RICHMOND REGIONAL TRANSPORTATION PLANNING ORGANIZATION

UNIFIED PLANNING WORK PROGRAM

FISCAL YEAR 2018
July 1, 2017 – June 30, 2018

Richmond Regional Transportation Planning Organization
May 4, 2017

Amended March 1, 2018
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 and Powhatan, 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 Transportation Authority, the Federal Highway Administration (FHWA), the Federal Transit Administration (FTA), the RRPDC and RideFinders, Inc., on behalf of the Richmond Regional Transportation Planning Organization (RRTPO). The contents of this work program reflect the views of the RRTPO. 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.

NONDISCRIMINATION

The Richmond Regional Transportation Planning Organization (RRTPO) fully complies with Title VI of the Civil Rights Act of 1964 and related statutes and regulations in all programs and activities. The RRTPO will strive to provide reasonable accommodations and services for persons who require special assistance to participate in this public involvement opportunity. For more information on meeting accessibility, or to obtain a Title VI Complaint Form, see www.richmondregional.org or call the Title VI Coordinator at 804-323-2033.
RRTPO AGENDA 5/4/17; ITEM III.B.

FY'18 UNIFIED PLANNING WORK PROGRAM

Richmond Regional Transportation Planning Organization

On motion of David T. Williams, seconded by Parker C. Agelasto, the Richmond Regional Transportation Planning Organization unanimously approved the following resolution:

RESOLVED, that the Richmond Regional Transportation Planning Organization (RRTPO) adopts the Fiscal Year 2018 Unified Planning Work Program (UPWP) and directs the submission of this work program to FHWA and FTA for final comment and approval.

*********************************************************************************************************************************************

This is to certify that the Richmond Regional Transportation Planning Organization approved the above resolution at its meeting held May 4, 2017.

WITNESS:                                                   BY:

[Signatures]

Sharon E. Robeson                                       Barbara Schoeh Nelson
Program Assistant                                         Secretary
Richmond Regional Planning                                Richmond Regional Transportation
District Commission                                       Planning Organization
# TABLE OF CONTENTS
## FISCAL YEAR 2018 UNIFIED PLANNING WORK PROGRAM

### I. INTRODUCTION

| RRTPPO Mission Statement and Planning Priorities | .......................................................... | 1 |
| Budget and Funding Sources                         | ................................................................... | 5 |

### II. TASKS

#### 1.0 PROGRAM MANAGEMENT

1.1 RRTPPO Program Management

1.2 Unified Planning Work Program (UPWP) Budget and Contract Administration

#### 2.0 TRANSPORTATION PLANNING

2.1 Public Outreach and Equity Analysis

2.11 Policy and Program Analysis: Title VI, Environmental Justice and Low Literacy/Limited English Proficiency

2.12 Public Participation and Outreach

2.13 Transportation Disadvantaged

2.2 Performance Based Transportation Planning

2.21 Transportation Planning Measures, Trends and Targets

2.22 Transportation Demand Management: TDM

2.23 Congestion Management Process: CMP

2.24 plan2040, VTrans2040, and plan2045

2.25 System Resilience

2.3 Transit

2.31 Transit 2040 Implementation and Transit Oriented Development

2.32 Paratransit, Coordinated Human Services Mobility Plan

2.33 Park and Ride and Multimodal Transportation Connectivity

2.34 Pulse TIGER Project

2.35 GRTC Downtown Transfer Center

2.4 Richmond Area Rail

2.41 DC2RVA: Washington to Richmond Southeast High Speed Rail

2.42 Richmond Area Rail Studies

2.43 Amtrak Thruway Bus Service: Main Street Station to Staples Mill Station

2.44 Unmanned Amtrak Station Safety Improvements

2.5 Freight and Intermodal

2.51 Commerce Corridor

2.52 Freight Corridor Mapping and Geodatabase Development

2.53 I-295 Corridor Feasibility Study

2.6 Active Transportation: Bicycle and Pedestrian

2.61 Coordination with Local Bicycle and Pedestrian Planning

2.62 Bicycle and Pedestrian Connectivity

2.63 Advisory Committee, Organization and Work Group Support

2.64 East Coast Greenway Off-Road Trail Location Coordination
2.7 Environment
  2.71 Ozone Advance
  2.72 CMAQ Program Analysis
  2.73 Storm Water and Resiliency

2.8 Special Planning Efforts and Studies
  2.81 Capital Region Collaborative
  2.82 Comprehensive Economic Development Strategy (CEDS)
  2.83 Go Virginia
  2.84 Port of Virginia: Richmond Marine Terminal
  2.85 Megaregion: FHWA Mid-Atlantic and Other
  2.86 Richmond Metropolitan Transportation Authority
  2.87 Virginia Association of MPOs (VAMPO)
  2.88 Automated and Connected Technologies
  2.89 Regional Transportation Funding Alternatives and Priorities

2.9 Contingency Funding

3.0 DATA AND MODELING APPLICATIONS

3.1 Data and Analysis
  3.11 Geographic
  3.12 Socioeconomic
  3.13 Transportation Network

3.2 Regional Travel Demand Modeling

4.0 FINANCIAL PROGRAMMING

4.1 Transportation Improvement Program (TIP)
  4.11 TIP Development
  4.12 TIP Analysis and Maintenance
  4.13 Annual Listing of Obligated Projects

4.2 Federal and State Transportation Funding
  4.21 Regional Surface Transportation Program (RSTP)
  4.22 Congestion Mitigation and Air Quality (CMAQ)
  4.23 Transportation Alternatives Set-Aside Program (TA)
  4.24 FTA 5310: Enhanced Mobility: Seniors and Individuals with Disabilities
  4.25 High Priority, District Grant and State of Good Repair Programming
  4.26 Financial Projections

III. APPENDIX

A. RRTPO Membership
B. RRTPO and Tri-Cities Area MPO Coordination
C. Frequently Used Terms and Abbreviations
D. Federal Regulations Applicable to MPOs
E. State Code Applicable to MPOs
F. FY 17 UPWP Year-End Report
G. Amendments to FY18 UPWP
FY 18 UPWP Introduction
Mission Statement and Planning Priorities

RICHMOND REGIONAL TRANSPORTATION PLANNING ORGANIZATION
MISSION STATEMENT AND PLANNING PRIORITIES

Mission
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.

November 18, 2004

The goal of the RRTPO Unified Planning Work Program (UPWP) is a well-functioning process and program that meets the federal and state transportation planning requirements. This effort involves the public, interested parties, and the RRTPO in developing a multi-modal, continuing, comprehensive, and cooperative transportation planning and programming process. A requirement of Section 450.308(c) of the Metropolitan Planning regulations is that Transportation Management Area (TMA) designated MPOs shall include a discussion of the planning priorities facing the metropolitan planning area. Further discussion of these priorities is provided in the various work tasks.

The UPWP is the RRTPO’s budget and work program for the upcoming fiscal year which begins on July 1, 2017 and concludes on June 30, 2018. The UPWP addresses federal/state planning and programming requirements, addresses regional transportation planning issues and needs, and includes activities required for the state and region to remain eligible for federal-aid highway and transit funds. The funding sources supporting the RRTPO program activities come from federal, state and local funds.

The FY18 UPWP continues to be organized with four core program areas: Program Management, Transportation Planning, Data and Analysis, and Financial Programs. Program Management is the policy, management and operations platform that supports the remaining three program areas. The program objectives, work elements, responsibilities, budgets, products and schedules are included within each core program area. In addition to grouping work tasks into four core areas, an effort has been made to identify how work tasks in each section correlate to the goals approved by the RRTPO in the plan2040. The use of appendices to consolidate information necessary to understanding and implementing the RRTPO program requirements will be continued.

As in past UPWP documents, there are work tasks that are included primarily as “project monitoring”; while the RRTPO is a participating partner in the effort, the designated lead role is undertaken by another agency or organization such as GRTC, DRPT or VDOT. FTA requires that projects and studies receiving FTA funding to be included in the UPWP; this is not a requirement shared by FHWA. The GRTC Downtown Transfer Center, the Pulse TIGER grant, and Richmond Area Rail Studies have been included in the “monitoring” category. All partners are provided the opportunity to incorporate project updates into the work task which those organizations or agencies lead.
The following work priorities from FY17 have been or will be completed prior to June 30, 2017:

- completion of Greater RVA Transit Vision Plan and evaluation of how to incorporate elements into future work programs and plan2045;
- completion of the plan2040 long-range Metropolitan Transportation Plan;
- identification of Senior Connections as the RRTPO partner organization to support seniors, individuals with disabilities and the transportation disadvantaged in identifying transportation opportunities and where gaps in delivery exist, work with partners to meet the identified needs;
- SMART SCALE: regional coordination of project development and submission of regional applications; participate in State of Good Repair project identification and advancement;
- update of Title VI Plan and Public Participation Plan; and
- Commerce Corridor Transportation Study.

The two primary funding sources supporting the work program are FHWA/PL funds and FTA Section 5303 funds. These funds are matched by state and local sources on an 80% federal (FHWA and FTA) 10% state (VDOT and DRPT), and 10% local (RRPDC) basis. Additional funding includes FHWA/RSTP which funds an on-call consultant to support RRTPO Regional Travel Demand Model development and analysis. The RSTP funds are matched by state sources with 80% federal funding (FHWA) and 20% state funding (VDOT). The FHWA/PL funding allocations for FY 18 from VDOT and the FTA 5303 funding allocations from DRPT have been received.

**Work Program Priorities**

The RRTPO approved priorities for the FY18 UPWP focused on fully addressing the recommendations included in the federal certification report, improving RRTPO outreach and engagement in the community, completing existing work tasks that span from fiscal year 2017 to fiscal year 2018, as well as advancing a limited number of new initiatives. The new initiatives are developed as themes which combine efforts within multiple work program tasks. The themes for the new initiatives include:

1. **Identifying transportation investments that capitalize on expanding regional commerce, workforce mobility and accessibility.**
2. **Expanding access to transit through multimodal connectivity and park and ride facilities.**

**Federal Certification Review Comments, FAST Act and Other USDOT Priorities**

- Review of RRTPO Bylaws
- Ensuring Disadvantaged Business Enterprise participation and process
- Identification of accomplishments and remaining work efforts: this information will be included in Appendix F and will be completed within 60 days of the completion of the fiscal year as an end-of-year report
- Improve community outreach and engagement
- Incorporate requirements of FAST Act into all elements of work program based on federal guidance
- Incorporation of Ladders of Opportunity and Models of Regional Cooperation into planning efforts and processes
- Integration of National Performance Measures for Safety, Bridges, Pavement, Freight and Congestion Management into plans, programs, policies and processes, as appropriate
FY 18 UPWP Introduction
Mission Statement and Planning Priorities

- Address the final rule on MPO Coordination and Planning Area Reform, if required.

**Continuation of Existing Work Efforts**
- Continue to develop the Regional Travel Demand Model to support transportation planning, research and analysis, including small area, sub-area, corridor and scenario planning tasks
- Advance the recommendations from the Commerce Corridor Study into project applications, policies or other planning efforts
- Continue the developing regional conversation on defining and advancing the East Coast Greenway off-road trail route with local, regional, state and national partners

**New Initiatives – Themes**
- *Identifying transportation investments that capitalize on expanding regional commerce, workforce mobility and accessibility:*
  This work effort will include work tasks involving freight, transit, multimodal connectivity, and equity.
- *Expanding access to transit through multimodal connectivity and park and ride facilities:*
  This work effort will include work tasks to inform the development of a regional park and ride plan and identity bicycle and pedestrian connections to transit stops to increase transit catchment with minimal impacts to transit capital or operating efforts. The work will come from the recommendations in the Greater RVA Transit Vision Plan and the under-development Richmond Transit Network Plan.
## AGENCY BUDGET SUMMARY SHEET

**FHWA PL/SPR; FTA SEC 5303; OTHER PLANNING GRANTS**

**FY 2018 UPWP - RICHMOND REGIONAL TPO**  
March 1, 2018

<table>
<thead>
<tr>
<th>Summarized Work Tasks</th>
<th>RRTPO Budget</th>
<th>GRAND</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PL</td>
<td>5303</td>
</tr>
<tr>
<td>1.0 Management</td>
<td>167,135</td>
<td>55,700</td>
</tr>
<tr>
<td>1.2 Budget, Contracts</td>
<td>114,237</td>
<td>39,460</td>
</tr>
<tr>
<td>2.1 Outreach/Equity</td>
<td>171,418</td>
<td>5,000</td>
</tr>
<tr>
<td>2.2 Performance Planning</td>
<td>249,623</td>
<td>92,065</td>
</tr>
<tr>
<td>2.3 Transit</td>
<td>17,224</td>
<td>130,000</td>
</tr>
<tr>
<td>2.4 Richmond Rail</td>
<td>4,507</td>
<td>50,000</td>
</tr>
<tr>
<td>2.5 Freight-Intermodal</td>
<td>76,408</td>
<td>5,000</td>
</tr>
<tr>
<td>2.6 Bike &amp; Pedestrian</td>
<td>22,581</td>
<td>60,000</td>
</tr>
<tr>
<td>2.7 Environment</td>
<td>24,032</td>
<td></td>
</tr>
<tr>
<td>2.8 Special Studies</td>
<td>104,928</td>
<td></td>
</tr>
<tr>
<td>2.9 Contingency Funding</td>
<td>37,496</td>
<td>43,500</td>
</tr>
<tr>
<td>3.0 Data and Modeling</td>
<td>153,996</td>
<td>46,359</td>
</tr>
<tr>
<td>4.0 Financial Programming</td>
<td>223,352</td>
<td>50,000</td>
</tr>
<tr>
<td><strong>TOTAL ($)</strong></td>
<td>1,366,937</td>
<td>435,019</td>
</tr>
</tbody>
</table>

**NOTES:**  
(1) VDOT SPR funds are shown in this work task budget for information purposes; these funds are not included in the RRTPO budget.  
(2) RSTP funds for Regional Travel Demand Model  
(3) FY 2017 funds programmed following FY 2017 audit
## FUNDING SOURCES SUMMARY SHEET

FHWA PL/SPR; FTA SEC 5303; OTHER PLANNING GRANTS

FY 2018 UWP - RICHMOND REGIONAL TPO

March 1, 2018

| Task No./ Abbrev. | PL Federal | State | Local | 5303 Federal | State | Local | CO 5303 (2) Federal | State | Local | RSTP Federal | State | Local | OTHER (1) Federal | State | Local | TOTAL Federal | State | Local | GRAND TOTAL |
|------------------|------------|--------|-------|-------------|-------|-------|-------------------|-------|-------|---------------|-------|-------|---------------|-------|-------|-------------|-------|-------|
| 1.1 Program Management | 133,708 | 16,714 | 16,714 | 44,560 | 5,570 | 5,570 | - | - | - | - | 80,000 | 20,000 | 178,268 | 22,284 | 22,284 | 322,835 |
| 1.2 UPWP, Budget, Contracts | 91,390 | 11,424 | 11,424 | 31,568 | 3,946 | 3,946 | - | - | - | - | - | - | 122,958 | 15,370 | 15,370 | 153,697 |
| 2.1 Public Outreach/Equity | 137,134 | 17,142 | 17,142 | 4,000 | 500 | 500 | - | - | - | - | - | - | 141,134 | 17,642 | 17,642 | 176,418 |
| 2.2 Performance Planning | 199,698 | 24,962 | 24,962 | - | - | - | 73,652 | 9,207 | 9,207 | - | - | - | 273,350 | 34,169 | 34,169 | 341,688 |
| 2.3 Transit | 13,779 | 1,722 | 1,722 | 104,000 | 13,000 | 13,000 | 120,000 | 15,000 | 15,000 | - | - | - | 237,779 | 29,722 | 29,722 | 297,224 |
| 2.4 Richmond Rail | 3,606 | 451 | 451 | 40,000 | 5,000 | 5,000 | - | - | - | - | - | - | 43,606 | 5,451 | 5,451 | 54,507 |
| 2.5 Freight-Intermodal | 61,126 | 7,641 | 7,641 | 4,000 | 500 | 500 | - | - | - | - | - | - | 65,126 | 8,141 | 8,141 | 81,408 |
| 2.6 Bike & Pedestrian | 18,065 | 2,258 | 2,258 | 48,000 | 6,000 | 6,000 | 80,000 | 10,000 | 10,000 | - | - | - | 146,065 | 18,258 | 18,258 | 182,581 |
| 2.7 Environment | 19,226 | 2,403 | 2,403 | - | - | - | - | - | - | - | - | - | 19,226 | 2,403 | 2,403 | 24,032 |
| 2.8 Special Planning Studies | 83,942 | 10,493 | 10,493 | - | - | - | - | - | - | - | - | - | 83,942 | 10,493 | 10,493 | 104,928 |
| 2.9 Contingency Funding | 29,996 | 3,750 | 3,750 | 34,800 | 4,350 | 4,350 | - | - | - | - | - | - | 64,796 | 8,100 | 8,100 | 80,996 |
| 3.0 Data and Analysis | 123,197 | 15,403 | 15,403 | 37,087 | 4,636 | 4,636 | - | - | - | - | 80,000 | 20,000 | 240,284 | 40,036 | 20,036 | 300,355 |
| 4.0 Financial Programming | 178,682 | 22,335 | 22,335 | 40,000 | 5,000 | 5,000 | - | - | - | - | - | - | 218,682 | 27,335 | 27,335 | 273,352 |
| TOTAL ($) | 1,093,549 | 136,694 | 136,694 | 348,015 | 43,502 | 43,502 | 313,652 | 39,207 | 39,207 | 80,000 | 20,000 | 80,000 | 20,000 | 1,835,216 | 239,402 | 219,402 | 2,394,021 |

**NOTES:**

1. VDOT SPR funds are shown in this work task budget for information purposes; not included in the RRTPO budget.
2. FY 2017 funds programmed following the FY 2017 audit.
(This page intentionally left blank.)
1.0 PROGRAM MANAGEMENT

The RRTPO works to deliver a well-functioning transportation planning and programming process meeting federal and state transportation planning requirements. This effort involves the public, interested parties, and the RRTPO in developing a multimodal, continuing, comprehensive, and cooperative transportation planning and programming process.

The RRTPO programs and activities are administered and managed by the RRPDC Deputy Executive Director, who is responsible for overseeing the RRTPO, and Policy and Programming. Contract and financial management are provided by the RRPDC Finance Director; oversight of the RRTPO program is provided by the Executive Director with human resources support from the RRPDC.
1.1 RRTPD Program Management

A. Objective and Description

This task provides the ongoing administrative support needed to maintain the RRTPD and RRTPD process and provides contract administration for FHWA PL, FTA Section 5303, RSTP funds and other funding programs, as appropriate. This work effort also supports the RRTPD program by providing legal and other financial services related to the RRTPD program.

Major work activities within Program Administration include: developing agendas, minutes, mailings, work status reports, program management and administration; federal/state program requirements and review of related legislation; and computer program support.

The RRDPD serves as lead staff for RRTPD program administration with VDOT Richmond District providing support through its participation on the RRTPD board, committees and work groups, processing quarterly bills and other requisitions, and conducting various other technical and administration support activities (see description of VDOT activities under Work Elements). VDOT SPR funds programmed under UPWP task 1.1 provides for VDOT Richmond District support on all RRTPD work tasks.

B. Work Elements

1. Maintenance and administration of the RRTPD “3-C” process for the RRTPD, committees and work groups, including direct costs to support the process. Work elements include the support and documentation of RRTPD and committee meetings and other meetings as appropriate.

2. Perform review activities under various local, state, and federal programs including Commonwealth Intergovernmental Review Process, Environmental Impact Statements and Assessments and other studies.

3. Coordinate review and presentation activities with RRDPD and other regional, local and state agencies involved with transportation planning and programming; respond to information requests from area local governments, federal and state agencies and regional transportation and planning agencies.

4. Maintain up-to-date information on transportation planning and programming in the Richmond region.

5. Review and comment as appropriate on legislative and regulatory activities affecting transportation planning and programming, and perform activities necessary to ensure RRTPD compliance with applicable state and federal rules and regulations.

6. Attend seminars, meetings, webinars/webcasts, workshops, and conferences related to RRTPD activities.
7. Review of RRTPO bylaws: the last comprehensive review of the RRTPO bylaws was conducted in the early 1990’s and the September 2013 RRTPO federal certification review report recommended that the bylaws be revised to make the document more transparent and understandable for the members and the public. This review will be managed by the Executive Committee; the target for completing this activity is RRTPO adoption by summer/fall 2017.

8. Coordinate the fifth RRTPO Transportation Forum planned for December 2017.

9. The following activities are provided by VDOT in support of the RRTPO program:
   a. Maintain current highway facilities inventory and monitor regional travel patterns.
   b. Provide traffic data forecasts for design of highway facilities.
   c. Provide technical assistance to RRPDC, local jurisdictions, and other agencies concerning transportation.
   d. Review site plans as requested.
   e. Review federal regulations and guidance related to RRTPO planning and programming requirements and update/revise the RRTPO work program, procedures and activities as appropriate addressing FAST Act and other federal requirements.

C. Agency Participation
   RRPDC, RRTPO, VDOT, DRPT, local governments, CRAC, GRTC, RMTA, RideFinders, FHWA, FTA.

D. Budget and Funding

<table>
<thead>
<tr>
<th>Source</th>
<th>Type</th>
<th>PL</th>
<th>5303</th>
<th>FY17 CO 5303</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal</td>
<td></td>
<td>133,708</td>
<td>44,560</td>
<td></td>
<td>178,268</td>
</tr>
<tr>
<td>State</td>
<td></td>
<td>16,714</td>
<td>5,570</td>
<td></td>
<td>22,284</td>
</tr>
<tr>
<td>RRPDC</td>
<td></td>
<td>16,714</td>
<td>5,570</td>
<td></td>
<td>22,284</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>167,135</td>
<td>55,700</td>
<td></td>
<td>222,835</td>
</tr>
</tbody>
</table>

G. Products and Schedule

RRTPO Program Management
Ongoing

Review of Bylaws
Summer/Fall 2017
1.2 Unified Planning Work Program (UPWP), Budget and Contract Administration

A. Objective and Description
This task provides for maintenance of the adopted UPWP and annual development of the RRTPO work program for the upcoming fiscal year. Work in this task includes development of time allocations, budgets, and funding to support the task descriptions. The UPWP also identifies the region’s planning priorities, documents cooperation between the RRTPO and Tri-Cities Area MPO on various work activities and notes non-RRTPO transportation study activities funded by FTA as informational items.

B. Work Elements
1.21 Unified Planning Work Program Development and Maintenance
   a. Identify and document planning priorities and a review of VDOT, DRPT, FHWA, FTA, EPA, and other agency requirements. This includes review of new planning and programming regulations and requirements of the FAST Act.
   b. Review of input for proposed work tasks through outreach meetings and activities, and based on comments and suggestions offered as part of regular CTAC and other work group meetings.
   c. Solicit input from local government, GRTC, VDOT, and DRPT on proposed transportation planning studies of interest to the RRTPO that are funded with federal transportation funds other than FHWA/PL and FTA Section 5303; this includes studies programmed in the Transportation Improvement Program (TIP).
   d. Prepare work tasks and budgets, including estimates of time and direct costs, and identify available funding and commitment of local match funds.
   e. Prepare final work program document and submit for RRTPO approval; secure approvals from RRTPO, VDOT/DRPT, FHWA, FTA, and other agencies as appropriate; and distribute final UPWP document including posting on RRPDC/RRTPO website. Amend adopted UPWP per RRTPO action to reflect updates to time allocations, work activities, PL transfer and Section 5303 carryover funds and schedules.
   f. Conduct State and Regional Intergovernmental Review process and submit grant applications for state and federal grant programs.

1.22 UPWP Budget and Contract Administration
   a. 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 support from the RRTPO.
   b. Management of VDOT/RRPDC Standard Project Administration Agreement management for RSTP funds to support consultant services in conducting approved work tasks with the regional travel demand model (RTDM).
   c. Approval of PL Agreement and Section 5303 Agreement
   d. Quarterly billing reports to VDOT and DRPT
FY18 UPWP Task 1.2
Unified Planning Work Program, Budget and Contract Administration

e. Mid-year and end-of-year budget review and analysis
f. Support for purchase, maintenance, upgrading, and repair and replacement of computers. Also, share in related costs for support of computer network and support activities. RRPDC computer support services for office network, servers, and other computer equipment are provided by contracted services with the RRPDC.

C. Agency Participation
RRPDC, RRTPO, VDOT, DRPT, local governments, CRAC, GRTC, RMTA, RideFinders, FHWA, FTA.

D. Budget and Funding

<table>
<thead>
<tr>
<th>Type</th>
<th>PL</th>
<th>FY17 CO 5303</th>
<th>FY18 CO 5303</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Federal</td>
<td>91,390</td>
<td>31,568</td>
<td></td>
<td>122,958</td>
</tr>
<tr>
<td>State</td>
<td>11,424</td>
<td>3,946</td>
<td></td>
<td>15,370</td>
</tr>
<tr>
<td>RRPDC</td>
<td>11,424</td>
<td>3,946</td>
<td></td>
<td>15,370</td>
</tr>
<tr>
<td>TOTAL</td>
<td>114,237</td>
<td>39,460</td>
<td></td>
<td>153,679</td>
</tr>
</tbody>
</table>

E. Products and Schedule

FY 2018 UPWP Maintenance and Amendments
Ongoing

FY 2019 UPWP Development
October 2017 – May 2018

RRTPO Program Contracts/Financial Management
Ongoing

RRTPO Quarterly Financial and Monthly Work Status Reports
Financial reimbursement reports for RRPDC expenses to VDOT and to DRPT within 30 days following the end of each quarter.

