The contents of this document reflect the views of the Tri Cities Area Metropolitan Planning Organization. The staff of the Crater Planning District Commission is responsible for the facts and the accuracy of the data presented herein. The contents do not necessarily reflect the official views or policies of the Federal Highway Administration, the Federal Transit Administration, or the Commonwealth Transportation Board. This report does not constitute a standard, specification, or regulation. Acceptance of this document by the Federal Highway Administration and the Federal Transit Administration, as evidence of fulfillment of the objectives of this planning document, does not constitute their approval for the 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.
Table of Contents

Section 1 – Introduction ......................................................................................................................................... 1
  Transportation Goals and Objectives for the Tri-Cities Area ............................................................................ 3

Section 2 – Tri-Cities Area Profile ....................................................................................................................... 5
  Metropolitan Planning Organization Study Area ............................................................................................... 6
  Population ....................................................................................................................................................... 6
    Elderly Population ..................................................................................................................................... 10
    Minority Population ................................................................................................................................ 11
  Housing ....................................................................................................................................................... 12
  Employment ................................................................................................................................................ 15
  Automobile Ownership .................................................................................................................................. 19

Section 3 – Land Use Planning in the Tri-Cities Area ......................................................................................... 21
  Relationships between Transportation and Land Use .................................................................................... 22
  Land Use Plans in the Tri-Cities Area ............................................................................................................. 22
  Preservation of Rights-of-Way ...................................................................................................................... 23
  Land Use Planning Responsibilities within the Tri-Cities Area ........................................................................ 23

Section 4 – Highway Element ............................................................................................................................. 25
  Functional Classification .................................................................................................................................. 26
    Present and Future Congestion Management ............................................................................................. 28
  Level of Service ........................................................................................................................................... 32

Section 5 – Intermodal Element ........................................................................................................................... 33
  Air Transportation ........................................................................................................................................... 34
  Freight Rail Service ....................................................................................................................................... 34
  Passenger Rail Service ................................................................................................................................... 35
    Southeast High-Speed Corridor ................................................................................................................... 35
    Richmond/Hampton Roads High-Speed Alternatives Analysis/Draft Environmental Impact Statement (DEIS) ...................................................................................................................... 35
  Ports ............................................................................................................................................................... 35
  Bikeways ......................................................................................................................................................... 37
  Pedestrian Walkways ...................................................................................................................................... 39
  Public Transit .................................................................................................................................................. 39
  Intercity Bus Service ......................................................................................................................................
Taxicab Services ....................................................................................................................... 40
Highways .................................................................................................................................. 40
Trucking .................................................................................................................................... 40
Intermodal Facility .......................................................................................................................... 40

Section 6 – Tri-Cities Area Transportation Plans and Programs .............................................. 41

Public Participation Process
Short Range Transit Development Plan .......................................................................................... 42
Tri-Cities Area Transportation Improvement Program .............................................................. 45
Air Quality and Transportation Planning .................................................................................... 46
Tri-Cities Area Transportation Planning .................................................................................... 47
Fort Lee Expansion Traffic Study
Crater Growth Management Plan
Route 460 Private Public Transportation Solicitation Process

Environmental Justice Assessment .................................................................................................. 47
Development of a Human Service Coordination Plan

Section 7 – Year 2031 Transportation Plan .............................................................................. 54

Tri-Cities Area Year 2031 Transportation Plan Recommended Projects and Financial Plan .... 55

Section 8 – Related Planning Activities in the Tri-Cities Area ..................................................... 70

Metropolitan Transportation Planning Factors ............................................................................. 73
Resource Agency Consultation and Potential Environmental Mitigation Strategies

Role of Management Systems in the Transportation Planning Process .................................. 76
Congestion Management Process ................................................................................................. 77
Intelligent Transportation Systems .............................................................................................. 79

Transportation Safety

Energy Conservation Efforts .......................................................................................................... 79
Congestion Mitigation and Air Quality Program ............................................................................ 81
Ridesharing .................................................................................................................................. 81

Transportation Security

Transportation Enhancement Program .......................................................................................... 82
Rural Transportation Program ....................................................................................................... 85
Section 9 – Appendices ........................................................................................................................................ 89

Appendix A: Tri-Cities Area Public Participation Plan ................................................................. 90

Appendix B: 2000 U.S. Census Tract Profile of the Transportation Study Area by Minority and Poverty Concentration .......................................................................................................................... 93

Appendix C: Environmental Overview of Year 2031 Transportation Plan with Project Locations .................................................................................................................................................. 108

Appendix D: Tri-Cities MPO Environmental Resource Agency Contact List

Appendix E: Status of Fort Lee Expansion Traffic Study Project Recommendations - April 2007

Appendix F: Plan Adoption Resolutions and Certification Statement ......................................... 113
Section 1 – Introduction
The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) was established under federal law in 2005. SAFETEA-LU authorizes surface transportation programs for highways, highway safety, and transit for federal fiscal years 2004-09. This legislation enhanced the current metropolitan transportation planning process with the addition of provision for consultation with environmental resource agencies and for consideration of transportation security as a separate planning factor. Following issuance of final guidance by the U.S. Department of Transportation in February 2007 for implementation of SAFETEA-LU, the Tri-Cities Metropolitan Planning Organization (MPO) completed revisions to the 2026 Transportation Plan narrative in June 2007 to make the document compliant with SAFETEA-LU metropolitan planning requirements. Planning assumptions, such as 2026 socio-economic forecast and the 2026 revenue forecast, were not changed. The list of financially constrained projects was modified for the 2026 Transportation Plan revision to include priority projects recommended in the Fort Lee Expansion Traffic Study. During the fall of 2007, the 2031 socio-economic forecast was endorsed by the Policy Committee. The 2031 financial forecast and project listing was developed during the winter of 2008 and approved for air quality conformity analysis. MPO endorsement of the 2031 Transportation Plan and the Conformity Analysis findings for public review is scheduled for May 2008. Approval of both documents by the MPO – Policy Committee is scheduled for June 2008.

The goals and objectives statement contained in the 2031 Transportation Plan places emphasis on economic development, resource agency consultation and transportation security in the Tri-Cities Area. Section 2 includes historical and projected demographic information for the transportation study area, including population, employment, and housing data with consideration for Fort Lee expansion pursuant to the recommendations of the 2005 U.S. Base Realignment and Closure Commission’s recommendations. The distribution of minority population, elderly population and the distribution of poverty in the transportation study area are also reviewed in Section 2. Section 3 discusses the trends in land development patterns and the type of land use planning activities occurring in the metropolitan area. Information on general environmental constraints in the study area is identified. Section 4 presents functional classification and congestion information on highway facilities. Section 5 provides a summary of existing transit facilities and a description of service delivery. General information on available modes of transportation in the region is also provided. Section 6 is a synopsis of current transportation plans and programs in the Tri-Cities area, including the public participation plan. Summary information on the Fort Lee Expansion Traffic Study and the Crater Growth Management Plan is also provided. Section 7 includes a discussion of several planning related activities, including Intelligent Transportation Systems applications in this transportation study area.
Transportation Goals and Objectives for the Tri-Cities Area

The following statement of transportation goals and objectives were developed under the direction of the Tri-Cities Area Transportation MPO and Technical Committee for the purpose of helping to determine the purpose and need for transportation projects listed in the Year 2031 Transportation Plan. These goals and objectives reflect community values and are intended to complement local comprehensive and land development plans. Further, governmental agencies may use these as an indication of the public interest when performing legislated responsibilities. While all of these goals may not be fully achieved with the implementation of the Tri-Cities 2031 Transportation Plan, some movement toward the desired objectives will be realized. The objectives may be considered as relative measures of goal attainment.

<table>
<thead>
<tr>
<th>Goal</th>
<th>Develop a regional transportation plan which offers alternative travel modes for the safe and efficient movement of people and freight at a reasonable cost.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Objectives</td>
<td></td>
</tr>
<tr>
<td>● Promote pedestrian and vehicular travel safety.</td>
<td></td>
</tr>
<tr>
<td>● Reduce travel time and transportation costs.</td>
<td></td>
</tr>
<tr>
<td>● Assure the future availability of transit service.</td>
<td></td>
</tr>
<tr>
<td>● Participate in regional and State airport and freight movement studies.</td>
<td></td>
</tr>
<tr>
<td>● Promote the use of low cost improvements and energy conservation measures to maximize the efficiency of the existing transportation system.</td>
<td></td>
</tr>
<tr>
<td>● Promote transportation security considerations, especially at military installations located in the transportation study area.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Goal</th>
<th>Assure that transportation improvements are compatible with local comprehensive plans, regional economic development activities, and environmental regulations.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Objectives</td>
<td></td>
</tr>
<tr>
<td>● Encourage the implementation of future transportation improvements which complement current land-development plans and regional economic development activities.</td>
<td></td>
</tr>
<tr>
<td>● Promote the reduction of mobile source air emissions.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Goal</th>
<th>Improve the urban transportation planning process by encouraging citizen input and intergovernmental cooperation.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Objectives</td>
<td></td>
</tr>
<tr>
<td>● Follow the provisions of adopted public participation process regarding resource agency consultation and stakeholder involvement.</td>
<td></td>
</tr>
<tr>
<td>● Maximize local government input into the development of area-wide transportation plans through the maintenance of a continuing transportation planning process.</td>
<td></td>
</tr>
</tbody>
</table>

The projects and transportation decisions resulting from this plan should benefit the overall social, economic and environmental well being of the Tri-Cities area. The enhancements to the area transportation system will provide for more efficient movement of people and goods and ensure accessibility to the system for all residents of the Tri-Cities. Because an efficient transportation system is vital to area economic health, planned improvements to the Tri-Cities transportation system should also benefit the regional economy. The improvements included in the metropolitan transportation plan are intended to benefit the area, socially and economically, with minimum adverse environmental impact.
Section 2 – Tri-Cities Area Profile
The Tri-Cities Transportation Study Area is comprised of the City of Petersburg, the City of Colonial Heights, and City of Hopewell, and portions of Chesterfield County, Prince George County and Dinwiddie County. The MPO is responsible for conducting the continuing, cooperative and comprehensive transportation planning process required by federal law in urbanized areas over 50,000 in population. The Tri-Cities Area forms the southern portion of the Richmond, Virginia Urbanized Area. The Richmond Urbanized Area has a population base of more than 200,000.

