RICHMOND REGIONAL
TRANSPORTATION PLANNING ORGANIZATION

UNIFIED PLANNING WORK PROGRAM
FISCAL YEAR 2017
July 1, 2016 – June 30, 2017

Approved as a Final Report by the
Richmond Regional Transportation Planning Organization
May 5, 2016

Reflects TPO approved amendments as of
May 4, 2017
ACKNOWLEDGMENTS

This report was prepared by the Richmond Regional Planning District Commission (RRPDC) staff through a cooperative process involving the City of Richmond, Counties of Charles City, Chesterfield, Goochland, Hanover, Henrico, New Kent, Powhatan, and the Town of Ashland, the Virginia Department of Transportation (VDOT), the Virginia Department of Rail and Public Transportation (DRPT), the Virginia Department of Aviation, the Capital Region Airport Commission, GRTC Transit System, the Richmond Metropolitan Authority, the Federal Highway Administration (FHWA), the Federal Transit Administration (FTA), the RRPDC and RideFinders, Inc., on behalf of the Richmond Regional Transportation Planning Organization (TPO). The contents of this work program reflect the views of the TPO. 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 (TPO) fully complies with Title VI of the Civil Rights Act of 1964 and related statutes and regulations in all programs and activities. The TPO 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.

NO DISCRIMINACIÓN

Aviso de Título VI abreviado al publicó: El Organización de Planeación Regional de Transporte de Richmond (TPO) cumple con el Título VI de la Ley de los Derechos Civiles de 1964 y con los estatutos y regulaciones relacionadas en todos los programas y actividades. TPO se esforzara en proveer acomodaciones razonables y servicios para personas que requieran asistencia especial para participar en esta oportunidad pública. Para más información sobre accesibilidad a la reunión o para obtener los documentos de reclamación del Título VI, entre a la página web (www.richmondregional.org) o llame al Coordinador del Título VI en 804-323-2033.

FY17 Unified Planning Work Program Amendment

Richmond Regional Transportation Planning Organization

On motion of Patricia S. O’Bannon, seconded by Larry J. Nordvig, the Richmond Regional Transportation Planning Organization unanimously approved the following resolution:

RESOLVED, that the Richmond Regional Transportation Planning Organization (RRTPo) amends the FY17 Unified Planning Work Program (UPWP), originally approved on May 5, 2016, to add $135,853 to work task 2.3, Transit, with $108,681 in FTA Section 5303 funds, $13,586 in state match funds, and $13,586 in local match funds.

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

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

WITNESS:

By:

Sharon E. Robeson
Program Assistant
Richmond Regional Planning District Commission

Barbara Schoeb Nelson
Secretary
Richmond Regional Transportation Planning Organization
# TABLE OF CONTENTS

## FISCAL YEAR 2017 UNIFIED PLANNING WORK PROGRAM

### I. INTRODUCTION

Richmond Regional TPO Mission Statement and Planning Priorities ........................................... 1 – 4
Budget and Funding ................................................................................................................... 5 – 8

### II. TASKS

#### 1.0 PROGRAM MANAGEMENT .......................................................................................... 9 – 14

1.1 TPO Program, Budget and Contract Administration ......................................................... 10 – 13
  1.1.1 Program Administration ............................................................................................ 10
  1.1.2 Budget and Contract Administration ....................................................................... 11

1.2 Unified Planning Work Program (UPWP) ...................................................................... 13 – 14

#### 2.0 TRANSPORTATION PLANNING .............................................................................. 15 – 46

2.1 Public Outreach and Equity Analysis .............................................................................. 16 – 18
  2.1.1 Title VI, Environmental Justice and Low Literacy/Limited English Proficiency: Policy, Program Analysis .................................................. 16
  2.1.2 Public Participation ................................................................................................ 17
  2.1.3 Elderly and Disability ............................................................................................... 18

2.2 Performance Measures and Transportation Data ............................................................ 19 – 20
  2.2.1 Transportation Data .................................................................................................. 19
  2.2.2 Regional Transportation and Land Use Performance Measures ......................... 19
  2.2.3 Federal Metropolitan Transportation Planning Measures and Targets .... 19
  2.2.4 Richmond Regional Bridge and Culvert Inventory & Structural Assessment.... 20

2.3 Transit ............................................................................................................................ 21 – 26
  2.3.1 Greater RVA Transit Vision Plan .............................................................................. 21
  2.3.2 Pulse: LadderSTEP and Transit Oriented Development .................................. 22
  2.3.3 Pulse TIGER Project .............................................................................................. 22
  2.3.4 Park and Ride, Other Multimodal Transportation Support .................................. 25
  2.3.5 GRTC Downtown Transfer Center ....................................................................... 26
  2.3.6 Paratransit, Coordinated Human Services Mobility Plan .................................... 28

2.4 Richmond Area Rail ....................................................................................................... 31 – 35
  2.4.1 DC2RVA: Washington to Richmond Southeast High Speed Rail ..................... 31
  2.4.2 Richmond Area Rail Studies .................................................................................. 32

2.5 Freight and Intermodal .................................................................................................. 37 – 40
  2.5.1 Commerce Corridor ............................................................................................... 37
  2.5.2 Freight Corridor Mapping and Geodatabase ......................................................... 38
  2.5.3 Richmond Marine Terminal .................................................................................. 39
  2.5.4 ChamberRVA Task Force ....................................................................................... 40

2.6 Active Transportation: Bicycle and Pedestrian ............................................................. 41 – 43
  2.6.1 Coordination with Local Bicycle and Pedestrian Planning .................................. 41
  2.6.2 Connectivity to Transit .......................................................................................... 42
  2.6.3 Advisory Committee, Organization and Work Group Support ......................... 42
  2.6.4 East Coast Greenway Off-Road Trail Location Coordination ............................ 42
2.7 Air Quality ........................................................................................................... 44 – 45
   2.71 Ozone Advance ................................................................................................. 44
   2.72 CMAQ Program Analysis .................................................................................. 44
2.8 Special Planning Efforts and Studies ................................................................ 46–48
   2.81 Virginia Association of MPOs (VAMPO) ......................................................... 46
   2.82 Regional Transportation Priorities ..................................................................... 46
   2.83 Capital Region Collaborative ............................................................................. 46
   2.84 Comprehensive Economic Development Strategy (CEDS) ......................... 47
   2.85 GO Virginia ....................................................................................................... 47
2.9 Metropolitan Transportation Plan ....................................................................... 49 – 50
   2.91 plan2040 ......................................................................................................... 49
   2.92 plan2045 ......................................................................................................... 50

3.0 TECHNOLOGY AND APPLICATIONS ......................................................... 51 – 61
   3.1 Socioeconomic Data ........................................................................................... 52 – 53
   3.2 Regional Travel Demand Model .......................................................................... 54 – 55
   3.3 Transportation Demand Management ............................................................. 56 – 61
       3.31 Congestion Management Process and Intelligent Transportation Systems ... 56
       3.32 RideFinders .................................................................................................. 57

4.0 FINANCIAL PROGRAMS ................................................................................. 62 – 67
   4.1 Transportation Improvement Program (TIP) .................................................... 63 – 64
       4.11 TIP Development ......................................................................................... 63
       4.12 TIP Analysis and Maintenance ...................................................................... 63
   4.2 Six-Year Improvement Program (SYIP) ............................................................ 65 – 67
       4.21 Regional Surface Transportation Program (RSTP) ...................................... 65
       4.22 Congestion Mitigation and Air Quality (CMAQ) ......................................... 65
       4.23 Transportation Alternatives Program ......................................................... 66
       4.24 FTA Section 5310: Enhanced Mobility of Seniors and Individuals with Disabilities .......................................................... 66
       4.25 High Priority, District Grant and State of Good Repair Programming ...... 67
       4.26 Metropolitan Transportation Plan (MTP) Financial Projections .............. 67

III. APPENDIX
   A. TPO Membership ............................................................................................... 71–72
   B. Richmond Regional TPO and Tri-Cities Area MPO Coordination .................... 73 – 74
   C. FY 16 UWP Year-End Report ............................................................................. 75 – 104
   D. Frequently Used Terms and Abbreviations ...................................................... 105 – 112
   E. Federal Regulations Applicable to MPOs ......................................................... 113 – 112
   F. State Code Applicable to MPOs ...................................................................... 143 – 144
   G. Amendments to FY 17 UPWP .......................................................................... 145 – 146
RICHMOND REGIONAL TPO
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 TPO Unified Planning Work Program (UPWP) is a well-functioning process and program which involves the public, interested parties, and the TPO as the policy body for transportation planning in the Richmond region providing for 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 MPO’s 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 TPO’s budget and work program for the upcoming fiscal year which begins on July 1, 2016 and concludes on June 30, 2017. Activities programmed in the UPWP address federal and state planning and programming requirements and address regional transportation planning issues and needs. Additionally, the UPWP addresses federal and state TPO planning and programming requirements which are required as a condition for the state and region to remain eligible for federal-aid highway and transit funds. The funding sources supporting the TPO program activities come from federal, state and local funds.

Funding Sources
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 TPO Regional Travel Demand Model development and analysis. These funds are matched by state sources with 80% federal funding (FHWA) and 20% state funding (VDOT). Table 1 represents the total annual “base allocation” for each fund source, excluding carry over or transfers, while Table 2 reflects the fluctuations in annual allocations (see page 2). The net change between the FY16 allocation and the FY17 PL and 5303 allocations is an increase of approximately three percent.

UPWP Document Format
The FY17 UPWP has been reorganized into four core program areas: Program Management, Transportation Planning, Technology and Applications, and Financial Programs. Program Management is the management and operations platform that support the remaining three
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 of these sections correlate to the goals approved by the TPO in the draft plan2040; this change was incorporated to address a recommendation from the September 2013 federal certification review report. The FY17 UPWP now includes an appendix section; this revision is intended to consolidate information that is necessary to understanding and implementing the TPO program requirements without combining it in the individual work tasks. The final format change is the linking of the “products” for each work effort with the “schedule” with the goal of creating a timeline for the work program where ongoing activities are differentiated from those with a targeted deadline.

As in past UPWP documents, there are work tasks that are included primarily as “project monitoring”; while TPO staff is a participating partner in the effort, the designated lead role is undertaken by another agency or organization such as GRTC, DRPT or VDOT. This is a requirement of FTA which requires projects and studies receiving FTA funding to be included in the UPWP; this is not a requirement shared by FHWA. Several projects including the GRTC Downtown Transfer Center, the Pulse TIGER grant, Richmond Area Rail Studies, and RideFinders are included in the “monitoring” category of work effort. Staff will work with RideFinders, GRTC and DRPT to incorporate their project updates into the work task which those organizations or agencies lead; these updates will be incorporated into the UPWP.

**Program Development and Planning Priorities**

As part of the UPWP development process, staff prepares a summary of work tasks based on anticipated needs for the TPO for the upcoming year and estimates the amount of staff time required for each effort. These work activities are then translated into corresponding budgets which are reflected in each section of the work program and include the proposed fund sources and the corresponding match sources. At this point in the budget process, an estimate of potential FTA Section 5303 Carry Over funding is not available; we project that this amount will be available following the close of the fiscal year. Should FY16 Section 5303 Carry Over funds become available, staff has identified four potential work efforts to receive these funds: Public Participation/Equity Analysis; Performance Measures and Data; Bicycle and Pedestrian; and/or Financial Programs: SYIP Development.

The FY17 UPWP is focusing the following areas: fully addressing the recommendations included in the federal certification report, improving our outreach and engagement in the community, completing existing work tasks that spanned from FY16 into FY17, as well as advancing a limited number of new initiatives. These priorities are outlined below and included in greater detail within each work task; a summary of the budget for the FY17 UPWP is attached.
Address Federal Certification Review Comments and Implementation of FAST Act and Other USDOT Priorities

- Review of TPO Bylaws (Task 1.1)
- Ensuring Disadvantaged Business Enterprise participation and process
- Linking the UPWP to the MTP goals: see table included in core program section
- 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 (Tasks 2.11, 2.12, and 2.13)
- Incorporate requirements of FAST Act into all elements of work program based on federal guidance
- Ladders of Opportunity and Models of Regional Cooperation

Completion of Existing Work Efforts

- Completion of Greater RVA Transit Vision Plan and evaluate how to incorporate elements into future work programs and plan2045 (Task 2.31)
- Completion of the plan2040 long-range plan (Task 2.9)
- From the Needs and Gaps Assessment of the Transportation Disadvantaged, complete the evaluation or possible organizations needed to support the “Coordinating Entity” role for transportation (Task 2.36)
- House Bill 2: regional coordination of project development and submission of regional applications; participate in State of Good Repair project identification and advancement (Task 4.2)
- Update of Title VI Plan and Public Participation Plan (Task 2.1)

New Initiatives

- Expanded use and development of Regional Travel Demand Model including identifying opportunities for small area, sub-area, corridor and scenario planning efforts (Task 3.2)
- Initiate and complete the Commerce Corridor transportation planning effort (Task 2.5)
- Facilitate regional conversation on defining and advancing the East Coast Greenway off-road trail route on a jurisdiction by jurisdiction basis (Task 2.6)
### AGENCY BUDGET SUMMARY SHEET

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

**FY 2017 UPWP - RICHMOND REGIONAL TPO**

**April 6, 2017**

<table>
<thead>
<tr>
<th>Task No/ Abbreviation</th>
<th>RRTP Budget</th>
<th>GRAND</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PL</td>
<td>5303</td>
</tr>
<tr>
<td>-----------------------</td>
<td>----</td>
<td>------</td>
</tr>
<tr>
<td>1.1 Program Admin</td>
<td>320,000</td>
<td>18,000</td>
</tr>
<tr>
<td>1.2 UPWP and Budget</td>
<td>31,300</td>
<td>40,000</td>
</tr>
<tr>
<td>2.1 Public Outreach/Equity</td>
<td>111,200</td>
<td>82,000</td>
</tr>
<tr>
<td>2.2 Performance Measures</td>
<td>41,000</td>
<td>17,000</td>
</tr>
<tr>
<td>2.3 Transit</td>
<td>24,646</td>
<td>225,596</td>
</tr>
<tr>
<td>2.4 Richmond Rail</td>
<td>3,500</td>
<td>15,000</td>
</tr>
<tr>
<td>2.5 Freight-Intermodal</td>
<td>100,000</td>
<td>15,000</td>
</tr>
<tr>
<td>2.6 Bike &amp; Pedestrian</td>
<td>18,600</td>
<td>38,000</td>
</tr>
<tr>
<td>2.7 Air Quality</td>
<td>3,000</td>
<td></td>
</tr>
<tr>
<td>2.8 Special Planning Studies</td>
<td>55,000</td>
<td></td>
</tr>
<tr>
<td>2.9 Metro Transp Plan (MTP)</td>
<td>120,500</td>
<td>20,000</td>
</tr>
<tr>
<td>3.1 Socioeconomic</td>
<td>6,500</td>
<td></td>
</tr>
<tr>
<td>3.2 RegTravel Demand Model</td>
<td>118,600</td>
<td>13,000</td>
</tr>
<tr>
<td>3.3 Transp Demand Mgmt</td>
<td>47,000</td>
<td>8,000</td>
</tr>
<tr>
<td>4.1 TIP: Development/Maint</td>
<td>105,000</td>
<td>50,000</td>
</tr>
<tr>
<td>4.2 Financial Program: SYIP</td>
<td>130,600</td>
<td>38,000</td>
</tr>
<tr>
<td><strong>TOTAL ($)</strong></td>
<td>1,236,446</td>
<td>579,596</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 TPO budget.

(2) RSTP funds for Regional Travel Demand Model

(3) FY16 FTA Section 5303 Carryover Funds
**FUNDING SOURCES SUMMARY SHEET**

**FHWA PL/SPR; FTA SEC 5303; OTHER PLANNING GRANTS**  
**FY 2017 UWP - RICHMOND REGIONAL TPO**  

**April 6, 2017**

| Task No./ Abbrev. | PL Federal | State  | Local  | 5303 Federal | State  | Local  | CO 5303 (2) Federal | State  | Local  | RSTP Federal | State  | Local  | VDOT SPR (1) Federal | State  | Local  | TOTAL Federal | State  | Local  | TOTAL Federal | State  | Local  | TOTAL Grand |
|------------------|------------|--------|--------|--------------|--------|--------|-------------------|--------|--------|---------------|--------|--------|------------------|--------|--------|---------------|--------|--------|---------------|--------|--------|---------------|--------|--------|---------------|
| 1.1 Program Admin | 256,000    | 32,000 | 32,000 | 14,400       | 1,800  | 1,800  | -                 | -      | -      | -             | 80,000 | 20,000 | 270,400         | 33,800 | 33,800 | 338,000       |
| 1.2 UPWP and Budget | 25,040    | 3,130  | 3,130  | 32,000       | 4,000  | 4,000  | -                 | -      | -      | -             | -      | -      | 57,040          | 7,130  | 7,130  | 71,300        |
| 2.1 Public Outreach/Equity | 88,960   | 11,120 | 11,120 | 65,600       | 8,200  | 8,200  | 48,000           | 6,000  | 6,000  | -             | -      | -      | 202,560         | 25,320 | 25,320 | 253,200       |
| 2.2 Performance Measures | 32,800    | 4,100  | 4,100  | 13,600       | 1,700  | 1,700  | 32,000           | 4,000  | 4,000  | -             | -      | -      | 78,400          | 9,800  | 9,800  | 98,000        |
| 2.3 Transit | 19,717    | 2,465  | 2,465  | 180,475      | 22,560 | 22,560 | -                 | -      | -      | -             | -      | -      | 200,192         | 25,025 | 25,025 | 250,242       |
| 2.4 Richmond Rail | 2,800     | 350    | 350    | 12,000       | 1,500  | 1,500  | -                 | -      | -      | -             | -      | -      | 14,800          | 1,850  | 1,850  | 18,500        |
| 2.5 Freight-Intermodal | 80,000   | 10,000 | 10,000 | 12,000       | 1,500  | 1,500  | -                 | -      | -      | -             | -      | -      | 92,000          | 11,500 | 11,500 | 115,000       |
| 2.6 Bike & Pedestrian | 14,880    | 1,860  | 1,860  | 30,400       | 3,800  | 3,800  | 33,491           | 4,186  | 4,186  | -             | -      | -      | 78,771          | 9,846  | 9,846  | 98,464        |
| 2.7 Air Quality | 2,400    | 300    | 300    | -            | -      | -      | -                 | -      | -      | -             | 2,400  | 300    | 300             | 3,000  |         |                |
| 2.8 Special Planning Studies | 44,000   | 5,500  | 5,500  | -            | -      | -      | -                 | -      | -      | -             | 44,000 | 5,500  | 5,500           | 55,000 |         |                |
| 2.9 Metro Transp Plan (MTP) | 96,400   | 12,050 | 12,050 | 16,000       | 2,000  | 2,000  | -                 | -      | -      | -             | 112,400 | 14,050 | 14,050          | 140,500 |         |                |
| 3.1 Socioeconomic | 5,200    | 650    | 650    | -            | -      | -      | -                 | -      | -      | -             | 5,200  | 650    | 650             | 6,500  |         |                |
| 3.2 RegTravelDemandModel | 94,880   | 11,860 | 11,860 | 10,400       | 1,300  | 1,300  | -                 | -      | -      | -             | 185,280 | 33,160 | 33,160          | 231,600 |         |                |
| 3.3 TranspDemandMgmt | 37,600   | 4,700  | 4,700  | 6,400        | 800    | 800    | -                 | -      | -      | -             | 44,000 | 5,500  | 5,500           | 55,000 |         |                |
| 4.1 TIP: Dev/Maint | 84,000   | 10,500 | 10,500 | 40,000       | 5,000  | 5,000  | -                 | -      | -      | -             | 124,000 | 15,500 | 15,500          | 155,000 |         |                |
| 4.2 Financial Program: SYIP | 104,480  | 13,060 | 13,060 | 30,400       | 3,800  | 3,800  | -                 | -      | -      | -             | 134,880 | 16,860 | 16,860          | 168,000 |         |                |
| **TOTAL ($)** | 989,157  | 123,645| 123,645| 354,994      | 44,374 | 44,374 | 113,491          | 14,186 | 14,186 | 80,000       | 80,000 | 80,000 | 80,000          | 1,537,642 | 202,205 | 202,205       | 1,922,053 |         |                |

**NOTES:**
(1) VDOT SPR funds are shown for information purposes; these funds are not included in the TPO budget.  
(2) FY16 FTA Section 5303 Carryover Funds
1.0 PROGRAM MANAGEMENT

Through the management of the TPO program, our goal is a well-functioning process which involves the public, interested parties, and the TPO as the policy body for transportation planning in the Richmond region providing for a multi-modal, continuing, comprehensive, and cooperative transportation planning and programming process.

