

FISCAL YEAR 2004
JULY 1, 2003 – JUNE 30, 2004

UNIFIED WORK PROGRAM

FOR THE

RICHMOND AREA METROPOLITAN

PLANNING ORGANIZATION

Approved as a Final Report by the Richmond Area Metropolitan Planning Organization, April 10, 2003.

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

- September 11, 2003: MPO action to amend UWP task 5.3 for revised task description, end products, work elements, agency participation, and budget.
- December 11, 2003 MPO meeting:
 - a.) FY 03 Section 5303 funds programmed for task 2.2.
 - b.) UWP tasks 2.3 and 2.4 task description, end products, and schedules revised.
 - c.) UWP task 5.4 deleted.
 - d.) New UWP task 3.3 added.
- February 12, 2004 MPO Meeting: Shift PL funds among various RRPDC staff work tasks (tasks 1.1, 1.3, 2.1, 2.2, 2.5, 3.1, 3.2, 6.1, and 7.1).
- April 8, 2004 MPO Meeting: Revise PDC overmatch funds and shift PL and Section 5303 funds among various RRPDC staff work tasks (tasks 1.1, 1.2, 1.3, 2.1, 2.2, 2.5, 3.1, 3.2, 4.1, 5.2, 6.1, and 7.1).

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 2004 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, and conducting outreach activities to involve minority and low income citizens in the MPO process.
3. Task 2.2, Long-Range Transportation Plan (LRTP) – Complete work on a multi-modal, financially constrained 2026 LRTP.
4. Task 3.1, Congestion Management System (CMS) – Complete work on the CMS and provide for its incorporation as an element into the LRTP.
5. Task 4.1, Transportation Improvement Program (TIP) – Maintain current TIP by processing amendments as requested and tracking previous allocations of Regional STP and CMAQ funds, and developing the upcoming TIP.
6. Task 5.2, Elderly and Disabled Transportation Needs and Services – Continuing support for the MPO's Elderly and Disabled Advisory Committee.
7. Task 6.1, Intermodal Transportation Development – Working through the Intermodal Advisory Task Force, provide for review of recommendations provided in the *Richmond Regional Intermodal Transportation Study* and report on the demand and need for a regional intermodal transportation facility.

FREQUENTLY USED MPO TERMS AND ABBREVIATIONS

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

NAAQS National Ambient Air Quality Standards; defined by EPA.

Regionally Significant

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

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

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

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

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

TDM Traffic Demand Management; various traffic 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

FREQUENTLY USED MPO TERMS AND ABBREVIATIONS

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

FEDERAL LEGISLATION

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

FUNDING PROGRAMS

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

FREQUENTLY USED MPO TERMS AND ABBREVIATIONS

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

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

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

OTHER TERMS AND ABBREVIATIONS

ACG Address Coding Guide

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

CAO Chief Administrative Officer

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

CMS Congestion Management System

COA Comprehensive Operational Analysis

CTB Commonwealth Transportation Board

EJ Environmental Justice

FY Fiscal Year (July 1 to June 30).

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

GASB # 34 GASB's Statement Number 34 "Basic Financial Statements and Management's Discussion and Analysis for State and Local Governments"; requires state and local governments to report the value of

FREQUENTLY USED MPO TERMS AND ABBREVIATIONS

their infrastructure assets including roads, bridges, sewer and water facilities, etc.

| | |
|-----------------------|---|
| GIS | Geographic Information System |
| I/M | Inspection and Maintenance |
| MSA | Metropolitan Statistical Area. The Richmond/Petersburg MSA includes the cities of Colonial Heights, Hopewell, Petersburg, and Richmond; the counties of Charles City, Chesterfield, Dinwiddie, Goochland, Hanover, Henrico, New Kent, Powhatan, and Prince George; and the Town of Ashland. |
| NHS | National Highway System |
| NO_x | Nitrogen Oxides |
| RFP | Request for Proposals; process used for reviewing and selecting proposals for consultant study activities. (Goods and non-professional services) |
| RFQ | Request for Qualifications (Consultant Services). |
| SIP | State Implementation Plan (for attainment and maintenance of air quality standards) |
| SOV | Single Occupant Vehicles |
| STP | Surface Transportation Program |
| TDP | Transit Development Program |
| TMA | Transportation Management Area (i.e. MPO's greater than 200,000 in population). |
| VMT | Vehicle Miles Traveled |
| VTDP | Virginia Transportation Development Plan; approved by the CTB (previously the 6-Year Improvement Program) |

TABLE OF CONTENTS

FY 2004 UNIFIED WORK PROGRAM WORK TASKS AND BUDGET/FUNDING INFORMATION

| I. | TASKS | <u>Page(s)</u> |
|------------|--|-----------------------|
| 1.0 | MAINTENANCE OF THE MPO | |
| 1.1 | MPO Maintenance/Special Studies | 9-12 |
| 1.2 | MPO Citizen Participation..... | 13-14 |
| 1.3 | Unified Work Program | 15-16 |
| 2.0 | LONG RANGE PLANNING AND SURVEILLANCE | |
| 2.1 | Socioeconomic Data Development..... | 17-19 |
| 2.2 | Long-Range Transportation Plan (LRTP) Update..... | 20-23 |
| 2.3 | Chesterfield County Public Involvement Media | 24-25 |
| 2.4 | City of Richmond – Update of the Transportation Element of the City Master Plan..... | 26-27 |
| 2.5 | Transportation Data Base Development/GIS | 28-29 |
| 2.8 | Chesterfield County GIS Thoroughfare Plan Theme Eastern Area..... | 30-31 |
| 2.9 | Richmond Regional Bicycle and Pedestrian Plan..... | 32-33 |
| 3.0 | MANAGEMENT SYSTEMS/SHORT RANGE PLANNING | |
| 3.1 | Congestion Management System (CMS)/Intelligent Transportation Systems (ITS)..... | 34-35 |
| 3.2 | Access Management Studies | 36-38 |
| 3.3 | Richmond/Tri-Cities Areas ITS Regional Architecture Study | 39-40 |
| 4.0 | TRANSPORTATION PROJECT PROGRAMMING | |
| 4.1 | Transportation Improvement Program (TIP)..... | 41-47 |
| 5.0 | TRANSIT PLANNING | |
| 5.2 | Elderly and Disabled Transportation Needs and Services | 48-49 |
| 5.3 | Downtown Circulator Study, Phase II..... | 50-51 |
| 6.0 | INTERMODAL PLANNING | |
| 6.1 | Intermodal Transportation Development..... | 52-54 |
| 7.0 | AIR QUALITY PLANNING | |
| 7.1 | Air Quality Plan and Program Activities..... | 55-57 |
| II. | BUDGET/FUNDING INFORMATION | |
| 1. | Agency Budget Summary Sheet..... | 58 |
| 2. | Funding Sources Summary Sheet..... | 59 |

1.0 MAINTENANCE OF THE MPO

1.1 MPO Maintenance/Special Studies

A. Background

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

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

The initial estimate for all staff direct costs (for all staff work tasks) is estimated at approximately \$152,000. Staff direct costs are reviewed by the Technical Advisory Committee (TAC) as part of the UWP development process and are reported to VDOT and VDRPT as part of its submission of quarterly work progress reports.

