

**RICHMOND AREA
METROPOLITAN PLANNING ORGANIZATION**



**UNIFIED WORK PROGRAM
FISCAL YEAR 2015**

July 1, 2014 – June 30, 2015

Approved as a Final Report by the Richmond Area
Metropolitan Planning Organization, May 1, 2014.

ACKNOWLEDGMENTS

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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TABLE OF CONTENTS

FY 2015 UNIFIED WORK PROGRAM WORK TASKS AND BUDGET/FUNDING INFORMATION

I.	INTRODUCTION	<u>Page(s)</u>
1.	Richmond Area MPO Mission Statement and Planning Priorities	1-2
2.	Documentation of Richmond Area MPO and Tri-Cities Area MPO Transportation Planning Coordination.....	3-4
3.	Frequently Used Terms and Abbreviations	5-10
4.	Richmond Area MPO Study Area Boundary	11
II.	TASKS	
1.0	MAINTENANCE OF THE MPO	
1.1	MPO Maintenance/Special Studies	12-20
1.2	MPO Citizen Participation.....	21-24
1.3	Unified Work Program	25-26
2.0	LONG RANGE PLANNING AND SURVEILLANCE	
2.1	Socioeconomic Data Development.....	27-30
2.2	Long-Range Transportation Plan (LRTP) Update.....	31-36
2.3	Regional Travel Demand Model (RTDM)	37-40
2.5	Transportation Data Base Development/GIS	41-43
3.0	MANAGEMENT SYSTEMS/SHORT RANGE PLANNING	
3.1	Congestion Management Process (CMP) Update	44-49
3.3	Intelligent Transportation Systems (ITS) Update.....	50-53
4.0	TRANSPORTATION PROJECT PROGRAMMING	
4.1	Transportation Improvement Program (TIP).....	54-68
5.0	TRANSIT PLANNING	
5.2	Elderly and Disability Transportation Needs and Services	69-73
5.5	Regional Public Transportation Services.....	74-77
5.6	Coordinated Human Services Mobility Plan	78-81
5.7	Broad Street Bus Rapid Transit (BRT) Alternatives Analysis	82-85
5.8	Richmond Area Rail Studies	86-88
5.9	GRTC Downtown Bus Transfer Center	89-92
6.0	INTERMODAL PLANNING	
6.1	Intermodal Planning	93-96
7.0	AIR QUALITY PLANNING	
7.1	Air Quality Plan and Program Activities	97-100
8.0	BICYCLE AND PEDESTRIAN PLANNING	
8.1	Bicycle and Pedestrian Planning	101-103

III. BUDGET/FUNDING INFORMATION

1. Agency Budget Summary Sheet..... 104
2. Funding Sources Summary Sheet..... 105

IV. AMENDMENTS

1. MPO Amendment Actions 106

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 2015 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. 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 Disability 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 mid-FY 2014 and continuing into FY 2015, 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 2.1, Socioeconomic Data Development; New Demographic Data and Forecasts* – MPO approved TAZ level data and forecasts for the Richmond Region (i.e., MPO study area and PD-15 rural areas TAZs) including documentation of methodology used to develop data and forecasts. Further information is provided in UWP task 2.1.
4. *Task 2.1, Socioeconomic Data Development; Richmond Regional Socioeconomic Data Analysis Report* – Report providing analysis of MPO approved base year data and forecasts, detailed description of methodology for developing TAZ level data and forecasts, and review of regional trends in urban, suburban and rural areas. Further information is provided in UWP task 2.1.
5. *Task 2.2, Long-Range Transportation Plan (LRTP) Update* – Conduct 2040 LRTP alternatives review and assessment, and develop draft scope of work for the upcoming 2040 LRTP/CMP Update. Further information is provided in UWP task 2.2.
6. *Task 2.3, Regional Travel Demand Model (RTDM); On-call Consultant Support* – Conduct review and selection process to obtain on-call consultant that will provide assistance to staff as needed for maintaining and updating the RTDM, and assisting staff when conducting work on the LRTP update, planning studies, and alternatives analysis. Further information is provided in UWP task 2.3.
7. *Task 4.1, Transportation Improvement Program (TIP); FFY 15 – 18 TIP* – Initiate work in late FY 2014 to develop the new FFY 15 – 18 TIP as per action by the MPO on April 10, 2014 to approve the TIP development schedule. Further information is provided in UWP task 4.1.

**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 15 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 Disability 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.
Section 5303	Planning funds available from the FTA 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 (NAAQS) in areas that are currently or previously designated by EPA as nonattainment or maintenance areas for NAAQS. 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 activities that lead to and result in project implementation.
RSTP	Regional Surface Transportation Program; Federal funding program created under ISTEA (1991). Federal funds apportioned based on the Richmond

Urbanized Area decennial census population and allocated to the Richmond and Tri-Cities MPO with 86.5 percent allocated to the Richmond MPO and 13.5 percent allocated to the Tri-Cities MPO (as per the MPO's April 4, 2013 action and agreed to by the Tri-Cities MPO and VDOT). Projects eligible for RSTP funding include highway and bridge construction and rehabilitation (for roads functionally classified as collector or higher; maintenance is not eligible); transit capital improvements; car and vanpool programs; bicycle and pedestrian facilities; safety and hazard elimination projects; traffic management systems; transportation enhancement/alternatives; wetlands and environmental mitigation; and MPO transportation planning activities.

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

OTHER TERMS AND ABBREVIATIONS

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).

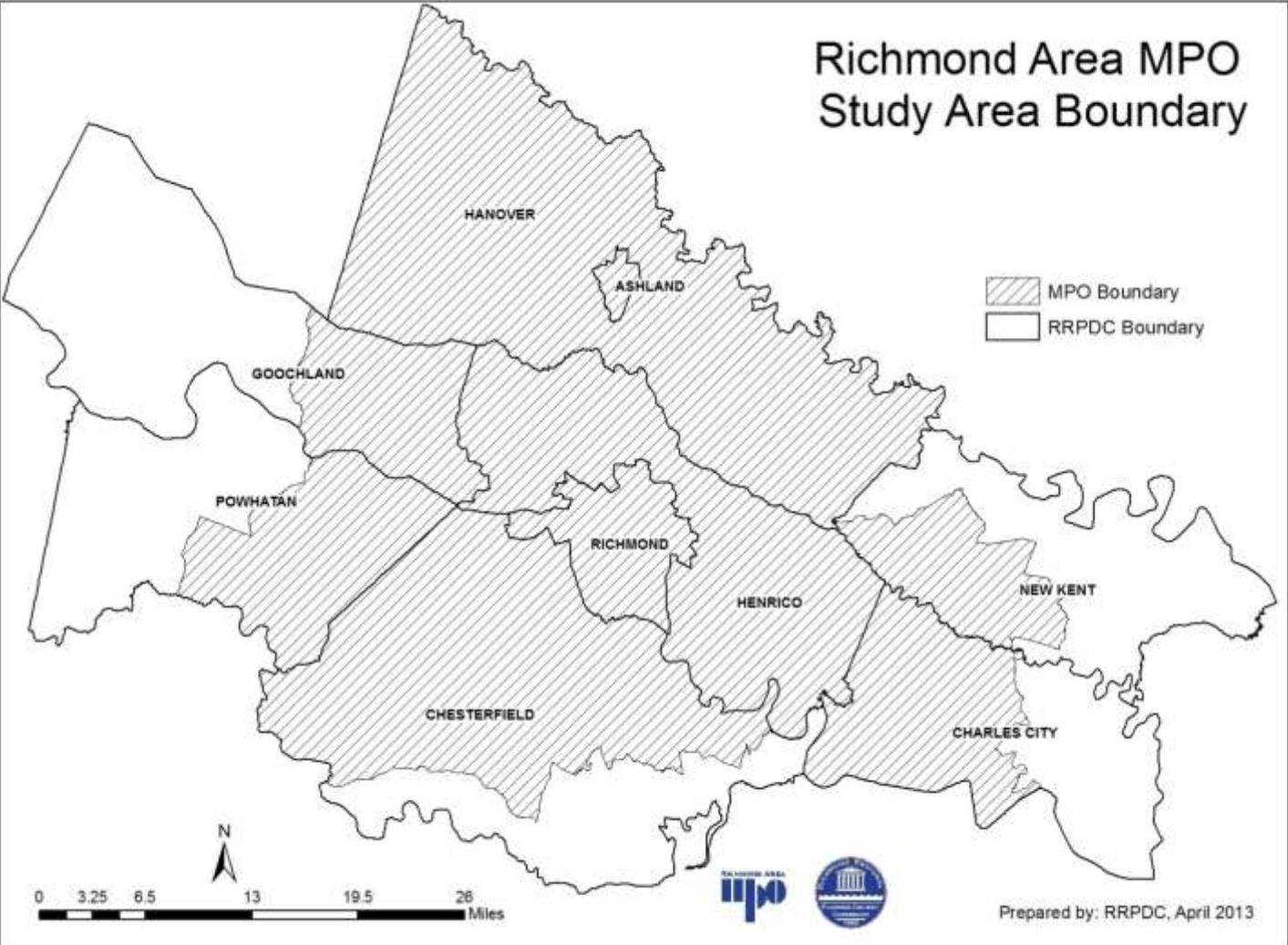
GIS Geographic Information System

I/M Inspection and Maintenance

LEP Limited English Proficiency

MSA	Metropolitan Statistical Area. The Richmond/Petersburg 2010 MSA includes the cities of Colonial Heights, Hopewell, Petersburg, and Richmond; the counties of Amelia, Caroline, Charles City, Chesterfield, Dinwiddie, Goochland, Hanover, Henrico, King William, New Kent, Powhatan, Prince George, Sussex; and the Town of Ashland.
NHS	National Highway System
NHTS	National Household Transportation Survey
NOx	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 standard projects 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 budget estimate for all staff direct costs is \$111,300. Staff direct costs are reported to VDOT and DRPT as part of the RRPDC's 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.