Elected representatives from each of the six localities within the study area, along with appointed representatives from the Virginia Department of Transportation (VDOT), the Crater Planning District Commission (CPDC) and Petersburg Area Transit (PAT) comprise the voting membership of the MPO – Policy Committee. Representatives from the Federal Transit Administration, the Federal Highway Administration and the Virginia Department of Rail and Public Transportation (VDR&PT) also participate on the MPO – Policy Committee as nonvoting members.

The MPO – Policy Committee is assisted by a Technical Advisory Committee, comprised of representatives from public works, engineering, planning, and traffic engineering staffs of the six local jurisdictions, VDR&PT, VDOT and the CPDC. A representative from U.S. Army installation at Fort Lee and a representative from the National Park Service at Petersburg National Battlefield also serve on the MPO - Technical Committee as ex-officio members.

The Tri-Cities study area is located in south central Virginia within the I-85, I-95, and I-295 travel corridors. Major arterial routes serving the area are Virginia Route 10, Virginia Route 36, US 301, US 1, US 460, Virginia Route 156 and Virginia Route 144. The Tri-Cities supports a multi-modal transportation system with air, rail, water, and pedestrian and bicycle transportation facilities accessible for its population. Localities within the study area also have access to the international water ports and airports located in Richmond and Norfolk.

In order to meet the future transportation needs of the Tri-Cities Area, annual estimates are made at the traffic analysis zone level of socio-economic growth or decline, including housing units, population and employment. Using current trends and State population control totals, new socio-economic forecasts are made for the next 20-year planning horizon period. Under SAFETEA-LU provisions, plan updates are to be made at least every 4 years. Changes in socio-economic patterns during the update periods are monitored and are a vital consideration to the transportation planning process. With these data, decision makers are better able to assess the future transportation needs for the study area. For example, rates of population change can be used to help determine future travel demand. This information can be used to provide an indication on needs for new transportation facilities and improvements to existing transportation facilities.

The following series of narratives, tables and graphs in this section show current and forecasted socio-economic trends in the Tri-Cities Area. This information has been used to help develop the 2031 Transportation Plan. Socio-economic data related to the anticipated expansion at Fort Lee expected to occur during fiscal years 2009 – 2011 as a result of the implementation of the U.S. Base Realignment and Closure (BRAC) Commission recommendations has been included in the 2031 forecast data. More detailed forecast impacts of Fort Lee expansion on the region related to housing, child care, employment and other items may be found in the Crater Growth Management Plan located www.craterpdc.state.va.us.
Population

The overall population of the Tri-Cities Area is projected to experience an increase from 2000 to 2031. Most of the growth in the area will occur within the counties, with the largest increases expected in Prince George and Chesterfield. The projected Tri-Cities study area population for the year 2031 is 195,118. This is an increase of 54,710 persons over the 2000 estimate and represents a forecasted growth of about 28% for the Tri-Cities Area during this time period.

Tri-Cities Existing and Projected Population (2000 - 2031)

<table>
<thead>
<tr>
<th>Jurisdiction</th>
<th>2000</th>
<th>2010</th>
<th>2020</th>
<th>2026</th>
<th>2031</th>
</tr>
</thead>
<tbody>
<tr>
<td>Petersburg</td>
<td>34,775</td>
<td>31,410</td>
<td>31,816</td>
<td>32,090</td>
<td>32,398</td>
</tr>
<tr>
<td>Colonial Heights</td>
<td>16,354</td>
<td>18,240</td>
<td>18,724</td>
<td>19,015</td>
<td>19,257</td>
</tr>
<tr>
<td>Hopewell</td>
<td>22,256</td>
<td>22,334</td>
<td>22,817</td>
<td>23,107</td>
<td>23,350</td>
</tr>
<tr>
<td>Prince George*</td>
<td>27,116</td>
<td>43,696</td>
<td>49,699</td>
<td>53,541</td>
<td>56,743</td>
</tr>
<tr>
<td>Dinwiddie*</td>
<td>10,219</td>
<td>12,896</td>
<td>13,401</td>
<td>13,703</td>
<td>13,955</td>
</tr>
<tr>
<td>Chesterfield*</td>
<td>29,688</td>
<td>46,230</td>
<td>47,737</td>
<td>47,791</td>
<td>49,415</td>
</tr>
<tr>
<td>Study Area Total</td>
<td>140,408</td>
<td>174,806</td>
<td>184,194</td>
<td>189,247</td>
<td>195,118</td>
</tr>
</tbody>
</table>

*Only that portion of the county in the transportation in the study area.
**Population - 2000**

- Chesterfield: 29,688 (21%)
- Petersburg: 34,775 (25%)
- Colonial Heights: 16,354 (12%)
- Hopewell: 22,256 (16%)
- Prince George: 27,116 (19%)
- Dinwiddie: 10,219 (7%)

*Only that portion of the county in the transportation in the study area.
Source: Tri-Cities Area Transportation Study, October 2003

**Population - 2031**

- Chesterfield: 49,415 (25%)
- Petersburg: 32,398 (17%)
- Colonial Heights: 19,257 (10%)
- Hopewell: 23,350 (12%)
- Prince George: 56,743 (29%)
- Dinwiddie: 13,955 (7%)

*Only that portion of the county in the transportation in the study area.
Source: Tri-Cities Area Transportation Study, October 2003
The projected differences in the rates of growth between the cities and the counties of the study area will affect future transportation planning. The counties are projected to grow more than the cities. The planning for certain modes of transportation, such as public transit and pedestrians, must be approached differently in a rural county setting than it is in the urban setting of cities. Special concerns arise when dealing with the elderly and the physically challenged in the more rural counties. These projections identify the future changes in the Tri-Cities population and allow for a proactive approach to transportation planning.

<table>
<thead>
<tr>
<th>Jurisdiction</th>
<th>% Growth 2000-2031</th>
</tr>
</thead>
<tbody>
<tr>
<td>Petersburg</td>
<td>-6.8%</td>
</tr>
<tr>
<td>Colonial Heights</td>
<td>17.8%</td>
</tr>
<tr>
<td>Hopewell</td>
<td>4.9%</td>
</tr>
<tr>
<td>Prince George*</td>
<td>109.2%</td>
</tr>
<tr>
<td>Dinwiddie*</td>
<td>36.60%</td>
</tr>
<tr>
<td>Chesterfield*</td>
<td>66.60%</td>
</tr>
<tr>
<td>Overall</td>
<td>39%</td>
</tr>
</tbody>
</table>

*Only that portion of the county in the transportation study area
Source: Tri-Cities Area Transportation Study, October 2007
Elderly Population
The concentration of elderly population in the jurisdictions comprising the Tri-Cities has increased steadily between the years 1960 and 2000. As shown in the table below, the percentage population over 65 is generally more concentrated in the 3 cities than the 3 counties. Between 1990 and 2000, Hopewell and Colonial Heights experienced the most significant percentage increases population 65 years of age and over.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Petersburg</td>
<td>9.1</td>
<td>10.2</td>
<td>11.6</td>
<td>15.5</td>
<td>15.6</td>
</tr>
<tr>
<td>Colonial Heights</td>
<td>N/A</td>
<td>6.9</td>
<td>9.0</td>
<td>15.5</td>
<td>18.6</td>
</tr>
<tr>
<td>Hopewell</td>
<td>6.0</td>
<td>10.9</td>
<td>10.9</td>
<td>13.0</td>
<td>14.6</td>
</tr>
<tr>
<td>Prince George</td>
<td>2.9</td>
<td>2.7</td>
<td>3.7</td>
<td>6.1</td>
<td>7.3</td>
</tr>
<tr>
<td>Dinwiddie</td>
<td>10.2</td>
<td>9.1</td>
<td>10.9</td>
<td>11.6</td>
<td>12.2</td>
</tr>
<tr>
<td>Chesterfield</td>
<td>4.9</td>
<td>4.4</td>
<td>4.5</td>
<td>6.1</td>
<td>8.1</td>
</tr>
</tbody>
</table>

*Entire Jurisdiction
Source: U.S. Bureau of the Census
Minority Population
The distribution of minority population at the jurisdiction for 2000 is shown in the table below. Petersburg has the largest Tri-Cities Area concentration of minority population and Colonial Heights the smallest.