B. End Products

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

C. Work Elements

Work activities include the following:

FY 04 UWP Task 1.1

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

FY 04 UWP Task 1.1

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

D. Agency Participation

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

E. Budget, Staff and Funding

| | <u>PL^{②③}</u> | <u>5303^③</u> | <u>RRPDC^{①③}</u> | <u>SPR</u> |
|-------|------------------------|-------------------------|---------------------------|------------------|
| RRPDC | 331,458 | 50,178 | 52,588 | ---- |
| VDOT | ---- | ---- | ---- | 220,200 |
| TOTAL | <u>\$331,458</u> | <u>\$50,178</u> | <u>\$52,588</u> | <u>\$220,200</u> |

FY 04 UWP Task 1.1

| | <u>TOTAL</u> |
|-------|----------------|
| RRPDC | 434,224 |
| VDOT | <u>220,200</u> |
| TOTAL | \$654,424 |

NOTES: ^①RRPDC overmatch funds (i.e., RRPDC local funds programmed above the match amounts required for PL and 5303 funds).

^②2/12/04 MPO action to add \$25,000 in PL funds (shifted from various other work tasks).

^③4/8/04 MPO action to add \$47,500 in PL funds and \$24,000 in 5303 funds and to reduce RRPDC overmatch by \$165,975.

F. Schedule

On-going activity.

1.2 MPO Citizen Participation

A. Background

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

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

Note that staff is scheduled to submit and review with CTAC in late FY 03 proposed revisions to the MPO's *Guidelines for Public Participation Activities and Procedures*. Staff will prepare a revised *Guidelines* document and submit it for MPO review and action in early FY 04, and if acceptable to the MPO, proceed with conducting the 45-day public review period for the revised *Guidelines* document. Comments received during this period will be documented and submitted, along with staff response comments and revisions as appropriate, for MPO consideration and final action on the revised *Guidelines* document. Revisions to the staff work elements and budget may be needed following MPO action on this matter.

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.

FY 04 UWP Task 1.2

3. Conduct public meetings and other citizen involvement activities for MPO plan and program activities.
4. Maintain and update as necessary the MPO Guidelines for Public Participation Activities and Procedures.
5. Electronic dissemination of articles and information via the RRPDC/MPO web site.
6. Posting of MPO/MPO Committee agendas, meetings minutes, notices, reports, newsletters, plan documents and summaries, on the RRPDC/MPO web site.
7. Develop, publish, and distribute background information materials on the MPO “3-C” study process.
8. Prepare proposed revisions to the MPO’s *Guidelines for Public Participation Activities and Procedures* document and submit it for CTAC review, comment, and recommendation, and for MPO review and authorization to proceed for public review (45-day public review period is federal requirement for changes to the MPO’s adopted *Guidelines for Public Participation* document). Following the 45-day review period, public comments received are documented, staff response comments are prepared, and the *Guidelines* are revised if deemed appropriate by staff. This revised *Guidelines* document, along with public comments received and staff response comments are submitted for MPO review and final action on the revised *Guidelines* document. Following MPO action, the adopted *Guidelines* will be posted on the RRPDC/MPO web site, and distributed to appropriate agencies, organizations, committees, and individuals.

D. Agency Participation

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

E. Budget, Staff and Funding

| | <u>PL^①</u> | <u>5303^①</u> | <u>RRPDC^①</u> | <u>SPR</u> | <u>TOTAL</u> |
|-------------|-----------------------|-------------------------|--------------------------|------------|--------------|
| RRPDC Staff | 55,000 | 11,000 | 49,000 | ---- | 115,000 |
| VDOT | ---- | ---- | ---- | 7,000 | 7,000 |
| TOTAL | \$55,000 | \$11,000 | \$49,000 | \$7,000 | \$122,000 |

NOTE: ^①4/8/04 MPO action to reduce PL funds by \$15,000, 5303 funds by \$9,000, and RRPDC overmatch by \$900.

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, 2004 to June 30, 2005). The UWP also identifies the region's planning priorities and notes various transportation study activities as informational items.

Note that in FY 02, as part of the FY 03 UWP development, TAC took action to establish a UWP Subcommittee to review funding, staff's proposed budget and staff time allocations, and direct costs as a first step in the UWP process.

B. End Products

1. Maintain/amend the FY 04 UWP.
2. FY 05 UWP document.
3. Applications for federal and state transportation planning funds.
4. Prepare/update staff work assignments and schedules.

C. Work Elements

Work activities include the following:

1. Review VDOT, VDRPT, FHWA, FTA, EPA, and other state and federal agency information and requirements, plus other materials relating to UWP preparation.
2. Solicit input for proposed work tasks from the TAC, CTAC, and EDAC.
3. Prepare a preliminary staff budget and list of proposed work tasks for the Commission's annual initial work program.
4. Meet with TAC UWP subcommittee to review proposed RRPDC staff time allocations and work assignments, work tasks, and cost information for the FY 05 UWP.
5. Identify and discuss 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.

D. Budget, Staff and Funding

| | <u>PL^{①②}</u> | <u>5303^②</u> | <u>RRPDC^②</u> | <u>SPR</u> | <u>TOTAL</u> |
|-------|------------------------|-------------------------|--------------------------|--------------|--------------|
| RRPDC | 12,000 | 3,000 | 25,000 | ---- | 40,000 |
| VDOT | <u>----</u> | <u>----</u> | <u>----</u> | <u>6,000</u> | <u>6,000</u> |
| TOTAL | \$12,000 | \$3,000 | \$25,000 | \$6,000 | \$46,000 |

NOTES: ^①2/12/04 MPO action to subtract \$5,000 in PL funds (shifted to various other work tasks).

^②4/8/04 MPO action to reduce PL funds by \$13,000 and 5303 funds by \$7,000, and to increase RRPDC overmatch funds by \$11,800.

E. Schedule

On-going activity for adopted UWP.

November 2003 to May 2004 for FY 05 UWP.

2.0 LONG RANGE PLANNING AND SURVEILLANCE

2.1 Socioeconomic Data Development

A. Background

As part of the MPO's regional transportation planning process, socioeconomic data is developed by area local governments and RRPDC staff for use in various VDOT, MPO, and local plan and study activities including plan model data input, EIS, corridor studies, air quality conformity analysis, transit studies, responding to information requests for market and other demographic studies, etc. Some local data items are maintained and developed on an annual basis while other data is updated every three years. A Socioeconomic Data Committee work group made up of local planning staffs has been established, and was active in assisting staff in preparing the base year (2000) and forecast year (2026) socioeconomic data in FY 03. In FY 04, the committee will be available to serve as a forum for discussion of issues related to methodology, data consistency, and applications as staff begins to develop data for the next (i.e., 2029/2030) LRTP update.