FY 15 UWP Task 1.1

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 help 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 first 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.

FY 15 UWP Task 1.1

Subsection (h), “Scope of the Planning Process,” includes requirements for a performance based approach as follows:

- 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 should be issued by March 31, 2014; however, as of mid-April 2014, only the draft rules for the Highway Safety Improvement Program have been issued). States, MPOs, and other stakeholders are to be provided at least 90 days to comment on any proposed regulations.

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”

FY 15 UWP Task 1.1

(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).

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 of mid-April 2014, only the draft regulations for the National Performance Management Measures of the Highway Safety Improvement Program have been issued).

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 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 2.2 Long-Range Transportation Plan (LRTP) Update, 3.1 Congestion Management Process (CMP) Update, 4.1 Transportation Improvement Program (TIP), and other UWP tasks if appropriate.

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 2015 (beyond the usual program management and administrative work activities) include the following:

FY 15 UWP Task 1.1

1. Raising the Standing and Effectiveness of the MPO – The FY 2014 MPO Chairman’s 4-step proposal on raising the standing and effectiveness of the MPO involves expanding use of the consent agenda at MPO meetings, transforming the MPO’s membership, expanding the MPO study area to cover the full Richmond Region (except for the portion of Chesterfield County covered by the Tri-Cities MPO) and changing the MPO’s name to Richmond Regional Transportation Planning Organization. Due to concerns associated with the current composition of the MPO’s local government voting membership and interim changes currently underway to address concerns expressed by FHWA, FTA and RRPDC/MPO legal counsel, MPO action on the 4-step proposal has been deferred several times. Following resolution of these concerns and MPO action on the 4-step proposal, including a possible action to request MPO redesignation, action to amend the MPO’s Base Memorandum of Understanding (MOU), Air Quality/Richmond and Tri-Cities MOU, and MPO bylaws may need to move forward depending on the final outcome of this matter.
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. Title VI Training and Annual Updates – Ongoing training activities to address Title VI administrative and planning requirements.
4. MPO Title VI Document Revisions – Recommendation cited in the preliminary FHWA/FTA certification review (noted as part of FHWA’s PowerPoint presentation at the November 7, 2013 MPO meeting) on need to include certification assurance and accomplishment report in the MPO’s Title VI Plan document. Specifics/details on revisions needed to be determined upon submission of the draft and final FHWA/FTA certification review report.
5. Update of Base MOU – Recommendation cited in the preliminary FHWA/FTA certification review (noted as part of FHWA’s PowerPoint presentation at the November 7, 2013 MPO meeting) on need to update/revise the MPO’s base (four-party) Memorandum of Understanding (MOU). Specifics/details or revisions needed will be determined upon submission of the draft and final FHWA/FTA certification review report.
6. Capital Region Collaborative (CRC) Transportation Work Group – RRPDC staff to serve as lead staff support for the CRC Coordinated Transportation Work Group, and provide support for identification and implementation of CRC plan goals related to transportation.

B. End Products

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

C. Work Elements

Work activities include the following:

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

FY 15 UWP Task 1.1

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.
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,

FY 15 UWP Task 1.1

procedures and activities as appropriate addressing MAP-21 and other federal requirements.

23. Conduct follow-up work activities related to MPO actions on the four-step proposal for raising the standing and effectiveness of the MPO (i.e., MPO redesignation, study area expansion and name change subject to approval); FHWA/FTA actions on MPO voting membership; and corrective actions identified in the final FHWA/FTA certification review letter and report. Also, MPO review and consideration of recommendations identified in the final FHWA/FTA certification review letter and report.
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. 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 Title VI Plan was approved at its June 6, 2013 meeting and submitted to DRPT.
26. Provide lead staff support and technical assistance for the Capital Region Collaborative (CRC) Transportation Work group. This includes support for identification and implementation of CRC plan goals related to coordinated transportation.

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</u>	<u>5303</u>	<u>SPR^①</u>	<u>FY 14 CO</u> <u>5303</u>	<u>TOTAL</u>
RRPDC	525,972	92,028	–	–	618,000
Contingency	32,548	–	–	–	32,548
VDOT	–	–	?	–	–
TOTAL	558,520	92,028	–	–	\$650,548

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

F. Schedule

Ongoing activity.

1.2 MPO Citizen Participation

A. Background

This task provides staff support to ensure an active and involved citizen participation program, which meets federal and state requirements for public involvement in the transportation planning process. 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, low-income, 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. Note that staff has initiated work to review and update the PPP. Staff is working to reorganize the structure of the PPP to serve as a useful guide for conducting LRTP and TIP updates, and for the MPO's annual public review/outreach meetings.

In addition to the PPP review and update, the MPO established the Ad Hoc Committee on Increasing Awareness and Accessibility of the MPO (established at the November 7, 2013 MPO meeting). Staff's report on current activities and mechanisms for MPO accessibility and awareness, and recommendations for improving MPO awareness and accessibility, was prepared and submitted to ad hoc committee members in March 2013 and comments are being reviewed. Staff anticipates having the final committee report ready for MPO review, discussion and action in late FY 2014 or early FY 2015. Staff should then be ready to submit a final draft PPP for MPO review and authorization to conduct public review (requires public notice and a 45-day review period).

FY 15 UWP Task 1.2

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 has developed and reported on action steps under each of these priority areas (including Transportation and Social Stability; note work in support of the Transportation Work Group is identified in UWP task 1.1).

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/CMP 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.

FY 15 UWP Task 1.2

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.
8. MPO Orientation Meeting – Conduct periodic orientation meeting for new RRPDC, MPO and MPO committee members or conduct individual orientation meetings if appropriate.
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) is being reviewed, revised and updated. As part of this review and update process, staff will consider the results from the final report of the MPO Ad Hoc Committee in Increasing Awareness and Accessibility of the MPO. Staff is working to reorganize the structure of the PPP to serve as a useful guide for conducting LRTP and TIP updates, and for the MPO’s annual public review/outreach meetings. Note that the final draft PPP will be submitted for MPO review and authorization to conduct public review (requires public notice on a 45-day review period.) Following the 45-day review period, staff will review and respond to comments received during the 45-day review period, make appropriate revisions to the final draft PPP, and if acceptable, submit the revised final draft PPP along with public comments received during the 45-day review period for MPO review and action.
12. MPO Board Meeting Reports – RRPDC staff prepares and distributes to the MPO, MPO committees and interested parties, reports summarizing recent MPO board meetings.
13. Annual Public Review Meeting – Conduct public review meetings for citizen input on MPO plans, programs and activities. Staff plans to work on incorporating these meetings into current CTAC and EDAC meetings and working through existing groups, organizations and events.

FY 15 UWP Task 1.2

- 14. 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.
- 15. MPO Meeting Reports – Summaries of MPO meetings prepared and provided to CTAC and EDAC.
- 16. 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</u>	<u>5303</u>	<u>FY 14 CO</u> <u>5303</u>	<u>TOTAL</u>
RRPDC	90,000	25,000	–	\$115,000

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.

Note that the MPO took action at its February 6, 2014 meeting to amend the FY 2014 UWP task 2.3 RTDM, to include on-call consultant services in support of staff work on the RTDM; to authorize the RRPDC to proceed with amending the TIP to program previously allocated RSTP funds from the MPO Multimodal LRP project (UPC 86357) in support of this work activity; and to authorize the RRPDC to proceed with preparing and executing a contract with VDOT for the pass-through of RSTP funds for on-call consultant services to support staff work and activities as identified in UWP task 2.3, RTDM. Staff is currently (as of mid-April 2014) working with VDOT to make appropriate amendments/adjustments to the TIP and to develop and execute a standard project administration agreement that will allow staff to move forward in advertising for and securing the services of an on-call consultant that will support staff work on UWP task 2.3.