<table>
<thead>
<tr>
<th>Jurisdiction*</th>
<th>Black</th>
<th>Other Race(s)</th>
<th>White</th>
</tr>
</thead>
<tbody>
<tr>
<td>Petersburg</td>
<td>79.0</td>
<td>2.5</td>
<td>18.5</td>
</tr>
<tr>
<td>Colonial Heights</td>
<td>6.3</td>
<td>4.6</td>
<td>89.1</td>
</tr>
<tr>
<td>Hopewell</td>
<td>33.5</td>
<td>4.2</td>
<td>62.3</td>
</tr>
<tr>
<td>Prince George</td>
<td>32.5</td>
<td>6.6</td>
<td>60.9</td>
</tr>
<tr>
<td>Dinwiddie</td>
<td>33.7</td>
<td>1.7</td>
<td>64.6</td>
</tr>
<tr>
<td>Chesterfield</td>
<td>17.8</td>
<td>5.3</td>
<td>76.7</td>
</tr>
</tbody>
</table>

*Entire Jurisdiction
Housing
The projected number of housing units for the Tri-Cities Area in 2031 is 85,959. This figure would represent an increase of 30,323 units over the 55,636 units that existed in 2000. Most of this increase is anticipated to occur in the county portions of the transportation study area, primarily in Prince George and Chesterfield.

<table>
<thead>
<tr>
<th>Jurisdiction*</th>
<th>2000</th>
<th>2010</th>
<th>2020</th>
<th>2026</th>
<th>2031</th>
</tr>
</thead>
<tbody>
<tr>
<td>Petersburg</td>
<td>16,266</td>
<td>16,502</td>
<td>16,737</td>
<td>16,896</td>
<td>17,071</td>
</tr>
<tr>
<td>Colonial Heights</td>
<td>6,897</td>
<td>8,365</td>
<td>8,618</td>
<td>8,770</td>
<td>8,943</td>
</tr>
<tr>
<td>Hopewell</td>
<td>9,737</td>
<td>10,761</td>
<td>10,979</td>
<td>11,110</td>
<td>11,252</td>
</tr>
<tr>
<td>Prince George*</td>
<td>8,498</td>
<td>13,072</td>
<td>16,958</td>
<td>19,358</td>
<td>21,357</td>
</tr>
<tr>
<td>Dinwiddie*</td>
<td>3,973</td>
<td>4,680</td>
<td>4,887</td>
<td>5,011</td>
<td>5,135</td>
</tr>
<tr>
<td>Chesterfield*</td>
<td>10,265</td>
<td>16,973</td>
<td>19,392</td>
<td>20,870</td>
<td>22,201</td>
</tr>
<tr>
<td>Study Area Total</td>
<td>55,636</td>
<td>70,353</td>
<td>77,571</td>
<td>82,015</td>
<td>85,959</td>
</tr>
</tbody>
</table>

*Only those portions of the counties located in the transportation in the study area.
Source: Tri-Cities Area Transportation Study, October 2007
Total Housing Units - 2000

- Chesterfield: 10,265 (18%)
- Petersburg: 16,266 (30%)
- Colonial Heights: 6,897 (12%)
- Hopewell: 9,737 (15%)
- Prince George: 8,498 (18%)
- Dinwiddie: 3,973 (7%)

Total Housing Units - 2031

- Chesterfield: 22,201 (26%)
- Petersburg: 17,071 (20%)
- Colonial Heights: 8,943 (10%)
- Hopewell: 11,252 (13%)
- Prince George: 21,357 (25%)
- Dinwiddie: 5,135 (6%)

*Only those portions of the counties located in the transportation in the study area.
Source: Tri-Cities Area Transportation Study, October 2003
### Households with Zero Vehicles Available

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Petersburg</td>
<td>3,563</td>
<td>2,848</td>
<td>-715</td>
<td>-20.1</td>
</tr>
<tr>
<td>Colonial Heights</td>
<td>382</td>
<td>407</td>
<td>25</td>
<td>6.5</td>
</tr>
<tr>
<td>Hopewell</td>
<td>1,257</td>
<td>912</td>
<td>-345</td>
<td>-27.4</td>
</tr>
<tr>
<td>Prince George</td>
<td>303</td>
<td>340</td>
<td>37</td>
<td>22.0</td>
</tr>
<tr>
<td>Dinwiddie</td>
<td>522</td>
<td>445</td>
<td>-77</td>
<td>-14.8</td>
</tr>
<tr>
<td>Chesterfield</td>
<td>2,091</td>
<td>3,056</td>
<td>965</td>
<td>46.2</td>
</tr>
</tbody>
</table>

*Entire Jurisdiction


### Change in Zero Vehicle Households 1990-2000

![Bar chart showing the change in zero vehicle households from 1990 to 2000 for various jurisdictions.](chart-url)
Employment

Employment projections are an important part of planning for future transportation needs. Places of employment generate traffic and affect travel demand. Much of the congestion experienced within the Tri-Cities occurs during peak demand hours and is a result of commuter traffic. Projections of employment can be used to determine the location and timing of future transportation facilities.

<table>
<thead>
<tr>
<th>Jurisdiction*</th>
<th>2000</th>
<th>2010</th>
<th>2020</th>
<th>2026</th>
<th>2031</th>
</tr>
</thead>
<tbody>
<tr>
<td>Petersburg</td>
<td>2,555</td>
<td>3,626</td>
<td>3,498</td>
<td>3,263</td>
<td>5,266</td>
</tr>
<tr>
<td>Colonial Heights</td>
<td>4,694</td>
<td>6,974</td>
<td>6,974</td>
<td>6,860</td>
<td>7,239</td>
</tr>
<tr>
<td>Hopewell</td>
<td>1,325</td>
<td>1,251</td>
<td>1,290</td>
<td>1,290</td>
<td>1,549</td>
</tr>
<tr>
<td>Prince George*</td>
<td>1,312</td>
<td>2,100</td>
<td>2,126</td>
<td>2,126</td>
<td>2,389</td>
</tr>
<tr>
<td>Dinwiddie*</td>
<td>418</td>
<td>781</td>
<td>764</td>
<td>764</td>
<td>962</td>
</tr>
<tr>
<td>Chesterfield*</td>
<td>530</td>
<td>203</td>
<td>199</td>
<td>199</td>
<td>207</td>
</tr>
<tr>
<td>Study Area Total</td>
<td>10,834</td>
<td>14,935</td>
<td>14,851</td>
<td>14,502</td>
<td>17,612</td>
</tr>
</tbody>
</table>

* Only those portions of the counties located in the transportation in the study area.
Source: Tri-Cities Area Transportation Study, October 2007
* Only those portions of the counties located in the transportation in the study area.
Source: Tri-Cities Area Transportation Study, October 2007
### Tri-Cities Existing and Projected Total Employment
#### 2000 - 2031

<table>
<thead>
<tr>
<th>Jurisdiction*</th>
<th>2000</th>
<th>2010</th>
<th>2020</th>
<th>2026</th>
<th>2031</th>
</tr>
</thead>
<tbody>
<tr>
<td>Petersburg</td>
<td>13,422</td>
<td>18,487</td>
<td>17,856</td>
<td>17,855</td>
<td>17,848</td>
</tr>
<tr>
<td>Colonial Heights</td>
<td>8,409</td>
<td>11,547</td>
<td>11,547</td>
<td>11,547</td>
<td>11,547</td>
</tr>
<tr>
<td>Hopewell</td>
<td>8,326</td>
<td>8,896</td>
<td>8,896</td>
<td>8,896</td>
<td>8,896</td>
</tr>
<tr>
<td>Prince George*</td>
<td>4,485</td>
<td>17,016</td>
<td>17,016</td>
<td>17,017</td>
<td>17,017</td>
</tr>
<tr>
<td>Dinwiddie*</td>
<td>4,886</td>
<td>7,949</td>
<td>7,949</td>
<td>7,949</td>
<td>7,949</td>
</tr>
<tr>
<td>Chesterfield*</td>
<td>9,057</td>
<td>10,294</td>
<td>10,294</td>
<td>10,294</td>
<td>10,294</td>
</tr>
<tr>
<td>Study Area Total</td>
<td>48,585</td>
<td>74,189</td>
<td>73,558</td>
<td>73,558</td>
<td>73,551</td>
</tr>
</tbody>
</table>

* Only those portions of the counties located in the transportation in the study area.

Source: Tri-Cities Area Transportation Study, October 2007

### Study Area Projected Total Employment

- Employment levels from 2000 to 2031 are shown.
- The study area total employment is projected to increase from 48,585 in 2000 to 73,551 in 2031.
* Only those portions of the counties located in the transportation in the study area.
Source: Tri-Cities Area Transportation Study, October 2007
Automobile Ownership
Auto ownership directly affects transportation planning as it provides information on the number of cars that may be using the area's transportation system. Increases in the number of autos in the Tri-Cities may be an indication of increasing traffic and congestion. Transportation plans must be developed taking into account the possible number of automobiles available for use in the system.

