

**RICHMOND AREA
METROPOLITAN PLANNING ORGANIZATION**



**UNIFIED WORK PROGRAM
FISCAL YEAR 2014**

July 1, 2013 – June 30, 2014

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Metropolitan Planning Organization, May 2, 2013.

Reflects MPO amendments as of
May 15, 2014

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This report was prepared by the Richmond Regional Planning District Commission (RRPDC) 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 (VDOT), the Virginia Department of Rail and Public Transportation (DRPT), the Virginia Department of Aviation, the Capital Region Airport Commission, GRTC Transit System, the Richmond Metropolitan Authority, the Federal Highway Administration (FHWA), the Federal Transit Administration (FTA), the RRPDC and RideFinders, Inc., on behalf of the Richmond Area Metropolitan Planning Organization (MPO). The contents of this work program reflect the views of the MPO. The RRPDC staff is responsible for the facts and accuracy of the data presented herein. The contents do not necessarily reflect the official views or policies of the FHWA, FTA, VDOT, DRPT or the RRPDC. This document does not constitute a standard, specification, or regulation. FHWA, FTA, VDOT, or DRPT acceptance of this document as evidence of fulfillment of the objectives of this work program does not constitute endorsement/approval of the need for any recommended improvements nor does it constitute approval of their location and design or a commitment to fund any such improvements. Additional project level environmental impact assessments and/or studies of alternatives may be necessary.

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RICHMOND AREA MPO MISSION STATEMENT AND PLANNING PRIORITIES

Mission Statement

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

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

Planning Priorities

Section 450.308(c) of the Metropolitan Planning regulations states that Transportation Management Area (TMA) designated MPO's shall include a discussion of the planning priorities facing the metropolitan planning area. The following identifies the FY 2014 UWP major planning priorities. Further discussion of these priorities is provided in the various work tasks.

1. *Task 1.1, MPO Maintenance/Special Studies; MAP-21 Performance Measures and Targets* – MAP-21 establishes national goals and directs the development of performance management measures and targets based on these goals. USDOT is expected to issue guidance and draft regulations in FY 2014 that will provide details on the development of performance management measures and targets and their integration into the MPO's planning and programming process. Staff anticipates that significant staff time and resources will be required to develop an understanding of these new requirements, developing methods and procedures for their integration into the MPO planning and programming process, and carrying out these new requirements. Staff anticipates that the new federal requirements could replicate current state requirements for reporting progress in meeting Regional Transportation and Land-Use Performance Measures and Targets, which could somewhat reduce staff time and effort in meeting the new federal requirements. Further information is provided in UWP task 1.1, MPO Maintenance/Special Studies.

2. *Task 1.2, MPO Citizen Participation; Public Participation Plan Review* – The MPO has a strong and active public participation program with two standing citizen advisory committees (Citizens Transportation Advisory Committee/CTAC and Elderly and Disabled Advisory Committee/EDAC) providing for the participation of and representation from individuals and organizations from diverse backgrounds and interests and representing a wide range of citizen views and concerns over regional transportation planning. The MPO also has other means and methods for obtaining citizen input into the MPO process. Starting in late FY 2013 and continuing into FY 2014, staff will conduct a review of the MPO's current Public Participation Plan (PPP) to examine the effectiveness of

current public participation activities, and will also look at revising some of CTAC's current at-large (non-jurisdiction) member organizations (see UWP task 1.2 for further details).

3. *Task 1.2, MPO Citizen Participation; Plan 2035 Citizens Guide* – The MPO took action in July 2012 to adopt the 2035 LRTP/CMP Update (i.e., the Metropolitan Transportation Plan and Congestion Management Process). In FY 2013, staff initiated work on the “Plan 2035 Citizens Guide” and anticipates this guide will be completed in early FY 2014 (see UWP task 1.2 for further details).
4. *Task 2.1, Socioeconomic Data Development; New Demographic Data and Forecasts* – With the completion and adoption of the 2013 LRTP/CMP Update in July 2012, work on the next plan (i.e., 2040 LRTP/CMP Update) should start. One of the first steps in developing the next LRTP is to develop new demographic data and forecasts that will be used in running the regional travel demand model (RTDM) and conducting other demographic analyses for the next LRTP. In early FY 2014, staff will initiate this process working through the Socioeconomic Data Work group to develop base year data and horizon year forecasts. Further information is provided in UWP task 2.1.
5. *Task 2.2, Long-Range Transportation Plan (LRTP) Update; Scenario Analysis* – To initiate work on the 2040 LRTP/CMP Update, staff will utilize the recently completed regional travel demand model (RTDM) to conduct a scenario analysis based on input from several sources, and use this as a starting point for discussion and consideration in developing the 2040 LRTP/CMP Update (which is due by July 2016). Further information is provided in UWP task 2.2.
6. *Task 2.3, Regional Travel Demand Model (RTDM); Application and Technical Support* – In October 2012, VDOT advised staff that work on the new RTDM has been completed and it was now available for staff to use (note that staff has not yet received from VDOT the interim year networks). Staff plans to use the new RTDM to support work in conducting the 2040 LRTP/CMP Update Scenario Analysis. Due to VDOT policies limiting support of RTDM technical assistance to work involved in air quality conformity analysis and not providing assistance for other RTDM planning activities, and due to staff's new responsibility for maintaining and applying the RTDM in support of various planning activities, staff plans to conduct an RFP or RFQ process to obtain an on-call consultant that can provide staff with assistance in various RTDM applications and activities. Further information is provided in UWP task 1.3.
7. *Task 4.1, Transportation Improvement Program (TIP); Regional Transportation Priority Projects* – At the MPO's March 13, 1997 meeting, the MPO took action to establish its first ever list of priority projects for the Richmond Region. Since then, the MPO has taken action on an annual basis to develop and submit to the Commonwealth Transportation Board (CTB) the MPO's list of regional transportation priority projects. The MPO's current list of priority projects has not changed since November 2009 when seven projects were added and shown as unranked. Due to the economic downturn that started at that time, the MPO has

taken a position every year to reaffirm the current list of projects and asked that the CTB focus its very limited resources on funding and moving those projects forward that had been shown in the FY 2009 – FY 2014 Six-Year Improvement Program as fully funded (ranked as the MPO’s number one priority) and doing what it can for the MPO’s other priority projects. With action taken in the 2013 General Assembly session to significantly expand transportation revenue (estimated at \$5.9 billion over the next five years) there will now be an opportunity to add new projects to the MPO’s list of priority projects with a reasonable expectation that the CTB can fund at least some of these projects in upcoming and future SYIPs. In FY 2014, the MPO will need to review its current list of priority projects (most of which can be expected to be shown as fully funded) and develop an expanded list of regional priority projects. Further information is provided in UWP task 4.1.

8. *Task 6.1, Intermodal Planning: VPA Port of Richmond Terminal Strategic Economic Development* – A major focus of work under UWP task 6.1 will be to continue support for the Port of Richmond and the VPA “64 Express” James River barge service. With the Port of Richmond starting to become a significant inland port that is strategically located along two of the country’s most important interstate highways (i.e., I-95 and I-64) and with I-85 not far away, and with service in the region by two major rail carriers (i.e., CSX and Norfolk Southern), the City of Richmond and nearby jurisdictions can become more attractive locations for manufacturing, warehousing and distribution centers. The MPO should be in a position to take advantage of economic development opportunities and promote the region’s strategic transportation resources, and the MPO needs to have adequate staff resources programmed in support of this activity (see UWP task 6.1 for further information).

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

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

The following documents cooperative work efforts provided for in the MPO’s FY 14 UWP.

- 1.1 MPO Maintenance/Special Studies – Staff for the Richmond Area and Tri-Cities Area MPOs share information of interest including MPO and TAC meeting agendas, work program and TIP documents, correspondence for various work program and study activities, etc. Staffs for these two MPOs also participate on various VDOT and DRPT technical/study advisory committees.
- 1.3 Unified Work Program (UWP) – The Richmond Area and Tri-Cities Area MPOs have an agreed procedure for the distribution of FHWA/PL funds that VDOT allocates to the Richmond Urbanized Area (which includes both MPOs).
- 2.1 Socioeconomic Data – Base year and forecast year data for the Richmond Area and Tri-Cities Area MPOs is jointly developed with common agreed-to base and forecast years and demographic factors.
- 2.2 Long-Range Transportation Plan (LRTP) – The LRTP regional travel demand model developed and maintained by VDOT covers both the Richmond Area and Tri-Cities Area MPO’s study areas. VDOT, the RRPDC and Crater PDC staffs have established an informal users group to coordinate technical work activities and to address any modeling issues that may arise.
- 3.3 Intelligent Transportation Systems (ITS) – VDOT has developed the *Virginia Central Region ITS Architecture Implementation Plan* and the *Virginia Central Region ITS Architecture Maintenance Plan*. Both plans cover all of the Richmond Area MPO and Tri-Cities Area MPO (plus other rural areas). A regional ITS technical work group has been established that covers major roads in the Richmond

Region. Coordination with ITS related activities with the Tri-Cities MPO area should be through VDOT as ITS work activities covered for the VDOT designated Central Region (i.e., includes study areas for both Richmond and Tri-Cities).

- 6.1 Intermodal Planning – The MPO continues to involve the Tri-Cities Area MPO in various freight-related planning activities. Freight related work groups include participation by Crater PDC staff when appropriate. Staff also works with businesses and industries that serve or are located in the Tri-Cities Area and impact the Richmond Region’s highway and rail networks, and may be potential users of the VPA Port of Richmond terminal.

- 7.1 Air Quality Plan and Program Activities – As part of VDEQ’s work to develop the State Implementation Plan (SIP) for the Richmond Nonattainment Area, VDEQ serves as lead staff for MRAQC, the CAAA Section 174 lead planning organization. Local elected officials representing each nonattainment area jurisdiction plus representatives from both MPOs, VDOT, and VDEQ also serve on the LPO. RRPDC, VDOT, and Crater PDC staffs also coordinate project reviews when conducting an air quality conformity analysis for a proposed TIP or LRTP amendment, or for the upcoming TIP or LRTP update. Also, both the RRPDC and Crater PDC staffs, and previously designated nonattainment/maintenance area jurisdictions from the Richmond/Petersburg area participate in the Ozone Advance program (administered by VDEQ).

FREQUENTLY USED MPO TERMS AND ABBREVIATIONS

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

| | |
|------------|---|
| TCM | Transportation Control Measures (for Air Quality Control); eligible for CMAQ funding. |
| TDM | Transportation Demand Management; various transportation control strategies and measures used in managing highway demand. |
| TIP | Transportation Improvement Program; a staged, multiyear, intermodal program of transportation projects that is consistent with the transportation plan. |

Transportation Plan

The MPO's adopted Long-Range Transportation Plan (under federal MPO planning regulations, referred to as the Metropolitan Transportation Plan or "MTP"); 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 overall 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 |
|-------------|-----------------------------------|

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|--------------------|---|
| DRPT | Virginia Department of Rail and Public Transportation |
| EPA | Environmental Protection Agency |
| FAA | Federal Aviation Administration |
| FHWA | Federal Highway Administration |
| FRA | Federal Railroad Administration |
| FTA | Federal Transit Administration |
| GRTC | GRTC Transit System (formerly Greater Richmond Transit Company) |
| MRAQC | Metropolitan Richmond Air Quality Committee |
| RideFinders | A public nonprofit corporation that provides carpool/vanpool matching and other commuter and transportation services; also, a division of GRTC Transit System |
| MARAD | Maritime Administration |
| RMA | Richmond Metropolitan Authority |
| RRPDC | Richmond Regional Planning District Commission; also referred to as the Richmond Region |
| USDOT | United States Department of Transportation |
| VCTIR | Virginia Center for Transportation Innovation and Research |
| VDA | Virginia Department of Aviation |
| VDEQ | Virginia Department of Environmental Quality |
| VDOT | Virginia Department of Transportation |

FEDERAL LEGISLATION

| | |
|---------------------|--|
| ADA of 1990 | Americans with Disabilities Act |
| ARRA of 2009 | American Recovery and Reinvestment Act (ARRA); enacted on February 17, 2009. Provides additional federal-aid funds in support of highway and transit programs. |
| CAAA of 1990 | Clean Air Act Amendments |

| | |
|-------------------|--|
| ISTEA | Intermodal Surface Transportation Efficiency Act; passed in 1991; reauthorized federal surface transportation programs for highways, highway safety and transit for a six-year period, 1992 to 1997. ISTEA provided for significant expansion of MPO planning and programming authority and responsibilities. Replaced by TEA-21. |
| TEA-21 | Transportation Equity Act for the 21 st Century; signed into law on June 9, 1998 (replaced ISTEA). Authorizes federal funds for highways, highway safety, transit, and other surface transportation programs for the next 6 years. Builds on and continues many of the initiatives established in the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991. Replaced by SAFETEA-LU. |
| SAFETEA-LU | Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users; federal transportation reauthorization signed into law on August 10, 2005. Replaced by MAP-21. |
| MAP-21 | Moving Ahead for Progress in the 21st Century; federal transportation reauthorization signed into law on July 6, 2012 and went into effect on October 1, 2012. |

FUNDING PROGRAMS

| | |
|----------------------------|---|
| SPR | State Planning and Research; federal funds allocated to VDOT in support of MPO program activities. |
| Local Match | Funds required by recipients of PL and Section 5303 funds for matching federal and state grant funds. Section 5303 and PL funds require a 10% match, with VDOT/DRPT providing 10% and the remaining 80% provided by the federal source. |
| RRPDC | Funds from the RRPDC (state appropriations and local dues) provided in addition to required local match funds (sometimes noted as RRPDC overmatch). |
| PL | Planning funds available from FHWA for MPO program activities. |
| CMAQ | Congestion Mitigation/Air Quality; federal funding program created under ISTEA (1991). Directs funding to projects that contribute to meeting National Ambient Air Quality Standards. CMAQ funds generally may not be used for projects that result in the construction of new highway capacity for single occupant vehicles. CMAQ funds may be available for eligible planning activities that lead to and result in project implementation. |
| Section 5303 | Planning funds available from the FTA for MPO program activities. |
| Multimodal Planning | Multimodal Planning Grant; VDOT discretionary grant program (state funds matched by local funds) providing assistance and support for innovative multimodal transportation planning initiatives. |

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

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.

CMP Congestion Management Process

CHSMP Coordinated Human Services Mobility Plan

COA Comprehensive Operational Analysis (for transit studies)

CTB Commonwealth Transportation Board

EJ Environmental Justice

FFY Federal Fiscal Year (October 1 to September 30)

FY Fiscal Year (July 1 to June 30).

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

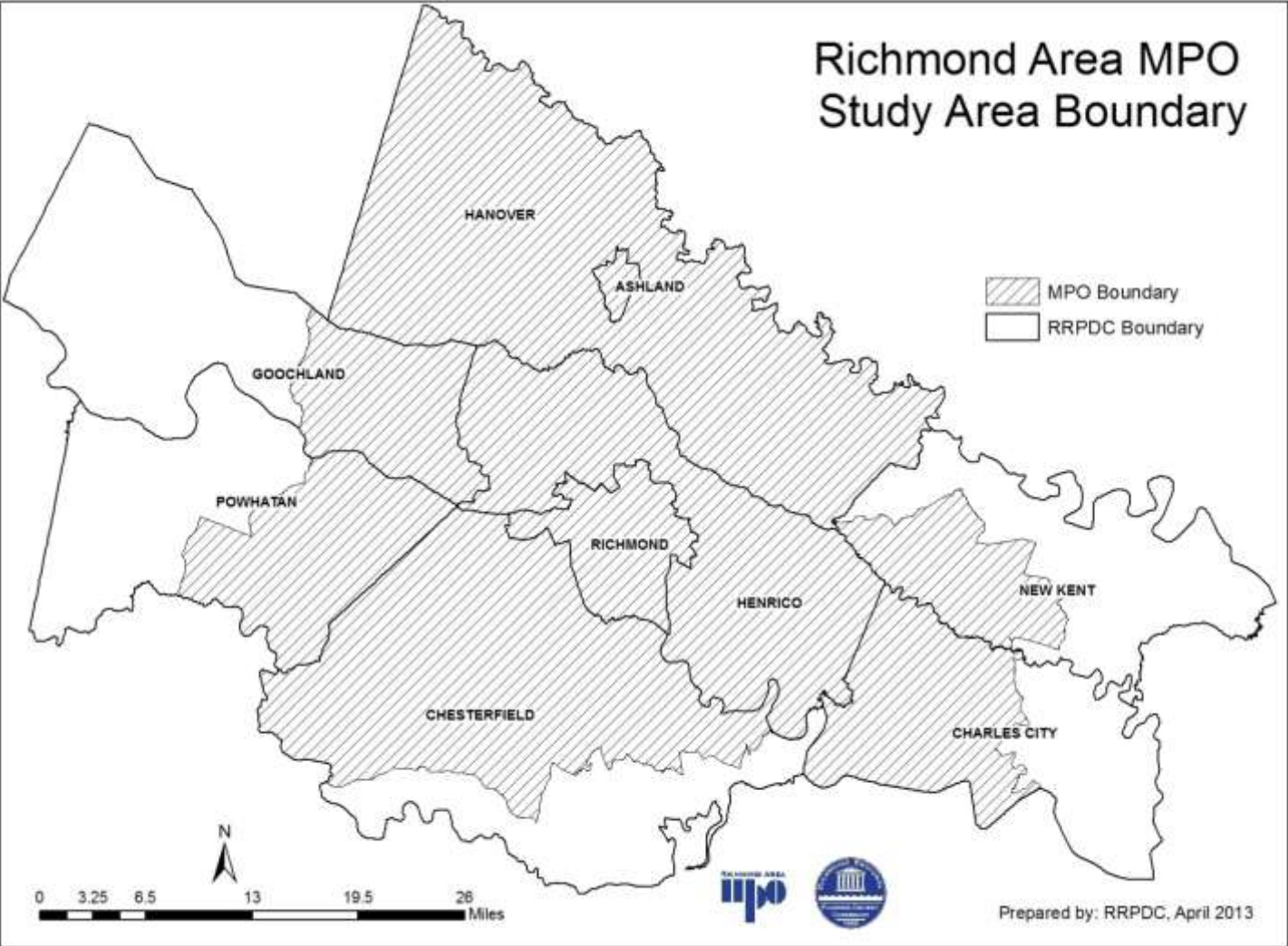
NHTS National Household Transportation Survey

NO_x Nitrogen Oxides

REVi Richmond Electric Vehicle Initiative

| | |
|--------------|---|
| 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 |
| STIR | Sustainable Transportation Initiative of Richmond. Partner organizations include GRTC Transit System, VCU, Greater Richmond Partnership, Dominion Resources, RRPDC, Richmond Times-Dispatch, Southeastern Institute of Research and others. |
| STP | Surface Transportation Program |
| SYIP | Six Year Improvement Program; annual document approved by the CTB. Provides the state's list of federal and state funded transportation projects and programs administered by VDOT and DRPT. |
| TDP | Transit Development Plan; DRPT requirement for all public transit service operators. GRTC Transit System's TDP was approved by the GRTC Transit System board in October 2011, and it was accepted as work received by the Richmond Area MPO on November 11, 2011. |
| TMA | Transportation Management Area (i.e., MPOs greater than 200,000 in population). |
| VAMPO | Virginia Association of Metropolitan Planning Organizations |
| VMT | Vehicle Miles Traveled |

Richmond Area MPO Study Area Boundary



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 and RRPDC Executive Director. Major work activities include program administration (e.g. agendas, minutes, mailing, monthly reports, program management and administration, etc.); PL, Section 5303, and RSTP funds 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.

The estimate for all staff direct costs is estimated at \$95,300. Staff direct costs are reported to VDOT and DRPT as part of its submission of quarterly work progress reports.

Under the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991, the MPO's planning and programming responsibilities were significantly increased and its scope became broader and more comprehensive. Most of these requirements were continued as part of the Transportation Equity Act for the 21st Century (TEA-21); signed into law on June 9, 1998. On August 10, 2005, President Bush signed into law the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). SAFETEA-LU guarantees funding for highways, highway safety, and public transportation totaling \$244.1 billion (as of its signing, does not include additional funding from extensions) and represents the largest surface transportation investment in U.S. history. SAFETEA-LU builds on the two landmark bills that brought surface transportation into the 21st century by shaping the highway program to meet the Nation's changing transportation needs—the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) and the Transportation Equity Act for the 21st Century (TEA-21). The planning provisions of SAFETEA-LU retain and revise metropolitan and statewide transportation planning statutory requirements. Most of the provisions mirror previous law, but key statutory changes are included. And, although most of the transportation planning requirements became effective immediately when SAFETEA-LU was signed into law on August 10, 2005, many of these provisions required rulemaking to implement the changes. Draft regulations implementing MPO planning and programming provisions under SAFETEA-LU were published in the Federal Register on June 9, 2006 and the final regulations were published on February 14, 2007. SAFETEA-LU expired on September 30, 2009. Congress has passed and the President has signed nine continuing resolutions that extended SAFETEA-LU.

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On July 6, 2012, President Obama signed into law the Moving Ahead for Progress in the 21st Century Act (MAP-21). MAP-21 extended SAFETEA-LU for the remainder of FFY 2012 with new provisions for FFY 2013 starting on October 1, 2012. MAP-21 creates a streamlined, performance-based and multimodal program to address many challenges facing the U.S. transportation system. These challenges include improving safety, maintaining infrastructure condition, reducing congestion, improving efficiency of the system and freight movement, protecting the environment and reducing delays in project delivery. MAP-21 builds on and refines many of the highway, transit, bike, and pedestrian programs and policies established in 1991 under ISTEA.

One major new feature under MAP-21 that will impact the MPO's planning and programming process is the establishment of performance management measures and targets. MAP 21 establishes national goals to focus the Federal-aid highway program. These seven (7) goals are established under title 23, U.S.C., section 15-(b) "National goals and performance management measures" as follows:

- (1) Safety – To achieve a significant reduction in traffic fatalities and serious injuries on all public roads.
- (2) Infrastructure condition – To maintain the highway infrastructure asset system in a state of good repair.
- (3) Congestion reduction – To achieve a significant reduction in congestion on the National Highway System.
- (4) System reliability – To improve the efficiency of the surface transportation system.
- (5) Freight movement and economic vitality – To improve the national freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development.
- (6) Environmental sustainability – To enhance the performance of the transportation system while protecting and enhancing the natural environment.
- (7) Reduced project delivery delays – To reduce project costs, promote jobs and the economy and expedite the movement of people and goods by accelerating project completion through eliminating delays in the project development and delivery process, including reducing regulatory burdens and improving agencies' work practices.