B. End Products

1. Maintain/amend the FY 15 UWP.
2. FY 16 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.

FY 15 UWP Task 1.3

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</u>	<u>FY 14 CO 5303</u>	<u>TOTAL</u>
RRPDC	40,000	20,000	–	\$60,000

F. Schedule

On-going activity for amending the adopted UWP

November 2014 to May 2015 for FY 16 RRPDC Work Program.

January 2015 to May 2015 for FY 16 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 and forecasts prepared by area local governments (or by RRPDC staff if local government requests such assistance) and by RRPDC staff is noted in the work elements section.

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 is now underway on development of the next (i.e., 2040) LRTP/CMP update. Work has been completed on the CTPP designated TAZs and TADs, adjustments to the MPO study area boundary in Chesterfield County, and designation of the smoothed urbanized area boundary. Significant MPO work activities to develop new socioeconomic data and forecasts were initiated in FY 2014. 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 now be done on an annual basis and included as part of the Annual Title VI Plan Update report.

For FY 2015, following completion of work and MPO approval of the new 2012 base year socioeconomic data and 2040 forecasts, staff will prepare the Richmond Regional Socioeconomic Data Analysis report. This report will provide detailed documentation of the methodology for the development of base year data and forecasts; present and review regional trends for the region's urban, suburban and rural areas' and present analysis findings and conclusions.

B. End Products

1. 2012/2040 Socioeconomic Data and Forecasts Report – MPO approved TAZ level data and forecasts for the Richmond Region (i.e., MPO study area and PD-

- 15 rural area TAZs) including documentation of methodology used to develop data and forecasts.
2. Richmond Regional Socioeconomic Data Analysis Report – Report providing analysis of MPO approved base year data and forecasts, detailed description of methodology for developing TAZ level data and forecasts, and review of regional trends in urban, suburban and rural areas.
 3. 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.
 4. Use of the 2010 Census and ACS data in support of various plans, studies, and reports.
 5. Staff involvement in review activities for the year 2010 census.
 6. 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. Socioeconomic Data Development – Staff will develop the base year and forecast year methodology and has established 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

Local Government

- | | |
|---|---|
| <ul style="list-style-type: none"> • 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) | <ul style="list-style-type: none"> • 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.

6. Richmond Regional Socioeconomic Data Analysis Report – Report providing analysis of MPO approved base year data and forecasts, detailed description of methodology for developing TAZ level data and forecasts, and review and analysis of regional trends for the Richmond Region’s (i.e., MPO study area and PD 15 rural areas) trends in urban, suburban and rural areas. Staff’s draft report to be reviewed and recommended by the Socioeconomic Data Work Group and TAC, and submitted for MPO review and approval.
7. 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</u>	<u>5303</u>	<u>FY 14 CO</u> <u>5303</u>	<u>TOTAL</u>
RRPDC	100,000	15,000	–	\$115,000

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 (anticipated for mid-FY 2015).
3. Development of New Base and Forecast Years Demographic Data – Completion anticipated in late FY 2014. Some work may continue into early FY 2015 (e.g., submission of final TAZ level data and forecasts for TAC review and MPO approval).
4. Richmond Regional Socioeconomic Data Analysis Report – July 2013 to November 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 adopted 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.

FY 15 UWP Task 2.2

- 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.

Staff is developing the initial draft scope of work for the 2040 LRTP/CMP Update and will review this scope with MPO committees (i.e., TAC, CTAC and EDAC) and will then submit it for MPO review and approval. Note that staff is working to procure the services of an on-call consultant to assist staff in conducting RTDM activities, and the timing for having an on-call consultant available to assist staff may have some impacts on the activities being conducted in the scope of work. Once the MPO approves the scope of work, staff will modify the work elements, identified in this UWP task as

appropriate (anticipate this will be done as part of the mid-year UWP budget review or just incorporate these new work elements as part of the FY 2016 UWP).

Note that new MAP-21 performance measures and targets will need to be reviewed and considered as part of the 2040 LRTP/CMP Update. Staff plans to address these new federal requirements as part of the draft scope of work. Draft federal regulations for MPO and statewide planning regulations were due to be published by March 31, 2014, however, as of mid-April 2014, staff is not aware of these regulations being issued. These new regulations will establish a performance-based planning process at both the metropolitan (i.e., MPO) and state level. It will also define coordination in the selection of targets linking planning and programming to performance targets. Staff anticipates that the LRTP/CMP Update will be the primary vehicle used by the MPO for defining new MAP-21 performance measures and targets, which include seven national goals, 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.

Other work activities anticipated for FY 2015 are as follows:

- Conduct amendments to the adopted 2035 LRTP/CMP Update – Staff anticipates that it will be able to conduct one review and amendment process during the year. This includes review of the LRTP approved financial capacity and adjustments if appropriate (based on requests, availability of surplus financial capacity, and possible deletion of previously included projects), and conducting the public review process. Note that conducting an air quality conformity analysis is no longer required based on the region’s current attainment status.
- Functional Classification Update – The MPO took action at its September 5, 2013 meeting to approve the revised federal functional classification and National Highway System (NHS) designations. VDOT has submitted the MPO’s approved functional classification and NHS designation for FHWA review and approval. As of mid-April 2014, the MPO has not been advised of any federal action on the MPO approved functional classification and NHS designation. Once the FHWA approved functional classification is received, staff may need to make adjustments to the region’s road network as reflected in the RTDM and used for reporting VMT data and other LRTP considerations.
- 2040 LRTP Alternatives Review and Assessment – Staff plans to develop alternatives for future networks of the 2040 LRTP based on input from various sources.
- State LRTP Performance Measures and Targets Report – Annual update (due in October) of MPO approved regional transportation and land-use performance measures and targets.
- CRC/RRPDC Community Indicators Project – Staff will coordinate its work on federal and state performance measures and targets with work to be conducted by

the RRPDC staff and Capital Regional Collaborative (CRC) to establish performance measures for the CRC's priority area in Coordinated Transportation.

Note that in FY 2014, work on the Citizen's Guide to the 2035 LRTP was completed; this document was approved at the February 6, 2014 MPO meeting. The guide provides a brief and informative introduction to the LRTP and it is suitable for distribution at public meetings and other events.

B. End Products

1. Maintenance of a 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, 2014).
4. If necessary, address MAP-21 performance measures and targets and conduct amendments/administrative modifications to the 2035 LRTP as appropriate (for a MAP-21 compliant LRTP).
5. Complete functional classification review and address new MAP-21 requirements for NHPP/enhanced NHS.

C. Work Elements

Work activities include the following:

1. 2040 LRTP Alternatives Review and Assessment – Based on input from the CRC Coordinated Transportation Work Group, Urban Land Institute's (ULI) Reality Check exercise (conducted in May 2013), CTAC, EDAC, TAC, and other public participation input/events, develop alternatives for future transportation networks (i.e., highways and public transit) in the Richmond Region (i.e., MPO study area and rural areas of PD 15) using MPO approved and modified socioeconomic forecasts, to develop proposed transportation projects, programs and services for consideration in developing the financially constrained 2040 LRTP/CMP update. Staff anticipates having an on-call consultant available to assist staff in developing and running various transportation network alternatives using the regional travel demand model (RTDM).
2. 2040 LRTP/CMP Update – Develop draft scope of work, review with MPO committees (i.e., TAC, CTAC and EDAC) and submit for MPO review and approval. Staff plans to modify the work elements identified in this UWP task as appropriate (anticipates this will be done as part of the mid-year UWP budget review or incorporate these new work elements as part of the new FY 2016 UWP).

FY 15 UWP Task 2.2

3. State LRTP Performance Measures and Targets Report – Annual update (due in October) of MPO approved regional transportation and land-use performance measures and targets.
4. Federal LRTP Performance Measures and Targets – Review and report on new MAP-21 performance measures and targets which include seven national goals, 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.

Draft regulations are scheduled to be published in the Federal Register in late FY 2014 with 90-day review period by MPOs and states to provide comments on draft regulations. Staff anticipates the final federal regulations will be issued in mid-FY 2015.