RRTPO Year-end Financial and Work Status Report
Year-end financial and work status report to VDOT and DRPT within 60 days following the end of this fiscal year; included in UPWP Appendix F.

VDOT/RRPDC Project Administration Agreement for RTDM Consultant Services
RTDM work orders prepared/submitted per the services agreement and financial reimbursement/work progress report for consultant services

RRTPO Mid-year Budget Review and Analysis
Review time allocations, direct costs and expenses by task following 2nd quarter billing and monthly reports of time charged to UPWP work tasks

RRTPO/RRPDC Computer Support Services
Ongoing
The RRTPO is charged with developing transportation plans and programs that support the development of a multimodal transportation system to the benefit of the Richmond region. The process for developing these plans must consider all modes of transportation, and must be continuing, cooperative, and comprehensive – the three elements of the federal “3-C” process.

There are eight work tasks identified in the Transportation Planning section of the UPWP. These tasks align with the goals in plan2040, the regional long-range transportation plan. The work efforts focus on maintaining and improving planning efforts, outputs and outcomes to more fully comply with the federal transportation regulations. The goal is a transportation planning process supporting the community through improved mobility and management of the system, improved access to employment opportunities, and reduced environmental impacts while improving quality of life within the region and creating new economic opportunities.

<table>
<thead>
<tr>
<th>2.0 TRANSPORTATION PLANNING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access to Employment</td>
</tr>
<tr>
<td>Public Outreach and Equity Analysis</td>
</tr>
<tr>
<td>Performance Measures and Transportation Data</td>
</tr>
<tr>
<td>Transit</td>
</tr>
<tr>
<td>Richmond Area Rail</td>
</tr>
<tr>
<td>Freight and Intermodal</td>
</tr>
<tr>
<td>Active Transportation</td>
</tr>
<tr>
<td>Air Quality</td>
</tr>
<tr>
<td>Special Planning Efforts and Studies</td>
</tr>
<tr>
<td>Metropolitan Transportation Plan</td>
</tr>
</tbody>
</table>
2.1 Public Outreach and Equity Analysis

A. Objective and Description
This work effort supports the development of a functional and viable citizen participation program, which contributes to informing the public on transportation issues and encourages public input to the “3-C” transportation planning and programming process. The federal planning process requires a high level of citizen outreach in the RRTPO process, including public meetings, the review of the TIP, and transportation plan documents, efforts and processes.

The RRTPO citizen participation process includes a standing Citizens Transportation Advisory Committee (CTAC) appointed by the RRTPO board and standing work groups such as the Equity and Transportation Disadvantaged Work Group, the Bicycle and Pedestrian Work Group and the Freight and Intermodal Work Group. The CTAC membership includes representation from all the RRTPO local jurisdictions and other interested parties, while the work groups reflect consumers and organizations representing seniors, individuals with disabilities, persons with low income and all persons that are transportation disadvantaged. Engagement with CTAC and the standing work groups provides an opportunity for citizen and interested party input to inform and advise the RRTPO on plans, studies, issues, and other matters related to the planning of transportation systems and services.

In addition to supporting CTAC and the work groups, the RRTPO will participate on various work groups related to the transportation needs of all persons in the region. Emphasis will be placed on the needs of minorities, seniors, limited English proficiency (LEP), individuals with disabilities, and persons with low income as appropriate to meet the needs of the RRTPO work program. Public meetings will be hosted to increase awareness of transportation issues and opportunities, and committee meetings, agendas and plan/document summaries will be posted on the website. This work will be in addition to other activities identified in the Public Participation Plan. Draft documents will be available for public review in a publicly accessible format with opportunity for open public comment at all regularly scheduled RRTPO board, TAC, CTAC and work group meetings.

B. Work Elements
2.11 Policy and Program Equity Analysis: Title VI, Environmental Justice and Low Literacy/Limited English Proficiency
a. Attend/participate in Title VI training courses offered by FHWA, FTA, VDOT and/or DRPT.

b. Prepare and submit to the FTA Regional Civil Rights Officer through DRPT the RRTPO report on compliance with Title VI requirements.

c. Outreach Meetings: achieve a higher level of public outreach especially to Hispanic/Latino and other ethnic and minority communities, and low literacy communities by participating and conducting outreach meetings through area groups, organizations and partnering with local governments.
d. 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, such as US Census and/or American Community Survey data. Additional data sources may include school lunch programs, employment data, etc. for the annual update of the RRTPO Title VI Plan and related equity analysis activities including disparate impacts of the projects in the long-range plan and the TIP using the EJ Tool.

e. Review and develop recommendations for more effective participation of groups and organizations that represent transportation disadvantaged communities for minority, low-income, limited English proficiency (LEP), seniors, and individuals with disabilities on CTAC by reconstituting the EDAC as a standing work group under CTAC.

This proposed structure is under consider by the RRPTO board in the review of the RRTPO Bylaws. This work of this group will be expanded from focusing on the elderly and persons with disabilities to include equity issues and to meet the needs of all transportation disadvantaged person. subcommittee will be called the CTAC Transportation Equity Work Group. The purpose of this subcommittee is to advise the RRTP, through CTAC, on issues, plans, studies, and other matters concerning the MPO’s “3-C” urban transportation planning process that effects transportation disadvantaged populations. This group should have flexible membership to maximize the opportunity for input on issues relative to equity for transportation disadvantaged populations.

2.12 Public Participation and Outreach

a. Citizens Transportation Advisory Committee (CTAC): Provide staff administrative and technical support to this RRRTPO standing committee.

b. Website: meeting agendas and minutes, notices, reports, newsletters, plan documents, and other information relating to the RRTPO program will be posted on the web site. A new website, separate from the RRPDC website will be established to support public participation and for sharing information about RRTPO work efforts, programs and actions; a consultant will be retained to support this effort.

c. Information Requests: Respond to requests for information on plans, studies, reports, and data.

d. Information Requests and Public Reviews: Conduct RRTPO review meetings and review process for initial citizen input for RRTPO plans and programs at key points in the planning and programming process through final action by the RRTPO.

e. Public Participation and Outreach Activity Log: Prepare reports on individual outreach meetings and activities per the Public Participation Plan and an annual report summarizing outreach efforts. This report should describe activities for the current program and make recommendations for new or continuing efforts for the next fiscal year. Additionally, this report should evaluate the measures of effectiveness, including efforts to ensure that public outreach efforts are addressing the diverse needs of the community.
f. Visualization Techniques: Use visualization techniques when presenting and describing RRTPO plans and programs or requesting public input. This activity will also include the development of informational fact sheets on RRTPO plans, studies, programs, activities and processes.

g. Consultation with Interested Parties/Agencies: Conduct consultation activities with interested parties and government agencies as part of the TIP and long-range transportation plan development process and other planning process.

h. RRTPO Orientation Meeting: Conduct annual orientation meeting for new RRTPO and committee members or conduct individual orientation meetings if appropriate.

i. Notices: Provide/distribute notice for all RRTPO board and committee meetings to area news media and interested parties. When appropriate, prepare and distribute press releases.

j. RRTPO Public Participation Plan (PPP) update – Review PPP in conjunction with annual review of Title VI Plan; recommend updates that may be appropriate due to ongoing citizen input, changes to the RRTPO bylaws, and new/revised requirements based on federal planning regulations.

k. Meeting Reports: Summaries of RRTPO meetings prepared and provided to CTAC and standing work group meeting summaries, recommendations and resolutions prepared and reported at RRTPO board meetings.

2.13 Transportation Disadvantaged

a. RRTPO Elderly and Disability Advisory Committee (EDAC): Ongoing administration and technical support for EDAC, including meeting agendas in an accessible format that allows visually impaired committee members and others to receive and read these materials. See Work Task 2.11.e above that describes a new organizational structure that is under consideration by the RRTPO board in the review of the RRTPO Bylaws.

b. Other activities to support efforts that enhance participation by elderly, disability, and low-income populations through the planned FY18 update to the Coordinated Human Services Mobility Plan by DRPT.

c. Support Senior Connections as a partner in developing the implementation plan to provide regional coordination services as described in the RRTPO report on the Needs and Gaps Assessment of the Transportation Disadvantaged.

C. Agency Participation

RRPDC, RRTPO, VDOT, DRPT, local governments, GRTC, CRAC, FHWA, FTA, RMTA, RideFinders, CTAC, RRTPO work groups, and Senior Connections
D. Budget and Funding

<table>
<thead>
<tr>
<th>Type</th>
<th>PL</th>
<th>5303</th>
<th>FY17 CO 5303</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal</td>
<td>137,134</td>
<td>4,000</td>
<td></td>
<td>141,134</td>
</tr>
<tr>
<td>State</td>
<td>17,142</td>
<td>500</td>
<td></td>
<td>17,642</td>
</tr>
<tr>
<td>Local</td>
<td>17,142</td>
<td>500</td>
<td></td>
<td>17,642</td>
</tr>
<tr>
<td>TOTAL</td>
<td>171,418</td>
<td>5,000</td>
<td></td>
<td>176,418</td>
</tr>
</tbody>
</table>

E. Products and Schedule

**Title VI, Environmental Justice and Low Literacy/Limited English Proficiency**
Title VI Plan Update: Spring 2018
Other related planning: ongoing

**Public Participation**
Public Participation Plan Update: Spring 2018
Website Development: summer 2017
Other related planning: ongoing

**Coordination Entity to Support Transportation Disadvantaged**
ongoing
2.2 Performance Based Transportation Planning

A. Objective and Description
Within one year of the release of the final regulations, VDOT will be required to establish statewide targets that represent the desired performance outcomes within the Commonwealth. Once VDOT has completed statewide target setting, MPOs in the Commonwealth will have 180 days to establish targets by either: agreeing to plan and program projects so that they contribute toward the accomplishment of relevant VDOT targets; or committing to unique, quantifiable targets specific to their metropolitan planning area.

As USDOT works to develop and seek input on proposed regulations for the establishment of performance measures and targets, RRTPO will monitor these activities, review and report on them as appropriate, and participate in webinars, conferences, and training sessions as needed. The RRTPO will work with FHWA, FTA, VDOT and DRPT to incorporate these new requirements into the RRTPO planning and programming process in the work program.

This work task utilizes the databases developed and managed under Work Task 3.0 and produces analysis and reports on the region’s transportation system.

B. Work Elements
2.21 Transportation Planning Measures, Trends and Targets
a. Regional Transportation and Land Use Performance Measures
Annual review and update of state-required and RRTPO-approved regional transportation and land-use performance measures and targets; corresponding report completed and posted on website by October 31 annually. As part of the phase-in of establishing federal performance targets, initiate a process of identifying and selecting potential measures to transition from trends to targets. This work will be undertaken with support from a TAC subcommittee and reviewed by the RRTPO board as part of the review and approval of the annual performance measures update.

b. Federal Metropolitan Transportation Planning Measures and Targets
Review and report on performance measures and targets to conform to the MAP-21/FAST Act national performance goals and statewide targets in the areas of safety, infrastructure condition, congestion reduction, system reliability, freight movement and economic vitality, environmental sustainability, and reduced project delivery delays. With new MAP-21 requirements for performance management measures and targets in the TIP, the Annual Listing of Obligated Projects is a tool to address these new requirements.

c. Bridge and Culvert Inventory and Structural Report
The Richmond Regional Bridge and Culvert Inventory & Structural Report builds on the previous report approved by the RRTPO in November 2015.
The 2017 report will be based on a snapshot of the data captured from VDOT’s online dashboard as of January 2017, two years after the snapshot of data used in the 2015 report. The 2017 report will cover all bridges and culvert structures in the Richmond Region and includes VDOT system and non-VDOT system roads including those in the Richmond and Ashland urban system, the Henrico secondary system, RMTA, and private bridges and culverts. The report will provide an inventory of all the structures in the region, and identify structures with poor conditions – known as structurally deficient, functionally obsolete, weight posted, etc. The report will also provide a list of structures eligible for federal bridge replacement funds and federal bridge rehabilitation funds. This work effort involves the review and comparison of the year-over-year changes and produces a final report for TAC review and RRTPO approval.

2.22 Transportation Demand Management: TDM

Transportation Demand Management (TDM) is a set of public planning processes, strategies and policies designed to relieve congestion, influence travel demand, improve efficiencies of the transportation network and redistribute demand in space or time. The benefits of TDM include cost effective alternatives to increasing highway capacity and coordinated efforts delivering better environmental outcomes, improved public health benefits, and higher quality of life.

In the Richmond Region, the Richmond Regional Transportation Planning Organization (RRTPO) serves 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. As such, the RRTPO is the lead agency responsible for developing TDM processes, strategies, and policies for the Richmond region and coordinating and partnering with provider entities that implement TDM strategies and activities.

TDM policies, plans and programs supported by the RRTPO include:

- Intelligent Transportation Systems
- Congestion Management Process Planning
- Transit and Fare Incentives
- Carpool and vanpooling
- Freight Diversion (64-Express)
- Flexible Work Hours and Teleworking
- Active Transportation: Bicycle and Pedestrian Connections
- Park and Ride Investments
- Parking Supply
- Other TDM strategies for alternative transportation

The FY18 work program includes a work effort that assesses additional opportunities to reduce air pollution, encourage mode-shifting from single-occupancy vehicles, and reduce transportation costs for all commuters across
the region. The framework for this assessment will be completed by September 2017 and will identify future possible work efforts.

RideFinders
In 1981, the Richmond Area MPO (now RRTPO) and the Greater Richmond Chamber of Commerce established COMPOOL, a non-profit ridesharing program. In 1985, COMPOOL’s name changed to RideFinders, and in 1998, the RideFinders Organization came under the management of the GRTC Transit System (GRTC) and is a division of GRTC.

As with the initial inception of the ridesharing program, the RRTPO remains a partner in working with RideFinders to promote ridesharing within the region. In addition to RideFinders’ membership and participation on the RRTPO Technical Advisory Committee and policy board, the partnership is further demonstrated through the consistent financial support that the RRTPO has provided to RideFinders since 1991 with RRTPO Regional Surface Transportation Program and/or Congestion Mitigation and Air Quality funds.

RideFinders promotes commute options and employer programs to increase the use of transit, vanpools, carpools, biking, walking, telework and flexible work schedules. RideFinders works with residents, workers and employers in the Richmond Region.

RideFinders is organized to support the following:
- Sales, including transit fare media, and outreach
- Commuter Store administration
- Marketing, Education and Awareness
- Research/Performance Planning and Evaluation

Defined activities include, but are not limited to the key performance indicators required by GRTC, TDM Performance data required by DRPT’s Online Grant Administration (OLGA) system and a detailed work plan required by the RRTPO. The detailed work plan includes a description of work elements, associated time, budget, and evaluation criteria/end products for each work task. The work plan is approved by the RideFinders Advisory Board (RAB) and then presented to the Technical Advisory Committee (TAC). The work plan is then approved by the RRTPO. Any updates to the work plans will be provided to the RAB at each quarterly meeting. In addition, Monthly operational reports are provided to GRTC, VDRPT, RRTPO, and the RAB. The report will include the following: Activity Description, Progress Update, Budget, and percent complete, periodic reports and program updates made to stakeholder groups, various social media components, flight plan activities updates, and speaking engagement and presentations. To accomplish this work, the RRTPO is providing $510,000 each year in fiscal years 2018 through 2020.

RideFinders Management
- GRTC Transit System Governing Board
RideFinders is a division of GRTC Transit System with the same Governing Board as GRTC, but separate Articles of Incorporation and Bylaws. The Governing Board assists with charting strategic direction for RideFinders and has demonstrated interest in the agency’s activities GRTC provides RideFinders with operational and marketing support in the manner of outside consultants or vendors.

- **RideFinders Advisory Board (RAB)**
  The RAB meets at least four times a year and provides policy guidance regarding program management. RideFinders program management includes organizational development, strategic planning, program budgeting and funding, program development, program implementation, coordination, supervision, and special task-oriented discussions. The RAB reviews the annual work program, provides input, monitors budgets and implementation progress, evaluates program results, suggests changes for more efficient and/or effective operation, and oversees the administration of the RideFinders program. Funding contracts and project agreements are issued through DRPT.

### 2.23 Congestion Management Process: CMP

The 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. The RRTPO is required to address congestion management through a process that provides for safe and effective integrated management and operation of the multimodal transportation system. This process is based on a cooperatively developed and implemented metropolitan-wide strategy for new and existing transportation facilities eligible for funding using travel demand reduction and operational management strategies.

The Congestion Management Process (CMP) and Intelligent Transportation Systems (ITS) work elements are combined into one work element due to overlapping efforts, analysis, and benefits as the goal of implementing ITS is to positively impact congestion on the regional network.

ITS programs elements are electronics, communications, or information processing used singly or in combination to improve the efficiency or safety of a surface transportation system. The goal of ITS is to use 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. VDOT has the lead on ITS architecture and deployment in the region with the work coordinated through the Statewide Transportation Operation Centers. VDOT related ITS issues will be shared with the RRTPO through the TAC.
CMP related work efforts include:

1. Annual review and report on travel time data from the I-95 Corridor Coalition Vehicle Probe Project for all CMP designated roads; analysis of data to identify congested road segments for AM and PM travel time periods and identify strategies to improve or mitigate congestion.

2. Annual review and report on accident data, provided by VDOT, for all CMP network designated roads, plus those roads functionally classified as collector and above in the Richmond region; analyze data to identify high accident locations, including road segments and intersections.

2.24 plan2040, VTrans2040, and plan2045

a. plan2040: Review, Amendments, Administrative Modifications

The Metropolitan Transportation Plan (MTP), previously referred to as the Constrained Long-Range Transportation Plan, serves as the blueprint for developing the region’s network of transportation facilities and services. The MTP features a multimodal approach including cars, buses, car and vanpools, passenger rail, bicycles, and freight by water, truck and rail to address the region’s long term travel needs over the next 20 years. The MTP considers the relationship between the transportation infrastructure and its impacts on the natural and human environment. Projects included in the MTP are constrained by the projected levels of available financial resources and must also meet federal, environmental justice and planning requirements. Highway and public transportation projects and programs must be consistent with the RRTPO-adopted MTP to be eligible for federal-aid funds.

An annual review of plan2040, the RRTPO MTP will be undertaken annually in conjunction with the development of the UPWP to advance new planning studies or initiatives. Amendments and administrative modifications to plan2040 will be undertaken as necessary.

b. VTrans2040

Virginia’s Office of Intermodal Planning and Investment (OIP) leads the development of the Commonwealth’s long-range multimodal transportation plan – VTrans2040. The plan is developed in two phases and will result in the production of two companion documents: the VTrans2040 Vision and the VTrans2040 Multimodal Transportation Plan.

VTrans2040 will identify multimodal needs across the Commonwealth. Moving forward, only projects that help address a need identified in VTrans2040 will be considered for funding under the statewide prioritization process from House Bill 2. The plan will focus on the needs of the Commonwealth’s statewide network of Corridors of Statewide Significance, the multimodal regional networks that support travel within metropolitan regions, and improvements to promote locally designated Urban Development Areas (UDAs). Work associated with this work task involves
participation in the VTrans planning process to support the RRTPO and its partners.

c. **plan2045**
The next comprehensive long-range regional transportation planning effort will be scheduled for completion in September 2021. This work task will evaluate the plan2040 process and develop a work program recommendation that will be included in the FY18 UPWP.

FHWA has recommended that the RRTPO consider introducing the scenario planning process into future long-range plans. The RRTPO is very interested in incorporating the scenario planning process into the planning efforts. The Commerce Corridor Study is an example of a successful introduction and initial effort. As capacity within the RRTPO develops, additional opportunities to test scenario planning will be considered and applied. At this point it is uncertain if a comprehensive regional scenario planning initiative can be undertaken with the development of **plan2045**. Scenario planning will continue to be introduced on a case-by-case smaller scale basis before ramping up to a full-scale regional engagement effort. The direction for which corridors, areas or efforts may be the best candidates for testing scenario planning will come from the adopted **plan2040** and related plans including the Greater RVA Transit Vision Plan for 2040.

2.25 System Resiliency
The Fast Act expanded the scope of the metropolitan planning process to require consideration of projects and strategies that will “improve resiliency and reliability of the transportation system and reduce or mitigate storm water impacts on surface transportation”, and strategies to reduce the vulnerability of existing transportation infrastructure to natural disasters. This work effort involves the development of an internal strategy to incorporate resiliency, storm water, and natural disaster considerations into future plans and programs.

C. **Agency Participation**
RRPDC, RRTPO, VDOT, DRPT, VDEQ, local governments, GRTC, CRAC, FHWA, FTA, RMTA, RideFinders, CTAC, RRTPO work groups, CVEMA and other interested parties

D. **Budget and Funding**

<table>
<thead>
<tr>
<th>Type</th>
<th>Source</th>
<th>PL</th>
<th>5303</th>
<th>FY17 CO 5303</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal</td>
<td></td>
<td>199,698</td>
<td>73,652</td>
<td>273,350</td>
<td></td>
</tr>
<tr>
<td>State</td>
<td></td>
<td>24,962</td>
<td>9,207</td>
<td>34,169</td>
<td></td>
</tr>
<tr>
<td>Local</td>
<td></td>
<td>24,962</td>
<td>9,207</td>
<td>34,169</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td>249,622</td>
<td>92,066</td>
<td>341,688</td>
<td></td>
</tr>
</tbody>
</table>
E. Products and Schedule

**Congestion Management Process and Intelligent Transportation Systems**
Travel Time Data Report: September 2017
Accident Data Report: September 2017

**plan2040**
Review: annually; amendments and modifications: as requested/needed
Related planning: ongoing

**Analysis of Transportation Data**
Ongoing

**Regional Transportation and Land-Use Performance Measures and Targets**
Report: October 2017

**Federal Metropolitan Transportation Planning Measures and Targets**
Ongoing

**Richmond Regional Bridge and Culvert Inventory and Structural Assessment**
Report: December 2017
Related planning: ongoing

**Regional Employee Trip Reduction Assessment**
Framework report: September 2017

**Coordinated TMD efforts with RideFinders**
- RideFinders annual report that reflects the outputs and outcomes of the RideFinders programs and services will be prepared and provided annually by RideFinders to the TAC on November 1, 2017. RRTPO will coordinate with VDOT Environmental on requesting the emissions reduction analysis that will be included in these reports.
- Submission of a detailed annual work program, as described in Work Task 2.22, Transportation Demand Management: 60-days prior to recommendation on the RideFinders annual budget to the RAB.
2.3 Transit

A. Objective and Description

The RRTPO’s primary focus for transit planning in FY18 is to begin implementing the Greater RVA Transit Vision Plan and identify opportunities to enhance and increase connectivity to transit. Paratransit needs for in the region are addressed through the Coordinated Human Services Mobility Plan (CHSMP), which covers both the RRTPO area and rural areas outside of the RRTPO. In partnership with Senior Connections, the state designate Area Agency on Aging, the RRTPO will support Senior Connections in the development of an implementation plan to fulfill the need of for establishing a regional service focusing on coordinating the transportation needs of disadvantaged populations across the entire region.

B. Work Elements

2.31 Transit 2040 Implementation and Transit Oriented Development

a. Working in collaboration with local governments and other partners, begin advancing identified “Critical First Steps” from the Greater RVA Transit Vision Plan (transit2040) by encouraging local corridors and services through further transportation and land use studies, by considering regional scenario planning to explore potential synergy between the plan and TOD, and other recommendations of the plan with the goal of advancing one or more transit corridor implementation studies in FY18.

b. Pulse: LadderSTEP and Transit Oriented Development

In 2015, the U.S. Department of Transportation (DOT) selected Richmond as one of seven pilot cities for the Ladders of Opportunity Transportation Empowerment Pilot (LadderSTEP) Initiative. This selection will help the City foster more sustainable and equitable economic development – particularly in the Greater Fulton community – related to the planned Broad Street “Pulse” Bus Rapid Transit (BRT) line. The new Pulse BRT line will provide frequent, reliable and fast service, and access to 77,000 jobs in the area. In early 2016, the FTA announced the selection of Richmond for in-depth technical assistance for Transit-Oriented Development (TOD) in the BRT station areas through its TOD Technical Assistance Initiative. A project team led by national non-profit Smart Growth America provided expertise to assess opportunities for TOD along the Pulse route and especially in Greater Fulton.

c. The RRTPO will continue to support the City of Richmond and other regional partners in the LadderSTEP effort by participating as a member of the FHWA/FTA/Smart Growth America TOD Peer Network and transferring the lessons learned to other TOD opportunities across the region.