MAP-21 also revises portions of title 23, U.S.C. Section 134 "Metropolitan transportation planning" to address performance management measures and targets. Subsection (h), "Scope of the Planning Process," includes requirements for a performance based approach as follows:

FY 14 UWP Task 1.1

- The MPO shall establish performance targets that address the applicable performance measures described in section 150(c) to use in tracking progress towards attainment of critical outcomes for the MPO's region.
- Selection of performance targets by the MPO shall be coordinated to the maximum extent practicable, with the state to ensure consistency.
- Selection of performance targets by the MPO shall be coordinated to the maximum extent practicable, with public transportation providers to ensure consistency with sections 5326(c) (Transit asset management) and 5329(d) (Public transportation safety program) of title 49 U.S. Code.
- Each MPO shall establish performance targets based on requirements in title 23, sections 150(d) and title 49 sections 5326(c) and 5329(d) not later than 180 days after the date on which the relevant state or provider of public transportation establishes the performance targets.
- MPOs shall integrate in their planning and programming process, directly or by reference, the goals, objectives, performance measures, and targets described in other state transportation plans and transportation processes, as well as any plans developed under chapter 53 of title 49 by providers of public transportation, required as part of a performance-based program.

Section 150(c) of title 23 describes the process and timeline by which seven national goals (noted above) are to be developed into performance measures and standards with the USDOT Secretary issuing final regulations within 18 months of MAP-21's enactment (i.e., MAP-21 went into effect on October 1, 2012, so rulemaking is to be issued by March 31, 2014). This includes providing states, MPOs, and other stakeholders at least 90 days to comment on any regulation proposed by the Secretary.

Section 150(c) also identifies under subsection (3) "National highway performance program" minimum standards for states to use in developing and operating bridge and pavement management systems, and measures for states to use to assess the condition of pavement and bridges on the Interstate and NHS, the performance of the Interstate and NHS, and data elements necessary to collect and maintain standardized data to carry out a performance-based approach. Section 150(c) also includes requirements for the "Highway safety improvement program" (establishing measures for states to use to address serious injuries and fatalities per vehicle mile traveled, and the number of serious injuries and fatalities), the "Congestion Mitigation and Air Quality program" (establishing measurements for States to assess traffic congestion and on-road mobile source emissions) and "National freight movement" (establishing measures for states to use to assess freight movement in the Interstate System).

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Section 150(d) of title 23, “Establishment of Performance Targets,” states that not later than one year after the Secretary has promulgated the final rulemaking under subsection (c) (i.e., Establishment of Performance Measures) each State shall set “performance targets that reflect the measures identified in paragraphs (3), (4), (5), and (6) of subsection (c) which are the following:

- National highway performance program (NHPP)
- Highway safety improvement program (HSIP)
- Congestion mitigation and air quality program (CMAQ)
- National freight movement

Assuming that the final rules for section 150(c) are issued in March 2014, this means that by March 2015, the Secretary must issue final rules that establish performance targets for the measures used for the NHPP, HSIP, CMAQ and National freight movement.

As USDOT works to develop and seek input on proposed regulations for the establishment of performance measures and targets, RRPDC staff will monitor these activities, review and report on them to the MPO as appropriate, and participate in webinars, conferences, and training sessions as needed. Staff will then work with FHWA, FTA, VDOT and DRPT to incorporate these new requirements into the MPO’s planning and programming process with work to address these requirements conducted under UWP tasks 2.1 Long-Range Transportation Plan (LRTP) Update, 3.1 Congestion Management Process (CMP) Update, and 4.1 Transportation Improvement Program (TIP).

The MPO is charged with developing transportation plans and programs, which provide for the development of transportation facilities which function as a “seamless” intermodal system. The process for developing these plans must consider all modes of transportation, and must, to the maximum extent feasible, be continuing, cooperative, and comprehensive (i.e., “3-C” process). As a TMA level MPO, the process must also consider the results of the Congestion Management System in the planning and programming of transportation projects.

Significant work activities for FY 2014 (beyond the usual program management and administrative work activities) include the following:

1. Sustainable Transportation Initiative of Richmond (STIR) – STIR is working to develop projects and programs in the Richmond Region that provide for the integration of alternative/environmentally friendly vehicles and transportation systems. Participation on STIR includes GRTC Transit System, VCU, Greater Richmond Partnership, Dominion Resources, RRPDC, Richmond Times-Dispatch, Southeastern Institute of Research, Inc., and others. In late FY 13, work on the Richmond Electric Vehicle Initiative (REVi) Regional Strategic Plan

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will be completed. Portions of REVi will be advanced through STIR, area local governments, and other groups and organizations to provide the infrastructure and support programs needed for electric vehicles. Staff will be an active participant in STIR providing advice and assistance to help advance REVi for the Richmond Region.

2. MAP-21 Requirements – Review and report as appropriate on new MAP-21 planning and programming requirements. This will include the development of new federal Performance Management Measures and Targets (to be included as part of the MPO’s LRTP, CMP and TIP).
3. Disadvantaged Business Enterprise (DBE) Program and Goals – Review and incorporate into RRPDC administrative procedures and contracts DBE program and Small Business Utilization program requirements and triennial DBE goals (new requirements as a result of the MPO now receiving over \$250,000 in federal Section 5303 planning funds). This will include a formal public notice for these new programs, and will also require including appropriate language in future consultant service agreements.
4. Title VI Training – Ongoing training activities to address Title VI administrative and planning requirements.
5. Special Studies – Staff participation in various special studies as needed. In FY 2013, this has included the following:
 - I-64 Peninsula Study/Draft EIS
 - I-95/I-64 Overlap Study
 - Routes 360/288 Interchange Study
 - VTrans 2035 Plan

B. End Products

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

C. Work Elements

Work activities include the following:

1. Provide for general maintenance and administration of the MPO “3-C” process, MPO, and MPO committees and work groups, including direct costs to support the process.

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2. Provide for the preparation and documentation of MPO meetings and other committee meetings as appropriate.
3. Perform review activities under various local, state, and federal programs including Commonwealth Intergovernmental Review Process, State Route projects and Environmental Impact Statements and Assessments.
4. Coordinate review and presentation activities with RRPDC and other regional, local and state agencies involved with transportation planning and programming.
5. Prepare various reports including VDOT and DRPT Quarterly Progress Reports, and MPO financial and work progress reports.
6. Provide for contract administration of PL, Section 5303, RSTP state program funds, and third party agreements.
7. Participate in consultant staffed work tasks including preparation (if designated as lead administrative staff) 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, webinars/webcasts, workshops, and conferences related to MPO activities. Attend and participate on various VDOT, VCTIR, and other advisory committees, task forces, regional and transportation planning associations (e.g., VAPDC, VAMPO, VASITE, ITSVA), etc. Attend Title VI training courses offered by VDOT and/or DRPT.
11. Provide for use of legal counsel and audit services, under the direction of the RRPDC Executive Director, for administering federal and state contracts, meeting reporting requirements, and other activities and services necessary and appropriate for staffing the MPO.
12. Provide staff assistance for and participation in special studies, projects and programs in response to requests by area local government, the RRPDC, MPO member organizations, and others as determined by the RRPDC Executive Director. Also, attend board meetings of state and regional transportation agencies to monitor current programs and activities.

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13. Collect and update files and reports as necessary.
14. Staff support for purchase, maintenance, upgrading, and repair of computers. Also, share in attributable costs for support of computer network and support activities. RRPDC computer support services (for office network, servers, and other computer equipment) are provided by Convergent Technologies Group under contract for services with the RRPDC.
15. Develop various maps in GIS format for MPO reports, special studies, major projects and presentations.
16. Respond to information requests from area local governments, VDOT, DRPT, 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, MPO Committees and the RRPDC Executive Director.
22. Review federal regulations and guidance related to MPO planning and programming requirements and update/revise the MPO's work program, procedures and activities as appropriate addressing MAP-21 and other federal requirements.
23. Sustainable Transportation Initiative of Richmond (STIR) – STIR is working to advance projects and programs in the City of Richmond and surrounding counties that provide for the integration of alternative/environmentally friendly vehicles and transportation systems. Membership on the STIR board includes City of Richmond, GRTC Transit System, VCU, Greater Richmond Partnership, Venture Richmond, RRPDC, Richmond Times-Dispatch, J. Sargeant Reynolds Community College, Southeastern Institute of Research, Inc., and others. RRPDC staff participation on STIR is focused on developing and advancing proposed projects and activities to encourage regional dialogue and discussion. Staff is working with Richmond Region local jurisdictions members of STIR and other stakeholders to advance the development and implementation of projects and programs to meet infrastructure needs related to the Richmond Region's Electric Vehicle Initiative (REVi). Work by the RRPDC and other partner

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organizations (i.e., Virginia Clean Cities, Dominion Resources, and J. Sargeant Reynolds community College) was completed in March 2013 and submitted to the U.S. Department of Energy; however, follow-up activities to advance REVi Strategies and actions in the Richmond Region will be ongoing.

- 24. Virginia Association of Metropolitan Planning Organizations (VAMPO) – VAMPO was formally established in mid-FY 2011 with the MPO taking action at its December 9, 2010 meeting to join. Staff will be an active participant and assist in various upcoming VAMPO activities that are currently being developed. Membership dues for each MPO are set at \$500 per year; VAMPO generally holds two to three meetings a year.
- 25. Title VI Report – Prepare and submit to FTA’s Regional Civil Rights Officer through DRPT the MPO’s report on compliance with Title VI requirements. Work to review and report demographic data available from the census will be conducted under both UWP tasks 1.1 and 2.1. The MPO’s draft Title VI was submitted to DRPT on September 20, 2012.

D. Agency Participation

RRPDC, VDOT, DRPT, local governments, GRTC, CRAC, RMA, FHWA, FTA, FRA, EPA, VDEQ, VDA, RideFinders.

E. Budget, Staff and Funding

| | <u>PL^{③⑤⑦}</u> | <u>5303^⑤</u> | <u>SPR^①</u> | <u>FY 13 CO 5303^④</u> | <u>TOTAL</u> |
|----------------------------|-------------------------|-------------------------|------------------------|--------------------------------------|------------------|
| RRPDC | 396,224 | 92,362 | – | 46,815 | 535,401 |
| Contingency ^{②③⑥} | – | – | – | – | – 0 – |
| VDOT | – | – | <u>245,000</u> | – | <u>245,000</u> |
| TOTAL | <u>396,224</u> | <u>92,362</u> | <u>245,000</u> | <u>46,815</u> | <u>\$780,401</u> |

- ① Provides for VDOT Richmond District support on all MPO work tasks.
- ② \$44,701 programmed as contingency for RRPDC staff (amount first programmed on 5/2/13).
- ③ 11/7/13 MPO action to shift \$46,815 in PL funds from RRPDC staff to staff contingency (revised PL contingency now \$91,516).
- ④ 11/7/13 MPO action to program \$46,815 in FY 13 FTA Section 5303 carryover funds for RRPDC staff.
- ⑤ 4/10/14 MPO action to add \$32,516 in PL funds and to add \$13,000 in 5303 funds (shifted from other RRPDC staff work tasks).
- ⑥ 4/10/14 MPO action to transfer available PL contingency funds to the FY 2015 UWP.

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- ⑦ 5/15/14 administrative adjustment; adjust PL funds by reducing RRPDC staff amount by \$115. Adjusted based on staff's use of VDOT's preliminary estimate of FHWA/PL funds allocation instead of VDOT's final allocation amount as shown in VDOT's May 14, 2013 Letter of Authorization.

F. Schedule

Ongoing activity.

1.2 MPO Citizen Participation

A. Background

This task provides staff support to ensure an active and involved citizen participation program, which meets federal and state requirements for public involvement in the transportation planning process. MAP-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 citizen participation process includes the use of two active and involved committees (i.e. CTAC and EDAC); annual public meetings for the TIP and LRTP; posting of MPO/MPO committee meetings and agendas and plan/document summaries on the RRPDC/MPO web site; submitting draft TIP's and other documents as directed by the MPO for public review and making these documents accessible to the public at various locations (e.g., local libraries); providing opportunity for open public comment at all regularly scheduled MPO, TAC, CTAC and EDAC meetings; and other activities documented in the *MPO Public Participation Plan*.

SAFETEA-LU expanded public participation requirements for the TIP and LRTP (i.e., additional consultations, development of public participation plan, employing visualization techniques, etc.). In response to these new requirements, the MPO took action at its April 12, 2007 MPO meeting to adopt the *MPO Public Participation Plan*. This plan builds on the MPO's previously adopted "Guidelines for Public Participation." The plan includes activities for consultation with interested parties and federal, state, and local agencies as part of the LRTP and TIP development process. It also provides for outreach activities that include activities to inform and seek comments from minority and low-income groups and limited English-speaking population groups. It also provides for information, (meeting agendas and notices, reports, studies, etc.) to be made available in an electronically accessible format. Staff currently posts MPO plans, programs, reports, MPO board and committee meeting agendas and minutes, and other materials on the RRPDC website.

Under the RRPDC and Greater Richmond Chamber of Commerce, RRPDC and Chamber staffs initiated the development of The Capital Region Collaborative (CRC) Strategic Plan for the Richmond Region (i.e., Planning District 15). RRPDC and Chamber staffs held 85 meetings during 2011 with groups, organizations and officials from throughout the Richmond Region to gain their input to identifying important regional issues. One of the issue categories being addressed in the findings from this extensive public input process has been coordinated transportation for the region's transportation systems. In addition to these meetings with various groups, organizations and officials, the CRC conducted a scientific survey of regional attitudes (work conducted by the Southeast Institute of Research). In early FY 2013, the CRC issued its report on "Building the Framework for Regional Collaboration," which identified seven priority areas for the Richmond Region. The CRC is engaged in a process to develop the action steps under each of these priority areas (including

Coordinated Transportation and Social Stability; note that results from the Social Stability priority area will be utilized in developing MPO plans and programs related to the Richmond Region's public transportation needs, especially for the Region's seniors, low-income, and individuals with disabilities).

B. End Products

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

C. Work Elements

Work activities include the following:

1. Citizens Transportation Advisory Committee (CTAC) – Provide administrative and technical support of the MPO CTAC.
2. Web Site – Post meeting agendas and minutes, notices, reports, newsletters, plan documents, and other information on the RRPDC web site. Staff will also seek ways to expand use of the website to provide for more efficient methods to improve public information, and provide ways to increase citizen input.
3. Information Requests – Respond to requests for information on plans, studies, reports, and data.
4. Public Reviews – Conduct annual MPO review meetings providing initial citizen input for MPO plans and programs. Also, conduct other public review meetings as necessary for the LRTP/CMS and TIP. Review meetings include outreach activities for low-income and minority communities and Limited English Proficiency (LEP) populations. Prepare notice for public reviews advertised in newspapers, posted on web site, and submitted to interested parties and others. Draft documents or summaries distributed to area libraries and posted on web site.
5. Visualization Techniques – Provide for use of appropriate visualization techniques when presenting and describing MPO plans and programs.
6. Consultation with Interested Parties/Agencies – Conduct consultation activities with various interested parties and government agencies as part of the TIP and LRTP development process.
7. Evaluations – Identify measures to evaluate the effectiveness of public involvement and outreach efforts, including efforts to ensure that public outreach efforts are addressing the diverse needs of the community.

FY 14 UWP Task 1.2

8. MPO Orientation Meeting – Conduct periodic orientation meeting for new RRPDC, MPO and MPO committee members.
9. MPO Background Information – Develop, publish, and distribute/post on web site, background information materials on the MPO.
10. Notices – Provide/distribute notice for all MPO and MPO committee meetings to area news media and interested parties and post MPO board and committee meeting agendas and meeting minutes on the RRPDC website. When appropriate, prepare and distribute press releases.
11. MPO Public Participation Plan (PPP) Review – The MPO’s current PPP (last reviewed and modified in April 2007) will be reviewed to examine the effectiveness of current public participation activities, and will also look at revising some of CTAC’s current at-large (i.e., non-jurisdiction) member organizations. Staff anticipates that review will be initiated in late FY 2013 and will continue into FY 2014. This review will also include possibly expanding CTAC’s membership to include representation from the region’s Latino and Asian communities (to help address federal corrective actions related to Title VI requirements). Note that “...specific and separate outreach practices should be documented in the PPP...” (see page 11, Public Involvement section of the March 25-26, 2009 FHWA/FTA Joint Certification Review of the MPO planning and programming process). The MPO must also “...submit a plan to identify the location and needs of limited English proficiency (LEP) population and how it will engage those individuals in the transportation planning process...” (see page 11, Public Involvement section of the FHWA/FTA Joint Certification Review). The PPP review should also examine current practices to evaluate the effectiveness of public involvement and outreach efforts and consider proposed new measures (consideration should include the amount of staff time required and staff assigned to conducting carrying out such evaluation assessments). The PPP review should also include consideration for establishing a separate website for the MPO.
12. Plan 2035 Citizens Guide – Summary report document of the MPO 2035 LRTP and CMP update (work underway in FY 13 and completion expected by early FY 14).
13. MPO Board Meeting Reports – RRPDC staff prepares and distributes to the MPO, MPO committees and interested parties, reports summarizing recent MPO board meetings.
14. Annual Public Review Meeting – Conduct series of public review meetings for citizen input on MPO plans, programs and activities. Staff plans to work on incorporating these meetings into current CTAFC and EDAC meetings and working through existing groups, organizations and events.

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- 15. MPO Information Fact Sheets – Prepare informational fact sheets on MPO plans, studies, programs, activities and processes (for use at public information/outreach meetings and responding to information requests). Fact sheets will be posted on the RRPDC website. Note that in FY 2012, the MPO overview/background fact sheet was translated into Spanish and made available.
- 16. MPO Meeting Reports – Summaries of MPO meetings prepared and provided to CTAC and EDAC.
- 17. CTAC and EDAC Meeting Reports – CTAC and EDAC meeting summaries and resolutions prepared and submitted to the MPO and reported at MPO board meetings.

D. Agency Participation

RRPDC, VDOT, DRPT, local governments, GRTC, CRAC, FHWA, FTA, RMA, RideFinders, CTAC at-large organizations.

E. Budget, Staff and Funding

| | <u>PL^①</u> | <u>5303^①</u> | <u>FY 13 CO 5303</u> | <u>TOTAL</u> |
|-------|-----------------------|-------------------------|--------------------------|--------------|
| RRPDC | 65,000 | 20,000 | 5,000 | \$90,000 |

^① 4/10/14 MPO action to reduce PL funds by \$18,000 and to reduce Section 5303 funds by \$10,000 (shifted to other RRPDC staff work tasks; portion of PL funds transferred to FY 2015 UWP).

F. Schedule

Ongoing activity.

1.3 Unified Work Program (UWP)

A. Background

This task provides for the maintenance of the adopted UWP and for the annual preparation of the MPO's work program for the upcoming fiscal year (i.e., FY 2015, from July 1, 2014 to June 30, 2015). The UWP also identifies the region's planning priorities, documents cooperation between the Richmond Area and Tri-Cities Area MPOs on various work activities and notes various transportation study activities as informational items.

Development of the FY 2014 UWP included consultation with VDOT and DRPT on the amount of FHWA/PL funds and FTA section 5303 funds allocated to the Richmond Area MPO. With the results from the 2010 census and urbanized area populations now available to the state and MPOs, VDOT and DRPT worked with MPOs and VAMPO to develop several scenarios for the allocation of PL and 5303 planning funds. As of mid-April, 2013, the MPO has not received formal notice from VDOT that FHWA has approved VDOT's proposed process for allocation of PL funds, nor has the MPO received formal notice from DPRT that FTA has approved DRPT's proposed process for allocation of 5303 funds. Staff has used the latest available estimates and guidance from VDOT and DRPT in preparing the staff budget for the FY 2014 UWP. When VDOT and DRPT provide the MPO with the final approved PL and 5303 allocations, the FY 2014 UWP may need to be amended to accommodate these final allocations.

Note that staff is proposing to use RSTP funds for on-call consultant services in providing technical support and assistance in using and applying the new regional travel demand model (RTDM). Staff received the latest version of this model from VDOT in October 2012 and has used earlier versions for conducting amendments to the 2031 LRTP. However, staff has not yet used and applied many of the new model features (including applications for transit, time of day peak periods, and truck/freight analysis) and VDOT policy does not provide VDOT support for such technical service assistance. The MPO currently has \$300,000 in previously allocated RSTP funds available under the MPO Multimodal Transportation Plan. All of these funds would only be available for consultant services (i.e., no RSTP funds to be used for staff support). If staff is allowed to proceed with hiring an on-call consultant to provide technical support for the RTDM, staff would amend the FY 2014 UWP to program this support, provide proposed work activities for consultant service, specify the anticipated budget, and outline the consultant review and selection process. Note that conducting this process may require additional funds for MPO administrative services (to be drawn from anticipated Section 5303 carryover funds or from anticipated contingency funds).

B. End Products

1. Maintain/amend the FY 14 UWP.
2. FY 15 UWP document.

3. Prepare/update staff work assignments, budgets, cost estimates and schedules.

C. Work Elements

Work activities include the following:

1. Review VDOT, DRPT, FHWA, FTA, EPA, and other state and federal agency information and requirements, plus other materials relating to UWP preparation. Note this includes review of new planning and programming regulations and requirements as a result of MAP-21.
2. Solicit input for proposed work tasks through the MPO's annual public information and outreach meetings and based on comments and suggestions offered as part of regular CTAC and EDAC meetings.
3. Prepare a preliminary staff budget and list of proposed work tasks for the Commission's current and upcoming work programs.
4. Provide for consideration of local government, GRTC, VDOT, and DRPT input on proposed transportation planning studies of interest to the MPO (funded with federal transportation funds other than FHWA/PL and FTA Section 5303), which includes studies programmed in the Transportation Improvement Program (TIP).
5. Identify and document planning priorities.
6. Prepare work tasks and budgets.
7. Identify funding sources and amounts.
8. Prepare final work program document and submit for MPO approval.
9. Secure needed approvals from MPO, VDOT, DRPT, 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 (for both state and federal grant programs).
12. Distribute final UWP document and post on RRPDC web site.
13. Amend adopted UWP as per MPO action.
14. Prepare and update staff work assignments, direct costs, and schedule.

D. Agency Participation

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

E. Budget, Staff and Funding

| | <u>PL</u> | <u>5303^①</u> | <u>FY 13 CO 5303</u> | <u>TOTAL</u> |
|-------|-----------|-------------------------|--------------------------|--------------|
| RRPDC | 45,000 | 10,000 | – | \$55,000 |

① 4/10/14 MPO action to reduce Section 5303 funds by \$10,000 (shifted to other RRPDC staff work tasks).

F. Schedule

On-going activity for amending the adopted UWP

November 2013 to May 2014 for FY 15 RRPDC Work Program.

January 2014 to May 2014 for FY 15 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. For instance, socioeconomic data provides input for planning models, EIS, corridor studies, air quality conformity analysis, transit studies, etc., and is used to respond to information requests for market and other demographic studies.