Another major work element has been the development of a demographic profile of the region's population. In FY 02, staff developed information on the location of low-income and minority groups by census tract. This information was used in conducting the environmental justice analysis for proposed Regional STP and CMAQ projects being programmed in the MPO's Transportation Improvement Program (TIP). Since year 2000 census data only had minority population groups by census tract available in FY 02, staff used 1990 census data for analysis of low-income groups. In FY 03, year 2000 census tract data for low income groups became available, and staff is scheduled to prepare this data in late FY 03. This year 2000 data (i.e., minority and low income groups by census tract) will be used in conducting the environmental justice analysis for the future LRTPs and TIPs until new census data becomes available.

Staff's major focus in FY 04 will be to conduct a review of previous staff and local government activities to develop base year and forecast year socioeconomic data, and to make adjustments to these methods, or to develop new methods to come up with accurate and easy to develop TAZ level data. In FY 04, staff should also receive the Census Transportation Planning Package (CTPP), which reports selected census information on a traffic analysis zone (TAZ) basis. Staff will use CTPP data to develop information on commuting patterns, travel behavior, and various other trip-making characteristics. This may also help in developing and calibrating the region's transportation models and in conducting various transit and travel demand management studies.

B. End Products

1. 2000/2026 Socioeconomic Data Report (work to be completed in FY 03, document to be printed and distributed in FY 03 or FY 04) including TAZ maps for all jurisdictions in the MPO study area.
2. Report to TAC on recommended methodologies for development of future base year and forecast year socioeconomic data.
3. Report to TAC on the CTPP and potential applications.
4. Use of CTPP in support of various plans, studies, and reports.

C. Work Elements

RRPDC work elements are as follows:

1. Review of previous staff and local government activities to develop base year and forecast year data for population, households, housing units, employment, and student data items/sub-items, and provide recommendations for development of these data items/sub-items in the future. Staff will utilize the Socioeconomic Data Committee/work group to develop this report and provide a final report for review and action by the MPO's Technical Advisory Committee (TAC).
2. Provide administrative and technical support for Socioeconomic Data Committee/work group meetings including preparing and submitting meeting agendas and summaries, and other activities necessary for support of this committee.
3. Review CTPP data and develop a report for TAC on potential applications.
4. Utilize CTPP data in support of various plans, studies, and reports.

VDOT and local government work elements are as follows:

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

D. Agency Participation

RRPDC, VDOT, Local Governments.

E. Budget, Staff and Funding

| | <u>PL^{①②}</u> | <u>5303^②</u> | <u>RRPDC^②</u> | <u>TOTAL</u> |
|-------|------------------------|-------------------------|--------------------------|--------------|
| RRPDC | \$26,000 | -0- | \$1,000 | \$27,000 |

NOTES: ^①2/12/04 MPO action to subtract \$15,000 in PL funds (shifted to various other work tasks).

^②4/8/04 MPO action to increase PL funds by \$1,000, and to reduce 5303 funds by \$5,000 and RRPDC overmatch funds by \$26,900.

F. Schedule

July 2003 to June 2004

2.2 Long-Range Transportation Plan Update

A. Background

The MPO adopted the *2023 Long-Range Transportation Plan* (LRTP) on March 8, 2001. 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.

In FY 03, the MPO took action to establish the LRTP Advisory Task Force with nine voting members from TAC (i.e., one from each local government), four from CTAC, and one from EDAC. There are also non-voting members on the task force from state and regional transportation/planning agencies (i.e., VDOT, GRTC, VDPRT, RMA, Ridefinders, Port of Richmond, CRAC, FHWA, and RRPDC). The task force recommendations and draft plan are to be presented to CTAC, EDAC, and TAC for review, comment, and recommendation. The draft plan as recommended by the task force will be presented to the MPO along with TAC, CTAC, and EDAC review comments and recommendations. The major work effort by staff in FY 04 was the development of the base year (2000) and forecast year (2026) socioeconomic data. Work on the scope of work should be completed in FY 03 and presented to the task force for its review and action. In addition, the initial round of public input meetings should be held in late FY 03.

Note that work on the *Regional Rail Feasibility Study* (FY 03 UWP task 5.5) should be completed in FY 03 and the results should be available for review and consideration by the task force for incorporation into the draft LRTP. Work on the *Richmond Regional Bicycle and Pedestrian Plan* will not be completed in time for consideration by the task force. The MPO may decide to take action later in the year to amend the 2026 LRTP to provide for its incorporation.

Work under the LRTP provides for the preparation of technical and other reports to assure documentation. Such documentation should be understandable for the general public, and should be made available to the parties consistent with the MPO's public participation policies. Development, preparation, and distribution of documentation should be addressed as part of the general work scope.

B. End Product

1. Amendments to the 2023 LRTP as necessary.
2. MPO adopted 2026 LRTP.

3. Amendments to the 2026 LRTP as necessary.

C. Work Elements

Work activities by RRPDC and VDOT staffs includes the following:

1. A Long-Range Transportation Plan that addresses the 7 TEA-21 planning requirements as follows:
 - a. Support the economic vitality of the United States, the states and metropolitan areas, especially by enabling global competitiveness, productivity, and efficiency;
 - b. Increase the safety and security of the transportation system for motorized and nonmotorized users;
 - c. Increase the accessibility and mobility options available to people and freight;
 - d. Protect and enhance the environment, promote energy conservation, and improve quality of life;
 - e. Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight;
 - f. Promote efficient system management and operation; and
 - g. Emphasize the preservation of the existing transportation system.
2. Citizen review meetings and other public input activities to provide comments and suggestions for LRTP development [RRPDC].
3. Review and submit for MPO approval, requests for functional classifications/reclassifications for study area roads [RRPDC].
4. Print and distribute (if necessary) additional copies of the 2023 LRTP citizens summary report (i.e., *Destinations 2023; A Citizens Guide to the LRTP*) [RRPDC].
5. Update LRTP model procedures, network counts, mode split network, and coordination with the conformity analysis model [VDOT].
6. Conduct technical documentation activities and make available for public review and information [RRPDC and VDOT as appropriate].
7. Review highway construction plans for conformance with the adopted Transportation Plan [VDOT and RRPDC].
8. Maintain/update computer software, staff training, and direct costs [VDOT].
9. Prepare and submit documentation on the assessment of impacts on different socioeconomic groups for investments identified in the LRTP [RRPDC].