2.32 Paratransit, Coordinated Human Services Mobility Plan

a. The Coordinated Human Services Mobility Plan (CHSMP)

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.

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.

DRPT maintains and conducts a mobility management training program and has encouraged area human service agencies and organizations to participate in these training programs. By working with other human service agencies and organizations to share and coordinate their limited transportation resources, area human services agencies will provide more effective and efficient services. DRPT is also encouraging human service agencies and organizations to utilize private transportation operators.

CHSMP activities to support mobility programming for elderly, disabled and low-income persons can be funded utilizing FTA Section 5310 funds supported by both the RRTPO and allocated by the CTB. Note that RRTPO-allocated funds are limited to projects/activities that serve the Richmond Urbanized Area, while Section 5310 funds allocated by the CTB can cover projects both inside and outside the urbanized area. FTA Section 5310 funds allocated to the Richmond Urbanized Area are available to both the RRTPO and Tri-Cities MPO.

At the February 14, 2013 RRTPO 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 these funds, which includes notifying local entities of funding availability, conducting 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 RRTPO that its serving as the FTA Section 5310 program funds designated recipient as a near-term measure, and that it plans to reevaluate this approach following issuance of FTA final guidance. DRPT is responsible for updating the CHSMP for the region; RRTPO will provide technical assistance to DRPT and its consultant in conducting the RRTPO area and Richmond Region CHSMP update. RRTPO will also continue to support DRPT in providing notice to local government staffs, human service agencies and organizations, members of EDAC, interested private transportation providers, and other interested parties for upcoming CHSMP stakeholder group meetings.

1. Coordinated Human Services Mobility Plan Update
   - Provide administrative and technical staff support to DRPT and their consultants in conducting updates to the CHSMP.
• Maintaining an updated CHSMP and an active and engaged stakeholder process for FTA Section 5310 grant applicants is a requirement for those seeking FTA Section 5310 program funds.

2. Review activities eligible under FTA regulations and review guidance on FTA Section 5310 “Enhanced Mobility of Seniors and Individuals with Disabilities Program.”

3. Monitor and report to the RRTPD, TAC and/or EDAC on various public transportation services and programs for seniors, individuals with disabilities and low-income persons in the Richmond Region.

4. Coordinate with DRPT on status of “designated recipient”; adjust work program based on outcome of coordinated review.

b. Needs and Gaps of the Transportation Disadvantaged

In FY 2016, the RRTPD completed work on the report Needs and Gaps Assessment for the Transportation Disadvantaged. The report provided for the following:

• Estimates of transportation disadvantaged persons and their location in the Richmond region.
• Identification and analysis of gaps between existing paratransit services in meeting the needs of the transportation disadvantaged.
• Forecast of future demand for paratransit services by the transportation disadvantaged.

Based on input from the RRTPD Ad Hoc Committee on Regional Paratransit Services and Programs, the committee developed a list of short-term, mid-term, and long-term recommendations to address the gap in transportation needs and services, focusing on the need to explore the establishment of an organizational structure to support a specialized transportation services coordination entity that can address these needs. The RRTPD acted at its December 2, 2016 meeting to endorse Senior Connections, the Capital Area Agency on Aging as the RRTPD partner is filling the role of the regional coordination entity for the transportation disadvantaged.

2.33 Park and Ride and Multimodal Transportation Connectivity

As the regional Transportation Demand Management (TDM) agency, the RRTPD worked with VDOT to complete a Park and Ride Inventory and Usage Study. This study was completed in 2013 and led to VDOT establishing a website in 2014 showing the location of designated park and ride lots maintained by VDOT, local governments and transit agencies throughout the state, and identifying commuter resource agencies that provide ridesharing services. With the inventory and website phase completed, the next steps will complete tasks associated with the second phase: a Park and Ride Investment Strategy. This study will develop a prioritized list of opportunities to expand the number of park-and-ride spaces and lots throughout the region, including amenities; a methodology to evaluate, rate, and prioritize...
investments/lot locations; and will identify potential funding sources to implement the selected projects in the Priority Investment Area.

This planning effort will be led by the RRTPO and implemented through a contract with a VDOT on-call consultant with direct participation by VDOT’s Transportation Mobility and Planning Division and other interested parties.

2.34 Pulse TIGER Project
a. Project Description

GRTC Pulse (Bus Rapid Transit) is a modern, high quality, high capacity rapid transit system that will serve a 7.6-mile route along Broad Street and Main Street, from Rocketts Landing in the City of Richmond to Willow Lawn in Henrico County. The Pulse will link the public to many exciting destinations, businesses, services and restaurants. The goal for Pulse service to begin is October 2017 (as of April 27, 2017); as with this type of construction project work progress is weather-dependent, which is why the work window is open through June 2018, if needed.

The project includes fourteen stations with 26 platforms and more than three miles of dedicated travel lanes. 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 several different routes. By consolidating service along Broad Street into one main trunk route that provides fast, reliable and frequent service, GRTC may be able 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 along the Broad Street corridor. GRTC also continues to collaborate with the City of Richmond on the 2016 Richmond Transit Network Plan, which may also yield system adjustments which further benefit riders and improve connectivity to and from the Pulse. BRT running times are estimated to be about 10% faster than current transit operations along Broad Street from Willow Lawn to downtown and ridership is conservatively estimated at 3,500 boardings per day.

On June 17, 2014, GRTC’s Board of Directors approved the GRTC Broad Street Bus Rapid Transit. The next step was to issue and award a Request for Proposals (RFP) for Architectural and Engineering (A&E) services. An RFP for A&E services was issued May 29, 2014. Staff reviewed and scored the proposals, with an award of the A&E contract in September 2014. Thus, the BRT project transitioned into the preliminary design phase for which funding of $4 million was already obtained.

The project team completed the Preliminary Engineering Phase in July 2015. The team began the Semi-Final Design in August 2015 and
completed it in October 2015. The Design Build procurement process started in September 2015 and ended in April 2016 with an award to LANE Construction Corporation.

The Virginia Department of Transportation completed its procurement process for a Design-Build Team in April 2016. On April 20, 2016, the Commonwealth Transportation Board ratified the decision to move forward with The LANE Construction Corporation, in partnership with STV, Inc., for the Design Build contract. VDOT approved this award to LANE to complete Final Design and administer construction with a bid of $47,295,500. The bid was viewed as a fair market value, reflecting the current cost of materials and the increased demand of BRT’s throughout the country and regionally. The LANE / STV Team came in with the best combination of technical score and lowest price proposal of the three competing bidders. LANE’s plan reflects everything presented to the public in 2015, which was approved unanimously by the City of Richmond’s Urban Design Committee and Planning Commission in November 2015. No design feature was sacrificed. The project will be delivered exactly as approved by the Project Partners. A Notice to Proceed was sent to The LANE Construction Corporation on April 29, 2016.

This project supports local jobs, as many of the LANE / STV team members live in and/or work in the Richmond area. Founded in 1890 and with headquarters in Cheshire, Connecticut, The LANE Construction Corporation is a leading U.S. construction company known for its effective public outreach and efficient Design-Build construction processes. Both LANE and STV have previously worked on Bus Rapid Transit projects.

On April 29, 2016, LANE started the scope validation process. This process ended July 26, 2016. A scope validation is when a firm independently verifies site conditions of the corridor prior to construction. Teams were in the field in June and July to sample the soil at various sites.

Utility relocation (for fiberoptic communications) occurred from August 16, 2016 through January 31, 2017 on primarily the south side of Broad Street between Thompson Street and Laurel Street. Temporary work zones typically involved closing one curb lane of Broad Street and the adjacent sidewalk for about 500 feet around the work site. Any bus stops in the work zones were also temporarily closed. Specific details for this work were provided at least 48 hours in advance, including posting any required “No Parking” signage.

A construction hotline is active at 804-980-0084, providing updates on construction and expected impacts. As work progresses, frequent updates will be provided at http://www.ridegrtc.com/brt/construction-info/.

Station work began January 31, 2017. Station construction will occur in multiple locations along the project simultaneously. Stations are organized
into “groups,” which are occurring in phases from January 2017 until the end of construction.

The goal for Pulse service to begin is October 2017 (as of April 27, 2017), weather- and progress-dependent.

LANE Construction will proactively minimize disruption to businesses and residents during construction. Any activity that would impact parking, loading zones, access, utilities and other business-related functions must receive approval from VDOT who will ensure that continuous access will be provided to all businesses. All Project team members are committed to providing prompt information to ensure a smooth construction phase for businesses, residents and patrons of the region as part of the overall success of the Project.

The work crew schedules are weather and progress-dependent. It is important to note that field conditions can change rapidly and LANE’s goal is to work safely and swiftly to minimize impacts to the areas where they work. Any bus stops within the work zone will be temporarily closed. Pedestrian pathway detours and street lane closure signs will be posted accordingly. Pedestrians are advised to follow work zone signage in the sidewalk area. During construction, the public will continue to have access to businesses, organizations and services located along the Project route.

During construction, outreach is also supported by City of Richmond staff and LANE.

The estimated total project cost for remaining design and construction is $64,916,00, in addition to the $4 million already used for preliminary engineering.

b. Project Budget
In FY2015, the projected budget for the Conceptual Design and Grant Application phase was $4,000,000 (62% Federal, 34% state, and 4% local). This is now completed and closed to charges.

In FY2016 through FY2018, the Final Design and Construction phase, the projected capital budget is $64,916,000 (Federal, State and Local contributions). Current estimates project the following commitments – FTA Grant $24,900,000, state (DRPT/VDOT) $32,016,000, City of Richmond $7,600,000 and County of Henrico $400,000. This budget includes a 5% project contingency.

c. Schedule
The Project team expects major construction work will progress following this sequence of construction:

- Utilities (fiberoptics): August 2016-January 2017. Completed. Utility work occurred on primarily the south side of Broad Street (sidewalk and adjacent lane), between Thompson Street and Laurel Street.
- Traffic Signal Work: December 2016 - Ongoing. In progress. This work is for the implementation of Transit Signal Priority (TSP).
- Station Construction: January 2017 - Ongoing. In progress. Stations are divided into five groups based on utility difficulty. Multiple stations from different groups are under construction simultaneously. Stations are constructed as resources and progress permits.
- Sewer/water line work: March 2017 - Ongoing. In progress (As of April 27, 2017). Several stations require relocation of sewer/water lines. This has been completed at Allison St West, and is currently in progress at Staples Mill East. Willow Lawn is expected to be next.

The goal for Pulse service to begin is October 2017 (as of April 27, 2017), weather- and progress-dependent. Specific details for work will be provided at least 48 hours in advance.

2.35 GRTC Downtown Transfer Center
a. Project Description

Selecting a permanent home for the Transit Center is crucial to the efficiency, safety and functionality of GRTC’s operations. 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 and bike, 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;
- Reduce sidewalk congestion on Broad Street downtown and provide increased curb-side frontage to store merchants by reducing the number of bus stops along the street.
GRTC continues to work with the City of Richmond and the Virginia Department of Rail and Public Transportation to develop a multi-modal transit center for the system. This process has been ongoing for about two decades in the City’s central business district. The project focus area is bordered by 14th Street to the east and Belvidere Street on the west and Leigh Street on the north with Canal Street to the south.

The project site selection scoring matrix continues to be used, based on 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). Recently, the selection criteria were applied to two sites in the focus area in 2015 and 2016. After considerable discussion with property owners of one of the sites, no forward progress has been made to advance the property for additional evaluation to transaction. The second site is currently in the very early stages of investigation, including initial coordination with the City of Richmond.

The site selection and design team along with GRTC continues to evaluate locations within the focus area and are re-evaluating potential sites that were dismissed in earlier reviews as the real estate market has changed along with availability. As new sites are evaluated per the established criteria, the team will bring the details forward for 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.

GRTC will hold public information meetings updating the status of the project after the site has been vetted and selected and a sales agreement is in place. Additional public information meetings will be held as appropriate to update the status of the project until its opening. Additionally, City Council will receive appropriate, periodic updates on the project during their informal meetings.

Specifically, members of the stakeholders and public will be asked to:

- Provide input on specific features of the 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 meetings and public information meetings in for the project.

b. Project Schedule
The project remains active without a known end date.
c. Project Budget
The project is expected to be funded as follows. Money to purchase a site is expected to come from GRTC’s 2015 disposition of its former Davis Avenue “Bus Barn.” GRTC has approximately $12 million available to design and build the multi-use Transit Center. Of this, about $9.1 million is from the disposition of Davis Ave. and $2.9 million is from an architecture and engineering FTA grant. Additionally, GRTC is actively pursuing other funding options to provide flexibility in the design to respond to public and stakeholder interests for the multi-use facility.

d. Temporary Transfer Plaza - Project Description
GRTC currently connects passengers between buses at the Temporary Transfer Plaza north of City Hall on 9th Street and Leigh Street (between 9th and 10th Streets). This Temporary Transfer Plaza opened April 20, 2014 in preparation for two major City-hosted events – the 2014 USA Cycling Collegiate Road National Championship and the 2015 UCI World Road Cycling Championship. Installation of bus shelters was completed in October 2014. Ongoing operations continue in 2017, and are expected to continue until a permanent Transit Center home is developed. It is possible the Richmond Transit Network Plan may impact the routing of buses downtown, leading to fewer connections at the Temporary Transfer Plaza. There is no known date of this potential impact yet.

C. Agency Participation
RRPDC, RRTPO, DRPT, DRPT consultants, VDOT, City of Richmond and other local governments, GRTC, RideFinders, CHSMP stakeholders, human service agencies/organizations, private transportation operators, FTA

D. Budget and Funding for RRTPO related Activities

<table>
<thead>
<tr>
<th>Source</th>
<th>Type</th>
<th>PL 5303</th>
<th>FY17 CO 5303</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal</td>
<td>13,779</td>
<td>104,000</td>
<td>120,000</td>
<td>237,779</td>
</tr>
<tr>
<td>State</td>
<td>1,722</td>
<td>13,000</td>
<td>15,000</td>
<td>29,722</td>
</tr>
<tr>
<td>Local</td>
<td>1,722</td>
<td>13,000</td>
<td>15,000</td>
<td>29,722</td>
</tr>
<tr>
<td>TOTAL</td>
<td>17,224</td>
<td>130,000</td>
<td>150,000</td>
<td>297,224</td>
</tr>
</tbody>
</table>

E. Products and Schedule

LadderSTEP and Transit Oriented Development
Related planning: ongoing

Greater RVA Transit Vision Plan Implementation
ongoing
Park & Ride and Other Multimodal Transportation Support
Park and Ride Investment Strategy (Phase Two): Conducted by VDOT with RRTPO; completion target: December 2017
Related planning: ongoing

Coordinated Human Services Mobility Plan
FTA Section 5310 Funding Applications: September 2017 – February 1, 2018
Related planning: ongoing

Transportation Disadvantaged: Coordination Entity
Support to Senior Connections during development of Implementation Plan
Other support: ongoing

Pulse TIGER Project
October 2017, anticipated project completion
Related planning: ongoing and project monitoring; GRTC is project lead

GRTC Downtown Transfer Center
Ongoing, project monitoring; GRTC is project lead
2.4 Richmond Area Rail

A. Objective and Description

Moving people and goods in the most efficient, cost effective and environmentally beneficial manner is a primary goal of the transportation system and the benefits are not mutually exclusive. The regional planning process can support policies that advocate investments in the rail system and to a lesser degree, also allocate financial resources which can also support these policies. While the regional financial resources are not sufficient to support improvements for the entire corridor, the region is capable of supporting spot-improvements with independent utility such as extension of sidings, crossovers, signal upgrades or grade-separation of crossings which can improve the performance of the rail system to the benefit of both passenger and freight movements. In Virginia, the passenger rail operates on privately held systems owned by CSX and Norfolk Southern.

B. Work Elements

2.41 DC2RVA: Washington to Richmond Southeast High Speed Rail (SEHSR)

DRPT was awarded a FY2010 FRA high speed rail grant for $44.3 million to conduct a National Environmental Policy Act (NEPA) Tier II Environmental Impact Study (EIS). The EIS will evaluate activities and preliminary engineering for high speed rail infrastructure improvements along the 123-mile Richmond Area to Potomac segment of SEHSR (RAPS). The corridor extends northward from Centralia in Chesterfield County via the CSX S-Line through 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).

DRPT held public scoping meetings in November 2014 for the Tier II EIS, including a public comment period that was completed in December 2014, during which 1,625 comments were received, reviewed and summarized for responses. Project activities for early 2015 included initiating the development of the updated Purpose and Need Statement and alternatives analysis. These activities will continue through 2016. Alternatives were further narrowed following public workshops held in June and December 2015 in Richmond, Fredericksburg and Northern Virginia. Following the public workshops, DRPT will begin work on a Draft EIS (DEIS) for the DC2RVA project in 2016 that will include a public meeting introducing the DEIS, followed by formal public hearing on the findings of the DEIS and a 30-day minimum comment period.
Based on agency and public comments on the DEIS, DRPT will prepare a Final EIS (FEIS) in 2017, which will be distributed to federal, state and local entities and will be made available online and in regional libraries for public viewing. DRPT will present the recommendations in the FEIS to the CTB, and if the Proposed Action is favorable, DRPT will work with FRA to issue a Record of Decision (ROD) which will identify the Preferred Alternative, the basis for the decision, will include all the alternatives considered and will commit to mitigate unavoidable environmental impacts.

As a participating partner, the RRTPO will coordinate with DRPT on work activities associated with advancing the Tier II EIS.

2.42 Richmond Area Rail Studies
While DRPT is the lead on these projects, the following rail efforts are routinely monitored by the RRTPO:

2013 Virginia State Rail Plan
The 2013 Virginia Statewide Rail Plan (VSRP) analyzed the state of Virginia’s rail system and recommended 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, 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 2040; an update of the current Statewide Rail Plan is underway and expected to be approved by the CTB in late 2017.

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 Tier II Final Environmental Impact Statement (FEIS) which was prepared by DRPT and NCDOT and was released in August 2015. The publication of the FEIS will be followed by a Record of Decision (ROD) from FRA, associated with an additional round of public hearings. Final design, right-of-way negotiation, and construction dates will depend on funding.

Southeast High Speed Rail – Washington, D.C. to Richmond (DC2RVA)
See task 2.41 for details on status of work effort.

Southeast High Speed Rail - Richmond to Hampton Roads Passenger Rail
DRPT is pursuing improved passenger rail service in the major east-west travel corridor between Richmond and Hampton Roads to 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.

Tri-Cities MPO Multimodal Station Location Study
On behalf of the Tri-Cities Area Metropolitan Planning Organization, the Crater Planning District Commission is sponsoring a National Environmental Policy Act (NEPA) study of several potential locations for a multi-modal passenger station. Currently, train service in the area is provided at the Ettrick station. As passenger rail service increases over time and with the potential introduction of new High Speed Rail service that stops in the Tri-Cities area there is demand for either improving the Ettrick Station or possibly relocating that station within the study area to expand services. This expansion is needed to meet current increase in demand and to meet future demands. The impacts of an improved station will be documented in an Environmental Assessment (EA) which is required under NEPA. A preferred alternative will be identified in the Finding of No Significant Impact (FONSI) which will be issued upon completion of the study.

Amtrak Virginia
In 2009, DRPT initiated Commonwealth-sponsored Amtrak regional intercity service in 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 1970s.
Virginia set the national pace in preparation for the October 2013 implementation of Passenger Rail Improvement and Investment Act (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 include extending service to Roanoke from Lynchburg, and increasing the train service frequencies to Norfolk from Richmond

**CSX National Gateway Project**
The multi-state National Gateway Project extends from North Carolina to Ohio and parallels I-95 through Virginia, with a connection to the Port of Virginia. The diversion of freight from highway to rail will benefit from a multi-state initiative involving federal, state, local, and private partners. The project plan focuses on improving clearances to enable double stack intermodal train operations. The project will improve the efficiency of freight rail for several Mid-Atlantic ports, including the Port of Virginia, and will help divert freight traffic from I-95 by providing double-stack clearances for freight containers. Ongoing parts of this project include the demolition of several unused bridges in the Richmond area and the modification of the Virginia Avenue Tunnel in Washington, D.C., currently under construction. The Virginia Avenue Tunnel project was completed in early-2017 allowing for double stack freight trains to travel to on the CSX mainline tracks through the Richmond region to markets in the mid-west and northeast from the Port of Virginia terminals in Hampton Roads. The RRTPO will monitor rail freight through our region because of the improvements to the Virginia Avenue tunnel.

**Bridge Clearances in Richmond**
This project was initiated to address limited clearances under several Norfolk Southern bridges in Richmond, one of which will also benefit the Willow Lawn to Rocketts Landing Bus Rapid Transit (BRT) project moving forward in the City of Richmond and Henrico County. The project involves excavation under bridges to increase roadway clearance and bridge reconstruction/replacement. The project is pending an agreement between DRPT and Norfolk Southern.

**Richmond Marine Terminal Rail Improvements**
Rail infrastructure in and around the Richmond Marine Terminal have been funded to repair and upgrade tie and track replacement inside the Port and repairs to a CSX siding adjacent to the port that is currently awaiting funding.
2.43 **Amtrak Thruway Bus Service: Main Street Station to Staples Mill Station**  
This work effort will explore with DRPT, Amtrak, and other interested parties, the establishment of a “Bus Bridge” or thruway bus service between the Amtrak station at Staples Mill and Main Street Station; this service would be included in the purchase of an Amtrak ticket.

2.44 **Unmanned Amtrak Station Safety Improvements**  
This work task will work with DRPT, Amtrak, CSX and regional partners to determine what technologies can be deployed at unmanned stations, such as the Amtrak station in Ashland, to alert passengers of approaching trains and other related safety enhancements.

C. **Agency Participation**  
DRPT, FRA, City of Richmond, Richmond Marine Terminal, Tri-Cities MPO, Crater PDC, Amtrak

D. **Budget and Funding**

<table>
<thead>
<tr>
<th>Source</th>
<th>PL</th>
<th>FY 17 CO 5303</th>
<th>TOTAL 5303</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal</td>
<td>3,606</td>
<td>40,000</td>
<td>43,606</td>
</tr>
<tr>
<td>State</td>
<td>451</td>
<td>5,000</td>
<td>5,451</td>
</tr>
<tr>
<td>Local</td>
<td>451</td>
<td>5,000</td>
<td>5,451</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>4,508</strong></td>
<td><strong>50,000</strong></td>
<td><strong>54,507</strong></td>
</tr>
</tbody>
</table>

E. **Products and Schedule**

**DC2RVA: Tier II Environnemental Impact Statement (EIS)**  
Draft Tier II EIS: 45-day public comment period, summer 2017  
Final Tier II EIS: late 2017 to early 2018  
Related Planning: Ongoing and project monitoring; DRPT is lead

**Richmond Area Rail Studies**  
Ongoing and project monitoring

**Amtrak Thruway Bus Service: Staples Mill to Main Street Station**  
Evaluation of feasibility: October 2017

**Unmanned Station Safety Improvements**  
Evaluation of feasibility: October 2017
2.5 **Freight and Intermodal**

A. **Objective and Description**

Intermodal transportation utilizes more than one form of transportation to ship goods to their destination. Cargoes are combined into economically larger units and utilize specialized equipment to affect high-speed transfer between ships, barges, railcars, aircraft and truck chassis using a minimum of labor. This increases logistic flexibility, reduces consignment times, and minimizes operating costs to efficiently move goods from point of origin to destination.

In order for Richmond to compete in the efficient movements of goods and services in the coming years, the region will need to identify, develop and implement intermodal strategies which will provide good connectivity for rail shipments that may originate on a north-south route and then need to transfer to an east west route; provide better rail access for local truck shipments; expand opportunity for air cargo movement; and explore alternative options of importing and exporting regional cargoes, such as by barge to the Port of Virginia’s Richmond Marine Terminal. By ensuring the continued performance of the regional transportation system, the prevention of environmental degradation, while encouraging and attracting economic opportunities, the RRTPO will be promoting a high quality of life for our region.

B. **Work Elements**

2.51 **Commerce Corridor Study Implementation**

The Richmond Regional Transportation Planning Organization (RRTPO) partnered the Virginia Office of Intermodal Planning and Investment (OIPI) and other regional partners to develop a comprehensive analysis of existing and future transportation needs and the prioritization of those infrastructure investments along the “Commerce Corridor”. The study was completed in FY17; the focus in FY18 will be on supporting the implementation of the study in supporting the development of funding applications through the Virginia SMARTSCALE project selection process, participation in work groups related to the study effort, and in related studies recommended by the plan.