The RRPDC staff works with area local governments to coordinate the development of socioeconomic data and forecasts. Data prepared by area local governments (or by RRPDC staff if local government requests such assistance) is as follows:

- Total households
- Group quarters population
- Population in housing units
- Total housing units
- Total public and private school enrollment
- Students grades pre-K – 12 (by location of school)
- College students (by location of school)

Data prepared by RRPDC staff is as follows:

- Total population
- Total households
- Total employment
- Retail employment
- Non-retail employment
- Automobiles
- Total public and private school enrollment
- Students grades pre-K – 12 (by school location)
- College students (by school location)

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

With the adoption of the MPO’s 2035 LRTP/CMP update in July 2012, work will now proceed on the development of the next (i.e., 2040) LRTP/CMP update. Work underway as part of the FY 2012 and 2013 UWPs included completion of CTPP designated TAZs and TADs, revisions to the MPO study area boundary in

Chesterfield County, and establishing the smoothed urbanized area boundary. Significant MPO work activities to develop new socioeconomic data are identified and briefly described below. Also in FY 2013, staff completed and submitted to DRPT (as part of their submission to FTA) Title VI demographic profiles for Limited English Proficiency (LEP), minority, and low-income population groups. Work to update this data and the profiles should continue into FY 2014.

Note that with the new/2010 census now conducted and with block level population data now available, staff will initiate (in late FY 2013) work to review and update the geographic boundaries of each transportation analysis zone (TAZ) in the Richmond Region (both inside and outside the MPO study area). Staff will need to review the geographic boundaries for each TAZ based primarily on RTDM needs, and work with the Socioeconomic Work Group to complete this review and transition to new TAZs in early FY 2014. Staff will also need to review the MPO's study area boundary (in Powhatan, Goochland, New Kent and Charles City counties) to determine if any expansion is warranted, and to also determine if expansion of the MPO study area should cover all of Planning District 15 (except for the portion of the Tri-Cities MPO in Chesterfield County) is appropriate (based on policy input from the MPO Executive Committee).

B. End Products

1. 2008/2035 Socioeconomic Data and Forecasts Report – Respond to information requests for TAZ level data and forecasts.
2. TAZ Delineation Analysis – Revised TAZ boundaries based on 2010 census blocks; new TAZs to be utilized for the 2040 LRTP Update. Note that CTPP delineated TAZs and Transportation Analysis Districts (TADs) were completed in FY 2013.
3. MPO Study Area Expansion – Review of MPO study area boundary in New Kent, Charles City, Goochland and Powhatan counties to determine if expansion is warranted and consideration for expansion of the MPO study area to include all of the Richmond Region (except for that portion of Chesterfield County covered by the Tri-Cities MPO). Review of the MPO study area boundary to cover the Richmond Region to be conducted through the MPO Executive Committee.
4. Title VI/Environmental Justice – Update demographic profiles of Richmond Region to identify areas of significant minority, low income, and limited English proficiency population groups and update profiles as 2010 census and/or ACS data becomes available.
5. Use of the 2010 Census and ACS data in support of various plans, studies, and reports.
6. Staff involvement in review activities for the year 2010 census.

7. Updated Base Year Data and Forecasts – Initiate work to develop new base year data and forecasts (for the 2040 LRTP Update).
8. RTDM Demographic Factors – Identify additional demographic factors to be used as input for the new RTDM (if warranted).
9. Census Transportation Planning Package (CTPP) – Review and analyze CTPP data as it becomes available.

C. Work Elements

1. RTDM Demographic Factors – If warranted, work with RTDM consultants to identify demographic factors to be used as input to the trip generation model of the new RTDM (e.g., demographic factors needed to conduct transit systems analysis as possible alternatives to employment data, etc.).
2. Respond to information requests and provide technical assistance as appropriate, which requires use of the MPO’s 2008 base year data and 2035 forecasts.
3. 2010 Census – Review and analyze available census data for use and applications in various MPO planning activities. Also develop and maintain census data repository.
4. American Community Survey (ACS) Census Data – Monitor, review and analyze ACS available data for use and applications in various MPO planning activities and for use in census data repository.
5. TAZ Geography – Review current transportation analysis zones (TAZ) to determine if current TAZs are appropriately sized for use in the Regional Travel Demand Model (RTDM) and make adjustments as needed (including elimination of inconsistencies with 2010 census geography).
6. MPO Study Area Boundary – Review if the MPO study area boundary should be revised (if there is sufficient density in these areas to justify their expansion) and also look into expansion of the MPO study area to include all of Planning District 15 (i.e., RRPDC), except for Chesterfield County which is already covered by both the Richmond and Tri-Cities MPOs.
7. Establish Base and Forecast Years for Upcoming LRTP – Staff tentatively proposes that the next LRTP have a base year of 2012 and forecast year of 2040. The MPO will need to establish the next LRTP’s base and forecast years in consultation with the Tri-Cities MPO.
8. Socioeconomic Data Development – Staff will develop the base year and forecast year methodology and will also establish the Socioeconomic Data Work Group (composed of local government planners/demographers, VDOT district and Crater PDC staffs) to review, advise and consult with staff on the

base year data/forecast methodology, to participate in the base year data/forecasts development process, and to review and recommend the final base year data and forecasts to TAC and the MPO. Based on past socioeconomic data development efforts, local government and RRPDC staff working together have responsibilities for base year data/forecasts development as follows:

RRPDC

- Total population
- Total households
- Total employment
- Retail employment
- Non-retail employment
- Automobiles
- Total public and private school enrollment
- Students grades pre-K–12 (by school location)
- College students (by school location)

Local Government

- Total households
- Group quarters population
- Population in housing units
- Total housing units
- Total public and private school enrollment
- Students grades pre-K–12 (by school location)
- College students (by school location)

Note that RRPDC staff can provide some assistance to local government staffs in developing base year data and forecasts, especially those staffs that do not routinely report socioeconomic data at the TAZ level.

Staff will likely propose that base year employment data be developed using proprietary data purchased from a third-party vendor. Previous efforts for employment data development have been to use Virginia Employment Commission (VEC) files which report employment data by business address, disaggregate and confirm employment data by individual sites for employers with 50 or more employees, and requires a major effort by RRPDC and local government staffs to distribute employment data reports for major businesses to site locations and to distribute data not matched based on other factors. Staff’s initial estimate for purchase of employment data is approximately \$5,200 (based on pricing proposal provided March 2013 by a private company). Staff is planning to complete work on development of the new base year TAZ level data and may also complete work on TAZ level forecasts depending on work being conducted as part of the LRTP scenarios analysis and input from the Socioeconomic Data Work Group on their jurisdiction’s expectation for future growth and development.

9. Title VI/Limited English Proficiency (LEP) Data – Maintain/update regional demographic profiles and data for minority, low-income and LEP population groups using latest available data (i.e., 2010 census and/or American Community Service (ACS) data). Updated data and profiles to be used in conducting various MPO planning activities.

VDOT and other local government work elements are as follows:

1. Participation by appropriate local staff on the Socioeconomic Data work group [local government work element] and development of socioeconomic data and forecasts (see work element 8).
2. Compile data for use in various special studies (e.g., Environmental Impact Statements and Assessments, etc.) [VDOT work element].

D. Agency Participation

RRPDC, VDOT, DRPT, Local Governments, Crater PDC.

E. Budget, Staff and Funding

| | <u>PL^①</u> | <u>5303</u> | FY 13 CO <u>5303</u> | <u>TOTAL</u> |
|-------|-----------------------|-------------|-------------------------|--------------|
| RRPDC | 53,000 | 20,000 | 1,000 | \$74,000 |

^① 4/10/14 MPO action to reduce PL funds by \$22,000 (shifted to other RRPDC staff work tasks; portion transferred to FY 2015 UWP).

F. Schedule

1. Title VI/Environmental Justice Demographic Profiles – ongoing (depending on available census data).
2. RTDM Demographic Factors – Conduct review following initial work by RTDM on-call consultant on use and application of the RTDM.
3. Development of New Base and Forecast Years Demographic Data – July 2013 to end of FY 2014/early 2015.
4. TAZ Geography – late FY 2013 to early/mid-FY 2014.
5. MPO Study Area Boundary Expansion – Early FY 2014 to mid-FY 2014.

2.2 Long-Range Transportation Plan (LRTP) Update

A. Background

The LRTP (i.e., referred to as the Metropolitan Transportation Plan under MPO planning regulations) serves as the blueprint for developing the region's network of transportation facilities and services. The LRTP features a multimodal approach (i.e. automobiles, buses, car and vanpools, passenger rail, bicycles, and freight by water, truck and rail) to address the region's long term (20 year) travel needs. The LRTP considers the relationship between the transportation infrastructure and its impacts on the natural and human environment. Projects included in the LRTP are constrained by the 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 adopted LRTP to be eligible for federal-aid funds.

The 2035 LRTP/CMP Update was adopted by the MPO on July 12, 2012. The next LRTP/CMP Update is scheduled to be completed by July 2016. The new LRTP has a horizon year of 2035, and was developed based on requirements of the 2005 federal transportation act entitled the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). The 2035 LRTP includes both long-range and short-range strategies/actions that support the development of an integrated multimodal transportation system, designed to facilitate the safe and efficient movement of people and goods in the Richmond area.

Pre-MAP-21 MPO planning regulations specify minimum requirements for LRTP content which are summarized as follows (see section 450.322 (f) and (h) of the MPO planning regulations):

- a. Projected transportation demand of persons and goods.
- b. Existing and proposed transportation facilities that should function as an integrated metropolitan transportation system.
- c. Inclusion of locally preferred alternatives selected from an Alternatives Analysis under the FTA Capital Investment Grant program (note this includes consideration of financial capacity, air quality conformity, and environmental justice requirements).
- d. Operational and management strategies.
- e. Consideration of the results of the congestion management process.
- f. Assessment of capital investment and other strategies to preserve the existing and projected future metropolitan transportation infrastructure and provision for multimodal capacity increases based on regional priorities and needs.

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- g. Design concept and design scope descriptions of all existing and proposed transportation facilities in sufficient detail, regardless of funding source.
- h. Discussion of types of potential environmental mitigation activities and potential areas to carry out these activities (discussion developed in consultation with federal and state land management, wildlife and regulatory agencies).
- i. Pedestrian walkway and bicycle transportation facilities (in accordance with 23 U.S.C. 217 (g)).
- j. Transportation and transit enhancement activities.
- k. A financial plan that demonstrates how the adopted transportation plan can be implemented.
- l. Both a safety and a security element that summarize the priorities, goals, or projects for the MPO study area contained in: 1) the State's Strategic Highway Safety Plan, and 2) emergency relief and disaster preparedness plans, strategies, and policies that support homeland security and safeguard the personal security of all motorized and non-motorized users.

Pre-MAP-21MPO planning regulations specify certain requirements for the LRTP development process, including the following (see Section 450.322 (g), (i), (j), and (l)):

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

In addition, MPOs must assess the impact of proposed projects on the region's low-income, minority and limited English proficiency communities. Such an environmental justice assessment is conducted as part of the LRTP development process with the analysis and results included in the LRTP.

Work activities for development of the next LRTP update (forecast year tentatively set as 2040) in FY 2014 will focus on TAZ review and update, developing staff experience in running and applying the new RTDM (staff received the new RTDM in stages with latest versions of the 2008 base and 2035 forecast year networks provided in October 2012; as of April 2013, VDOT has not provided the interim year networks of 2018 and 2028) developing the region's long-range list of transportation needs, and developing scenarios for future transportation system networks that can be used as initial input for the next LRTP/CMP update. Other work activities include

addressing MAP-21 requirements for development of performance management measures and targets as part of the next LRTP/CMP update (including coordination with state mandates for reporting on LRTP Performance Measures and Targets), conducting LRTP/CMP amendments as needed, and completing work on the functional classification review of the Richmond Region's roads (work lead by VDOT staff and consultants with RRPDC staff and local government staffs initiating their review of VDOT's draft functional classification system data in March 2013; completion is expected in early FY 2014).

B. End Products

1. Maintenance of a conforming and financially constrained 2035 LRTP.
2. Amendments and administrative modifications to the 2035 LRTP as necessary.
3. Annual report on MPO Regional Transportation and Land-Use Performance Measures and Targets (posted on RRPDC website by October 31, 2013).
4. 2035 LRTP/CMP Update Executive/Citizens Summary Report.
5. Address MAP-21 performance measures and targets and conduct amendments/administrative modifications to the 2035 LRTP as appropriate (for a MAP-21 compliant LRTP).
6. Complete VDOT statewide functional classification review and address new MAP-21 requirements for NHPP/enhanced NHS.

C. Work Elements

Work activities include the following:

1. 2035 LRTP/CMP Update Executive/Citizens Summary Report – Prepare and distribute summary LRTP/CMP document (for public information purposes). Work on this activity also conducted under UWP task 1.2 MPO Citizen Participation. Note that this will be a significant direct cost (printing hard copies and CDs).
2. 2040 LRTP Update – Initiate work to develop an initial list of transportation needs (i.e., projects, programs and services) in the Richmond Region that is not financially constrained and is in conformance with local government comprehensive plans.
3. 2040 LRTP/CMP Update Scenario Analysis – Based on input from the Capital Region Collaborative transportation workgroup, Urban Land Institute's (ULI) Reality Check exercise, TAC, CTAC, EDAC, and other public participation input/events, develop several scenarios for future networks in the Richmond Region (i.e., MPO study area and rural areas of PD 15) using MPO approved and modified socioeconomic forecasts, to come up with proposed transportation

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projects, programs and services for consideration in the next/year 2040 LRTP update.

4. State LRTP Performance Measures and Targets – Annual update (due in October) on MPO approved regional transportation and land-use performance measures and targets. Also, develop summary of annual report or modify current report to show data for previous years along with report for current year.
5. Federal LRTP Performance Measures and Targets – Work with VDOT to develop process to address new MAP-21 performance measures and targets which include seven national goals, addresses requirements for a performance based approach, and establishes targets for the following:
 - National highway performance program (NHPP);
 - Highway safety improvement program (SHIP);
 - Congestion mitigation and air quality improvement (CMAQ); and
 - National freight movement.
6. LRTP Amendments/Adjustments – Conducted as needed; amendments requiring air quality conformity analysis and public review require significant staff time and resources and should be limited to no more than one time per year.
7. VDOT Statewide Functional Classification Review/NHPP Requirements – Complete work (initiated in early FY 2013) conducted by VDOT and their consultants to conduct a statewide review of the functional classification for all roads in the state.
8. Advance recommendations, projects and programs from the Richmond Electric Vehicle Initiative (REVi) and participate in public education and outreach efforts in cooperation with STIR and other electric vehicle stakeholders (work element also covered by UWP task 1.1).
9. Assist the REVi policy and incentives work group moving forward with defined electric vehicle initiative legislative policies that may be reviewed and considered in the upcoming General Assembly session.
10. Functional Classification Reviews – Review requests for function classification and reclassification and submit for MPO review and action.
11. Review highway construction plans for conformance with the adopted Transportation Plan [VDOT and RRPDC].
12. Maintain/update computer software, staff training, and direct costs [VDOT].

D. Agency Participation

RRPDC, VDOT, DRPT, VDEQ, local governments, CRAC, GRTC, RMA, VPA, FHWA, FTA, and RideFinders, STIR, and REVi stakeholders.

E. Budget, Staff and Funding

| | <u>PL^①</u> | <u>5303^①</u> | <u>FY 13 CO</u> <u>5303</u> | <u>TOTAL</u> |
|-------|-----------------------|-------------------------|--------------------------------|--------------|
| RRPDC | 44,000 | 15,000 | – | \$59,000 |

^① 4/10/14 MPO action to reduce PL funds by \$42,000 (shifted to other RRPDC staff work tasks; portion transferred to FY 2015 UWP) and to reduce Section 5303 funds by \$7,000 (shifted to other RRPDC staff work tasks).

F. Schedule

1. 2035 LRTP/CMP Executive/Citizens Summary Report – Draft document initiated in FY 2013 to be completed by October 2013, submitted for CTAC, EDAC and TAC review, and revised/final document submitted for MPO review and action in mid-FY 2013.
2. State required MPO Regional Transportation and Land-Use Performance Measures and Targets – Posted on RRPDC website by October 31, 2013.
3. LRTP Amendments/Administrative Modifications – Conducted as needed (staff anticipates that no more than one major amendment process involving air quality conformity analysis, financial capacity analysis, and public review can be conducted in a fiscal year). LRTP administrative modifications conducted as needed (all amendments and modifications to be documented as part of the 2035 LRTP and CMP Update document posted on the RRPDC website).
4. Statewide Functional Classification Review – Completed by early to mid-FY 2014 with MPO action to approve the functional classification for Richmond Area roads.
5. National Highway Performance Program (NHPP)/Enhanced NHS – Schedule to be determined.
6. Federal LRTP Performance Measures and Targets – Schedule to be determined.
7. 2040 LRTP/CMP Update Scenario Analysis – July 2013 to late FY 2014.
8. 2040 LRTP Update Needs Assessment – Conduct as part of the 2040 LRTP/CMP Update Scenario Analysis and determine appropriate time for schedule.
9. Other work activities – Ongoing.

2.3 Regional Travel Demand Model (RTDM)

A. Background

On April 8, 2009, VDOT announced a new policy that starting in FY 2010 (July 1, 2009) VDOT would no longer support MPO model application/usage for MPO short- and long-range plans (including the constrained long-range plan and the TIP), providing outputs required for the air quality conformity analysis (including project listing/implementations, and VMT for the region) and other MPO studies (such as alternatives analysis for corridor studies and scenario planning). VDOT's announcement also stated that MPO staffs would now be responsible for conducting these activities. VDOT's responsibilities for support of the MPO's RTDM were announced as follows:

- Support model development and enhancement (includes data collection through travel surveys and traffic counts, model calibration/validation, and supporting documentation).
- Provide Citilabs software (i.e., Cube Base, Voyager and Analyst) and training to MPO staff.
- Perform state model applications for state studies and plans, and for public/private partnership solicitations to the state.
- Support for the Virginia Transportation Modeling (VTM) Users Group.

VDOT also announced (on April 8, 2009) that VDOT would continue to support the following:

- Statewide coordination and training (includes provision of RTDM software through statewide license for VDOT and all MPO staffs; covers Citilabs CUBE Base, Voyager and Analyst and may also include CUBE Cluster).
- Conduct/lead the Virginia Transportation Model User's Groups.
- Model development and enhancement (e.g., HOV/HOT, tolling, transit, heavy trucks), data collection (i.e., travel surveys, traffic counts and other activities required for model calibration) model calibration/validation, and model documentation.
- Model application and usage (limited to state studies and plans, and PPTA process applications/requests).

The RRPDC, as staff for the MPO, is now responsible for conducting travel demand modeling to meet federal MPO planning requirements, including the regional travel demand model portion of the air quality conformity analysis, and development of model networks (both highway and transit) for the analysis of LRTP alternatives and air quality conformity analysis. In addition, the RRPDC is responsible for model applications that may be used for alternatives and scenarios analysis, corridor studies, and other MPO plans and studies that involve model applications.

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VDOT and VDOT's consultant work for the new RTDM was completed in October 2012. Note that the new RTDM covers all of the Richmond and Tri-Cities MPOs study areas, plus the rural portions (i.e., outside of the MPO study area) of Charles City and New Kent counties. Note that it does not cover those areas outside of the MPO study area for Powhatan and Goochland counties.

The RTDM used for the MPO's 2031 LRTP Update was sufficient for conducting regional level air quality conformity analysis, but was not sufficiently accurate for conducting corridor level or transit service analysis. Extensive work conducted by VDOT and their consultants since January 2010 has enhanced the RTDM's capabilities as follows:

- New/expanded transportation networks (GIS based network)
- Time of day modeling (accurate for planning level analysis)
- Congestion feedback
- Transit model
- New toll modeling procedures
- Enhanced truck modeling procedures (based on data from Hampton Roads)
- Full use of "Cube Voyager" scripts

In addition, RRPDC staff's development of autos by TAZ based on geocoded address data (auto data used in the 2031 LRTP Update was based on assumed rates applied to demographic data), plus other model enhancements conducted by VDOT, should provide for a more effective model. The new RTDM also incorporates results from the enhanced National Household Travel Survey (NHTS) that was conducted in 2008 and 2009 and the supplemental large universities (including VCU) survey (conducted in 2009). The new Richmond/Tri-Cities RTDM will support VDOT and MPO planning needs as follows:

- Air quality conformity analysis
- Comprehensive HOV and toll enhancement
- Mode choice and transit inputs
- Congestion assessment
- Subarea analysis (note that additional data, network and other modifications required depending on the scale of the subarea)
- Truck movements

The new RTDM features will include the following:

- Detail coded highway networks
- Updated transit network, with delay-based bus times/speeds (not multiplicative factors)
- Updated trip rates with consistent methodology

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- Time of day modeling (peak/off peak distribution through mode choice, four periods for final highway assignment)
- Mode choice using structure/parameters FTA expects in New Starts (i.e., FTA light rail/BRT funding program) forecasts
- AM peak, PM peak, mid-day, and night highway assignments (which sum to 24 hour traffic volumes)
- Full feedback loops (peak and off peak) from highway assignment through distribution

Due to the limited availability of VDOT staff support for the RTDM, its importance in developing and supporting upcoming MPO plans and studies, and staff's limited experience in use and application of the RTDM for various purposes (e.g., transit/mode choice, time of day modeling, congestion assessment, truck movements, subarea and scenario analysis, etc.), it will be important for staff to have timely assistance and guidance for these various activities. Staff is proposing to use some of the MPO's previously allocated \$300,000 in RSTP funds (i.e., MPO Multimodal LRP project UPC 86357) to hire an on-call consultant to be available to assist staff in using and applying the RTDM for various MPO plans, studies and reports. Staff plans to initiate and conduct the on-call consultant review and selection process in late FY 2014 with the consultant review and selection process completed in early FY 2015. Note that a VDOT/RRPDC pass-through funds agreement for RSTP funds must first be executed before the RFP process can begin. The on-call consultant services budget will be initially set at \$100,000 per year and this figure will be further defined after an on-call consultant is selected and price for services is negotiated and agreed to in the on-call consultant services agreement.

Note that maintenance and development activities for the RTDM will proceed along two tracks in FY 2014 and into FY 2015. The first track is for maintaining, using and applying the current RTDM for 2035 LRTP amendments, and other MPO studies and activities. The second track will be for updating the RTDM for new TAZ geography/modifications, use of new socioeconomic base year data and forecasts (tentatively set as 2012 and 2040), and network/model expansion to include the rural areas of Powhatan and Goochland.

B. End Products

1. Development and maintenance of the Richmond Regional Travel Demand Model (RTDM).
2. Coordinate RTDM work activities with VDOT and Crater PDC.
3. On-call consultant available for technical assistance in RTDM applications and enhancements.