<table>
<thead>
<tr>
<th>Jurisdiction*</th>
<th>2000</th>
<th>2010</th>
<th>2020</th>
<th>2026</th>
<th>2031</th>
</tr>
</thead>
<tbody>
<tr>
<td>Petersburg</td>
<td>19,480</td>
<td>18,088</td>
<td>18,632</td>
<td>18,969</td>
<td>19,283</td>
</tr>
<tr>
<td>Colonial Heights</td>
<td>11,602</td>
<td>12,948</td>
<td>13,280</td>
<td>13,479</td>
<td>13,645</td>
</tr>
<tr>
<td>Hopewell</td>
<td>14,046</td>
<td>14,218</td>
<td>14,500</td>
<td>14,669</td>
<td>14,811</td>
</tr>
<tr>
<td>Prince George*</td>
<td>15,441</td>
<td>22,872</td>
<td>27,626</td>
<td>30,540</td>
<td>32,968</td>
</tr>
<tr>
<td>Dinwiddie*</td>
<td>8,655</td>
<td>10,755</td>
<td>11,126</td>
<td>11,349</td>
<td>11,534</td>
</tr>
<tr>
<td>Chesterfield*</td>
<td>19,823</td>
<td>33,501</td>
<td>34,674</td>
<td>34,995</td>
<td>36,183</td>
</tr>
<tr>
<td>Study Area Total</td>
<td>89,070</td>
<td>112,382</td>
<td>119,838</td>
<td>124,000</td>
<td>128,424</td>
</tr>
</tbody>
</table>

* Only those portions of the counties located in the transportation in the study area.
Source: Tri-Cities Area Transportation Study, October 2007

Within the Tri-Cities area, the historical increase in the number of automobiles is expected to continue to increase. Between the years 2000 and 2031, the number of autos is projected to increase 39,354 over the 2000 figure of 89,070 for an increase of 44.25%.
Automobile Ownership - 2000

- Chesterfield 19,823 (22%)
- Petersburg 19,480 (22%)
- Dinwiddie 8,655 (10%)
- Prince George 15,441 (17%)
- Hopewell 14,069 (16%)
- Colonial Heights 11,602 (13%)

* Only those portions of the counties located in the transportation in the study area.

Source: Tri-Cities Area Transportation Study, October 2007

Automobile Ownership - 2031

- Chesterfield 36,183 (27%)
- Petersburg 19,283 (15%)
- Dinwiddie 11,534 (9%)
- Prince George 32,968 (26%)
- Hopewell 14,811 (12%)
- Colonial Heights 13,645 (11%)

* Only those portions of the counties located in the transportation in the study area.

Source: Tri-Cities Area Transportation Study, October 2007
Section 3 – Land Use Planning in the Tri-Cities Area
Relationships between Transportation and Land Use

No longer can the issues of land use and transportation be treated as isolated events. In planning for these issues, the interrelations between these areas must be carefully considered. It is necessary to consider the effects that decisions in transportation planning will have on existing and future land use and, likewise, the impacts that land use policy will have on transportation needs.

Land use patterns in the Tri-Cities area must be carefully evaluated, as the need to improve air quality becomes more pressing. The area has been previously designated as an ozone non-attainment area and, therefore, local officials must work to improve air quality in the area. As traffic volumes increase, land use patterns such as those present along commercial strips must be re-evaluated. The delays and the harmful emissions associated with these delays that result from such land use need to be addressed. The relationship between land use and its effects on travel time are an important consideration in areas such as the Tri-Cities.

Another manner in which land use affects transportation in the Tri-Cities area is evident as residential areas become removed from the commercial and business areas that serve them. As the population moves further into the suburbs and rural areas, transportation policies will need to address such issues as commuter traffic and public transportation. Programs such as ride-sharing and rural transportation for the elderly and handicapped may need to accompany current land use trends. Likewise, mixed-use communities may provide a land use solution to transportation concerns.

Transportation decisions will impact land use and development and must, therefore, take these plans into consideration. Transportation and land use plans must be coordinated to ensure that the benefits accompanying a new transportation project are not negated by improper use of the land along the improvement corridor. In the Tri-Cities area, transportation plans made in accordance with State and federal guidelines, such as those that accompany air quality designations, must take into account the effects of transportation decisions on area development.

Coordination between land use and transportation is a necessity in the creation and maintenance of successful communities. Efforts are made to assure transportation decisions in the Tri-Cities are made consistent and coordinated with area land use plans.

Land Use and Comprehensive Planning in the Tri-Cities Area

Land use decisions in Virginia are decided at the local government level. The Code of Virginia defines the authority, and describes the tools used by localities for implementation. All jurisdictions in Virginia's Tidewater area are required to adopt comprehensive plans, zoning ordinances and subdivision ordinances. All of these measures are important because together they define what land development can occur in each locality. Land development in the county portions of the Tri-Cities differs from that of the cities because the cities have less undeveloped land for which to plan.

The comprehensive plan is a guide for community growth and development. It outlines each jurisdiction's long-term development scheme and defines the goals and objectives for achieving the derived level of land use and development. According to Title 15.2 of the Code of Virginia, the plan must be reviewed at least once every five years. In addition to land use and transportation elements, comprehensive plans include elements for housing, community facilities, each of the 6 local governments within the transportation study area have comprehensive plans with land use elements. MPO – Technical and Policy Committee representatives provide input on land use development plan for each transportation plan update. SAFETEA-LU requires the MPO to consult with State and local agencies responsible for land use management. Within the comprehensive plans of MPO jurisdictions, transportation issues are discussed. Inventories of the existing transportation facilities are presented and evaluated. Future transportation needs are identified based on existing and future
planned land development patterns.

The Code of Virginia authorizes local governments to enact land development ordinances or tools for implementing comprehensive plans, including the official map, subdivision ordinance, zoning ordinance, site plan review, and capital improvement program.

An official map may be prepared and used to indicate future location of transportation facilities and other utilities. Local governments are required to consult with State agencies regarding facilities under their purview and to submit the official map for review. The official map has value as a means of coordinating State and local plans for land development along transportation corridors.

Subdivision ordinances are used to regulate land parcel division in a manner which promotes orderly development consistent with local goals. These ordinances include standards for lot size and specifications for infrastructure needed to support land development and to avoid congestion. Infrastructure includes roadway facilities constructed by private developers on land parcels being developed. VDOT standards for accepting new roadway facilities into the State maintenance system must be met before new developments are granted access to existing public roadway facilities.

Local governments are also authorized by the State to enact zoning ordinances to implement the land use and other elements of the comprehensive plan. Zoning ordinances separate the land area within a jurisdiction into different zones and specifies the type of land use activities permitted. The intent of zoning is to promote an arrangement of compatible land uses that benefit the entire community in a manner consistent with the goals and objectives of the comprehensive plan.

Site plan review process may be established and used by a locality to require land developers to submit a visual plan for developing land parcels. The site plan indicates the location of the parcel to be developed, existing and proposed roadways, drainage, vegetation and other factors pertinent to how the development of the parcel will meet applicable requirements of local land development ordinances.

Locally developed capital improvement programs typically include information on the scheduling and financing of public facilities proposed to be constructed to support planned land development over a five-year period. For the past several decades, capital improvement programs in the cities of Petersburg and Hopewell have included consideration of redevelopment areas which may be supported by mass transit service.

**Preservation of Rights-of-Way**

The preservation of rights-of-way should be included in the transportation planning process. Early planning for rights-of-way can ensure that localities will be able to address future needs of the transportation system, such as congestion relief, in a more efficient and cost effective manner. A systematic classification of roadway facilities and the establishment of minimum right-of-way widths for those roadway facilities consistent with future local comprehensive planning can help avoid the construction of private development on land needed for future transportation improvement.

**Access Management**

An effective access management program that limits closely spaced entrances to public roadway facilities, closely spaced traffic signals and median openings can help reduce accident rates, congestion levels and help maintain roadway capacity to carry traffic.

**Traffic Calming**
Traffic calming measures can be incorporated into local ordinances to make subdivision streets less conducive to speeding. Measures to accomplish traffic calming objectives include narrowing the travel way using pavement markings and other roadway design modifications.

**Land Use Planning Responsibilities within the Tri-Cities Area**

Land use planning in the region is conducted at the local government level. The Crater Planning District Commission (CPDC) is responsible for regional planning activities in the Tri-Cities area. In addition to the six MPO jurisdictions, CPDC also serves the following four localities: the counties of Greensville, Surry and Sussex, and the city of Emporia. The Commission is involved in a variety of regional planning activities including rural transportation, coastal resource management, solid waste management and environmental analysis. The CPDC also provides staff support for the Tri-Cities MPO. In addition to its role in regional planning, the CPDC provides planning assistance to its member jurisdictions. Planning assistance activities have included assistance in preparing land use plans, recreational site plans and park development plans and updating land use ordinances.

All local governments in the Tri-Cities Area are directly involved in land use planning. Within the past year, the General Assembly amended the Code of Virginia to require localities to submit rezoning, site plan, and subdivision plat proposals to VDOT for review along with a traffic impact analysis for proposed developments likely to generate specified traffic volume thresholds.