10. Provide for development of the 2026 LRTP based on scope of work reviewed and approved by the LRTP Advisory Task Force. Major work activities tentatively identified in the work scope include the following:
 - a. Revise/update chapter on Planning Framework and Requirements.
 - b. Update chapter on Socioeconomic Data Characteristics.
 - c. Provide for documentation of public input and conduct appropriate review activities.
 - d. Update data and existing conditions analysis for highway, public transportation, transportation demand management (TDM), bicycle and pedestrian, and intermodal plan elements.
 - e. Review and revise as appropriate the LRTP goals and objectives.
 - f. Prepare proposed projects lists for highway, transit, TDM, bicycle and pedestrian, and intermodal elements. Lists to be submitted for financial capacity, air quality conformity, and environmental justice analyses.
 - g. Incorporate Congestion Management System (CMS) and Intelligent Transportation System (ITS) elements into appropriate plan elements.
 - h. Provide documentation for local/private projects included in the LRTP.
 - i. Prepare, print, and distribute final plan document (following MPO adoption).

D. Agency Participation

RRPDC, VDOT, VDRPT, VDEQ, local governments, CRAC, GRTC, RMA, Port of Richmond, FHWA, FTA, Ridefinders, LRTP advisory task force member organizations.

E. Budget, Staff and Funding

| | <u>PL^②</u> | <u>FY 04 5303^③</u> | <u>FY 03 5303^①</u> | <u>RRPDC^③</u> | <u>SPR</u> | <u>TOTAL</u> |
|-------|-----------------------|-----------------------------------|-----------------------------------|--------------------------|-----------------|------------------|
| RRPDC | 135,000 | 35,000 | 18,077 | 5,000 | ---- | 193,077 |
| VDOT | ---- | ---- | ---- | ---- | 53,000 | 53,000 |
| TOTAL | <u>\$135,000</u> | <u>\$35,000</u> | <u>\$18,077</u> | <u>\$5,000</u> | <u>\$53,000</u> | <u>\$246,077</u> |

NOTES: ^①12/11/03 MPO action to program \$18,077 in FY 03 Section 5303 funds.

^②2/12/04 MPO action to add \$15,000 in PL funds (shifted from various other work tasks).

^③4/8/04 MPO action to increase 5303 funds by \$5,000 and to reduce RRPDC overmatch funds by \$19,000.

Schedule

July 1, 2003 to June 30, 2004.

2.3 Chesterfield County Public Involvement Media

A. Background

Chesterfield County's Transportation Department works on many types of projects which are of interest to the public including road improvements, the Thoroughfare Plan, and new development. The county's first strategic goal is to provide world-class customer service. To achieve this, the county must provide effective public involvement in regards to these projects.

During the life of road improvement projects managed by Chesterfield County, the county typically meets individually with impacted landowners and any other interested citizens and business owners. Prior to the standard posting of willingness or public hearing, the county conducts Citizen Information Meetings. Additionally, the county's Transportation Department provides information to the public regarding the Thoroughfare Plan or transportation issues related to new development or rezoning cases at public meetings and to individuals.

Chesterfield County has utilized many different, effective methods to communicate with the community: Power Point presentations with photos of the area, GIS maps and scanned plan material, along with digitally enhanced "before and after" photos, color plan rolls, plan displays with photos along the project length to help orient the view. Often these materials are e-mailed to interested people.

This effort towards a continual dialogue with the community during the life of a project requires professional and clear presentation materials. While these materials are certainly invaluable, the cost charged and time for preparation prevents them from being utilized more. The county staff needs to be able to prepare as much of this information as possible in order to provide clear communications to the community while keeping projects costs down.

Funds for this UWP task were first programmed as part of the FY 02 UWP (MPO action on May 10, 2001 to add to UWP and to program available PL funds) and the RRPDC/Chesterfield County Agreement for PL funds pass-through was executed on September 24, 2001. Work on this task was initiated in FY 03. Equipment purchased included a digital camera, scanner, and color printer. County staff also researched the software necessary for the process of generating project renderings and determined it would be more cost effective to have such renderings developed by consultants as needed (county staff time not charged to task 2.3). For FY 04, the county plans to purchase additional equipment as available and budgeted for this work task. Such equipment includes a laptop computer, digital projector and desktop/ArcView GIS (or ArcGIS) software. The laptop and digital projector will be used for presentations made to the public away from the office. The desktop will be used by a staff member who maintains traffic count information on the webpage (accessed by public, developers, county staff and other agencies), tracks accident data

FY 04 UWP Task 2.3

with GIS and accesses MINUTP model data. Existing and future traffic volumes along with accident data are all important information requested by the public on a daily basis and during public meetings. The new ArcView will be used by support staff in creating maps for public meetings, documents and applications, complaint tracking and citizen inquiries received via the webpage.

B. End Product

County-produced high quality presentations with high resolution photos and scanned plan sheets, clear color GIS maps, traffic count information available from web site, and other appropriate public information presentation materials.

C. Work Elements

1. Purchase of digital projector, laptop computer, desktop and ArcView/ArcGIS software, and other appropriate equipment and software necessary for providing easily accessible and accurate information to county staff and the public.
2. Submission of report to MPO on completion of work task (i.e., list of equipment purchased).
3. Produce a report and presentation to TAC and the MPO on how equipment and software purchased under this UWP task have been put to use by the county.

D. Agency Participation

Chesterfield County, VDOT, RRPDC, FHWA

E. Budget, Staff and Funding

| | |
|---------------------|------------|
| | <u>PL*</u> |
| Chesterfield County | \$17,000 |

*Note: Local match funds to be provided by Chesterfield County.

F. Schedule

July 2003 to June 2004.

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

A. Background

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

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

This UWP task was added to the FY 03 UWP by MPO amendment action on December 12, 2002. It was further amended on December 11, 2003 with the addition of funds previously programmed for the Downtown Transit Center Need and Location Study (task 5.4, deleted from the UWP).

B. End Product

Update of the Transportation Element of the City Master Plan.

C. Work Elements

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

FY 04 UWP Task 2.4

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 the location of the GRTC transfer center(s) in downtown and the full build-out of the Main Street Station.
4. Development of maps, which are compatible with ARCVIEW or similar GIS software, and provided in a digital format.
5. Financial analysis of recommendations and establishment of project prioritization system.
6. Community charettes and presentations including City of Richmond Planning Commission, Richmond City Council, and others.

D. Agency Participation

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

E. Budget, Staff and Funding

City of Richmond Consultant \$110,000

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

FTA Section 5313b: \$8,000

VDRPT/MTTF-Tech: \$1,000

City Staff*: \$1,000

*In-kind match

F. Schedule

February 2004 to September 2004.

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. GIS support as follows:
 - a. Staff support for development of maps and data linked to GIS map system. Includes staff work in support of the LRTP, CMS, TIP (project

FY 04 UWP Task 2.5

location maps for major and priority projects, etc.) and other staff, local, and VDOT plan and study activities.

- b. Technical assistance to GRTC, Ridefinders, and others in mapping data/information for analysis and display of data and/or features on a local, sub area, corridor, or regional basis.
- c. Maintenance and support for the RRPDC’s street name clearing house program.