C. Work Elements

1. Current RTDM – Staff support for RTDM runs, evaluations and reports in support of MPO plans, studies, air quality conformity analysis and amendments. This includes activities in support of the regional transportation needs assessment and the 2040 plan scenario analysis.
2. Updated RTDM – Staff support for modification of the current RTDM to meet the needs of the 2040 LRTP update. This includes expanding the RTDM coverage to include the rural areas of Powhatan and Goochland, modification of TAZ geography (based on review conducted as part of UWP task 2.1, Socioeconomic Data Development) and the various model networks. Further revisions may be made based on VDOT and/or consultant assistance for RTDM modifications. Staff will use and apply the updated RTDM for the 2040 LRTP/CMP update.
3. On-call consultant services assistance to expand and enhance the application of the RTDM to include activities such as:
 - Detailed scenario analysis;
 - Detailed project alternatives analysis;
 - Traffic congestion forecasting;
 - Robust truck/freight modeling;
 - Corridor/small area modeling; and
 - Transit travel demand analysis and forecasting.
4. Participate in RTDM related training, research, conferences, webinars, and the Virginia Transportation Model Users Group.
5. Conduct RTDM runs to generate VMT input when required for air quality conformity analysis (i.e., for LRTP and/or TIP amendments).

D. Agency Participation

RRPDC, RRPDC on-call consultant, VDOT, DRPT, GRTC, FHWA, FTA, local governments.

E. Budget, Staff and Funding

| | <u>PL^②</u> | <u>5303</u> | FY 12 CO <u>5303</u> | <u>RSTP</u> | <u>TOTAL</u> |
|------------------|-----------------------|-------------|-------------------------|-------------|--------------|
| RRPDC Staff | 76,000 | 14,000 | - | - | \$90,000 |
| RRPDC Consultant | <u>-</u> | <u>-</u> | <u>-</u> | <u>①</u> | <u>-</u> |
| Total | 76,000 | 14,000 | - | - | \$90,000 |

① RSTP funds budget of \$100,000 for on-call consultant anticipated to start in FY 2015.

② 4/10/14 MPO action to increase PL funds by \$16,000 (shifted from other RRPDC staff work tasks).

F. Schedule

1. Ongoing work activity in support of the LRTP and CMP work activities.
2. Conduct RTDM runs to provide VMT input for air quality conformity analysis when needed.

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, DRPT, 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.

In FY 2013, significant staff time and effort has been made for several reports (e.g., Estimated Transportation Taxes and Fees Report, Richmond Region Bridge Inventory and Structural Status Report) and providing staff GIS support for MPO plans, studies and reports (e.g., Title VI/Environmental Justice/ Limited English Proficiency demographic profile maps, functional classification maps, Route 5 corridor study, I-64 Peninsula Study/Draft EIS interchange area maps, MPO urbanized area boundary smoothing, MPO study area boundary changes in Chesterfield County, etc.). In addition, this task provides for transportation staff work activities supporting RRPDC work for GIS file structure organization and maintenance. It also provides for staffing of the Richmond Region Street Name Clearinghouse Program.

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. GIS File Structure/Organization – Continuing support by transportation staff for its efforts and input to the RRPDC’s GIS file structure organization and maintenance.
2. Information/Data Reports – Develop, distribute (i.e., print and/or post on website/FTP site) reports on transportation studies, data, etc.
3. MPO Plans/Programs/Reports – GIS mapping support for MPO plans, programs, studies and reports.
4. Street Name Clearinghouse – Continuing support for the RRPDC (Richmond Region) street name clearinghouse program.

D. Agency Participation

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

E. Budget, Staff and Funding

| | <u>PL^①</u> | <u>5303</u> | <u>TOTAL</u> |
|-------|-----------------------|-------------|--------------|
| RRPDC | 54,000 | 10,000 | \$64,000 |

① 4/10/14 MPO action to reduce PL funds by \$26,000 (shifted to other RRPDC staff work tasks; portion transferred to FY 2015 UWP).

F. Schedule

Ongoing

3.0 MANAGEMENT SYSTEMS/SHORT RANGE PLANNING

3.1 Congestion Management Process (CMP) Update

A. Background

The Congestion Management Process (CMP) serves as a systematic process for addressing congestion by providing information on transportation system performance and proposing use of alternative strategies and programs to help alleviate congestion. Update work on the CMP is conducted as an element of the LRTP update. In addition, MPO planning regulations require the MPO to address congestion management through a process that provides for safe and effective integrated management and operation of the multimodal transportation system, based on a cooperatively developed and implemented metropolitan-wide strategy of new existing transportation facilities eligible for funding under title 23 U.S.C. and title 49 U.S.C. Chapter 53, through the use of travel demand reduction and operational management strategies (see Section 450.320 (a) of the MPO planning regulations). MPO planning requirements for development of a CMP is summarized as follows (see Section 450.320 (b) for a complete description of these requirements):

1. Development of a CMP should result in multimodal system performance measures and strategies that can be reflected in the LRTP and the TIP.
2. The level of system performance deemed acceptable by state and local transportation officials may vary by facility type, location, and/or time of day.
3. Consideration should be given to strategies that manage demand, reduce single occupant vehicle (SOV) travel, and improve transportation system management and operations.
4. Where the addition of general purpose lanes is determined to be an appropriate congestion management strategy, explicit consideration is to be given to the incorporation of appropriate features with the SOV project to facilitate future demand management strategies and operational improvements that will maintain the functional integrity and safety of those lanes.

Note that Section 450.320 (c) provides that the CMP shall be developed, established, and implemented as part of the MPO planning process including coordination with transportation system management and operations activities. In addition, the CMP shall include the following (see Section 450.320 (c) for a complete description of these requirements):

1. Methods to monitor and evaluate the performance of the multimodal transportation system, identify the causes of recurring and non-recurring congestion, identify and evaluate alternative strategies, provide information

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supporting the implementation of actions, and evaluate the effectiveness of implemented actions.

2. Definition of congestion management objectives and appropriate performance measures to assess the extent of congestion and support the evaluation of the effectiveness of congestion reduction and mobility enhancement strategies. Such measures shall be developed in consultation with operators of major modes of transportation.
3. Establishment of a coordinated program for data collection and system performance monitoring. To the extent possible, this data collection program should be coordinated with existing data sources (including archived operational/ITS data) and coordinated with area operations managers.
4. Identification and evaluation of the anticipated performance and expected benefits of appropriate congestion management strategies, which may include the following:
 - Demand management measures including growth management and congestion pricing;
 - Traffic operational improvements;
 - Public transportation improvements;
 - ITS technologies as related to the regional ITS architecture; and
 - Where necessary, additional system capacity.
5. Identification of an implementation schedule, implementation responsibilities, and possible funding sources for each strategy/combination of strategies proposed for implementation.
6. Implementation of a process for periodic assessment of the effectiveness of implemented strategies.

Note that work required for conducting CMP corridor reviews was replaced by SAFETEA-LU, which required that the CMP establish and maintain a process that provides for effective management and operations to address congestion.

In the event that the Richmond Area is redesignated back to nonattainment status, the MPO planning regulations would require the following (see Section 450.320(d) for a complete description):

1. The CMP shall provide an appropriate analysis of reasonable (including multimodal) travel demand reduction and operational management strategies for the corridor in which a project that will result in a significant increase in

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single occupant vehicle (SOV) capacity is proposed to be advance with federal funds.

2. If the analysis of such strategies for such a corridor demonstrates that travel demand reduction and operational management strategies cannot fully satisfy the need for additional capacity in the corridor, and additional SOV capacity is warranted, then the CMP process shall identify all reasonable strategies to manage the SOV facility safely and effectively, or to facilitate its future management.
3. Other travel demand reduction and operational management strategies appropriate for the corridor, but not appropriate for incorporation into the SOV facility itself, shall also be identified through the CMP.
4. All identified reasonable travel demand reduction and operational management strategies shall be incorporated into the SOV project or committed to by the State and MPO for implementation.

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

In order to meet new MAP-21 requirements to establish performance measures and targets to address seven national goals, requirements for a performance based approach, and targets for federal highway and safety programs and freight movement, further modification to development, reporting and monitoring of CMP data inputs (primarily accident and travel time data) may be needed. Staff's primary focus for addressing MAP-21 performance measures and targets will be under UWP task 2.2, LRTP Update.

Work in FY 2014 will focus on system monitoring, which includes receiving, reviewing and analyzing accident data from VDOT; and receiving, reviewing and analyzing travel time data from the I-95 Corridor Coalition under its Vehicle Probe Project.

B. End Products

Ongoing monitoring and reporting of accident data, travel times, and congestion based on the most recent and available VDOT accident data, travel time data, and Texas Transportation Institute Congestion Reports.

C. Work Elements

1. Travel Time/Congestion Data – VDOT has entered into an agreement with INRIX, Inc. which provides proprietary comprehensive travel time data for the state (which covers all CMP network designated roads). Data is also available through the I-95 Corridor Coalition’s Vehicle Probe Project (VPP), which is housed/staffed by the University of Maryland. VDOT’s participation in the I-95 Corridor Coalition provides access to VPP archived travel time data, which also allows for RRPDC staff to access, download and use this data. Staff is currently working through the VPP to acquire/download annual archived travel time data for the CMP network. This covers CMP network roads with travel time reports at 15-minute intervals for Tuesday, Wednesdays and Thursdays (which represents usual/daily commuting conditions and is consistent with the methodology used for Texas Transportation Institute Urban Mobility reports).
2. Accident Data – VDOT provided 2009 accident data for all roads in the Richmond Region to RRPDC staff (including non-VDOT administered roads). Staff is currently waiting for VDOT to provide 2010 and 2011 accident data, which staff will use in the upcoming CMP update (use to identify areas with non-recurring congestion).
3. Texas Transportation Institute (TTI) Urban Mobility Reports – Continue to receive, review, and analyze TTI reports on congestion data for the Richmond Urbanized Area. Note that TTI prepares such reports for all urbanized areas in the U.S.
4. Consideration for Change in Area’s Air Quality Status – Richmond Area MPO jurisdictions covered by EPA’s previous designation for maintenance of ozone air quality standards (i.e., Richmond, Henrico, Hanover, Chesterfield and Charles City) may revert to nonattainment status based on the addition of data from the most recent ozone season (i.e., summer of 2012 maintained as a running three-year average). The Richmond/Petersburg area was designated by EPA on April 30, 2012 as being in attainment for ozone air quality standards, but reports by staff for the Virginia Department of Environmental Quality (DEQ) indicate that based on the most recent three years of ozone data, the region could go back into nonattainment status. To address this, DEQ has requested to participate in the EPA Ozone Advance program (letter submitted by DEQ to EPA on June 4, 2012) and EPA has agreed to DEQ’s proposal. This program facilitates the creation of an Ozone Advance action plan for the Richmond/Petersburg area, with the intention that the plan would reduce emissions of ozone precursors. The region’s participation in the Ozone Advance program provides EPA with a greater level of discretion in proceeding with redesignation of the region back to non-attainment status and as a result, some/all of CMP requirements under Sections 450.320(d) and (e) of the MPO planning regulations may not come into effect under the Ozone Advance action

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plan. Section 450.320(d) requires that projects which result in a significant increase in carrying capacity for single occupant vehicles (SOV) must be first addressed through a CMP process which meets requirements of Section 450.320. Section 450.320(e) requires that the CMP process provide for analysis of travel demand reduction and operational management strategies for those corridors in which a project will result in a significant increase in SOV capacity, and also address other CMP related requirements.

5. Federal Performance Measures and Targets – Work with VDOT to develop process to address new MAP-21 performance measures and targets which include seven national goals, addresses requirements for a performance-based approach, and establishes targets for the following:
 - National highway performance program (NHPP);
 - Highway safety improvement program (HSIP);
 - Congestion mitigation and air quality improvement (CMAQ); and
 - National freight movement.

In developing this new process, modifications to the development and/or reporting of accident and/or traffic data currently conducted for the CMP may be necessary to meet these new MAP-21 requirements and appropriate revisions or additions to the CMP may be necessary (see UWP task 1.1, MPO Maintenance/Special Studies for initial work to be conducted on this activity).

6. Access Management – Provides staff support and participation on access management studies for area jurisdictions and corridors. For FY 2014, staff does not anticipate any staff time being needed for such work.

D. Agency Participation

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

E. Budget, Staff and Funding

| | <u>PL^①</u> | <u>5303</u> | <u>FY 13 CO</u> <u>5303</u> | <u>TOTAL</u> |
|-------|-----------------------|-------------|--------------------------------|--------------|
| RRPDC | 60,000 | 14,000 | – | 74,000 |

^① 4/10/14 MPO action to reduce PL funds by \$20,000 (shifted to other RRPDC staff work tasks; portion transferred to FY 2015 UWP).

F. Schedule

1. Ongoing work activities (to be scheduled based on data becoming available from VDOT).
2. Texas Transportation Institute (TTI) Congestion Reports – Ongoing.

3.3 Intelligent Transportation Systems (ITS) Update

A. Background

Intelligent Transportation System (ITS) is defined by USDOT federal regulations as “...electronics, communications, or information processing used singly or in combination to improve the efficiency or safety of a surface transportation system” (see 23CFR Part 940 – ITS Architecture and Standards). The basic goal of ITS programs is to use modern computer and communications technologies to provide for more efficient and effective management of existing transportation systems. When integrated into the transportation system infrastructure, and in vehicles themselves, these technologies help monitor and manage traffic flow, reduce congestion, provide alternate routes to travelers, enhance productivity, and save lives, time and money. Examples of ITS include the following:

- Advanced traveler information systems – Provides information on traffic conditions, accidents and other incidents, weather information, etc. directly to travelers, enabling them to make more informed decisions on routes.
- Advanced traffic management systems – Employs a variety of detectors, cameras, and other systems to monitor traffic, optimize traffic signal timings on major arterials, and other means to control traffic flow.
- Incident Management Systems – Provides traffic operators with tools to allow quick and efficient response to accidents, hazardous spills, and other emergencies.
- Emergency Vehicle Pre-Emption Devices – Carried on ambulances, fire trucks and other emergency vehicles, it enables such vehicles to remotely change traffic signals for safe and speedy passage through intersections (usually by advancing or extending “green” time so traffic can move through ahead of emergency vehicle).
- Automatic Vehicle Location – GPS-based vehicle tracking system, used on buses, paratransit vehicles, long-haul freight trucks to monitor vehicle location and provide location information to dispatchers and bus users.

The underlying principle for ITS deployment is adherence to established standards and an overall framework that can allow all elements of the transportation network to function and interact as one system. This is achieved through the “National ITS Architecture,” which provides a common framework for planning, defining, and integrating ITS; and through “Regional ITS Architecture,” which is the regional framework for ensuring institutional agreement and technical integration for implementation of ITS projects. Federal policy provides that regional ITS architecture should be consistent with the transportation planning process for Statewide and Metropolitan Transportation Planning (i.e., the MPO planning and programming process).

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The Commonwealth of Virginia is divided into five regions for ITS planning and project development. The Richmond Area MPO along with Tri-Cities Area MPO, portions of the Fredericksburg Area MPO, and rural area jurisdictions are covered by VDOT's Central Region. ITS program development and project deployment for jurisdictions in the Central Region is provided through VDOT's "Virginia Central Region ITS Architecture Implementation Plan" and "Virginia Central Region ITS Architecture Maintenance Plan." The Implementation Plan covers the process for ITS deployment, project sequencing, developing various levels of agency/jurisdiction cooperative agreements, and establishing standards for exchange of information among ITS systems. The Maintenance Plan establishes the agency responsible for ITS architecture maintenance (i.e., VDOT Richmond District office is the VDOT Central Region "ITS Architecture Maintainer"), defines the ITS Architecture maintenance process, the architecture update process, and defines the ITS Architecture Maintenance Committee (participants include ITS Stakeholders and the ITS "Architecture Maintainer").

The MPO took action at its June 9, 2011 meeting to establish the Richmond Region ITS Work Group under the MPO's Technical Advisory Committee (TAC) to provide planning and programming support and assistance for TAC on ITS related matters, with work group members appointed by TAC members (for their respective jurisdictions/agencies) and with representatives from the Crater Planning district Commission and the FHWA Virginia Division office, and with the direction that the work group's duties and responsibilities are subject to TAC review, consideration and action. The primary responsibilities for the ITS/TAC work group are as follows:

1. Provide a regional forum for discussion of ITS related issues, projects, plans and programs.
2. Facilitate and promote use and maintenance of the VDOT Central Region ITS Architecture.
3. Promote and assist in integrating the ITS architecture into the regional planning process.
4. Provide recommendations to TAC on ITS projects, programs and services for development and/or funding consideration.

Note that VDOT currently has underway a review of its regional traffic operations centers across the state including consideration of a Public Private Partnership proposal/approach that would consolidate their operations. Also, note that MAP-21 requires that all Federal-aid highway toll facilities implement technologies or business practices that provide for the interoperability of electronic toll collection by October 1, 2016 (four years after the enactment of MAP-21's new tolling requirements).

B. End Product

Ongoing and active ITS/TAC work group with the following primary functions:

- Provide a regional forum for discussion of ITS related issues, projects, plans and programs
- Facilitate and promote use and maintenance of the VDOT Central Region ITS Architecture
- Promote and assist in integrating the ITS architecture into the regional planning process
- Provide recommendations to TAC on ITS projects, programs and services for development and/or funding considerations.

C. Work Elements

1. Richmond Region ITS Work Group – Administrative and technical support by RRPDC staff for the TAC ITS Work Group which includes reporting work group recommendations to TAC; coordinating activities with VDOT, local governments, GRTC, RMA and others; and providing planning and programming assistance to TAC on ITS related matters.
2. ITS Related Advisory Groups and Training – Staff participation on ITS related advisory groups (VDOT’s Central Region ITS Work Group) and organizations (Intelligent Transportation Society of Virginia, ITSVA) and ITS related meetings, conferences, webinars, etc.
3. ITS Reports and Recommendations – Provide reports and recommendations on projects, programs, and services based on the VDOT Central Region ITS Architecture and based on findings and recommendations from the Richmond Region ITS Work Group (RRPDC staff reports prepared and provided to TAC).

D. Agency Participation

RRPDC, VDOT, DRPT, local governments, GRTC, RMA, CRAC, FHWA, FTA, Crater PDC.

E. Budget, Staff and Funding

| | <u>PL^①</u> | <u>5303</u> | FY 13 CO <u>5303</u> | <u>TOTAL</u> |
|-------|-----------------------|-------------|-------------------------|--------------|
| RRPDC | 23,000 | 2,000 | – | \$25,000 |

^① 4/10/14 MPO action to reduce PL funds by \$7,000 (shifted to other RRPDC staff work tasks; portion transferred to FY 2015 UWP).

F. Schedule

Ongoing process.

4.0 TRANSPORTATION PROJECT PROGRAMMING

4.1 Transportation Improvement Program (TIP)

A. Background

As federally funded highway and transit projects and programs move from the planning to the implementation phase, such projects and programs must be reviewed and approved by the MPO. Most transportation projects and programs are initially selected by the CTB with federal and state funds allocated (usually over several years) as part of the state's Six-Year Improvement Program (SYIP). When projects are moved into the TIP, it shows that sufficient funds are available, or are reasonably expected to become available in the near future (i.e., one to four years) for a project, project phase, or program to move forward for implementation. Projects must be included in the MPO's adopted TIP in order for the implementing agency (i.e., state, local government or regional agency) to submit its request or application for federal funds.

The RRPDC serves as lead staff for developing and maintaining the TIP. In addition, the RRPDC staff identifies regional priority projects and advocates for the allocation of funds to these projects, and it has lead authority in allocating federal funds under the Regional Surface Transportation Program (RSTP) and Congestion Mitigation Air Quality (CMAQ) and Transportation Alternatives (TA) programs.

New requirements under MAP-21 for performance measures and targets cover both the LRTP and the TIP with the TIP being developed to show how it will make progress toward established performance targets and also include a description of anticipated achievements. The MPO's current FY 12 – FY 15 TIP was adopted by the MPO on June 9, 2011 and is valid until June 2015. Federal and state agencies will need to advise the MPO as to requirements that may impact the current TIP for making it MAP-21 compliant.

MAP-21 restructures core highway programs with activities carried out under several previous formula programs (i.e., National Highway System Program, Interstate Maintenance Program, and the Highway Bridge Program) incorporated into the following new core formula program structure:

- National Highway Performance Program (NHPP)
- Surface Transportation Program (STP)
- Congestion Mitigation and Air Quality Improvement Program (CMAQ)
- Highway Safety Improvement Program (HSIP)
- Railway-Highway Crossings (set-aside from HSIP)
- Metropolitan Planning

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It creates two new formula programs:

- Construction of Ferry Boats and Ferry Terminal Facilities – replaces a similarly purposed discretionary program.
- Transportation Alternatives (TA) – a new program, with funding derived from the NHPP, STP, HSIP, CMAQ and Metropolitan Planning programs, encompassing most activities funded under the Transportation Enhancements, Recreational Trails, and Safe Routes to School programs under SAFETEA-LU.

MAP-21 creates a new discretionary program – Tribal High Priority Projects (THPP) – and continues the following current discretionary programs:

- Projects of National and Regional Significance (PNRS)
- On-the-Job Training Supportive Services
- Disadvantaged Business Enterprise (DBE) Supportive Services
- Highway Use Tax Evasion (Intergovernmental enforcement projects)
- Work Zone Safety Grants

It also eliminates most current discretionary programs (shown below), but many of the eligibilities are covered in other programs:

- Delta Region Transportation Development
- Ferry Boats Discretionary
- Highways for LIFE Demonstration Program
- Innovative Bridge Research and Deployment
- Interstate Maintenance Discretionary
- National Historic Covered Bridge Preservation
- National Scenic Byways
- Public Lands Highway Discretionary
- Railway-Highway Crossing Hazard Elimination in High Speed Rail Corridors
- Transportation, Community, and System preservation
- Truck Parking Pilot Program
- Value Pricing Pilot Program (no additional funding, but authority remains)

MAP-21 also provides for significant expansion of the Transportation Infrastructure Financing and Innovation Act (TIFIA) program, which provides Federal credit assistance to eligible surface transportation projects. Funding available for TIFIA, authorized \$750 million in FY 2013 and \$1 billion in FY 2014 to pay the subsidy cost (similar to a commercial bank's loan reserve requirements) of supporting federal credit. A \$1 billion TIFIA authorization will support about \$10 billion in actual lending capacity.

MAP 21 also makes changes to the statutory provisions governing tolling on highways that are constructed or improved with federal funds (23 USC 129). One

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significant change is the removal of the requirement for an agreement to be executed with the U.S. DOT prior to tolling under the mainstream tolling programs (though such agreements will continue to be required under the toll pilot programs). Other changes include the mainstreaming of tolling new Interstates and added lanes on existing Interstates, which was previously allowed only under the *Interstate System Construction Toll Pilot Program* and the *Express Lanes Demonstration Program*. The *Value Pricing Pilot Program*, which allows congestion pricing, is continued (but without discretionary grants), as is the *Interstate System Reconstruction and Rehabilitation Pilot Program*, which allows tolling of all lanes on an existing Interstate highway when required for reconstruction or rehabilitation. (Note that during the 2013 session of the General Assembly, legislation was passed that prohibits any tolls on I-95 south of Fredericksburg.) MAP-21 also requires that all Federal-aid highway toll facilities implement technologies or business practices that provide for the interoperability of electronic toll collection by October 1, 2016 (four years after the enactment of MAP-21's new tolling requirements).

