 458,732        | 21,030         | -        | 800            | -           | 125,000        | -                | 458,732        | 125,000        | 21,030         | -        | 800            | -                | 605,562          |
| 1.2 Citi Partic     | 72,000         | 10,000         | -        | 30,000         | -           | 5,600          | -                | 72,000         | 5,600          | 10,000         | -        | 30,000         | -                | 117,600          |
| 1.3 UWP             | 35,000         | 10,000         | -        | 5,000          | -           | 5,600          | -                | 35,000         | 5,600          | 10,000         | -        | 5,000          | -                | 55,600           |
| 2.1 Data            | 30,000         | -              | -        | 10,000         | -           | 5,600          | -                | 30,000         | 5,600          | -              | -        | 10,000         | -                | 45,600           |
| 2.2 LRTP            | 70,000         | 10,000         | -        | 2,000          | -           | 36,500         | -                | 70,000         | 36,500         | 10,000         | -        | 2,000          | -                | 118,500          |
| 2.4 City MP (4)     | -              | -              | -        | -              | -           | -              | 162,000          | -              | -              | -              | -        | -              | 162,000          | 162,000 (4)      |
| 2.5 TD/GIS          | 55,000         | 5,000          | -        | 20,000         | -           | -              | -                | 55,000         | -              | 5,000          | -        | 20,000         | -                | 80,000           |
| 3.1 CMS/ITS         | 80,000         | 10,000         | -        | 6,000          | -           | 10,100         | -                | 80,000         | 10,100         | 10,000         | -        | 6,000          | -                | 106,100          |
| 3.2 Access Mgt      | 10,000         | -              | -        | 20,000         | -           | -              | -                | 10,000         | -              | -              | -        | 20,000         | -                | 30,000           |
| 4.1 TIP             | 115,000        | 10,000         | -        | 2,000          | -           | 27,500         | -                | 115,000        | 27,500         | 10,000         | -        | 2,000          | -                | 154,500          |
| 5.2 E&D TNS         | 5,000          | 40,000         | -        | 3,000          | -           | -              | -                | 5,000          | -              | 40,000         | -        | 3,000          | -                | 48,000           |
| 5.3 Dwt .Cir (3)    | -              | -              | -        | -              | -           | -              | -                | -              | -              | -              | -        | -              | -                | -                |
| 5.5 RMTS (5)        | -              | -              | -        | -              | -           | -              | 125,000          | -              | -              | -              | -        | -              | 125,000          | 125,000          |
| 5.8 Rail (2)        | -              | -              | -        | -              | -           | -              | 2,295,556        | -              | -              | -              | -        | -              | 2,295,556        | 2,295,556        |
| 5.9 Pub. Transp.    | 5,000          | 40,000         | -        | 2,000          | -           | -              | -                | 5,000          | -              | 40,000         | -        | 2,000          | -                | 47,000           |
| 6.1 Int. Modal      | 5,000          | 5,000          | -        | 18,000         | -           | -              | -                | 5,000          | -              | 5,000          | -        | 18,000         | -                | 28,000           |
| 6.2 Statewide Frgt. | -              | -              | -        | -              | -           | 10,100         | -                | -              | 10,100         | -              | -        | -              | -                | 10,100           |
| 7.1 Air Q. Plg.     | 25,000         | 5,000          | -        | 3,000          | -           | 46,000         | -                | 25,000         | 46,000         | 5,000          | -        | 3,000          | -                | 79,000           |
| <b>TOTAL</b>        | <b>965,732</b> | <b>166,030</b> | <b>-</b> | <b>121,800</b> | <b>-</b>    | <b>272,000</b> | <b>2,582,556</b> | <b>965,732</b> | <b>272,000</b> | <b>166,030</b> | <b>-</b> | <b>121,800</b> | <b>2,582,556</b> | <b>4,108,118</b> |

- NOTES:
- (1) RRPDC Over Match Funds (OMF) (over and above required local match).
  - (2) Work conducted by VDRPT consultant (UWP information item).
  - (3) Work conducted by GRTC consultant (UWP information item).
  - (4) Work conducted by City of Richmond consultant (UWP information item).
  - (5) 2/2/06 MPO action to amend UWP to add task 5.5.