D. Agency Participation

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

E. Budget, Staff and Funding

| | <u>PL^{①②}</u> | <u>5303^②</u> | <u>RRPDC^②</u> | <u>TOTAL</u> |
|-------|------------------------|-------------------------|--------------------------|--------------|
| RRPDC | \$65,000 | \$12,000 | \$22,000 | \$99,000 |

NOTES: ^①2/12/04 MPO action to subtract \$40,000 in PL funds (shifted to various other work tasks).

^②4/8/04 MPO action to increase PL funds by \$5,000 and 5303 funds by \$2,000, and to reduce RRPDC overmatch funds by \$70,400.

F. Schedule

On-going

2.8 Chesterfield County GIS Thoroughfare Plan Theme Eastern Area

A. Background

The Thoroughfare Plan is part of the County's Comprehensive Plan. The plan was adopted in 1989 (amended 1999), and is illustrated on a county base map. The county is currently working towards creating a Thoroughfare Plan theme in its GIS for the western half of the county. This project would incorporate the remaining part of the Thoroughfare Plan (eastern half of the county) into this GIS theme.

The Thoroughfare Plan is used by developers, consultants, county staff and citizens in identifying functional classifications and anticipated right-of-way widths of existing roads, as well as alignments of many proposed roadways throughout the county. This information must be accurate and readily available.

This UWP task was first programmed in the FY 01 UWP by amendment action of the MPO on June 12, 2000. The RRPDC/Chesterfield pass-through funds agreement was executed on March 1, 2001, and the Chesterfield/study consultant contract was executed on January 31, 2002. It was originally budgeted at \$54,586.

B. End Product

The Thoroughfare Plan for the eastern area of Chesterfield County in a digitized format.

C. Work Elements

Analyze and evaluate each of the roadways, existing and proposed, on the Thoroughfare Plan (eastern area) at a level of detail consistent with the data available in the county GIS.

Consultant and/or staff work tasks include obtaining and receiving the following documents and information in developing a GIS theme:

1. Thoroughfare Plan.
2. Comprehensive Plan.
3. Approved zoning cases.
4. County GIS data including; existing street centerlines; parcel information; environmental features (streams, RPA, wetlands, etc.); other existing improvements (railroads, major utility lines, etc.).

D. Agency Participation

Chesterfield County, VDOT, RRPDC, and FHWA.

E. Budget, Staff and Funding

PL*

Chesterfield County Consultant \$0

* Note: All PL funds programmed for this study have been spent. Work on the study will be completed using Chesterfield County funds. The final draft report will be submitted for MPO review and action when work has been completed.

F. Schedule

July 2002 to June 2003

2.9 Richmond Regional Bicycle and Pedestrian Plan

A. Background

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

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

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

B. End Products

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

C. Work Elements

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

1. Project kickoff events.
2. Establish vision and goals.
3. Assess existing conditions.
4. Assess latent demand for bicycling and walking.
5. Prepare draft regional network plan.

6. Prepare final regional network plans.

D. Agency Participation

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

E. Budget, Staff and Funding

SPR

VDOT Consultant \$500,000

F. Schedule

FY 01 to June 30, 2004.

3.0 MANAGEMENT SYSTEMS/SHORT RANGE PLANNING

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

A. Background

The MPO took action on March 8, 2001 to adopt the region's Congestion Management System (CMS). The CMS provides a systematic process for addressing congestion by providing information on transportation system performance and proposing use of alternative transportation strategies and programs to help alleviate congestion. Travel times for the region's major highway corridors are shown and these times will serve as a benchmark for assessing the effectiveness of transportation projects and programs in addressing congestion. The CMS also documents current congestion management strategies and programs in the MPO's Transportation Improvement Program (TIP). The CMS is updated every 3 years in conjunction with the LRTP update.

Both the CMS and LRTP for the Richmond area on the same development schedule. The CMS is also one of the major elements in the LRTP update. As a result, the 2026 LRTP will address CMS requirements and it will be included in the LRTP rather than being a separate, stand-alone document.

Work under this task also provides for staff support and participation on the VDOT ITS Steering Committee. A major requirement facing the region is the development of a regional ITS architecture. Federal regulations require this to be in place by April 8, 2005. VDOT is scheduled to receive assistance from on-call consultants to develop the regional ITS architecture for VDOT's Richmond District. The VDOT ITS Steering Committee (which include technical staff from local governments and state governments in the Richmond Area and Tri-Cities Area MPOs) will oversee this effort.

Staff also plans to continue GPS travel time runs along the region's major roadways (i.e., CMS network). These runs provide data for measuring the performance of CMS strategies and roadway improvements. GPS runs should be conducted at least once every two years.

B. End Products

1. CMS work element for the LRTP.
2. Participation and support for the VDOT ITS Steering Committee.
3. GPS travel time runs and development of other data for the CMS update.

C. Work Elements

1. Develop CMS element for the 2026 LRTP.
2. Participation and support for the VDOT ITS Steering Committee.
3. Conduct corridor travel time delay studies on congested corridors to identify congestion points and potential improvements (conducted based on VDOT and local government request).
4. Collect data from VDOT, GRTC, Ridefinders, and other available sources related to the CMS performance measures, and utilize this data for developing proposed CMS strategies and actions.
5. Conduct and document peak hour travel time runs for CMS network roads using GPS equipment.
6. Develop and print maps and information on regional traffic flow, congestion etc.

D. Agency Participation

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

E. Budget, Staff and Funding

| | <u>PL^①</u> | <u>RRPDC^②</u> | <u>SPR</u> | <u>TOTAL</u> |
|-------|-----------------------|--------------------------|-----------------|------------------|
| RRPDC | 70,000 | 52,000 | ---- | 122,000 |
| VDOT | <u>----</u> | <u>----</u> | <u>13,000</u> | <u>13,000</u> |
| TOTAL | <u>\$70,000</u> | <u>\$52,000</u> | <u>\$13,000</u> | <u>\$135,000</u> |

NOTES: ^①2/12/04 MPO action to add \$20,000 in PL funds (shifted from various other work tasks).

^②4/8/04 MPO action to increase RRPDC overmatch funds by \$5,100.

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 further delayed progress, and work is scheduled to resume in late FY 03 if staff time is available. Given the work level required for the LRTP and other MPO plan and study activities, staff will likely resume work on the New Kent access management study in the third quarter of FY 04.

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

standards and policies falls on the county. As a result, county staff has requested that RRPDC staff provide assistance in developing an automated system that can calculate turn lane and other requirements for proposed developments. The staff will give consideration to this request and provide the county with a recommendation on how to proceed.

B. End Product

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

A. Work Tasks

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

FY 04 UWP Task 3.2

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

D. Agency Participants

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

E. Budget, Staffing, Funding

| | <u>PL^①</u> | <u>RRPDC^②</u> | <u>TOTAL</u> |
|-------|-----------------------|--------------------------|--------------|
| RRPDC | \$4,000 | \$8,000 | \$12,000 |

NOTES: ^①2/12/04 MPO action to subtract \$5,000 in PL funds (shifted to various other work tasks).

^②4/8/04 MPO action to reduce PL funds by \$11,000 and RRPDC overmatch funds by \$5,700.