MAP-21 has also made significant changes to federal-aid transit programs (i.e., programs administered by FTA) which, in order to be eligible for use by the implementing agency, must be programmed in the TIP. The following programs have been repealed; however, funds currently available and obligated in the TIP should remain available until expended:

- Section 5308 – Clean Fuels Grant Program
- Section 5309(b)(2) – Fixed Guideway Modernization
- Section 5309(b)(3) – Bus and Bus Facilities Program
- Section 5316 – Job Access and Reverse Commute Program
- Section 5317 – New Freedom Program
- Section 5320 – Paul S. Sarbanes Transit in the Parks Program
- Section 5339 – Alternative Analysis Program
- Section 3038 – Over-the-Road Bus Accessibility Program

New or continuing federal-aid transit programs (administered by FTA) include the following:

- Section 5305(d) – Metropolitan Planning Program (note requirements for metropolitan transportation planning are set forth in 40 U.S.C. 5303).
- Section 5305(e) – Statewide Planning and Research Program (note requirements for statewide transportation planning/technical assistance are set forth in 49 U.S.C. 5304).
- Section 5307 – Urbanized Area Formula Program
- Section 5309 – Fixed Guideway Capital Investment Program; New and Small Starts and Core Capacity

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- Section 5310 – Enhanced Mobility of Seniors and Individuals with Disabilities Program
- Section 5314 – Technical Assistance and Standards Development
- Section 5322 – Human Resources and Training Program
- Section 5324 – Public Transportation Emergency Relief Program
- Section 5337 – State of Good Repair Program
- Section 5339 – Bus and Bus Facilities Formula Grants

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

Note that significant changes made under SAFETEA-LU related to the TIP development process and document content have been continued under MAP-21 which include the following:

- The TIP must be updated at least every four years and contain at least four years of projects and strategies.
- The TIP must be developed through the MPO's adopted *Public Participation Plan* (adopted by MPO on April 12, 2007).
- Visualization techniques shall be employed to describe the TIP.
- The TIP shall be made available in electronically accessible formats (such as the RRPDC web site).
- SAFETEA-LU specifies that the development of the annual listing of obligated projects "shall be a cooperative effort of the state, transit operator, and MPO" and also shall include two new project types: "investments in pedestrian walkways and bicycle transportation facilities" for which federal funds have been obligated in the preceding year.
- The TIP will contain: priority list of projects and strategies for four years; financial plan; and description of work (type of work, termini, length, etc.) of each project in the TIP.

The MPO has lead authority for the allocation of Regional Surface Transportation Program (RSTP) and Congestion Mitigation Air Quality (CMAQ) program funds. RSTP funds are allocated under federal formula to the Richmond Urbanized Area while CMAQ funds are allocated by federal formula to the state and these funds are

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sub-allocated by state formula to EPA designated non-attainment and maintenance areas in the state. The Commonwealth Transportation Board (CTB) established a new policy on February 16, 2011, which directs the district CTB member to work with the appropriate MPO and with VDOT and DRPT staff to recommend to the Board a list of CMAQ projects for inclusion in the SYIP with all six years of CMAQ funds anticipated to be available to the MPO to be programmed; that CMAQ projects will be programmed to facilitate maximization of the use of federal funds including fully funding project phases according to current schedules and cost estimates; and that CMAQ allocations be programmed centrally by VDOT and DRPT staff based on the recommended CMAQ projects according to CTB priorities and federal eligibility requirements.

The MPO established its current RSTP and CMAQ funds project review, selection and funds allocation process on December 9, 2004. This process emphasizes allocating funds to projects by phase as each project moves forward in both the SYIP and TIP. After all current projects have been reviewed and allocations have been made to allow these projects to move forward, consideration to allocation of remaining funds is given to new candidate projects. Applications submitted by area local government and regional agency TAC members are reviewed and scored based on established criteria for project applications. These applications are reviewed and ranked by RRPDC and VDOT staffs. These findings are presented to TAC, which provides its recommendation to select projects and allocate funds by year. The TAC recommendation for CMAQ funds is then reviewed by the CTB member, and the TAC and staff recommendation is presented for MPO review and action.

Under MAP-21, funds for the new Transportation Alternatives (TA) program (which is a consolidation of the SAFETEA-LU Transportation Enhancement program and the Safe Routes to Schools program with changes to categories of eligible projects) are now apportioned to both the state and TMA designated MPOs (i.e., the Richmond Area MPO is a TMA). In FY 2013, RRPDC staff is conducting a separate project review, selection and funds allocation process (which utilized VDOT's TA candidate project review and scoring/ranking process). In FY 2014, staff plans to conduct the TA project review, selection and funds allocation process in conjunction with its RSTP and CMAQ funds allocation process.

Essential elements of the TIP 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 four years. The Richmond Area MPO's TIP is currently updated on an ongoing basis based on VDOT's annual preparation of the state's Six-Year Improvement Program. Note that a new TIP update is due by June 2015.

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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 over a four-year period, and a financial plan that demonstrates how it can be implemented. Projects within a funding category for a particular year can serve as an indicator of priority, such that first year projects are the highest priority, second year projects are the next highest priority, etc. Procedures or agreements that distribute sub-allocated STP or funds under 49 U.S.C. 5307 to individual jurisdictions or modes within the metropolitan planning area by predetermined percentages or formulas are inconsistent with legislative provisions that require the MPO, in cooperation with the state and public transportation operator, to develop a prioritized and financially constrained TIP, and shall not be used unless they can be clearly shown to be based on considerations required to be addressed as part of the MPO's planning process.
5. Included Projects – The TIP shall include capital and non-capital surface transportation projects (or phases of projects) within the boundaries of the metropolitan planning area proposed for funding under 23 U.S.C. and 49 U.S.C. Chapter 53 (including transportation alternatives, Federal Lands Highway program projects, safety projects included in the state's Strategic Highway Safety Plan, trails projects, pedestrian walkways, and bicycle facilities), except the following do not necessarily have to be included:
 - a. Safety projects funded under 23 U.S.C. 402 and 49 U.S.C. 31102;
 - b. Metropolitan planning projects funded under 23 U.S.C. 104 (f), 49 U.S.C. 5305 (d), and 49 U.S.C. 5339;
 - c. State planning and research projects funded under 23 U.S.C. 505 and 49 U.S.C. 5305 (e);
 - d. At the discretion of the state and MPO, state planning and research projects funded with National Highway System, STP, and/or Equity Bonus funds;
 - e. Emergency relief projects (except those involving substantial functional, locational, or capacity changes);

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- f. National planning and research projects funded under 49 U.S.C. 5314; and
 - g. Project management oversight projects funded under 49 U.S.C. 5327.
6. Project Selection – The TIP serves as the project selection document. Under SAFETEA-LU, all federally funded projects, except NHS, Bridge, Interstate Maintenance and Federal Lands Highway Program projects are to be selected by the MPO in consultation with the state and public transportation operator (GRTC) from the approved TIP and in accordance with the TIP priorities. Projects that are on the NHS and projects funded under the Bridge and Interstate Maintenance programs are to be selected by the state in cooperation with the MPO from the approved TIP. With the consolidation of several existing federal-aid highway and transit programs and the creation of several new programs under MAP-21, the MPO will need guidance from FHWA and FTA as to the MPO’s responsibility to serve as the lead agency in selecting projects to be programmed in the TIP (i.e., projects selected by the MPO in consultation with the state and public transit operator from the approved TIP and in accordance with the TIP priorities) and the MPO’s responsibility to cooperate with the state in the selection of other projects from the TIP.
7. Transportation Plan Consistency – All federally funded TIP projects must be consistent with the MPO's adopted Metropolitan Transportation Plan (i.e., LRTP). As a management tool for monitoring progress in implementing the transportation plan, the TIP should:
- a. Identify criteria and process for prioritizing implementation of transportation plan elements (including multimodal trade-offs) for inclusion in the TIP and any changes in priorities from the previous TIP; and
 - b. List major projects from the previous TIP that were implemented and identify any significant delays in the planned implementation of major projects.
8. Air Quality Conformity – The MPO, along with FHWA and FTA, must make a conformity determination for projects listed in the proposed TIP, or for amendments that add or delete regionally significant projects. Conformity is generally defined in the CAAA as conforming to the adopted State Implementation Plan's purpose for eliminating and reducing the severity and number of NAAQS violations and achieving attainment status. In other words, the implementation of TIP projects must be shown to serve as part of the region's effort to improve air quality. Note that effective mid-July 2013, the Richmond and Tri-Cities MPOs will no longer be required to conduct air quality conformity analysis for the LRTP and TIP due to their attainment status (designation made by EPA on April 30, 2012) for ozone air quality standards.

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However, this could change as updated air quality data is processed by EPA (i.e., could go back to nonattainment status) and based on EPA's discretion in considering DEQ's Ozone Advance Plan for the Richmond/Petersburg area.

9. Agencies/Public Review and Comment – The public, affected agencies, representatives of transportation agency employees, other affected employee representatives, private providers of transportation, and other interested parties must receive a reasonable opportunity to comment on the proposed program.
10. Environmental Justice – Assessment and documentation of the distributional effects of the metropolitan transportation investments are provided through the MPO's LRTP and VDOT's use of the NEPA process. The NEPA process that is completed by VDOT (or project administrator) address project specific Environmental Justice (EJ) analysis and documentation. With a regional level assessment of EJ covered by the LRTP and with project level EJ analysis covered by the NEPA process, an EJ component is not required at the TIP level.
11. MPO Certification – In TMA's, the USDOT Secretary shall certify the planning process at least once every four years. Note that the most recent federal certification review was conducted on March 25-26, 2009. The next federal certification review of the MPO is scheduled for FY 2014.
12. The state, public transportation operator and MPO shall, on an annual basis and within 90 days following the end of a program year, cooperatively develop a listing of projects (including investments in pedestrian walkways and bicycle transportation facilities) for which funds under 23 U.S.C. or 49 U.S.C. Chapter 53 were obligated in the preceding program year. This listing shall be prepared in accordance with Section 450.314 (a) of the MPO planning regulations and shall include all federally funded projects authorized or revised to increase obligations in the preceding program year, and shall at a minimum include the TIP information under Section 450.324 (e) (1) and (4) and identify for each project the amount of federal funds requested in the TIP, the federal funding that was obligated during the preceding year, and the federal funding remaining and available for subsequent years. This listing shall be made available for public review in accordance with the MPO's public participation criteria for the TIP.

Note that the "Memorandum of Understanding on Metropolitan Transportation Planning Responsibilities for the Richmond Area" (MOU signed by the Richmond Area MPO, the Commonwealth of Virginia Secretary of Transportation, GRTC Transit System, and the RRPDC) states under the Annual Obligation Report section the following:

Within 60 days after the close of the federal fiscal year the Virginia Department of Transportation and the Virginia Department of Rail and

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Public Transportation shall provide the MPO with Annual Obligation Report information. To the extent possible, this report(s) will contain the projects (including investments in pedestrian walkways and bicycle transportation facilities) for which federal highway or transit funds were obligated in the preceding program year. It shall include all federally funded projects authorized including those revised to increase obligations in the preceding program year, at a minimum include TIP project description and implementing agency information and identify, for each project, the amount of federal funds requested in the TIP, the federal funding that was obligated during the preceding year, and the federal funding remaining and available for subsequent years. The MPO shall publish the Annual Obligation Report on the web and in accordance with any procedures outlined in the Public Participation Plan to ensure adequate access by the public and other interested stakeholders.

13. Freight shippers, providers of freight transportation services, and representatives of users of public transit are added to the list of parties that must be given the opportunity for review and comment on plans and TIP's.

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

In addition to developing and maintaining the TIP, RRPDC staff identifies regional priority projects and advocates for the allocation of funds to these projects, and it has lead authority in allocating federal funds under the Regional Surface Transportation Program (RSTP) and Congestion Mitigation Air Quality (CMAQ) program

B. End Products

1. Annual listing of obligated projects from preceding program year (i.e., federal fiscal year). Projects to be submitted by VDOT and DRPT to RRPDC by December 1, 2013 and posted on RRPDC web site by December 30, 2013.
2. Maintenance activities in support of the current TIP including processing of TIP amendment and adjustment requests; and maintenance of records tracking the programming of RSTP, CMAQ and TA program funds.
3. Development and submission of the MPO's list of regional transportation priority projects to the CTB and the MPO's and local governments' priority projects to VDOT Richmond District for their review and consideration in developing the upcoming working draft SYIP.
4. Conduct annual RSTP, CMAQ and TA projects review, selection, and funds allocation, and submit MPO approved list of projects and allocations for CTB

review and programming in the upcoming Six-Year Improvement Program (SYIP).

C. Work Elements

Work activities include the following:

1. MPO Regional Transportation Priority Projects – Annual activity to identify the region’s list of priority projects. These projects are described in a report document (i.e., Regional Transportation Priority Projects Report), approved by the MPO and submitted to the Commonwealth Transportation Board (CTB) for its review and consideration in allocating state and federal funds in the Six-Year Improvement Program (SYIP). It can also be submitted by MPO member local governments and agencies in seeking federal, state and other potential sources of funds. Note that the MPO’s current list of regional priority projects has not significantly changed since November 2009 when seven projects were added and shown as unranked. With the General Assembly taking action in 2013 to significantly expand transportation revenue (amounts to approximately \$5.9 billion in additional revenue over the next five years), the MPO will need to review its current list of priority projects (most of which are expected to be shown as fully funded) and come up with an expanded list of regional priority projects.
2. Local Transportation Priority Projects – Coordinate regional review and submittal of Richmond Region local governments local priority projects for VDOT Richmond District staff review in developing the working draft Six-Year Improvement Program (SYIP).
3. RSTP, CMAQ and TA Projects Review, Selection and Funds Allocation Process – Conduct annual process for review, selection and funds allocation for RSTP and CMAQ funded projects. New to this process for FY 2014 is the MPO’s new responsibility for allocation of Transportation Alternative (TA) program funds. Staff plans to include TA project review, selection and funds allocation as part of the current process for RSTP and CMAQ funded projects. Note that staff will need to expand its efforts at solicitation for proposed TA projects to various groups and organizations that are eligible to apply for TA funds. Staff will work with VDOT staff to utilize their solicitation process as much as possible for at least this initial phase of the TA projects applications process. Also note that staff will need to revise the MPO’s RSTP and CMAQ Project Review, Selection and Funds Allocation Guidelines document on returning FY 2007 and prior years surplus allocations for reallocation at the regional level and revision to the current policy of an 11.4 percent off-the-top CMAQ funds allocation for RideFinders (recommended by TAC to be changed to a base annual allocation of \$500,000 with RideFinders allowed to submit an application for additional CMAQ funds and/or RSTP funds in support of its

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various programs and services). Staff plans to address these recommended policy changes with the MPO's Executive Committee and submit them for review and action by the MPO board in late FY 2013/early FY 2014.

4. Tracking Allocations for RSTP, CMAQ and TA funds and Financial Closeout for Active Projects – Staff support to track RSTP, CMAQ and TA (new) allocations made to individual projects and reallocation of funds through the “PD-24” process. Note that VDOT Richmond District and RRPDC programming staffs meet on a regular basis (usually after TAC meetings) to review the status of active projects, conduct financial closeout for these projects, then reallocate these funds to other projects. Note that staff will need to establish a project review, tracking and closeout process for TA funds allocated to the MPO. Staff also plans to provide annual reports to TAC and the MPO on financial closeout activities for the previous fiscal year. Staff anticipates that it will provide these reports at the July or August TAC meeting and at the August, September, or October MPO board meeting.
5. TIP Amendments/Adjustments – Ongoing staff support for reviewing and processing amendments to the TIP. Note that certain amendments (i.e., adjustments) can be processed by RRPDC staff in consultation with appropriate local government and/or regional agencies rather than being submitted for MPO review and action. VDOT Richmond District has full-time staff to monitor and report on various project programming activities, and works with VDOT Richmond District project managers, VDOT Central Office Programming and Scheduling staff, and MPO and local government staffs to monitor, report and facilitate updates to project costs, allocations and obligations.
6. Annual Listing of Obligated Projects – Annual submission by VDOT and DRPT of projects that had funds obligated during the preceding federal fiscal year. With new MAP-21 requirements for performance management measures and targets that are to be addressed in the TIP, staff will review using the Annual Listing of Obligated Projects to address these new requirements. Staff will also give consideration to establishing a new state related (i.e., not MAP-21) performance measure and target for the MPO's Regional Transportation and Land-Use Performance Measures which monitors and reports the region's progress in having planned obligations actually obligated and showing if there is an upward or downward trend over a several year time period in the total and per capita amount of actual obligations.
7. Visualization Techniques – Continue work to develop visual and graphic aids for use in TIP documents and reports.
8. SYIP and STIP – Monitor and report as appropriate federal and state activities to merge/coordinate the State SYIP with the federally required State TIP.

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9. TIP MAP-21 Compliance – Conduct activities required to make the MPO’s current/FY 12 – FY 15 TIP compliant with MAP-21. FHWA and VDOT guidance will be needed before staff initiates work activities to meet these requirements. Note that FTA interim guidance on MAP-21 states that “TIPs must include a description of the anticipated progress toward achieving the performance targets resulting from implementation of the TIP.”
10. New TIP – The MPO’s current/FY 12 – FY 15 TIP was adopted by the MPO on June 9, 2011. A new TIP will need to be prepared and adopted by June 2015 (i.e., FY 2015). Staff does not anticipate any work to develop the next TIP until FY 2015 unless advised by VDOT and/or FHWA of any need to initiate such work.
11. TIP Participation Plan – Conduct participation plan that specifies procedures and process for providing reasonable opportunity for comment on the content of the TIP. This includes consultation with interested parties and consultation with federal, state, and local agencies when developing the draft TIP document.
12. Public Review – Conduct public review process for final draft TIP document and air quality conformity analysis findings (conduct when appropriate; development of the next TIP is not yet scheduled). Adopted TIP document, RSTP and CMAQ allocations, TA allocations (made by the MPO), and regional priority projects are posted on the RRPDC web site.
13. Conformity Analysis – Utilizing the regional travel demand model, RRPDC staff will model projects when developing a draft TIP or when amending the TIP for regionally significant projects to determine vehicle miles of travel (VMT), which is used as input for the new Motor Vehicle Emission Simulator (MOVES2010) model for SIP development and regional conformity analysis. VDOT staff is charged with running the MOVES2010 model for analyzing projects included in the draft TIP and for regionally significant TIP amendments, and prepares and submits the air quality conformity analysis report for RRPDC staff review, and for TAC review and recommendation. The RRPDC staff conducts the public review process for the draft air quality conformity analysis report, which is submitted for TAC review and recommendation and for MPO action. The RRPDC staff conducts the public review process for the draft air quality conformity analysis report. The RRPDC staff also runs the regional travel demand model (RTDM) which provides VMT input for the MOVES model. Note that effective mid-July 2013, the Richmond and Tri-Cities MPOs will no longer be required to conduct air quality conformity analysis for the LRTP and TIP due to its attainment status (designation made by EPA on April 30, 2012) for ozone air quality standards. However, this could change as updated air quality details processed by EPA (i.e., could go back to nonattainment status) and based on EPA’s discretion in considering DEQ’s Ozone Advance Plan for the Richmond/Petersburg area.

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14. Regionally Significant Projects – Under VDOT guidance, coordinate identification of regionally significant public and private transportation projects and submit to VDOT for air quality analysis purposes (if appropriate).
15. Federal Transit Administration (FTA) Section 5310 Projects – Advise area local governments, human service agencies and organizations, TAC, EDAC and private transportation operators of upcoming review and application activities for FTA Section 5310 program funds. Note that interested private transportation operators are included in the information and notices provided to EDAC, TAC, and local governments and human service agencies and organizations in order to encourage the use of private transportation services. Following CTB action to approve the SYIP, staff takes action to amend the current TIP to include those Section 5310 projects included in the SYIP (MPO action to authorize amending the TIP is given as part of the MPO’s action to endorse application for Section 5310 funds subject to their being selected and programmed in the SYIP). Note that the MPO took action at its February 14, 2013 meeting to designate DRPT as the designated recipient for Section 5310 funds apportioned for the Richmond Urbanized Area.
16. SYIP and STIP – Monitor and report as appropriate federal and state activities to merge/coordinate the State SYIP with the federally required State TIP.
17. Coordinate listing and description of progress in the implementation of TCM’s (if appropriate).
18. TIP Availability in Electronically Accessible Format – Post MPO adopted TIP and other appropriate documents on the RRPDC web site.

D. Agency Participation

RRPDC, VDOT, VDEQ, DRPT, 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</u> | <u>FY 13 CO</u> <u>5303</u> | <u>TOTAL</u> |
|-------|-----------------------|-------------|--------------------------------|--------------|
| RRPDC | 146,000 | 40,000 | 2,000 | \$188,000 |

^① 4/10/14 MPO action to reduce PL funds by \$24,000 (shifted to other RRPDC staff work tasks; portion transferred to FY 2015 UWP).

F. Schedule

1. TIP Amendments/Adjustments – Ongoing activity
2. Regional Transportation Priority Projects – July 2013 to November 2013.
3. Local Transportation Priority Projects – December 2013 to February 2014.
4. FY 15 to FY 20 RSTP, CMAQ and TA Project Review and Selection – October 2013 to April 2014 (for RSTP and CMAQ) and to June 2014 (for TA).
5. Annual Listing of Obligated Projects Report – VDOT and DRPT to provide annual listing of actual project obligations during the preceding program year (i.e., federal fiscal year) to RRPDC by December 1, 2013 and final list to be posted on RRPDC web site by December 31, 2013.
6. RSTP, CMAQ and TA Project Review and Selection Policy Guidelines (proposed changes eliminating/revising policy of 11.4 percent off-the-top CMAQ funds allocation to RideFinders, eliminating/revising policy of FY 2007 and prior allocated CMAQ and RSTP funds staying with jurisdictions and agencies to which they were first allocated, and revising policy guidelines document to incorporate new MPO responsibility as lead organization charged with allocating TA funds apportioned to the Richmond Urbanized Area and allocated to the Richmond Area MPO) – FY 2013 to November 2013.

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 consumers and organizations representing seniors, individuals with disabilities, and persons with low income. It advises the MPO on plans, studies, issues, and other matters related to the planning of public transportation services. It also assists GRTC by advising them of public transportation needs and issues and concerns to the Richmond Region's seniors, individuals with disabilities and persons with low income. EDAC members also serve with other human service agency/organization staffs as a part of the stakeholders work group for work on UWP task 5.6, Coordinated Human Services Mobility Plan (see UWP task 5.6).