5. CRC /RRPDC Community Indicators Project – Coordinate with work by RRPDC staff/Capital Region Collaborative (CRC) to establish performance measures for the CRC's priority area on Coordinated Transportation.
6. VDOT Statewide Functional Classification (FC) and National Highway System (NHS) Review – MPO approved FC and NHS designation submitted by VDOT to FHWA in late December/early January. Staff anticipates final FHWA action on VDOT's submission of the Richmond Region's FC and NHS designation in late FY 2014/early FY 2015. Staff will update its roadway database and include consideration of the new FC and NHS designations in the LRTP, CMP and TIP following FHWA action and notification. Note that certain new MAP-21 performance measures and targets will be based upon the NHS designations with reports made in compliance with new National Highway Performance Program (NHPP) requirements.
7. LRTP Amendments/Adjustments – Due to time required for staff to conduct LRTP amendment process (i.e., financial capacity analysis, public review, processing proposed amendments for TAC review and recommendation and MPO review and action, and incorporating/documenting approved amendments into the LRTP), proposed amendments to the LRTP should be limited to no more than one time per year. Adjustments (i.e., administrative modifications) can be conducted as needed.
8. Functional Classification Reviews – Review requests for function classification and reclassification and submit for MPO review and action.
9. Review highway construction plans for conformance with the adopted Transportation Plan [VDOT and RRPDC].

10. Maintain/update computer software, staff training, and direct costs [VDOT].

D. Agency Participation

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

E. Budget, Staff and Funding

	<u>PL</u>	<u>5303</u>	<u>FY 14 CO</u> <u>5303</u>	<u>TOTAL</u>
RRPDC	80,000	30,000	–	\$110,000

F. Schedule

1. State required MPO Regional Transportation and Land-Use Performance Measures and Targets – Posted on RRPDC website by October 31, 2013.
2. LRTP Amendments/Administrative Modifications – Conducted as needed (staff anticipates that no more than one major amendment process involving 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).
3. Functional Classification Update – Early FY 2015 (awaiting FHWA review and submission).
4. National Highway Performance Program (NHPP)/Enhanced NHS – Schedule to be determined.
5. Federal LRTP Performance Measures and Targets – Schedule to be determined.
6. 2040 LRTP Update Review and Assessment – Early to mid-FY 2015.
7. 2040 LRT)/CMP Update Scope of Work – late FY 2014 to November 2014.
8. CRC/RRPDC Community Indicators Project – Initiate after draft federal regulations issued for new MAP-21 performance measures and targets.
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).

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.

VDOT and VDOT's consultant work for the MPO's 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; however, it does not cover those areas outside of the MPO study area for Powhatan and Goochland counties. With the update of the RTDM that is currently underway (for the 2040 LRTP/CMP Update) the updated model will include all of PD 15 (i.e., the MPO study area and the rural positions of Charles City, New Kent, Goochland and Powhatan).

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

FY 15 UWP Task 2.3

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 can now 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 RTDM features 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
- 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 proposed and the MPO took action at its February 6, 2014 meeting to authorize RRPDC and VDOT staffs to amend the FY 12 – FY 15 TIP to program previously allocated RSTP funds from the MPO's Multimodal LRP project (\$300,000 in previously allocated RSTP funds; UPC 86357) in support of this UWP work task, and also authorized staff to proceed with preparing and executing a contract with VDOT for the pass-through of RSTP funds for on-call consultant services in support of staff work activities as identified in this UWP task. Note that the on-call consultant services budget will be initially set at \$100,000 per year and this

FY 15 UWP Task 2.3

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 (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 new Richmond Regional Travel Demand Model (RTDM) for use in conducting the 2040 LRTP/CMP update.
2. Maintenance of the current RTDM for 2035 LRTP amendments and for other MPO studies and activities (which use MPO approved 2008/2035 socioeconomic data and forecasts).
3. Coordinate RTDM work activities with VDOT and Crater PDC.
4. 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, and amendments. This includes activities in support of the 2040 LRTP alternatives review and assessment.
2. Updated RTDM – Staff support for modification of the current RTDM to meet the needs of the 2040 LRTP update. Note the current RTDM now covers the MPO study area and added areas of Powhatan and Goochland (rural areas of Charles City and New Kent were previously included). 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 – Staff to conduct review and selection process to obtain an on-call consultant that will provide assistance to staff as needed for maintaining and updating the RTDM, and assisting and advising staff when conducting work on the LRTP update and various planning studies and alternatives analysis (work activity to also be conducted as part of UWP Task 1.1., MPO Maintenance/Special Studies).

FY 15 UWP Task 2.3

4. 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.
5. Participate in RTDM related training, research, conferences, webinars, and the Virginia Transportation Model Users Group.
6. Conduct RTDM runs if needed 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</u>	<u>5303</u>	FY 14 CO <u>5303</u>	<u>RSTP^①</u>	<u>TOTAL</u>
RRPDC Staff	80,000	20,000	–	–	\$100,000
RRPDC Consultant	<u>–</u>	<u>–</u>	<u>–</u>	<u>100,000</u>	<u>\$100,000</u>
Total	80,000	20,000	–	100,000	\$200,000

^① RSTP funds budget of \$100,000 for on-call consultant anticipated to start in FY 2015 (to be programmed/obligated in TIP).

F. Schedule

1. On-call consultant review and selection process – Initiate in late FY 2014 and have consultant under contract by October 2014.
2. Ongoing work activity in support of the LRTP and CMP work activities.
3. Conduct RTDM runs to provide VMT input for air quality conformity analysis if 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 2014, significant staff time was spent on development of the area’s first inventory and assessment of the Richmond Region’s bridges and structures (which required use of VDOT spreadsheets and developing source information and other necessary documentation not readily available from VDOT). Also, staff GIS support was provided for MPO plans, studies and reports (e.g. CTPP commuting tables, mapping VDOT’s 2012 database for highway needs assessment, mapping assistance for development of new TAZs to be used for reporting new socioeconomic data and forecasts, metro area map showing potential transit activity areas, digital version mapping location of citizen responses received during the May 4, 2013 ¿Que Pasa? Festival, etc.).

For FY 2015, staff anticipates that significant work activities will include incorporating the new functional classification and NHPP designations into the GIS map file system (as of mid-April, the MPO has not been advised if the September 5, 2013 functional classification and NHPP designation for roads in the Richmond Region have been approved by FHWA), providing GIS and technical assistance in mapping and reporting on transportation system networks performance based on the new MAP-21 performance measures and requirements (see UWP tasks 2.2, LRTP Update and 3.1, CMP Update), and providing GIS mapping and data development assistance in support of transit planning activities (see UWP task 5.5, Regional Public Transportation

FY 15 UWP Task 2.5

Services) and bicycle and pedestrian planning activities (see UWP task 8.1, Bicycle/Pedestrian Planning).

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. Richmond Region Bridges and Culverts Inventory and Structure Assessment Report – Conduct an annual review and update of this report using VDOT’s new reporting process and availability of new data.
2. New Federal Performance Measures and Targets – Provide GIS and technical assistance in mapping and reporting on transportation systems networks performance based on new MAP-21 performance measures and targets (see UWP tasks 2.2, LRTP Update and 3.1, CMP Update).
3. GIS File Structure/Organization – Continuing support by transportation staff for its efforts and input to the RRPDC’s GIS file structure organization and maintenance.
4. Information/Data Reports – Develop, distribute (i.e., print and/or post on website/FTP site) reports on transportation studies, data, etc.
5. MPO Plans/Programs/Reports – GIS mapping support for MPO plans, programs, studies and reports.

D. Agency Participation

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

E. Budget, Staff and Funding

	<u>PL</u>	<u>5303</u>	<u>TOTAL</u>
RRPDC	50,000	15,000	\$65,000

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

FY 15 UWP Task 3.1

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

FY 15 UWP Task 3.1

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. Also note that staff will review findings and recommendations from the September 6, 24-25, 2013 quadrennial federal certification review and make appropriate changes to staff's work program and assignments to address any corrective actions.

Work in FY 2015 will focus on system monitoring, which includes receiving, reviewing and analyzing accident data from VDOT; receiving, reviewing and analyzing travel time data from the I-95 Corridor Coalition under its Vehicle Probe Project; and addressing new MAP-21 performance measures and targets (draft federal regulations on MPO planning requirements are expected to be released in April or May 2014 with final regulations to be issued in mid- to late FY 2015).

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 – Conduct annual review and report on travel time data from INRIX, Inc. (i.e., proprietary comprehensive travel time data) for all CMP network designated roads. Process data to identify congested road segments for AM and PM travel time periods. Also conduct modifications to data review and reporting process as appropriate based on findings and recommendations from the September 24 – 25, 2013 federal certification review and based on final MAP-21 federal regulations establishing new performance measures and targets (review in coordination with UWP task 2.2, LRTP Update).
2. Accident Data – Conduct annual review and report on accident data (provided by VDOT) for all CMP network designated roads, plus those major roads (i.e., functionally classified as collector and above) in the Richmond Region’s rural transportation study area. Process data to identify high accident locations (i.e., segments and intersections). Also conduct modifications to data review and reporting process as appropriate based on findings and recommendations from the September 24 – 25, 2013 federal regulations establishing new performance measures and targets (review in conjunction with UWP task 2.2, LRTP Update).
3. CRC/RRPDC Community Indicators Project – Coordinate with work by RRPDC staff/Capital Region Collaborative (CRC) to establish performance measures for the CRC’s priority area on coordinated transportation (review in conjunction with UWP task 2.2, LRTP Update).
4. 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.
5. 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 2013 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

FY 15 UWP Task 3.1

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 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.