Chesterfield County planning activities are carried out through the Department of Planning. The County has an adopted countywide land use plan and has adopted several area plans that cover portions of the County. The County has adopted zoning, subdivision, site plan review ordinances and an erosion and sediment control ordinance. Chesterfield County also has an ordinance to regulate development in locally designated Chesapeake Bay Preservation Areas.

The City of Colonial Heights has a Director of Planning who is responsible for local planning activities. The City has adopted zoning and subdivision ordinances and an erosion and sediment control ordinance. The City has also adopted ordinances, which implement locally designated Chesapeake Bay Preservation Areas. Finally, Colonial Heights has adopted an ordinance establishing a local wetlands board.

Dinwiddie County's local planning is handled through the Director of Planning. The County has an adopted land use plan as well as zoning and subdivision ordinances. The County also has a soil erosion and sediment control ordinance.

The City of Hopewell has a current land use plan. Hopewell has adopted zoning and subdivision ordinances and an erosion and sediment control ordinance. The City has an ordinance to regulate development in locally designated Chesapeake Bay Preservation Areas. Finally, the City has adopted an ordinance, which protects locally designated Chesapeake Bay Preservation Areas.

The City of Petersburg Planning Office handles local planning activities. The City has an adopted land use plan. In addition, the City has adopted zoning and subdivision ordinances and an erosion and sediment control ordinance. Petersburg has adopted ordinances, which protect locally designated Chesapeake Bay Preservation Areas.

Prince George County has a Director of Planning who is in charge of local planning activities. The County has adopted a comprehensive plan and local ordinances implementing zoning, subdivision, site plan review and erosion and sediment control. Prince George has also adopted ordinances to implement locally designated Chesapeake Bay Preservation Areas.
Section 4 – Highway Element
Functional Classification
The Virginia Department of Transportation classifies major roads in the State by the way they function. This function is generally determined by the type of traffic operating on a road and how each road functions relative to other roads in the system. Functional classification is also utilized to determine the type of funding for which improvements are eligible and to aid in the planning and development of an integrated, balanced statewide highway network. Functional classification can be generally defined as follows:

Arterial Roads A route providing service, which is relatively continuous and of relatively high traffic volume, long average trip length, high operating speed, and high mobility importance. In addition, many United States (US) numbered highways are arterial roads. Arterial roadways are further classified as rural or urban and principal or minor.

Urban Principal Roads which generally serve the major centers of activity of an urban area.

Arterial Roads The highest volume traffic corridors, the longest trip purpose and carry a high proportion of the total urban area travel on a minimum of mileage. The routes are integrated, both internally and between major rural connections.

Urban Minor Routes which generally interconnect with, and augment urban principal.

Arterial Roads arterial routes and provide service trips of shorter length and a lower level of travel mobility. Such routes include all arterials not classified as principal and contain facilities that place more emphasis on land access than the higher system.

Collector Roads Routes which generally provide service which is of moderately average traffic volume, moderately average trip length, and moderate average operating speed. Such a route also collects and distributes traffic between local roads and serves as a linkage between land access and mobility needs.
## Estimated Highway Miles in the Tri-Cities Area by Functional Classification

<table>
<thead>
<tr>
<th>Jurisdiction</th>
<th>Interstate &amp; Freeway</th>
<th>Principal Arterials</th>
<th>Minor Arterials</th>
<th>Collectors</th>
<th>Local</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Petersburg</td>
<td>9.00</td>
<td>18.05</td>
<td>21.81</td>
<td>21.01</td>
<td>132.23</td>
<td>202.10</td>
</tr>
<tr>
<td>Colonial Heights</td>
<td>3.57</td>
<td>5.01</td>
<td>3.02</td>
<td>7.98</td>
<td>64.07</td>
<td>83.65</td>
</tr>
<tr>
<td>Hopewell</td>
<td>2.04</td>
<td>8.75</td>
<td>11.85</td>
<td>3.74</td>
<td>93.17</td>
<td>119.55</td>
</tr>
<tr>
<td>Prince George</td>
<td>15.33</td>
<td>13.86</td>
<td>34.11</td>
<td>54.25</td>
<td>80.68</td>
<td>198.23</td>
</tr>
<tr>
<td>Dinwiddie</td>
<td>8.44</td>
<td>5.86</td>
<td>12.37</td>
<td>26.16</td>
<td>47.15</td>
<td>99.98</td>
</tr>
<tr>
<td>Chesterfield</td>
<td>20.02</td>
<td>8.16</td>
<td>45.62</td>
<td>44.18</td>
<td>105.41</td>
<td>223.39</td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td><strong>58.40</strong></td>
<td><strong>59.69</strong></td>
<td><strong>128.78</strong></td>
<td><strong>157.32</strong></td>
<td><strong>522.71</strong></td>
<td><strong>926.90</strong></td>
</tr>
</tbody>
</table>

Source: Virginia Department of Transportation, 2000

### Total Road Mileage

- **Chesterfield**: 223.39 (24%)
- **Petersburg**: 202.1 (22%)
- **Dinwiddie**: 99.98 (11%)
- **Colonial Heights**: 83.65 (9%)
- **Hopewell**: 119.55 (13%)
- **Prince George**: 198.23 (21%)
**Congestion Management Process**

Highway facilities designated as part of the National Highway System (NHS) in urbanized areas with a population greater than 200,000 are required by SAFETEA-LU to be part of a regionally developed Congestion Management Process (CMP). In the Tri-Cities Area, a CMP Operations Plan has been developed. The CMP Operations Plan uses the same CMP roadway segment numbering that is used for air quality monitoring modeling efforts in the Richmond Ozone Non-Attainment/Maintenance Area. By dividing the roadways into smaller segments and numbering the segments, the CMP can better identify specific congested locations. The Tri-Cities CMP database has 111 roadway segments categorizes as Urban Arterial, Freeway, Rural Multi-Lane and Rural Two-Lane facilities.

The April 2003 update of the Tri-Cities CMP Operations Plan identified 13 present-day segments as potentially congested and 34 segments as potentially congested in the year 2025. These locations are shown in the Table below. The Tri-Cities Area MPO – Technical Committee has reviewed present-day congestion levels for these segments. Highway oriented strategies under consideration for reducing congestion at these locations include intersection improvements, one-way/reversible streets, access management, signal improvements, improved signage, turn prohibitions, highway information systems and Park-n-Ride Lots. Transit strategies for reducing congestion include service expansion, improved routing and fare structures. Intelligent Transportation System (ITS) strategies include Traveler information/Assistance, Incident Management System and electronic fare collection. Transportation Demand Management (TDM) strategies include alternative hours of travel (flextime) and assistance programs to make TDM more successful.

Performance measures provide a means of evaluating the efficiency of the facilities in the transportation system on a quantitative basis. These measures provide parameters needed to identify the location and severity of congestion. In addition, performance measures may be used to evaluate the effectiveness of strategies/alternatives to lessen congestion for both highway segments and transit facilities.

In order to determine the level of congestion for a highway segment, the Tri-Cities CMP uses volume/capacity and vehicle occupancy rates as performance measures. A road segment showing a v/c ratio of 1.0 or greater (volume is greater than capacity) is considered congested.

The vehicle occupancy rate measures the number of people moved on the roadway network at specific locations as compared to the number of vehicles at those same locations. Vehicle occupancy rates are used as performance measures in a CMP because it is an indication of whether or not programs to reduce travel demand are successful.

As part of the Tri-Cities CMP, VDOT provided funding in April 2006 for a traffic study to analyze traffic implications of the planned expansion of the Fort Lee military installation. Fort Lee is anticipated to experience significant growth between FY 2008 and FY 2011. An evaluation was made of present and future roadway and intersection improvements needed to accommodate planned expansion, especially at the gates, for this major employer and activity center. The study was concluded in November 2006 by the project consultant with recommendations for 3 present-day improvements, 10 intermediate (2015) improvements and 6 long-term improvements (2026). The MPO – Policy Committee received the report in November 2007 and incorporated recommendations on priority Fort Lee improvement projects into the financially constrained 2026 Plan revision in June of 2007.
Maps 2 and 3 graphically display 2003 present-day and 2025 projected traffic congestion on the Tri-Cities Area Congestion Management System. The traffic count database used to prepare Map 2 was collected by the VDOT for the year 2000. As new traffic counts are received, the CMS database is updated to provide a more accurate picture of present-day congestion in the region. Projected traffic counts used to produce future-day projected congestion in the Year 2026 shown on Map 3 are obtained from the traffic modeling efforts of VDOT.

The performance measures used to monitor fixed-route transit service provided by Petersburg Area Transit (PAT) is total passenger miles and number of unlinked passenger trips. PAT passenger counts for 2001 were used in the 2003 CMS update to establish baseline values for future comparisons. PAT reported a total of 1,287,368 passenger miles and 715,262 unlinked passenger trips during 2001.
Level of Service

The concept of level-of-service (LOS) is defined as a qualitative measure describing the operational conditions of traffic flow and how motorists perceive these conditions. Factors such as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience, and safety are used to describe level-of-service. Roadway links with a LOS of C or better are considered desirable. An intersection LOS of E or F is considered undesirable.