The TPO programs and activities are administered and managed by the RRPDC Director of Transportation with contract management provided by the RRPDC Finance and Contracts Administrator. Oversight of the TPO program is provided by the Executive Director with finance and human resources support from the Assistant Executive Director.
1.1 **Program, Budget and Contract Administration**

A. **Objective and Description**

This task provides the ongoing administrative support needed to maintain the TPO and TPO 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 TPO program by providing legal and other financial services related to the TPO program.

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

The RRPDC serves as lead staff for TPO program administration with VDOT Richmond District staff providing support through its participation on the TPO 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 TPO work tasks.

B. **Work Elements**

1.11 **Program Administration**

a. Provide for general maintenance and administration of the TPO “3-C” process, TPO, and TPO committees and work groups, including direct costs to support the process. Work elements include the support and documentation of TPO board and committee meetings and other meetings as appropriate.

b. Perform review activities under various local, state, and federal programs including Commonwealth Intergovernmental Review Process, State Route projects and Environmental Impact Statements and Assessments.

c. Coordinate review and presentation activities with RRPDC 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.

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

e. Review and comment as appropriate on legislative and regulatory activities affecting transportation planning and programming, and perform activities necessary to ensure TPO compliance with applicable state and federal rules and regulations.
f. Attend seminars, meetings, webinars/webcasts, workshops, and conferences related to TPO activities.

g. Review of TPO Bylaws: the last comprehensive review of the TPO bylaws was conducted in the early 1990’s and the September 2013 TPO 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 board adoption by June 2017.

h. The following activities are provided by VDOT in support of the TPO program:

1. Maintain current highway facilities inventory and monitor regional travel patterns.
2. Provide traffic data forecasts for design of highway facilities.
3. Provide technical assistance to RRPDC, local jurisdictions, and other agencies concerning transportation.
4. Review site plans as requested.
5. Review federal regulations and guidance related to TPO planning and programming requirements and update/revise the TPO’s work program, procedures and activities as appropriate addressing FAST Act and other federal requirements.

1.12 Budget and Contract Administration

a. Provide for use of legal counsel and audit services, under the direction of the RRPDC Executive Director, for administering federal and state contracts, meeting reporting requirements, and other activities and services necessary and appropriate for staffing the TPO.

b. VDOT/RRPDC Standard Project Administration Agreement management for use of RSTP funds to support on-call consultant services for staff work in conducting various activities with the regional travel demand model (RTDM).

c. PL Agreement and Section 5303 Agreement

d. Quarterly billing

e. Mid-year and end-of-year budget review and analysis

f. Staff 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 Convergent Technologies Group under contract for services with the RRPDC.

C. Agency Participation

RRPDC, RRTPO, VDOT, DRPT, local governments, GRTC, CRAC, RMTA, FHWA, FTA, FRA, EPA, VDEQ, VDA, RideFinders.
D. Budget and Funding

<table>
<thead>
<tr>
<th>Source</th>
<th>PL</th>
<th>5303</th>
<th>SPR</th>
<th>FY 16 CO 5303</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal</td>
<td>256,000</td>
<td>14,400</td>
<td>80,000</td>
<td></td>
<td>270,400</td>
</tr>
<tr>
<td>State</td>
<td>32,000</td>
<td>1,800</td>
<td>20,000</td>
<td></td>
<td>33,800</td>
</tr>
<tr>
<td>Local</td>
<td>32,000</td>
<td>1,800</td>
<td></td>
<td></td>
<td>33,800</td>
</tr>
<tr>
<td>TOTAL</td>
<td>320,000</td>
<td>18,000</td>
<td>*100,000</td>
<td></td>
<td>338,000</td>
</tr>
</tbody>
</table>

NOTE: * VDOT SPR funds are shown for information purposes; these funds are not included in the TPO budget.

E. Products and Schedule

TPO Program Administration
Ongoing

Review of Bylaws
June 2017

TPO Program Contracts/Financial Management
Ongoing

TPO Quarterly Financial and Work Status Reports
Financial reimbursement reports for RRPDC staff expenses due to VDOT (for PL) and to DRPT (for Section 5303) within 30 days following the end of each quarter.

TPO Year-end Financial and Work Status Report
Year-end financial and work status (i.e., fourth quarter) report due to VDOT for PL funds and to DRPT for Section 5303 funds within 60 days following the end of this fiscal year.

VDOT/RRPDC Standard Project Administration Agreement for RTDM Consultant Services
- RTDM (Regional Travel Demand Model) work orders prepared and submitted as per the services agreement
- Financial reimbursement and work progress report for consultant services

TPO Mid-year Budget Review and Analysis
- Staff review of FY 17 staff time allocations, direct costs and expenses by UPWP task prepared in December 2016
- Ongoing monthly reports prepared on staff time charged to UPWP work tasks

TPO/RRPDC Computer Support Services
Ongoing
1.2 Unified Planning Work Program (UPWP)

A. Objective and Description

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

B. Work Elements

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 EDAC meetings.

c. Solicit input from local government, GRTC, VDOT, and DRPT on proposed transportation planning studies of interest to the TPO 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 staff time and direct costs, and identify available funding and commitment of local match funds.

e. Prepare final work program document and submit for TPO approval; secure approvals from TPO, VDOT/DRPT, FHWA, FTA, and other agencies as appropriate; and distribute final UPWP document including posting on RRPDC/TPO website. Amend adopted UPWP as per TPO action to reflect updates to staffing/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.

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>5303</th>
<th>FY 16 CO 5303</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal</td>
<td>25,040</td>
<td>32,000</td>
<td>57,040</td>
<td></td>
</tr>
<tr>
<td>State</td>
<td>3,130</td>
<td>4,000</td>
<td>7,130</td>
<td></td>
</tr>
<tr>
<td>RRPDC</td>
<td>3,130</td>
<td>4,000</td>
<td>7,130</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>31,300</td>
<td>40,000</td>
<td>71,300</td>
<td></td>
</tr>
</tbody>
</table>
E. Products and Schedule

FY 2017 UPWP Maintenance and Amendments
Ongoing

FY 2018 UPWP Development
November 2016 – May 2017
2.0 **Transportation Planning**

The TPO is charged with developing transportation plans and programs which provide for the development of transportation facilities which function as a “seamless” multimodal system. The process for developing these plans must consider all modes of transportation, and must, to the maximum extent feasible, be continuing, cooperative, and comprehensive – the three elements of the federal “3-C” process.

There are nine work tasks identified in the Transportation Planning section of the UPWP. These tasks are consistent with plan2035 and directly align with the goals approved by the TPO board as the guiding principles for developing the plan2040 long-range 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 planning process that provides a better transportation system 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 involvement in the TPO process, including public meetings, the review of the TIP, and transportation plan documents, efforts and processes.

The TPO’s citizen participation process includes two active and involved standing committees appointed by the TPO board: the Citizens Transportation Advisory Committee (CTAC) and the Elderly and Disabilities Advisory Committee (EDAC). The CTAC membership includes representation from all of the TPO local jurisdictions and other interested parties, while the EDAC membership reflects consumers and organizations representing seniors, individuals with disabilities, and persons with low income. These two committees advise the TPO on plans, studies, issues, and other matters related to the planning of transportation systems and services.

In addition to supporting these two standing committees, TPO staff will participate on various work groups related to the transportation needs of all persons in the region. Particular 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 TPO work program. Staff will support annual public meetings to increase awareness of transportation issues and opportunities, and post committee meetings, agendas and plan/document summaries on the website. This work will be in addition to other activities identified in the Public Participation Plan. Staff will submit draft documents as directed by the TPO for public review and make these documents publicly accessible and provide an opportunity for open public comment at all regularly scheduled TPO, TAC, CTAC and EDAC meetings.

B. Work Elements

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

a. Attend/participate in Title VI training courses offered by FHWA, FTA, VDOT and/or DRPT.

b. Prepare and submit to FTA’s Regional Civil Rights Officer through DRPT the TPO’s 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 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 Service data. Additional data sources may include school lunch
programs, employment data, etc. for the annual update of the TPO’s Title VI Plan and related equity analysis activities including disparate impacts of the projects in the long-range plan and the TIP.

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 and EDAC.

f. Evaluate if formal committee structure is a barrier to participation on EDAC and if greater participation could be achieved by a less formal “workgroup” organizational structure.

2.12 Public Participation

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

b. Website: meeting agendas and minutes, notices, reports, newsletters, plan documents, and other information relating to the TPO 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 TPO 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 TPO review meetings and review process for initial citizen input for TPO plans and programs at key points in the planning and programming process through final action by the TPO.

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 TPO plans and programs or requesting public input. This activity will also include the development of informational fact sheets on TPO 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 MTP development process and other planning process.

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

i. Notices: Provide/distribute notice for all TPO board and committee meetings to area news media and interested parties. When appropriate, prepare and distribute press releases.
j. TPO 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 TPO bylaws, and new/revised requirements based on federal planning regulations.

k. Meeting Reports: Summaries of TPO meetings prepared and provided to CTAC and EDAC; CTAC and EDAC meeting summaries and resolutions prepared and submitted to the TPO and reported at TPO board meetings.

2.13 Elderly and Disability

a. TPO 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.

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

C. Agency Participation

RRPDC, RRTPO, VDOT, DRPT, local governments, GRTC, CRAC, FHWA, FTA, RMTA, RideFinders, CTAC and EDAC

D. Budget and Funding

<table>
<thead>
<tr>
<th>Source</th>
<th>Type PL</th>
<th>5303</th>
<th>FY 16 CO</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal</td>
<td>89,960</td>
<td>65,600</td>
<td>48,000</td>
<td>202,560</td>
</tr>
<tr>
<td>State</td>
<td>11,120</td>
<td>8,200</td>
<td>6,000</td>
<td>25,320</td>
</tr>
<tr>
<td>Local</td>
<td>11,120</td>
<td>8,200</td>
<td>6,000</td>
<td>25,320</td>
</tr>
<tr>
<td>TOTAL</td>
<td>111,200</td>
<td>82,000</td>
<td>60,000</td>
<td>253,200</td>
</tr>
</tbody>
</table>

E. Products and Schedule

Title VI, Environmental Justice and Low Literacy/Limited English Proficiency
Title VI Plan Update: October 2016
Other related planning: ongoing

Public Participation
Public Participation Plan Update: October 2016
Website Development: December 2016
Other related planning: ongoing

Elderly and Disability
Other related planning: ongoing
2.2 Performance Measures and Transportation Data

A. Objective and Description

Final federal regulations and rules on the Highway Safety Improvement Plan (HSIP) and Safety were issued on March 15, 2016. 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, TPO staff will monitor these activities, review and report on them as appropriate, and participate in webinars, conferences, and training sessions as needed. Staff will then work with FHWA, FTA, VDOT and DRPT to incorporate these new requirements into the TPO’s planning and programming process in the work program to address these requirements.

This work task also provides for the development of databases and reports on the region’s transportation system/network and to provide GIS support for other TPO work tasks.

B. Work Elements

2.21 Transportation Data and GIS

a. Development and maintenance of transportation planning, programming, and related mapping efforts to support TPO plans, programs, studies and reports. This work effort provides information and data to support reports and programming efforts.

b. In addition to US Census and ACS data, this effort maintains the functional classification (FC) and national highway system (NHS) data sets, the travel time/congestion data, accident data, and bicycle count data.

c. Census Transportation Planning Package (CTPP) – Review and analyze CTPP data as it becomes available.

2.22 Regional Transportation and Land Use Performance Measures

a. Regional Transportation and Land-Use Performance Measures: Annual review and update of state-required and TPO-approved regional transportation and land-use performance measures and targets; corresponding report completed and posted on website by October 31 annually.

b. 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 TPO board as part of the review and approval of the annual performance measures update.

2.23 Federal Metropolitan Transportation Planning Measures and Targets

a. 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
Performance Measures and Transportation Data

reliability, freight movement and economic vitality, environmental sustainability, and reduced project delivery delays.

b. With new MAP-21 requirements for performance management measures and targets that are to be addressed in the TIP, staff will review using the Annual Listing of Obligated Projects to address these new requirements.

2.24 Bridge and Culvert Inventory & Structural Report

The Richmond Regional Bridge and Culvert Inventory & Structural Report builds on the previous report approved by the TPO Board 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 TPO approval.

C. Agency Participation

RRPDC, RRTPO, VDOT, RMTA, DRPT, local governments

D. Budget and Funding

<table>
<thead>
<tr>
<th>Source</th>
<th>PL</th>
<th>5303</th>
<th>FY 16 CO 5303</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal</td>
<td>32,800</td>
<td>13,600</td>
<td>32,000</td>
<td>78,400</td>
</tr>
<tr>
<td>State</td>
<td>4,100</td>
<td>1,700</td>
<td>4,000</td>
<td>9,800</td>
</tr>
<tr>
<td>Local</td>
<td>4,100</td>
<td>1,700</td>
<td>4,000</td>
<td>9,800</td>
</tr>
<tr>
<td>TOTAL</td>
<td>41,000</td>
<td>17,000</td>
<td>40,000</td>
<td>98,000</td>
</tr>
</tbody>
</table>

E. Products and Schedule

Development and Maintenance of Transportation Data
Ongoing

Regional Transportation and Land-Use Performance Measures and Targets
Report: October 2016

Federal Metropolitan Transportation Planning Measures and Targets
Ongoing

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

A. Objective and Description

The TPO’s primary focus for transit planning in the Richmond area in FY 2017 will be on completion of the Greater RVA Transit Vision Plan and on work required of the GRTC Pulse Bus Rapid Transit (BRT) project. The Transit Vision Plan should provide a blueprint for planning the region’s public transportation services while work tasks for the GRTC Pulse (tasks 2.32, Pulse LadderSTEP and Transit Oriented Development; and 2.33 Pulse TIGER Project) and the GRTC Transfer Center (task 2.35) will provide for the planning and development of critical mass transit infrastructure in the center of the Richmond Region.

Paratransit needs for the Richmond Region are addressed through the Coordinated Human Services Mobility Plan (CHSMP), which covers both the Richmond TPO area and rural areas outside of the TPO. In addition, the TPO plans to move forward to develop recommendations for establishing a regional agency/organization or a new entity to coordinate and/or provide paratransit services for the transportation disadvantaged in the Richmond region.

B. Work Elements

2.31 Greater RVA Transit Vision Plan

a. DRPT is leading development of a Transit Vision Plan for the Richmond region. This work effort began in August 2015 and was included in the FY16 UWP. The process spans two fiscal years with completion anticipated by October 2016. Work on this plan is being performed by consultants under contract to DRPT; consultant services is budgeted at $306,477 using FTA Section 5304 funds.

b. The plan will examine existing gaps in the Richmond region’s transit service, existing and future population and employment conditions, travel patterns and land use and development patterns in order to develop a vision for transit. Recommendations will be developed for transit investment in the short-term, long-term and extended long-term timeframes with a horizon year of 2040. The end product for this effort will be a vision plan and accompanying maps, survey results, and other appendices to be used by the TPO to inform planning efforts in the development of the plan2045 long-range transportation planning efforts.

c. Outreach for this effort will be in three forms:
   1. A Regional Transit Forum
   2. A coordinated stakeholder engagement effort
   3. A public engagement effort

d. The Richmond Regional Transit Vision Plan will consist of five tasks:
   1. Project Management
   2. Stakeholder Outreach and Public Engagement
   3. Data Collection and Analysis
   4. SIR Research and Outreach Support:
5. Alternatives Analysis and Development of Recommendations

2.32 Pulse: LadderSTEP and Transit Oriented Development

a. 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 will provide the expertise to assess opportunities for TOD along the Pulse route and especially in Greater Fulton.

b. Technical assistance from USDOT will have two major components. The first, and smaller component, will be a market assessment of the station areas along the Pulse route, aimed at identifying the station areas with the greatest near-term TOD potential. The larger part of the assistance will be devoted to assisting the planning effort for successful, equitable TOD in the Orleans Station/Fulton area. The two work efforts will be conducted concurrently and both will include recommendations in the form of “action plans” that can be used to guide additional work.

2.33 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. Pulse service is expected to begin in October 2017; as with this type of construction project work progress is weather-dependent.

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 a number of different routes. By consolidating service along Broad Street into one main trunk route that provides fast, reliable and frequent service, GRTC may be in a position to reallocate some vehicle resources and help mitigate congestion; thereby improving traffic conditions for all travelers. The potential to improve public transportation along the major east/west route in the City of Richmond became the impetus for a Bus Rapid Transit (BRT) line to augment service 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 work is occurring August 16, 2016 into October 2016 (estimated to end the week of October 24, 2016 - as of October 25, 2016) on primarily the south side of Broad Street between Thompson Street and Laurel Street. Temporary work zones typically involve 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 are also temporarily closed. Specific details for this work are 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/, the “what, when and where” project hotline.

Phase I of station work is expected to begin October 31, 2016. Station construction will occur in multiple locations along the project simultaneously. Stations are organized into “groups,” which are expected to occur in phases from October 2016 to October 2017.

Final Pulse operations are expected to begin October 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 at all times. 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 within the following approximate timeframes:

- Thompson Street to Laurel Street: August 2016 – October 2016. Utility work occurs on eastbound Broad Street on the south side sidewalk and adjacent lane.
- Allison Street to 5th Street: October 2016 – April 2017. Station work occurs in the median area.
- I-195 to Allison Street: March 2017 – July 2017. Station work occurs in the median area.
- Curbside Stations (Willow Lawn, Staples Mill, Main Street Station, Shockoe Bottom, East Riverfront and Orleans St): November 2016 – October 2017. Station work occurs in the sidewalk area and adjacent lane only at station locations.
- 4th Street to 12th Street Westbound: June 2017 – October 2017. Station work occurs in the sidewalk area. Westbound outside lane is closed.
- 4th Street to 12th Street Eastbound: August 2017 – October 2017. Station work occurs in the sidewalk area. Eastbound outside lane is closed.

Pulse service is expected to begin in October 2017. As always, work is weather and progress-dependent. Specific details for this work will be provided at least 48 hours in advance.

2.34 Park and Ride, Other Multimodal Transportation Support

Park and Ride Investment Strategy

As the regional Transportation Demand Management (TDM) agency, the TPO 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 strategy is administered by VDOT.

### 2.35 GRTC 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 according to 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 2016, 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.

2.36 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 allocated by both the TPO and by the Commonwealth Transportation Board (CTB). Note that TPO-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 Richmond TPO and Tri-Cities MPO.

At the TPO’s February 14, 2013 meeting, action was taken to designate DRPT as the FTA Section 5310 program funds designated recipient. As the designated recipient, DRPT is responsible for administering 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 TPO 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; TPO staff will provide technical assistance to DRPT and its consultant in conducting the TPO area and Richmond Region CHSMP update. TPO staff will also continue to provide assistance to 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’s Section 5310 “Enhanced Mobility of Seniors and Individuals with Disabilities Program.”