6. 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).

7. Access Management – Provides staff support and participation on access management studies for area jurisdictions and corridors. For FY 2015, 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</u>	<u>5303</u>	<u>FY 14 CO</u> <u>5303</u>	<u>TOTAL</u>
RRPDC	90,000	10,000	–	100,000

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. Federal Performance Measures and Targets – Initiate review after draft federal regulations are issued. Also, conduct final review after final regulations are issued.

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).

FY 15 UWP Task 3.3

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.

In response to VDOT's RFP (issued in late 2011/early 2012), VDOT has recently contracted with a private company for the staffing and operations of all five of the state's traffic operations centers (TOC) including the Central Virginia Center off I-95 in Chester. The transition of staffing and operations to the private contractor for the Central Virginia TOC was completed in early December 2013. 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

FY 15 UWP Task 3.3

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).
4. ITS Architecture Implementation and Maintenance Plans – Staff and ITS workgroup review to be scheduled upon being advised by VDOT of these draft plans being available.

D. Agency Participation

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

E. Budget, Staff and Funding

	<u>PL</u>	<u>5303</u>	FY 14 CO <u>5303</u>	<u>TOTAL</u>
RRPDC	17,000	–	–	\$17,000

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.

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

It creates two new formula programs:

FY 15 UWP Task 4.1

- 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.

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 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*

FY 15 UWP Task 4.1

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
- 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

FY 15 UWP Task 4.1

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 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

FY 15 UWP Task 4.1

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 conducted 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 conducted the TA project review process in conjunction with its RSTP and CMAQ funds allocation process. Staff also considered the state's proposed allocations of statewide TA program funds and then provided its recommended projects and allocations for TAC review and recommendation. Staff's and TAC's recommended projects and allocations are scheduled for review and action at the May 1, 2014 MPO meeting.

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.
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

FY 15 UWP Task 4.1

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);
 - 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 – Based on federal regulations, 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. It is important to note that in Virginia, the state's Six-Year Improvement Program (SYIP) is used to develop the list of projects for which upcoming federal and state funds are to be made available for transportation projects and programs. The MPO has lead responsibility for the project review, selection and funds allocation process for RSTP, CMAQ, TA Program, and FTA Section 5310 projects, while VDOT and DRPT have lead responsibility for all other FHWA and FTA funded programs (except for certain FTA funds that are apportioned to the Richmond Urbanized Area for which GRTC and Petersburg Area Transit have lead responsibility). As a result, the MPO's TIP document shows these projects that have been selected

FY 15 UWP Task 4.1

by the MPO (i.e., RSTP, CMAQ, TA Program and Section 5310) and by the CTB (i.e., all other federal and state funding programs except for those programs where GRTC has lead responsibility) with those funds now programmed for obligation.

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. 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 annual updates to 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 (which includes freight shippers, providers of freight transportation services, and representatives of users of public transit) 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.

FY 15 UWP Task 4.1

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 report and letter is from the March 25 – 26, 2009 review. The latest federal certification review was conducted on September 25 – 26, 2013; however, the draft report and letter have not yet been issued (as of mid-April 2014).
12. Annual Obligation Report – 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 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.

FY 15 UWP Task 4.1

13. MAP-21 Performance Measures and Targets – MAP-21 will require the state and MPOs to establish performance measures for the state DOTs and MPOs to use to carry out federal-aid highway and transit programs, and to assess their performance by establishing measurable targets. The USDOT is currently in the process of issuing draft federal regulations to define procedures and requirements for this process. So far, proposed federal regulations for the Highway Safety Improvement Program (HSIP) have been issued (published in the Federal Register on March 11, 2014); draft regulations for other federal-aid highway and transit programs as well as changes to the MPO's planning and programming process are anticipated in the next few months (i.e., April 2014 to July 2014). As part of the HSIP draft regulations, FHWA has noted that the TIP will include discussion documenting how the programs (i.e., federal-aid highway and transit programs) are designed to achieve targets. Staff anticipates that proposed federal regulations for other highway and transit programs addressing MAP-21 performance measures and targets will include this new TIP requirement.

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.

For FY 2015, the MPO has scheduled development of the FFY 15 – 18 TIP. The current FY 12 – FY 15 TIP is valid until June 2015. The MPO took action at its April 10 meeting to proceed with development of the FFY 15 – 18 TIP based on the following schedule:

April – May 2014

- Request MPO member jurisdiction and agency input on projects and obligation schedule for FFY15-18 program cycle.

June – July 2014

- MPO staff develops draft FFY15-18 TIP; VDOT will need to provide previous obligations, estimates by phase and project schedule information for projects as requested by the MPO.
- MPO work also includes new TIP format to more effectively communicate to the public the work being undertaken with each transportation project. Depending on staffing resources, this work may be undertaken in phases with first priority given to developing maps for RSTP and CMAQ projects.
- Draft TIP will be provided to TAC on July 15, 2014 with a request to authorize release of the document for public review.

August – September 2014

- Public review of FFY15-18 Richmond Area MPO TIP.
- Staff review/response to public comments.
- TAC review/action to recommend draft FFY15-18 Richmond Area TIP to MPO scheduled for September 16, 2014.

October 2014

- MPO review/action on draft FFY15-18 Richmond Area MPO TIP.
- Submission of TIP to VDOT for incorporation into the Statewide TIP, including VDOT submission to FHWA and FTA for approval; anticipate approval of TIP within 60-days of MPO action.

The MPO has also taken action on an annual basis to establish the region’s priority transportation projects. This list of projects helps guide the CTB in determining the region’s transportation priorities and in deciding on the allocation of state and federal funds. It has also proven to be useful to area local governments and regional transportation agencies in seeking federal grant funds through various federal programs. For the past several years, the MPO has reaffirmed the MPO’s existing list of priority projects and many of these projects have been completed or are fully funded with completion expected within the current SYIP. Due to other work priorities and staff changes, the MPO has not been able to move forward with updating the MPO’s list of priority projects. In addition, during the 2014 session of the Virginia General Assembly, legislation was passed (i.e., HB2) to establish new requirements for the prioritization of projects using objective and quantifiable analysis that considers, at a minimum, the following factors relative to the cost of the “project or strategy”:

- congestion mitigation
- economic development
- accessibility
- safety
- environmental quality

Prior to initiating work to update the MPO’s list of regional transportation priority projects, the MPO should review and consider VDOT’s proposed process for carrying out these new state requirements implementing HB2.

In the interim, staff will update the MPO’s current list of priority projects and encourage area local governments and regional agencies to make the CTB aware of their jurisdictions/agencies priority projects.

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, 2014 and posted on RRPDC web site by December 30, 2014.

FY 15 UWP Task 4.1

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. Develop and submit the new FFY 15 – 18 TIP.
4. Update and submit 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.
5. 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. For FY 15, the MPO's priority projects report will be updated to reflect updated cost estimates, schedules and allocations from the FY 15 – FY 20 SYIP. Development of the MPO's new list of priority transportation projects should be initiated after VDOT advises the MPO as to how it will meet requirements for prioritizing transportation projects and strategies as required by HB2.
2. Local Transportation Priority Projects – Monitor and report on submission of Richmond Region local governments and regional agencies priority projects for VDOT Richmond District staff review in developing the 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, CMAQ and TA funded projects as follows:
 - Conduct annual process for review, selection and funds allocation for RSTP and CMAQ funded projects (includes initial consideration for proposed TA program projects).

FY 15 UWP Task 4.1

- Improve the content and presentation of proposed RSTP and CMAQ funded projects by providing brief background descriptions, location maps, cost estimates and funding information for each new project.
 - TA project review and selection conducted in conjunction with and following the RSTP and CMAQ review/allocation process with recommended TA projects and allocations submitted for TAC review and recommendation and for MPO review and action.
 - Conduct/review RSTP and CMAQ projects in GenMod for the initial SYIP.
4. Tracking Allocations for RSTP, CMAQ and TA funds and Financial Closeout for Active Projects –
- Ongoing staff support working with VDOT and DRPT staffs to track RSTP, CMAQ and TA allocations made to individual projects and reallocation of funds through the “PD-24” process and through RRPDC/VDOT programming staffs workgroup meetings. Note that VDOT has developed a Financial Analysis Tool (FAT) spreadsheet that is currently being tested in the VDOT Richmond District for use in reporting and tracking all VDOT projects.
 - Annual report by RRPDC and VDOT staffs on financial closeout activities for the previous fiscal year (i.e., July 1 to June 30). Reports are tentatively scheduled for the August or September TAC meetings.
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. VDOT and DRPT are required to submit these reports to RRPDC/MPO staff by November 30, which gives RRPDC staff 30 days to review these reports, make appropriate corrections in consultation with VDOT and DRPT, and post the final reports on the RRPDC website by December 31.