**FUNDING SOURCES SUMMARY SHEET**  
**FHWA PL/SPR; FTA SEC 5303;RRPDC ADDITIONAL LOCALFUNDS**  
**FY 2006 UWP - RICHMOND AREA MPO**

| Task No./<br>Abbrev. | PL             |                | SPR            |               | 5303           |               | CO 5303  |             | RRPDC<br>OMF (1) | OTHER            |                  | TOTAL            |                  | GRAND<br>TOTAL   |
|----------------------|----------------|----------------|----------------|---------------|----------------|---------------|----------|-------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                      | Federal        | State/Local    | Federal        | State         | Federal        | State/Local   | Federal  | State/Local |                  | Federal          | State/Local      | Federal          | State/Local      |                  |
| 1.1 MPO Maint        | 366,986        | 91,746         | 100,000        | 25,000        | 16,824         | 4,206         | -        | -           | 800              | -                | -                | 483,810          | 121,752          | 605,562          |
| 1.2 Citi Partic      | 57,600         | 14,400         | 4,480          | 1,120         | 8,000          | 2,000         | -        | -           | 30,000           | -                | -                | 70,080           | 47,520           | 117,600          |
| 1.3 UWP              | 28,000         | 7,000          | 4,480          | 1,120         | 8,000          | 2,000         | -        | -           | 5,000            | -                | -                | 40,480           | 15,120           | 55,600           |
| 2.1 Data             | 24,000         | 6,000          | 4,480          | 1,120         | -              | -             | -        | -           | 10,000           | -                | -                | 28,480           | 17,120           | 45,600           |
| 2.2 LRTP             | 56,000         | 14,000         | 29,200         | 7,300         | 8,000          | 2,000         | -        | -           | 2,000            | -                | -                | 93,200           | 25,300           | 118,500          |
| 2.4 City MP (4)      | -              | -              | -              | -             | -              | -             | -        | -           | -                | 129,600          | 32,400           | 129,600          | 32,400           | 162,000 (4)      |
| 2.5 TD/GIS           | 44,000         | 11,000         | -              | -             | 4,000          | 1,000         | -        | -           | 20,000           | -                | -                | 48,000           | 32,000           | 80,000           |
| 3.1 CMS/ITS          | 64,000         | 16,000         | 8,080          | 2,020         | 8,000          | 2,000         | -        | -           | 6,000            | -                | -                | 80,080           | 26,020           | 106,100          |
| 3.2 Access Mgt       | 8,000          | 2,000          | -              | -             | -              | -             | -        | -           | 20,000           | -                | -                | 8,000            | 22,000           | 30,000           |
| 4.1 TIP              | 92,000         | 23,000         | 22,000         | 5,500         | 8,000          | 2,000         | -        | -           | 2,000            | -                | -                | 122,000          | 32,500           | 154,500          |
| 5.2 E&D TNS          | 4,000          | 1,000          | -              | -             | 32,000         | 8,000         | -        | -           | 3,000            | -                | -                | 36,000           | 12,000           | 48,000           |
| 5.3 Dwt. Cir. (3)    | -              | -              | -              | -             | -              | -             | -        | -           | -                | -                | -                | -                | -                | -                |
| 5.5 RMTS (5)         | -              | -              | -              | -             | -              | -             | -        | -           | -                | -                | 125,000          | -                | 125,000          | 125,000          |
| 5.8 Rail (2)         | -              | -              | -              | -             | -              | -             | -        | -           | -                | 880,000          | 1,415,556        | 880,000          | 1,415,556        | 2,295,556        |
| 5.9 Pub. Transp.     | 4,000          | 1,000          | -              | -             | 32,000         | 8,000         | -        | -           | 2,000            | -                | -                | 36,000           | 11,000           | 47,000           |
| 6.1 Int. Modal       | 4,000          | 1,000          | -              | -             | 4,000          | 1,000         | -        | -           | 18,000           | -                | -                | 8,000            | 20,000           | 28,000           |
| 6.2 Statewide Frgt.  | -              | -              | 8,080          | 2,020         | -              | -             | -        | -           | -                | -                | -                | 8,080            | 2,020            | 10,100           |
| 7.1 Air Q. Plg.      | 20,000         | 5,000          | 36,800         | 9,200         | 4,000          | 1,000         | -        | -           | 3,000            | -                | -                | 60,800           | 18,200           | 79,000           |
| <b>TOTAL</b>         | <b>772,586</b> | <b>193,146</b> | <b>217,600</b> | <b>54,400</b> | <b>132,824</b> | <b>33,206</b> | <b>-</b> | <b>-</b>    | <b>121,800</b>   | <b>1,009,600</b> | <b>1,572,956</b> | <b>2,132,610</b> | <b>1,975,508</b> | <b>4,108,118</b> |

- NOTES:
- (1) RRPDC Over Match Funds (OMF) (over and above required local match).
  - (2) Work conducted by VDRPT consultant (UWP information item).
  - (3) Work conducted by GRTC consultant (UWP information item).
  - (4) Work conducted by City of Richmond consultant (UWP information item).
  - (5) 2/2/06 MPO action to amend UWP to add task 5.5.