3. Monitor and report to the TPO, 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 Transportation Disadvantaged
   In FY 2016, the TPO completed work on the report Needs and Gaps Assessment for the Transportation Disadvantaged (report presented at the December 3, 2015 TPO board meeting). 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 TPO’s 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 TPO took action at its December 3, 2015 meeting to endorse the recommendations of the TPO ad hoc committee and to include in the FY 17 UPWP a task to explore the organizational structure to support a specialized transportation services coordination entity.
• Develop staff report providing recommendation for regional agency/organization or establishing a new entity to coordinate and/or provide paratransit services for the transportation disadvantaged in the Richmond region.

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

<table>
<thead>
<tr>
<th>Type</th>
<th>Source</th>
<th>PL</th>
<th>5303</th>
<th>FY 16 CO 5303</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal</td>
<td>19,717</td>
<td>71,794</td>
<td></td>
<td>91,511</td>
<td></td>
</tr>
<tr>
<td>State</td>
<td>2,464</td>
<td>8,974</td>
<td></td>
<td>11,438</td>
<td></td>
</tr>
<tr>
<td>Local</td>
<td>2,465</td>
<td>8,975</td>
<td></td>
<td>11,440</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>24,646</td>
<td>89,743</td>
<td></td>
<td>114,389</td>
<td></td>
</tr>
</tbody>
</table>

E. Products and Schedule

Greater RVA Transit Vision Plan
October 2016

Pulse: LadderSTEP and Transit Oriented Development
FTA Smart Growth America Planning effort completion: September 2016
Related planning: ongoing and project monitoring; City of Richmond is project lead

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

Park & Ride and Other Multimodal Transportation Support
Park and Ride Investment Strategy (Phase Two): Conducted by VDOT with TPO; schedule to be determined
Related planning: ongoing

GRTC Downtown Transfer Center
Ongoing, project monitoring; GRTC is project lead.

Coordinated Human Services Mobility Plan
FTA Section 5310 Funding Applications: September 2016 – February 1, 2017
Related planning: ongoing

Needs & Gaps Report to TPO
Recommendation for a Coordinating Entity: December 2016
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 (DRPT project lead)

DRPT was awarded a FY2010 FRA high speed rail grant for $44.3 million to conduct NEPA Tier II EIS 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 Richmond's Main Street Station and rejoins the CSX A-Line near Staples Mill Station. The study will also examine the potential for SEHSR to continue along the CSX A-Line from Centralia, over the James River and north to CSX’s Acca Yard. From Richmond the corridor extends northward along the CSX Richmond, Fredericksburg and Potomac Subdivision (RF&P) to Arlington, Virginia. The segment also includes the following improvement areas in the Richmond Region: CSX Peninsula Subdivision between AM Junction and Beulah to the east and Bucking 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 of the alternatives considered and will commit to mitigate unavoidable environmental impacts.

As a participating partner, the TPO will coordinate with DRPT on work activities associated with advancing the Tier II EIS. Additional work efforts may include exploring the establishment of a “Bus Bridge” service between the Amtrak station at Staples Mill and Main Street Station, and the application of technology to alert passengers at unmanned stations (Ashland) of approaching trains as a safety enhancement.

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

**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*, in order to ensure that Virginia’s rail plans are consistent with federal funding requirements. The VSRP has been incorporated into the Commonwealth’s long-range multi-modal transportation plan, *VTrans 2040*.

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

**Tri-Cities MPO Multimodal Station Location Study**
On behalf of the Tri-Cities Area Metropolitan Planning Organization (MPO), the Crater Planning District Commission (CPDC) is sponsoring a National Environmental Policy Act (NEPA) study of several potential locations for a multimodal 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 in order to expand services. This expansion is needed not only for increased passenger rail demand that has occurred recently, but also needed to meet future demands. The impacts of an improved station will be documented in an Environmental Assessment (EA) which is required under the National Environmental Policy Act. 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 a number of 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.

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 is undergoing repair and upgrades including tie and track replacement inside the Port (completed) and repairs to a CSX siding adjacent to the port that is currently awaiting funding.
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>Type</th>
<th>PL</th>
<th>5303</th>
<th>FY 16 CO 5303</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal</td>
<td></td>
<td>2,800</td>
<td>12,000</td>
<td></td>
<td>14,800</td>
</tr>
<tr>
<td>State</td>
<td></td>
<td>350</td>
<td>1,500</td>
<td></td>
<td>1,850</td>
</tr>
<tr>
<td>Local</td>
<td></td>
<td>350</td>
<td>1,500</td>
<td></td>
<td>1,850</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>3,500</td>
<td>15,000</td>
<td></td>
<td>18,500</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 2016
Final Tier II EIS: 2017
Related Planning: Ongoing and project monitoring; DRPT is lead

Richmond Area Rail Studies
Ongoing and project monitoring
(This page intentionally left blank.)
2.5 **Freight and Intermodal**

### A. Objective and Description

Intermodal transportation utilizes more than one form of transportation to ship goods to their final 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 final 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 via 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 TPO will be promoting a high quality of life for our region.

### B. Work Elements

#### 2.5.1 Commerce Corridor

The Richmond Regional Transportation Planning Organization (TPO) is partnering with the Virginia Office of Intermodal Planning and Investment (OIPI) to develop a comprehensive analysis of existing and future transportation needs and the prioritization of those infrastructure investments along the “Commerce Corridor”. The study is titled the *Commerce Corridor: Transportation Connectivity, Accessibility and Economic Opportunity Study* and capitalizes on the Richmond Marine Terminal (RMT) transportation node and the surrounding I-95 corridor from the James River to Route 10 in Chesterfield County. In addition to OIPI, the TPO staff is working with interested partners in the City of Richmond, Chesterfield County, Virginia Department of Rail and Public Transportation, Port of Virginia, Virginia Office of Public Private Partnerships, VDOT Richmond District, and VDOT Central Office. The target for completing the study is by February 2017.

The impact of regional collaboration and leadership is evidenced by recent successes in the Commerce Corridor. Consistent growth of barge cargo volumes passing through RMT has resulted in fewer heavy trucks traveling on I-64 from Hampton Roads, and renewed private sector interest in industrial and commercial opportunities in the area around RMT and the broader Commerce Corridor; including the proposed development of a major manufacturing plant by the
Shandong Tranlin Paper Company at the James River Industrial Center in Chesterfield County. As the Commerce Corridor continues to grow into an inland logistics hub of statewide significance, increased freight activity will bring additional stresses to a transportation network already strained to safely and efficiently handle existing passenger and freight volumes.

The Port of Virginia’s 40-year lease of the RMT will create new opportunities for the region and stress existing transportation system deficiencies. Currently, the Commerce Corridor is experiencing safety, congestion and state of good repair challenges. Insufficient vertical clearances and deficient interchange designs at multiple locations along the corridor limit connectivity and accessibility to key regional freight activity centers as identified in the VTrans 2040 Regional Network Needs Assessment. System deficiencies in I-95 and the surrounding road and rail network range from pavement condition, signals and operations, vertical clearances, turning radii and geometrics to capacity constraints. The need for a comprehensive study of existing and future transportation needs is well documented and the results of the study effort will identify projects and position the investments to compete through all available federal, state and regional funding processes.

2.52 Freight Corridor Mapping and Geodatabase

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

In FY 2016, TPO staff began an effort to identify and map the regional freight transportation network (roadways, rail, and ports) and regional nodes of freight-intensive land uses. Staff compiled data from the ‘Federal Primary Highway Freight System’, ‘Virginia Multimodal Freight Network’ and ‘Richmond/Tri-Cities Regional Multimodal Freight Network’ in order 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.

b. In the FY17 UPWP the foundational work described above will be used as a tool and built upon to complete the following tasks:

- 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 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 TPO 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 TPO 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 TPO 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.

- 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.
- Ongoing staff support and coordination with POV for maintaining and expanding the “64 Express” barge service between Hampton Roads and the Richmond region.
2.54 chamberRVA Task Force

The chamberRVA has established a Task Force focused on economic development around the Richmond Marine Terminal. The Task Force 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. The Task Force is established for an 18-month period with quarterly meetings and additional subcommittee meetings. Five standing sub-committees have been established: Innovation, Land Management and Business Development, Logistics, Transportation, and Workforce.

TPO staff is serving on the Task Force and is leading the Transportation Subcommittee work effort.

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 16 CO 5303</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal</td>
<td>80,000</td>
<td>12,000</td>
<td></td>
<td>92,000</td>
</tr>
<tr>
<td>State</td>
<td>10,000</td>
<td>1,500</td>
<td></td>
<td>11,500</td>
</tr>
<tr>
<td>Local</td>
<td>10,000</td>
<td>1,500</td>
<td></td>
<td>11,500</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100,000</td>
<td>15,000</td>
<td></td>
<td>115,000</td>
</tr>
</tbody>
</table>

E. Products and Schedule

Commerce Corridor Transportation Plan
February 2017

Freight Corridor Mapping and Geodatabase
Ongoing

Richmond Marine Terminal
Ongoing

chamberRVA Task Force: Richmond Marine Terminal
October 2017 Task Force effort concludes
Related planning: ongoing
2.6 **Active Transportation: Bicycle and Pedestrian**

A. **Objective and Description**

Federal legislation requires that TPO activities provide for all means of transportation, “including accessible pedestrian walkways and bicycle transportation facilities”. This task helps to satisfy federal regulations by ensuring that there are a sufficient number of projects which minimize transportation-related fuel consumption and air pollution, and which protect and enhance the environment and improve quality of life. The Metropolitan Transportation Plan (MTP) must include existing and proposed transportation facilities that include pedestrian walkways and bicycle facilities to function with other modes as an integrated transportation system. Additional emphasis should be given to those facilities that serve important national and regional transportation functions in the MTP.

This task provides TPO staff time in support of work by area groups, organizations and local governments to advance bicycle and pedestrian studies, programs and projects in the Richmond region. Efforts to improve bicycle and pedestrian access, whether on or off-road are in keeping with the Virginia Department of Conservation (DCR) and Recreation 2013 Virginia Outdoors Plan (VOP), the 1993 Regional Greenways Plan, and various efforts already underway in the Region. The Virginia Capital Trail was completed in 2015 and the East Coast Greenway (ECG), a trail with the vision of connecting cities and towns from Florida to Maine, requires a regional thoroughfare through this region and needs a local effort to support it. The James River Heritage Trail (JRHT) is shown in the VOP running along the south shore of the James River in Chesterfield and Powhatan counties and the City of Richmond. Both the ECG and the JRHT are shown in the VOP as proposed trails.

The plan2035 included significant revisions to the TPO’s 2031 LRTP bicycle and pedestrian element by identifying major regional/multi-state such as U.S. routes 1 and 76, East Coast Greenway and Virginia Capital Trail facilities. The plan also takes a “bottom-up” approach with local governments developing bicycle and pedestrian facilities, designating and signing bicycle routes and multi-use trails that can eventually be linked to establish a well-defined regional bicycle and pedestrian network. The plan2035 also looks at regional demographic characteristic such as area concentrations of households with zero or one car only, to identify areas where bicycle and pedestrian projects may have a higher need. The GRTC transit service area is also identified with the intent of improving pedestrian and bicycle access to GRTC bus service.

B. **Work Elements**

2.61 *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 \textit{plan}2040 update.

d. The \textit{plan}2035 identifies how bicycle and pedestrian facilities are addressed in local government comprehensive plans, reviews their subdivision and zoning ordinances to identify implementation tools for bicycle and pedestrian facilities, and identifies the jurisdiction’s existing and proposed bicycle and pedestrian corridors. This data should be reviewed an updated on an annual basis to determine progress in policy/planning and regional needs.

\textbf{2.62 Connectivity to Transit}

a. Work with GRTC, City of Richmond, Henrico and Chesterfield counties staff to identify proposed improvements for pedestrian and bicycle facilities along GRTC bus routes and within GRTC’s local bus service area.

b. FTA guidelines have established a recommended service area to plan for pedestrians and bicyclist access to transit; staff will work with GRTC and local governments to promote these planning considerations, and may also identify a limited number of areas where improved pedestrian and bicycle access should be studied in order to identify projects that can improve safe and efficient access to GRTC transit services.

\textbf{2.63 Advisory Committee, Organization and Work Group Support}

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

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

c. 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, etc. and other pedestrian and bicycle plans, programs and studies.

\textbf{2.64 East Coast Greenway Off-road Trail Coordination}

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

\textbf{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, etc.
D. Budget, Staff and Funding

<table>
<thead>
<tr>
<th>Source</th>
<th>Type</th>
<th>FY 16 CO 5303</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal</td>
<td>PL</td>
<td>14,880</td>
<td>33,491</td>
</tr>
<tr>
<td></td>
<td>5303</td>
<td>30,400</td>
<td>78,771</td>
</tr>
<tr>
<td>State</td>
<td>1,860</td>
<td>3,800</td>
<td>9,846</td>
</tr>
<tr>
<td>Local</td>
<td>1,860</td>
<td>3,800</td>
<td>9,846</td>
</tr>
<tr>
<td>TOTAL</td>
<td>18,600</td>
<td>38,000</td>
<td>98,464</td>
</tr>
</tbody>
</table>

E. Products and Schedule

**Coordination with Local Bicycle and Pedestrian Planning**
Ongoing with annual report in February 2017

**Connectivity to Transit**
Phased initiative covering transit service area: ongoing with annual report on progress: February 2017

**Advisory Committee, Organization and Work Group Support**
Ongoing with annual report in February 2017

**East Coast Greenway (ECG) Off-Road Trail Coordination**

**Phase I:** coordination and facilitation of community meetings to create awareness of trail, related opportunities and confirm locations where trail will cross jurisdictions in the region: March 2017

**Phase II:** work with local jurisdictions to identify and prioritize off-road route alignment, engage community in confirming route alignment and incorporate ECG into local comprehensive plans, and potential funding strategy to begin implementation: ongoing
2.7 Air Quality

A. Objective and Description

Richmond-Petersburg area jurisdictions are currently in compliance with Clean Air Act air quality standards and the region is no longer in nonattainment or maintenance status. As a result, conducting an air quality conformity analysis is no longer a requirement for the TPO plans and programs. In an effort 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 staff for annual updates to the Richmond-Petersburg Area Ozone Advance Action Plan.

b. Provide periodic reports to TAC and the TPO 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 City of Richmond and counties of Charles City, Chesterfield, Hanover and Henrico.

d. Coordinate with DEQ to report on changes to federal regulations for air quality standards.

e. Ongoing administrative and technical supports for TPO 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, there are several that support programs utilizing Congestion Mitigation and Air Quality (CMAQ) funding. Within the TPO area, there are three programs that receive annual funding. 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.

C. Agency Participation

RRPDC, RRTPO, VDOT, DEQ, POV, RideFinders, City of Richmond
D. Budget and Funding

<table>
<thead>
<tr>
<th>Source</th>
<th>PL</th>
<th>5303</th>
<th>FY 16 CO 5303</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal</td>
<td>2,400</td>
<td></td>
<td>2,400</td>
<td></td>
</tr>
<tr>
<td>State</td>
<td>300</td>
<td></td>
<td>300</td>
<td></td>
</tr>
<tr>
<td>Local</td>
<td>300</td>
<td></td>
<td>300</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>3,000</td>
<td></td>
<td>3,000</td>
<td></td>
</tr>
</tbody>
</table>

E. Products and Schedule

**Ozone Advance**
Annual Report from DEQ: April 2017
Related planning: ongoing

**CMAQ Program Analysis**
Annual Report: February 2017
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 Director of Transportation.

B. Work Elements

2.81 Virginia Association of MPOs (VAMPO)
Virginia Association of Metropolitan Planning Organizations (VAMPO): VAMPO was formally established in mid-FY 2011 with the TPO taking action at its December 9, 2010 meeting to join. Staff will be an active participant and assist in VAMPO activities. Membership dues for each MPO are set at $550 per year; VAMPO holds quarterly board meetings and an annual training meeting for Virginia MPOs and partners.

2.82 Regional Transportation Priorities
The Regional Transportation Priority Projects selection process began in 1999 and continues to-date. The current list of priorities was selected by the TPO 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 and EDAC.

The TPO work program for fiscal year 2017 includes the adoption of a new process for selecting regional transportation priority projects; the candidate projects will come from the TPO plan2040 long-range plan. Following policy guidance from the TPO board, the development of a recommended process will be supported by a TAC subcommittee working with TPO staff.

2.83 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. It is a partnership to improve the quality of life across the Richmond Region of Virginia.
Through the TPO program, staff will coordinate with the CRC Transportation Action Team on issues of mutual interest and share TPO data to support the CRC Community Indicators project.

2.84 Comprehensive Economic Development Strategy

The 2014 Richmond Regional Comprehensive Economic Development Strategy (CEDS) is 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 TPO 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 close proximity to our region that have successfully secured US Economic Development Administration (EDA) funding for specific projects. Additional efforts will focus on how an active CEDS can support projects and initiatives, not just EDA funding.

2.85 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.

State government must provide incentives for strategic, job-focused collaboration in each region of the Commonwealth.

C. Agency Participation

RRPDC, RRTPO and other interested parties

D. Budget and Funding

<table>
<thead>
<tr>
<th>Source</th>
<th>Type</th>
<th>PL</th>
<th>5303</th>
<th>FY 16 CO 5303</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal</td>
<td>PL</td>
<td>44,000</td>
<td></td>
<td></td>
<td>44,000</td>
</tr>
<tr>
<td>State</td>
<td>PL</td>
<td>5,500</td>
<td></td>
<td></td>
<td>5,500</td>
</tr>
<tr>
<td>Local</td>
<td>PL</td>
<td>5,500</td>
<td></td>
<td></td>
<td>5,500</td>
</tr>
<tr>
<td>TOTAL</td>
<td>PL</td>
<td>55,000</td>
<td></td>
<td></td>
<td>55,000</td>
</tr>
</tbody>
</table>
E. **Products and Schedule**

**Virginia Association of MPOs**
- Board Membership: quarterly meetings and other as needed
- Annual MPO Training Workshop: May or June 2017

**Regional Transportation Priorities**
- Guidance from TPO Executive Committee: March 2017
- Review and recommendation by TAC: June 2017

**Capital Region Collaborative**
- Ongoing

**Comprehensive Economic Development Strategy**
- Ongoing

**GO Virginia**
- TBD following program approval; project monitoring.
2.9 Metropolitan Transportation Plan (MTP)

A. Objective and Description

The MTP, previously referred to as the 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 automobiles, 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 TPO’s adopted MTP to be eligible for federal-aid funds.

The current MTP, plan2035, was adopted by the TPO on July 12, 2012. The plan2040 update has been underway throughout the past two years and is expected to be approved by September 2017. The current plan has a horizon year of 2035, and was developed based on requirements of the 2005 federal transportation: Safe, Accountable, Flexible, and Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). The plan2035 includes both long-range and short-range strategies/actions that support the development of an integrated multimodal transportation system, designed to facilitate the safe and efficient movement of people and goods in the Richmond area. Additionally, the TPO must assess the impact of proposed projects on the region’s low-income, minority and limited English proficiency communities. Such an environmental justice assessment is conducted as part of the plan development process with the analysis and results included in the document.

B. Work Elements

2.9.1 plan2040

a. Completed major work activities; activities are based on scope of work approved by TPO January 29, 2015
   • Administrative/technical support for the MTP Advisory Committee.
   • Initiated public outreach/participation process; effort will continue through plan adoption.
   • Development of plan vision and goals.
   • Selection of draft project list based on fiscally constrained requirements, projected revenues, and project review and ranking process and in accordance with Allocation Guidelines.
   • Conduct Environmental Justice Analysis of proposed projects.
   • Update of Congestion Management Process (CMP).
   • Documentation activities for transportation modes, demographics, land-use, transportation network, and other sections of the MTP update as identified
in the scope of work and included in the 2012-2040 Socio-Economic Report.

b. Remaining work activities:
   - Public outreach: MTP process, projects and preliminary draft document
   - TPO authorization of formal public review of plan2040
   - TAC review
   - TPO Review and action: September 2016

c. Amendments and administrative modifications to the plan2040 as necessary

2.92 plan2045

a. Following the adoption of plan2040, the next comprehensive 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.

b. FHWA has recommended that the TPO consider introducing the scenario planning process into future long-range plans. While the TPO is very interested in incorporating the scenario planning process, there are capacity constraints that need to be overcome before undertaking a comprehensive regional scenario planning initiative. The TPO is in the initial phases of using the regional travel demand model for small area, sub-area or corridor analysis. The TPO will introduce scenario planning 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.