Six levels of service are defined and each is given a letter designation from A to F. LOS A represents the best operating conditions and LOS F the worst. Levels-of-service are defined as follows for uninterrupted traffic flow:

LOS A: *(Free flow conditions)* Vehicles are almost completely unimpeded in their ability to maneuver within the traffic stream with a high level of physical and psychological comfort. The effects of minor accidents or breakdowns are easily absorbed at this level.

LOS B: *(Reasonably free flow conditions)* The ability to maneuver within the traffic stream is only slightly restricted and the general level of physical and psychological comfort provided to drivers is still high. The effects of minor incidents and breakdowns are still easily absorbed.

LOS C: *(Stable operations)* Traffic flows are approaching the range in which small increases in traffic will cause substantial deterioration in service. Freedom to maneuver within the traffic stream is noticeably restricted and lane changes require additional care and vigilance. Minor accidents may still be absorbed, but the local deterioration in service will be substantial with delay forming behind any significant blockage. The driver now experiences a noticeable tension due to the additional vigilance required for safe operation.

LOS D: *(High density, but stable flow. Bordering unstable flow)* Small increases in traffic may cause substantial deterioration in service. Freedom to maneuver within the traffic stream is severely limited and the driver experiences drastically reduced physical and psychological comfort levels. Even minor accidents can be expected to create substantial delays because the traffic stream has little space to absorb disruptions.

LOS E: *(Very unstable operations)* Virtually no usable gaps exist within the traffic stream. This means that any disruption, such as a vehicle entering from a ramp or changing lanes, causes following vehicles to slow or stop to admit the vehicle disrupting the flow. Any incident can be expected to produce substantial delay. Maneuverability within the traffic stream is extremely limited and the level of physical and psychological comfort is extremely poor.

LOS F: *(Forced or breakdown flow)* Such conditions generally exist for a number of reasons such as traffic accidents, recurring points of congestion, or peak hour conditions which exceed the current design of the facility. LOS F is used to identify that point where the facility has reached maximum capacity and a complete breakdown of service occurs.
Section 5 – Intermodal Element
**Intermodal Element**

Federal transportation planning legislation places emphasis on the importance of an intermodal transportation system. Such a system focuses on the interconnectivity between different modes of transportation that allow for linked trip making. The resulting connections, choices and coordination of an intermodal system are a necessary part of a successful transportation system for the future. Map 4 identifies the major intermodal connections in the study area.

A variety of transportation modes are available in the Tri-Cities. As is the case in many metropolitan areas, the overall transportation system of the Tri-Cities would be enhanced by developing a greater level of interconnectivity among these forms of transportation in the area. Benefits of the resulting transportation system would include congestion relief, improved coordination among transportation organizations and easier access to a variety of transportation options.

The Tri-Cities Transportation Plan is designed to promote an intermodal transportation system by building upon the existing multi-modal system. The plan identifies existing transportation facilities and examines the linkages that occur among them. The preservation of identified facilities and their integration into an intermodal system will enhance the overall efficiency of the Tri-Cities transportation system.

The transportation plan examines the different elements of a successful intermodal system. These elements include, but are not limited to:

- Air transportation
- Ports
- Pedestrians
- Intercity Bus Service
- Highways
- Rail Services
- Bikeways
- Public Transit
- Taxicab Services
- Trucking

A brief assessment of current conditions and future opportunities for each element of the Tri-Cities multi-modal system is presented below.

**Air Transportation**

Air transportation in the Tri-Cities is provided by the Dinwiddie County Airport. The Dinwiddie Airport and Industrial Authority operates this facility. I-85, Route 1 and Route 460 provides ground access to the terminal area. This general aviation facility has a 5,000’ x 100’ primary runway along with 3,600-foot paved runway and is classified as a "basic transport" airport by the Federal Aviation Administration. The facility is capable of accommodating aircraft with approach speeds greater than 121 knots and aircraft with maximum takeoff weights greater than 50,000 pounds. In addition to fixed-base operator, the services offered by this facility include charter, airfreight, and maintenance and flight instruction. Construction of a 6,000 square foot new terminal building has been completed.

Scheduled air carrier services for the Tri-Cities area are generally provided by Richmond International Airport located in Henrico County approximately 45 minutes northeast of Petersburg via I-95 and I-64 or I-295. Airports outside of the transportation study area, such as Norfolk and Newport News/Williamsburg, also provide air carrier services for Tri-Cities Area residents.

**Freight Rail Service**

Rail service in the Tri-Cities area consists of freight as well as passenger service. Freight service is provided by CSX Transportation and Norfolk Southern railroads. The Surface Transportation Board, the federal regulatory agency responsible for classifying railroad carriers according to annual operating revenues, has classified CSX Transportation and Norfolk Southern as Class I carriers.
In addition, these rail lines located in the Tri-Cities area are further classified as density 7, or as carrying 300 or more million gross ton-miles per mile of line per year. This is the highest freight traffic density classification of all rail lines in the Commonwealth.

Norfolk Southern has proposed the construction of an intermodal facility in Prince George County near the Route 460 & I-295 interchange. VDOT has accepted a traffic impact assessment of this major private sector transportation investment. The potential construction of a new Route 460 facility parallel to and south of the existing Route 460 facility will alter traffic patterns and volumes in this vicinity of the Tri-Cities.

**Passenger Rail Service**

Rail Passenger service in the Tri-Cities area is provided by the National Railroad Passenger Corporation (Amtrak). Intercity trains that serve the Commonwealth use the Ettrick Station. The Ettrick Route of Petersburg Area Transit serves the local Amtrak station located just east of Route 36 (Chesterfield Avenue) in Chesterfield County and provides a modal connection.

**Southeast High-Speed Corridor**

The North Carolina Department of Transportation and the Virginia Department of Rail and Public Transportation have completed a Tier I Environmental Impact Statement on a proposal for high-speed rail passenger service between Raleigh, North Carolina and Washington, D.C. Within the Crater Planning District, a corridor that generally parallels I-85 from North Carolina in a northeasterly direction into Petersburg and northward to Richmond has been selected for more detailed study in a Tier II Environmental Impact Statement currently in progress. Additional information on this project may be found on the web at [http://www.sehsr.org](http://www.sehsr.org).

**Richmond/Hampton Roads High-Speed Alternatives Analysis/Draft Environmental Impact Statement (DEIS)**

The Virginia Department of Rail and Public Transportation (VDR&PT) has prepared high-speed rail alternatives analysis/draft Tier I Environmental Impact Statement for the development of high-speed passenger rail service between Richmond and Hampton Roads. This document is under review by the Federal Railroad Administration and is being coordinated with the Southeast High Speed Passenger Rail Study. Additional information on this project may be found on the web at [http://www.rich2hrrail.info](http://www.rich2hrrail.info).

**Ports**

Water transportation service in the Tri-Cities Area is primarily located at the City Point Port in Hopewell just east of Water Street. Docks located here are near the confluence of the Appomattox and James Rivers approximately 18 miles downstream from Richmond and approximately 75 miles northwest of the ports of Hampton Roads. The port facility at City Point serves ocean-going ships and has a 25-foot channel. Several companies own this facility. In addition, the port serves as a dock area for private tugboats used for the movement of barge traffic.

Several major companies located in the Tri-Cities use port facilities in Hampton Roads for the shipment of product overseas.
Bikeways
The Tri-Cities MPO completed an update of the regional bikeway plan in August 2003. The plan recognizes that bicycling is a safe, convenient and viable transportation alternative and to integrate bicycles and walking in the transportation system of the Tri-Cities. The plan considers bikeways concepts such as urban and suburban settings, user group skill levels, facility types, such as Shared Use Path (off-street), Bike Lane (pavement markings for bicyclists, wide outside lane (additional pavement width with no strips delineating separate lane for bikes), shoulder improvements (use of shoulder area for biking) and ancillary facilities (supporting facilities such as bicycle parking and lockers). A future bikeway route structure that can be promoted by the localities as a safe and convenient substitute for motor vehicle travel for recreational and commuting has been recommended in the 2003 Bikeways Plan. Map #5 shows the recommended bikeway improvements throughout the transportation study area. According to VDOT, the identification of an improvement project in an adopted bike and/or pedestrian plan does not guarantee or require the inclusion of bike/pedestrian facilities in the final project design.
Pedestrian Walkways

Pedestrian walkways are an important part of the transportation system. They can provide the link between other modes of transportation in the system. Pedestrian facilities should be considered in both new development and improvements to existing development. Where feasible, efforts should be made to include pedestrian facilities as an option to other transportation modes that may be detrimental to air quality.

The Transportation Enhancement Program is a source of funding for pedestrian facilities in the Tri-Cities area. Projects such as the Appomattox Heritage Trail and improvements to Grove Avenue in Petersburg have taken advantage of this funding to enhance pedestrian facilities. Other sources of funding for improving the pedestrian element of the intermodal transportation system should be sought.

Public Transit

Petersburg Area Transit (PAT) provides public transportation service within the City of Petersburg, the Ettrick portion of Chesterfield County and along the Route 36 corridor in Prince George County and the City of Hopewell and to Central State Hospital in Dinwiddie County. PAT has been owned and operated by the City of Petersburg since June 1977. The system has 16 vehicles and offers 11 fixed routes with a central transfer point at North Sycamore and Franklin Streets in downtown Petersburg. The PAT hours of operation are from 6:00 a.m. to 7:00 p.m., Monday thru Saturday. Paratransit or Dial-A-Ride service is available for the same hours regular bus service is provided for qualified persons. The regular base fare for fixed and Paratransit service is $1.00. During off-peak hours, a 50% fare discount is offered to elderly and handicapped patrons.