F. Schedule

July 2003 to June 2004

3.3 Richmond/Tri-Cities Areas ITS Regional Architecture Study

A. Background

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

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

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

VDOT has obtained consultant services to conduct this study. VDOT has also requested the establishment of a steering committee composed of technical staffs from VDOT, the RRPDC and Crater PDC, area local governments, GRTC Transit System, and the Virginia State Police. The Steering Committee will be charged with reviewing and providing comments to the study consultants on reports and draft plans, and providing other information and assisting as needed for this study.

B. End Product

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

1. Draft Regional ITS Architecture

2. Draft Regional ITS Deployment Plan

C. Work Elements

Major work elements include the following:

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

D. Agency Participation

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

E. Budget, Staff and Funding

| | |
|-----------------|---------------|
| | <u>SPR</u> |
| VDOT Consultant | 127,700 |
| VDOT Staff | <u>22,300</u> |
| TOTAL | \$150,000 |

F. Schedule

September 2003 to June 2004.

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.

The TIP programs transportation projects on an administrative classification basis consistent with the Virginia Transportation Development Plan (VTDP) under the following systems and programs:

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

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

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

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

FY 04 UWP Task 4.1

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

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

FY 04 UWP Task 4.1

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

8. Public Review and Comment--The public, affected agencies, representatives of transportation agency employees, other affected employee representatives, private providers of transportation, and other interested parties must receive a reasonable opportunity to comment on the proposed program.
9. Environmental Justice - - The TIP documentation includes an assessment of the distribution of impacts on different socioeconomic groups for investments identified in the TIP. The RRPDC conducts this assessment for RSTP and CMAQ projects.
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.

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.

Draft federal planning regulations implementing these new TEA-21 provisions were published in the federal register in early FY 01. However, these draft regulations

FY 04 UWP Task 4.1

have been withdrawn. The VDOT and FHWA have advised that even though there are no current regulations implementing TEA-21, the MPO is required to abide by its provisions.

Staff has also been advised by VDOT that future six-year programs will be made available by electronic format (e-mail). This should reduce the amount of staff time needed for copying and inserting descriptions and allocations for Richmond area TIP projects. Staff received an electronic version of the *FY 02-08 Virginia Transportation Six-Year Program for Construction and Development in FY 03*; however, it was after VDOT's scheduled deadline for submitting the draft TIP for public review. As a result, staff had to again spend considerable time in developing the Richmond area projects list based on those projects listed in the *Six Year Program*.

B. End Products

1. Development and adoption of the FY 03/04-05/06 TIP (work initiated in FY 03) and initiating the draft FY 04/05-06/07 TIP; the MPO's annual Statement of Certification; and supporting 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. 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.
3. Development and submission of the MPO's list of regional priority transportation projects.

C. Work Elements

Work activities include the following:

1. Document the TIP preparation process including project advancement, area priorities and use of the Long-Range Transportation Plan (LRTP) and Congestion Management System (CMS) for selecting and programming projects.
2. Prepare a 3-year List of Proposed Projects for the following systems and programs based on submissions from area local governments, VDOT, VDRPT, RMA, Ridefinders, CRAC and GRTC:

FY 04 UWP Task 4.1

- NHS/Interstate and Non-Interstate System
 - Primary System
 - Secondary System
 - Urban System
 - TEA-21 High Priority
 - Priority Transportation Funds
 - FRANS (Reimbursement Notes)
 - General Funds
 - Toll Facilities Revolving Account Program
 - Congestion Mitigation/Air Quality Program
 - Surface Transportation Program
 - Transportation Enhancement Program
 - Transportation Safety Program
 - Public Transportation
 - Airports
 - Local/Private funded Projects
3. Coordinate submission of FTA Section 5310 project requests and submit for MPO endorsement action and final recommended projects for inclusion in the TIP. (RRPDC)
 4. Coordinate submission of transportation enhancement projects and submit for MPO endorsement, and final recommended projects for inclusion in the TIP (RRPDC).
 5. Coordinate identification of all regionally significant public and private transportation projects, and submit to VDOT for air quality analysis purposes (RRPDC).
 6. Coordinate listing and description of progress in the implementation of TCM's (if appropriate). (RRPDC and VDOT)
 7. Develop annual list of projects, consistent with the categories in the TIP, for which Federal funds have been obligated in the preceding year. Also, include list of other major state projects from the previous TIP that were implemented, and identify significant delays in the planned implementation of these major projects. Publication and distribution (i.e. posting on the RRPDC/MPO website) will also be conducted as part of UWP task 1.2, MPO Citizen Participation. (RRPDC)
 8. Prepare and submit the TIP financial plan and supporting documentation. (RRPDC and VDOT)

FY 04 UWP Task 4.1

9. Conduct public review and comment activities, including at least one public meeting. (RRPDC)
10. Conduct and document assessment of the distribution of impacts on different socioeconomic groups for investments (i.e. projects and programs) identified in the TIP. (RRPDC)
11. Prepare and process amendments to the TIP as approved by the MPO. Conduct conformity analysis and public participation as required. (RRPDC and VDOT)
12. Prepare and process MPO Statement of Certification and supporting documentation for the area's "3-C" Transportation Planning Process. (RRPDC and VDOT)
13. Prepare and submit to the MPO a report on Virginia's Allocation of State and Federal Construction Program Funds. This report should focus on VDOT Richmond District funding for the various administrative system classifications as compared to funding for other VDOT Construction Districts (RRPDC and VDOT; staff time and funds permitting).

D. Agency Participation

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

E. Budget, Staff and Funding

| | <u>PL^①</u> | <u>5303^②</u> | <u>RRPDC^②</u> | <u>SPR</u> | <u>TOTAL</u> |
|-------|-----------------------|-------------------------|--------------------------|---------------|---------------|
| RRPDC | 85,000 | 30,000 | 9,000 | ---- | 124,000 |
| VDOT | <u>----</u> | <u>----</u> | <u>----</u> | <u>30,000</u> | <u>30,000</u> |
| TOTAL | \$85,000 | \$30,000 | \$9,000 | \$30,000 | \$154,000 |

NOTES: ^①2/12/04 MPO action to add \$15,000 in PL funds (shifted to various other work tasks).

^②4/8/04 MPO action to increase 5303 funds by \$5,000 and to reduce RRPDC overmatch funds by \$16,600.

F. Schedule

1. FY 03/04 – 05/06 TIP -- July 2003 to October 2003

FY 04 UWP Task 4.1

2. FY 04/05 - 06/07 TIP -- November 2003 to FY 05
3. TIP Amendments -- On-going activity

5.0 TRANSIT PLANNING

5.2 Elderly and Disabled Transportation Needs and Services

A. Background

The Elderly and Disabled Advisory Committee (EDAC) is composed of individuals and organizations representing the region's elderly and disabled, and advises the MPO on plans, studies, issues, and other matters related to the planning of public transportation services. It serves to advise the MPO on issues plans and studies, involving public transportation facilities and services for the elderly and disabled. It also assists GRTC by advising them of public transportation needs and issues of concern to the elderly and disabled community.