C. Agency Participation

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

E. Budget and Funding

<table>
<thead>
<tr>
<th>Type</th>
<th>Source</th>
<th>PL</th>
<th>5303</th>
<th>FY 16 CO 5303</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Federal</td>
<td>96,400</td>
<td>16,000</td>
<td></td>
<td>112,400</td>
</tr>
<tr>
<td></td>
<td>State</td>
<td>12,050</td>
<td>2,000</td>
<td></td>
<td>14,050</td>
</tr>
<tr>
<td></td>
<td>Local</td>
<td>12,050</td>
<td>2,000</td>
<td></td>
<td>14,050</td>
</tr>
<tr>
<td></td>
<td>TOTAL</td>
<td>120,500</td>
<td>20,000</td>
<td></td>
<td>140,500</td>
</tr>
</tbody>
</table>

D. Products and Schedule

plan2040
Public Review of Draft Plan:
TPO Action on plan2040: September 2017
Related planning: Ongoing
3.0 Technology and Applications

As part of the TPO’s 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 demand management (TDM) strategies are examples of the work efforts that will be incorporated in this section of the work program.

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

The TPO’s new RTDM will be used to support of future corridor plans, scenario planning efforts, planning studies and to support the development of plan2045, the regional long-range plan which will be adopted in 2021. The RTDM will also be 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, utilizing Transportation Demand Management (TDM) as a set of public planning processes, strategies and policies the TPO will evaluate congestion, travel demand, and seek to identify efficiencies and improvements 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.
3.1 Socioeconomic Data

A. Objective and Description

As part of the TPO’s regional transportation planning process, socioeconomic data is developed for use in various VDOT, TPO, and local plan and study activities. Examples of its use include: input for planning models, EIS, corridor studies, air quality conformity analysis, transit studies, etc.; it is also used to respond to information requests for market and other demographic studies.

In FY 2015, staff completed work on the 2012 base-year and the year 2040 forecasts for TAZ level demographic data (technical data and forecast report approved at the April 2, 2015 TPO board meeting). The Richmond Regional Socioeconomic Data Analysis report was completed and presented to the TPO board in November 2015. This report provides documentation of the methodology for the development of base year data and forecasts and presents regional trends and analysis for the region’s urban, suburban and rural areas.

New or additional TAZ level demographic data needs will be evaluated after the completion of plan2040. If additional base-year data and forecasts are needed for the travel demand model, the request will be reviewed and coordinated with the TAC before initiating the work effort.

B. Work Elements

a. RTDM Demographic Factors: If needed, work with RTDM consultants to identify demographic factors to be used as input to the trip generation model of the new RTDM. For example: demographic factors needed to conduct transit systems analysis as possible alternatives to employment data, etc.

b. Respond to information requests and provide technical assistance as appropriate, which requires use of the TPO’s 2012 base year data and 2040 forecasts.

c. VDOT and other local government work elements include compiling data for use in various special studies such as Environmental Impact Statements and Assessments. [VDOT work element].

d. Prepare data for interim years as requested by VDOT.

D. Agency Participation

RRPDC, RRTPO, VDOT, DRPT, local governments, Crater PDC

E. Budget and Funding

<table>
<thead>
<tr>
<th>Source</th>
<th>PL</th>
<th>5303</th>
<th>FY 16 CO 5303</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal</td>
<td>5,200</td>
<td></td>
<td></td>
<td>5,200</td>
</tr>
<tr>
<td>State</td>
<td>650</td>
<td></td>
<td></td>
<td>650</td>
</tr>
<tr>
<td>Local</td>
<td>650</td>
<td></td>
<td></td>
<td>650</td>
</tr>
<tr>
<td>TOTAL</td>
<td>6,500</td>
<td></td>
<td></td>
<td>6,500</td>
</tr>
</tbody>
</table>
F. Products and Schedule

RTDM Demographic Factors
Consult with RTDM on-call consultant on need for additional demographic data/forecasts and Subarea TAZ splits or other needs in use and application of RTDM (schedule if needed).
3.2 Regional Travel Demand Model (RTDM)

A. Objective and Description

The TPO’s new RTDM will be used to support of future corridor plans, scenario planning efforts, planning studies and to support the development of plan2045, the regional long-range plan which will be adopted in 2021. The RTDM will also be 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.

The RTDM will be managed primarily by TPO staff in conjunction with as-needed support from the on-call consultant. The on-call consultant will also provide support in maintaining and updating the RTDM and assisting and advising staff when conducting work on the long-range plan, other planning studies and alternatives analyses. TPO staff will also oversee management of funds and contract oversight for the on-call consultant. VDOT Central Office staff will continue its current RTDM support activities including statewide coordination and training, providing Cube Voyager software used to develop the RTDM, model development and enhancements, and model application and usage for state studies and plans.

B. Work Elements

a. Staff will utilize the RTDM for applications related to the current plan and studies and to determine system deficiencies in the existing and future transportation network based on the programmed assumptions from the 2012-2040 socioeconomic data and report.

b. The model will be used as a tool in TPO corridor studies and sub-area plans as identified regional plans.

c. The TPO will also develop a framework for making the model available to TPO member jurisdictions for use in local planning efforts.

d. TPO staff will be responsible for managing the documentation of changes and updates/upgrades to the model and coordinating the distribution of this information with VDOT and the Tri-Cities MPO.

e. TPO staff will conduct a freight corridor analysis.

f. TPO staff and Tri-Cities MPO will develop a process for coordination of model uses and enhancements for future work tasks.

C. Agency Participation

RRPDC, RRTPO, VDOT, DRPT, local government, Crater PDC
D. Budget and Funding

<table>
<thead>
<tr>
<th>Source</th>
<th>PL</th>
<th>5303</th>
<th>RSTP</th>
<th>FY 16 CO 5303</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal</td>
<td>94,880</td>
<td>10,400</td>
<td>80,000</td>
<td></td>
<td>185,280</td>
</tr>
<tr>
<td>State</td>
<td>11,860</td>
<td>1,300</td>
<td>20,000</td>
<td></td>
<td>33,160</td>
</tr>
<tr>
<td>Local</td>
<td>11,860</td>
<td>1,300</td>
<td></td>
<td></td>
<td>13,160</td>
</tr>
<tr>
<td>TOTAL</td>
<td>118,600</td>
<td>13,000</td>
<td>100,000</td>
<td></td>
<td>231,600</td>
</tr>
</tbody>
</table>

E. Products and Schedule

Work tasks as developed and approved by RRTPO/RRPDC
Ongoing

Cube Voyager software license renewal
October 2016
3.3 Transportation Demand Management

A. Objective and Description

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 (TPO) 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 TPO 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 TPO 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

B. Work Elements

3.3.1 Congestion Management Process and Intelligent Transportation Systems

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

b. 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. Update work on the CMP is conducted as an element of the long-range update; the TPO completed the update of the CMP work efforts with plan2040. Federal transportation regulations require the TPO 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 under title 23 U.S.C. and title 49 U.S.C. Chapter 53, through the use of travel demand reduction and operational management strategies (see Section 450.320 (a) of the TPO planning regulations)

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

d. VDOT is currently utilizing a consultant for Operations Program Management Support services associated with its Statewide Transportation Operation Center (TOC) Program through a public/private partnership arrangement for operating, providing software and management of all five TOCs and other service operations including Safety Service Patrols. As VDOT has the lead on ITS architecture and deployment in the region, the role of the ITS Work Group established by the TPO in 2011 has been re-evaluated. The work of this group will be incorporated into the regular and routine work of the TPO TAC including the following:

1. Annual review and report on travel time data from the I-95 Corridor Coalition Vehicle Probe Project (proprietary comprehensive travel time data) for all CMP network designated roads. Process data to identify congested road segments for AM and PM travel time periods.

2. Annual review and report on accident data, provided by VDOT, for all CMP network designated roads, plus those major roads (i.e., functionally classified as collector and above) in the Richmond Region’s rural transportation study area. Process data to identify high accident locations (i.e., segments and intersections).

3.32 RideFinders

In 1981, the Richmond Area MPO (now TPO) 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 remains today as a division of GRTC.

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

RideFinders is the TDM program that serves the Richmond Region. 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 has been functionally organized into the following work elements:
- Sales (to include transit fare media) and Outreach
- Commuter Store Administration
- Marketing, Education and Awareness
- Staffing
- Research/Performance Planning and Evaluation

Defined activities for the year include, but are not limited to the key performance indicators required by GRTC, TDM Performance data required by the Virginia Department of Rail and Public Transportation (VDRPT)’s Online Grant Administration (OLGA) system and a detailed work plan required by the Richmond Regional Transportation Planning Organization (TPO). The detailed work plan includes a description of work elements, associated staff, 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 TPO. 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, TPO, 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 engagements/presentations.

**RideFinders Management**

1. 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, but does not micromanage tactical day-to-day operations. RideFinders maintains a substantially independent operation within the parameters defined for the agency by GRTC. GRTC provides RideFinders with substantial operational and marketing support in the manner of outside consultants or vendors.

2. RideFinders Advisory Board (RAB)
   The RAB meets at least four times a year and is comprised of staff members of RideFinders, DRPT, TPO, Chesterfield County, Henrico County, the City of Richmond, Virginia Department of Environmental Quality (VDEQ), Crater Planning District Commission and the Greater Richmond Chamber. All are voting members of the RAB. RideFinders is in the process of revising its
Bylaws, and considering adding non-voting representatives from GRTC and FHWA. The RAB 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 VDRPT.

(Please note: Chesterfield County, Henrico County, the City of Richmond, GRTC and DRPT are also voting members of TAC; FHWA is a nonvoting member of TAC.)

Work activities include the following:

1. Sales and Outreach
   a. Identify employers, public and private schools, colleges and universities, residential neighborhoods, and any other entity that can benefit from carpooling, vanpooling, teleworking, walking/biking and public transportation to and from work or school in an overarching effort to reduce or mitigate congestion, reduce pollution, provide a more stress free commute, and enhance the overall quality of life in the Richmond Region.
   b. Transit Fare Media Sales: RideFinders Commuter Store sells GRTC Go Cards, CARE tickets for paratransit services and vanpool vouchers. The Go Cards are purchased by individual commuters and by employers enrolled in the Commuter Choice program or human service agencies which are allowed to purchase $1.50 and $3.00 transit Go Cards. The Commuter Choice program permits employers to offer employees a tax-free benefit to commute to work by bus or vanpool via an employer-paid benefit, an employee paid pre-tax benefit, or a share-the-fare benefit. RideFinders has assisted over 52 companies in developing, implementing and maintaining such programs. In addition, RideFinders has enrolled 26 companies in GRTC’s electronic swipecard program.
   c. Partnerships with other environmental or transportation-related entities, community events, and expositions to showcase RideFinders in the community by having staff man informational booths and/or operating the RideFinders Mobile Unit. Also participation with local and state government partners, public and private colleges, community organizations, Chambers of Commerce, and the public.

2. Commuter Store Administration
   Ongoing administration of the RideFinders program includes the Commuter Store operations and audits.

3. Marketing, Education & Awareness
   Program awareness is crucial for any customer-based organization. Marketing, education and awareness activities are built-in components to the RideFinders program. These consist of advertising, public relations, social media
engagement, mobile application usage, usage of the Team RideFinders character heroes, and information distribution. Program Awareness helps to induce and maintain the thought and the reality that TDM programs are essential for the Richmond region. These services are an ongoing process.

4. **Staffing**
Organizational development is necessary for the RideFinders program to continue. This includes staff recruitment (as necessary), training, development of support materials, coordination within GRTC and other transit and non-transit agencies, documentation of best practices, and feedback from on-the-job learning. RideFinders staffing includes the following:

- Two Outreach Specialists
- One RideFinders Program Manager
- One Client Services Coordinator
- One part-time Customer Relationship Specialist
- One Executive Director of the RideFinders program

5. **Research/Performance Planning and Evaluation**
Information from RideFinders Six-Year TDM Plan update, industry best practice, and relevant research is utilized for program development and implementation. RideFinders will supply data to TPO staff, by a date mutually agreed upon by RideFinders, VDOT, and TPO staff, for performance of an annual emissions reduction analysis that will be coordinated by TPO through the VDOT Environmental Division.

**C. Agency Participation**
RRPDC, RRTPO, RideFinders, VDOT, local governments and interested parties

**D. Project Budget** (This budget reflects RRPDC staff time to support Task 3.3.)

<table>
<thead>
<tr>
<th>Source</th>
<th>Type</th>
<th>FY 16 CO 5303</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal</td>
<td>PL</td>
<td>37,600</td>
<td>44,000</td>
</tr>
<tr>
<td>State</td>
<td></td>
<td>4,700</td>
<td>5,500</td>
</tr>
<tr>
<td>Local</td>
<td></td>
<td>4,700</td>
<td>5,500</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>47,000</td>
<td>55,000</td>
</tr>
</tbody>
</table>

**E. Products and Schedule**

**Congestion Management Process and Intelligent Transportation Systems**
Travel Time Data Report: September 2016
Accident Data Report: September 2016

**Develop new data update schedule to receive new accident data**
October 2016
RideFinders

1. RideFinders report that reflects the outputs and outcomes of the RideFinders programs and services will be prepared and provided annually by RideFinders (Annual Report) to RAB by November 1, 2016, and to the TAC on November 1, 2016. TPO staff will coordinate with VDOT Environmental on requesting the emissions reduction analysis that will be included in these reports.

2. A report that highlights the marketing awareness and education “flight plan” for advertising and the actual visuals for viewing will be provided by RideFinders to the RAB and TAC once a year. These include TV and radio commercials, Clean Air Campaign efforts, creative brochures, billboards, flyers, web banners and other media and public relations opportunities that brand the RideFinders name.

3. A tracking report reflecting all alternatives used by commuters registered in the existing rideshare software (GreenRide), and through outreach efforts will be developed by RideFinders and tracked monthly by staff to ensure outreach goals and objectives are met. These reports filter into the overall TAC and RAB reports as noted in “End Products” item 1 above.
4.0 **FINANCIAL PROGRAMS**

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 TPO. 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 TIP, it shows that sufficient funds are available, or are reasonably expected to become available in the near future for a project, project phase, or program to move forward for implementation. Projects must be included in the TPO’s adopted Transportation Improvement Program (TIP) in order for the implementing agency to submit its application for federal funds.

The TPO is responsible for developing and maintaining the TIP and has lead authority in allocating federal funds under the Regional Surface Transportation Program (RSTP) and the Congestion Mitigation and Air Quality (CMAQ) program, and the Transportation Alternatives Program (TAP). RSTP has been renamed Regional Surface Transportation Block Grant and TAP no longer exists except as a set-aside under the RSTBG program.

RSTP funds are allocated under federal formula to the Richmond Urbanized Area while CMAQ funds are allocated by federal formula to the state and these funds are sub-allocated by state formula to current or previously EPA designated non-attainment and maintenance areas in the state. Although the TPO 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 appropriate TPO and with VDOT and DRPT staff to recommend to the Board a list of CMAQ projects for inclusion in the SYIP with all six years of CMAQ funds anticipated to be available to the TPO to be programmed; that CMAQ projects will be programmed to facilitate maximization of the use of federal funds including fully funding project phases according to current schedules and cost estimates; and that CMAQ allocations be programmed centrally by VDOT and DRPT staff based on the recommended CMAQ projects according to CTB priorities and federal eligibility requirements.

<table>
<thead>
<tr>
<th>4.0 FINANCIAL PROGRAMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access to Employment</td>
</tr>
<tr>
<td>Transportation Improvement Program</td>
</tr>
<tr>
<td>Six-Year Improvement Program</td>
</tr>
</tbody>
</table>
4.1 **Transportation Improvement Program**

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 of funds actually or scheduled for allocation, type of improvement, and other appropriate information. The TIP also includes a financial plan summary, GRTC’s Financial Capacity documentation and certification, project implementation status, public participation and the MPO/State Statement of Certification.

B. **Work Elements**

4.11 **TIP Development**

a. **TPO FFY 15 – FFY 18 TIP**

   - The TPO’s current/FFY 15 – FFY 18 TIP remains valid through September, 2018. The next update for the TIP will be completed in FY 17 and will require collaboration between VDOT, DRPT, local jurisdictions, and other agencies/organizations.
   - MAP-21/FAST Act compliance activities will need to be incorporated into the TIP. As noted on the USDOT fact sheet “The TIP will include, to the maximum extent practicable, a description of the anticipated effect of the TIP toward achieving the performance targets established in the [Metropolitan Transportation] Plan, linking investment priorities to those performance targets.”

b. **Visualization Techniques** – Continue work to develop visual and graphic aids for use in TIP, RSTP, CMAQ and TAP documents and reports.

c. **Regionally Significant Projects** – Under VDOT guidance, coordinate identification of regionally significant public and private transportation projects and submit to VDOT.

d. **TIP availability in Electronically Accessible Format:** Post TPO adopted TIP and other appropriate documents on the RRPDC or RRTPO website.

4.12 **TIP Analysis and Maintenance**

a. **TIP Amendments/Adjustments**

   - Ongoing staff support for reviewing and processing amendments to the TIP.
   - Note that certain amendments (i.e., adjustments) can be processed by RRPDC staff in consultation with appropriate local government and/or regional agencies rather than being submitted for TPO review and action.

a. **Annual Listing of Obligated Projects**

   - Annual submission by VDOT and DRPT of projects that had funds obligated during the preceding federal fiscal year. VDOT and DRPT are required to submit these reports to RRPDC/TPO staff by November 30, which gives staff 30 days to review these reports, make appropriate
corrections in consultation with VDOT and DRPT, and post the final reports on the RRPDC website by December 31.

C. Agency Participation

RRPDC, RRTPO, 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 5303</th>
<th>FY 16 CO 5303</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal</td>
<td>84,000</td>
<td>40,000</td>
<td>124,000</td>
</tr>
<tr>
<td>State</td>
<td>10,500</td>
<td>5,000</td>
<td>15,500</td>
</tr>
<tr>
<td>Local</td>
<td>10,500</td>
<td>5,000</td>
<td>15,500</td>
</tr>
<tr>
<td>TOTAL</td>
<td>105,000</td>
<td>50,000</td>
<td>155,000</td>
</tr>
</tbody>
</table>

E. Products and Schedule

Development of FY 18 – FY 21 TIP
April 2017 – September 2017

Maintenance activities in support of the current TIP including processing of TIP amendment and adjustment requests.
Ongoing

Annual Listing of Obligated Projects Report
VDOT and DRPT to provide annual listing of actual project obligations during the preceding program year (i.e., federal fiscal year) to RRPDC by November 30, 2016 and final list to be posted on RRPDC/RRTPO web site by December 31, 2016.
4.2 Six-Year Improvement Program

A. Objective and Description

B. Work Elements

4.21 Regional Surface Transportation Program (RSTP)

a. RSTP Projects Review, Selection and Funds Allocation –
   • Conduct annual process for review, selection and funds allocation for RSTP funded projects.
   • Staff is also working to improve the content and presentation of proposed RSTP funded projects by providing brief background descriptions, location maps, cost estimates and funding information for each new project.
   • Conduct/review RSTP projects in GenMod for the initial SYIP.

b. Tracking Allocations for RSTP Funds and Financial Closeout for Active Projects
   • Ongoing staff support working with VDOT and DRPT staffs to track RSTP allocations made to individual projects and reallocation of funds through the “PD-24” process and through TPO/VDOT programming staffs workgroup meetings. Note that 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.
   • Annual report by TPO and VDOT staffs on financial closeout activities for the previous fiscal year. Reports are tentatively scheduled for the August or September TAC meeting.
   • Redevelopment of the RSTP tracking sheets into a searchable reference database.