The arrangement of stops along the PAT routes offers several opportunities for connection with other modes of transportation. Auto, taxi, pedestrian routes and bicycle can access nearly all of the stops. Because the central transfer terminal is located in downtown Petersburg, pedestrian-oriented businesses of downtown Petersburg can be accessed through all PAT routes. Intercity connection is available by Trailways, Inc. that can be accessed by nearby PAT stops. Connection of this public transportation system to Amtrak services located at the Ettrick Station is available on the Ettrick Route.

The need for expanding transit service in the Tri-Cities Area is addressed on a periodic basis. At the present time, PAT and the Greater Richmond Transit Company (GRTC) are providing limited fixed-route transit service between downtown Richmond and Petersburg with a connection to John Tyler Community College in the vicinity of Chester in Chesterfield County.

The City of Petersburg is sponsoring the construction of a multi-modal center at the intersection of Washington & Union streets near the existing PAT transfer area. This facility will provide a comfortable and safe central transfer point for PAT patrons. In addition, an array of additional benefits will be attainable with this transportation project. Intra and intercity public and private transit operations would use the same facility. Convenient commuter parking would be provided. Development goals for downtown commercial/retail land uses would be enhanced, improved air quality and reduced congestion would be realized within a pedestrian friendly environment.
Information on 20-year PAT planned capital improvements may be found in Section 6 Tri-Cities Transportation Plans and Programs of this document. Additional information on PAT may be found on the website for the City of Petersburg http://www.petersburg-va.org/transit/index.asp.

Greyhound Bus Lines offers north/south intercity bus service to the Tri-Cities Area. This near hourly service, located on Washington Street in downtown Petersburg, is accessible by auto, taxi, pedestrian, bicycle and public transit. Intercity bus service is an important part of the area's transportation system due to the nearby interstate systems. Other transit companies offering charter and/or tour services include Groome Transportation, Virginia Overland, Winn Transportation and James River Bus Lines. Plans for the PAT multi-modal center include joint use of the facility with private intercity bus service.

Taxicab Services
Taxicab services are an important part of the area's transportation system. Such services provide a demand-responsive mode of transportation. Future coordination of taxicab services with public transit, rail service and other modes of transportation would enhance the area intermodal system. Several taxicab services operate in the Tri-Cities area.

Highways
Highways are an important part of the overall intermodal transportation system. This element of the system provides the link between many of the other elements of the intermodal system. A detailed description of the highway element and its needs can be found in this document in Section 4-Highway Element.

Trucking
Trucking is an important factor in the Tri-Cities area transportation system. Because of the area's excellent network of interstates and primary highways and the availability of rail and ports access to the region, a number of distribution centers are located in the Tri-Cities Area. The distribution centers and trucks traveling through the area account for a significant portion of the area's total traffic. The distribution centers and other major generators of truck traffic need to be considered in corridor and other transportation planning studies conducted in conjunction with the Tri-Cities transportation system. The TransAmerica Corridor Feasibility Study and the I-85/I-95/Route 460 Corridor Study found that truck volumes currently average approximately 20% of total average daily traffic on these facilities in the Tri-Cities Area. The percentage distributions of truck volumes on these facilities are expected to increase as more warehouse distribution industries locate in this portion of the Commonwealth.

A survey was conducted January 2007 by the Tri-Cities Area MPO of 10 major freight shippers located in the Tri-Cities in conjunction with statewide freight planning activities sponsored by VDOT Intermodal Planning Office. The main problem revealed by this survey for Tri-Cities freight shippers was reoccurring congestion in Northern Virginia.
Section 6 – Tri-Cities Area Transportation Plans and Programs
Public Participation Plan
Pursuant to SAFETEA-LU, the Tri-Cities Area MPO has adopted a public participation plan. The public participation plan outlines a process for soliciting input from the public prior to the endorsement of metropolitan transportation plans and programs by the MPO. The participation plan provides opportunities for interested parties, including citizens, providers of freight transportation services, representatives of the disabled and others to be involved in the metropolitan transportation planning process. Also, a process is defined in the participation plan for consultation with resources agencies regarding the transportation plan. Notices of significant regional transportation plans and programs are routinely published local newspapers of general circulation. A copy of the public notice and available documentation on the draft transportation plan or program are made available to the public libraries in the transportation study area. A copy of the public participation plan followed by the Tri-Cities Area MPO is contained in Appendix A of this document. Additional information on the Tri-Cities MPO and regional transportation plans and programs may be found on the website of the Crater Planning District Commission under MPO located at www.craterpdc.state.va.us.

Transit Development Plan
In April 2006, the City of Petersburg and the Virginia Department of Rail and Public Transportation completed a system level analysis of the PAT ridership base and route structure. Several alternatives for modifying existing services were considered during this study effort.

The merger of the Richmond urbanized area and the Petersburg-Colonial Heights-Hopewell urbanized area by the federal government following the 2000 U.S. Census changed the way federal transit grant funds may be used by PAT. Because the PAT operation is now located in an urbanized area greater than 200,000 in population, its option to use federal transit funds for operating assistance is being phased out. Prior to the urbanized area merger, transit properties similar in size to PAT located in urbanized areas less than 200,000 in population were permitted by the federal government to use federal transit formula funds for capital or operating needs. This change in federal classification has significantly impacted the ability of the City of Petersburg to continue subsidizing PAT operations, especially for transit services currently provided in surrounding jurisdictions.

In February 2007, the City of Petersburg prepared a 20-year forecast of capital and operating improvement needs for PAT. The table and notes listed below identify long-term PAT improvement projects. This project listing is considered to be financially constrained by the Tri-Cities MPO.

Petersburg Area Transit – Financially Constrained 2031 Improvement Projects

<table>
<thead>
<tr>
<th>Project Description</th>
<th>Total Cost</th>
<th>Previous Funding</th>
<th>Balance in 2031 Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Replacement Buses (30’)</td>
<td>4,423,000</td>
<td>923,000</td>
<td>3,500,000</td>
</tr>
<tr>
<td>Replacement Buses (35’)</td>
<td>2,700,000</td>
<td>-</td>
<td>2,700,000</td>
</tr>
<tr>
<td>Replace. Paratransit Vans</td>
<td>1,295,000</td>
<td>60,000</td>
<td>1,235,000</td>
</tr>
<tr>
<td>Support Vehicles</td>
<td>328,000</td>
<td>38,000</td>
<td>290,000</td>
</tr>
<tr>
<td>Rehab Multi-Modal Facility</td>
<td>150,000</td>
<td>-</td>
<td>150,000</td>
</tr>
<tr>
<td>Rehab Maintenance Facility</td>
<td>5,254,000</td>
<td>604,000</td>
<td>4,650,000</td>
</tr>
<tr>
<td>Shop Equipment</td>
<td>928,000</td>
<td>363,000</td>
<td>565,000</td>
</tr>
<tr>
<td>Item</td>
<td>Budget 1</td>
<td>Budget 2</td>
<td>Budget 3</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>----------</td>
<td>----------</td>
<td>----------</td>
</tr>
<tr>
<td>ADP Hardware</td>
<td>58,000</td>
<td>4,000</td>
<td>54,000</td>
</tr>
<tr>
<td>Fare Collection Equipment</td>
<td>930,000</td>
<td>170,000</td>
<td>760,000</td>
</tr>
<tr>
<td>Miscellaneous Equipment</td>
<td>615,000</td>
<td>140,000</td>
<td>475,000</td>
</tr>
<tr>
<td>Multi-Modal Facility</td>
<td>15,174,000</td>
<td>13,674,000</td>
<td>1,500,000</td>
</tr>
<tr>
<td>Preventative Maintenance</td>
<td>17,550,000</td>
<td>800,000</td>
<td>16,750,000</td>
</tr>
<tr>
<td>Petersburg – Richmond Express Service</td>
<td>6,900,000</td>
<td>1,200,000</td>
<td>5,700,000</td>
</tr>
<tr>
<td>Multi-Modal Facility Operation</td>
<td>1,800,000</td>
<td></td>
<td>1,800,000</td>
</tr>
<tr>
<td>Total Cost</td>
<td>58,126,000</td>
<td>17,978,000</td>
<td>40,148,000</td>
</tr>
</tbody>
</table>

Notes:
Source of Federal Funds – Section 5307, Statewide Surface Transportation Program (provided through Virginia Department of Rail and Public Transportation), Section 5309 (Earmark) and Regional Surface Transportation Program (RSTP) and Congestion Mitigation and Air Quality (CMAQ) Projects Selected by Tri-Cities MPO

Previous funding includes 2004 – 2007

Section 5307 will fund preventative maintenance projects first and remaining funds will be used to fund other capital projects.

It is assumed PAT will receive Surface Transportation Program and Section 5309 funds to supplement Section 5307 for balance of capital needs based on prior history. If funds are not available in any given year, the project will be moved to the following year.