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

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

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

B. End Products

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

C. Work Elements

1. Provide administrative and technical staff support for the EDAC.
2. Update the transportation operators inventory of private and human service agencies' transportation services and submit the final draft report for TAC and EDAC review and recommendation, and for MPO review and action.

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>5303^①</u> | <u>PL^①</u> | <u>RRPDC^①</u> | <u>TOTAL</u> |
|-------|-------------------------|-----------------------|--------------------------|--------------|
| RRPDC | \$25,000 | \$5,500 | \$10,500 | \$41,000 |

NOTE: 4-8-04 MPO action to reduce 5303 funds by \$5,000 and to increase PL funds by \$500 and RRPDC overmatch funds by \$3,900.

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. The Richmond City Council adopted a resolution in support of the streetcar concept, advising the streetcar steering committee to pursue public input to refine the route and operating characteristics, and to refine cost estimates and recommended funding mechanisms.

The GRTC Transit System is enlisting the assistance of a professional consulting firm to engage the public to define the community's preferred route alignment and operational features of a steel-rail streetcar system in the Downtown. The *Downtown Richmond Streetcar Study* will provide a platform for this phase of the study, using its recommendations as starting points to gather public input. The study will also include a "fatal flaw" analysis of existing underground utilities and potentially sensitive environmental factors, which will help inform the selection of an optimal route. 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 a study providing public input for the optimal steel-rail streetcar line linking important trip generators (Convention Center, Shockoe Slip, downtown employers, Main Street Station, etc.) in downtown Richmond, and a first-level utility and environmental analysis to identify "fatal flaws" in any routes considered during the process. The study will also include a refined cost estimate and a description of next steps for the community to pursue if it wishes to advance the project to the preliminary engineering phase.

C. Work Elements

1. Conduct a public involvement process to gather and synthesize public input regarding a preferred streetcar route and operating characteristics, incorporating information gathered in parts 2 and 3 below;
2. Complete a first-level utility analysis to identify street segments that would not be buildable because of underground utilities, and street segments that would require mitigating efforts;
3. Conduct a first-level environmental scan to identify local characteristics that would inhibit the construction of an electric streetcar on certain street segments, and to identify potential mitigating efforts for problematic streets or locations;
4. Produce a cost estimate for the streetcar system using the preferred alignment and operating characteristics, as well as the results of parts 2 and 3 above;
5. Outline the tasks that must be completed to bring the project up to and through the preliminary engineering process and recommend a timeline for completing these tasks;
6. Develop and give a presentation of the results of this study to City Council and associated committees as needed; and
7. Complete other elements and activities as deemed appropriate.

GRTC reserves the right to eliminate, in whole or in part, any of the above-mentioned services.

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

CMAQ *

GRTC Consultant \$225,000

* Local match funds to be provided by GRTC (\$180,000 federal and \$45,000 local).

F. Schedule

September 1, 2003 to May 1, 2004.

6.0 INTERMODAL PLANNING

6.1 Intermodal Planning

A. Background

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

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

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

B. End Products

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

C. Work Elements

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

D. Agency Participation

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

E. Budget, Staff and Funding

| | <u>PL^{①②}</u> | <u>5303^②</u> | <u>RRPDC^②</u> | <u>TOTAL</u> |
|-------|------------------------|-------------------------|--------------------------|--------------|
| RRPDC | \$5,000 | - 0 - | \$17,000 | \$22,000 |

NOTES: ^①2/12/04 MPO action to subtract \$10,000 in PL funds (shifted to various other work tasks).

FY 04 UWP Task 6.1

②4-8-04 MPO action to reduce PL funds by \$5,000, Section 5303 funds by \$10,000, and RRPDC overmatch funds by \$5,400.

F. Schedule

On-going

7.0 AIR QUALITY PLANNING

7.1 Air Quality Plan and Program Activities

A. Background

The Clean Air Act Amendments (CAAA) of 1990 presents serious air quality improvement challenges to almost all of the nation's 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 FY1995, 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 FY1997, VDEQ staff submitted a request to EPA for designating the area to attainment status. In November 1997 EPA issued notice in the Federal Register noting the Richmond Area to be in attainment status for ozone air quality standards, and was designed as a Maintenance Area.

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

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

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

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

B. End Products

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

C. Work Elements

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

D. Agency Participation

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

E. Budget, Staff, and Funding

| | <u>PL^①</u> | <u>SPR</u> | <u>RRPDC^①</u> | <u>TOTAL</u> |
|-------|-----------------------|-----------------|--------------------------|-----------------|
| RRPDC | 10,000 | ---- | 17,000 | 27,000 |
| VDOT | <u>----</u> | <u>48,000</u> | <u>----</u> | <u>48,000</u> |
| TOTAL | <u>\$10,000</u> | <u>\$48,000</u> | <u>\$17,000</u> | <u>\$75,000</u> |

NOTES: 4/8/04 MPO action to reduce PL funds by \$10,000 and to increase RPRDC overmatch funds by \$4,700.