2.52 **Freight Corridor Mapping and Geodatabase Development**

a. **Identify Critical Freight Corridors based on Freight-Intensive Land Use**

The RRTPO has initiated a process to identify and map the regional freight transportation network (roadways, rail, and ports) and regional nodes of freight-intensive land uses. This data has been compiled from the Federal Primary Highway Freight System, ‘Virginia Multimodal Freight Network’ and ‘Richmond/Tri-Cities Regional Multimodal Freight Network’ to develop a single GIS layer accounting for all officially designated freight corridors in the region. The initial effort also included the development of a geodatabase of freight-intensive land uses relying on publicly available parcel data, which includes the following fields of information: land use category; property address; property owner; facility sq. footage; site acreage; improvement value; and facility classification.
 FY18 UPWP Task 2.5  
Freight and Intermodal

b. The foundational work described above was used as a tool and is being used to accomplish and expand on the following work efforts:

- Develop methodology for defining and organizing ‘Freight-Intensive Land Use Zones’ by order of magnitude freight generation, i.e. Tier 1, Tier 2, Tier 3 freight zones.
- Develop methodology for conducting ‘Establishment-level’ data collection and begin implementation with Tier 1 zones or targeted facilities.
  - Establishment surveys will be used to collect information regarding modal freight (trucking, rail, etc.) activity characteristics of freight facilities, which will provide key inputs for freight applications of the regional travel demand model and other planning applications.
  - Specific data attributes to be collected could include facility hours of operation, number of employees, facility land area, fleet size, fleet ownership, types of trucks in fleet (straight, tractor-trailers), commodities handled, average payloads by commodity and type of truck, types and share of trucking services used (parcel, truckload, and LTL), average daily inbound and outbound truck shipments, average trip lengths, truck trip-chaining activity, truck O-D distribution patterns, types of facilities used, etc.
  - In addition, establishment surveys may be used to understand how key transportation performance variables such as transportation costs, travel times, reliability, highway regulations, and roadway closures impact shipment decisions.
- Systematically identify and designate ‘Critical Urban Freight Corridors’ as required by the FAST Act. The designation of ‘CUFCs’ is a required step for projects not on the National Highway Freight Network to become eligible for funding under the new FAST Act freight formula program. This task will require close coordination and guidance from VDOT TMPD

2.53 Interstate 295 Freight Corridor Study – A Feasibility Assessment
Through the Commerce Corridor Study, transportation system deficiencies were identified across the modes in proximity to the study area. The study also evaluated the potential impacts outside of the study corridor. An area identified as having potential significant deficiencies was the I-295 corridor. This work task will evaluate the data relating to the I-295 corridor from the Commerce Corridor Study and explore the merits and feasibility of developing a similar planning effort for the I-295 corridor.

2.54 Freight and Intermodal Work Group
To support the implementation of the Commerce Corridor and future planning efforts, evaluate the merits and organization of a work group to support the technical and policy efforts of the RRTPO.
C. Agency Participation

RRPDC, RRTPO, POV, VDOT, DRPT, FHWA, FRA, local governments and interested parties

D. Budget and Funding

<table>
<thead>
<tr>
<th>Source</th>
<th>PL</th>
<th>5303</th>
<th>FY 17 CO 5303</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal</td>
<td>61,126</td>
<td>4,000</td>
<td>65,126</td>
<td></td>
</tr>
<tr>
<td>State</td>
<td>7,641</td>
<td>500</td>
<td>8,141</td>
<td></td>
</tr>
<tr>
<td>Local</td>
<td>7,641</td>
<td>500</td>
<td>8,141</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>76,408</td>
<td>5,000</td>
<td>81,408</td>
<td></td>
</tr>
</tbody>
</table>

E. Products and Schedule

Commerce Corridor Transportation Study Implementation
Ongoing

Freight Corridor Mapping and Geodatabase
Ongoing

POV/Richmond Marine Terminal
Ongoing

chamberRVA Task Force: Richmond Marine Terminal
October 2017 Task Force effort concludes
Related planning: ongoing

Freight and Intermodal Work Group
Evaluation of feasibility: January 2018
2.6 **Active Transportation**

A. **Objective and Description**

The RRTPO is responsible for planning for all means of transportation including accessible pedestrian walkways and bicycle transportation facilities. These transportation investments can minimize transportation-related fuel consumption and air pollution while providing non-motorized access to where people live, work and play across the region. Additionally, an established and well-defined regional bicycle and pedestrian network can provide reliable transportation connectivity for populations or households with zero or one car only.

This task provides RRTPO support of work by area groups, organizations and local governments to advance bicycle and pedestrian studies, programs and project. Efforts to improve bicycle and pedestrian access, whether on or off-road are in keeping with the Virginia Department of Conservation and Recreation “Virginia Outdoors Plan” (VOP), the 1993 Regional Greenways Plan, and various efforts already underway in the Region. While the Virginia Capital Trail was completed in 2015, the RRTPO is leading the current planning effort to identify the off-road alignment of the East Coast Greenway (ECG) through the region with the plans to connect the two long-distance trails.

B. **Work Elements**

2.61 **Bicycle and Pedestrian Connectivity**

Work with partners to identify proposed improvements for pedestrian and bicycle facilities and begin a systematic evaluation of where improved pedestrian and bicycle access should be studied in the region.

Through this multi-phase process, develop an initial framework for convening the regional conversation on improving bicycle and pedestrian connectivity – in particular, connectivity to transit – and identify several pilot areas to test the framework and to define the elements of the public engagement strategy.

As part of the assessment, consider the opportunity for using the methodology described in the DRPT Multimodal System Design Guidelines in future work efforts.

2.62 **East Coast Greenway Off-Road Trail Location Coordination**

Coordination and facilitation of regional discussions on the off-road alignment of the East Coast Greenway.

2.63 **Coordination with Local Bicycle and Pedestrian Planning**

a. Develop and maintain/update inventory database on existing, programmed and planned bicycle and pedestrian facilities and user count data as available from VDOT, local governments or advocacy groups.

b. Participate with VDOT and local planning, public works and transportation staffs in planning and developing bicycle and pedestrian facilities

c. Utilize local government plans and programs for input on bicycle and pedestrian facilities as part of the **plan2040** update.
d. **plan2040** identifies how bicycle and pedestrian facilities are addressed in local government comprehensive plans, subdivision and zoning ordinances, and identifies implementation tools for bicycle and pedestrian facilities, and identifies the jurisdiction’s existing and proposed bicycle and pedestrian corridors. This data will be reviewed an updated on an annual basis to determine progress in policy/planning and regional needs.

### 2.64 Advisory Committee, Organization and Work Group Support

a. Establish a RRTPO bicycle and pedestrian work group with quarterly reports out to the TAC for evaluation of policy, programmatic, planning, funding, and related technical needs to expand the network and opportunities of bicycling and walking as a core component of the transportation network, including regional discussion on Complete Streets policies and implementation strategies.

b. Provide for staff participation on local government work groups addressing local bicycle and pedestrian plans, issues and studies.

c. Participation on VDOT’s Bicycle and Pedestrian Advisory Committee.

d. Participation in National Park Service, Virginia Department of Conservation and Recreation, Sports Backers and other groups and organizations meetings/work activities for local, regional and multi-state facilities, such as the East-Coast Greenway, James River Heritage Trail, and other pedestrian and bicycle plans, programs and studies.

### C. Agency Participation

RRPDC, RRTPO, VDOT, DRPT, GRTC, FHWA, National Park Service, local governments and interested parties such as the Richmond Area Bicycling Association, Virginia Capital Trail Foundation, Sports Backers, and other interested parties.

### D. Budget, Staff and Funding

<table>
<thead>
<tr>
<th>Source</th>
<th>Type</th>
<th>FY 17 CO 5303</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal</td>
<td>PL</td>
<td>18,065</td>
<td>146,065</td>
</tr>
<tr>
<td></td>
<td>5303</td>
<td>48,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>80,000</td>
<td></td>
</tr>
<tr>
<td>State</td>
<td>PL</td>
<td>2,258</td>
<td>18,258</td>
</tr>
<tr>
<td></td>
<td>5303</td>
<td>6,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>10,000</td>
<td></td>
</tr>
<tr>
<td>Local</td>
<td>PL</td>
<td>2,258</td>
<td>18,258</td>
</tr>
<tr>
<td></td>
<td>5303</td>
<td>6,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>10,000</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>22,581</td>
<td>182,581</td>
</tr>
<tr>
<td></td>
<td></td>
<td>60,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>100,000</td>
<td></td>
</tr>
</tbody>
</table>

### E. Products and Schedule

**Coordination with Local Bicycle/Pedestrian Planning and Complete Streets**

Ongoing with annual report in October 2017

**Bicycle and Pedestrian Connectivity**

Phased initiative: phases to-be-determined; effort is ongoing.
Advisory Committee, Organization and Work Group Support
Ongoing with report on work group structure: September 2017

East Coast Greenway (ECG) Off-Road Trail Coordination
Related planning and engagement: ongoing
2.7 Environment

A. Objective and Description
Richmond-Petersburg area jurisdictions are currently in compliance with Clean Air Act air quality standards, therefore, conducting an air quality conformity analysis is no longer a requirement for the RRTPo plans and programs. To monitor and maintain the attainment designation, the region participates in the Environmental Protection Agency Ozone Advance Program with the Virginia Department of Environmental Quality (DEQ) and monitors the impact of the regional programs supported with Congestion Mitigation and Air Quality funds.

B. Work Elements

2.71 Ozone Advance
a. Provide input/review comments to DEQ for annual updates to the Richmond-Petersburg Area Ozone Advance Action Plan.
b. Provide periodic reports to TAC and the RRTPo board when appropriate on the Ozone Advance Plan.
c. Richmond-Petersburg Air Quality Studies: Monitor and report as appropriate on the air quality status of jurisdictions in the Richmond Region impacted by the regional air quality designation. These jurisdictions include: the counties of Charles City, Chesterfield, Hanover and Henrico and the City of Richmond.
d. Coordinate with DEQ to report on changes to federal regulations for air quality standards.
e. Ongoing administrative and technical supports for RRTPo activities involving the state implementation plan (SIP), air quality conformity analysis, and participation in the Ozone Advance Program and action plan.

2.72 CMAQ Program Analysis
While most of the RSTP and CMAQ funds go to specific projects, funds have been allocated to supporting programs. Within the RRTPo, there are three programs that receive annual funding for programmatic investments to mitigate the negative impacts of transportation on air quality and work to improve air quality. These include the POV Green Operators, RideFinders, and the City of Richmond Employee Trip Reduction programs. This work effort includes analysis of the impact the CMAQ investment on congestion mitigation and air quality improvement.

2.73 Stormwater
The Fast Act expanded the scope of the metropolitan planning process to require consideration of projects and strategies that will “improve resiliency and reliability of the transportation system and reduce or mitigate storm water impacts on surface transportation”, and strategies to reduce the vulnerability of existing transportation infrastructure to natural disasters. This work effort involves the development of an internal strategy to incorporate resiliency, storm water, and natural disaster considerations into future plans and programs.
C. Agency Participation
RRPDC, RRTPO, VDOT, DEQ, POV, RideFinders, City of Richmond

D. Budget and Funding

<table>
<thead>
<tr>
<th>Type</th>
<th>Source</th>
<th>PL</th>
<th>5303</th>
<th>FY 17 CO 5303</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal</td>
<td>19,226</td>
<td></td>
<td></td>
<td></td>
<td>19,226</td>
</tr>
<tr>
<td>State</td>
<td>2,403</td>
<td></td>
<td></td>
<td></td>
<td>2,403</td>
</tr>
<tr>
<td>Local</td>
<td>2,403</td>
<td></td>
<td></td>
<td></td>
<td>2,403</td>
</tr>
<tr>
<td>TOTAL</td>
<td>24,032</td>
<td></td>
<td></td>
<td></td>
<td>24,032</td>
</tr>
</tbody>
</table>

E. Products and Schedule

Ozone Advance
Annual Report from DEQ: September 2017
Related planning: ongoing

CMAQ Program Analysis
Annual Report: February 2018
Related planning: ongoing

Storm water and Resiliency
Related planning: ongoing
2.8 Special Planning Efforts and Studies

A. Objective and Description
Participate in and provide technical support to special planning efforts or studies in the region that are related to transportation planning, system performance and financial programming as determined by the RRPDC Deputy Executive Director responsible for RRTPO oversight and management.

B. Work Elements
2.81 Capital Region Collaborative
The Capital Region Collaborative (CRC) is a collaborative effort between government, business, and the community to identify and implement regional priorities that will enhance the quality of life in the Richmond region. The CRC was formed to address issues that are not confined by city or county limits and is a partnership to improve the quality of life across the region. The RRTPO coordinate with the CRC Transportation Action Team on issues of mutual interest and share data to support the CRC Community Indicators project.

2.82 Comprehensive Economic Development Strategy (CEDS)
The 2014 Richmond Regional Comprehensive Economic Development Strategy (CEDS) was the culmination of a three-year process to create an economic roadmap to diversify and strengthen the regional economy with a special focus on distressed areas of the region. The strategy provides a mechanism for coordinating the efforts of local governments, state agencies, economic development organizations, and private businesses to create jobs while stabilizing and diversifying the region’s economy with a focus on people, place and prosperity. With the regional transportation system influencing economic and workforce opportunities, there are coordination opportunities between the RRTPO program and the CEDS effort.

The CEDS work group will focus initial efforts in FY17 on putting the CEDS to work by evaluating projects within proximity to our region that have successfully secured US Economic Development Administration (EDA) and other funding for specific projects.

2.83 GO Virginia
GO Virginia is working to restore Virginia’s position of economic leadership by growing and diversifying the state’s economy. The focus is the creation of state financial incentives, technical support, and other assistance that will encourage collaboration on private-sector growth and job creation by business, education, and government in each region. The initiative is based on three main points: encouraging private sector growth, regional collaboration, and the role of the state government as a catalyst and a partner in the process.

2.84 Port of Virginia: Richmond Marine Terminal
Since 2008, the Richmond region has dedicated significant planning and programming resources toward advancing projects in and around the Richmond
Marine Terminal. The collaborative relationship and financial investment began with the RRTPo support in establishing a USDOT America’s Marine Highway (AMH) along the James River, the designation of the “64-Express” barge service as a USDOT AMH project, and through the allocation of $3.9 million in regional CMAQ funds by the RRTPo to support the start-up of the barge service in 2008. Recognizing that deficient transportation infrastructure is a significant limiting factor to private sector investment in development and redevelopment of underutilized industrial and commercial sites, the RRTPo has invested significant regional transportation resources inside and outside the RMT gates, and along the corridor, including: $4.18 million in CMAQ funds for procurement of RMT Mobile Harbor Crane; $2.05 million for Commerce Road Reconstruction; $1.75 million in RSTP funds on Deepwater Terminal Road Extension; and $33.9 million in RSTP funds for improvements to Route 10. Additionally, the RRPDC Comprehensive Economic Development Strategy (2014) identified the Richmond Marine Terminal (RMT) as a source of significant economic development and job growth opportunities in the region.

Work efforts include:

a. Ongoing staff support and coordination with Port of Virginia (POV) for development of the Richmond Marine Terminal as a regional freight intermodal center and economic asset for the Richmond Region.

b. Ongoing staff support and coordination with POV for maintaining and expanding the “64 Express” barge service between Hampton Roads and the Richmond region.

c. Participation in the ChamberRVA Port Task Force that is charged with developing short term and long term strategies to maximize real estate development and small business vendor opportunities, to develop training programs for workforce preparation, and to create awareness in the region and at the state level for transportation funds needed to encourage and support future development at RMT and in the region.

2.85 Megaregion: FHWA Mid-Atlantic, Other

FHWA has initiated a national planning effort that provides an approach to address new emerging challenges, and take advantages of the opportunities that arise around large metropolitan centers and their surrounding areas, connected by existing environmental, economic, cultural, and infrastructure relationships. This planning effort focus on Megaregions which are a group of geographic locations and/or areas that are combined because of similar characteristics and mutual interest. The transportation system crosses many jurisdictional boundaries, and should be considered at the “megaregion” scale. Air pollution, freight movements, and road safety don't stop at political boundaries but planning often does.

Megaregions present a new perspective that captures the economic, political and spatial level at which planning can be conducted to respond to the challenges of agglomerations of economic activity and population. Megaregions
offer flexible frameworks to harmonize transportation with quality of life, economic opportunity, and environmental sustainability and allow global thinking, regional coordination and local action.

2.86 Richmond Metropolitan Transportation Authority
The RRTPO works in partnership with the Richmond Metropolitan Transportation Authority (RMTA). The mission of the RMTA is to build and operate a variety of public facilities and public services, especially transportation related, within the Richmond metropolitan area, each of which is operated and financed primarily by user fees.

2.87 Virginia Association of MPOs (VAMPO)
VAMPO was formally established in with the RRTPO acting at its December 9, 2010 meeting to join the association. Staff dedicated to supporting the RRTPO program are active participants in assisting in VAMPO activities and efforts. Membership dues for each MPO are set at $550 per year with VAMPO holding quarterly board meetings and an annual training meeting for Virginia MPOs and partners.

2.88 Automated and Connected Vehicle Technology
The capability of vehicles to communicate is here; vehicles can communicate with each other, with technology supporting infrastructure and ancillary assets (like signs and stoplights) and with other types of mobility devices like wheelchairs and bicycles. VDOT leadership will outline the department’s vision of the future state of connected vehicle technologies, the impact of that future state on transportation within the commonwealth and define strategies that VDOT will plan to utilize to take advantage of these technologies. RRTPO will work with VDOT and other partners to advance innovative technologies to support regional transportation mobility and accessibility.

2.89 Regional Transportation Funding Alternatives and Priorities
a. The Regional Transportation Priority Projects selection process began in 1997. The current list of priorities was selected by the RRTPO at its November 8, 2012 meeting. This list is authorized for submission to the Commonwealth Transportation Board (CTB) for its review and consideration in selecting transportation projects and allocating state and federal funds in the upcoming Virginia Department of Transportation (VDOT) Six-Year Improvement Program (SYIP) and in considering revisions to the current SYIP. The project list is supported by a report that includes cost estimates, allocations and schedules for the projects based on the SYIP. This list is also used in support of efforts by local governments, area transportation agencies and other regional partners to obtain federal and state funds for these priority projects. Input into the regional transportation priorities is received from TAC, CTAC, work groups and interested parties.

b. The RRTPO work program for fiscal year 2018 includes the development of a recommendation for a new process for selecting regional
transportation priority projects; the candidate projects will come from the RRTP0 plan2040 long-range plan. Following policy guidance from the RRTP0 board, the development of a recommended process will be supported by a TAC work group.

C. Agency Participation

RRPDC, RRTP0 and other interested parties

D. Budget and Funding

<table>
<thead>
<tr>
<th>Source</th>
<th>PL</th>
<th>5303</th>
<th>FY17 CO 5303</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal</td>
<td>83,942</td>
<td></td>
<td></td>
<td>83,942</td>
</tr>
<tr>
<td>State</td>
<td>10,493</td>
<td></td>
<td>10,493</td>
<td>10,493</td>
</tr>
<tr>
<td>Local</td>
<td>10,493</td>
<td></td>
<td></td>
<td>10,493</td>
</tr>
<tr>
<td>TOTAL</td>
<td>104,928</td>
<td></td>
<td></td>
<td>104,928</td>
</tr>
</tbody>
</table>

E. Products and Schedule

Virginia Association of MPOs
Board Membership: quarterly meetings and other as needed
Annual MPO Training Workshop: late spring 2018

Regional Transportation Priorities
Guidance from RRTP0 Executive Committee: October 2017

Capital Region Collaborative
Ongoing

Comprehensive Economic Development Strategy
Ongoing

GO Virginia
Project monitoring.
2.9 Contingency Funding

A. Objective and Description
The RRTPO Contingency Funding task has been included to provide a source of contingency funding for unforeseen activities related to public participation, potential filling of vacant staff positions during the year, or consultant contracts associated with UPWP tasks. This item may also be used as a source of funding for new UPWP tasks that may be approved by the RRTPO board during the fiscal year.

B. Work Elements
Work elements associated with RRTPO contingency funding will be included under the appropriate UPWP task through an amendment process. New UPWP tasks may be created at the discretion of the RRTPO board, in which case the associated work elements will be included under the new task.

C. Agency Participation
RRPDC, RRTPO and other interested parties

D. Budget and Funding

<table>
<thead>
<tr>
<th>Type</th>
<th>PL</th>
<th>5303</th>
<th>FY17 CO 5303</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Federal</td>
<td>29,996</td>
<td>34,800</td>
<td></td>
<td>64,796</td>
</tr>
<tr>
<td>State</td>
<td>3,750</td>
<td>4,350</td>
<td></td>
<td>8,100</td>
</tr>
<tr>
<td>Local</td>
<td>3,750</td>
<td>4,350</td>
<td></td>
<td>8,100</td>
</tr>
<tr>
<td>TOTAL</td>
<td>37,496</td>
<td>43,500</td>
<td></td>
<td>80,996</td>
</tr>
</tbody>
</table>

E. Products and Schedule
End products associated with the RRTPO contingency funding will be included under the appropriate UPWP task. New UPWP tasks may be created at the discretion of the RRTPO board, in which case the associated end products will be included under the new task. Schedules associated with the contingency funding will be included under the appropriate UPWP task.
3.0 **Data and Modeling Applications**

As part of the RRTP0 regional transportation planning process, technology and the applications derived from it provided the tools for a quantitative assessment of the planning efforts. Socioeconomic data, the regional travel demand model (RTDM) and transportation data are examples of the work efforts that are incorporated in this section of the work program.

Socioeconomic data is developed for use in various VDOT, RRTP0, and local plan and study activities. Examples of its use include: input for planning models, EIS, corridor studies, air quality conformity analysis, transit studies, or other efforts. It is also used to respond to information requests for market and other demographic studies.

The RTDM is used to support corridor plans, scenario planning efforts, planning studies and the development of plan2045, the regional long-range plan which is anticipated to be adopted in 2021. The RTDM is also available to VDOT, to local governments and their consultants in conducting alternatives analysis, planning studies, and in meeting environmental impact analysis (EIS) requirements for highway and transit studies.

Finally, to support performance based planning, multiple data sets are required to analyze and manage transportation demand. These public planning processes, strategies and policies are included in UPWP Task 2.2; however, the data to support this analysis is developed and managed in this work task.

### 3.0 TECHNOLOGY AND APPLICATIONS

<table>
<thead>
<tr>
<th>Access to Employment</th>
<th>Congestion Mitigation</th>
<th>Environment and Air Quality</th>
<th>Freight Mobility</th>
<th>Multimodal Connectivity</th>
<th>Preservation and Maintenance</th>
<th>Safety and Security</th>
<th>System Reliability</th>
<th>Transportation and Land Use Integration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Socioeconomic Data</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Regional Travel Demand Model</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Transportation Demand Management</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>
3.0 Data and Modeling Applications

A. Objective and Description
As part of the RRTPO regional transportation planning process, geographic, socioeconomic, census and transportation network data is used to support various VDOT, RRTPO, and local plan and study activities. Examples of its use include: input for planning models, EIS, corridor studies, air quality conformity analysis, transit studies, or other studies. It is also used to respond to information requests for market and other demographic studies.

B. Work Elements
3.1 Transportation Data and Analysis
3.11 Geographic
Development of geographic data bases to support RRTPO planning efforts.

3.12 Socioeconomic Data
This effort works with VDOT and Tri-Cities MPO to identify demographic factors to be used as inputs to the trip generation component of the model, including but not limited to demographic factors needed to conduct transit systems analysis, evaluate changes in employment data, and other related factors. This task will also respond to information requests and provide approved technical assistance using the RRTPO 2012 base year data and 2040 forecasts. This data can also be used to support VDOT and other local government work in compiling data for various special studies, including Environmental Impact Statements and Assessments or other.

3.13 Census and Transportation Network Data
This work task focuses on development and maintenance of transportation planning, programming, and related mapping efforts to support the RRTPO efforts. It provides information and data to support reports and programming efforts and maintains the functional classification (FC) and national highway system (NHS) data sets, the travel time/congestion data, accident data, and bicycle count data. Additionally, the effort includes maintaining, reviewing and analyzing the U.S. Census, ACS, and Census Transportation Planning Package (CTPP), as required or requested.

3.2 Regional Travel Demand Model (RTDM)
a. Use the RTDM for applications related to the plans and studies, and to analyze system deficiencies in the existing and future transportation network based on assumptions from the 2012-2040 socioeconomic data report, including any amendments to plan2040.
b. Use the RTDM as a tool in RRTPO corridor studies and small area plans and encourage the use of the model by RRTPO members in local planning efforts.
c. Manage and document changes and updates to the model and coordinate the distribution of this information with VDOT and the Tri-Cities MPO and
implement a process for coordination of model uses and enhancements for future work tasks.

d. Evaluate the merits of developing data for interim years in consultation with VDOT.

e. VDOT is evaluating a phased transition of the base model software in which all Virginia travel demand models are built and operated. Currently all Virginia models including the RTC model are built in Citilab’s Cube Voyager software. VDOT is planning to change the base software to Caliper’s TransCAD which combines GIS and transportation modeling capabilities in a single integrated platform. In FY18, the RRTPO will explore and evaluate which software platform to use. Initial evaluation suggests that TransCAD has an edge over Cube; however, there will be a learning curve requiring additional training. VDOT will sponsor staff training and support if the MPO opts for TransCAD.

f. Evaluate the need for new or additional TAZ level demographic data needs. If additional base-year data and forecasts are recommended for the model, the request will be reviewed and coordinated with the TAC before initiating the work effort.

g. Identify opportunities to participate in FTA Ridership Forecasting using Simplified Trip-on-Project Software (STOPS) for transit project planning to support planning for New Starts and Small Starts projects.