4.22 Congestion Mitigation and Air Quality (CMAQ)

a. CMAQ Project Review, Selection and Funds Allocation
   • Conduct annual process for review, selection, CTB member consultation and funds allocation for CMAQ funded projects.
   • Staff is also working to improve the content and presentation of proposed CMAQ funded projects by providing brief background descriptions, location maps, cost estimates and funding information for each new project.
   • Conduct/review CMAQ projects in GenMod for the initial SYIP.

b. Tracking Allocations for CMAQ Funds and Financial Closeout for Active Projects
   • Ongoing staff support working with VDOT and DRPT staffs to track CMAQ allocations made to individual projects and reallocation of funds
through the “PD-24” process and through TPO/VDOT programming staffs workgroup meetings. Note that 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.

- Annual report by TPO and VDOT staffs on financial closeout activities for the previous fiscal year (i.e., July 1 to June 30). Reports are tentatively scheduled for the August or September TAC meeting.
- Redevelopment of the CMAQ tracking sheets into a searchable reference database.

4.23 Transportation Alternatives Program (TAP)

a. TAP Projects Review, Selection and Funds Allocation
   - The TAP application process is conducted by VDOT.
   - TAP project review and selection conducted in conjunction with and following the RSTP and CMAQ review/allocation process with recommended TAP projects and allocations submitted for TPO Executive Committee review and recommendation and for TPO review and action.

b. Tracking Allocations for TAP Funds and Financial Closeout for Active Projects –
   - Ongoing staff support working with VDOT and DRPT staffs to track TAP allocations made to individual projects and reallocation of funds through the “PD-24” process and through RRPDC/VDOT programming staffs workgroup meetings. Note that VDOT has developed a Financial Analysis Tool (FAT) spreadsheet that continues to be tested in the VDOT Richmond District for use in reporting and tracking all VDOT projects.
   - Annual report by RRPDC and VDOT staffs on financial closeout activities for the previous fiscal year (i.e., July 1 to June 30). Reports are tentatively scheduled for the August or September TAC meeting.
   - Redevelopment of the TAP tracking sheets into a searchable reference database.

4.24 House Bill 2: High Priority, District Grant and State of Good Repair Programming

a. During the 2014 session of the Virginia General Assembly, the House Bill 2 legislation was passed to establish new requirements for the prioritization of projects using objective and quantifiable analysis that considers, at a minimum, the following factors relative to the cost of the “project or strategy”:

   - congestion mitigation
   - economic development
   - accessibility, safety and environmental quality
As a Transportation Management Area (TMA), the TPO is also required to consider the additional factor of land-use and transportation coordination.

In FY 2017, the HB 2 project review, ranking and scoring process for certain deferral and state funded projects, including RSTP, CMAQ or TAP funding programs, will go through a full annual cycle with projects subject to HB2 and being selected for funding as part of the FY 18 – FY 23 SYIP anticipated to follow this schedule to be set.

4.25 **FTA Section 5310 Enhanced Mobility of Seniors and Individuals with Disabilities**

a. (See Task 2.36 Paratransit, CHSMP)

4.26 **Metropolitan Transportation Plan (MTP) Financial Projections**

TPO Financial Programs staff will support the MTP through the coordination and evaluation of financial projection data.

C. **Agency Participation**

RRPDC, RRTPO, 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>Type</th>
<th>Source</th>
<th>PL</th>
<th>5303</th>
<th>FY 16 CO 5303</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Federal</td>
<td>104,480</td>
<td>30,400</td>
<td></td>
<td>134,880</td>
</tr>
<tr>
<td></td>
<td>State</td>
<td>13,060</td>
<td>3,800</td>
<td></td>
<td>16,860</td>
</tr>
<tr>
<td></td>
<td>Local</td>
<td>13,060</td>
<td>3,800</td>
<td></td>
<td>16,860</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>130,600</td>
<td>38,000</td>
<td></td>
<td>168,600</td>
</tr>
</tbody>
</table>

E. **Products and Schedule**

**Maintenance of records tracking the programming of RSTP, CMAQ and TAP funds**

Ongoing

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

October 2016 – April 2017

**Annual Report on Closeout**

September 2016

**House Bill 2**

Ongoing
(This page intentionally left blank.)
APPENDIX

UNIFIED PLANNING WORK PROGRAM FISCAL YEAR 2017

July 1, 2016 – June 30, 2017
# 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</strong></td>
</tr>
<tr>
<td>Steve A. Elswick</td>
<td>Angela L. Gray</td>
</tr>
<tr>
<td>James M. Holland</td>
<td><strong>RMTA</strong></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><strong>Participating Nonvoting Members</strong></td>
</tr>
<tr>
<td>W. Canova Peterson, IV</td>
<td><strong>Citizens Transportation Advisory Committee (CTAC)</strong></td>
</tr>
<tr>
<td>Angela C. Kelly Wiecek</td>
<td>Robert P. Morris</td>
</tr>
<tr>
<td>Wayne T. Hazzard*</td>
<td>Amber B. Lancaster*</td>
</tr>
<tr>
<td><strong>Henrico County</strong></td>
<td><strong>Elderly and Disability Advisory Committee (EDAC)</strong></td>
</tr>
<tr>
<td>Patricia S. O’Bannon</td>
<td>Brian Montgomery</td>
</tr>
<tr>
<td>Frank J. Thornton</td>
<td>Chris M. Lloyd*</td>
</tr>
<tr>
<td>Thomas Branin*</td>
<td><strong>Federal Highway Administration (FHWA)</strong></td>
</tr>
<tr>
<td><strong>New Kent County</strong></td>
<td>Ivan Rucker</td>
</tr>
<tr>
<td>Patricia A. Paige</td>
<td><strong>Federal Transit Administration (FTA)</strong></td>
</tr>
<tr>
<td>C. T. Tiller, Jr.</td>
<td>Melissa McGill</td>
</tr>
<tr>
<td>W. Ray Davis, Jr.*</td>
<td><strong>MPO Chairman’s Citizen Appointees</strong></td>
</tr>
<tr>
<td>Thomas Evelyn*</td>
<td>(Vacant)</td>
</tr>
<tr>
<td><strong>Powhatan County</strong></td>
<td><strong>RideFinders, Inc.</strong></td>
</tr>
<tr>
<td>Larry J. Nordvig</td>
<td>Von S. Trisdale</td>
</tr>
<tr>
<td>Carson L. Tucker*</td>
<td>Cherika Ruffin*</td>
</tr>
<tr>
<td><strong>City of Richmond</strong></td>
<td><strong>Virginia Dept. of Aviation</strong></td>
</tr>
<tr>
<td>Andreas D. Addison</td>
<td>P. Clifford Burnette, Jr.</td>
</tr>
<tr>
<td>Parker C. Agelasto</td>
<td><strong>Virginia Dept. of Rail and Public Transportation</strong></td>
</tr>
<tr>
<td>Kimberly B. Gray</td>
<td>Jitender Ramchandani</td>
</tr>
<tr>
<td>Cynthia I. Newhille</td>
<td>Nick Britton*</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

---

## Participating Nonvoting Members

### Citizens Transportation Advisory Committee (CTAC)
- Robert P. Morris
- Amber B. Lancaster*

### Elderly and Disability Advisory Committee (EDAC)
- Brian Montgomery
- Chris M. Lloyd*

### Federal Highway Administration (FHWA)
- Ivan Rucker

### Federal Transit Administration (FTA)
- Melissa McGill

* 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 TPO) 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 TPO and Tri-Cities MPO shall be included in their respective annual planning work programs.

The following documents cooperative work efforts provided for in the TPO’s FY 17 UPWP.

1. TPO Maintenance: Staff for the Richmond TPO and Tri-Cities MPO share information of interest including MPO/TPO 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 TPO 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 TPO 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 TPO 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 all of the Richmond TPO 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 TPO 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 located 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 TPO 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 TPO/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 (administered by VDEQ).
Richmond Regional Transportation Planning Organization
FY 2016 Year-End Status Report

The following report summarizes RRPDC staff work activities and accomplishments for FHWA/PL and FTA Section 5303 funded work tasks in the TPO’s FY 2016 Unified Planning Work Program (UPWP).

1.1 TPO Maintenance/Special Studies

❖ TPO Executive Committee and Policy Board

- The RRPDC staff provided ongoing administrative and technical assistance in support of the TPO’s “3C” process. This included support for a total of ## TPO board, TPO committee, ad hoc committee, and work group meetings as follows:
  - TPO Board - 9
  - TPO Executive Committee – 10
  - Technical Advisory Committee (TAC) – 12
  - Citizens Transportation Advisory Committee (CTAC) – 6
  - Elderly and Disability Advisory Committee (EDAC) – 5
  - TPO Ad-Hoc Committee on Regional Paratransit Services and Programs – 1
  - 2040 Metropolitan Transportation Plan (MTP) Advisory Committee – 10

- Informational presentations provided at TPO Board meetings by speakers from VDOT Richmond District Administrator Rob Cary and staff from VDOT, DRPT, FHWA, and RRPDC.

- Executed and administered FHWA/PL and FTA Section 5303 grant agreements

- Provided administrative support for various state and federal report and documentation requests.

- Letter of Agreement and Review of MOU between Tri-Cities and Richmond: completed the review of the FY17 Letter of Agreement for VDOT PL funds; participated in review of existing MOU with Tri-Cities in preparation for meeting on June 1, 2016 to review current MOU and to evaluate options for changes to the MOU to meet planning coordination needs.

- Staff Changes – The RRPDC hired a new Executive Director and new staff in FY 2016 as follows:
  - Barbara Jacocks, RRPDC Interim Executive Director, returned to her position as RRPDC Planning Director on December 15, 2015 after Martha Shickle was hired as the new RRPDC Executive Director. Ms. Shickle started effective December 16, 2015.
Catie Bray, Senior Planner, started on May 1, 2016 with a focus on Title VI, outreach and other transportation efforts.

Shaquille Christmas, an undergraduate student from the University of Richmond, was selected to fill an intern position from February to July 2016 to support the development of a geodatabase for the freight and intermodal program.

New staff position authorized and offer of employment made to Phil Riggan, Senior Planner on May 12, 2016. Mr. Riggan’s start date was July 1, 2016 with a focus on multimodal connectivity.

- **Richmond Region Third Annual Transportation Forum (March 3, 2016)** - TPO staff has been working with partners to develop the final agenda for the third annual transportation forum hosted by the RRTPO Board. This year’s theme is “Accessibility to Economic Opportunity: Transportation Planning for our Region,” and the event will be held at the Richmond-Harley Davidson facility in Ashland, Va., on March 3.

- **House Bill 2/SMART SCALE Project Review and Ranking Process** - Two presentations on work activities and future TPO action in support of selecting regional project applications and supporting resolutions of endorsement for local project applications under House Bill 2 High Priority Statewide Projects and State of Good Repair funding; House Bill 2 resolutions of endorsement for twenty-six local applications and six TPO applications; presentation by VDOT on the HB2 scoring process and preliminary recommendation by the Secretary’s Office; updates

- **Metropolitan Transportation Plan (MTP)** – Approval of the Metropolitan Transportation Plan (MTP) 2040 goals, 2012-2040 Socioeconomic Data Analysis Report, Allocation Guidelines, Revenue Projections, Constrained Projects List

- **Regional Surface Transportation Program (RSTP), Congestion Mitigation and Air Quality (CMAQ), and Transportation Alternatives (TAP) Program** - Resolution of endorsement for FY17 Transportation Alternatives (TAP) applications within the RRTPO area; report of the three CMAQ programs supported by the TPO funding (Green Operators, Employee Trip Reduction, RideFinders), allocation of FY17 TAP funds; final action on the FY17-FY22 RSTP/CMAQ allocations

- **DC2RVA** – Presentation by DRPT staff on the DC2RVA Tier II EIS including Alternatives Analysis and Screening and information on public meetings

- **Title VI and Public Participation Plans** – Approval of the RRTPO Title VI and Public Participation Plans

- **BRT Land Use and Connectivity Analysis** – Presentations on Phase I of the study
• **Greater RVA Transit Vision Plan** – Presentation on the scope and schedule of the plan

• **Needs and Gaps of the Transportation Disadvantaged** – Approval of the report and update on the work in identifying a coordinating entity

• **2015 Regional Bridge and Culvert Inventory** – Approval of the annual update to the Inventory Report

• **2015 Annual Regional Performance Measures Report** – Approval of the annual update to the report

❖ **TPO Technical Advisory Committee (TAC)**

• **FY 2016 UPWP** - recommendation actions for TPO consideration of FY 16 UWP Budget Amendments (see details in 1.3); FY 16 UWP new task 3.2, RideFinders, and revised task 3.0 Transportation Demand Management

• **Transportation Improvement Program (TIP)** - TIP amendments for Rt. 5 Bridge Replacement Over NS Railroad, Richmond and Rt. 5 Bridge/Superstructure over Herring Creek, Charles City

• **RSTP, CMAQ, TAP** - Amend the project description of the RRTPO approved the Virginia Port Authority (VPA) Green Operator Program CMAQ project description; action taken on RSTP Funds Shift for Pole Green Road/Walnut Grove Road Intersection Improvements Project; Hanover County; recommendation on the endorsement resolution for FY17 TAP applications; update to the RSTP and CMAQ FY17-22 allocation cycle, report of funding sources for RideFinders; presentations on the FY 17-22 RSTP/CMAQ existing project funding needs, the FY17 Transportation Alternatives Program applications; action was taken to recommend approval of the FY17 TAP projects; action on RSTP and CMAQ was continued to April, although the draft projects and allocations were authorized to be added to the draft SYIP; recommendation on FY17-22 RSTP/CMAQ allocations

• **VTrans2040** – Updates to the VTrans2040 Needs Assessment

• **Greater RVA Transit Vision Plan (Formerly Richmond Region Transit Vision Plan)** – Later renamed as Greater RVA Transit Vision Plan. August 18 presentation on Richmond Region Transit Vision Plan; recommendation action for TPO on UWP Task 5.3, Richmond Region Transit Vision Plan

• **House Bill 2/SMART SCALE Project Review and Ranking Process** – Review of HB2 applications; HB 2 Project Endorsement Resolution Template; TPO Project Applications for Corridors of Statewide Significance; the TAC convened a special meeting on February 25 and March 1 to formulate comments regarding the HB2 process and results. These comments were forwarded to the TPO for consideration by the Executive Committee at their March 3 meeting;
• Metropolitan Transportation Plan (MTP) – Status report by RRPDC staff on the development of plan2040 or the 2040 MTP update; 2012-2040 Socioeconomic Data Analysis

• DC2RVA Tier II EIS – Presentations on the Alternatives Analysis,

• BRT Land Use and Connectivity Analysis – Presentation on the analysis focusing on areas adjacent to the Bus Rapid Transit route for the GRTC Pulse

• Reports – The following items were reviewed and recommended by the TAC:
  ○ 2015 Regional Bridge and Culvert Inventory and Assessment
  ○ 2015 Annual Regional Performance Measures Report

• Public Participation Plan: the need to provide an adjustment to the Public Participation Plan which was approved in June 2015; revisions to the Public Participation Plan

❖ Reporting

• Staff prepared and completed the FY 2015 Year End Work Status Report for RRPDC staff work tasks and distributed to the TPO.

• Staff prepared and submitted to VDOT the VDOT FY 15 Fourth Quarter Work Progress Report and Invoice/Expense Reimbursement; posted report on the RRPDC website.

• Staff completed and submitted to DRPT on August 11, the FY 2015 Fourth Quarter Work Progress Report and Invoice/Expense Reimbursement Request (submitted two reports: one for the FY 14 Section 5303 carryover funds and one for the FY 15 Section 5303 funds). These reports have been posted on the RRPDC website.

• FY16 PL transfers, FY16 budget amendments and associated updates to the UPWP; approval of the TPO budget and FY17 UPWP

❖ Capital Region Collaborative (CRC)

• Transportation Work Group: TPO staff is working with Ashley Hall, CRC Manager, to identify an educational and actionable work program efforts for the work group. The work effort proposal is expected to be presented to the CRC Transportation Work Group in October 2015. TPO staff participated in the CRC work group meeting on October 16 at the Greater Richmond Chamber office. The primary meeting topics included updates on the Transportation Work Group Action Plan (May 2013) and plans for a combined TPO-CRC work effort on a regional transportation summit. The next meeting was scheduled for December 18, 2015, however, it was rescheduled to the first quarter of 2016.

• Active RVA: Meeting at the RRPDC office on December 14 to discuss TPO participation in the Active Living Summit scheduled for March 2016. The TPO will facilitate a panel discussion on active transportation, provide an overview of the TPO and have display boards describing the Goals and Projects under consideration in the 2040 MTP.

❖ Virginia Association of MPOs (VAMPO)
• Staff attended the VAMPO Board meeting on October 28, 2015 in Virginia Beach preceding the Governor’s Transportation Conference. Primary meeting topics including discussion of strategic planning effort for VAMPO and the Transportation Improvement Guide document developed in conjunction with VDOT.

• RRTPO staff attended and participated in the VAMPO meeting in Richmond on February 11, 2016. Topics of discussion included approaches and responses to implementation of House Bill 2 project applications, the strategic plan for VAMPO and the annual training event which will be held in early summer in Richmond and coordinated by the RRTPO staff.

• RRTPO staff participated in coordinating the annual VAMPO Conference on May 3, 2016 at the JSRCC Workforce Development Center. The conference was attended by nearly 50 participants from nine MPOs along with partners from VDOT, DRPT and FHWA.

✈ 2015 Governor’s Transportation Conference: TPO staff participated in the 2015 Governor’s Transportation Conference in Virginia Beach, October 28-30; the theme of the conference was Virginia’s New Economy with emphasis on opportunities with the Port of Virginia, Wallops Island space initiatives, Public/Private Partnerships, Innovative Technologies in Transportation, and a presentation by USDOT Secretary of Transportation Anthony Foxx.

✈ VDOT and Partners Planning and Programming Meeting: Staff attendance and participation at the annual meeting which included presentations on Title VI and Environmental Justice, VTrans2040, HB2, Infrastructure Investment, STARS, Connected Vehicles, DRPT Programs, and a presentation by FHWA on the FAST Act and its implications to MPO and statewide planning.

✈ Richmond-Hampton Roads Leadership meeting: Participation in the meeting on May 23, 2016 in Williamsburg; coordinated and provided a presentation on the region’s transportation priorities.

✈ Comprehensive Economic Development Strategy (CEDS): participated in a meeting on May 9, 2016 at the RRPDC offices with the CEDS team to identify potential projects eligible for US EDA or other funding in an effort to “put the CEDS to work” for the region.

✈ National Association of Regional Councils Conference: Salt Lake City, UT, June 25-30, 2016. Staff attended the conference which brought together councils of government and MPO leadership to focus on pressing issues facing regions today. The educational platform as well as mobile workshops demonstrated technical and policy initiatives relating to data-decision processes, FHWA planning issues, community engagement, walkable communities, scenario planning, and integrating economic development, transportation and land use.
1.2 TPO Citizen Participation

- TPO staff briefing to the Greater RVA Transit Vision Plan Advisory Committee on the 2040 MTP Goals on December 14, 2015
- Ongoing staff support provided for maintaining/updating TPO related information on the RRPDC website and responding to information requests. Updates to the RRPDC website include meeting agendas and minutes, Annual Listing of Obligations, Updated UWP, Title VI Plan, amended FY15-18 TIP, and the street name clearinghouse listings.

- **Social Media:** Community Affairs has established a Facebook page and Twitter account for the TPO and is promoting meetings, efforts, and activities on these sites; public meetings and notices are posted and maintained on the RRPDC website for the RRTPO.