This task provides RRPDC staff support to ensure an active and involved EDAC and to assist the committee in developing up-to-date information and addressing the transportation needs seniors, individuals with disabilities and persons with low income and identifying available transportation services and resources. This task also provides for staff participation in various study activities addressing the region's specialized transportation services and serving on advisory committees involved with specialized transportation needs and services.

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

One major work task being completed in FY 2013 is the *Transportation Services Guide*. This report provides a guide that lists significant public and private transportation service operators and programs available to the Richmond Region's seniors, individuals with disabilities and low-income persons. In FY 2014, staff will conduct ongoing updates to this document as it becomes aware of new transportation service operators and changes to existing programs.

Work in FY 2013 will also focus on exploring ways in which the mobility needs of paralyzed veterans can be identified and develop strategies and actions to meet these needs. As part of the update of the MPO's adopted *Public Participation Plan* (see UWP task 1.2, MPO Citizen Participation) staff will also review EDAC's current member organizations and identify ways to become more effective in representing minority, ethnic, limited English proficiency, and low-income communities, and also maintain good representation and participation of groups and organizations that address the transportation needs of seniors, individuals with disabilities and persons with low income.

B. End Products

1. A functional and viable process that advises the MPO and GRTC on the special transportation needs of seniors, individuals with disabilities, and low-income persons.
2. Ongoing updates to the *Transportation Services Guide*.
3. Review and recommendations for more effective participation of groups and organizations that represent communities for minority, low-income, ethnic, limited English proficiency, seniors, and individuals with disabilities.
4. Strategies and actions to meet the mobility needs of the Richmond Region's paralyzed veterans.

C. Work Elements

1. MPO Elderly and Disabled Advisory Committee (EDAC) – Provide administrative and technical support for EDAC (anticipate four to five meetings in FY 14). Note that the EDAC Chairman has indicated a need for EDAC to provide a greater focus on meeting the transportation needs of the region's paralyzed veterans. The Richmond Region is home to the Hunter Holmes McGuire Veterans Affairs Medical Center, one of the largest hospitals for military veterans in the country. Staff will explore ways in which mobility needs of paralyzed veterans can be identified and develop strategies and actions to meet these needs. Staff will also conduct a review of EDAC's current member organizations and identify ways to become more effective in representing minority, ethnic, limited English proficiency, and low-income communities, and also maintain good representation and participation of groups and organizations that address the transportation needs of seniors, individuals with disabilities, and persons with low income.
2. Transportation Services Guide – In late FY 2013, staff should complete work on the Richmond Region's Transportation Service Guide. This guide provides a list of public and private transportation service operators and programs available to the Richmond Region's seniors, individuals with disabilities, and low-income persons. One primary focus for this guide will be to help the Capital Area Agency on Aging, Senior Connections "Ride Connection" program, which acts as a broker for qualified persons in the Richmond Region needing transportation services. It will also be available to other human services agencies and organizations as an information resource. Staff will conduct ongoing updates to this document as it becomes aware of new transportation service operators and changes to existing programs, and provide this information to Senior Connections and GRTC.

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3. Demographic Profiles/Data for Richmond Region Seniors, Individuals with Disabilities and Low-Income Persons – Review available data from the 2010 census and most current ACS census to develop block group or census tract level data for seniors, individuals with disabilities and low-income persons, and provide a report on this data/profiles to EDAC, TAC and the MPO. Note that work on this activity will also be conducted as part of staff’s work to develop demographic data under UWP task 2.1 Socioeconomic Data Development.
4. Coordinated Human Services Mobility Plan (CHSMP) Update – Provide for EDAC review and participation in updating the CHSMP (see UWP task 5.6).
5. Advisory Groups/Organizations Participation – Participation by staff on various advisory committee/work groups related to the transportation needs of seniors, individuals with disabilities, and persons with low income.
6. GRTC CARE Services, Report and Policies – Coordinate submission of CARE service reports, proposed CARE services policies and programs, and other items of interest for EDAC review and input that can assist GRTC in addressing ADA related matters, and also to assist GRTC in providing more effective, efficient and consumer friendly public transportation services for use by qualified users (i.e., seniors and individuals with disabilities).

D. Agency Participation

RRPDC, GRTC, DRPT, local governments, FTA, EDAC appointing organizations, private and human service agency transportation operators.

E. Budget, Staff and Funding

| | <u>PL^①</u> | <u>FY 13 CO</u> <u>5303</u> | <u>5303</u> | <u>TOTAL</u> |
|-------|-----------------------|--------------------------------|-------------|--------------|
| RRPDC | – | – | 55,000 | \$55,000 |

^① 4/10/14 MPO action to reduce PL funds by \$5,000 (shifted to other RRPDC staff work tasks; portion transferred to FY 2015 UWP) and to increase Section 5303 funds by \$10,000 (shifted from other RRPDC staff work tasks).

F. Schedule

1. Review of EDAC member organizations (conducted in conjunction with UWP task 1.2) – Late FY 2013 to November 2013.
2. Transportation Services Guide Updates – Ongoing

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3. Strategies and actions to meet the mobility needs of the Richmond Region's paralyzed veterans – Staff to consult with EDAC Chairman on schedule.
4. EDAC support/meetings – Ongoing.
5. Demographic profiles/data for seniors, individuals with disabilities and low-income persons – Ongoing (depending on availability of census data). Work to be conducted in conjunction with UWP task 2.1.

5.5 Regional Public Transportation Services

A. Background

The MPO *Regional Mass Transit Study* was completed and approved by the MPO in May 2008. The results from this study were incorporated into the MPO's adopted 2031 Long-Range Transportation Plan (LRTP) update (adopted by the MPO on August 14, 2008) and then also used in developing the MPO's 2035 LRTP/CMP Update (adapted by the MPO on July 12, 2013). The MPO took action at its November 13, 2008 meeting to establish its list of regional priority projects, which included two new transit projects; Broad Street Bus Rapid Transit (from Willow Lawn to Rockett's Landing) and GRTC Downtown Transfer Center.

In October and November 2011, GRTC and its consultants completed work on the GRTC Transit Development Plan (TDP), which was approved at the October 18, 2011 GRTC board meeting and accepted as work received at the November 10, 2011 MPO board meeting. The TDP is designed to help transit operators improve their efficiency and effectiveness by identifying the need and required resources for modifying and enhancing services provided to the general public. TDPs also provide a solid foundation for funding requests and feed directly into the programming process (i.e., budgeting, funding and implementation of a transit operators capital needs program and transportation services). To capture the benefit of this planning tool, DRPT requires that any public transit (bus, rail, ferry) operator receiving state funding prepare, adopt, and submit a TDP. DRPT requires that a TDP be completed every six years. DRPT also requires the annual submission of a letter by the transit operator describing progress made towards implementing the TDP and any significant changes. The planning horizon for the TDP is a minimum of six years (a longer planning horizon may be required to reflect significant capital replacement/rehabilitation needs, or the capital and operating budget implications of significant service expansion). Items identified by DRPT as the purpose of the TDP are as follows:

- To improve the efficiency and effectiveness of public transportation services in the Commonwealth of Virginia.
- To serve as a management and policy document for the transit operators.
- To maximize the investment of public funds and achieve the greatest possible public benefit.
- To provide the basis for inclusion of an operator's capital and operating programs in planning and programming documents such as: the Six Year Improvement Program (SYIP), Statewide Transportation Improvement Program (STIP), Transportation Improvement Program (TIP) and Constrained Long-Range Plan (CLRP).

The MPO is involved with various agencies, jurisdictions, and organizations providing technical assistance and participation in various public transportation services studies, advisory groups and committees, and other activities supporting the development of public transportation services in the region. This work task provides

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for RRPDC staff participation in such activities. Work activities anticipated for RRPDC staff in FY 2014 include the following:

- Review and recommendation on the GRTC Bus Rapid Transit (BRT) Alternatives Analysis for the Broad Street corridor locally preferred alternative, and submit for MPO review and action.
- Provide for MPO review/participation in various rail studies and projects (see UWP task 5.8).
- Staff work to identify potential rail and transit improvement projects in the Richmond MPO study area eligible for RSTP and/or CMAQ funds, and conduct needed reviews and reports to move these potential projects forward for funding.
- Review and report on various local and regional proposals for expanded public transportation services, and provide staff comments and recommendations as appropriate.
- Attend/participate on various advisory committees and work groups. Includes staff participation as a member of the RideFinders Advisory Board, the GRTC Downtown Transfer Center Steering Committee, and staff attendance at GRTC Board meetings and other meetings, conferences, webinars, and events, and staff attendance at GRTC board meetings and other meetings, conferences, webinars, and events.
- Staff participation and assistance to groups, agencies, organizations, and area local governments involved with implementing transportation recommendations/steps identified in the City of Richmond Mayor's Anti-Poverty Commission Report (report submitted to Mayor Dwight C. Jones on January 18, 2013).
- Staff participation and assistance for the Capital Region Collaborative (CRC) Coordinated Transportation and Social Stability work groups in developing work group recommendation and working with the CRC to promote collaboration on implementation of the identified action steps (related to public transportation services).
- Staff review, comments and recommendations (if appropriate) to TAC and the MPO on the GRTC Annual TDP Update letter (required annual submission by GRTC to DRPT). At a minimum, staff plans to submit the Annual TDP Update letter to the MPO for its review and consideration. Note that the MPO has provided significant funding to GRTC through the MPO allocation of RSTP and CMAQ funds for various projects. The MPO's list of regional priority projects also includes several GRTC projects.

B. End Products

Ongoing RRPDC staff review and participation in local and regional public transportation service proposals and studies and state passenger rail studies.

C. Work Elements

1. Advisory Committees/Work Groups/Meetings – RRPDC staff participation on the GRTC/DRPT Broad Street Rapid Transit Alternatives Analysis project/study, GRTC Transfer Center Steering Committee, RideFinders Advisory Board, and other public transportation related groups and organizations. Attendance at public transportation workshops, conferences, meetings and webinars.
2. Plans, EIS and Studies – Monitor, review, comment, and provide reports to the MPO and MPO committees on plans, studies, and Environmental Impact Statement (EIS) projects (includes EIS work currently underway for the Washington, D.C. to Richmond, Richmond to Raleigh/Charlotte, and Richmond to Hampton Roads high speed rail corridors; and studies for Richmond area rail improvement projects). Also monitor, review, comment and report on GRTC, RideFinders, DRPT and local government public transportation plans, programs, projects and studies (includes Main Street Station, GRTC Transfer Center, Broad Street Rapid Transit Study/ Alternatives Analysis, park and ride lot studies, DRPT proposed improvements to the Greendale/Staples Mill Road Amtrak Station, etc.).
3. Technical Service Assistance and Analysis – Prepare and conduct reviews, analysis and reports of public transportation services and programs in the Richmond Region and provide technical assistance to area local governments, regional agencies (including GRTC, RMA and Senior Connections) in conducting research, analysis, reports, and studies for local and regional public transportation services.
4. Capital Region Collaborative (CRC) – Staff participation and assistance for the CTAC Coordinated Transportation and Social Stability work groups in developing and work group recommendations and working with the CRC to promote collaboration on implementation of the identified action steps (related to public transportation services).
5. GRTC TDP – Work on the GRTC Transit Development Plan (TDP) was completed and accepted as work completed by the MPO on November 10, 2011 (TDP was approved by the GRTC Board on October 18, 2011). Updates to the TDP will be reviewed by staff and if appropriate, request that GRTC provide a report on these updates to MPO committees (CTAC, EDAC and/or TAC) and the MPO. Note that DRPT requires Virginia’s public transit operators (e.g., GRTC) to develop and maintain a TDP on an ongoing basis in order to be eligible for various state grant programs. **DRPT also requires an Annual**

TDP update letter be submitted to DRPT. The MPO requests that a copy of this letter be submitted and reported to the MPO. The TDP was used in developing the MPO’s “*plan2035*” Long-Range Transportation Plan (LRTP) Update and is also considered in developing the Transportation Improvement Program (TIP). It can also be used to identify projects and programs for consideration in the MPO’s list of regional priority projects, and may also provide data that can be used by the MPO in developing new federal performance management measures and targets required under MAP-21.

6. MAP-21 Transit Planning Requirements and New/Revised Transit Programs – Conduct staff review activities of new and revised MAP-21 transit programs and revise/update MPO planning process to accommodate these new transit programs and planning requirements.
7. DRPT Funding Programs – As follow-up to action taken during the 2013 General Assembly session and signed by the Governor, provide reports to the MPO on new and expanded state funding sources and programs related to public transportation services (for rail, mass transit, paratransit and TDM services/programs). It is recommended that DRPT staff provide such reports to the MPO.
8. Richmond Area Rail and Transit Improvement Projects – Staff work to identify potential rail and transit projects in the Richmond MPO study area eligible for RSTP and/or CMAQ funds, and conduct needed reviews and reports to move these potential projects forward for allocation of funds (including RSTP, CMAQ and other potential funding sources). Staff will also give consideration to other federal and/or state funding sources when appropriate.

D. Agency Participation

RRPDC, GRTC, RideFinders, local governments, RMA, Senior Connections, VDOT, FHWA, DRPT, FTA

E. Budget, Staff, and Funding

| | <u>PL^①</u> | <u>FY 13 CO</u> <u>5303</u> | <u>5303</u> | <u>TOTAL</u> |
|-------|-----------------------|--------------------------------|-------------|--------------|
| RRPDC | – | – | 82,000 | \$82,000 |

① 4/10/14 MPO action to reduce PL funds by \$10,000 (shifted to other RRPDC staff work tasks; portion transferred to FY 2015 UWP) and to increase Section 5303 funds by \$22,000 (shifted from other RRPDC staff work tasks).

F. Schedule

1. GRTC TDP Update – Fall 2013
2. All other activities – Ongoing

5.6 Coordinated Human Services Mobility Plan (CHSMP)

A. Background

The CHSMP serves as a comprehensive, unified plan that promotes community mobility for seniors, individuals with disabilities, and low-income persons; establishes priorities to incrementally improve mobility for these groups; and provides an ongoing process to identify partners interested, willing and able to promote community mobility for these groups. One remaining effort for the CHSMP planning process is the development of an ongoing structure and process for future coordinated transportation planning efforts. Note that the MPO took action at its October 9, 2008 meeting to approve the CHSMP and to endorse the establishment of and authorize the participation of those designated by GRTC on a project review and selection committee for the purpose of reviewing and scoring applications for FTA Section 5316 and 5317 funds as administered by GRTC (MPO also specified the member organizations for this project review and selection committee). Note that under MAP-21, the MPO designated the Virginia Department of Rail and Public Transportation (DRPT) to serve as the designated recipient for FTA Section 5310 program funds (MAP-21 consolidates the previous Section 5317 New Freedom Program with Section 5310, and eliminates Section 5316 Job Access Reverse Commute or “JARC” program making activities previously funded under JARC eligible under other FTA formula grant programs). Funds apportioned under SAFETEA-LU to GRTC through the old FTA Section 5316 JARC and Section 5317 New Freedom programs, will continue to be administered by GRTC with project review and selection conducted under these previous program requirements.

The Richmond Region’s CHSMP focuses on identifying strategies and actions to meet unmet transportation needs of the region’s seniors, individuals with disabilities, and low-income persons. The CHSMP includes the following federally required elements:

1. Assessment of available services identifying current providers (public and private).
2. Assessment of transportation needs of the elderly, disabled and low-income.
3. Strategies, activities, and/or projects to address the identified gaps between current services and needs, as well as opportunities to improve efficiencies in service delivery.
4. Priorities for implementation based on resources, time, and feasibility for implementing specific strategies and/or activities.

Under MAP-21, TMA designated MPOs (i.e., generally those with 200,000 or greater population) now have FTA Section 5310 program funds apportioned for such areas (note the Richmond Urbanized Area includes both the Richmond and Tri-Cities MPOs). At the MPO’s February 14, 2013 meeting, action was taken to designate

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DRPT as the FTA Section 5310 program funds designated recipient. As the designated recipient, DRPT is responsible for administering this program, which includes notifying local entities of funding availability, developing the project review and selection process, determining project eligibility, developing the program of projects, and ensuring that all applicants comply with federal requirements. DRPT has advised the MPO that its serving as the FTA Section 5310 program funds designated recipient is a near-term measure, and that it plans to reevaluate this approach in light of its experience in conducting and administering this program in FY 2014 and following issuance of FTA final guidance. DRPT can also draw down a certain amount of Section 5310 funds apportioned to the Richmond Urbanized Area for planning and administrative support. DRPT has advised that it will use some of these funds to support consultant work on updating the CHSMP for the Richmond and Tri-Cities MPOs. RRPDC staff will provide technical assistance to DRPT and its consultant in conducting the Richmond Region CHSMP update. RRPDC staff will also continue to provide assistance to DRPT in providing notice to local government staffs, human service agencies and organizations, members of EDAC, and interested private transportation providers, and other interested parties for upcoming CHSMP stakeholder group meetings (in support of CHSMP requirements for ongoing review of strategies and actions to identify and meet transportation service needs and to facilitate cooperation and coordination among human service agencies and organizations, and interested private transportation providers).

Service on Senior Connections Regional Mobility Management Program was initiated in mid-2012. This program is funded under FTA Section 5317 New Freedom program funds (administered by GRTC). Staffing for the program is very limited with most funds used for support of a Regional Mobility Manager. The program acts primarily as a brokerage service for individuals seeking transportation assistance. Referrals are made to transportation service providers (both public and private) principally for non-emergency medical transport. The program also includes very limited transportation service using volunteer driver and private transportation providers under contract to Senior Connections.

DRPT also maintains and conducts a mobility management training program and has encouraged area human service agencies and organizations to participate in these training programs and work with other human service agencies and organizations to share and coordinate their limited transportation resources to have more effective and efficient services. DRPT is also encouraging human service agencies and organizations to utilize private transportation operators. Note that Chesterfield County contracts with a private company which operates the Access Chesterfield program for qualified elderly, disabled and low-income Chesterfield County residents.

B. End Product

1. Update of the Coordinated Human Services Mobility Plan (CHSMP) for the MPO and Richmond Region and assistance in DRPT and consultant work activities for review and selection of Section 5310 funded projects.

2. Ongoing participation in the GRTC administered FTA Sections 5316 and 5317 application review and scoring process (based on funds remaining from SAFETEA-LU apportionments).

C. Work Elements

Work activities include the following:

1. RRPDC staff participation on the GRTC administered Project Review and Selection Committee for FTA Section 5316 and 5317 funds applications. Also, staff participation/work activities in support of DRPT work activities to conduct the FTA Section 5310 program process for project review and selection has not yet been determined. Staff expects that this will include advising EDAC area local governments and human service agencies and organizations and interested private transportation operators of upcoming DRPT review and application activities for FTA Section 5310 program funds and of MPO action to endorse these applications. Note that interested private transportation operators are included in the information and notices provided to local governments and human service agencies and organizations in order to encourage wider use of private transportation services. These private providers can also now apply for such funds. Following CTB action to approve the SYIP, staff takes action (under UWP task 4.1 TIP) to amend the current TIP to include those Section 5310 projects included in the SYIP (MPO action to authorize amending the TIP is given as part of the MPO's action to endorse application for Section 5310 funds subject to their being selected and programmed in the SYIP).
2. Provide assistance to DRPT and its consultants in conducting the CSHMP update for the Richmond Region.
3. Provide technical assistance to Senior Connections in support of its Regional Mobility Management Program.
4. Conduct staff review activities of new and revised CHSMP requirements as a result of new/revised FTA guidance and regulations under MAP-21.
5. Monitor and report to the MPO, TAC and/or EDAC on various public transportation services and programs for seniors, individuals with disabilities and low-income persons in the Richmond Region.

D. Agency Participation

RRPDC, DRPT, DRPT Consultant, VDOT, GRTC, Senior Connections, local governments, human service agencies/ organizations, public and private non-profit and private for-profit paratransit service operators, FTA.

E. Budget, Staff and Funding

| | <u>PL^①</u> | <u>FY 13 CO 5303</u> | <u>5303^①</u> | <u>TOTAL</u> |
|-------|-----------------------|--------------------------|-------------------------|--------------|
| RRPDC | – | – | 12,000 | \$12,000 |

① 4/10/14 MPO action to reduce PL funds by \$5,000 (shifted to other RRPDC staff work tasks; portion transferred to FY 2015 UWP) and to reduce Section 5303 funds by \$18,000 (shifted to other RRPDC staff work tasks).

F. Schedule

1. GRTC Administered FTA Sections 5316 and 5317 funds project review and application process – Initiated in April 2013 and completed by early FY 2014.
2. Updated Richmond Region/Richmond Area MPO CHSMP – (schedule to be submitted by DRPT).
3. Other CHSMP maintenance/review/support activities – Ongoing.

5.7 Broad Street Bus Rapid Transit (BRT) Study Alternatives Analysis

A. **Project Description**

The Broad Street Bus Rapid Transit (BRT) Study Alternatives Analysis (AA) and Environmental Assessment will develop a detailed problem statement representing the purpose and need of the project from which project goals and objectives will be derived. The Alternatives Analysis will be conducted in accordance with the Environmental Assessment (EA) guidelines, as required by the National Environmental Protection Act (NEPA) of 1969.

A definition of alternatives will be developed to: 1) meet the study's problem statement goals and objectives for the improvements, 2) isolate the differences between potential solutions to an identified transportation problem, and 3) highlight the tradeoffs inherent in the selection of a locally-preferred alternative (LPA). The "build" and Transportation System Management (TSM) alternatives will be included in the definition of alternatives report and will be directly related to and address the "purpose and need" of the project. An "Evaluation of Alternatives" report will be developed in a manner that will provide the information necessary for local officials and the general public to understand the relative costs and benefits among the alternatives and to ultimately select the LPA. The evaluation framework will focus on the transportation problems identified in the project's purpose and need and will reflect the corresponding project goals and objectives that will fundamentally drive the alternatives analysis. A detailed station area analysis will be conducted to identify appropriate station locations and assess the adjacent land-use compatibility. Ridership forecasts will be developed to contribute to the evaluation of the alternatives. Detailed capital and operating costs will be developed to reflect each alternative, along with a preliminary financial plan. The financial plan will reflect the recent financial history of GRTC, document projected costs and revenues into the future, and demonstrate the reasonableness of key assumptions underlying these projections. The financial plan will aid decision makers in understanding the costs associated with constructing, operating and maintaining each of the alternatives on an annual basis.

The BRT alternatives analysis study area is along the Broad Street Corridor starting at Willow Lawn (in Henrico County) extending east on Broad Street in the City of Richmond to downtown, then proceeding along the Route 5 corridor to the Rocketts Landing development in the City of Richmond and Henrico County.