FY 15 UWP Task 4.1

- 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.
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.
 9. TIP MAP-21 Compliance – If needed, 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. FFY 15 – 18 TIP – Initiate work in late FY 2014 to develop the new FFY 15 – 18 TIP as per action by the MPO on April 10, 2014 to approve the TIP development schedule (see schedule as shown in Section A., Background).
 11. TIP Participation Plan – Conduct public 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 (if appropriate). 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 – If appropriate, RRPDC staff will utilize the regional travel demand model to determine air quality impacts for proposed 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

FY 15 UWP Task 4.1

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 are 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 data reports are processed by EPA (i.e., could go back to nonattainment status) and based on EPA's discretion in considering updates to DEQ's Ozone Advance Plan for the Richmond/Petersburg area.

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, DEQ, 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</u>	<u>5303</u>	<u>FY 14 CO</u> <u>5303</u>	<u>TOTAL</u>
RRPDC	150,000	66,000	–	\$216,000

F. Schedule

1. TIP Amendments/Adjustments – Ongoing activity
2. Regional Transportation Priority Projects – August 2014 to November 2014 (subject to VDOT submission of new process for prioritization of projects and strategies as per HB2).
3. Local Transportation Priority Projects – December 2014 to February 2015.
4. FY 16 to FY 21 RSTP, CMAQ and TA Project Review and Selection – October 2013 to April 2015 (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 November 30, 2014 and final list to be posted on RRPDC web site by December 31, 2014.
6. New FFY 15 – 18 TIP – late FY 2014 to October 2014.

5.0 TRANSIT PLANNING

5.2 Elderly and Disability Transportation Needs and Services

A. Background

The Elderly and Disability 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 by e-mail in an accessible format that allows visually impaired committee members, GRTC staff and others to receive and read these materials. Information posted on the RRPDC/MPO website is also accessible to these members, staff and the public.

One major work task completed in late FY 2013 was the *Richmond Region Transportation Services Guide*. This guide 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 2015, 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 2014 will also focus on exploring ways to identify mobility needs of paralyzed veterans 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.

FY 15 UWP Task 5.2

In FY 2014 (at the October 3, 2013 MPO meeting) action was taken to establish the Ad Hoc MPO Committee on Regional Paratransit Services and Programs. Committee members were appointed by the MPO Chairman at the November 7 MPO meeting and in late February 2014 (replacements due to staff changes at GRTC and RRPDC, and following EDAC recommendation action). This committee was established in response to a resolution passed by EDAC and presented to the MPO, which expressed EDAC's concern on proposed changes to the provision of GRTC's CARE service (i.e., ADA compliant paratransit service) over proposed fare increases and service changes. The EDAC resolution requested the MPO to consider these concerns and seek ways to maintain current CARE service operations while developing plans and methods to ensure the long-term availability of paratransit services in the area for those in need of this service. Based on EDAC's resolution and the MPO's action to establish this ad hoc committee, the committee was given the following charge:

- review of transportation services currently available in the Richmond Region for the elderly, individuals with disabilities, and low-income persons;
- report on options available in the Richmond Region to meet the transportation needs of these transportation disadvantaged groups; and
- provide recommendations for the development of plans and methods to ensure the long-term availability of paratransit service in our area to those in need.

The committee was able to hold its first meeting on April 14, 2014. Staff anticipates that the ad hoc committee will be able to prepare and provide its report to the MPO in early FY 2015.

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.
5. Report by Ad Hoc Committee on Regional Paratransit Services and Programs.

C. Work Elements

1. MPO Elderly and Disabled Advisory Committee (EDAC) –
 - Ongoing administration and technical support for EDAC (anticipate four to five meetings in FY 15). Includes EDAC review of CARE ridership reports; review and comment of proposed CARE services, policies, and programs; and addressing various items of interest that can assist GRTC in addressing ADA related services within the GRTC service area.
 - Work with GRTC, human service agencies and organizations, and local government staffs to review and report on ways for the Richmond Region to develop and grow effective provision and coordination of client-based transportation services and programs, and public transportation services.
 - Coordinate with the Capital Region Collaborative’s Social Stability Work Group to address the transportation needs of the Richmond Region’s elderly, low-income and persons with disabilities populations.
2. Richmond Region Transportation Services Guide –
 - Conduct ongoing review and update activities for the Richmond Region Transportation Services Guide (approved at the September 5, 2013 MPO meeting).
3. Demographic Profiles/Data for Richmond Region Seniors, Individuals with Disabilities and Low-Income Persons –
 - Review available data (i.e., 2010 census and ACS) 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 be conducted as part of staff’s work to develop demographic data under UWP task 2.1 Socioeconomic Data Development.
 - Staff will consider updating the MPO’s 2006 report “Public Transportation for the Elderly, Disabled and Low-Income: Phase I – Needs Assessment Report.” This updated report should assist the MPO, GRTC, DRPT and local governments in identifying public transportation needs for the Richmond Region’s transportation disadvantaged populations, and strategies and programs to help meet these needs (report would be developed in conjunction with DRPT work to review and update the Coordinated Human Services Mobility Plan; see UWP task 5.6).
4. Coordinated Human Services Mobility Plan (CHSMP) Update –
 - Provide for EDAC review and participation working with various stakeholders to review and update 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. This includes working with the Paralyzed Veterans of America and representatives of the Hunter Holmes McGuire Veterans Affairs Medical Center to meet the transportation needs of the region's paralyzed, injured and recovering veterans.

6. MPO Ad Hoc Committee on Regional Paratransit Services –

- Staff administrative and technical support for MPO Ad Hoc Committee (established following the MPO's consideration of EDAC's resolution in support of CARE services as presented at the October 3, 2013 MPO meeting)
- Committee's purpose is to:
 - review transportation services currently available in the Richmond Region for the elderly, individuals with disabilities, and low-income persons;
 - report on options available in the Richmond Region to meet the transportation needs of those transportation disadvantaged groups; and
 - provide recommendations for the development of plans and methods to ensure the long-term availability of paratransit service in any area to those in need.

7. GRTC CARE Services Report and Policies –

- Coordinated 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</u>	<u>FY 14 CO</u> <u>5303</u>	<u>5303</u>	<u>TOTAL</u>
RRPDC	3,000	10,000	50,000	\$63,000

F. Schedule

1. Review of EDAC member organizations (conducted in conjunction with UWP task 1.2) – Late FY 2014 to November 2014
2. Richmond Region Transportation Services Guide Updates – Ongoing
3. Report by MPO Ad Hoc Committee on Regional Paratransit Services and Programs – Early FY 2015
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 (adopted 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 for RRPDC staff

FY 15 UWP Task 5.5

participation in such activities. Possible/likely work activities anticipated for RRPDC staff in FY 2015 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 changes to current public transportation services, proposed new 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). Staff plans to submit the Annual TDP Update letter to TAC 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 GRTC board meetings, 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 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 TAC (and if appropriate, by EDAC). 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).

FY 15 UWP Task 5.5

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. 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</u>	<u>FY 14 CO</u> <u>5303</u>	<u>5303</u>	<u>TOTAL</u>
RRPDC	14,000	–	100,000	\$114,000

F. Schedule

1. GRTC TDP Annual Update – Fall 2014
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 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. (As of late April, 2014, staff has not been advised by DRPT of any changes to this policy or if such an evaluation has been initiated.) 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 MPO area and 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).

The 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 and certain paratransit services. 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 service providers which operates the Access Chesterfield program for qualified 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. 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 (i.e., Section 5310, Enhanced Mobility of Seniors and Individuals with Disabilities Program).
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</u>	FY 14 CO <u>5303</u>	<u>5303</u>	<u>TOTAL</u>
RRPDC	2,000	–	15,000	\$17,000

F. Schedule

1. GRTC Administered FTA Sections 5316 and 5317 funds project review and application process – Ongoing (subject to GRTC determination of funds available/remaining for current/new projects and programs).
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, Grant Application Submission, and Construction**

A. **Project Description**

The Broad Street corridor in the City of Richmond is the City's major east/west route and shows the highest demand for transit service. This corridor has the highest ridership in GRTC's current service area, although that ridership is spread over a number of different routes. By consolidating service along Broad Street into one main trunk route that provides fast, reliable and frequent service, GRTC may be in a position to reallocate some vehicle resources and help mitigate congestion; thereby improving traffic conditions for all travelers. The potential to improve public transportation along the major east/west route in the City of Richmond became the impetus for a Bus Rapid Transit (BRT) line to augment service in Broad Street corridor.