- **Title VI Plan**
  - TPO action was taken to approve updates to the Title VI Plan; the revisions included changes to the following chapters: Organization Background and Communication and Public Participation, as well as Appendix B: Public Participation Plan (approved June 5, 2014) and Appendix D: TIP Environmental Justice (approved August 7, 2014).
  - Review of the Title VI Plan reveals a continuing need to improve outreach to low-literacy, limited English proficiency, as well as the general public; these improvements will be incorporated into the MTP2040 plan efforts and into the 2016 update of the TPO Title VI Plan.
  - In response to an email from DRPT on August 4, 2015 the TPO compared the current Title VI Plan with a checklist provided by DRPT to ensure that the TPO Title VI Plan meets all requirements. Staff initiated its review of these items noting items currently addressed, items that require minor changes, and updates that require significant staff time and effort to complete, all of which are currently being reviewed and addressed by staff.
  - Administrative clarification to the Title VI Plan adopted on September 24, 2015 to address a question raised by DRPT on December 28, 2015 regarding whether any complaints had been filed with the TPO in accordance with the process outlined in the adopted plan. Staff confirmed with DRPT that there have been no lawsuits, complaints or investigations filed; this note was added to page 60 of the plan document and posted on the website on December 31, 2015.
  - TPO staff attended a FHWA sponsored webinar on the role of data analysis in Title VI and Environmental Justice in transportation planning.

- **Public Participation Plan**
  - Review and response to FHWA, FTA and VDOT on how the current plan addresses modifications to the Transportation Improvement Program and to the Long-Range
Transportation Plan. This request was received by FHWA on December 7 with a response due by January 15, 2016.

- **TPO Citizens Transportation Advisory Committee**
  - **Presentations**
    - Greater RVA Transit Vision Plan
    - DC2RVA Tier II EIS Alternatives Analysis
    - SMART SCALE Project Review and Ranking Process
    - BRT Land Use and Connectivity Analysis Phase I
  - **VTrans2040** - Presentation by Scudder Wagg with Michael Baker International discussing the VTrans update process and how it works as a comprehensive planning process for the development of a statewide transportation system
  - **Metropolitan Transportation Plan** - Discussion on public involvement opportunities in the MTP or *plan2040* as it is titled, citizen survey developed for the MTP
  - **Capital Region Collaborative** – Presentation on the RVA Snapshot by Ashley Hall, CRC Manager
  - **2016 General Assembly: A Look Back** – Presentation by RRPDC Community Affairs Manager, Chuck Gates

### 1.3 Unified Work Program (UWP)

- **UWP Amendments:**
  - TAC recommended and actions were taken at the August 6 and September 24, 2015 TPO meetings to amend the FY 2016 UWP; following these actions, the amended UWP was posted on the RRPDC website and DRPT, FHWA and VDOT were advised of these amendments:
    - To program $102,784 in FTA Section 5303 carryover funds that were not spent by RRPDC staff in FY 2015 and to program these funds for various RRPDC staff UWP work tasks
    - To program $18,473 in de-obligated FTA Section 5303 carryover funds and FTA Section 5304 funds made available by DRPT for UWP task 5.1, BRT Connectivity and Land-Use Analysis (funds that were budgeted but not spent on task 5.1 in FY 2015)
    - To revise the title for task 3.0, Management Systems/Short Range Planning to Transportation Demand Management and to add a background description for revised task 3.0
    - To add new UWP task 3.2, RideFinders (UWP information item work task)
To add to Work Task 5.3, Richmond Region Transit Vision Plan details of the project description, work elements, agency participation, project budget, schedule and funding.

**FY16 Mid-Year Funding and Budget Amendments**: TPO staff reviewed staff time allocations and direct costs incurred to-date and projected through the end of the year. This work effort is undertaken so that PL funds that will be transferred to FY17 can be identified by March 31 with a transfer request submitted to VDOT making transferred funds available in FY18. Any PL funds not transferred by March 31, 2016 or expended by June 30, 2016 will not be available to support the MPO program until FY18.

**FY16 End-of-Year Funding and Budget Amendments**: TPO staff reviewed staff time allocations and direct costs incurred to-date and projected through the end of the year. A budget amendment was prepared for TPO review and consideration at the April 7 and the June 2, 2016 meetings.

**FY17 UPWP**: Development and approval of the FY17 work program which was recommended by the TAC in April and approved by the TPO in May. Approval by FHWA was received in May and by FTA in June 2016.

**Staff Assignments**: Review of staff assignments and responsibilities are continuing; revised assignments reflecting work effort priorities divided into three tiers will be completed and reviewed with the staff in October and with the new RRPDC Executive Director prior to incorporation into the FY17 Unified Planning Work Program. Revised assignments reflecting work effort priorities divided into three tiers is continuing and will be reviewed with the staff with the development of the FY17 work program.

### 2.1 Socioeconomic Data Development

- Staff completed work on the initial draft *Richmond Regional Socioeconomic Data Analysis* report, which is currently being reviewed by RRPDC management staff. The final draft report is scheduled to be presented at the October 20 TAC meeting and November 5 TPO board meeting. This report uses data from the socioeconomic technical report approved by the TPO in April 2015 and analyzes the historical population trends in the region, reviews the projected growth in population and employment, identifies top industries and employers, and other data and presents findings of the analysis.

- Review of Socioeconomic Data for information related to the Notice of Proposed Rulemaking on MPO Coordination in June 2016

### 2.2 Metropolitan Transportation Plan (MTP) Update

- **2040 MTP Advisory Committee (MTP AC)**
• Major development milestones for the 2040 MTP AC include the review and recommendation of the following:
  ◦ The 2040 MTP Goals
  ◦ Project Ranking and Selection Process
  ◦ 2040 MTP Public Participation Strategy
  ◦ 2040 MTP Schedule Updates
  ◦ Richmond Regional Travel Demand Model status
  ◦ VDOT and DRPT revenue projections

❖ 2040 MTP Document: The following activities were accomplished for this reporting period:
TPO action on 2040 MTP Goals on September 24; MTPAC recommendation on Project Ranking and Selection Process on September 30; staff work on assigned sections of the plan including research, data collection and analysis; and staff review and comment on final Project Selection and Ranking Process in preparation for MTPAC recommendation.

• Document Development: During this reporting period, staff completed draft chapters of the plan including research, data collection, mapping and analysis; document chapters, design and layout of the document

• Project Ranking and Scoring: Work included developing the 2040 MTP/CMP draft project ranking and selection process based on the process developed for the 2035 LRTP and incorporating elements from VTrans 2040 and HB 2. Staff also spoke with staff from the Hampton Roads Transportation Planning Organization and Delaware Valley Regional Planning Commission for insight on their project ranking process. The proposed process was presented to the MTP/CMP Advisory Committee at the August 26 meeting and was revised at the September 30 meeting for November 5 TPO consideration.

• Project Applications: The TPO approved the Ranking and Scoring process on November 5 in advance of the November 30 filing deadline for project applications (this deadline was extended from November 13). Seventy-nine project applications were received by the November 30 deadline; staff then began the review and scoring of applications using the “MTP Project Evaluation Tool” during the month of December. Scores will be presented by staff through individual meetings with applicants in advance of the January 19 MTP Advisory Committee meeting.

• Environmental Justice: Staff has initiated data collection for the Environmental Justice Analysis, downloading the 2009-2013 5-year ACS data. Staff are also researching best practices and case studies such as HRTPO’s 2040 LRTP Title VI/Environmental Justice

**Revenue Projections:** The time bands for allocating funds were recommended by the MTPAC at the October 28, 2015 meeting and the final revenue projections from VDOT on October 30, 2015. The MTPAC met on November 17 to discuss the approach to recommending an allocation distribution that will move the region from allocations weighted toward the highway mode in 2017 to a multimodal allocation program by 2040. The December 16 MTP AC meeting included discussion on DRPT revenue projections and “Allocation Guidelines.” Staff received recommendations at the December 16 MTP AC meeting to include revenue projections from DRPT as part of the 2040 MTP revenue projections and allocation guidelines development. Incorporating DPRT revenue projections and projects from their SYIP resulted in changes to be reviewed at the January 19 MTP AC meeting; the allocation recommendation will be presented to the TPO on February 4.

**Allocation Guidelines and Draft Constrained Projects List:** Staff developed the Draft Constrained Projects List and revised Allocation Guidelines for review and recommendation at the March 15, 2016 MTP Advisory Committee meeting. These items were prepared for TPO Board action at their April 7, 2016 meeting.

**Data and Mapping:** Work is underway in revising the demographic data to support the environmental justice sections of the MTP2040.

**Socioeconomic Data Analysis:** The final draft of the analysis report was presented to TAC on October 20 and to the TPO on November 5. The data used to develop the report was approved by the TPO in May 2015.

**Regional Travel Demand Model:** The existing model is being updated by VDOT to recalibrate the model incorporating 2012 base-year and 2040 forecasts of socio-economic data; the 2012 data was provided in June 2014 and the 2040 forecast was provided in March 2015. Although the Regional Travel Demand Model (RTDM) will not be used in the development of the 2040 MTP, staff is anticipating the receipt of the updated model from VDOT in October 2015.

In anticipation of the October update, staff is defining model activities to support the current Unified Work Program; this work will be undertaken by staff, TAC, and the selected on-call consultant, The Corradino Group.

**Public Outreach:** Staff is developing an online survey for public input on the 2040 MTP Goals, approved in draft form by the MTP Advisory Committee back in May. The survey will be used to assist in identifying priorities among the goals and possible scoring weights for the project ranking and selection process. Staff is also researching methods to
receive ideas or suggestions as an open dropbox through the TPO website throughout the year including interactive mapping (Open Street Map, Wikimapping).

Presentations were made to TPO EDAC and CTAC committees, and the groups were asked for suggestions on how to improve the public outreach efforts for the MTP plan. Staff offered to provide MTP presentations to organizations represented by the TPO committees. Public display boards were created for public meetings outlining the development process, goals and objects, connection between goals and candidate projects and a regional map of candidate projects. Initial work to update the plan2040 website is complete and the initial survey seeking public input on the plan goals is ready for public solicitation.

Initial work to update the plan2040 MTP website as well as launching initial survey for public feedback.

Presentations on the 2040 MTP at the Ashland Town Council meeting on March 15, 2016 and to the Henrico County Fairfield District Constituents meeting on March 24, 2016; staff facilitation of a panel session as part of the Active RVA Summit on March 7; and MTP display boards at the March 3 RRTPO Transportation Forum.

Participated in the May 16 VMTP Needs Synthesis Regional Forum, which involved the review and prioritization of transportation needs for the Richmond District.

Presentations at the Goochland Community Partners on May 11 and Senior Connections Open House on May 24.

- **Public Review:** The MTPAC met on June 15 to recommend the draft plan for public review. Development of ads and meeting materials for the 2040 MTP Public Review scheduled for August 1 – 31, 2016.

- **VTrans2040 Multimodal Transportation Plan Needs Assessment and Relationship to HB2**

  - Staff attended the VTrans 2040 Multimodal Transportation Plan Regional Forum held on July 22 (for the RRTPO, Tri-Cities MPO, and HRTPO) in Williamsburg.

  - Staff received notice on August 3 from the Virginia Office of Intermodal Planning and Investment (OIPI) of the draft VTrans2040 Multimodal Transportation Plan Needs Assessment being made available for public review and comment. Staff submitted this notice to TAC. Staff advised TAC that one of the key purposes of the VTrans Needs Assessment is to serve as an initial screen for candidate project applications being submitted for funding under the HB2 process.

  - As follow-up to discussion at the August 11 TAC HB2 Work Group meeting, staff prepared the Work Group’s comments on the VTrans2040 Needs Assessment and submitted them to the Virginia Office of Intermodal Planning and Investment (OIPI) on August 14. Staff also prepared staff’s review comments, submitted them to OIPI on August 14, and shared these comments with the TAC HB2 Work Group.
• Staff participated in VTrans 2040: Needs Synthesis and Recommendations project update webinar.

❖ **Land Use and Performance Measures**: The data to update the performance measures report has been compiled and will be posted on the TPO website before the end of October 2015. In addition to the TPO approved measures, the report will include information on additional measures that data is readily available for, as well as identifying possible future measures for measuring the performance of the transportation system, the planning effort, and the community impacts. As part of this year’s update, the data will be displayed and described in a report format to better assist the community in understanding the data. The data to update the performance measures has been compiled and was posted to the TPO website on October 30, 2015. In addition to the TPO approved measures, the information includes data on additional measures that is readily available, as well as identifying possible future measures for evaluating the performance of the transportation system, the planning effort, and the community impacts. As part of this year’s update, the data will be displayed and described in a report format with descriptive text to better assist the community in understanding the data. The draft report was presented to TAC on November 17 and is open for public comment through December 16. At the January 2016 meeting, TAC will discuss and recommend additional planning performance measures that will be considered by the TPO at the February 2016 meeting.

❖ **Congestion Management Process**: Document update is continuing as part of the 2040 MTP update.

2.3 **Regional Travel Demand Model (RTDM)**

• Staff is reviewing VDOT’s Travel Demand Modeling Policies and Procedures document, approved in June 2014 as a continuing education effort in preparation for assuming more responsibility for managing the regional model. Used to update link attributes while doing network editing. Strict guidelines from VDOT need to be followed during model network editing as part of use agreement

• Reviewed the process of highway network editing and coding in Cube and review the reference book “Modeling Transport” to continue knowledge base development.

❖ **RTDM Status Report**: VDOT provided a report at the August 26 MTP Advisory Committee meeting on the status of the new Regional Travel Demand Model (RTDM). Note that staff provided TAC approved base year (2012) and forecasts (2040) TAZ level socioeconomic data to VDOT in June 2014 (base year data) and in early March 2015 (year 2040 forecasts) for VDOT’s use in completing model calibration and validation work. The existing model was updated by VDOT to recalibrate the model incorporating 2012 base-year and 2040 forecasts of socioeconomic data; the 2012 data was provided in June 2014 and the 2040 forecast was provided in March 2015. A “pre-test” of the data was released by VDOT on October 14 and TPO staff ran the model using the data set and provided comments back to VDOT. VDOT provided the Richmond Tri-Cities (RTC) 2012 model network on November
20. Staff ran model test runs and found errors in the GIS functionality of the model as well as the “Richmond Tri-Cities Model Methodology Report”. Revised copies of the model were received on December 2 and again on December 11 from VDOT. The last update incorporated network corrections identified during the House Bill 2 process. When staff ran the revised model, no errors were found.

**Agreement for On-call Consultant Services:** In response to staff’s email request to VDOT on July 13 as to the status of VDOT’s authorization and execution of the VDOT/RRPDC Local Project Agreement for On-Call Consultant Services to support and assist RRPDC staff in using the RTDM, staff was advised in mid-August that the agreement (submitted to VDOT as the final agreement in late June 2015) has been approved with the final executed agreement provided to RRPDC staff in late September and executed by all parties. In anticipation of receiving the final data set in October, TPO staff coordinated drafting of the first work task with the Corradino Group, the on-call consultant selected to support the TPO in its modeling efforts. This work effort was reviewed by the TAC on November 17. The consultant began work on this task in December which included the following efforts: model review making sure it works and does what the documentation says it does, and evaluating it with respect to what staff thinks the model should be able to do to be useful to the TPO transportation planning process. The first deliverable is anticipated on January 8 with a follow-up conference call scheduled for January 14, 2016 to discuss progress on Work Task Order #1. This work order also will also include a training session at the RRPDC office in February and at the conclusion of the two-day training event, there will be a demonstration of the model for TPO member jurisdictions and interested parties.

**Work Task Order #1:** A two-day training effort on the RTDM was held at the RRPDC on February 18-19. Included in the training was a demonstration of the model to our member jurisdictions and interested parties. As part of the training, the consultant team worked with RRTPO staff to test the model to ensure that it does what the documentation says it does, and evaluating it with respect to what staff thinks the model should be able to do to be useful to the TPO transportation planning process.

**Work Task Order #2: Deficiency Analysis**
- Provided input and reviewed revisions to the scope of the Task Order 2 provided by the consultants; suggested establishment of a standard Deficiency Analysis for the region which staff can replicate in future and do the coding of the new MTP projects in the 2040 network in-house with Consultant’s Guidance.
- GoTo meeting sessions with consultants, development of Existing plus Committed (E+C) list of projects from the FY2017-2022 SYIP document to be coded in the model network including additional details on projects from TPO staff
- Creation of list of projects for a Cost Feasible and Regional Needs model network from the 2040 MTP Constrained Projects List
• Initiating coding of widening projects into the E+C model network
• Review of CUBE documentation on model network coding and editing and reference book “Modelling Transport” as part of coding into the E+C model network

❖ RTDM Output Runs: Staff prepared output runs from the current Regional Travel Demand Model as requested by Jim Ponticello, Air Quality Program Manager for VDOT Environmental Division. The output runs are used to interpolate 2014 daily vehicle miles traveled (VMT) and approximate VMT growth rate as part of a triennial request from VDEQ for 2014 traffic data.

❖ RTDM Research and Development: Continued staff training and research on the RTDM including expanding research on two components, knowledge of the theory associated with these components, and how the model is executable through CUBE software based on input provide Continued staff training and research on the Regional Travel Demand Model including expanding knowledge base through online training sessions by the Florida DOT.

Staff review of the model continues with analysis of model outputs and changes to produce additional statistics. Staff also modified model scripts to produce custom variables, which will be incorporated into the geodatabase output and used in mapping model statistics.

Evaluation of the details of Transit Modelling component of the RTC Model. Viewing of a webinar provided by Citilabs on the “Sugar Access” extension of Cube and ArcGIS which can be used to do Transportation Equity Analysis. All the framework of equity analysis; Accessibility, Affordability and Health & Safety can be performed using this software. Staff also read white papers related to the software.

❖ RTDM Requests

• Provided RTC model output (AADT for base and future year) request for two corridors in the Richmond Region from VDOT. Staff provided six maps with AADT for all the links (road segments) in the corridors.
• Provided the RTC model via RRPDC FTP site to Kimley-Horn Consultant upon request for the work related to I-95-Willis-Route 10 Study. Staff also provided a list of all SYIP-TIP Projects, Candidate Projects and Private-Local Projects from LRTP 2035.

2.5 Transportation Data Base Development/GIS

❖ Street Name Clearinghouse Program: Staff provided ongoing assistance for the RRPDC Street Name Clearinghouse Program.

❖ Richmond Regional Bridge and Culvert Inventory and Structural Assessment Report Update: Staff completed work on a final draft update to the Richmond Regional Bridge and Culvert Inventory and Structural Assessment Report. Staff is working with VDOT District and Central Office to determine the status of VDOT’s priority ranking system so that it can
be incorporated into the TPO report. This report will be presented to the TAC on November 17 and the TPO on December 3.

- **Land Use Map Update**: Staff is continuing work to update the existing land-use map covering the future RRPDC region. Work to develop land-use data using aerial photos for all nine PDC jurisdictions has been completed. Staff is conducting quality control review work and anticipates that it will be completed by the end of September.

- **2040 MTP**: Mapping to support the 2040 MTP and Environmental Justice analysis.

- **Data Request for Goochland County**: Evaluation of minority and low income population within and outside of the TPO boundary; also provided mapping showing geography of Transportation Analysis Zones (TAZs) to address an exploratory inquiry regarding a scenario involving the TPO boundary adjustment.

### 3.1 Congestion Management Process (CMP)

- Staff work to update the CMP document for incorporation into the 2040 MTP/CMP update including the following:
  - Congestion Management Process (CMP) development continues with compiling bottleneck statistics using the I-95 Corridor Coalition Vehicle Probe Project suite of analytic tools. The bottleneck data is analyzed against travel time index data for congested segments of the CMP network.
  - Update/edits to CMP narrative
  - Data review and collection for VDOT accident data, vehicle miles of travel (VMT) data, and INRIX travel time data (from the I-95 Corridor Coalition).
  - Working with INRIX travel time data (i.e. Vehicle Probe Project) for the CMP network including downloading the travel time index (TTI), planning time index, buffer index and speed. Freeway road segments with a TTI of 1.3 or greater and arterial road segments with a TTI of 1.4 or greater were identified or congested.
  - Compiling bottleneck statistics using the I-95 Corridor Coalition Vehicle Probe Project suite of analytic tools. The bottleneck data is analyzed against travel time index data for congested segments of the CMP network.
  - Created a one page general layout/template using InDesign to present traffic characteristics/data of CMP corridors.