The Project Team collaborated with a Policy Advisory Committee (PAC) and a Technical Advisory Committee (TAC) that is comprised of representatives from the City of Richmond and Henrico County, as well as representatives from the Virginia Commonwealth University (VCU), the Convention Center, the MPO, in developing the BRT study alternatives analysis. In addition, public outreach and communications to the public have helped to facilitate DRPT's and GRTC's ability to gain public involvement and input throughout the Alternatives Analysis and Environmental Assessment planning and project development process.

The project continues to advance through the evaluation of alternatives. Recent issues with the route's proposed alignment in the east end of the study area have required additional work and time to properly assess. Stakeholder engagement has continued, as needed, since the last public meetings were held, and a third round of public meetings will be held once a viable alternative has been finalized for the eastern end of the route and the Alternatives Analysis and NEPA documentation can be finalized and approved for public distribution by the Federal Transit Administration (FTA).

The project, as currently proposed, with service from Willow Lawn in the west to Rocketts Landing in the east, including fourteen stations and over three miles of dedicated travel lanes, has an estimated construction cost of \$68 million. BRT running times are estimated to be 14 minutes faster than current transit operations along Broad Street from Willow Lawn to downtown and ridership is estimated at 5,500 boardings per day.

Half the construction costs are proposed to come from the federal Small Starts program, with the other half coming in the form of a 50 percent match funded by both state and local sources. The matching funds would consist of \$17 million from yet to be identified local sources and \$17 million from state sources. Operation of the service would cost \$4-5 million per year. Some of this cost would be covered by fares and the remainder to be provided annually from yet to be determined local funding sources. Note that an economic impact analysis of the proposed service was completed in late FY 2012 and GRTC expects this information will help in securing local financial commitments.

Once the additional study funding has been identified (if needed) and ensuing work has been completed on the route's east end alignment, the Alternatives Analysis and Environmental Assessment documents will be released for public review and comment via a third round of public meetings. The next step will be to select a Locally Preferred Alternative and to submit an application to the FTA for acceptance into the Small Starts transit funding program. If the application proceeds quickly and is accepted by FTA, and if state and local matching funds are secured, the project could then proceed to design. Construction would follow, likely starting 2-3 years later.

B. Project Budget

In FY 2009, DRPT and GRTC programmed \$720,000 flexible STP (allocated by the state) and local match of \$180,000 (\$90,000 state and \$90,000 GRTC). In FY 2010 DRPT and GRTC programmed \$873,142 of Section 5304 funding (allocated by the state) and local match of \$180,000 (allocated by GRTC) to provide an additional \$1,053,142 of funding to the project. The total project budget between FY 2009 and FY 2010 is \$1,953,142. No additional funds have been programmed since FY 2011.

C. Schedule

To be determined when FTA New Starts/Small Starts funding request is submitted.

5.8 Richmond Area Rail Studies and Projects

The following presents a brief informational report on statewide and Richmond Region passenger rail studies and projects.

Virginia State Rail Plan

The *Virginia Statewide Rail Plan* analyzes the current state of Virginia's rail system and recommends segments for improvement. The *Virginia Statewide Rail Plan* has been developed in accordance with guidelines (49 CFR 266.15) set out by the Federal Railroad Administration (FRA) for state plans in order to ensure that Virginia's rail plans are consistent with federal funding requirements. The *Virginia Statewide Rail Plan* has been incorporated into the Commonwealth's long-range multi-modal transportation plan, *VTrans 2035*.

The draft Rail Plan was made available for public comment in June 2008 and public hearings were held across the state and comments were received through August 2008. The *Virginia Statewide Rail Resource Allocation Plan* was released in December 2008 to assist in programming funds. The *Virginia Statewide Rail Plan* was completed in December 2008.

An update to the Virginia Statewide Rail Plan is currently under development, in accordance with the Passenger Rail Investment and Improvement Act of 2008 (PRIIA), and is expected to be available in mid-2013.

Southeast High Speed Rail Overview

The Southeast High-Speed Rail (SEHSR) corridor, originally designated in ISTEA and TEA-21, would extend high-speed rail service south from Washington, D.C., to Richmond and on to Raleigh and Charlotte. The SEHSR corridor would later expand further south from Charlotte to New Orleans via Atlanta and from Raleigh to Jacksonville and east from Richmond to Hampton Roads. DRPT and the North Carolina Department of Transportation (NCDOT) jointly completed the Tier I National Environmental Policy Act (NEPA) Environmental Impact Statement (EIS) for SEHSR from Washington, D.C. to Charlotte, NC (almost 500 miles) in 2002. The study recommended high speed rail in Virginia along the I-95 corridor north of Petersburg, continuing south via a reconstructed former CSX rail line that parallels I-85 to Norlina, NC.

Below is a summary of the recent and ongoing SEHSR-related projects in Virginia.

- Southeast High Speed Rail – Raleigh to Richmond

In cooperation with NCDOT, DRPT continues to advance the SEHSR Richmond to Raleigh Tier II EIS, and submitted the project Recommendation Report to FRA in May 2012, which identified the two states' recommendations for the preferred rail alternative for each of the 26 sections of the project corridor. In Chesterfield County and the City of Richmond, all rail alternatives follow the same alignment along the existing rail right-of-way. The preferred alternative and associated road work will be

presented in the upcoming Tier II Final Environmental Impact Statement (FEIS), expected to be published in 2014. That will be followed by a Record of Decision (ROD) from FRA, associated with a second round of public hearings. Final design, right-of-way negotiation, and construction dates will depend on funding.

- **Southeast High Speed Rail – Richmond to Washington, D.C.**

DRPT was awarded a FY2010 FRA high speed rail grant for \$44.3 million to conduct NEPA EIS activities and preliminary engineering for high speed rail infrastructure improvements along the 110-mile Richmond Area (i.e., Main Street Station) to Potomac segment of SEHSR (RAPS). The corridor extends northward from Centralia in Chesterfield County via CSX's S-Line through Richmond's Main Street Station and rejoins CSX's A-Line near Staples Mill Station. From there it extends northward along the CSX Richmond, Fredericksburg and Potomac Subdivision (RF&P) to Arlington, Virginia. The segment also includes the following improvement areas in the Richmond Region: CSX Peninsula Subdivision between AM Junction and Beulah to the east, and Buckingham Branch Railroad from AM Junction to Ruffin to the north. The grant agreement is for \$55.385 million (\$44,308,000 in federal funding and \$11,077,000 in non-federal match). The study is currently under way and in the detailed work plan phase.

The Arkendale to Powells Creek 3rd track project, located along an 11-mile segment of RAPS that straddles Stafford and Prince William Counties, received an Environmental Assessment Finding of No Significant Impact (FONSI) in February 2011. It has since received a \$75 million ARRA Stimulus Grant for final design and construction. The 3rd track will be used to meet, pass, and overtake trains to enhance the performance schedule for intercity passenger service, high speed passenger rail service, and Virginia Railway Express commuter service, while preserving freight operations between Richmond and Washington, D.C. The project is expected to be complete in 2017, in advance of other improvements recommended in the RAPS study.

- **Southeast High Speed Rail - Richmond to Hampton Roads Passenger Rail Study**

DRPT is also pursuing improved passenger rail service in the major east-west travel corridor between Richmond and Hampton Roads, to ultimately connect to the Southeast, Northeast and Mid-Atlantic regions as an extension of the Southeast High Speed Rail Corridor. The Richmond to Hampton Roads Passenger Rail Study, a Tier I EIS, was issued a Record of Decision by FRA in December 2012 that set the environmentally preferred alternative for enhanced rail in the corridor: continued conventional speed passenger rail service on the Peninsula/CSXT route with three (3) daily roundtrips serving the existing Richmond Main Street, Williamsburg, and Newport News stations and new higher-speed passenger rail service with a maximum authorized speed (MAS) of 90 mph along the Southside/NS route with six (6) roundtrips daily serving stations in the Petersburg area, Bowers Hill and Norfolk. DRPT intends to advance the study to Tier II evaluations and analysis, depending on funding. The Tier II analysis will include specific planning and detailed evaluations of the selected alternative.

- **Amtrak Virginia**

In 2009 DRPT initiated Commonwealth-sponsored Amtrak regional intercity service, known as Amtrak Virginia. It began with a new service extension from Washington, D.C. to Lynchburg and in 2010 added additional service to Richmond. In December 2012 one of the new Richmond frequencies was extended to Norfolk, which re-established rail service that was unavailable since the 1970's. Next steps for Amtrak Virginia include extending service to Roanoke from Lynchburg, and increasing the train service frequencies to Norfolk from Richmond. In addition, Virginia is setting the national pace in preparation for the October 2013 implementation of PRIIA's Section 209 provisions. Section 209 requires states to fund regional train service. In 2011 the Virginia General Assembly responded to the anticipated funding need by creating the Intercity Passenger Rail Operating and Capital Fund (IPROC). In 2012, the General Assembly began funding IPROC by special appropriation and in 2013, in its landmark transportation funding legislation, created a dedicated revenue source for IPROC, securing the continuation of Amtrak regional service in Virginia and creating a sufficient sustainable revenue stream to develop new intercity service enhancements within strategic corridors.

5.9 GRTC Downtown Bus Transfer Center

A. Project Description

The purpose of the project is to locate, acquire, design and construct an efficient operating mobility center that uses alternative energy, is LEED certified, safe and secure, and that creates and supports economic and downtown revitalization efforts while also providing a local multi-modal transportation hub.

Such a facility will support a variety of transportation modes, such as local bus, bike, taxi, shuttle, Segway, flex car, and EV vehicles, all on a single site and within a single building. It may include additional program space to accommodate limited administrative offices, retail spaces, security and police spaces, and a community meeting room. The multi-modal transfer center will allow for:

- Improved supervision of on-time performance;
- Coordinated scheduling;
- Reduced congestion along Broad Street by providing off-street locations for vehicle layovers while also eliminating service duplication along Broad Street;
- Reduced bus travel mileages and idling times resulting in fuel cost savings and improvements to regional air quality;
- Provide protection from the elements for riders while providing them with a safe, secure, and well maintained place to wait for the bus;
- Reduce rider wait time for transfer activity to a seven-10 minute wait;
- Reduce sidewalk congestion on Broad Street between 2nd Street and 10th Street and provide increased curb-side frontage to store merchants by reducing the number of bus stops along the street.

GRTC is continuing to work with the City of Richmond and the Virginia Department of Rail and Public Transportation to develop a multi-modal transfer center for the system. The formation of a multi-disciplinary site selection Steering Committee continues the work of identifying a viable site to construct a transfer center at a location in the City’s central business district. The project focus area is bordered by 14th Street to the east and Belvedere Street on the west and Leigh Street on the north with Canal Street to the south.

The project Steering Committee developed a site selection scoring matrix using 10 major criteria consisting of relative location to GRTC routes and operations, site size/land configuration (pass/fail requirement), access (pass/fail requirement), traffic impact, inter-modality, economic development, environmental, availability (pass/fail requirement), and zoning (pass/fail requirement). The selection criteria were applied to seventeen sites in the focus area. The site list was reduced to five top sites for additional due-diligence level analysis. Additional evaluation is pending contact and discussion with each property Owner to gauge their interest, public scoping meetings, and implementation of a public communication plan.

The Public Communication Plan will consist of Public Scoping meetings, formation of and meetings with a Stakeholder Group, and general public meetings. The Stakeholder Group is created to provide guidance and recommendations into the location and design of the Multimodal Transportation hub. This collective will also assist in communicating the project to other vested individuals and organizations bring community input and views into planned visioning sessions. Specifically, members of the stakeholders will:

- Provide input on the vision of the multi-modal transportation hub;
- Provide input on possible sites, within the defined study area, for locating the hub;
- Provide input on facility design, street connectivity, amenities, and other facets of the project;
- Serve as a connection to other interested and vested parties or organizations about the proposed project;
- And attend stakeholder visioning meetings and public information meetings in support of the project.

B. Project Schedule

The project is scheduled for site selection to be completed by end of May 2013 (pending discussions w/owners, stakeholders, and general public). NEPA and 30 percent of the design are to be completed by end of September 2014.

C. Project Budget

The project is funded with the following FY09 grant awarded to GRTC by the Virginia Department of Rail and Public Transportation:

Fund Source: FY09 Capital-Flexible Surface Transportation Program

Amount:

Federal = \$2.8 million

State Match = \$560,000

Local (GRTC) Match = \$140,000

TOTAL FUNDING = \$3.5 million

Purpose: Engineering and design activities for a downtown transfer center.

Federal TEAM Grant Number: VA-95-X090-00

6.0 INTERMODAL PLANNING

6.1 Intermodal Planning

A. Background

With the passage of SAFETEA-LU and growing concern over the movement of freight through the Richmond Region, there is a renewed interest and need to address freight transportation issues and needs. Part of this need has been addressed under work being conducted by VDOT to develop the statewide Multimodal Freight Study. This effort was initiated in October 2006 with a Phase One report being completed in early 2008. The Phase Two report was completed in April 2011 with recommendations incorporated into the VTrans 2035 Statewide Transportation Plan. The Statewide Multimodal Freight Study provides a comprehensive look at Virginia's freight issues covering all transportation modes at statewide and corridor levels, and all types of freight movement (local/regional and through).

VDOT provided the MPO with 2004 commodity flow data for the Richmond Region (provided to VDOT under contract with Global Insight, Inc.). Staff was able to use this data for an analysis of region-wide freight data (examining commodity flow data by load, tonnage and value) in the 2031 LRTP Update. Note this is proprietary data and staff reviewed proposed tables and data included in the 2031 LRTP with VDOT before its release and publication.

In May 2010, the MPO's Intermodal Strategies and Action Study was completed. Work on this study was initiated in October 2008 and was funded under a VDOT Multimodal Planning Grant (i.e., state funds). It identifies roadway designations and policy measures to improve accommodation of current and future truck traffic and presents a summary of infrastructure improvement projects. These strategies and actions will help the MPO in addressing various regional freight movement needs, and have been included as part of the 2035 LRTP and CMP Update. In addition, project recommendations have been considered for funding (following the state and the MPO's process for reviewing and selecting projects and allocating and obligating funds). The MPO's FY 14 – FY 19 RSTP and CMAQ allocations include several VPA funded projects.

A major innovation in freight movement, initiated by the Richmond Area MPO, has been the highly successful "64 Express" James River Barge service operating between the Port of Richmond and Hampton Roads marine terminals. The service concept was proposed in November 2007 and the service was launched in December 2008 as a cooperative venture by the MPO, the Port of Richmond, the Virginia Port Authority (VPA), and Norfolk Tug. The initial service had once or twice weekly service transporting about 100 to

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160 truck containers. During its first year of operation (ending December 2009), approximately 6,000 truck containers were moved by barge on the 64 Express. It also removes oversize and overweight containers from the Region's roads and provides 30-plus gallons of diesel fuel saved per trip. The MPO initiated the 64 Express service by allocating approximately \$3.9 million in federal and state CMAQ funds for a three-year demonstration period. In FY 2011, RRPDC staff assisted VPA and the City of Richmond in discussions on VPA's proposed lease of the Port of Richmond from the City. VPA entered into a five-year lease arrangement (with options for future renewals) with the City of Richmond to manage and operate the Port of Richmond. This lease went into effect on July 1, 2011. Note that the City's Port of Richmond Commission has been disbanded. With the Port of Richmond now under VPA operation, areas adjacent to the port terminal as well as other areas in the City of Richmond plus Chesterfield and Henrico counties should become more attractive locations for warehousing and distribution centers. Note that several actions were taken during the 2011 General Assembly session for various tax credits (i.e., SB 1282, SB 1136 and HB 2531/SB1481) that provide direct and indirect economic incentives for shipping truck containers by barge on the 64 Express.

In FY 2013, staff will complete work on the Richmond Region's first Comprehensive Economic Development and Strategies (CEDS). This plan should qualify some jurisdictions and areas in the Richmond Region to be eligible for Economic Development Administration (EDA) funding. This plan will need to be updated on a regular basis (at least once every five years) in order for the Richmond Region to remain qualified for EDA grants. Staff will build upon strategies and actions identified in the Richmond Region CEDS in conducting intermodal freight work activities and utilize results from the CEDS as input to MPO plans, studies and reports.

MAP-21 includes a number of provisions designed to enhance freight movement in support of national goals. It calls for national leadership in improving the condition and performance of a National Freight Network by identifying components of the network (which will be designated by the USDOT Secretary), includes incentives to prioritize projects that advance freight performance targets, and calls for USDOT, in consultation with partners and stakeholders, to develop a national freight strategic plan. States are encouraged to develop individual freight plans and establish freight advisory committees. Staff will participate to the extent possible in these various MAP-21 activities and programs.

A major focus of staff work under this UWP work task in FY 14 will continue to be support for the Port of Richmond and the VPA "64 Express" James River barge service. VPA entered into a five-year lease arrangement effective July 1, 2011 with the City of Richmond to manage and operate the Port of Richmond (note the lease includes options for future renewals).

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During FY 2013, the 64 Express increased frequency of service from two to three sailings per week, with plans to go to five days per week in the near future. Between 2011 and 2012, the total number of barges calling on Richmond increased by 15 percent. During that same period, the total volume of short tons increased by nearly 65 percent removing over 110,000 short tons of freight cargo from the highway system (note that one short ton equals 2,000 pounds).

With the Port of Richmond starting to become a significant inland port strategically located along two of the country's most important interstate highways (i.e., I-95 and I-64) and with I-85 not far away, and with service by two major rail carriers (i.e., CSX and Norfolk Southern), the City of Richmond and nearby jurisdictions can become more attractive locations for manufacturing, warehousing and distributions centers. The MPO needs to be in a position with adequate staff resources (including training, communications and connections to stakeholders) to take advantage of economic development opportunities and to also be able to help plan and promote the region's strategic resources.

The RRPDC is also active on "Richmond's Future" an independent think tank organization chaired by Dr. Eugene P. Trani, President Emeritus and University Distinguished Professor for Virginia Commonwealth University. Richmond's Future has identified logistics related to the warehousing, processing and distribution of freight as a major economic development opportunity for the Richmond Region. With the 64 Express James River barge service, increasing traffic congestion along I-64 and Route 460 out of Hampton Roads, and the significant increase in truck container traffic through VPA's Hampton Roads marine terminals (associated with improved economic conditions and the upcoming expansion of the Panama Canal) the Port of Richmond is expected to see significant increases in truck container traffic. The Richmond Region should plan to take advantage of these conditions, and Richmond's Future is working with area government leaders and businesses to facilitate appropriate plans and projects.

B. End Products

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

C. Work Elements

1. VPA Port of Richmond Terminal Strategic Economic Development – RRPDC staff to review with MPO area jurisdictions, regional partners and Virginia Port Authority staffs and officials, and with other interested parties, revisions/updates to regional capital facility plans and programs in support of the Port of Richmond. Staff will also assist in

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strategic development activities and rail and roadway access improvements to and from the Port of Richmond terminal. Staff will also coordinate with VPA and other interested parties in continuing and expanding the “64 Express” James River Barge Service.

2. Intermodal Economic Development Coordination – Coordinate MPO intermodal economic development activities with work from the recently completed Richmond Regional CEDS (due to be completed by July 1, 2013).
3. Intermodal Strategies and Actions – Provide technical and administrative assistance in carrying out program activities identified in the *2010 Intermodal Strategies and Action Study*. Work activities include working with Richmond’s Future and their Logistics Task Force, other freight system users, and local, regional and state government organizations to refine and prioritize projects, transportation programs and other infrastructure needs to support growth in manufacturing, distribution, and logistics related users in the region. This work will be accomplished through small group meetings (e.g., Freight Alliance members) with results presented in an annual forum. The small group meetings will include freight users of various modes, shippers, and other interested parties. Consideration should be given for coordinating the annual forum as a component of the Virginia Freight Summit (inaugural Summit was held December 2011). Input and recommendations received from these meetings will be incorporated into future long-range transportation plan revisions, strategic plan development supporting the Port of Richmond terminal, and in addressing road and rail access issues throughout the region.
4. MAP-21 Freight Movement Provisions/Participation – Review federal guidance and regulations related to MAP-21 requirements to enhance freight movement in support of national goals, and participate to the extent possible (based on available time and within budget restrictions for out-of-state travel) with VDOT and USDOT in dialogue, discussions and meetings in developing the national freight strategic plan. This includes participation and support of statewide freight planning efforts through the Freight Alliance group.

D. Agency Participation

RRPDC, VDOT, DRPT, Crater PDC, CRAC, VPA, local governments, FHWA, MARAD, public and private shippers/freight operators.

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E. Budget, Staff and Funding

| | <u>PL^①</u> | <u>5303</u> | <u>TOTAL</u> |
|-------|-----------------------|-------------|--------------|
| RRPDC | 30,000 | 5,000 | \$35,000 |

① 4/10/14 MPO action to reduce PL funds by \$10,000 (shifted to other RRPDC staff work tasks; portion transferred to FY 2015 UWP).

F. Schedule

Ongoing

7.0 AIR QUALITY PLANNING

7.1 Air Quality Plan and Program Activities

A. Background

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

In FY 1995, the Metropolitan Richmond Air Quality Committee (MRAQC) was established as the Section 174 Lead Planning Organization (LPO) based on appointments by the Governor's office. Representation on MRAQC includes local elected officials from non-attainment area jurisdictions (i.e. Richmond, Henrico, Chesterfield, Hanover, Charles City, Colonial Heights, Hopewell and Prince George), from the Richmond and Tri-Cities Area MPOs, the Crater and Richmond regional planning district commissions and agency representatives from VDOT and VDEQ. The role of the LPO is established and defined in general terms in Section 174 of the CAAA. It is also described in the Richmond Area and Tri-Cities Area Memorandum of Understanding (MOU) for Air Quality and Transportation Planning Coordination. Section 174 of the CAAA provides that the LPO shall prepare the state implementation plan (SIP) revisions, and determine those elements of the SIP to be implemented by the state, local governments, regional agencies, and others. In FY 1997, VDEQ staff submitted a request to EPA for designating the area to attainment status. In November 1997 EPA issued notice in the Federal Register noting the Richmond Area to be in attainment status for ozone air quality standards and was designated as a Maintenance Area. However, EPA designated the Richmond area (i.e., City of Richmond, Petersburg, Colonial Heights and Hopewell, and counties of Charles City, Chesterfield, Hanover, Henrico, and Prince George) to be a marginal nonattainment area for ozone air quality standards. The Richmond area nonattainment designation went into effect on June 15, 2004 with its status being set at a marginal level shortly after that time (Richmond was a moderate nonattainment area at one time under EPA's one-hour ozone air quality standards).