C. Agency Participation
RRPDC, RRTPO, VDOT, DRPT, local governments, Tri-Cities MPO, Crater PDC

D. Budget and Funding

<table>
<thead>
<tr>
<th>Type</th>
<th>PL</th>
<th>5303</th>
<th>RSTP</th>
<th>FY17 CO</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Federal</td>
<td>123,197</td>
<td>37,087</td>
<td>80,000</td>
<td>240,284</td>
<td></td>
</tr>
<tr>
<td>State</td>
<td>15,400</td>
<td>4,636</td>
<td>20,000</td>
<td>40,036</td>
<td></td>
</tr>
<tr>
<td>Local</td>
<td>15,400</td>
<td>4,636</td>
<td></td>
<td>20,036</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>153,996</td>
<td>46,359</td>
<td>100,000</td>
<td>300,355</td>
<td></td>
</tr>
</tbody>
</table>

E. Products and Schedule

RTDM Demographic Factors
Consult with RTDM consultant as needed for additional demographic data/forecasts and subarea TAZ splits or other needs in use and application of RTDM.

RTDM Work Tasks as developed and approved by RRTPO/RRPDC
Ongoing

Cube Voyager software license renewal
TBD; need to determine if the RRTPO model will run using TransCAD
4.0 **FINANCIAL PROGRAMMING**

As federally funded highway and transit projects and programs move from the planning to the implementation phase, projects and programs must be reviewed and approved by the RRTPO. Most transportation projects and programs are initially selected by the Commonwealth Transportation Board (CTB) with federal and state funds allocated as part of the state’s Six-Year Improvement Program (SYIP). When projects are moved into the Transportation Improvement Program (TIP), it shows that sufficient funds are available, or are reasonably expected to become available soon for a project, project phase, or program to move forward for implementation. Projects must be included in the RRTPO adopted TIP for the implementing agency to submit its application for federal funds.

The RRTPO is responsible for developing and maintaining the TIP and has lead authority in allocating federal funds under the Regional Surface Transportation Program (RSTP) Block Grant and the Congestion Mitigation and Air Quality (CMAQ) program, and the Transportation Alternatives (TA) Set-Aside within the RSTP Block Grant program.

RSTP funds are allocated under federal formula to the Richmond Urbanized Area while CMAQ funds are allocated by federal formula to the state. The CTB sub-allocates by state formula to current or previously designated EPA non-attainment and maintenance areas in Virginia. Although the RRTPO is currently in attainment status for ozone, the region participates in the Ozone Advance Program.

The CTB established a new policy on February 16, 2011, which directs the district CTB member to work with the RRTPO, VDOT and DRPT to accomplish the following:

- recommend a list of CMAQ projects for the SYIP with all six years of CMAQ funds anticipated to be available to the RRTPO to be programmed;
- program the CMAQ funds to facilitate maximization of the use of federal funds including fully funding project phases based on current schedules and cost estimates; and
- that CMAQ allocations be programmed centrally by VDOT and DRPT based on the CTB priorities and federal eligibility requirements.

### 4.0 FinanciAl Programs

<table>
<thead>
<tr>
<th>Access to Employment</th>
<th>Congestion Mitigation</th>
<th>Environment and Air Quality</th>
<th>Freight Mobility</th>
<th>Multimodal Connectivity</th>
<th>Preservation and Maintenance</th>
<th>Safety and Security</th>
<th>System Reliability</th>
<th>Transportation and Land Use Integration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transportation Improvement Program</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Six-Year Improvement Program</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>
4.0 Financial Programming

A. Objective and Description
Projects in the Transportation Improvement Program (TIP) include information on the implementing agency, location/service area, cost estimates, funding sources, amount and type of funds to be spent, 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. The TIP includes projects funded federal sources such as RSTP, CMAQ, TA, Section 5303 and Section 5310 funding, and projects of regional significance funded with state, local or private sources.

B. Work Elements

4.1 Transportation Improvement Program
4.11 TIP Development
The FY18 – FY21 TIP that is scheduled for approval by the RRTPO on May 4, 2017 is expected to become effective following approval by FHWA and FTA on or before October 1, 2017. This TIP document identifies on a project by project basis, the plan2040 goals achieved by each project. The TIP identifies a listing of regionally significant public and private transportation projects which are developed under VDOT guidance. The TIP and its amendments are available electronically on the RRPDC or RRTPO website.

4.12 TIP Analysis and Maintenance
TIP Amendments: ongoing support for reviewing and processing amendments to the TIP, and analysis and reporting of TIP obligations, project type, and similar comparative evaluations.

Certain amendments known as administrative modifications or adjustments can be processed in consultation with appropriate local government and/or regional agencies rather than being submitted for RRTPO board review and action.

4.13 Annual Listing of Obligated Projects
Annual submission by VDOT and DRPT of projects with funds obligated during the preceding federal fiscal year. VDOT and DRPT are required to submit these reports to the RRTPO by November 30, which gives 30 days to review the reports, make appropriate corrections in consultation with VDOT and DRPT, and post the report on the website by December 31.

4.2 Federal and State Transportation Funding
4.21 Regional Surface Transportation Program (RSTP)
a. Conduct RSTP project review, selection and fund allocation and review RSTP projects in the initial SYIP.
b. Track allocations of RSTP funds and financial closeout for active projects; work with VDOT and DRPT to track RSTP allocations and
reallocation of funds through the “PD-24” process. VDOT has developed a Financial Analysis Tool (FAT) spreadsheet that continues to be tested in the VDOT Richmond District for use in reporting and tracking all VDOT projects; RRTPO read-only access to this data set would assist in tracking allocations.

c. Develop annual report on financial closeout activities for the previous fiscal year with VDOT.

d. Redevelopment of the RSTP tracking sheets into a searchable reference database.

e. Initiate an assessment of the RSTP and CMAQ project selection guidelines to determine if revisions should be considered for future allocation cycles.

4.22. **Congestion Mitigation and Air Quality (CMAQ)**

a. Conduct annual review, selection and funds allocation for CMAQ funded projects and review CMAQ projects in the initial SYIP.

b. Track allocations for CMAQ funds and financial closeout for active projects; work with VDOT and DRPT to track CMAQ allocations and reallocation of funds through the “PD-24” process. VDOT has developed a Financial Analysis Tool (FAT) spreadsheet that continues to be tested in the VDOT Richmond District for use in reporting and tracking all VDOT projects; RRTPO read-only access to this data set would assist in tracking allocations.

c. Develop annual report on financial closeout activities for the previous fiscal year with VDOT.

d. Redevelopment of the CMAQ tracking sheets into a searchable reference database.

4.23 **Transportation Alternatives Set-Aside (TA)**

a. TA projects review, selection and funds allocation begins with an application submitted to VDOT where projects are scored and returned to the RRTPO for review and selection. This review conducted in conjunction with the RSTP/CMAQ review process.

b. Redevelopment of the TAP tracking sheets into a searchable reference database.

4.24 **FTA 5310: Enhanced Mobility of Seniors and Individuals with Disabilities**

(See Task 2.32 Paratransit, CHSMP)

4.25 **High Priority, District Grant and State of Good Repair Programming**

SMART SCALE established 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 and environmental quality. As a Transportation Management Area (TMA), the RRTPO is also required to consider the additional factor of land-use and transportation coordination. The next round of SMART SCALE
applications will be accepted in summer 2018 for evaluation and selection into the FY20 – FY25 SYIP.

4.26 Financial Projections
Support the amendment of plan2040 and the development of plan2045 through the coordination and evaluation of financial projection data.

C. Agency Participation
RRPDC, RRTP, VDOT, DEQ, DRPT, local governments, GRTC, FHWA, EPA, FTA, RideFinders, CRAC, RMTA, paratransit and other transportation operators, freight shippers, providers of freight transportation services, and representatives of users of public transit.

D. Budget and Funding

<table>
<thead>
<tr>
<th>Source</th>
<th>Type</th>
<th>PL</th>
<th>5303</th>
<th>FY17 CO</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal</td>
<td>PL</td>
<td>178,682</td>
<td>40,000</td>
<td>218,682</td>
<td></td>
</tr>
<tr>
<td>State</td>
<td>PL</td>
<td>22,335</td>
<td>5,000</td>
<td>27,335</td>
<td></td>
</tr>
<tr>
<td>Local</td>
<td>PL</td>
<td>22,335</td>
<td>5,000</td>
<td>27,335</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>223,352</td>
<td>50,000</td>
<td>273,352</td>
<td></td>
</tr>
</tbody>
</table>

E. Products and Schedule
Maintenance activities in support of the current TIP including processing of TIP amendment, adjustment requests and analysis of the TIP
Ongoing

Annual Listing of Obligated Projects Report
VDOT and DRPT to provide annual listing of actual project obligations during the preceding program year to RRPDC by November 30, 2017 and final list to be posted on the RRTPO website by December 31, 2017.

Maintenance of records tracking the programming of RSTP, CMAQ and TA funds
Ongoing

Conduct annual RSTP, CMAQ and TAP projects review, selection, and funds allocation, and submit RRTPO approved list of projects and allocations for CTB review and programming in the upcoming Six-Year Improvement Program (SYIP).
October 2017 – April 2018

Annual Report on Closeout
September 2017

SMART SCALE
Regional candidate project pool: summer 2017; FY20 applications: summer 2018
APPENDIX

UNIFIED PLANNING
WORK PROGRAM
FISCAL YEAR 2018

July 1, 2017 – June 30, 2018
## Richmond Regional Transportation Planning Organization

### Voting Members

<table>
<thead>
<tr>
<th>Jurisdictions</th>
<th>Organizations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Town of Ashland</strong></td>
<td><strong>Capital Region Airport Commission (CRAC)</strong></td>
</tr>
<tr>
<td>Kathy Abbott</td>
<td>John B. Rutledge</td>
</tr>
<tr>
<td>James Foley*</td>
<td>Jon Mathiasen*</td>
</tr>
<tr>
<td><strong>Charles City County</strong></td>
<td><strong>GRTC Transit System</strong></td>
</tr>
<tr>
<td>Floyd H. Miles</td>
<td>David Green</td>
</tr>
<tr>
<td>William G. Coada*</td>
<td>Garland W. Williams*</td>
</tr>
<tr>
<td><strong>Chesterfield County</strong></td>
<td><strong>Richmond Metropolitan Transportation Authority (RMTA)</strong></td>
</tr>
<tr>
<td>Steve A. Elswick</td>
<td>Angela L. Gray</td>
</tr>
<tr>
<td>James M. Holland</td>
<td></td>
</tr>
<tr>
<td>Christopher Winslow</td>
<td></td>
</tr>
<tr>
<td>Leslie Haley*</td>
<td></td>
</tr>
<tr>
<td><strong>Goochland County</strong></td>
<td><strong>Virginia Secretary of Transportation Designee</strong></td>
</tr>
<tr>
<td>Manuel Alvarez, Jr.</td>
<td>Robert H. Cary</td>
</tr>
<tr>
<td>Susan F. Lascolette</td>
<td>Mark E. Riblett*</td>
</tr>
<tr>
<td>Ned S. Creasey*</td>
<td></td>
</tr>
<tr>
<td><strong>Hanover County</strong></td>
<td></td>
</tr>
<tr>
<td>W. Canova Peterson, IV</td>
<td></td>
</tr>
<tr>
<td>Angela C. Kelly Wieck</td>
<td></td>
</tr>
<tr>
<td>Wayne T. Hazzard*</td>
<td></td>
</tr>
<tr>
<td><strong>Henrico County</strong></td>
<td></td>
</tr>
<tr>
<td>Patricia S. O’Bannon</td>
<td></td>
</tr>
<tr>
<td>Frank J. Thornton</td>
<td></td>
</tr>
<tr>
<td>Thomas Bralin*</td>
<td></td>
</tr>
<tr>
<td><strong>New Kent County</strong></td>
<td></td>
</tr>
<tr>
<td>Patricia A. Paige</td>
<td></td>
</tr>
<tr>
<td>C. T. Tiller, Jr.</td>
<td></td>
</tr>
<tr>
<td>W. Ray Davis, Jr.*</td>
<td></td>
</tr>
<tr>
<td>Thomas Evelyn*</td>
<td></td>
</tr>
<tr>
<td><strong>Powhatan County</strong></td>
<td></td>
</tr>
<tr>
<td>Larry J. Nordvig</td>
<td></td>
</tr>
<tr>
<td>David T. Williams*</td>
<td></td>
</tr>
<tr>
<td><strong>City of Richmond</strong></td>
<td></td>
</tr>
<tr>
<td>Andreas D. Addison</td>
<td></td>
</tr>
<tr>
<td>Parker C. Agelasto</td>
<td></td>
</tr>
<tr>
<td>Kimberly B. Gray</td>
<td></td>
</tr>
<tr>
<td>Cynthia I. Newbille</td>
<td></td>
</tr>
<tr>
<td>Chris A. Hilbert*</td>
<td></td>
</tr>
<tr>
<td>Michael J. Jones*</td>
<td></td>
</tr>
<tr>
<td>Kristen Nye Larson*</td>
<td></td>
</tr>
<tr>
<td>Ellen F. Robertson*</td>
<td></td>
</tr>
</tbody>
</table>

* Alternates

### Nonvoting Members

<table>
<thead>
<tr>
<th><strong>Citizens Transportation Advisory Committee (CTAC)</strong></th>
<th><strong>MPO Chairman’s Citizen Appointees</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Robert P. Morris</td>
<td>(Vacant)</td>
</tr>
<tr>
<td>Amber B. Lancaster*</td>
<td>(Vacant)</td>
</tr>
<tr>
<td><strong>Elderly and Disability Advisory Committee (EDAC)</strong></td>
<td><strong>RideFinders, Inc.</strong></td>
</tr>
<tr>
<td>Brian Montgomery</td>
<td>Von S. Tisdale</td>
</tr>
<tr>
<td>Chris M. Lloyd*</td>
<td>Cherika Ruffin*</td>
</tr>
<tr>
<td><strong>Federal Highway Administration (FHWA)</strong></td>
<td><strong>Virginia Dept. of Aviation</strong></td>
</tr>
<tr>
<td>Ivan Rucker</td>
<td>P. Clifford Burnette, Jr.</td>
</tr>
<tr>
<td><strong>Federal Transit Administration (FTA)</strong></td>
<td><strong>Virginia Dept. of Rail and Public Transportation</strong></td>
</tr>
<tr>
<td>Melissa McGill</td>
<td>Jitender Ramchandani</td>
</tr>
<tr>
<td></td>
<td>Nick Britton*</td>
</tr>
</tbody>
</table>

* Alternates
(This page intentionally left blank)
DOCUMENTATION OF
RICHMOND REGIONAL TPO AND
TRI-CITIES AREA MPO COORDINATION

Article I of the “Memorandum of Understanding for Coordination of Regional Transportation and Air Quality Planning and Programming in the Richmond Area MPO (now referred to as the RRTPO) 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 socioeconomic data at the transportation 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 Regional RRTPO and Tri-Cities MPO shall be included in their respective annual planning work programs.

The following documents cooperative work efforts provided for in the RRTPO FY 18 UPWP.

1. RRTPO Maintenance: Staff for the Richmond RRTPO and Tri-Cities MPO share information of interest including MPO/RRTPO and TAC meeting agendas, work programs 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.

2. Unified Planning Work Program (UPWP): The Richmond RRTPO and Tri-Cities Area MPO have an agreed procedure for the distribution of FHWA/PL funds that VDOT allocates to the Richmond Urbanized Area (which includes both MPOs).

3. Socioeconomic Data: Base year and forecast year data for the Richmond RRTPO and Tri-Cities MPO is jointly developed with common agreed-to base and forecast years and demographic factors.

4. Metropolitan Transportation Plan (MTP): The MTP regional travel demand model developed by VDOT and maintained by the Richmond RRTPO and Tri-Cities MPO covers both the Richmond and Tri-Cities 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.

5. 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 the Richmond RRTPO and Tri-Cities MPO areas, plus other rural areas. Coordination of ITS related activities with the Tri-Cities MPO area
should be through VDOT as ITS work activities covered for the VDOT designated Central Region which includes both MPO areas.

6. Freight and Intermodal Planning: The RRTPO continues to involve the Tri-Cities 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 in the Tri-Cities Area and impact the Richmond Region’s highway and rail networks, and may be potential users of the Richmond Marine Terminal which is part of the Port of Virginia.

7. Air Quality Plan and Program Activities: As part of the Virginia Department of Environmental Quality (DEQ) work to develop the State Implementation Plan (SIP), DEQ serves as lead staff for the Metropolitan Richmond Air Quality Committee (MRAQC) and is the CAAA Section 174 lead planning organization (LPO). Local elected officials representing each nonattainment area jurisdiction plus representatives from both the Richmond RRTPO and Tri-Cities MPO, VDOT, and VDEQ also serve on the MRAQC. 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 long-range plan update.

Note that air quality conformity analysis is no longer required as of April 2015. However, the procedures established in the Richmond RRTPO/Tri-Cities MPO MOU remain in effect should the Richmond and Petersburg areas go back into non-attainment status. 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 that is administered by Virginia Department of Environmental Quality.
FREQUENTLY USED MPO TERMS AND ABBREVIATIONS

Attainment
A term that means an area that meets the air quality standards set in 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 that includes Cities of Richmond, Colonial Heights, Hopewell, and Petersburg, and the counties of Charles City, Chesterfield, Hanover, Henrico and Prince George, is designated as being in attainment for 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. MPO’s, established under federal legislation, serves as the policy board of an organization created and designated to carry out the metropolitan planning process (see 23USC Part 450). 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, RMTA, VDOT, RideFinders, FHWA, FTA, and VDA; The MPO serves as the forum for cooperative transportation decision making in the Richmond area. Note that the MPO’s bylaws were amended in October, 2014 to change the MPO’s name, to be referred to (for informal use) as the Richmond Regional Transportation Planning Organization (RRTPO). The Richmond Area MPO remains as the official name for use in the MPO’s designation letter, memorandum of understanding, and other legal documents.

MTP
Metropolitan Transportation Plan. Serves as the initial step and framework in developing a regionally based network of transportation facilities and services that meets travel needs in the most efficient and effective manner possible. The current MTP is the 2035 long-range Transportation Plan (LRTP) that was adopted by the RRTPO in July 2012 (see Transportation Plan below).

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 RRTPO’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 RRTPO plans, programs, and studies. |
| **RRTPO** | Richmond Regional Transportation Planning Organization. Serves as the policy board charged with conducting federal transportation planning and programming requirements under 23USC Part 450. RRTPO is the term or name used for general reference purposes for the Richmond Area Metropolitan Planning Organization (see MPO above). |
| **"3-C" Process** | ("Continuing, Cooperative and Comprehensive") Language from federal legislation establishing MPOs/TPOs and used to describe 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 RRTPO's adopted long-range transportation plan or LRTP (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. The plan2040, adopted October 2016 is the current RRTPO transportation plan. |
| **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. |
| **UPWP** | Unified Planning Work Program; the RRTPO 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. |
APPENDIX C
MPO Terms and Abbreviations

RRTPSTANDING COMMITTEES
CTAC Citizens Transportation Advisory Committee
EDAC Elderly and Disability Advisory Committee (anticipate transition to work group)
TAC Technical Advisory Committee

FEDERAL, STATE AND REGIONAL AGENCIES, ORGANIZATIONS, COMMITTEES
CRAC Capital Region Airport Commission
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 providing carpool/vanpool matching and other commuter services; a division of GRTC Transit System
MARAD Maritime Administration
RMTA Richmond Metropolitan Transportation Authority
RRPDC Richmond Regional Planning District Commission; also, referred to as the Richmond Region or Planning District 15 (PD-15)
USDOT United States Department of Transportation
VTRC Virginia Transportation Research Council
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
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 21st 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**

**MAP-21**
Moving Ahead for Progress in the 21st Century; federal transportation legislation reauthorization signed into law on July 6, 2012 and went into effect on October 1, 2012.

**FAST Act**
Fixing America’s Surface Transportation Act; federal transportation legislation reauthorization signed into law on December 4, 2015 and went into effect October 1, 2015.

**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 percent match, with VDOT/DRPT providing 10 percent and the remaining 80 percent 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). The RRPDC provides local match funds for RRPDC staff work activities.

**PL**
Planning funds available from FHWA for RRTPO program activities.

**Section 5303**
Planning funds available from the FTA for RRTPO 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 (i.e. funds cannot be used for planning studies).

**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 RRTPO and Tri-Cities MPO with 86.5 percent allocated to the Richmond RRTPO and 13.5 percent allocated to the Tri-Cities MPO (as per the RRTPO 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 RRTPO 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

**CRC** Capital Region Collaborative; Cooperative planning process conducted by the RRPDC and the Greater Richmond Chamber of Commerce.

**EJ** Environmental Justice

**FFY** Federal Fiscal Year (October 1 to September 30)

**FY** State 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.

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>NHPP</td>
<td>National Highway Performance Program</td>
</tr>
<tr>
<td>NHS</td>
<td>National Highway System</td>
</tr>
<tr>
<td>NHTS</td>
<td>National Household Transportation Survey</td>
</tr>
<tr>
<td>NOx</td>
<td>Nitrogen Oxides</td>
</tr>
<tr>
<td>REVi</td>
<td>Richmond Electric Vehicle Initiative</td>
</tr>
<tr>
<td>RFP</td>
<td>Request for Proposal; process used for reviewing and selecting proposals for consultant study activities. (Goods and non-professional services)</td>
</tr>
<tr>
<td>RFQ</td>
<td>Request for Qualifications (Consultant Services).</td>
</tr>
<tr>
<td>SIP</td>
<td>State Implementation Plan (for attainment and maintenance of national ambient air quality standards)</td>
</tr>
<tr>
<td>SOV</td>
<td>Single Occupant Vehicles</td>
</tr>
<tr>
<td>STP</td>
<td>Surface Transportation Program</td>
</tr>
<tr>
<td>SYIP</td>
<td>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.</td>
</tr>
<tr>
<td>TDP</td>
<td>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 RRTPO on November 11, 2011. Note that GRTC submits annual updates to the TDP to DRPT and these updates are available for RRTPO review.</td>
</tr>
<tr>
<td>TMA</td>
<td>Transportation Management Area – MPOs greater than 200,000 in population</td>
</tr>
<tr>
<td>VAMPO</td>
<td>Virginia Association of Metropolitan Planning Organizations</td>
</tr>
<tr>
<td>VMT</td>
<td>Vehicle Miles Traveled</td>
</tr>
</tbody>
</table>
Below are federal regulations applicable to MPOs:

**Subpart A—Transportation Planning and Programming Definitions**

§ 450.100 Purpose.
The purpose of this subpart is to provide definitions for terms used in this part.

§ 450.102 Applicability.
The definitions in this subpart are applicable to this part, except as otherwise provided.

§ 450.104 Definitions.
Unless otherwise specified, the definitions in 23 U.S.C. 101(a) and 49 U.S.C. 5302 are applicable to this part.

**Administrative modification** means a minor revision to a long-range statewide or metropolitan transportation plan, Transportation Improvement Program (TIP), or Statewide Transportation Improvement Program (STIP) that includes minor changes to project/project phase costs, minor changes to funding sources of previously-included projects, and minor changes to project/project phase initiation dates. An administrative modification is a revision that does not require public review and comment, redemonstration of fiscal constraint, or a conformity determination (in nonattainment and maintenance areas).

**Alternatives analysis (AA)** means a study required for eligibility of funding under the Federal Transit Administration’s (FTA’s) Capital Investment Grant program (49 U.S.C. 5309), which includes an assessment of a range of alternatives designed to address a transportation problem in a corridor or subarea, resulting in sufficient information to support selection by State and local officials of a locally preferred alternative for adoption into a metropolitan transportation plan, and for the Secretary to make decisions to advance the locally preferred alternative through the project development process, as set forth in 49 CFR part 611 (Major Capital Investment Projects).

**Amendment** means a revision to a long-range statewide or metropolitan transportation plan, TIP, or STIP that involves a major change to a project included in a metropolitan transportation plan, TIP, or STIP, including the addition or deletion of a project or a major change in project cost, project/project phase initiation dates, or a major change in design concept or design scope (e.g., changing project termini or the number of through traffic lanes). Changes to projects that are included only for illustrative purposes do not require an amendment. An amendment is a revision that requires public review and comment, redemonstration of fiscal constraint, or a conformity determination (for metropolitan transportation plans and TIPs involving “non-exempt” projects in nonattainment and maintenance areas). In the context of a long-range statewide transportation plan, an amendment is a revision approved by the State in accordance with its public involvement process.

**Attainment area** means any geographic area in which levels of given criteria air pollutant (e.g., ozone, carbon monoxide, PM10, PM2.5, and nitrogen dioxide) meet the health-based National Ambient Air Quality Standards (NAAQS) for that pollutant. An area may be an attainment area for one pollutant and a nonattainment area for others. A “maintenance area” (see definition below) is not considered an attainment area for transportation planning purposes.