- **CMP Storymap**: Continued revisions to the CMP storymap on the RRTPPO website in support of the plan2040 long-range plan update.

- Two staff participated in the I-95 Corridor Coalition Automated and Connected Vehicles conference held at the Maritime Institute in Linthicum Heights, MD from June 21-22
3.2 RideFinders

- Meeting with Von Tisdale and Tyler Walter of RideFinders on May 11 to discuss the FTA Mobility on Demand grant program. Shared with RideFinders the EDAC staff report regarding the program and the staff recommendation not to submit an application during the current fiscal year.

- Attended the June 30, 2016 RideFinders Advisory Board meeting, and prepared a summary of the Board’s discussions and decisions

- Participated in the June 1 ACT webinar, FTA Mobility on Demand Funding: Overview of Program and Partner Opportunities. The webinar included brief presentations by various TDM-related resources that are interested in partnering with Mobility on Demand applicants.

3.3 Intelligent Transportation Systems (ITS) Update

- Staff attended the ITSVA Conference held at the Omni Hotel in downtown Richmond on July 16 and 17.

- Coordination with VDOT and other partners on possible agenda topics for the next quarterly Richmond Regional ITS Work Group meeting, tentatively scheduled for October 20, 2015 and regional ITS issues.

4.1 Transportation Improvement Program (TIP)

- **SMART SCALE (formerly House Bill 2)**
  - **Resolutions of Endorsement:** Twenty-six local project application resolutions on the Corridors of Statewide Significance and Regional Network were developed by staff, recommended by TAC, and approved by the TPO; the resolutions detail how each project supports one or more needs identified in VTrans2040. At the October 20 meeting, TAC reviewed and recommended to revise the Meadowville Technology Parkway resolution project based on a new need identified in the VTrans2040 planning documents and recommendation to approve a new resolution in support of extending the GRTC Route 19 in Henrico County, including a park and ride lot, to support connectivity to the BRT Pulse route. At the November 5 meeting, the TPO reviewed and recommended revisions to the Meadowville Technology Parkway resolution project based on a new need identified in the VTrans2040 planning documents; GRTC withdrew the request for the Route 19 application, therefore no action was taken.

  - **TPO Applications on Corridors of Statewide Significance:** Six applications were developed by staff, reviewed by TAC and the TPO, and submitted for consideration under the House Bill 2 High Priority Projects funding category. The preliminary ranking of projects will be released in early 2016 by VDOT.
Consultation with VDOT on House Bill 2 project validation process: Following September 30 deadline, TPO and VDOT staff worked to address validation questions on certain applications from the candidate pool of the twenty-seven local project applications and the six TPO regional applications on the Corridors of Statewide Significance.

Reviewed the DRAFT FY17 – FY22 SYIP to check the allocation timing and status for District Grant and High Priority project selections. Reviewed concerns with allocation timing and project schedule and relayed this information to district staff.

Monitored the presentation from Deputy Secretary Donahue on the second round of House Bill 2 applications. This presentation provided insight into updates to the overall process. Substantial changes include: revised scoring factor methods, and updated project application portal, and a new notices of intent to apply for district grant and high priority resources.

Initiated the process of reviewing existing studies to see if any projects would serve as viable regional HB2 submittal for the FY18 cycle.

Throughout the month of June, TPO staff revised the TPO Board approved Smart Scale application endorsement process. For the FY17 application cycle a process was created that required all applications meeting a Corridor of Statewide Significance (CoSS) or Regional Network Need, as identified in the VMTP 2025 Needs Assessment, should be reviewed and approved by the TPO Board. This approach was believed to provide assistant to all applicants in making their case for funding. This process is being proposed for revision, which would better align with the requirements of HB2.

On June 8, TPO Staff meet with VDOT Richmond District Staff to discuss potential project applications for the FY18 Smart Scale. Recommendations were created by TPO staff based on this discussion.

On June 20, TPO staff attended a Smart Scale training and VDOT’s Richmond District Offices. The training better explained the revisions to the application portal as well as revisions to the application scoring process. TPO staff also took the opportunity to meet with VDOT District staff to further discuss the nuances of potential applications.

On June 21, TPO presented to the TAC preliminary recommendations for a FY18 regional candidate pool. The TAC recommended that these potential project be taken to the TPO board for consideration. These recommended projects for consideration are as follows:

- Safety and large-scale operational needs within the I-95/I-64 overlap corridor
- Operational efficiency improvements for mainline commuter corridors
- Completion of the 30-mile gap in capacity investment in I-64 corridor between Bottoms Bridge and York County in the Hampton Roads region

RSTP, CMAQ, TAP and FTA Section 5310
• Staff worked with TAC members in preparation for the submission of FY17-FY22 RSTP and CMAQ applications which were due on November 20, 2015. Copies of consolidated applications that were submitted by the November 20, 2015 deadline were prepared provided to the applicants.

• From December 7 through 17, staff conducted meetings with applicants and VDOT to review new applications as well as existing RSTP or CMAQ projects. These meetings provide an opportunity to review the applications received, discuss questions, and confirm the status of active projects with RSTP and/or CMAQ allocations.

• Based on the TPO approval at the 5/5/16 TPO meeting, FY17-FY22 RSTP and CMAQ allocations were submitted to VDOT on 5/6/16.

• Received 4 closeout fund PD-24s from VDOT (1 Goochland County project – UPC 104089, 2 Hanover County projects – UPC 58189 and UPC 51253, and 1 region-wide project – UPC 101492). However, based on TPO records, there are no allocations on the region-wide project. These PD-24s are under review.

• Received FTA Sec 5310 carryover funding from DRPT on 5/27/16. The carryover funding was reviewed.

• Received the VDOT GenMod report handling FY17-FY22 RSTP and CMAQ allocations and projects for inserting into FY17-FY22 VDOT SYIP. Reviewed and compared the TPO’s allocations with the allocations in the GenMod report, and found all allocations to be correct.

• Obtained the draft VDOT FY17-FY22 SYIP from the VDOT web site on 5/17/16 and reviewed the TPO’s RSTP and CMAQ allocations with the allocations in the SYIP. There are four projects that do not show FY17-FY22 RSTP funds. They are: Hanover County Rt. 360 widening/intersection improvement project (UPC 13551); Jahnke Rd 2-lane improvement in the City of Richmond (UPC 19035); Main Street Station Capital Funds in the City of Richmond (UPC 64219); and Region-wide Traffic Operations Improvements (UPC 101492). Comments were submitted to VDOT on 5/20/16.

• Obtained CTB approved (6/14/16) final FY17-22 SYIP from the VDOT web site, and the copies were distributed to Barb and Sarah. Checked FY17-22 TPO’s RSTP and CMAQ allocations with the SYIP, and found all allocations are in SYIP correctly.

• Received a PD-24 request from VDOT to shift CMAQ funds from three projects (CRAC #90352, Hanover #18948, and Henrico #72199) to the CRAC CNG bus purchase project (#109193), on 6/24/16. This request is under review and the final PD-24 will be provided by VDOT.

• Based on CTB’s approval of the FY17-22 SYIP on 6/14/16, TPO’s FY17-22 RSTP and CMAQ allocations were inserted in the tracking sheets that will be placed on the RRPDC website.
**Bonus Obligation Authority**

- At the August 6 TPO meeting, VDOT requested that the TPO take action to authorize TAC to act on behalf of the TPO if Bonus Obligation Authority of RSTP becomes available. Staff had discussed this matter briefly with VDOT staff prior to the meeting and indicated to VDOT and to the TPO that should Bonus Obligation Authority (BOA) become available, then the priority for use of RSTP funds should be based on the TPO’s recent review of RSTP funding priorities, which would be to fund either the I-64 widening PE project (UPC 107458) or for the I-64 East Bound Pavement Markings Improvements (UPC 107461). This matter was added to the August 6 TPO meeting agenda, and the TPO took action to authorize TAC to take action on behalf of the TPO in this matter and that it agreed with VDOT’s request with the condition that BOA funds be given to the two projects recommended by staff. Should either of these two projects not be eligible for BOA, then the TAC is authorized to act on behalf of the TPO to consider and select any other active RSTP project already selected for funding by the TPO or to select pavement and infrastructure maintenance projects as recommended by VDOT. The TPO also authorized TAC to approve, on behalf of the TPO, any TIP revisions required by VDOT for non-RSTP funded projects with bonus obligation funds during the FY 15 round of obligation funding.

- As follow-up to the TPO’s action at the August 6 TPO meeting concerning BOA funds and projects to be considered for these funds, VDOT staff provided a status report on this matter at the August 18 TAC meeting and discussion was continued to the September 8 TAC meeting. At the September 8 TAC meeting, it was confirmed by VDOT that Virginia did not receive BOA for RSTP therefore no action by TAC was necessary.

**Annual Listing of Obligations Report:** Submitted FFY2015 Annual Listing back to VDOT district office in order for district staff to make minor revisions regarding two of the project obligations. The Annual Listing was posted on the TPO website on Friday, December 18, 2015. VDOT staff was notified of this posting via email on the same day.

**FY2015-2018 TIP Amendments**

- Action was taken at the August 6 TPO meeting to amend the FFY 15 – FFY 18 TIP to add and obligate funds for the following projects and submitted to VDOT on August 10:
  - Route 5 bridge replacement over Norfolk Southern Railroad, City of Richmond (UPC T16873)
  - Route 5 superstructure replacement over Herring Creek, Charles City County (UPC 98134)
• Request from DRPT for the FTA 5310 new and existing projects as well as GRTC transit projects on 5/16/16. There are: 14 no action projects, 19 adjustment projects, 3 amendment projects, and 1 project located outside of our TPO study area.

• Received an amendment request from DRPT for the Lake Country Area Agency’s FTA Section 5310 grant program on 5/16/16. After receiving the TIP inclusion request from the agency, TIP amendment documents were prepared and submitted to TAC to discuss them at the 6/21/16 TAC meeting. Based on TAC recommendation, the amendment request will be included in the 7/7/16 TPO meeting agenda package for approval.

• Based on a VDOT TIP amendment request, prepared nine TIP amendment documents and submitted to TAC for their discussion and recommendation to the TPO. These nine projects are: CRAC CNG bus purchase (#109193), Rt 288/Commonwealth Center Parkway & Bailey Bridge IMR (#109191) in Chesterfield, I-64/Rt 623 (Ashland Rd) IMR (#109231) in Goochland, Laburnum Avenue sidewalk (#109190) in Henrico, intermodal transfer improvement with Richmond Marine Terminal (#109266), Azalea Avenue intersection improvements (#106299) in Henrico, I-64 widening from I-295 to Bottoms Br (#107458) in Henrico and New Kent, State vehicle fuel conversion program (#T11802), and Transit Development Plan with GRTC (#T18033).

• Based on a TIP amendments/adjustments request from DRPT on 5/16/16, TIP adjustment and amendment documents for 20 transit adjustment projects and two transit amendment projects were prepared and submitted to TAC for their discussion and recommendation to the TPO, at the 6/21/16 TAC meeting. UPC numbers of the adjustment projects are: AGP0001, BAY0001, CAP0001, CHS0002, CHS0004, GFC0001, HHI0001, RRC0001, GRTC004, GRTC005, GRTC008, GRTC021, GRTC031, GRTC032, GRTC033, GRTC034, GRTC035, GRTC036, GRTC037, and GRTC040. UPC numbers of the amendment projects are: GPCS001 and GRTC045.

❖ TIP Adjustment: Action for an administrative modification to the TIP was prepared by staff for the Smoketree Drive sidewalk addition project in Chesterfield County (UPC 105192). Staff’s action was submitted to VDOT on August 21. Processed TIP modifications for CRAC, Hanover County, and Chesterfield County. The adjusted documents were submitted to VDOT and the updated TIP was placed on the RRPDC website.

Received a TIP adjustment request from VDOT for the Hanover Rt 33/Ashland Rd intersection improvement project (#56181) on 6/27/16.

❖ Richmond Green Operator Program: Action was taken at the August 6 TPO meeting to approve a change in the Scope for the Richmond Green Operator Program to include: clean diesel technologies for diesel retrofits/dray truck replacements and cargo handling equipment; a monitored 64-Express TDM Program including the shift of containers from single truck trips to barge and tug repowering; and to also direct that the Port of Virginia provide an annual report to the TPO staff on the air quality and congestion impacts of the Richmond Green Operator Program by November 1 of each year. This revised project
description was incorporated into the FFY 15 – FFY 18 TIP, and staff advised VDOT of this TIP revision on August 17.

- **Online TIP Map:** Staff updated the online FFY 15 – FFY 18 TIP document map to include additions and changes made for recent TIP adjustments and amendments.

### 5.1 Bus Rapid Transit (BRT) Connectivity and Land-Use Analysis

- Staff conducted and complete several analyses through GIS on poverty, walkability, land-use, zoning, and development potential in the BRT study area. Staff’s work so far has been on the whole study area, and it will now shift its focus and analysis to the BRT station level.

- Staff has been compiling various records and reports including GRTC reports, development plans, applicable federal regulations, and various other background data and materials for review and analysis.

- RRPDC staff continues to work closely with the City of Richmond staff; RRPDC staff is creating graphics and maps for the City-sponsored public meeting on November 19. The project team has moved into corridor-wide analysis: determining existing transit oriented development (TOD) characteristics, market readiness, and development potential of inlying areas. Josh Mallow, project lead, provided presentations to the TPO Technical Advisory Committee on November 17, the Citizens Transportation Advisory Committee on November 19, and the TPO on December 3 in an effort to increase awareness and understanding of this work effort.

- Development of a “story map” to publicly explain the work developed under phase I of the planning effort which include elements describing demographics of the study area, including population, age, rent/own, and employment, and the plan boundary, zoning for the planning area and surface parking details. The story map can be found at this link: [https://rrpdc.maps.arcgis.com/apps/MapJournal/?appid=4d7d3f61fabb4c73909c7c19e8d50506](https://rrpdc.maps.arcgis.com/apps/MapJournal/?appid=4d7d3f61fabb4c73909c7c19e8d50506)

### 5.2 Elderly and Disability Transportation Planning

- **Elderly and Disability Advisory Committee:** Primary meeting topics included the role of the taxi cab industry in meeting the needs of seniors and persons with disabilities; the Richmond Region Transit Vision Plan; public involvement opportunities in the MTP2040; update on the Senior Connections training program; presentation on the VDOT Work Zone Pedestrian and Bicycle Guidance and the GRTC Travel Training Program funded with FTA Section 5310 funds; presentations from the Hampton Roads Transportation, Inc. Subsidized Taxicab Program (Frank Azzalina and July Swystun), the City of Richmond Smart Cities Application (Mike Sawyer), and plan 2040 Citizen Survey (Catie Bray)
TPO Ad-Hoc Committee (September 14): The Committee met to review the final draft of the Needs and Gaps Assessment for the Transportation Disadvantaged report. The Ad-Hoc Committee is recommending short-, mid-, and long-term actions; the Committee is further recommending that these actions be finalized and implemented by a coordinating entity that exists within the regional private non-profit community. The recommendations will be presented to the TPO on December 3.

Need and Gaps of the Transportation Disadvantaged: Staff presented the recommendations of the report, Needs and Gaps Assessment for the Transportation Disadvantaged to the TPO at its December 3 meeting. The TPO approved a resolution endorsing the recommendation of the Ad Hoc Committee on Regional Paratransit Services and Programs to include in the FY 2017 UWP a task to explore identifying an organizational structure to support a specialized transportation services coordination entity. As follow-up to discussion at the TPO meeting, staff prepared a preliminary scope of work to provide an annotated “at-a-glance” summary of existing and candidate services that may best meet the transportation needs from the Needs and Gaps report.

Needs and Gaps – Coordinating Entity: Developed a list of 24 candidate transportation coordination entities. Began assessing the strengths of each by listing the pro’s and con’s based on information from the literature and personal observations and knowledge.

Richmond Regional Transportation – New Solutions for Growing Needs - Reviewed the revised Senior Connections report, Richmond Regional Transportation- New Solutions for Growing Needs and provided additional comments to the Senior Connections staff.

Staff contacted regional social service agencies and other partners by email about the availability of applying for the FTA Section 5310 funding. Information on the Section 5310 funding was also shared at the Age Wave Leadership meeting held at the RRPDC on December 11. The meeting included a discussion of the coordination of various human service client information referral services, which may be applicable to the development of a coordinated human services transportation program.

Attended the May 24 Older Americans Month Open House at Senior Connections. The event featured displays on transportation services and programs. Staffed the RRPDC table and provided information on the RRPDC and TPO and the long range planning process.

Attended the June 8 meeting of the Rappahannock Area on Aging Regional Human Services Transportation Coordinating Committee. Contacted Nancy Lo with the Virginia Grand Driver Program and confirmed her availability to provide a presentation at the September 21 EDAC meeting.

Participated in the June 16 National Aging and Disability Transportation Center webinar “Addressing Transportation Barriers for Older Adults and People with Disabilities.” The webinar included a presentation by a member of the Atlanta Regional Commission (ARC) on the Commission’s transportation services website, “Simply Get There.”
Enrolled in the National Aging and Disability Transportation Center online course, “Section 5310: Filling Gaps in Mobility for Older Adults & People with Disabilities.” The course, which consists of three webinars and two assignments, is intended to promote interest in the Section 5310 program as a means to address gaps in mobility for older adults and people with disabilities and improve understanding of the flexibilities inherent in the Section 5310 program so as to promote new and innovative approaches to the use of the funding. Participated in the first webinar, “Section 5310: The Federal Perspective” which was held on June 30.

5.5 Regional Public Transportation Services

Greater RVA Transit Vision Plan (formerly Richmond Regional Transit Vision Plan)

- DRPT staff gave a presentation at the August 18 TAC meeting, the September 16 EDAC meeting and the September 17 CTAC meeting on initiation of work for the Richmond Region Transit Vision Plan.

- DRPT has conducted the consultant review and selection process for this study (budgeted at $306,477 with FTA Section 5304 funds) and it is ready to initiate stakeholder and public outreach meetings. TPO and DRPT staff have been in consultation regarding the scope of work and the incorporation of this work effort into the RRTPO Unified Work Program.

- Staff attended/participated in various meetings, conferences, and events in support of creating awareness on the rollout of the Richmond Regional Transit Vision Plan.

- TPO staff participated in a region-wide Vision Plan Advisory Committee meeting held at the RRPDC offices on October 14, 2015. This meeting was the kick-off for the Advisory Committee and began with introductions of the members and the consultant team, a discussion of the purpose of the meeting, what has been learned from research support to GRTC, several visioning exercises on future goals, and concluded with next steps. Following the October meeting, community outreach meetings were held on November 4 at Main Street Station; November 5 at New Bridge Baptist Church; and November 9 CCWA – at John Tyler in Chester. Notice of these meetings was shared with the Advisory Committee. At the meetings, the public was provided background information on the study, the schedule for developing alternatives and recommendations, individuals were offered the opportunity to comment on regional transit needs. The results information gathered at these meetings will be shared with the Transit Vision Plan Advisory Committee on December 14 at a meeting at the RRPDC office. At this meeting TPO staff also provided an update on the MTP process and how the MTP goals intersect with the efforts of the RRTVP. Additional activities at the December 14 meeting included the development of a comprehensive vision statement for the RTVP.
• Participated in the Greater RVA Transit Vision Planning Forum meeting at RRPDC on May 2 and participated in the public meetings on June 7, 9, and 13.

• Attended the May 25 meeting of the LogistiCare Advisory Committee. Distributed copies of the Richmond Transit Vision Plan public information meeting fliers.