In FY 05, VDEQ reconstituted the Metropolitan Richmond Air Quality Committee (MRAQC) which is the Lead Planning Organization (LPO) under Section 174 of the CAAA. Appointments of local elected officials and agency members were made in FY 05 and MRAQC held its first meeting in November 2005 (FY 06) initiating work to develop the region's State Implementation Plan (SIP). At its May 10, 2006 meeting, action was taken to approve proposed control strategies (as part of the extension of the Richmond nonattainment area into the newly added areas, which are the City of

Petersburg, Prince George County, and the remaining area of Charles City County; previously only a small part of Charles City County was in the nonattainment/maintenance area). MRAQC also took action to approve contingency measures (required as part of the contingency plan included in VDEQ's request for redesignation of the Richmond nonattainment area to attainment/maintenance status).

In March 2008, EPA finalized and set the new 8-hour ozone standard to 0.075 parts per million (it was previously set at 0.08 ppm). As a result of this change and based on the past three years of data exceeding these new standards, the Richmond and Tri-Cities Maintenance Area jurisdictions (i.e., Richmond, Henrico, Hanover, Chesterfield, Charles City, Petersburg, Colonial Heights, Hopewell, and Prince George) were expected to be redesignated to nonattainment status. However, on September 16, 2009, EPA announced that it would reconsider the 2008 ozone standard and area designations (under the new 0.075 ppm standard) were put on hold. On June 2, 2010, EPA proposed it was proceeding to develop a new lower standard within the range of 0.060 ppm to 0.070 ppm. EPA was expected to have the final standard set and announced by July 31, 2011. However, on September 2, 2011, President Obama announced that the new proposed standards were withdrawn and EPA would now move forward with the implementation of the 2008 standard of 0.075 ppm (which had been on hold since the announcement of the standard reconsideration in 2009). In addition, the Richmond area experienced relatively good air quality readings in the previous three years (i.e., 2009 to 2011) and DEQ submitted a revised area recommendation request to EPA on November 21, 2011 asking for the Richmond area to be designated as an attainment area. EPA Region III responded on December 9, 2011 that based on preliminary 2009 – 2011 air quality data and other relevant technical information, EPA intends to designate the Richmond area as “unclassifiable/attainment.” On April 30, 2012, EPA Administrator Lisa Jackson issued final area designations for 2008 NAAQS for ozone and there were no Richmond or Petersburg area jurisdictions included as nonattainment or maintenance areas (previously, the cities of Richmond, Petersburg, Colonial Heights and Hopewell, and counties of Charles City, Chesterfield, Hanover, Henrico and Prince George had been classified by EPA as maintenance area jurisdictions). However, DEQ anticipates that based on the most recent three-year readings of ozone air quality data for the Richmond/Petersburg area, these jurisdictions would be reclassified back into nonattainment status for ozone air quality standards. DEQ submitted a request to EPA on June 4, 2012 requesting participation by Richmond/Petersburg area jurisdictions in EPA's Ozone Advance program and EPA has approved the request. By participation in the Ozone Advance program, EPA has some discretion when it comes to redesignation action of Richmond/Petersburg area jurisdictions back to nonattainment status. In general, a nonattainment designation has as a minimum the following consequences:

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- More difficult/expensive federal air permitting requirements of large facilities;
- More state and federal review of transportation planning, including transportation conformity; and/or
- More state and federal review of any federal facility expansion.

The MPO took action at its July 12, 2012 meeting to support the voluntary participation of the MPO along with voluntary participation of Charles City, Chesterfield, Hanover, Henrico and Richmond in the Ozone Advance program. Note that the MPO's participation was made subject to these jurisdictions also agreeing to participate. As of mid-April 2013, staff has been advised by the CAOs for Hanover, Henrico and Richmond of their jurisdiction's willingness to participate. Also, DEQ has prepared a draft Ozone Advance Action Plan for the Richmond-Petersburg Area and it should be submitted by May 1, 2013 for EPA review and approval.

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 is responsible for conducting the air quality conformity analysis using the new "MOVES 2010" (Motor Vehicle Emission Simulator, first released for use in 2010). The RRPDC staff is responsible for developing the vehicle miles of travel (VMT) input for MOVES2010 (staff will be using the regional travel demand model). RRPDC staff is also responsible for conducting the public review process when an air quality conformity analysis is conducted, and also provides staff support for TIP, LRTP, and TIP/LRTP amendments (when appropriate) review and coordination. Note that as of mid-July 2013, the MPO will no longer be required to conduct the transportation conformity process for the LRTP and TIP due to its current attainment status for ozone. However, this could change under the Ozone Advance Plan or should the area go back into nonattainment status. Staff responsibilities for transportation conformity 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

Technical and administrative support for MPO activities involving the state implementation plan, air quality conformity analysis and participation in the Ozone Advance Program and action plan.

C. Work Elements

1. Conduct air quality conformity analysis activities in support of the TIP and LRTP (RRPDC and VDOT work task). Conformity analysis for LRTP and TIP amendments are conducted as needed. Note that due to the length of time and staff effort required to conduct this analysis (e.g.,

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modify RTDM networks, run the RTDM and provide output to VDOT for the conformity analysis model, ICG meetings, TAC meetings, public review, MPO review and action, and state and federal agencies reviews and action), staff expects to conduct a conformity analysis process (for proposed LRTP and TIP amendments to include regionally significant projects) no more than one time a year. Also note that with the change in the region's status as attainment, transportation conformity analysis will not be required; however, this could change depending on EPA requirements in the Ozone Advance Plan, and when the most recent air quality data becomes official and related requirements become effective (unless covered by requirements in the Ozone Advance Plan).

2. If advised by VDEQ that MRAQC (the EPA designated lead planning organization for development of the region's state implementation plan for achieving and maintaining ozone air quality standards) is needed, provide staff support and participation on MRAQC as appropriate.
3. Contingent upon agreement by area local governments (i.e., City of Richmond and counties of Charles City, Chesterfield, Hanover and Henrico) provide for staff participation in carrying out appropriate activities in support of the Richmond/Petersburg Area Ozone Advance Plan.
4. Should the Richmond/Petersburg area be designated back to nonattainment status, or should it be part of the Ozone Advance Plan, staff will work with DEQ and VDOT staffs to review proposed changes to the nonattainment area source emission budgets (for VOC and NO_x emissions). Note that the emission budgets establish the benchmark or target which must be met in order to have a conforming LRTP and TIP. Changes to the area's emission budgets should be reviewed and recommended by TAC and it must be submitted for MRAQC review and approval (budgets established for transportation, point, area-wide, biogenic and other sources).
5. New Air Quality Conformity Analysis Model – Based on direction and requirements for proceeding with conducting transportation conformity analysis, staff will work with VDOT Environmental Division staff to coordinate the implementation of the new air quality conformity analysis model (i.e., "MOVES") with the Richmond/Tri-Cities MPOs regional travel demand model, and to gain an understanding of its use and applications for air quality conformity analysis. Implementation of the new MOVES conformity analysis model went into effect in March 2013 (i.e., any LRTP, TIPs, or amendments to the LRTP or TIP involving regionally significant projects that are initiated on or after March 2, 2013 will be required to utilize the new MOVES model).

6. Monitor air quality data for the Richmond area, and review EPA and Virginia Department of Air Pollution Control reports, guidelines, regulations, etc.

D. Agency Participation

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

E. Budget, Staff, and Funding

| | <u>PL^①</u> | <u>5303</u> | <u>TOTAL</u> |
|-------|-----------------------|-------------|--------------|
| RRPDC | 4,000 | 3,000 | \$7,000 |

^① 4/10/14 MPO action to reduce PL funds by \$16,000 (shifted to other RRPDC staff work tasks; portion transferred to FY 2015 UWP).

F. Schedule

Ongoing activity

8.0 BICYCLE AND PEDESTRIAN PLANNING

8.1 Bicycle and Pedestrian Planning

A. Background

This task provides RRPDC staff time in support of work by area groups, organizations and local governments to advance bicycle and pedestrian studies, programs and projects in the Richmond Region.

Efforts to improve bicycle and pedestrian access, whether on or off-road are in keeping with the Virginia Department of Conservation and Recreation 2007 Outdoors Plan, the 1993 Regional Greenways Plan, and various efforts already underway in the Region. The Virginia Capital Trail is nearing completion except for a portion in Henrico County (west of I-295) which is currently under review. The East Coast Greenway (ECG), a continuous path from Florida to Maine, requires a regional thoroughfare through this region and needs a local effort to support it. The James River Heritage Trail (JRHT) is shown running along the south shore of the James River in Chesterfield and Powhatan counties and the City of Richmond. Both the ECG and the JRHT are shown in the Virginia Outdoors Plan as proposed trails.

The MPO's 2035 LRTP/CMP Update contains a major revision to the MPO's previous 2031 LRTP Update bicycle and pedestrian element. The 2035 LRTP identifies current major regional/multi-state (e.g., U.S. routes 1 and 76, East Coast Greenway and Virginia Capital Trail) facilities and designated routes to identify the region's major bicycle/pedestrian network. It also takes a "bottom-up" approach with local governments developing bicycle and pedestrian facilities, designating and signing bicycle routes and multi-use trails (not recreational trails) that can eventually be linked to establish a well-defined regional bicycle and pedestrian network. The 2035 LRTP also looks at regional demographic characteristic (e.g., area concentrations of households with zero or one car only) to identify areas where bicycle and pedestrian projects have a higher need. The GRTC transit service area is also identified with the intent of improving pedestrian and bicycle access to GRTC bus service. The 2035 LRTP also reviews how bicycle and pedestrian facilities are addressed in local government comprehensive plans, reviews their subdivision and zoning ordinances to identify implementation tools for bicycle and pedestrian facilities, and identifies the jurisdiction's existing and proposed bicycle and pedestrian corridors.

Staff work activities will include meeting with advocacy groups and organizations, local government staffs and officials, and others to review and discuss proposals, studies and plans for development of a regional network of bicycle and pedestrian routes and facilities. Note that with the MPO's new responsibility under MAP-21 as the lead organization for project review, selection and funds allocation for Transportation Alternative (TA) program projects, and the MPO's priority and emphasis on using TA funds for bicycle

and pedestrian facilities that are integral to the transportation network, improve mobility and support other transportation modes, staff expects to have a higher level of activity under this work task in FY 14.

B. End Products

1. Development of jurisdiction level inventories for bicycle and pedestrian routes and facilities.
2. Participation in various groups and organizations in support of and to assist in the development of local and regional bicycle and pedestrian routes and facilities.
3. Reports for the MPO's Regional Transportation and Land-Use Performance Measures for bicycle and pedestrian related measures and targets.

C. Work Elements

Federal legislation (enacted under TEA-21 and SAFETEA-LU) requires that MPO activities provide for all means of transportation, "including accessible pedestrian walkways and bicycle transportation facilities". This task helps to satisfy federal regulations by ensuring that there are a sufficient number of projects which minimize transportation-related fuel consumption and air pollution, and which protect and enhance the environment and improve quality of life (23 CFR sec 450.300 (a) and 450.306 (a)(2), (3), (5) and (6)). Also, note that at a minimum, the MPO's metropolitan transportation plan (i.e., LRTP) shall include existing and proposed transportation facilities that include "pedestrian walkways and bicycle facilities" with these and other transportation modes functioning "...as an integrated metropolitan transportation system giving emphasis to those facilities that serve important national and regional transportation functions over the period of the transportation plan."

Staff work activities anticipated for FY 2014 include the following:

1. Initiate work on jurisdiction level inventories of existing, planned, and programmed bicycle and pedestrian facilities (staff to work first with one local government to serve as a template for other jurisdictions inventories). This effort will be coordinated with the Sports Backers Bike/Walk initiative.
2. Conduct review of census (American Community Survey) Journey to Work data to identify the number and percent of residents who walk to work (note this is one of the MPO's Regional Performance Measures which responds to the General Assembly's performance measure for Job and Housing Access to Pedestrian Facilities).

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3. Participation on VDOT’s Bicycle and Pedestrian Advisory Committee, VDOT Pedestrian Policy Plan meetings, and the Mayors Pedestrian, Bicycle and Trails Commission (anticipated that it will become a work group of City staff and interested bicycle/pedestrian advocacy groups and organizations).
4. Participation in National Park Service, Virginia Department of Conservation and Recreation, Sports Backers and other groups and organizations meetings/work activities for regional/multi-state facilities (e.g., East Coast Greenway, James River Heritage Trail, etc.) and other pedestrian and bicycle plans, programs and studies.
5. GRTC Transit Service Area Bicyclists and Pedestrian Access Improvements – As part of FTA grant programs that involve pedestrian and bicyclists access to transit services, FTA has issues guidelines that establish a recommended service area to plan for pedestrian and bicyclist access (i.e., one-half mile for pedestrians and three miles for bicyclists). Staff will work with GRTC and area local governments to promote these programs and planning considerations, and may also identify a limited number of areas where improved pedestrian and bicyclist access should be studied in order to identify projects that can improve safe and efficient access to GRTC transit services.

D. Agency Participation

RRPDC, VDOT, DRPT, GRTC, FHWA, National Park Service, local governments and interested parties (e.g., Richmond Area Bicycling Association, Sports Backers, etc.)

E. Budget, Staffing and Funding

| | <u>PL^①</u> | <u>5303</u> | <u>FY 13 CO</u> <u>5303</u> | <u>TOTAL</u> |
|-------|-----------------------|-------------|--------------------------------|--------------|
| RRPDC | 11,000 | 5,000 | 2,000 | \$18,000 |

^① 4/10/14 MPO action to reduce PL funds by \$12,000 (shifted to other RRPDC staff work tasks; portion transferred to FY 2015 UWP).

F. Schedule

Ongoing activity.

**AGENCY BUDGET SUMMARY SHEET
FHWA PL/SPR; FTA SEC 5303; OTHER PLANNING GRANTS
FY 2014 UWP - RICHMOND AREA MPO**

| Task No/ Abbrev | RRPDC | | | | VDOT SPR | OTHER | TOTAL | | | | | | GRAND TOTAL |
|--------------------|------------------|----------------|---------------|-----------|----------------|-----------|------------------|----------------|----------------|---------------|-----------|-----------|------------------|
| | PL | 5303 | CO 5303 | OMF (1) | | | PL | SPR | 5303 | CO 5303 | OMF(1) | OTHER | |
| 1.1 MPO Maint | 396,224 | 92,362 | 46,815 | -- | 245,000 | -- | 396,224 | 245,000 | 92,362 | 46,815 | -- | -- | 780,401 |
| 1.1 Conting. | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 1.2 Citi Partic | 65,000 | 20,000 | 5,000 | -- | -- | -- | 65,000 | -- | 20,000 | 5,000 | -- | -- | 90,000 |
| 1.3 UWP | 45,000 | 10,000 | -- | -- | -- | -- | 45,000 | -- | 10,000 | -- | -- | -- | 55,000 |
| 2.1 Data | 53,000 | 20,000 | 1,000 | -- | -- | -- | 53,000 | -- | 20,000 | 1,000 | -- | -- | 74,000 |
| 2.2 LRTP | 44,000 | 15,000 | -- | -- | -- | -- | 44,000 | -- | 15,000 | -- | -- | -- | 59,000 |
| 2.3 RTDM | 76,000 | 14,000 | -- | -- | -- | -- | 76,000 | -- | 14,000 | -- | -- | -- | 90,000 |
| 2.5 TD/GIS | 54,000 | 10,000 | -- | -- | -- | -- | 54,000 | -- | 10,000 | -- | -- | -- | 64,000 |
| 3.1 CMP | 60,000 | 14,000 | -- | -- | -- | -- | 60,000 | -- | 14,000 | -- | -- | -- | 74,000 |
| 3.3 ITS | 23,000 | 2,000 | -- | -- | -- | -- | 23,000 | -- | 2,000 | -- | -- | -- | 25,000 |
| 4.1 TIP | 146,000 | 40,000 | 2,000 | -- | -- | -- | 146,000 | -- | 40,000 | 2,000 | -- | -- | 188,000 |
| 5.2 E&D TNS | -- | 55,000 | -- | -- | -- | -- | -- | -- | 55,000 | -- | -- | -- | 55,000 |
| 5.5 RPTS | -- | 82,000 | -- | -- | -- | -- | -- | -- | 82,000 | -- | -- | -- | 82,000 |
| 5.6 CHSMP | -- | 12,000 | -- | -- | -- | -- | -- | -- | 12,000 | -- | -- | -- | 12,000 |
| 5.7 RBRT (2) | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 5.8 Rail (2) | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 5.9 Dwn TC (2) | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 6.1 IM Plg. | 30,000 | 5,000 | -- | -- | -- | -- | 30,000 | -- | 5,000 | -- | -- | -- | 35,000 |
| 7.1 Air Q. Plg. | 4,000 | 3,000 | -- | -- | -- | -- | 4,000 | -- | 3,000 | -- | -- | -- | 7,000 |
| 8.1 Bike/Ped Plg. | 11,000 | 5,000 | 2,000 | -- | -- | -- | 11,000 | -- | 5,000 | 2,000 | -- | -- | 18,000 |
| TOTAL (\$) | 1,007,224 | 399,362 | 56,815 | -- | 245,000 | -- | 1,007,224 | 245,000 | 399,362 | 56,815 | -- | -- | 1,708,401 |

- NOTE:
- (1) RRPDC Over Match Funds (OMF) or in-kind staff match (100 percent RRPDC local funds).
 - (2) Work conducted by consultants (UWP information item).
 - (3) Work conducted by RRPDC consultant.
 - (4) Work conducted by GRTC consultant.

**FUNDING SOURCES SUMMARY SHEET
FHWA PL/SPR; FTA SEC 5303; OTHER PLANNING GRANTS
FY 2014 UWP - RICHMOND AREA MPO**

| Task No./ Abbrev. | PL | | SPR | | 5303 | | CO 5303 | | RRPDC | OTHER | | TOTAL | | GRAND TOTAL |
|----------------------|----------------|----------------|----------------|---------------|----------------|---------------|---------------|---------------|-----------|-----------|-------------|------------------|----------------|------------------|
| | Federal | State/Local | Federal | State | Federal | State/Local | Federal | State/Local | OMF (1) | Federal | State/Local | Federal | State/Local | |
| 1.1 MPO Maint | 316,979 | 79,245 | 196,000 | 49,000 | 73,890 | 18,472 | 37,452 | 9,363 | -- | -- | -- | 624,321 | 156,080 | 780,401 |
| 1.1 Conting. | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 1.2 Citi Partic | 52,000 | 13,000 | -- | -- | 16,000 | 4,000 | 4,000 | 1,000 | -- | -- | -- | 72,000 | 18,000 | 90,000 |
| 1.3 UWP | 36,000 | 9,000 | -- | -- | 8,000 | 2,000 | -- | -- | -- | -- | -- | 44,000 | 11,000 | 55,000 |
| 2.1 Data | 42,400 | 10,600 | -- | -- | 16,000 | 4,000 | 800 | 200 | -- | -- | -- | 59,200 | 14,800 | 74,000 |
| 2.2 LRTP | 35,200 | 8,800 | -- | -- | 12,000 | 3,000 | -- | -- | -- | -- | -- | 47,200 | 11,800 | 59,000 |
| 2.3 RTDM | 60,800 | 15,200 | -- | -- | 11,200 | 2,800 | -- | -- | -- | -- | -- | 72,000 | 18,000 | 90,000 |
| 2.5 TD/GIS | 43,200 | 10,800 | -- | -- | 8,000 | 2,000 | -- | -- | -- | -- | -- | 51,200 | 12,800 | 64,000 |
| 3.1 CMP | 48,000 | 12,000 | -- | -- | 11,200 | 2,800 | -- | -- | -- | -- | -- | 59,200 | 14,800 | 74,000 |
| 3.3 ITS | 18,400 | 4,600 | -- | -- | 1,600 | 400 | -- | -- | -- | -- | -- | 20,000 | 5,000 | 25,000 |
| 4.1 TIP | 116,800 | 29,200 | -- | -- | 32,000 | 8,000 | 1,600 | 400 | -- | -- | -- | 150,400 | 37,600 | 188,000 |
| 5.2 E&D TNS | -- | -- | -- | -- | 44,000 | 11,000 | -- | -- | -- | -- | -- | 44,000 | 11,000 | 55,000 |
| 5.5 RPTS | -- | -- | -- | -- | 65,600 | 16,400 | -- | -- | -- | -- | -- | 65,600 | 16,400 | 82,000 |
| 5.6 CHSMP | -- | -- | -- | -- | 9,600 | 2,400 | -- | -- | -- | -- | -- | 9,600 | 2,400 | 12,000 |
| 5.7 RBRT (2) | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 5.8 Rail (2) | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 5.9 Dwn TC (2) | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 6.1 IM Plg. | 24,000 | 6,000 | -- | -- | 4,000 | 1,000 | -- | -- | -- | -- | -- | 28,000 | 7,000 | 35,000 |
| 7.1 Air Q. Plg. | 3,200 | 800 | -- | -- | 2,400 | 600 | -- | -- | -- | -- | -- | 5,600 | 1,400 | 7,000 |
| 8.1 Bike/Ped Plg. | 8,800 | 2,200 | -- | -- | 4,000 | 1,000 | 1,600 | 400 | -- | -- | -- | 14,400 | 3,600 | 18,000 |
| TOTAL (\$) | 805,779 | 201,445 | 196,000 | 49,000 | 319,490 | 79,872 | 45,452 | 11,363 | -- | -- | -- | 1,366,721 | 341,680 | 1,708,401 |

- NOTE:
- (1) RRPDC Over Match Funds (OMF) or in-kind staff match (100 percent RRPDC local funds).
 - (2) Work conducted by consultants (UWP information item).
 - (3) Work conducted by RRPDC consultant.
 - (4) Work conducted by GRTC consultant.

AMENDMENTS

MPO AMENDMENT ACTIONS

1. June 6, 2013 – UWP task 5.9, GRTC Downtown Bus Transfer Center amended to update project schedule information.
2. June 6, 2013 – UWP document amended to revise the Acknowledgments statement and to add a statement (in both English and Spanish) on nondiscrimination.
3. November 7, 2013 – UWP amended to program \$46,815 in FY 2013 FTA Section 5303 carryover funds, and to shift \$46,815 in FHWA/PL funds in UWP task 1.1, MPO Maintenance/Special Studies from RRPDC staff to staff contingency.
4. February 6, 2014 – UWP task 2.3, Regional Travel Demand Model (RTDM) background, work elements, and budget, staff and funding sections revised to incorporate work related to on-call consultant services.
5. April 10, 2014 – Various UWP tasks amended to shift FHWA/PL funds and FTA Section 5303 funds among various RRPDC staff work tasks, and to transfer \$260,000 in FHWA/PL funds to the FY 2015 UWP.

Staff Administrative Adjustments

1. May 15, 2014 – Adjust FHWA/PL funds reducing total by \$115 (\$92 federal and \$23 state/local). Adjusted due to staff's use of VDOT's preliminary estimate of FHWA's annual PL funds allocation instead of VDOT's final amount shown in VDOT's May 14, 2013 Letter of Authorization. Staff adjusted by taking \$115 out of UWP task 1.1, MPO Maintenance/Special Studies.