Beginning in fall 2009, GRTC Transit System and the Virginia Department of Rail and Public Transportation (DRPT) initiated an Environmental Assessment (EA) of the Broad Street Corridor to study rapid transit improvements from Willow Lawn in Western Henrico County, through the City of Richmond's Broad Street Corridor and Central Business District, to Rocketts Landing in Eastern Henrico County.

The Broad Street 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

FY 15 UWP Task 5.7

in understanding the costs associated with constructing, operating and maintaining each of the alternatives on an annual basis. It is projected that the BRT LPA process will advance through review and approval as follows:

- April 2014 – Presentation to Richmond City Council
- May 2014 – Presentation to Project Advisory Committee (PAC) and Technical Advisory Committee (TAC)
- May 2014 – Initiate amendment of the 2035 Long-Range Transportation Plan to include BRT design and construction description and detail
- May 2014 – Public meetings
- June 2014 – GRTC Board of Directors would take formal action on LPA
- June 2014 – Presentation to the Richmond Area Metropolitan Planning Organization (MPO) (tentatively scheduled)
- July 2014 – Richmond Area Metropolitan Planning Organization (MPO) adoption of LPA to include amendment of the financially constrained Long-Range Plan (CLRP) (subject to completion of the public review process)

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 total project cost of \$53.3 million of which \$49.8 million is projected for construction. 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.

FY 15 UWP Task 5.7

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 \$8 million from yet to be identified local sources and \$17 million from state sources. Operation of the service would cost \$2.7 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 fourth round of public meetings. The next step will be to select a Locally Preferred Alternative (LPA) 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.

In April 2014, due to significant process, GRTC, DRPT, the City of Richmond decided to apply for a Transportation Investment Generating Economic Recovery Discretionary Grant (TIGER) as an additional means to move the BRT project from conceptual design into final design and construction on an expedited schedule.

TIGER discretionary grants will be awarded on a competitive basis and the Broad Street BRT project, if awarded, will fund 50% of the estimated construction cost. The other 50% match for construction would require both state and local funding. The matching funds would consist of \$8,000,000 from yet to be identified local sources and \$16,900,000 from state sources.

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.

In FY2015, the projected budget for the Conceptual Design and Grant Application phase is \$4,000,000 (62% Federal, 34% State, and 4% Local)

In FY2016 through FY2018, the Final Design and Construction phase, the projected capital budget is \$49,800,000 (50% Federal, 34% State and 16% Local). Current estimates project the following commitments – FTA Grant \$24,900,000, State/DRPT \$16,900,000, City of Richmond \$7,600,000 and County of Henrico \$400,000

C. Schedule

To be determined when FTA New Starts/Small Starts funding request is submitted or award of TIGER Discretionary Grant.

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.

2013 Virginia State Rail Plan

The 2013 *Virginia Statewide Rail Plan* (VSRP) analyzes the current state of Virginia's rail system and recommends future funding for improvements, operations and maintenance. The VSRP was developed in coordination with the Federal Railroad Administration (FRA) and in accordance with 49 USC 22705 as enacted in *Passenger Rail Investment and Improvement Act of 2008*, in order to ensure that Virginia's rail plans are consistent with federal funding requirements. The VSRP has been incorporated into the Commonwealth's long-range multi-modal transportation plan, *VTrans 2035*.

Outreach activities for the VSRP were conducted in conjunction with the Office of Intermodal Planning and Investment's VTrans (August 2012) Virginia Surface Transportation Plan (March 2012) and public meetings. A draft VSRP was issued for a thirty-day review and comment period during the month of August 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 115-mile Richmond Area to Potomac segment of SEHSR (RAPS). The corridor extends northward from Centralia in Chesterfield County via the CSX S-Line through Richmond's Main Street Station and rejoins the CSX A-Line near Staples Mill Station. (The study will also examine the potential for SEHSR to continue along the CSX A-Line from Centralia, over the James River and north to CSX's Acca Yard.) From Richmond the corridor 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 consultant procurement phase.

The Arkendale to Powells Creek 3rd track project, located along an 11-mile segment of RAPS in 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.

Virginia set the national pace in preparation for the October 2013 implementation of PRIIA Section 209 provisions requiring states to fund regional passenger rail service provided by Amtrak. 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.

Next steps for Amtrak Virginia include extending service to Roanoke from Lynchburg, and increasing the train service frequencies to Norfolk from Richmond.

5.9 GRTC Downtown Bus Transfer Center

A. Project Description

The purpose of the project is to locate, acquire a site, design and construct an efficient operating permanent 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. After considerable discussion with property Owners of the final five sites and with input from nearby neighborhood/stakeholders, all but Site#17 (Dominion owned property at 7th and Canal) failed to move forward with additional evaluation and transactional interest. The design team continued

discussion with Dominion Resources both at staff level and executive level regarding Site #17 through a number of design program test fits, design charrettes, with design solutions, and developed a Letter of Intent to Dominion for written commitment. The Letter of Intent was not acted on by Dominion and they have decided to pursue other development opportunities for the Site #17.

The site selection and design team along with GRTC continues to evaluate locations within the focus area and are re-evaluating potential of sites that were dismissed in earlier reviews as the real estate market has changed over the past year along with availability. As new sites are evaluated according to the established criteria, the team will bring the details forward for Steering Committee discussion and commence with contact with the property Owner to gauge their interest, hold additional public scoping meetings as necessary, and implement 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 June 2014 (pending discussions w/owners, stakeholders, and general public). NEPA and 30 percent of the design are to be completed by end of June 2015.

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

D. Temporary Transfer Plaza - Project Description

For several years GRTC Transit System has worked along with its project partners, City of Richmond and other downtown stakeholders, to navigate the complexities of site selection for a permanent downtown Richmond transportation hub.

The logistics of the City's hosting two major bicycle events, 2014 USA Cycling Collegiate Road National Championship and the 2015 UCI Road World Championship, have presented challenges to the GRTC Transit System to maintain transit operations during the two bicycle events and continue to develop a permanent Transfer Center location. GRTC Transit System proposes installation of the GRTC Temporary Bus Transfer Plaza. Temporary status being defined as two to three years beginning in April, 2014. Though temporary in nature, characteristics of the temporary plaza include:

- Strong security and maintenance component
- Designed to support the rapid movement of riders in and out of an on-street transfer site
- Allow most downtown routes to connect at one location
- Sized to handle a large amount of bus/pedestrian traffic.

The GRTC Temporary Bus Transfer Plaza will

- Accommodate 90 buses per peak hour
- Serve approximately 5,000 to 8,000 riders per day
- Locate thirteen bus bays curbside along 9th Street and Leigh Street, which will be painted on the surface of the street pavement
- Be enhanced by installation of benches, trashcans, information kiosks, and bus shelters.

E. Temporary Transfer Plaza – Project Schedule

Phase One - Includes installation of all the above amenities with exception of shelters. The project is considered an installation of amenities project for construction purposes. Installation construction began March 13 and is on schedule to be completed by April 4, 2014. The Plaza will go into operation on April 20, 2014.

FY 15 UWP Task 5.9

Phase Two – Includes installation of bus shelters only and is schedule for August/September 2014 – October/November 2014.

F. Project Budget

Design: \$32,399.00 Source of funds: VA95-x090

Installation/construction: \$124,879.00 Source of funds: \$64,000 from local funds; \$60,879 from VA 90-355; VA90-370, VA90-384.

Total estimated costs including design and installation are \$157,278.00. Installation of amenities will be out of local operating funds.

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 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 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 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 roads in the Richmond and Hampton Roads regions and provides 30-plus gallons of diesel fuel saved per trip. The MPO initiated the 64 Express service by allocating approximately

FY 15 UWP Task 6.1

\$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 with VPA went into effect on July 1, 2011. (Note the first five-year lease is due to expire on June 30, 2016.) 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.

In FY 2014, staff completed work on the Richmond Region's first Comprehensive Economic Development and Strategies (CEDS), with the RRPDC board taking action at its December 12, 2013 meeting to adopt CEDS and authorize its submission to the U.S. Department of Commerce Economic Development Administration (EDA). The CEDS presents a snapshot of economic strengths, opportunities, and challenges for the Region in addressing five key goals:

- create best-in-class Pre-K – 12 public education system;
- expand productive workforce participation;
- focus capital investments on priority economic development opportunities;
- grow and retain jobs that advance the Region; and
- expand regional choice in housing and transportation access to employment.