**Available funds** means funds derived from an existing source dedicated to or historically used for transportation purposes. For Federal funds, authorized and/or appropriated funds and the extrapolation of formula and discretionary funds at historic rates of increase are considered
“available.” A similar approach may be used for State and local funds that are dedicated to or historically used for transportation purposes.

**Committed funds** means funds that have been dedicated or obligated for transportation purposes. For State funds that are not dedicated to transportation purposes, only those funds over which the Governor has control may be considered “committed.” Approval of a TIP by the Governor is considered a commitment of those funds over which the Governor has control. For local or private sources of funds not dedicated to or historically used for transportation purposes (including donations of property), a commitment in writing (e.g., letter of intent) by the responsible official or body having control of the funds may be considered a commitment. For projects involving 49 U.S.C. 5309 funding, execution of a Full Funding Grant Agreement (or equivalent) or a Project Construction Grant Agreement with the USDOT shall be considered a multi-year commitment of Federal funds.

**Conformity** means a Clean Air Act (42 U.S.C. 7506(c)) requirement that ensures that Federal funding and approval are given to transportation plans, programs and projects that are consistent with the air quality goals established by a State Implementation Plan (SIP). Conformity, to the purpose of the SIP, means that transportation activities will not cause new air quality violations, worsen existing violations, or delay timely attainment of the NAAQS. The transportation conformity rule (40 CFR part 93) sets forth policy, criteria, and procedures for demonstrating and assuring conformity of transportation activities.

**Conformity lapse** means, pursuant to section 176(c) of the Clean Air Act (42 U.S.C. 7506(c)), as amended, that the conformity determination for a metropolitan transportation plan or TIP has expired and thus there is no currently conforming metropolitan transportation plan or TIP.

**Congestion management process** means a systematic approach required in transportation management areas (TMAs) that provides for effective management and operation, based on a cooperatively developed and implemented metropolitan-wide strategy, of new and existing transportation facilities eligible for funding under title 23 U.S.C., and title 49 U.S.C., through the use of operational management strategies.

**Consideration** means that one or more parties takes into account the opinions, action, and relevant information from other parties in making a decision or determining a course of action.

**Consultation** means that one or more parties confer with other identified parties in accordance with an established process and, prior to taking action(s), considers the views of the other parties and periodically informs them about action(s) taken. This definition does not apply to the “consultation” performed by the States and the MPOs in comparing the long-range statewide transportation plan and the metropolitan transportation plan, respectively, to State and Tribal conservation plans or maps or inventories of natural or historic resources (see § 450.214(i) and § 450.322(g)(1) and (g)(2)).

**Cooperation** means that the parties involved in carrying out the transportation planning and programming processes work together to achieve a common goal or objective.

**Coordinated public transit-human services transportation plan** means a locally developed, coordinated transportation plan that identifies the transportation needs of individuals with disabilities, older adults, and people with low incomes, provides strategies for meeting those local needs, and prioritizes transportation services for funding and implementation.
**Coordination** means the cooperative development of plans, programs, and schedules among agencies and entities with legal standing and adjustment of such plans, programs, and schedules to achieve general consistency, as appropriate.

**Design concept** means the type of facility identified for a transportation improvement project (e.g., freeway, expressway, arterial highway, grade-separated highway, toll road, reserved right-of-way rail transit, mixed-traffic rail transit, or busway).

**Design scope** means the aspects that will affect the proposed facility’s impact on the region, usually as they relate to vehicle or person carrying capacity and control (e.g., number of lanes or tracks to be constructed or added, length of project, signalization, safety features, access control including approximate number and location of interchanges, or preferential treatment for high-occupancy vehicles).

**Designated recipient** means an entity designated, in accordance with the planning process under 49 U.S.C. 5303, 5304, and 5306, by the chief executive officer of a State, responsible local officials, and publicly-owned operators of public transportation, to receive and apportion amounts under 49 U.S.C. 5336 that are attributable to transportation management areas (TMAs) identified under 49 U.S.C. 5303, or a State regional authority if the authority is responsible under the laws of a State for a capital project and for financing and directly providing public transportation.

**Environmental mitigation activities** means strategies, policies, programs, actions, and activities that, over time, will serve to avoid, minimize, or compensate for (by replacing or providing substitute resources) the impacts to or disruption of elements of the human and natural environment associated with the implementation of a long-range statewide transportation plan or metropolitan transportation plan. The human and natural environment includes, for example, neighborhoods and communities, homes and businesses, cultural resources, parks and recreation areas, wetlands and water sources, forested and other natural areas, agricultural areas, endangered and threatened species, and the ambient air. The environmental mitigation strategies and activities are intended to be regional in scope, and may not necessarily address potential project-level impacts.

**Federal land management agency** means units of the Federal Government currently responsible for the administration of public lands (e.g., U.S. Forest Service, U.S. Fish and Wildlife Service, Bureau of Land Management, and the National Park Service).

**Federally funded non-emergency transportation services** means transportation services provided to the general public, including those with special transport needs, by public transit, private non-profit service providers, and private third-party contractors to public agencies.

**Financial plan** means documentation required to be included with a metropolitan transportation plan and TIP (and optional for the long-range statewide transportation plan and STIP) that demonstrates the consistency projected sources of Federal, State, local, and private revenues and the costs of implementing proposed transportation system improvements.

**Financially constrained or Fiscal constraint** means that the metropolitan transportation plan, TIP, and STIP includes sufficient financial information for demonstrating that projects in the metropolitan transportation plan, TIP, and STIP can be implemented using committed, available, or reasonably available revenue sources, with reasonable assurance that the federally supported transportation system is being adequately operated and maintained. For the TIP and the STIP, financial constraint/fiscal constraint applies to each program year. Additionally, projects in air quality...
nonattainment and maintenance areas can be included in the first two years of the TIP and STIP only if funds are “available” or “committed.”

*Freight shippers* means any business that routinely transports its products from one location to another by providers of freight transportation services or by its own vehicle fleet.

*Full funding grant agreement* means an instrument that defines the scope of a project, the Federal financial contribution, and other terms and conditions for funding New Starts projects as required by 49 U.S.C. 5309(d)(1).

*Governor* means the Governor of any of the 50 States or the Commonwealth of Puerto Rico or the Mayor of the District of Columbia. *Illustrative project* means an additional transportation project that may (but is not required to) be included in a financial plan for a metropolitan transportation plan, TIP, or STIP if reasonable additional resources were to become available.

*Indian Tribal government* means a duly formed governing body for an Indian or Alaska Native tribe, band, nation, pueblo, village, or community that the Secretary of the Interior acknowledges to exist as an Indian Tribe pursuant to the Federally Recognized Indian Tribe List Act of 1994, Public Law 103–454.

*Intelligent transportation system (ITS)* means electronics, photonics, communications, or information processing used singly or in combination to improve the efficiency or safety of a surface transportation system.

*Interim metropolitan transportation plan* means a transportation plan composed of projects eligible to proceed under a conformity lapse and otherwise meeting all other applicable provisions of this part, including approval by the MPO.

*Interim transportation improvement program (TIP)* means a TIP composed of projects eligible to proceed under a conformity lapse and otherwise meeting all other applicable provisions of this part, including approval by the MPO and the Governor.

*Long-range statewide transportation plan* means the official, statewide, multimodal, transportation plan covering a period of no less than 20 years developed through the statewide transportation planning process.

*Maintenance area* means any geographic region of the United States that the EPA previously designated as a nonattainment area for one or more pollutants pursuant to the Clean Air Act Amendments of 1990, and subsequently redesignated as an attainment area subject to the requirement to develop a maintenance plan under section 175A of the Clean Air Act, as amended.

*Management system* means a systematic process, designed to assist decision-makers in selecting cost effective strategies/actions to improve the efficiency or safety of, and protect the investment in, the nation’s infrastructure. A management system can include: Identification of performance measures; data collection and analysis; determination of needs; evaluation and selection of appropriate strategies/actions to address the needs; and evaluation of the effectiveness of the implemented strategies/actions.
**Metropolitan planning area (MPA)** means the geographic area determined by agreement between the metropolitan planning organization (MPO) for the area and the Governor, in which the metropolitan transportation planning process is carried out.

**Metropolitan planning organization (MPO)** means the policy board of an organization created and designated to carry out the metropolitan transportation planning process.

**Metropolitan transportation plan** means the official multimodal transportation plan addressing no less than a 20-year planning horizon that is developed, adopted, and updated by the MPO through the metropolitan transportation planning process.

**National ambient air quality standard (NAAQS)** means those standards established pursuant to section 109 of the Clean Air Act.

**Nonattainment area** means any geographic region of the United States that has been designated by the EPA as a nonattainment area under section 107 of the Clean Air Act for any pollutants for which an NAAQS exists.

**Non-metropolitan area** means a geographic area outside a designated metropolitan planning area.

**Non-metropolitan local officials** means elected and appointed officials of general purpose local government in a non-metropolitan area with responsibility for transportation.

**Obligated projects** means strategies and projects funded under title 23 U.S.C. and title 49 U.S.C. Chapter 53 for which the supporting Federal funds were authorized and committed by the State or designated recipient in the preceding program year, and authorized by the FHWA or awarded as a grant by the FTA.

**Operational and management strategies** means actions and strategies aimed at improving the performance of existing and planned transportation facilities to relieve congestion and maximizing the safety and mobility of people and goods.

**Project construction grant agreement** means an instrument that defines the scope of a project, the Federal financial contribution, and other terms and conditions for funding Small Starts projects as required by 49 U.S.C. 5309(e)(7).

**Project selection** means the procedures followed by MPOs, States, and public transportation operators to advance projects from the first four years of an approved TIP and/or STIP to implementation, in accordance with agreed upon procedures.

**Provider of freight transportation services** means any entity that transports or otherwise facilitates the movement of goods from one location to another for others or for itself.

**Public transportation operator** means the public entity which participates in the continuing, cooperative, and comprehensive transportation planning process in accordance with 23 U.S.C. 134 and 135 and 49 U.S.C. 5303 and 5304, and is the designated recipient of Federal funds under title 49 U.S.C. Chapter 53 for transportation by a conveyance that provides regular and continuing general or special transportation to the public, but does not include school bus, charter, or intercity bus transportation or intercity passenger rail transportation provided by Amtrak.
Regional ITS architecture means a regional framework for ensuring institutional agreement and technical integration for the implementation of ITS projects or groups of projects.

Regionally significant project means a transportation project (other than projects that may be grouped in the TIP and/or STIP or exempt projects as defined in EPA's transportation that is on a facility which serves regional transportation needs (such as access to and from the area outside the region; major activity centers in the region; major planned developments such as new retail malls, sports complexes, or employment centers; or transportation terminals) and would normally be included in the modeling of the metropolitan area’s transportation network. At a minimum, this includes all principal arterial highways and all fixed guide-way transit facilities that offer a significant alternative to regional highway travel.

Revision means a change to a long-range statewide or metropolitan transportation plan, TIP, or STIP that occurs between scheduled periodic updates. A major revision is an “amendment,” while a minor revision is an “administrative modification.”

State means any one of the fifty States, the District of Columbia, or Puerto Rico.

State implementation plan (SIP) means, as defined in section 302(q) of the Clean Air Act (CAA), the portion (or portions) of the implementation plan, or most recent revision thereof, which has been approved under section 110 of the CAA, or promulgated under section 110(c) of the CAA, or promulgated or approved pursuant to regulations promulgated under section 301(d) of the CAA and which implements the relevant requirements of the CAA.

Statewide transportation improvement program (STIP) means a statewide prioritized listing/program of transportation projects covering a period of four years that is consistent with the long-range statewide transportation plan, metropolitan transportation plans, and TIPs, and required for projects to be eligible for funding under title 23 U.S.C. and title 49 U.S.C. Chapter 53.

Strategic highway safety plan means a plan developed by the State DOT in accordance with the requirements of 23 U.S.C. 148(a)(6).

Transportation control measure (TCM) means any measure that is specifically identified and committed to in the applicable SIP that is either one of the types listed in section 108 of the Clean Air Act or any other measure for the purpose of reducing emissions or concentrations of air pollutants from transportation sources by reducing vehicle use or changing traffic flow or congestion conditions. Notwithstanding the above, vehicle technology-based, fuel-based, and maintenance-based measures that control the emissions from vehicles under fixed traffic conditions are not TCMs.

Transportation improvement program (TIP) means a prioritized listing/program of transportation projects covering a period of four years that is developed and formally adopted by an MPO as part of the metropolitan transportation planning process, consistent with the metropolitan transportation plan, and required for projects to be eligible for funding under title 23 U.S.C. and title 49 U.S.C. Chapter 53.

Transportation management area (TMA) means an urbanized area with a population over 200,000, as defined by the Bureau of the Census and designated by the Secretary of Transportation, or any additional area where TMA designation is requested by the Governor and the MPO and designated by the Secretary of Transportation.
Unified planning work program (UPWP) means a statement of work identifying the planning priorities and activities to be carried out within a metropolitan planning area. At a minimum, a UPWP includes a description of the planning work and resulting products, who will perform the work, time frames for completing the work, the cost of the work, and the source(s) of funds.

Update means making current a long-range statewide transportation plan, metropolitan transportation plan, TIP, or STIP through a comprehensive review. Updates require public review and comment, a 20-year horizon year for metropolitan transportation plans and long-range statewide transportation plans, a four-year program period for TIPs and STIPs, demonstration of fiscal constraint (except for long-range statewide transportation plans), and a conformity determination (for metropolitan transportation plans and TIPs in nonattainment and maintenance areas).

Urbanized area means a geographic area with a population of 50,000 or more, as designated by the Bureau of the Census.

Users of public transportation means any person, or groups representing such persons, who use transportation open to the general public, other than taxis and other privately funded and operated vehicles.

Visualization techniques means methods used by States and MPOs in the development of transportation plans and programs with the public, elected and appointed officials, and other stakeholders in a clear and easily accessible format such as maps, pictures, and/or displays, to promote improved understanding of existing or proposed transportation plans and programs.
Subpart C – Metropolitan Transportation Planning and Programming

§ 450.300 Purpose.
The purposes of this subpart are to implement the provisions of 23 U.S.C. 134 and 49 U.S.C. 5303, as amended, which:

(a) Sets forth the national policy that the MPO designated for each urbanized area is to carry out a continuing, cooperative, and comprehensive multimodal transportation planning process, including the development of a metropolitan transportation plan and a transportation improvement program (TIP), that encourages and promotes the safe and efficient development, management, and operation of surface transportation systems to serve the mobility needs of people and freight (including accessible pedestrian walkways and bicycle transportation facilities) and foster economic growth and development, while minimizing transportation-related fuel consumption and air pollution; and

(b) Encourages continued development and improvement of metropolitan transportation planning processes guided by the planning factors set forth in 23 U.S.C. 134(h) and 49 U.S.C. 5303(h).

§ 450.302 Applicability.
The provisions of this subpart are applicable to organizations and entities responsible for the transportation planning and programming processes in metropolitan planning areas.

§ 450.304 Definitions.
Except as otherwise provided in subpart A of this part, terms defined in 23 U.S.C. 101(a) and 49 U.S.C. 5302 are used in this subpart as so defined.

§ 450.306 Scope of the metropolitan transportation planning process.
(a) The metropolitan transportation planning process shall be continuous, cooperative, and comprehensive, and provide for consideration and implementation of projects, strategies, and services that will address the following factors:

1. Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency;

2. Increase the safety of the transportation system for motorized and non-motorized users;

3. Increase the security of the transportation system for motorized and non-motorized users;

4. Increase accessibility and mobility of people and freight;

5. Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns;

6. Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight;
(7) Promote efficient system management and operation; and

(8) Emphasize the preservation of the existing transportation system.

(b) Consideration of the planning factors in paragraph (a) of this section shall be reflected, as appropriate, in the metropolitan transportation planning process. The degree of consideration and analysis of the factors should be based on the scale and complexity of many issues, including transportation system development, land use, employment, economic development, human and natural environment, and housing and community development.

(c) The failure to consider any factor specified in paragraph (a) of this section shall not be reviewable by any court under title 23 U.S.C., 49 U.S.C. Chapter 53, subchapter II of title 5, U.S.C. Chapter 5, or title 5 U.S.C. Chapter 7 in any matter affecting a metropolitan transportation plan, TIP, a project or strategy, or the certification of a metropolitan transportation planning process.

(d) The metropolitan transportation planning process shall be carried out in coordination with the statewide transportation planning process required by 23 U.S.C. 135 and 49 U.S.C. 5304.

(e) In carrying out the metropolitan transportation planning process, MPOs, States, and public transportation operators may apply asset management principles and techniques in establishing planning goals, defining TIP priorities, and assessing transportation investment decisions, including transportation system safety, operations, preservation, and maintenance, as well as strategies and policies to support homeland security and to safeguard the personal security of all motorized and non-motorized users.

(f) The metropolitan transportation planning process shall (to the maximum extent practicable) be consistent with the development of applicable regional intelligent transportation systems (ITS) architectures, as defined in 23 CFR part 940.

(g) Preparation of the coordinated public transit-human services transportation plan, as required by 49 U.S.C. 5310, 5316, and 5317, should be coordinated and consistent with the metropolitan transportation planning process.

(h) The metropolitan transportation planning process should be consistent with the Strategic Highway Safety Plan, as specified in 23 U.S.C. 148, and other transit safety and security planning and review processes, plans, and programs, as appropriate.

(i) The FHWA and the FTA shall designate as a transportation management area (TMA) each urbanized area with a population of over 200,000 individuals, as defined by the Bureau of the Census. The FHWA and the FTA shall also designate any additional urbanized area as a TMA on the request of the Governor and the MPO designated for that area.

(j) In an urbanized area not designated as a TMA that is an air quality attainment area, the MPO(s) may propose and submit to the FHWA and the FTA for approval a procedure for developing an abbreviated metropolitan transportation plan and TIP. In developing proposed simplified planning procedures, consideration shall be given to whether the abbreviated metropolitan transportation plan and TIP will achieve the purposes of 23 U.S.C. 134, 49 U.S.C. 5303, and these regulations, taking into account the complexity of the transportation
problems in the area. The simplified procedures shall be developed by the MPO in cooperation with the State(s) and public transportation operator(s).

§ 450.308 Funding for transportation planning and unified planning work programs.
(a) Funds provided under 23 U.S.C. 104(f), 49 U.S.C. 5305(d), 49 U.S.C. 5307, and 49 U.S.C. 5339 are available to MPOs to accomplish activities in this subpart. At the State’s option, funds provided under 23 U.S.C. 104(b)(1) and (b)(3) and 23 U.S.C. 105 may also be provided to MPOs for metropolitan transportation planning. In addition, an MPO serving an urbanized area with a population over 200,000, as designated by the Bureau of the Census, may at its discretion use funds sub-allocated under 23 U.S.C. 133(d)(3)(E) for metropolitan transportation planning activities.

(b) Metropolitan transportation planning activities performed with funds provided under title 23 U.S.C. and title 49 U.S.C. Chapter 53 shall be documented in a unified planning work program (UPWP) or simplified statement of work in accordance with the provisions of this section and 23 CFR part 420.

(c) Except as provided in paragraph (d) of this section, each MPO, in cooperation with the State(s) and public transportation operator(s), shall develop a UPWP that includes a discussion of the planning priorities facing the MPA. The UPWP shall identify work proposed for the next one- or two-year period by major activity and task (including activities that address the planning factors in § 450.306(a)), in sufficient detail to indicate who (e.g., MPO, State, public transportation operator, local government, or consultant) will perform the work, the schedule for completing the work, the resulting products, the proposed funding by activity/task, and a summary of the total amounts and sources of Federal and matching funds.

(d) With the prior approval of the State and the FHWA and the FTA, an MPO in an area not designated as a TMA may prepare a simplified statement of work, in cooperation with the State(s) and public transportation operator(s), in lieu of a UPWP. A simplified statement of work would include a description of the major activities to be performed during the next one- or two-year period, who (e.g., State, MPO, public transportation operator, local government, or consultant) will perform the work, the resulting products, and a summary of the total amounts and sources of Federal and matching funds. If a simplified statement of work is used, it may be submitted as part of the State’s planning work program, in accordance with 23 CFR part 420.

(e) Arrangements may be made with the FHWA and the FTA to combine the UPWP or simplified statement of work with the work program(s) for other Federal planning funds.

(f) Administrative requirements for UPWPs and simplified statements of work are contained in 23 CFR part 420 and FTA Circular C8100.1B (Program Guidance and Application Instructions for Metropolitan Planning Grants).

§ 450.310 Metropolitan planning organization designation and redesignation.
(a) To carry out the metropolitan transportation planning process under this subpart, a metropolitan planning organization (MPO) shall be designated for each urbanized area with a population of more than 50,000 individuals (as determined by the Bureau of the Census).
(b) MPO designation shall be made by agreement between the Governor and units of general purpose local government that together represent at least 75 percent of the affected population (including the largest incorporated city, based on population, as named by the Bureau of the Census) or in accordance with procedures established by applicable State or local law.

(c) Each Governor with responsibility for a portion of a multistate metropolitan area and the appropriate MPOs shall, to the extent practicable, provide coordinated transportation planning for the entire MPA. The consent of Congress is granted to any two or more States to:

1. Enter into agreements or compacts, not in conflict with any law of the United States, for cooperative efforts and mutual assistance in support of activities authorized under 23 U.S.C. 134 and 49 U.S.C. 5303 as the activities pertain to interstate areas and localities within the States; and

2. Establish such agencies, joint or otherwise, as the States may determine desirable for making the agreements and compacts effective.

(d) Each MPO that serves a TMA, when designated or redesignated under this section, shall consist of local elected officials, officials of public agencies that administer or operate major modes of transportation in the metropolitan planning area, and appropriate State transportation officials. Where appropriate, MPOs may increase the representation of local elected officials, public transportation agencies, or appropriate State officials on their policy boards and other committees as a means for encouraging greater involvement in the metropolitan transportation planning process, subject to the requirements of paragraph (k) of this section.

(e) To the extent possible, only one MPO shall be designated for each urbanized area or group of contiguous urbanized areas. More than one MPO may be designated to serve an urbanized area only if the Governor(s) and the existing MPO, if applicable, determine that the size and complexity of the urbanized area make designation of more than one MPO appropriate. In those cases where two or more MPOs serve the same urbanized area, the MPOs shall establish official, written agreements that clearly identify areas of coordination and the division of transportation planning responsibilities among the MPOs.

(f) Nothing in this subpart shall be deemed to prohibit an MPO from using the staff resources of other agencies, non-profit organizations, or contractors to carry out selected elements of the metropolitan transportation planning process.

(g) An MPO designation shall remain in effect until an official redesignation has been made in accordance with this section.

(h) An existing MPO may be redesignated only by agreement between the Governor and units of general purpose local government that together represent at least 75 percent of the existing metropolitan planning area population (including the largest incorporated city, based on population, as named by the Bureau of the Census).

(i) Redesignation of an MPO serving a multistate metropolitan planning area requires agreement between the
Governors of each State served by the existing MPO and units of general purpose local government that together represent at least 75 percent of the existing metropolitan planning area population (including the largest incorporated city, based on population, as named by the Bureau of the Census).

(j) For the purposes of redesignation, units of general purpose local government may be defined as elected officials from each unit of general purpose local government located within the metropolitan planning area served by the existing MPO.

(k) Redesignation of an MPO (in accordance with the provisions of this section) is required whenever the existing MPO proposes to make:

1. A substantial change in the proportion of voting members on the existing MPO representing the largest incorporated city, other units of general purpose local government served by the MPO, and the State(s); or

2. A substantial change in the decision-making authority or decision-making procedures established under MPO by-laws.

(l) The following changes to an MPO do not require a redesignation (as long as they do not trigger a substantial change as described in paragraph (k) of the section):

1. The identification of a new urbanized area (as determined by the Bureau of the Census) within an existing metropolitan planning area;

2. Adding members to the MPO that represent new units of general purpose local government resulting from expansion of the metropolitan planning area;

3. Adding members to satisfy the specific membership requirements for an MPO that serves a TMA; or

4. Periodic rotation of members representing units of general-purpose local government, as established under MPO by-laws.

§ 450.312 Metropolitan planning area boundaries.

(a) The boundaries of a metropolitan planning area (MPA) shall be determined by agreement between the MPO and the Governor. At a minimum, the MPA boundaries shall encompass the entire existing urbanized area (as defined by the Bureau of the Census) plus the contiguous area expected to become urbanized within a 20-year forecast period for the metropolitan transportation plan. The MPA boundaries may be further expanded to encompass the entire metropolitan statistical area or combined statistical area, as defined by the Office of Management and Budget.

(b) An MPO that serves an urbanized area designated as a nonattainment area for ozone or carbon monoxide under the Clean Air Act (42 U.S.C. 7401 et seq.) as of August 10, 2005, shall retain the MPA boundary that existed on August 10, 2005. The MPA boundaries for such MPOs may only be adjusted by agreement of the Governor and the affected MPO in accordance with the redesignation procedures described in § 450.310(h). The MPA boundary for an MPO that serves an urbanized area designated as a nonattainment area for ozone or carbon monoxide under the Clean Air Act (42 U.S.C. 7401 et seq.) after August 10,
2005 may be established to coincide with the designated boundaries of the ozone and/or carbon monoxide nonattainment area, in accordance with the requirements in § 450.310(b).