• Attended the June 7 Greater RVA Transit Vision Plan public meeting. Information was presented on the draft BRT and transit networks, travel demand management, and ridership levels and estimated costs for no build, low cost and high cost alternatives.

❖ **RideFinders Funding Sources Report:** In approving the FY 2016 Unified Work Program, FHWA recommended that the UWP include a task to research and present to TAC a report on reasonable and sustainable sources of revenue for the RideFinders regional program. Staff is developing a report in consultation with RideFinders to document work completed under UWP work task 5.5, Regional Public Transportation Services (Work Element 9, RideFinders Funding Sources Report) on current and proposed revenue sources to fund RideFinders work program activities and to identify additional potential funding sources in support of RideFinders activities. This report will be completed and presented to the RideFinders Advisory Board on October 7 and the TPO Technical Advisory Committee at its October 20 meeting for recommendation action by the TPO.

In approving the FY 2016 Unified Work Program, FHWA recommended that the UWP include a task to research and present to TAC a report on reasonable and sustainable sources of revenue for the RideFinders program. Staff developed a report in consultation with RideFinders to document work completed under UWP work task 5.5, Regional Public Transportation Services (Work Element 9, RideFinders Funding Sources Report). This report was presented to the RideFinders Advisory Board on October 7 and the TPO Technical Advisory Committee (TAC) at its October 20 meeting; recommendation action by the TAC was continued to the November 17 meeting at which time it was recommended to be accepted as work completed. The report is scheduled to go to the TPO on December 3.


❖ **FTA 5310 Human Services Grant Funding Information Meetings:** A region-wide meeting was sponsored by DRPT and held at the RRPDC offices on October 21. In preparation for the meeting, TPO staff contacted regional social services organizations to make sure that potential applicants were aware that the meeting was taking place; this contact was by email correspondence and by providing briefings at community meetings across the region.

In an effort to encourage more participation in the FTA Section 5310 funding program, TPO staff met throughout October and November with interested parties including the New Kent Outreach Council, Hanover Department of Community Resources and Mechanicsville Churches Emergency Function (MCEF), Partnership for People with Disabilities, the Goochland Community Partners, the Region IV Intellectual Disabilities Directors, the
Powhatan Resources Council and provided a briefing at the October 20 TAC meeting to increase awareness of the program opportunities, requirements and deadlines.

- **NEC Future:** Staff participated in the FRA webinar on October 28, 2015 focusing on the upcoming release of the Tier 1 Draft Environmental Impact Statement (EIS) for NEC FUTURE corridor rail project between Washington, DC and Boston, MA. The presentation included an overview of the Tier 1 Draft EIS contents, the public comment period, schedule of public hearings, and comment submission opportunities.

- **DC2RVA Tier II Environmental Impact Statement:** In May 2015, the TPO received its first presentation on the DC2RVA Tier II Environmental Impact Statement (EIS); this planning effort was initiated by the Virginia Department of Rail and Public Transportation (DRPT) in the fall of 2014. The infrastructure improvements and service upgrades anticipated with this project will improve the travel time, service frequency, and on-time performance of passenger trains operating between Washington, DC and Richmond, VA. Staff has been working with DRPT to understand the status of the alternatives screening process and the impacts that each alternative may have in advance of a public meeting to be held in the region on December 10. DRPT provided a presentation to the TAC on October 20, to the TPO on November 5, and to CTAC on November 19 describing the screening of the alternatives and identifying the next steps in the EIS process. In addition to these meetings, TPO staff participated in DRPT sponsored meetings on November 10 and 12 and December 1 with local jurisdictions impacted by the EIS alternatives to evaluate the screening alternatives in advance of the December 10 public meeting. Participated in two DC2RVA meetings in Hanover County: a public meeting at Hanover High School on April 4 and a meeting at Hanover Courthouse on April 28 with representatives from the Town of Ashland and Hanover County.

- **Mobility on Demand and Rides to Wellness**
  - Reviewed the report, “ACT Mobility-On-Demand Partners” and provided author Tyler Walter of RideFinders with comments and suggestions. Developed and communicated with the members of the EDAC subcommittee a strategy for presenting to EDAC recommendations for the possible use of Mobility-on-Demand and Rides to Wellness funds.
  - Forwarded information about the Rides to Wellness and Mobility on Demand Programs to the members of the EDAC sub-committee that volunteered to explore potential uses of technology to enhance transportation services for seniors and persons with disabilities.
  - Participated in the June 1 ACT webinar, FTA Mobility on Demand Funding: Overview of Program and Partner Opportunities. The webinar included brief presentations by various TDM-related resources that are interested in partnering with Mobility on Demand applicants.
• Convened a meeting with Travis Snellings (VanGo), Isaac Wright (GRTC), and Tyler Walter (RideFinders) on June 16 to begin discussing possible uses for the FTA Rides to Wellness and Mobility on Demand funds.

• Staff met with staff from Southeastern Institute of Research (SIR), Inc. to review, discuss, and provide feedback and comments on survey research they are conducting for GRTC related to customer satisfaction for existing services and ways to increase service ridership, and on work it is conducting to develop a community outreach plan.

• Staff attendance and participation in the Transit Means Business event on December 1 at the Richmond Association of Realtors and sponsored by the VTA in cooperation with DRPT, the Greater Richmond Chamber of Commerce, the RRTPO and other partners.

• Discussion with Henrico County on June 15 to discuss the implications of implementing a taxi voucher pilot program.

• Attended and participated in the Fulton Charrette supported by the FTA Ladders of Opportunity meetings on May 31; additional meetings continued in June 2016.

5.6 Coordinated Human Services Mobility Plan (CHSMP)

❖ Staff prepared and submitted to DRPT on August 26 an updated summary table showing the final list of applicants for FTA Section 5310 funds in the Richmond Urbanized Area. Staff’s previous summary table had shown GRTC’s travel training program funded at $50,000 and as a capital purchase item. The updated table showed it funded at $300,000 for a two-year period and for operating purposes.

❖ Coordinated with DRPT on the status of the regional CHSMP update.

6.1 Intermodal Planning

❖ Port of Virginia – Richmond Marine Terminal (RMT): Participation in an event at RMT hosted by Secretary of Transportation and the Port of Virginia to share information on the economic and job creation opportunities in the Richmond region because of the investments by the RRTPO, the Commonwealth, the private sector and the 40-year lease between the Port of Virginia and the City of Richmond.

Staff attended Richmond Region State of the Port presentation by John Reinhart, CEO of the Port of Virginia where the chamberRVA rolled out the new Task Force focusing on creating economic opportunities in the corridor surrounding the port.

Staff participated in Greater Richmond Exports Initiative: Marching toward a Regional Strategy project update meeting.

Staff reviewed Port of Richmond lease agreement between City of Richmond and Port of Virginia.
Commerce Corridor Transportation Plan: Staff participated in initial scoping discussion on potential corridor study for I-95 south of the James River to Route 10 in Chesterfield County coordinated by the VDOT Office of Intermodal Planning and Investment. Potential partners in the planning effort include Chesterfield County, the City of Richmond, VDOT, DRPT, the Virginia Office of Public Private Partnerships and the Port of Virginia. Staff participated in the progress and review RFP responses from consultant team for a corridor study for I-95 south of the James River to Route 10 in Chesterfield County; notice to proceed received in June 2016. Participated in meetings sponsored by the Virginia P3 Office on strategies for redevelopment of properties in close proximity to the port on May 16 and May 17. Staff managed and coordinated consultant work on Commerce Corridor study.

USDOT National Freight Summit: Staff participation in national summit; the purpose of the summit is coordination of the next steps for implementation of the FAST Act freight program initiatives.

Coordination of Intern Research Activities: Conducted interviews for intern position to develop Freight Database. Activities to date have included:
- Mapping state freight corridors based on freight intensive land uses
- Mapping the regional freight network, including the Primary Freight Network
- Mitigating freight impacts on communities

ChamberRVA Port Task Force: Staff participated in the initial Task Force meeting on April 5, a briefing on May 10 at the ChamberRVA office to discuss Transportation Team membership and activities, and a tour with the Task Force of the Richmond Marine Terminal on May 16, 2016. The focus of this 18-month work effort is to create economic and workforce opportunities outside of the gate of the Richmond Marine Terminal.

Route 10/I-95 & Willis Rd./I-95 Interchange Modification: Staff participated in coordination meeting for VDOT and Chesterfield County

RMT Refrigerated Cargo: Participation in meeting with MARAD and POV on exploring market potential for refrigerated cargoes and the use of a hydrogen-cell power pack for providing a fuel source for the cargoes.

Staff is reviewing reports, plans, and documents related to intermodal planning in the Richmond Region and best practices from freight programs in comparable MPO’s.

Staff is reviewing the FHWA Freight Analysis Framework for possible use as a data source for freight analysis work that may be conducted as part of the TPO’s 2040 MTP/CMP update.

Staff coordinated with Port of Virginia staff on regulations related to procurement of new mobile harbor crane for Port of Richmond; the new crane was funded by RRTPO CMAQ allocations.
Staff attended RTD Public Square event focused on discussion of findings from the ‘Richmond’s Future Final Report’.

7.1 Air Quality and Program Activities

- Staff participated in the air quality analysis of the expansion of the VPA Green Operator Program and the potential benefits to the region by increasing the number of weekly barge calls and the impact on regional air quality. This review was undertaken as part of the TAC and TPO consideration in amending the scope of the CMAQ VPA Green Operator Program.
- Evaluation of the regional air quality, including a presentation from VA-DEQ on the three-year ozone report.

8.1 Bicycle and Pedestrian Planning

- From August through October staff installed the equipment and participated in weekly collection of data from the tube counters and pyro-boxes; the data is currently being analyzed for incorporation into a draft report which is due to FHWA in December 2015.
- Continued to review local comprehensive plans to see goals and objectives for bike and pedestrian planning at a locality level and identify opportunities for larger scale bike and pedestrian projects that have interregional momentum.
- Worked on the development of phase 2 for the TPO’s role in developing a region wide count program.
- Released and followed up on the development of the 2040 MTP Bike and Pedestrian Planning Matrix. This matrix will be incorporated into the Bike and Pedestrian chapter of the MTP document. All nine jurisdictions were asked to review the information from the 2035 LRTP and provide updates as need. As of June 3rd all jurisdictions have responded with updated information.

8.2 Bicycle and Pedestrian Count Program

- The TPO received a $20,000 grant under the FHWA Bicycle and Pedestrian County Technology Deployment Pilot Program to purchase equipment to support counting pedestrian and bicycle activity. The Richmond pilot is advancing in two phases: collecting data on Floyd Avenue, and the second phase which will include data collection on Broad Street (Richmond) in early 2016.
- Bicycle and pedestrian count equipment, software, licenses, and installation kits and services were purchased with grant funds in July and included the following: two Pyro Box Infrared Counters and related equipment and services from Transportation Equipment Services (total cost of $9,085.00) to be used for pedestrian counts. Staff also purchased two Trax Cycle
Counter/Classifiers and related equipment and services from JAMAR Technologies (total cost of $6,272.00).

- The first phase of the data collection for the FHWA Bicycle and Pedestrian County Technology Deployment Pilot Program to support counting pedestrian and bicycle activity is complete. The equipment, which was purchased with grant funds in August, was used in the first phase on Floyd Avenue and collected data on bicycle and pedestrian activity from September through October. Staff is continuing to review count data. Bike count data has been provided to consultants (JAMAR) for analysis. Due to damage to the tubes, TPO staff is working with JAMAR to determine what of this data is useable.

- Revised phase two approach to testing the count data; the Broad Street location in Richmond will not be the test site for phase two due to complications in protecting the equipment in the Broad Street corridor. Staff worked with the Town of Ashland and FHWA to revise the scope of work for this pilot to focus on a new count site in Ashland. This update to the scope will be presented to the TAC at the January 2016 meeting.

- Began drafting the final report for the Bike and Pedestrian Grant program, which ends on April 30, 2016.

- Worked with the Town of Ashland to set up a Bike and Pedestrian Counter within the Town for the month of April.

- Completed the final report for the pilot project. This report was submitted to FHWA’s Jeremy Raw on May 26, 2016. This report detailed the experience of counting cyclists and pedestrians on Floyd Ave prior to the installation of the Bike-Walk Boulevard project.

- Completed the counting efforts in the Town of Ashland, which finished on May 31. The total duration of the count was April 14 to May 31. The data collected focused on bicycles but also included cars and buses.

- Submitted final data materials to the Town of Ashland for further review and future development by the Town. Town staff is now interested in hosting a second count in the northern portion of the Town.
**Attainment**  
A term that means an area is in compliance with the National Ambient Air Quality Standards (NAAQS) and/or the Clean Air Act (CAA). There are six atmospheric pollutants covered under the CAA. The Richmond area (i.e., Cities of Richmond, Colonial Heights, Hopewell, and Petersburg, and the counties of Charles City, Chesterfield, Hanover, Henrico and Prince George) is currently designated as an attainment area for ozone air quality standards.

**Highway Trust Fund (HTF)**  
Provides dedicated funding for federal highway and mass transit programs. Revenues placed in the HTF come from the federal gasoline tax plus other user fees. The HTF consists of separate highway and mass transit accounts.

**MPO**  
Metropolitan Planning Organization. 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 (i.e. TPO). 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 TPO 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 TPO’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.

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SIP</strong></td>
<td>State Implementation Plan; identifies control measures and process for achieving and maintaining NAAQS; eligible for CMAQ funding.</td>
</tr>
<tr>
<td><strong>Study Area</strong></td>
<td>The area projected to become urbanized within the next 20 years; defines the area for TPO plans, programs, and studies.</td>
</tr>
<tr>
<td><strong>TPO</strong></td>
<td>Transportation Planning Organization. Serves as the policy board charged with conducting federal transportation planning and programming requirements under 23USC Part 450. TPO is the term or name used for general reference purposes for the Richmond Area Metropolitan Planning Organization (see MPO above).</td>
</tr>
<tr>
<td><strong>&quot;3-C&quot; Process</strong></td>
<td>(&quot;Continuing, Cooperative and Comprehensive&quot;) Language from federal legislation establishing MPOs/TPOs and used in reference to the regional transportation planning and programming process.</td>
</tr>
<tr>
<td><strong>TCM</strong></td>
<td>Transportation Control Measures (for Air Quality Control); eligible for CMAQ funding.</td>
</tr>
<tr>
<td><strong>TDM</strong></td>
<td>Transportation Demand Management; various transportation control strategies and measures used in managing highway demand.</td>
</tr>
<tr>
<td><strong>TIP</strong></td>
<td>Transportation Improvement Program; a staged, multiyear, intermodal program of transportation projects that is consistent with the transportation plan.</td>
</tr>
<tr>
<td><strong>Transportation Plan</strong></td>
<td>The TPO's adopted Long-Range Transportation Plan or LRTP (under federal MPO/TPO 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 2035 LRTP is the TPO’s current transportation plan, adopted by the TPO in July 2012.</td>
</tr>
<tr>
<td><strong>TAZ (Transportation or Traffic Analysis Zone)</strong></td>
<td>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.</td>
</tr>
<tr>
<td><strong>Urbanized Area</strong></td>
<td>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.</td>
</tr>
</tbody>
</table>
UWP  Unified Work Program; TPO's program of work activities noting planning priorities, assigned staffs, work products, budgets, and funding sources.

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

TPO STANDING COMMITTEES

CTAC  Citizens Transportation Advisory Committee
EDAC  Elderly and Disability Advisory Committee
TAC  Technical Advisory Committee

FEDERAL STATE AND REGIONAL AGENCIES

CRAC  Capital Region Airport Commission
DRPT  Virginia Department of Rail and Public Transportation
EPA  Environmental Protection Agency
FAA  Federal Aviation Administration
FHWA  Federal Highway Administration
FRA  Federal Railroad Administration
FTA  Federal Transit Administration
GRTC  GRTC Transit System (formerly Greater Richmond Transit Company)
MRAQC  Metropolitan Richmond Air Quality Committee
RideFinders  A public nonprofit corporation that provides carpool/vanpool matching and other commuter and transportation services; also, a division of GRTC Transit System
MARAD  Maritime Administration
RMTA  Richmond Metropolitan Transportation Authority
APPENDIX D
MPO Terms and Abbreviations

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
VCTIR  Virginia Center for Transportation Innovation and Research
VDA  Virginia Department of Aviation
VDEQ  Virginia Department of Environmental Quality
VDOT  Virginia Department of Transportation

FEDERAL LEGISLATION

ADA of 1990  Americans with Disabilities Act
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.
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 TPO program activities.

**Section 5303**  
Planning funds available from the FTA for TPO 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 TPO and Tri-Cities MPO with 86.5 percent allocated to the Richmond TPO and 13.5 percent allocated to the Tri-Cities MPO (as per the TPO’s April 4, 2013 action and agreed to by the Tri-Cities MPO and VDOT). Projects eligible for RSTP funding include highway and bridge construction and rehabilitation (for roads functionally classified as collector or higher; maintenance is not eligible); transit capital improvements; car and vanpool programs; bicycle and pedestrian facilities; safety and hazard elimination projects; traffic management systems; transportation enhancement/alternatives; wetlands and environmental mitigation; and TPO 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

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADT</td>
<td>Average Daily Traffic; used in conjunction with current and projected traffic volumes.</td>
</tr>
<tr>
<td>CAO</td>
<td>Chief Administrative Officer</td>
</tr>
<tr>
<td>CARE</td>
<td>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.</td>
</tr>
<tr>
<td>CMP</td>
<td>Congestion Management Process</td>
</tr>
<tr>
<td>CHSMP</td>
<td>Coordinated Human Services Mobility Plan</td>
</tr>
<tr>
<td>COA</td>
<td>Comprehensive Operational Analysis (for transit studies)</td>
</tr>
<tr>
<td>CTB</td>
<td>Commonwealth Transportation Board</td>
</tr>
<tr>
<td>CRC</td>
<td>Capital Region Collaborative; Cooperative planning process conducted by the RRPDC and the Greater Richmond Chamber of Commerce.</td>
</tr>
<tr>
<td>EJ</td>
<td>Environmental Justice</td>
</tr>
<tr>
<td>FFY</td>
<td>Federal Fiscal Year (October 1 to September 30)</td>
</tr>
<tr>
<td>FY</td>
<td>State Fiscal Year (July 1 to June 30).</td>
</tr>
<tr>
<td>GIS</td>
<td>Geographic Information System</td>
</tr>
<tr>
<td>I/M</td>
<td>Inspection and Maintenance</td>
</tr>
<tr>
<td>LEP</td>
<td>Limited English Proficiency</td>
</tr>
<tr>
<td>MSA</td>
<td>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.</td>
</tr>
<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>Term</td>
<td>Definition</td>
</tr>
<tr>
<td>------</td>
<td>------------</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 TPO on November 11, 2011. Note that GRTC submits annual updates to the TDP to DRPT and these updates are available for TPO 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 the 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 predetermined 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.
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.

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 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.
AMENDMENTS

TPO AMENDMENT ACTIONS

1. December 1, 2016 – RRTPO action to amend the Fiscal Year 2017 Unified Planning Work Program to program $141,864 in Fiscal Year 2016 Federal Transit Administration 5303 Carryover funds to work tasks 2.1 Public Outreach/Equity ($60,000), 2.2 Performance Measures ($40,000) and 2.6 Active Transportation ($41,864); to incorporate project and budget updates for two monitoring projects: GRTC Pulse Bus Rapid Transit and GRTC Downtown Transit Center; and to revise the FY18 – FY21 Transportation Improvement Program to reflect an accelerated completion schedule.

2. April 4, 2017 – RRTPO action to amend the Fiscal Year 2017 Unified Planning Work Program to shift Federal Highway Administration (FHWA) PL funds among various work tasks and to transfer $30,200 in FY17 FHWA/PL funds from the FY17 UPWP to the FY18 UPWP.