This plan should qualify some jurisdictions and areas in the Richmond Region to be eligible for 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 has been to provide staff 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). 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

FY 15 UWP Task 6.1

the 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. The RRPDC Executive Director is a board member for Richmond's Future and also serves as Co-Chair of the Logistics Roundtable. 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 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.

FY 15 UWP Task 6.1

2. Intermodal Economic Development Coordination – Coordinate MPO intermodal economic development activities with work from the recently completed Richmond Regional CEDS (completed December 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.

E. Budget, Staff and Funding

	<u>PL</u>	<u>5303</u>	<u>TOTAL</u>
RRPDC	56,000	–	\$56,000

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 planning district commissions and agency representatives from VDOT and DEQ. 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, DEQ 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, DEQ 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 DEQ'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:

- 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 and the CAOs for each of these jurisdictions have expressed their willingness to participate on

a voluntary basis. DEQ has prepared and submitted the draft Ozone Advance Action Plan for the Richmond-Petersburg Area and EPA has approved it. Note that annual updates to the plan are due to EPA by April 30.

This work task also provides for RRPDC and VDOT staff work activities for conducting air quality conformity analysis (if required) 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 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 (if necessary) 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., 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 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 DEQ 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. Provide for staff participation in carrying out appropriate activities in support of updates to the Richmond/Petersburg Area Ozone Advance Plan.
4. Should the Richmond/Petersburg area be designated back to nonattainment status, staff will work with DEQ and VDOT staffs to review proposed changes to the nonattainment area source emission budgets (for VOC and NOx 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</u>	<u>5303</u>	<u>TOTAL</u>
RRPDC	10,000	–	\$10,000

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 2013 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 the City of Richmond. 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 under this task 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 (i.e., for TA funds apportioned to the Richmond Urbanized Area and the portion made available to the MPO), and the MPO's priority and emphasis on using TA funds for bicycle and pedestrian facilities that are integral to the transportation network and improve mobility and support other

transportation modes, staff should provide a higher level of activity under this work task in FY 15.

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 2015 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. Note that staff was not able to conduct this activity as planned in FY 14, and recent staffing changes may not allow staff to proceed with this activity until late FY 15.
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 state's performance measure for Job and Housing Access to Pedestrian Facilities).
3. Participation on VDOT's Bicycle and Pedestrian Advisory Committee, VDOT Pedestrian Policy Plan meetings.
4. Participation with area local governments on planning efforts for development of jurisdiction, corridor or sub-area bicycle and pedestrian facilities.

5. 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.
6. 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 issued 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 specific 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</u>	<u>5303</u>	FY 14 CO <u>5303</u>	<u>TOTAL</u>
RRPDC	30,000	10,000	–	\$40,000

F. Schedule

Ongoing activity.

**AGENCY BUDGET SUMMARY SHEET
FHWA PL/SPR; FTA SEC 5303; OTHER PLANNING GRANTS
FY 2015 UWP - RICHMOND AREA MPO**

Task No/ Abbrev	RRPDC				VDOT SPR	OTHER	TOTAL						GRAND TOTAL
	PL	5303	CO 5303	RSTP (2)			PL	SPR	5303	CO 5303	RSTP	OTHER	
1.1 MPO Maint	525,972	92,028	--	--	?	--	525,972	?	92,028	--	--	--	618,000
1.1 Conting.	32,548	--	--	--	--	--	32,548	--	--	--	--	--	32,548
1.2 Citi Partic	90,000	25,000	--	--	--	--	90,000	--	25,000	--	--	--	115,000
1.3 UWP	40,000	20,000	--	--	--	--	40,000	--	20,000	--	--	--	60,000
2.1 Data	100,000	15,000	--	--	--	--	100,000	--	15,000	--	--	--	115,000
2.2 LRTP	80,000	30,000	--	--	--	--	80,000	--	30,000	--	--	--	110,000
2.3 RTDM	80,000	20,000	--	100,000 [2]	--	--	80,000	--	20,000	--	100,000	--	200,000
2.5 TD/GIS	50,000	15,000	--	--	--	--	50,000	--	15,000	--	--	--	65,000
3.1 CMP	90,000	10,000	--	--	--	--	90,000	--	10,000	--	--	--	100,000
3.3 ITS	17,000	--	--	--	--	--	17,000	--	--	--	--	--	17,000
4.1 TIP	150,000	66,000	--	--	--	--	150,000	--	66,000	--	--	--	216,000
5.2 E&D TNS	3,000	50,000	10,000	--	--	--	3,000	--	50,000	10,000	--	--	63,000
5.5 RPTS	14,000	100,000	--	--	--	--	14,000	--	100,000	--	--	--	114,000
5.6 CHSMP	2,000	15,000	--	--	--	--	2,000	--	15,000	--	--	--	17,000
5.7 RBRT (1)	--	--	--	--	--	--	--	--	--	--	--	--	--
5.8 Rail (1)	--	--	--	--	--	--	--	--	--	--	--	--	--
5.9 Dwn TC (1)	--	--	--	--	--	--	--	--	--	--	--	--	--
6.1 IM Plg.	56,000	--	--	--	--	--	56,000	--	--	--	--	--	56,000
7.1 Air Q. Plg.	10,000	--	--	--	--	--	10,000	--	--	--	--	--	10,000
8.1 Bike/Ped Plg.	30,000	10,000	--	--	--	--	30,000	--	10,000	--	--	--	40,000
TOTAL (\$)	1,370,520	468,028	10,000	100,000	?	--	1,370,520	?	468,028	10,000	100,000	--	1,948,548

- NOTE:
- (1) Work conducted by consultants (UWP information item).
 - (2) Work conducted by RRPDC consultant
 - (3) 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		RSTP (2)		OTHER		TOTAL		GRAND TOTAL
	Federal	State/Local	Federal	State	Federal	State/Local	Federal	State/Local	Federal	State/Local	Federal	State/Local	Federal	State/Local	
1.1 MPO Maint	420,778	105,194	?	?	73,623	18,405	--	--	--	--	--	--	494,401	123,599	618,000
1.1 Conting.	26,038	6,510	--	--	--	--	--	--	--	--	--	--	26,038	6,510	32,548
1.2 Citi Partic	72,000	18,000	--	--	20,000	5,000	--	--	--	--	--	--	92,000	23,000	115,000
1.3 UWP	32,000	8,000	--	--	16,000	4,000	--	--	--	--	--	--	48,000	12,000	60,000
2.1 Data	80,000	20,000	--	--	12,000	3,000	--	--	--	--	--	--	92,000	23,000	115,000
2.2 LRTP	64,000	16,000	--	--	24,000	6,000	--	--	--	--	--	--	88,000	22,000	110,000
2.3 RTDM	64,000	16,000	--	--	16,000	4,000	--	--	80,000	20,000	--	--	160,000	40,000	200,000
2.5 TD/GIS	40,000	10,000	--	--	12,000	3,000	--	--	--	--	--	--	52,000	13,000	65,000
3.1 CMP	72,000	18,000	--	--	8,000	2,000	--	--	--	--	--	--	80,000	20,000	100,000
3.3 ITS	13,600	3,400	--	--	--	--	--	--	--	--	--	--	13,600	3,400	17,000
4.1 TIP	120,000	30,000	--	--	52,800	13,200	8,000	2,000	--	--	--	--	172,800	43,200	216,000
5.2 E&D TNS	2,400	600	--	--	40,000	10,000	--	--	--	--	--	--	50,400	12,600	63,000
5.5 RPTS	11,200	2,800	--	--	80,000	20,000	--	--	--	--	--	--	91,200	22,800	114,000
5.6 CHSMP	1,600	400	--	--	12,000	3,000	--	--	--	--	--	--	13,600	3,400	17,000
5.7 RBRT (1)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
5.8 Rail (1)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
5.9 Dwn TC (1)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
6.1 IM Plg.	44,800	11,200	--	--	--	--	--	--	--	--	--	--	44,800	11,200	56,000
7.1 Air Q. Plg.	8,000	2,000	--	--	--	--	--	--	--	--	--	--	8,000	2,000	10,000
8.1 Bike/Ped Plg.	24,000	6,000	--	--	8,000	2,000	--	--	--	--	--	--	32,000	8,000	40,000
TOTAL (\$)	1,096,416	274,104	?	?	374,423	93,605	8,000	2,000	80,000	20,000	--	--	1,558,839	389,709	1,948,548

NOTE: (1) Work conducted by consultants (UWP information item).
(2) Work conducted by RRPDC consultant.
(3) Work conducted by GRTC consultant.

AMENDMENTS

MPO AMENDMENT ACTIONS

(Amendments to be added/documented when appropriate)