(c) An MPA boundary may encompass more than one urbanized area.

(d) MPA boundaries may be established to coincide with the geography of regional economic development and growth forecasting areas.

(e) Identification of new urbanized areas within an existing metropolitan planning area by the Bureau of the Census shall not require redesignation of the existing MPO.

(f) Where the boundaries of the urbanized area or MPA extend across two or more States, the Governors with responsibility for a portion of the multistate area, MPO(s), and the public transportation operator(s) are strongly encouraged to coordinate transportation planning for the entire multistate area.

(g) The MPA boundaries shall not overlap with each other.

(h) Where part of an urbanized area served by one MPO extends into an adjacent MPA, the MPOs shall, at a minimum, establish written agreements that clearly identify areas of coordination and the division of transportation planning responsibilities among and between the MPOs. Alternatively, the MPOs may adjust their existing boundaries so that the entire urbanized area lies within only one MPA. Boundary adjustments that change the composition of the MPO may require redesignation of one or more such MPOs.

(i) The MPA boundaries shall be reviewed after each Census by the MPO (in cooperation with the State and public transportation operator(s)) to determine if existing MPA boundaries meet the minimum statutory requirements for new and updated urbanized area(s), and shall be adjusted as necessary. As appropriate, additional adjustments should be made to reflect the most comprehensive boundary to foster an effective planning process that ensures connectivity between modes, reduces access disadvantages experienced by modal systems, and promotes efficient overall transportation investment strategies.

(j) Following MPA boundary approval by the MPO and the Governor, the MPA boundary descriptions shall be provided for informational purposes to the FHWA and the FTA. The MPA boundary descriptions shall be submitted either as a geo-spatial database or described in sufficient detail to enable the boundaries to be accurately delineated on a map.

§ 450.314 Metropolitan planning agreements.

(a) The MPO, the State(s), and the public transportation operator(s) shall cooperatively determine their mutual responsibilities in carrying out the metropolitan transportation planning process. These responsibilities shall be clearly identified in written agreements among the MPO, the State(s), and the public transportation operator(s) serving the MPA. To the extent possible, a single agreement between all responsible parties should be developed. The written agreement(s) shall include specific provisions for cooperatively developing and sharing information related to the development of financial plans that support the metropolitan transportation plan (see § 450.322) and the metropolitan TIP (see § 450.324) and development of the annual listing of obligated projects (see § 450.332).
(b) If the MPA does not include the entire nonattainment or maintenance area, there shall be a written agreement among the State department of transportation, State air quality agency, affected local agencies, and the MPO describing the process for cooperative planning and analysis of all projects outside the MPA within the nonattainment or maintenance area. The agreement must also indicate how the total transportation-related emissions for the nonattainment or maintenance area, including areas outside the MPA, will be treated for the purposes of determining conformity in accordance with the EPA’s transportation conformity rule (40 CFR part 93). The agreement shall address policy mechanisms for resolving conflicts concerning transportation-related emissions that may arise between the MPA and the portion of the nonattainment or maintenance area outside the MPA.

(c) In nonattainment or maintenance areas, if the MPO is not the designated agency for air quality planning under section 174 of the Clean Air Act (42 U.S.C. 7504), there shall be a written agreement between the MPO and the designated air quality planning agency describing their respective roles and responsibilities for air quality related transportation planning.

(d) If more than one MPO has been designated to serve an urbanized area, there shall be a written agreement among the MPOs, the State(s), and the public transportation operator(s) describing how the metropolitan transportation planning processes will be coordinated to assure the development of consistent metropolitan transportation plans and TIPs across the MPA boundaries, particularly in cases in which a proposed transportation investment extends across the boundaries of more than one MPA. If any part of the urbanized area is a nonattainment or maintenance area, the agreement also shall include State and local air quality agencies. The metropolitan transportation planning processes for affected MPOs should, to the maximum extent possible, reflect coordinated data collection, analysis, and planning assumptions across the MPAs. Alternatively, a single metropolitan transportation plan and/or TIP for the entire urbanized area may be developed jointly by the MPOs in cooperation with their respective planning partners. Coordination efforts and outcomes shall be documented in subsequent transmittals of the UPWP and other planning products, including the metropolitan transportation plan and TIP, to the State(s), the FHWA, and the FTA.

(e) Where the boundaries of the urbanized area or MPA extend across two or more States, the Governors with responsibility for a portion of the multistate area, the appropriate MPO(s), and the public transportation operator(s) shall coordinate transportation planning for the entire multistate area. States involved in such multistate transportation planning may:

1. Enter into agreements or compacts, not in conflict with any law of the United States, for cooperative efforts and mutual assistance in support of activities authorized under this section as the activities pertain to interstate areas and localities within the States; and

2. Establish such agencies, joint or otherwise, as the States may determine desirable for making the agreements and compacts effective.

(f) If part of an urbanized area that has been designated as a TMA overlaps into an adjacent MPA serving an urbanized area that is not designated as a TMA, the adjacent urbanized area shall not be treated as a TMA. However, a written agreement shall be established between the MPOs with MPA boundaries including a portion of the TMA, which clearly identifies the
roles and responsibilities of each MPO in meeting specific TMA requirements (e.g., congestion management process, Surface Transportation Program funds sub-allocated to the urbanized area over 200,000 population, and project selection).

§ 450.316 Interested parties, participation, and consultation.
(a) The MPO shall develop and use a documented participation plan that defines a process for providing citizens, affected public agencies, representatives of public transportation employees, freight shippers, providers of freight transportation services, private providers of transportation, representatives of users of public transportation, representatives of users of pedestrian walkways and bicycle transportation facilities, representatives of the disabled, and other interested parties with reasonable opportunities to be involved in the metropolitan transportation planning process.

(1) The participation plan shall be developed by the MPO in consultation with all interested parties and shall, at a minimum, describe explicit procedures, strategies, and desired outcomes for:

(i) Providing adequate public notice of public participation activities and time for public review and comment at key decision points, including but not limited to a reasonable opportunity to comment on the proposed metropolitan transportation plan and the TIP;

(ii) Providing timely notice and reasonable access to information about transportation issues and processes;

(iii) Employing visualization techniques to describe metropolitan transportation plans and TIPs;

(iv) Making public information (technical information and meeting notices) available in electronically accessible formats and means, such as the World Wide Web;

(v) Holding any public meetings at convenient and accessible locations and times;

(vi) Demonstrating explicit consideration and response to public input received during the development of the metropolitan transportation plan and the TIP;

(vii) Seeking out and considering the needs of those traditionally underserved by existing transportation systems, such as low-income and minority households, who may face challenges accessing employment and other services;

(viii) Providing an additional opportunity for public comment, if the final metropolitan transportation plan or TIP differs significantly from the version that was made available for public comment by the MPO and raises new material issues which interested parties could not reasonably have foreseen from the public involvement efforts;
(ix) Coordinating with the statewide transportation planning public involvement and consultation processes under subpart B of this part; and

(x) Periodically reviewing the effectiveness of the procedures and strategies contained in the participation plan to ensure a full and open participation process.

(2) When significant written and oral comments are received on the draft metropolitan transportation plan and TIP (including the financial plans) as a result of the participation process in this section or the interagency consultation process required under the EPA transportation conformity regulations (40 CFR part 93), a summary, analysis, and report on the disposition of comments shall be made as part of the final metropolitan transportation plan and TIP.

(3) A minimum public comment period of 45 calendar days shall be provided before the initial or revised participation plan is adopted by the MPO. Copies of the approved participation plan shall be provided to the FHWA and the FTA for informational purposes and shall be posted on the World Wide Web, to the maximum extent practicable.

(b) In developing metropolitan transportation plans and TIPs, the MPO should consult with agencies and officials responsible for other planning activities within the MPA that are affected by transportation (including State and local planned growth, economic development, environmental protection, airport operations, or freight movements) or coordinate its planning process (to the maximum extent practicable) with such planning activities. In addition, metropolitan transportation plans and TIPs shall be developed with due consideration of other related planning activities within the metropolitan area, and the process shall provide for the design and delivery of transportation services within the area that are provided by:

(1) Recipients of assistance under title 49 U.S.C. Chapter 53;

(2) Governmental agencies and nonprofit organizations (including representatives of the agencies and organizations) that receive Federal assistance from a source other than the U.S. Department of Transportation to provide non-emergency transportation services; and

(3) Recipients of assistance under 23 U.S.C. 204.

(c) When the MPA includes Indian Tribal lands, the MPO shall appropriately involve the Indian Tribal government(s) in the development of the metropolitan transportation plan and the TIP.

(d) When the MPA includes Federal public lands, the MPO shall appropriately involve the Federal land management agencies in the development of the metropolitan transportation plan and the TIP.

(e) MPOs shall, to the extent practicable, develop a documented process(es) that outlines roles, responsibilities, and key decision points for consulting with other governments and
agencies, as defined in paragraphs (b), (c), and (d) of this section, which may be included in the agreement(s) developed under § 450.314.

§ 450.318 Transportation planning studies and project development.

(a) Pursuant to section 1308 of the Transportation Equity Act for the 21st Century, TEA–21 (Pub. L. 105–178), an MPO(s), State(s), or public transportation operator(s) may undertake a multimodal, systems-level corridor or subarea planning study as part of the metropolitan transportation planning process. To the extent practicable, development of these transportation planning studies shall involve consultation with, or joint efforts among, the MPO(s), State(s), and/or public transportation operator(s). The results or decisions of these transportation planning studies may be used as part of the overall project development process consistent with the National Environmental Policy Act (NEPA) of 1969 (42 U.S.C. 4321 et seq.) and associated implementing regulations (23 CFR part 771 and 40 CFR parts 1500–1508). Specifically, these corridor or subarea studies may result in producing any of the following for a proposed transportation project:

1. Purpose and need or goals and objective statement(s);
2. General travel corridor and/or general mode(s) definition (e.g., highway, transit, or a highway/transit combination);
3. Preliminary screening of alternatives and elimination of unreasonable alternatives;
4. Basic description of the environmental setting; and/or
5. Preliminary identification of environmental impacts and environmental mitigation.

(b) Publicly available documents or other source material produced by, or in support of, the transportation planning process described in this subpart may be incorporated directly or by reference into subsequent NEPA documents, in accordance with 40 CFR 1502.21, if:

1. The NEPA lead agencies agree that such incorporation will aid in establishing or evaluating the purpose and need for the Federal action, reasonable alternatives, cumulative or other impacts on the human and natural environment, or mitigation of these impacts; and
2. The systems-level, corridor, or subarea planning study is conducted with:
   (i) Involvement of interested State, local, Tribal, and Federal agencies;
   (ii) Public review;
   (iii) Reasonable opportunity to comment during the metropolitan transportation planning process and development of the corridor or subarea planning study;
   (iv) Documentation of relevant decisions in a form that is identifiable and available for review during the NEPA scoping process and can be appended to or referenced in the NEPA document; and
(v) The review of the FHWA and the FTA, as appropriate.

(c) By agreement of the NEPA lead agencies, the above integration may be accomplished through tiering (as described in 40 CFR 1502.20), incorporating the subarea or corridor planning study into the draft Environmental Impact Statement (EIS) or Environmental Assessment, or other means that the NEPA lead agencies deem appropriate.

(d) For transit fixed guideway projects requiring an Alternatives Analysis (49 U.S.C. 5309(d) and (e)), the Alternatives Analysis described in 49 CFR part 611 constitutes the planning required by section 1308 of the TEA–21. The Alternatives Analysis may or may not be combined with the preparation of a NEPA document (e.g., a draft EIS). When an Alternatives Analysis is separate from the preparation of a NEPA document, the results of the Alternatives Analysis may be used during a subsequent environmental review process as described in paragraph (a).

(e) Additional information to further explain the linkages between the transportation planning and project development/NEPA processes is contained in Appendix A to this part, including an explanation that it is nonbinding guidance material.

§ 450.320 Congestion management process in transportation management areas.

(a) The transportation planning process in a TMA shall 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 and 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.

(b) The development of a congestion management process should result in multimodal system performance measures and strategies that can be reflected in the metropolitan transportation plan and the TIP. The level of system performance deemed acceptable by State and local transportation officials may vary by type of transportation facility, geographic location (metropolitan area or subarea), and/or time of day. In addition, consideration should be given to strategies that manage demand, reduce single occupant vehicle (SOV) travel, and improve transportation system management and operations. 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 into the SOV project to facilitate future demand management strategies and operational improvements that will maintain the functional integrity and safety of those lanes.

(c) The congestion management process shall be developed, established, and implemented as part of the metropolitan transportation planning process that includes coordination with transportation system management and operations activities. The congestion management process shall include:

(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 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 for the movement of people and goods. Since levels of acceptable system performance may vary among local communities, performance measures should be tailored to the specific needs of the area and established cooperatively by the State(s), affected MPO(s), and local officials in consultation with the operators of major modes of transportation in the coverage area;

(3) Establishment of a coordinated program for data collection and system performance monitoring to define the extent and duration of congestion, to contribute in determining the causes of congestion, and evaluate the efficiency and effectiveness of implemented actions. To the extent possible, this data collection program should be coordinated with existing data sources (including archived operational/ITS data) and coordinated with operations managers in the metropolitan area;

(4) Identification and evaluation of the anticipated performance and expected benefits of appropriate congestion management strategies that will contribute to the more effective use and improved safety of existing and future transportation systems based on the established performance measures. The following categories of strategies, or combinations of strategies, are some examples of what should be appropriately considered for each area:

   (i) Demand management measures, including growth management and congestion pricing;

   (ii) Traffic operational improvements;

   (iii) Public transportation improvements;

   (iv) ITS technologies as related to the regional ITS architecture; and

   (v) Where necessary, additional system capacity;

(5) Identification of an implementation schedule, implementation responsibilities, and possible funding sources for each strategy (or combination of strategies) proposed for implementation; and

(6) Implementation of a process for periodic assessment of the effectiveness of implemented strategies, in terms of the area’s established performance measures. The results of this evaluation shall be provided to decision-makers and the public to provide guidance on selection of effective strategies for future implementation.

(d) In a TMA designated as nonattainment area for ozone or carbon monoxide pursuant to the Clean Air Act, Federal funds may not be programmed for any project that will result in a significant increase in the carrying capacity for SOVs (i.e., a new general purpose highway on a new location or adding general purpose lanes, with the exception of safety improvements or the elimination of bottlenecks), unless the project is addressed through a congestion management process meeting the requirements of this section.
(e) In TMAs designated as nonattainment for ozone or carbon monoxide, the congestion management process 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 capacity for SOVs (as described in paragraph (d) of this section) is proposed to be advanced with Federal funds. If the analysis 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 congestion management process shall identify all reasonable strategies to manage the SOV facility safely and effectively (or to facilitate its management in the future). 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 congestion management process. 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.

(f) State laws, rules, or regulations pertaining to congestion management systems or programs may constitute the congestion management process, if the FHWA and the FTA find that the State laws, rules, or regulations are consistent with, and fulfill the intent of, the purposes of 23 U.S.C. 134 and 49 U.S.C. 5303.

§ 450.322 Development and content of the metropolitan transportation plan.

(a) The metropolitan transportation planning process shall include the development of a transportation plan addressing no less than a 20-year planning horizon as of the effective date. In nonattainment and maintenance areas, the effective date of the transportation plan shall be the date of a conformity determination issued by the FHWA and the FTA. In attainment areas, the effective date of the transportation plan shall be its date of adoption by the MPO.

(b) The transportation plan shall include both long-range and short-range strategies/actions that lead to the development of an integrated multimodal transportation system to facilitate the safe and efficient movement of people and goods in addressing current and future transportation demand.

(c) The MPO shall review and update the transportation plan at least every four years in air quality nonattainment and maintenance areas and at least every five years in attainment areas to confirm the transportation plan's validity and consistency with current and forecasted transportation and land use conditions and trends and to extend the forecast period to at least a 20-year planning horizon. In addition, the MPO may revise the transportation plan at any time using the procedures in this section without a requirement to extend the horizon year. The transportation plan (and any revisions) shall be approved by the MPO and submitted for information purposes to the Governor. Copies of any updated or revised transportation plans must be provided to the FHWA and the FTA.

(d) In metropolitan areas that are in nonattainment for ozone or carbon monoxide, the MPO shall coordinate the development of the metropolitan transportation plan with the process for developing transportation control measures (TCMs) in a State Implementation Plan (SIP).
(e) The MPO, the State(s), and the public transportation operator(s) shall validate data utilized in preparing other existing modal plans for providing input to the transportation plan. In updating the transportation plan, the MPO shall base the update on the latest available estimates and assumptions for population, land use, travel, employment, congestion, and economic activity. The MPO shall approve transportation plan contents and supporting analyses produced by a transportation plan update.

(f) The metropolitan transportation plan shall, at a minimum, include:

1. The projected transportation demand of persons and goods in the metropolitan planning area over the period of the transportation plan;

2. Existing and proposed transportation facilities (including major roadways, transit, multimodal and intermodal facilities, pedestrian walkways and bicycle facilities, and intermodal connectors) that should function 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. In addition, the locally preferred alternative selected from an Alternatives Analysis under the FTA's Capital Investment Grant program (49 U.S.C. 5309 and 49 CFR part 611) needs to be adopted as part of the metropolitan transportation plan as a condition for funding under 49 U.S.C. 5309;

3. Operational and management strategies to improve the performance of existing transportation facilities to relieve vehicular congestion and maximize the safety and mobility of people and goods;

4. Consideration of the results of the congestion management process in TMAs that meet the requirements of this subpart, including the identification of SOV projects that result from a congestion management process in TMAs that are nonattainment for ozone or carbon monoxide;

5. Assessment of capital investment and other strategies to preserve the existing and projected future metropolitan transportation infrastructure and provide for multimodal capacity increases based on regional priorities and needs. The metropolitan transportation plan may consider projects and strategies that address areas or corridors where current or projected congestion threatens the efficient functioning of key elements of the metropolitan area’s transportation system;

6. Design concept and design scope descriptions of all existing and proposed transportation facilities in sufficient detail, regardless of funding source, in nonattainment and maintenance areas for conformity determinations under the EPA’s transportation conformity rule (40 CFR part 93). In all areas (regardless of air quality designation), all proposed improvements shall be described in sufficient detail to develop cost estimates;

7. A discussion of types of potential environmental mitigation activities and potential areas to carry out these activities, including activities that may have the greatest potential to restore and maintain the environmental functions affected by the metropolitan transportation plan. The discussion may focus on policies, programs, or strategies, rather than at the project level. The discussion shall be developed in
consultation with Federal, State, and Tribal land management, wildlife, and regulatory agencies. The MPO may establish reasonable timeframes for performing this consultation;

(8) Pedestrian walkway and bicycle transportation facilities in accordance with 23 U.S.C. 217(g);

(9) Transportation and transit enhancement activities, as appropriate; and

(10) A financial plan that demonstrates how the adopted transportation plan can be implemented.

(i) For purposes of transportation system operations and maintenance, the financial plan shall contain system-level estimates of costs and revenue sources that are reasonably expected to be available to adequately operate and maintain Federal-aid highways (as defined by 23 U.S.C. 101(a)(5)) and public transportation (as defined by title 49 U.S.C. Chapter 53).

(ii) For the purpose of developing the metropolitan transportation plan, the MPO, public transportation operator(s), and State shall cooperatively develop estimates of funds that will be available to support metropolitan transportation plan implementation, as required under § 450.314(a). All necessary financial resources from public and private sources that are reasonably expected to be made available to carry out the transportation plan shall be identified.

(iii) The financial plan shall include recommendations on any additional financing strategies to fund projects and programs included in the metropolitan transportation plan. In the case of new funding sources, strategies for ensuring their availability shall be identified.

(iv) In developing the financial plan, the MPO shall take into account all projects and strategies proposed for funding under title 23 U.S.C., title 49 U.S.C. Chapter 53 or with other Federal funds; State assistance; local sources; and private participation. Starting December 11, 2007, revenue and cost estimates that support the metropolitan transportation plan must use an inflation rate(s) to reflect “year of expenditure dollars,” based on reasonable financial principles and information, developed cooperatively by the MPO, State(s), and public transportation operator(s).

(v) For the outer years of the metropolitan transportation plan (i.e., beyond the first 10 years), the financial plan may reflect aggregate cost ranges/cost bands, as long as the future funding source(s) is reasonably expected to be available to support the projected cost ranges/cost bands.

(vi) For nonattainment and maintenance areas, the financial plan shall address the specific financial strategies required to ensure the implementation of TCMs in the applicable SIP.
(vii) For illustrative purposes, the financial plan may (but is not required to) include additional projects that would be included in the adopted transportation plan if additional resources beyond those identified in the financial plan were to become available.

(viii) In cases that the FHWA and the FTA find a metropolitan transportation plan to be fiscally constrained and a revenue source is subsequently removed or substantially reduced (i.e., by legislative or administrative actions), the FHWA and the FTA will not withdraw the original determination of fiscal constraint; however, in such cases, the FHWA and the FTA will not act on an updated or amended metropolitan transportation plan that does not reflect the changed revenue situation.

(g) The MPO shall consult, as appropriate, with State and local agencies responsible for land use management, natural resources, environmental protection, conservation, and historic preservation concerning the development of the transportation plan. The consultation shall involve, as appropriate:

1. Comparison of transportation plans with State conservation plans or maps, if available; or
2. Comparison of transportation plans to inventories of natural or historic resources, if available.

(h) The metropolitan transportation plan should include a safety element that incorporates or summarizes the priorities, goals, countermeasures, or projects for the MPA contained in the Strategic Highway Safety Plan required under 23 U.S.C. 148, as well as (as appropriate) emergency relief and disaster preparedness plans and strategies and policies that support homeland security (as appropriate) and safeguard the personal security of all motorized and non-motorized users.

(i) The MPO shall provide citizens, affected public agencies, representatives of public transportation employees, freight shippers, providers of freight transportation services, private providers of transportation, representatives of users of public transportation, representatives of users of pedestrian walkways and bicycle transportation facilities, representatives of the disabled, and other interested parties with a reasonable opportunity to comment on the transportation plan using the participation plan developed under §450.316(a).

(j) The metropolitan transportation plan shall be published or otherwise made readily available by the MPO for public review, including (to the maximum extent practicable) in electronically accessible formats and means, such as the World Wide Web.

(k) A State or MPO shall not be required to select any project from the illustrative list of additional projects included in the financial plan under paragraph (f)(10) of this section.

(l) In nonattainment and maintenance areas for transportation-related pollutants, the MPO, as well as the FHWA and the FTA, must make a conformity determination on any updated or amended transportation plan in accordance with the Clean Air Act and the EPA transportation conformity regulations (40 CFR part 93). During a conformity lapse, MPOs can prepare an interim metropolitan transportation plan as a basis for advancing projects that
are eligible to proceed under a conformity lapse. An interim metropolitan transportation plan consisting of eligible projects from, or consistent with, the most recent conforming transportation plan and TIP may proceed immediately without revisiting the requirements of this section, subject to interagency consultation defined in 40 CFR part 93. An interim metropolitan transportation plan containing eligible projects that are not from, or consistent with, the most recent conforming transportation plan and TIP must meet all the requirements of this section.

§ 450.324 Development and content of the transportation improvement program (TIP).

(a) The MPO, in cooperation with the State(s) and any affected public transportation operator(s), shall develop a TIP for the metropolitan planning area. The TIP shall cover a period of no less than four years, be updated at least every four years, and be approved by the MPO and the Governor. However, if the TIP covers more than four years, the FHWA and the FTA will consider the projects in the additional years as informational. The TIP may be updated more frequently, but the cycle for updating the TIP must be compatible with the STIP development and approval process. The TIP expires when the FHWA/FTA approval of the STIP expires. Copies of any updated or revised TIPs must be provided to the FHWA and the FTA. In nonattainment and maintenance areas subject to transportation conformity requirements, the FHWA and the FTA, as well as the MPO, must make a conformity determination on any updated or amended TIP, in accordance with the Clean Air Act requirements and the EPA’s transportation conformity regulations (40 CFR part 93).

(b) The MPO shall provide all interested parties with a reasonable opportunity to comment on the proposed TIP as required by § 450.316(a). In addition, in nonattainment area TMAs, the MPO shall provide at least one formal public meeting during the TIP development process, which should be addressed through the participation plan described in § 450.316(a). In addition, the TIP shall be published or otherwise made readily available by the MPO for public review, including (to the maximum extent practicable) in electronically accessible formats and means, such as the World Wide Web, as described in § 450.316(a).