F. Schedule

On-going activity

**AGENCY BUDGET SUMMARY SHEET
FHWA PL/SPR; FTA SEC 5303;RRPDC ADDITIONAL LOCAL FUNDS
FY 2004 UWP - RICHMOND AREA MPO**

| Task No/ Abbrev | RRPDC | | | | Local PL | VDOT SPR | OTHER | TOTAL | | | | | | GRAND TOTAL |
|--------------------|----------------|----------------|---------------|----------------|---------------|------------------|----------------|----------------|------------------|----------------|---------------|----------------|----------------|--------------------|
| | PL | 5303 | CO 5303 | ALF (1) | | | | PL | SPR | 5303 | CO 5303 | ALF | OTHER | |
| 1.1 MPO Maint | 331,458 | 50,178 | - | 52,588 | - | 220,200 | - | 331,458 | 220,200 | 50,178 | - | 52,588 | - | 654,424 |
| 1.2 Citi Partic | 55,000 | 11,000 | - | 49,000 | - | 7,000 | - | 55,000 | 7,000 | 11,000 | - | 49,000 | - | 122,000 |
| 1.3 UWP | 12,000 | 3,000 | - | 25,000 | - | 6,000 | - | 12,000 | 6,000 | 3,000 | - | 25,000 | - | 46,000 |
| 2.1 Data | 26,000 | - | - | 1,000 | - | - | - | 26,000 | - | - | - | 1,000 | - | 27,000 |
| 2.2 LRTP | 135,000 | 35,000 | 18,077 | 5,000 | - | 53,000 | - | 135,000 | 53,000 | 35,000 | 18,077 | 5,000 | - | 246,077 |
| 2.3 Ches. Media | - | - | - | - | 17,000 | - | - | 17,000 | - | - | - | - | - | 17,000 |
| 2.4 City MP (4) | - | - | - | - | - | - | 100,000 | - | - | - | - | - | 100,000 | 100,000 (4) |
| 2.5 TD/GIS | 65,000 | 12,000 | - | 22,000 | - | - | - | 65,000 | - | 12,000 | - | 22,000 | - | 99,000 |
| 2.8 Ches GIS (5) | - | - | - | - | - | - | (5) | - | - | - | - | - | (5) | (5) |
| 2.9 B & P Plan(2) | - | - | - | - | - | 500,000 | - | - | 500,000 | - | - | - | - | 500,000 (2) |
| 3.1 CMS/ITS | 70,000 | - | - | 52,000 | - | 13,000 | - | 70,000 | 13,000 | - | - | 52,000 | - | 135,000 |
| 3.2 Access Mgt | 4,000 | - | - | 8,000 | - | - | - | 4,000 | - | - | - | 8,000 | - | 12,000 |
| 3.3 ITS Arch (2) | - | - | - | - | - | 150,000 | - | - | 150,000 | - | - | - | - | 150,000 (2) |
| 4.1 TIP | 85,000 | 30,000 | - | 9,000 | - | 30,000 | - | 85,000 | 30,000 | 30,000 | - | 9,000 | - | 154,000 |
| 5.2 ED TNS | 5,500 | 25,000 | - | 10,500 | - | - | - | 5,500 | - | 25,000 | - | 10,500 | - | 41,000 |
| 5.3 Dwt .Cir (3) | - | - | - | - | - | - | 225,000 | - | - | - | - | - | 225,000 | 225,000 (3) |
| 6.1 Int. Modal | 5,000 | - | - | 17,000 | - | - | - | 5,000 | - | - | - | 17,000 | - | 22,000 |
| 7.1 Air Q. Plg. | 10,000 | - | - | 17,000 | - | 48,000 | - | 10,000 | 48,000 | - | - | 17,000 | - | 75,000 |
| TOTAL | 803,958 | 166,178 | 18,077 | 268,088 | 17,000 | 1,027,200 | 325,000 | 820,958 | 1,027,200 | 166,178 | 18,077 | 268,088 | 325,000 | \$2,625,501 |

- NOTES:
- (1) RRPDC Additional Local Funds (ALF) (over and above local match).
 - (2) Work conducted by VDOT consultant.
 - (3) Work conducted by GRTC consultant (UWP information item).
 - (4) Work conducted by City of Richmond consultant (UWP information item).
 - (5) Work to be completed with local funds.

**FUNDING SOURCES SUMMARY SHEET
FHWA PL/SPR; FTA SEC 5303;RRPDC ADDITIONAL LOCALFUNDS
FY 2004 UWP - RICHMOND AREA MPO**

| Task No./ Abbrev. | PL | | SPR | | 5303 | | CO 5303 | | RRPDC | OTHER | | TOTAL | | GRAND |
|----------------------|----------------|----------------|----------------|----------------|----------------|---------------|---------------|--------------|----------------|----------------|---------------|------------------|----------------|---------------------|
| | Federal | State/Local | Federal | State | Federal | State/Local | Federal | State/Local | ALF | Federal | State/Local | Federal | State/Local | TOTAL |
| 1.1 MPO Maint | 265,166 | 66,292 | 176,160 | 44,040 | 40,142 | 10,036 | - | - | 52,588 | - | - | 481,469 | 172,955 | 654,424 |
| 1.2 Citi Partic | 44,000 | 11,000 | 5,600 | 1,400 | 8,800 | 2,200 | - | - | 49,000 | - | - | 58,400 | 63,600 | 122,000 |
| 1.3 UWP | 9,600 | 2,400 | 4,800 | 1,200 | 2,400 | 600 | - | - | 25,000 | - | - | 16,800 | 29,200 | 46,000 |
| 2.1 Data | 20,800 | 5,200 | - | - | - | - | - | - | 1,000 | - | - | 20,800 | 6,200 | 27,000 |
| 2.2 LRTP | 108,000 | 27,000 | 42,400 | 10,600 | 28,000 | 7,000 | 14,461 | 3,616 | 5,000 | - | - | 192,861 | 53,216 | 246,077 |
| 2.3 Ches. Media | 13,600 | 3,400 | - | - | - | - | - | - | - | - | - | 13,600 | 3,400 | 17,000 |
| 2.4 City MP (4) | - | - | - | - | - | - | - | - | - | 80,000 | 20,000 | 80,000 | 20,000 | 100,000 (4) |
| 2.5 TD/GIS | 52,000 | 13,000 | - | - | 9,600 | 2,400 | - | - | 22,000 | - | - | 61,600 | 37,400 | 99,000 |
| 2.8 Ches GIS (5) | - | - | - | - | - | - | - | - | - | - | (5) | - | (5) | (5) |
| 2.9 B & P Plan(2) | - | - | 400,000 | 100,000 | - | - | - | - | - | - | - | 400,000 | 100,000 | 500,000 (2) |
| 3.1 CMS/ITS | 56,000 | 14,000 | 10,400 | 2,600 | - | - | - | - | 52,000 | - | - | 66,400 | 68,600 | 135,000 |
| 3.2 Access Mgt | 3,200 | 800 | - | - | - | - | - | - | 8,000 | - | - | 3,200 | 8,800 | 12,000 |
| 3.3 ITS Arch (2) | - | - | 120,000 | 30,000 | - | - | - | - | - | - | - | 120,000 | 30,000 | 150,000 (2) |
| 4.1 TIP | 68,000 | 17,000 | 24,000 | 6,000 | 24,000 | 6,000 | - | - | 9,000 | - | - | 116,000 | 38,000 | 154,000 |
| 5.2 ED TNS | 4,400 | 1,100 | - | - | 20,000 | 5,000 | - | - | 10,500 | - | - | 24,400 | 16,600 | 41,000 |
| 5.3 Dwt. Cir. (3) | - | - | - | - | - | - | - | - | - | 180,000 | 45,000 | 180,000 | 45,000 | 225,000 (3) |
| 6.1 Int. Modal | 4,000 | 1,000 | - | - | - | - | - | - | 17,000 | - | - | 4,000 | 18,000 | 22,000 |
| 7.1 Air Q. Plg. | 8,000 | 2,000 | 38,400 | 9,600 | - | - | - | - | 17,000 | - | - | 46,400 | 28,600 | 75,000 |
| TOTAL | 656,766 | 164,192 | 821,760 | 205,440 | 132,942 | 33,236 | 14,461 | 3,616 | 268,088 | 260,000 | 65,000 | 1,885,930 | 739,571 | \$ 2,625,501 |

- NOTES:
- (1) RRPDC Additional Local Funds (ALF) (over and above local match).
 - (2) Work conducted by VDOT consultant.
 - (3) Work conducted by GRTC consultant (UWP information item).
 - (4) Work conducted by City of Richmond consultant (UWP information item).
 - (5) Work to be completed with local funds.