(c) The TIP shall include capital and non-capital surface transportation projects (or phases of projects) within the boundaries of the metropolitan planning area proposed for funding under 23 U.S.C. and 49 U.S.C. Chapter 53 (including transportation enhancements; Federal Lands Highway program projects; safety projects included in the State’s Strategic Highway Safety Plan; trails projects; pedestrian walkways; and bicycle facilities), except the following that may (but are not required to) be included:


2. Metropolitan planning projects funded under 23 U.S.C. 104(f), 49 U.S.C. 5305(d), and 49 U.S.C. 5339;

3. State planning and research projects funded under 23 U.S.C. 505 and 49 U.S.C. 5305(e);

4. At the discretion of the State and MPO, State planning and research projects funded with National Highway System, Surface Transportation Program, and/or Equity Bonus funds;
(5) Emergency relief projects (except those involving substantial functional, locational, or capacity changes);

(6) National planning and research projects funded under 49 U.S.C. 5314; and

(7) Project management oversight projects funded under 49 U.S.C. 5327.

(d) The TIP shall contain all regionally significant projects requiring an action by the FHWA or the FTA whether or not the projects are to be funded under title 23 U.S.C. Chapters 1 and 2 or title 49 U.S.C. Chapter 53 (e.g., addition of an interchange to the Interstate System with State, local, and/or private funds and congressionally designated projects not funded under 23 U.S.C. or 49 U.S.C. Chapter 53). For public information and conformity purposes, the TIP shall include all regionally significant projects proposed to be funded with Federal funds other than those administered by the FHWA or the FTA, as well as all regionally significant projects to be funded with non-Federal funds.

(e) The TIP shall include, for each project or phase (e.g., preliminary engineering, environment/NEPA, right-of-way, design, or construction), the following:

(1) Sufficient descriptive material (i.e., type of work, termini, and length) to identify the project or phase;

(2) Estimated total project cost, which may extend beyond the four years of the TIP;

(3) The amount of Federal funds proposed to be obligated during each program year for the project or phase (for the first year, this includes the proposed category of Federal funds and source(s) of non-Federal funds. For the second, third, and fourth years, this includes the likely category or possible categories of Federal funds and sources of non-Federal funds);

(4) Identification of the agencies responsible for carrying out the project or phase;

(5) In nonattainment and maintenance areas, identification of those projects which are identified as TCMs in the applicable SIP;

(6) In nonattainment and maintenance areas, included projects shall be specified in sufficient detail (design concept and scope) for air quality analysis in accordance with the EPA transportation conformity regulation (40 CFR part 93); and

(7) In areas with Americans with Disabilities Act required paratransit and key station plans, identification of those projects that will implement these plans.

(f) Projects that are not considered to be of appropriate scale for individual identification in a given program year may be grouped by function, work type, and/or geographic area using the applicable classifications under 23 CFR 771.117(c) and (d) and/or 40 CFR part 93. In nonattainment and maintenance areas, project classifications must be consistent with the “exempt project” classifications contained in the EPA transportation conformity regulation (40 CFR part 93). In addition, projects proposed for funding under title 23 U.S.C. Chapter 2 that are not regionally significant may be grouped in one line item or identified individually in the TIP.
(g) Each project or project phase included in the TIP shall be consistent with the approved metropolitan transportation plan.

(h) The TIP shall include a financial plan that demonstrates how the approved TIP can be implemented, indicates resources from public and private sources that are reasonably expected to be made available to carry out the TIP, and recommends any additional financing strategies for needed projects and programs. In developing the TIP, the MPO, State(s), and public transportation operator(s) shall cooperatively develop estimates of funds that are reasonably expected to be available to support TIP implementation, in accordance with §450.314(a). Only projects for which construction or operating funds can reasonably be expected to be available may be included. In the case of new funding sources, strategies for ensuring their availability shall be identified. In developing the financial plan, the MPO shall take into account all projects and strategies funded under title 23 U.S.C., title 49 U.S.C. Chapter 53 and other Federal funds; and regionally significant projects that are not federally funded.

For purposes of transportation operations and maintenance, the financial plan shall contain system-level estimates of costs and revenue sources that are reasonably expected to be available to adequately operate and maintain Federal-aid highways (as defined by 23 U.S.C. 101(a)(5)) and public transportation (as defined by title 49 U.S.C. Chapter 53). In addition, for illustrative purposes, the financial plan may (but is not required to) include additional projects that would be included in the TIP if reasonable additional resources beyond those identified in the financial plan were to become available. Starting [Insert date 270 days after effective date], revenue and cost estimates for the TIP must use an inflation rate(s) to reflect “year of expenditure dollars,” based on reasonable financial principles and information, developed cooperatively by the MPO, State(s), and public transportation operator(s).

(i) The TIP shall include a project, or a phase of a project, only if full funding can reasonably be anticipated to be available for the project within the time period contemplated for completion of the project. In nonattainment and maintenance areas, projects included in the first two years of the TIP shall be limited to those for which funds are available or committed. For the TIP, financial constraint shall be demonstrated and maintained by year and shall include sufficient financial information to demonstrate which projects are to be implemented using current and/or reasonably available revenues, while federally supported facilities are being adequately operated and maintained. In the case of proposed funding sources, strategies for ensuring their availability shall be identified in the financial plan consistent with paragraph (h) of this section. In nonattainment and maintenance areas, the TIP shall give priority to eligible TCMs identified in the approved SIP in accordance with the EPA transportation conformity regulation (40 CFR part 93) and shall provide for their timely implementation.

(j) Procedures or agreements that distribute sub-allocated Surface Transportation Program funds or funds under 49 U.S.C. 5307 to individual jurisdictions or modes within the MPA by pre-determined percentages or formulas are inconsistent with the legislative provisions that require the MPO, in cooperation with the State and the 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 metropolitan transportation planning process.
(k) For the purpose of including projects funded under 49 U.S.C. 5309 in a TIP, the following approach shall be followed:

(1) The total Federal share of projects included in the first year of the TIP shall not exceed levels of funding committed to the MPA; and

(2) The total Federal share of projects included in the second, third, fourth, and/or subsequent years of the TIP may not exceed levels of funding committed, or reasonably expected to be available, to the MPA.

(l) As a management tool for monitoring progress in implementing the transportation plan, the TIP should:

(1) Identify the 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 previous TIPs;

(2) List major projects from the previous TIP that were implemented and identify any significant delays in the planned implementation of major projects; and

(3) In nonattainment and maintenance areas, describe the progress in implementing any required TCMs, in accordance with 40 CFR part 93.

(m) During a conformity lapse, MPOs may prepare an interim TIP as a basis for advancing projects that are eligible to proceed under a conformity lapse. An interim TIP consisting of eligible projects from, or consistent with, the most recent conforming metropolitan transportation plan and TIP may proceed immediately without revisiting the requirements of this section, subject to interagency consultation defined in 40 CFR part 93. An interim TIP containing eligible projects that are not from, or consistent with, the most recent conforming transportation plan and TIP must meet all the requirements of this section.

(n) Projects in any of the first four years of the TIP may be advanced in place of another project in the first four years of the TIP, subject to the project selection requirements of § 450.330. In addition, the TIP may be revised at any time under procedures agreed to by the State, MPO(s), and public transportation operator(s) consistent with the TIP development procedures established in this section, as well as the procedures for the MPO participation plan (see § 450.316(a)) and FHWA/FTA actions on the TIP (see § 450.328).

(o) In cases that the FHWA and the FTA find a TIP to be fiscally constrained and a revenue source is subsequently removed or substantially reduced (i.e., by legislative or administrative actions), the FHWA and the FTA will not withdraw the original determination of fiscal constraint. However, in such cases, the FHWA and the FTA will not act on an updated or amended TIP that does not reflect the changed revenue situation.

§ 450.326 TIP revisions and relationship to the STIP.

(a) An MPO may revise the TIP at any time under procedures agreed to by the cooperating parties consistent with the procedures established in this part for its development and approval. In nonattainment or maintenance areas for transportation-related pollutants, if a TIP amendment involves non-exempt projects (per 40 CFR part 93), or is replaced with an updated TIP, the MPO and the FHWA and the FTA must make a new conformity
determination. In all areas, changes that affect fiscal constraint must take place by amendment of the TIP. Public participation procedures consistent with § 450.316(a) shall be utilized in revising the TIP, except that these procedures are not required for administrative modifications.

(b) After approval by the MPO and the Governor, the TIP shall be included without change, directly or by reference, in the STIP required under 23 U.S.C. 135. In nonattainment and maintenance areas, a conformity finding on the TIP must be made by the FHWA and the FTA before it is included in the STIP. A copy of the approved TIP shall be provided to the FHWA and the FTA.

(c) The State shall notify the MPO and Federal land management agencies when a TIP including projects under the jurisdiction of these agencies has been included in the STIP.

§ 450.328 TIP action by the FHWA and the FTA.

(a) The FHWA and the FTA shall jointly find that each metropolitan TIP is consistent with the metropolitan transportation plan produced by the continuing and comprehensive transportation process carried on cooperatively by the MPO(s), the State(s), and the public transportation operator(s) in accordance with 23 U.S.C. 134 and 49 U.S.C. 5303. This finding shall be based on the self-certification statement submitted by the State and MPO under § 450.334, a review of the metropolitan transportation plan by the FHWA and the FTA, and upon other reviews as deemed necessary by the FHWA and the FTA.

(b) In nonattainment and maintenance areas, the MPO, as well as the FHWA and the FTA, shall determine conformity of any updated or amended TIP, in accordance with 40 CFR part 93. After the FHWA and the FTA issue a conformity determination on the TIP, the TIP shall be incorporated, without change, into the STIP, directly or by reference.

(c) If the metropolitan transportation plan has not been updated in accordance with the cycles defined in § 450.322(c), projects may only be advanced from a TIP that was approved and found to conform (in nonattainment and maintenance areas) prior to expiration of the metropolitan transportation plan and meets the TIP update requirements of § 450.324(a). Until the MPO approves (in attainment areas) or the FHWA/FTA issues a conformity determination on (in nonattainment and maintenance areas) the updated metropolitan transportation plan, the TIP may not be amended.

(d) In the case of extenuating circumstances, the FHWA and the FTA will consider and take appropriate action on requests to extend the STIP approval period for all or part of the TIP in accordance with § 450.218(c).

(e) If an illustrative project is included in the TIP, no Federal action may be taken on that project by the FHWA and the FTA until it is formally included in the financially constrained and conforming metropolitan transportation plan and TIP.

(f) Where necessary in order to maintain or establish operations, the FHWA and the FTA may approve highway and transit operating assistance for specific projects or programs, even though the projects or programs may not be included in an approved TIP.
§ 450.330 Project selection from the TIP.

(a) Once a TIP that meets the requirements of 23 U.S.C. 134(j), 49 U.S.C. 5303(j), and § 450.324 has been developed and approved, the first year of the TIP shall constitute an “agreed to” list of projects for project selection purposes and no further project selection action is required for the implementing agency to proceed with projects, except where the appropriated Federal funds available to the metropolitan planning area are significantly less than the authorized amounts or where there are significant shifting of projects between years. In this case, a revised “agreed to” list of projects shall be jointly developed by the MPO, the State, and the public transportation operator(s) if requested by the MPO, the State, or the public transportation operator(s). If the State or public transportation operator(s) wishes to proceed with a project in the second, third, or fourth year of the TIP, the specific project selection procedures stated in paragraphs (b) and (c) of this section must be used unless the MPO, the State, and the public transportation operator(s) jointly develop expedited project selection procedures to provide for the advancement of projects from the second, third, or fourth years of the TIP.

(b) In metropolitan areas not designated as TMAs, projects to be implemented using title 23 U.S.C. funds (other than Federal Lands Highway program projects) or funds under title 49 U.S.C. Chapter 53, shall be selected by the State and/or the public transportation operator(s), in cooperation with the MPO from the approved metropolitan TIP. Federal Lands Highway program projects shall be selected in accordance with procedures developed pursuant to 23 U.S.C. 204.

(c) In areas designated as TMAs, all 23 U.S.C. and 49 U.S.C. Chapter 53 funded projects (excluding projects on the National Highway System (NHS) and projects funded under the Bridge, Interstate Maintenance, and Federal Lands Highway programs) shall be selected by the MPO in consultation with the State and public transportation operator(s) from the approved TIP and in accordance with the priorities in the approved TIP. Projects on the NHS and projects funded under the Bridge and Interstate Maintenance programs shall be selected by the State in cooperation with the MPO, from the approved TIP. Federal Lands Highway program projects shall be selected in accordance with procedures developed pursuant to 23 U.S.C. 204.

(d) Except as provided in § 450.324(c) and § 450.328(f), projects not included in the federally approved STIP shall not be eligible for funding with funds under title 23 U.S.C. or 49 U.S.C. Chapter 53.

(e) In nonattainment and maintenance areas, priority shall be given to the timely implementation of TCMs contained in the applicable SIP in accordance with the EPA transportation conformity regulations (40 CFR part 93).

§ 450.332 Annual listing of obligated projects.

(a) In metropolitan planning areas, on an annual basis, no later than 90 calendar days following the end of the program year, the State, public transportation operator(s), and the MPO shall 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.

(b) The listing shall be prepared in accordance with § 450.314(a) and shall include all federally funded projects authorized or revised to increase obligations in the preceding
APPENDIX D
Federal Regulations Applicable to MPOs

program year, and shall at a minimum include the TIP information under § 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.

(c) The listing shall be published or otherwise made available in accordance with the MPO’s public participation criteria for the TIP.

§ 450.334 Self-certifications and Federal certifications.

(a) For all MPAs, concurrent with the submittal of the entire proposed TIP to the FHWA and the FTA as part of the STIP approval, the State and the MPO shall certify at least every four years that the metropolitan transportation planning process is being carried out in accordance with all applicable requirements including:

(1) 23 U.S.C. 134, 49 U.S.C. 5303, and this subpart;

(2) In nonattainment and maintenance areas, sections 174 and 176 (c) and (d) of the Clean Air Act, as amended (42 U.S.C. 7504, 7506 (c) and (d)) and 40 CFR part 93;

(3) Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d–1) and 49 CFR part 21;

(4) 49 U.S.C. 5332, prohibiting discrimination on the basis of race, color, creed, national origin, sex, or age in employment or business opportunity;

(5) Section 1101(b) of the SAFETEA–LU (Pub. L. 109–59) and 49 CFR part 26 regarding the involvement of disadvantaged business enterprises in USDOT funded projects;

(6) 23 CFR part 230, regarding the implementation of an equal employment opportunity program on Federal and Federal-aid highway construction contracts;

(7) The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) and 49 CFR parts 27, 37, and 38;

(8) The Older Americans Act, as amended (42 U.S.C. 6101), prohibiting discrimination on the basis of age in programs or activities receiving Federal financial assistance;

(9) Section 324 of title 23 U.S.C. regarding the prohibition of discrimination based on gender; and


(b) In TMAs, the FHWA and the FTA jointly shall review and evaluate the transportation planning process for each TMA no less than once every four years to determine if the process meets the requirements of applicable provisions of Federal law and this subpart.
(1) After review and evaluation of the TMA planning process, the FHWA and FTA shall take one of the following actions:

(i) If the process meets the requirements of this part and a TIP has been approved by the MPO and the Governor, jointly certify the transportation planning process;

(ii) If the process substantially meets the requirements of this part and a TIP has been approved by the MPO and the Governor, jointly certify the transportation planning process subject to certain specified corrective actions being taken; or

(iii) If the process does not meet the requirements of this part, jointly certify the planning process as the basis for approval of only those categories of programs or projects that the FHWA and the FTA jointly determine, subject to certain specified corrective actions being taken.

(2) If, upon the review and evaluation conducted under paragraph (b)(1)(iii) of this section, the FHWA and the FTA do not certify the transportation planning process in a TMA, the Secretary may withhold up to 20 percent of the funds attributable to the metropolitan planning area of the MPO for projects funded under title 23 U.S.C. and title 49 U.S.C. Chapter 53 in addition to corrective actions and funding restrictions. The withheld funds shall be restored to the MPA when the metropolitan transportation planning process is certified by the FHWA and FTA, unless the funds have lapsed.

(3) A certification of the TMA planning process will remain in effect for four years unless a new certification determination is made sooner by the FHWA and the FTA or a shorter term is specified in the certification report.

(4) In conducting a certification review, the FHWA and the FTA shall provide opportunities for public involvement within the metropolitan planning area under review. The FHWA and the FTA shall consider the public input received in arriving at a decision on a certification action.

(5) The MPO(s), the State(s), and public transportation operator(s) shall be notified of the actions taken under paragraphs (b)(1) and (b)(2) of this section. The FHWA and the FTA will update the certification status of the TMA when evidence of satisfactory completion of a corrective action(s) is provided to the FHWA and the FTA.

§ 450.336 Applicability of NEPA to metropolitan transportation plans and programs.
Any decision by the Secretary concerning a metropolitan transportation plan or TIP developed through the processes provided for in 23 U.S.C. 134, 49 U.S.C. 5303, and this subpart shall not be considered to be a Federal action subject to review under NEPA.

§ 450.338 Phase-in of new requirements.
(a) Metropolitan transportation plans and TIPs adopted or approved prior to July 1, 2007 may be developed using the TEA–21 requirements or the provisions and requirements of this part.
(b) For metropolitan transportation plans and TIPs that are developed under TEA–21 requirements prior to July 1, 2007, the FHWA/FTA action (i.e., conformity determinations and STIP approvals) must be completed no later than June 30, 2007. For metropolitan transportation plans in attainment areas that are developed under TEA–21 requirements prior to July 1, 2007, the MPO adoption action must be completed no later than June 30, 2007. If these actions are completed on or after July 1, 2007, the provisions and requirements of this part shall take effect, regardless of when the metropolitan transportation plan or TIP were developed.

(c) On and after July 1, 2007, the FHWA and the FTA will take action on a new TIP developed under the provisions of this part, even if the MPO has not yet adopted a new metropolitan transportation plan under the provisions of this part, as long as the underlying transportation planning process is consistent with the requirements in the SAFETEA–LU.

(d) The applicable action (see paragraph (b) of this section) on any amendments or updates to metropolitan transportation plans and TIPs on or after July 1, 2007, shall be based on the provisions and requirements of this part. However, administrative modifications may be made to the metropolitan transportation plan or TIP on or after July 1, 2007 in the absence of meeting the provisions and requirements of this part.

(e) For new TMAs, the congestion management process described in § 450.320 shall be implemented within 18 months of the designation of a new TMA.
Below is the state code applicable to MPOs:

CHAPTER 554
An Act to amend and reenact § 33.1-23.03:01 of the Code of Virginia and to amend the Code of Virginia by adding in Article 15 of Chapter 1 of Title 33.1 a section numbered 33.1-223.2:25, relating to duties and responsibilities of Metropolitan Planning Organizations.
[S 1112]
Approved March 25, 2011

Be it enacted by the General Assembly of Virginia:

1. That § 33.1-23.03:01 of the Code of Virginia is amended and reenacted and that the Code of Virginia is amended by adding in Article 15 of Chapter 1 of Title 33.1 a section numbered 33.1-223.2:25 as follows:

§ 33.1-23.03:01. Distribution of certain federal funds.

Metropolitan Planning Organizations (MPOs) as defined under Title 23 U.S.C. 134 and Section 8 of the Federal Transit Act shall be authorized to issue contracts for studies and to develop and approve transportation plans and improvement programs to the full extent permitted by federal law.

The Commonwealth Transportation Board (CTB), Virginia Department of Transportation, and Department of Rail and Public Transportation are directed to develop and implement a decision-making process that provides MPOs and regional transportation planning bodies a meaningful opportunity for input into transportation decisions that impact the transportation system within their boundaries. Such a process shall provide the MPOs and regional transportation planning bodies with the CTB priorities for development of the Six-Year Improvement Program and an opportunity for them to identify their regional priorities for consideration.

§ 33.1-223.2:25. Transportation planning duties and responsibilities of Metropolitan Planning Organizations.

The Metropolitan Planning Organizations (MPOs) of Virginia shall be responsible for the development of regional long-range transportation plans for the regions they represent in accordance with federal regulation. Each such long-range plan shall include a fiscally constrained list of all multimodal transportation projects, including those managed at the statewide level either by the Virginia Department of Transportation or the Virginia Department of Rail and Public Transportation. The purpose of the plan is to comply with federal regulations and provide the MPOs and the region a source of candidate projects for the MPOs’ use in developing regional Transportation Improvement Programs (TIPs) and serving as an input to assist the Commonwealth with the development of the statewide Long-Range Plan (VTrans).

The MPOs shall develop amendments for their regional TIPs in accordance with federal regulations. The MPOs shall be required to coordinate planning and programming actions with those of the Commonwealth and duly established public transit agencies in accordance with federal regulations.

The MPOs shall examine the structure and cost of transit operations within the regions they represent and incorporate the results of these inquiries in their plans and shall endorse long-range plans for assuring maximum utilization and integration of mass transportation facilities throughout the Commonwealth.

The MPOs shall conduct a public involvement process focused on projects and topics that will best enable them to develop and approve Long Range Transportation Plans (LRTPs) that shall be submitted for approval by their board and forwarded to the Commonwealth Transportation Board and updated as required by federal regulations.
To be completed and inserted within 60-days of the close of the fiscal year.
(This page intentionally left blank.)
AMENDMENTS

RRTPPO AMENDMENT ACTIONS

1. December 7, 2017 – RRTPO action to amend the Fiscal Year 2018 Unified Planning Work Program to program $392,065 in Fiscal Year 2017 Federal Transit Administration 5303 Carryover funds to work tasks 2.2 Performance Planning ($92,065), 2.3 Transit ($150,000), Richmond Rail (50,000) and 2.6 Bike and Pedestrian ($100,000).

2. March 1, 2017 – RRTPO action to amend the Fiscal Year 2018 Unified Planning Work Program to shift $95,000 in Federal Highway Administration PL funds from Task 2.9 Contingency Funding to work tasks 2.5 Freight and Intermodal ($25,000), 2.7 Air Quality and Environment (20,000), and 4.9 Financial Programming (50,000).
RRTPPO AGENDA 12/7/17; ITEM II.B.
FY18 UNIFIED PLANNING WORK PROGRAM (UPWP):
BUDGET AND WORK TASK AMENDMENT

Richmond Regional Transportation Planning Organization

On motion of James M. Holland, seconded by Patricia S. O’Bannon, the
Richmond Regional Transportation Planning Organization unanimously
approved the following resolution:

RESOLVED, that the Richmond Regional Transportation Planning
Organization (RRTPPO) amends the Fiscal Year 2018 Unified Planning
Work Program to program $392,065 in Fiscal Year 2017 Federal Transit
Administration 5303 Carryover funds to work tasks 2.2 Performance
Planning, 2.3 Transit, 2.4 Richmond Rail, and 2.6 Active Transportation.

BE IT FURTHER RESOLVED, that the RRTPPO action to amend the
UPWP as submitted meets all requirements noted in the VDOT/RRPDC
Agreement for the Utilization of Federal and State Funds to Support
Metropolitan Planning in the Richmond Area as provided in Article III,
Statement of Work, which includes VDOT and FHWA approval of this
RRTPPO action and amending the FY 2018 UPWP.

*******************************************************************************

This is to certify that the Richmond Regional Transportation Planning Organization
approved the above resolution at its meeting held December 7, 2017.

WITNESS:  

[Signature]
Sharon E. Robeson
Program Assistant
Richmond Regional Planning
District Commission

BY:

[Signature]
Barbara Schoeb Nelson
Secretary
Richmond Regional Transportation
Planning Organization

9211 Forest Hill Avenue, Suite 200 • Richmond, Virginia 23235 • Telephone: (804) 323-2033 • Fax: (804) 323-2025
www.richmondregional.org
APPENDIX G
FY 17 UPWP Amendments

RRRTPo Agenda 3/1/18; Item II.C.
FY18 Unified Planning Work Program
Budget Amendment

Richmond Regional Transportation Planning Organization

On motion of David T. Williams, seconded by W. Canova Peterson, IV, the Richmond Regional Transportation Planning Organization unanimously approved the following resolution:

Resolved, that the Richmond Regional Transportation Planning Organization (RRRTPo) amends the Fiscal Year 2018 Unified Planning Work Program to shift Federal Highway Administration (FHWA) PL funds from Task 2.9 Contingency Funding to the following tasks: 2.5 Freight and Intermodal, 2.7 Air Quality and Environment, and 4.0 Financial Programming as presented in the attached table “FY18 UPWP Agency Summary Budget Sheet,” dated March 1, 2018; and

Be It Further Resolved, that the RRRTPo action to amend the FY18 Unified Planning Work Program work task budgets and to transfer FHWA/PL funds meets all requirements noted in the VDOT/RRPDC Agreement for the Utilization of Federal and State Funds to Support Metropolitan Planning in the Richmond Area as provided in Article III – Statement of Work, which includes approval by the RRRTPo, the Virginia Department of Transportation (VDOT) and FHWA for the reallocation of funds between UPWP work tasks.

*******************************************************************************

This is to certify that the Richmond Regional Transportation Planning Organization approved the above resolution at its meeting held March 1, 2018.

Witness: Sharon E. Robeson
Program Assistant
Richmond Regional Planning District Commission

By: Barbara Schoeb Nelson
Secretary
Richmond Regional Transportation Planning Organization