This table includes RSTP funds allocated by the Tri-Cities MPO for the PAT Multi-Modal Facility. No CMAQ funds have been allocated for transit capital or operating projects.
Petersburg Area Transit Routes, Shopping Centers, and Major Activity Centers
Tri-Cities Area Transportation Improvement Program

A Transportation Improvement Program (TIP) is prepared as part of the transportation planning process for the Tri-Cities transportation study area. The Tri-Cities Area TIP is a program of highway and transit projects anticipated to receive federal funding during the next 3-year period. The current TIP was adopted in March 2006 and is for fiscal years 2006 thru 2008. Under SAFETEA-LU, the TIP will be updated on a 4 year cycle in cooperation with the State, the transit operator and local governments. Projects expected to receive local or State funding are listed by funding category. The metropolitan TIP is consistent with the Statewide Transportation Improvement Program (STIP).

The Tri-Cities MPO has project selection authority for Congestion Management and Air Quality (CMAQ), Regional Surface Transportation Funds (RSTP) and transit improvement funds sub-allocated from State and/or national levels. CMAQ projects are selected by the MPO with a rating process that considers factors such as completion of funding needs for projects partially funded during a previous year, availability of local government support, citizen input and reduction of mobile source emissions. The Tri-Cities MPO also uses a rating process to help evaluate candidate RSTP projects. The transit element of the metropolitan TIP is obtained from the Tri-Cities Transit Development Program (TDP) and Petersburg Area Transit. The TDP is a multi-year document that includes the identification of transit service and management improvements for the region. Petersburg Area Transit, in cooperation with the Tri-Cities MPO and the Virginia Department of Rail and Public Transportation, update the Transit Development Program periodically. The transit portion of the TIP includes information on estimated capital and operational project cost. The Tri-Cities MPO endorses transit improvement projects. The Commonwealth Transportation Board has project selection responsibility for other federal and State transportation funding programs identified in the metropolitan TIP.

The TIP is supported by a financial plan. The financial plan indicates which projects can be funded using identified public and/or private sources. The financial forecasts for each funding program in the highway element of the TIP and long range plan are developed by the Virginia Department of Transportation and the Virginia Department of Rail and Public Transportation. Transportation improvement projects, other than CMAQ, RSTP and transit listed in the metropolitan TIP are extracted from the State’s Six Year Development Plan. The State’s Six-Year Development Plan is also updated on an annual basis and approved by the Commonwealth Transportation Board. The transit element of the TIP is obtained from the Tri-Cities Transit Development Program (TDP) developed in cooperation with Petersburg Area Transit and the Virginia Department of Rail and Public Transportation. A new update of the Tri-Cities TDP is scheduled to begin after July 2008.

In order to meet federal requirements for public involvement in the development of the Transportation Improvement Program, the Tri-Cities MPO follows its adopted public involvement procedures. The adopted public involvement procedures include provision for periodic public meetings. These meetings provide a forum where both oral and written comments are solicited on transportation needs in the transportation study area. Prior to its endorsement of the TIP, the Metropolitan Planning Organization considers the statements presented during the annual public meeting and during citizen information period scheduled prior to each Technical Committee and Policy Committee meeting. The Virginia Department of Transportation also conducts annual public meetings at the construction district level throughout the Commonwealth regarding the next Six-Year Development Program. The purpose of these annual meetings is to obtain public input on transportation needs and priorities. Also, the cities and counties in the transportation study area have citizen information periods during regular meetings. During designated periods of these regular meetings, citizens have additional opportunities to comment on transportation needs and priorities.
After the metropolitan TIP is endorsed by the MPO, it is forwarded to the State for inclusion in the Statewide Transportation Improvement Program (STIP). Individual projects are advanced for federal authorization and implemented by the State, local government or by private entities. The projects selected for inclusion in the metropolitan TIP are based on the most recently adopted financially constrained and air quality conforming Transportation Plan. Projected project cost cannot exceed projected project revenue during the anticipated year of expenditure.

**Air Quality and Transportation Planning**
Section 176(c) of the 1990 Clean Air Act Amendments (CAAA) of 1990, includes provisions requiring consistency between metropolitan transportation plans and transportation improvement programs and the State Implementation Plan (SIP). Hopewell, Colonial Heights, Petersburg, Chesterfield and Prince George are among localities in the Richmond area that have been previously classified by the U.S. EPA as nonattainment for ozone. Monitored air quality emissions have indicated applicable national standards for ozone have been exceeded. Nonattainment areas are generally defined in federal air quality legislation as local governmental units and/or geographic areas where monitored air quality emissions for oxides of nitrogen (NOx) and volatile organic compounds (VOC) have shown that a national air quality standard has been violated. In order to improve air quality emissions in nonattainment areas, State Implementation Plans are developed to indicate how mobile and fixed air pollution concentrations will be reduced in order to attain the national standard. Further, federal air quality and transportation planning legislation requires the preparation of an analysis that demonstrates the finding that the implementation of projects contained in metropolitan transportation plans and transportation improvement programs conforms with the State Implementation Plan for attaining and maintaining the applicable national ozone standard. This analysis and conclusion is referred to as an ozone conformity finding.

In recent years, the Richmond nonattainment area has experienced a sufficient reduction in ozone related emissions. Effective June 18, 2007, the U.S. EPA approved a request by the Commonwealth that the Richmond area be reclassified to an ozone maintenance area status.

The Richmond ozone maintenance area has a mobile source emissions budget for ozone precursors, volatile organic compounds (VOCs) and oxides of nitrogen (NOx), in its approved maintenance SIP. Therefore, the Build scenario emissions for each analysis year of the 2026 Transportation Plan must be less than the VOC and NOx emission budgets established in the SIP. On October 23, 2007, the EPA concurred with the conformity analysis prepared by VDOT on the 2026 Transportation Plan revision that applicable conformity requirements for the Richmond 8-hour ozone maintenance Area were met.
Tri-Cities Area Transportation Planning

Traditionally, metropolitan transportation plans have presented capital costs for recommended facilities without identifying sufficient revenue sources to support planned improvements. Under current federal transportation planning guidelines, metropolitan planning organizations, transit operators and state transportation agencies must identify known funding sources for projects listed in financially constrained transportation plans. Projects without identified funding sources are shown in the transportation plan as vision projects. A vision project may be implemented in the future as the transportation plan is updated and funding sources identified. VDOT has provided revenue projections for highway transportation improvement projects in the Tri-Cities Area for the next 23-year period. The projected allocations and projected project cost are listed by funding source in the 2031 project listings. Each project has a unique identifier number and has been located on a jurisdiction level map. Local officials participating in the metropolitan transportation planning process have identified a series of long-range projects recommended for improvement. The recommended project lists have been developed as a combination of local comprehensive planning activities; local transportation needs assessments and recognition of regional transportation service needs identified in the Fort Lee Expansion Traffic Study. The recommended highway improvement projects listed in Section 7 Year 2031 Long-Range Transportation Project are consistent with regional transportation goals and objectives. The Tri-Cities MPO considers Fort Lee expansion related projects high-priority because of homeland security importance.

Between February and June 2007, efforts were made to revise the 2026 Transportation Plan to make compliant with SAFETEA-LU before July 1, 2007. Planning assumptions, such as socio-economic, traffic and revenue forecasts were not changed for the 2026 Plan revision. New planning assumptions, including new socio-economic and financial forecasts, have been used for the 2031 Transportation Plan update.

Fort Lee Expansion Traffic Study

The U.S. Army installation at Fort Lee is scheduled to receive a major expansion during fiscal years FY 2008 through FY 2011. This expansion is a direct result of findings by the 2005 U.S. Base Realignment and Closure Commission (BRAC).

In conjunction with the Tri-Cities Area MPO, VDOT provided resources for a traffic study of the impact of the planned expansion of Fort Lee on existing roadways and intersections leading to base entrances. Assumption was made that for the 3,153 new off-base households expected as a result of BRAC actions would be distributed among area local governments in a pattern similar to existing Fort Lee employment by place of residence as documented in the 2000 Census. Present and future traffic data were analyzed, deficiencies identified and 21 recommendations for phased transportation improvements were developed. The MPO – Policy Committee accepted the report recommendations in January 2007. The MPO has amended the 2026 financially constrained Transportation Plan to include roadway and intersection improvement projects recommended in the Fort Lee Expansion Traffic Study. The 2031 Transportation Plan update shows most of the Fort Lee expansion roadway and intersection improvements as financially as constrained projects. Some of these priority projects are shown as vision projects because of funding shortfalls during the projected year of project expenditure.

Crater Regional Growth Management Plan

One of the requirements associated with the BRAC process is the preparation of a growth management plan to accommodate impacts of the federal action to expand Fort Lee on the surrounding community. Consultant resources have been secured by the Crater Planning District
Commission under sponsorship from the U.S. Department of Defense, Office on Economic Adjustment. The development of the growth management plan was initiated in February 2007. Along with the development of a project public involvement process, task forces have been established in the areas of economic and social impact, housing market, education capacity, employment and child care, and transportation.

The scope for the transportation element for this project will include the results of a housing assessment and econometric modeling aimed at forecasting where direct and indirect off-base growth related to Fort Lee expansion is projected to occur at the traffic analysis zone level. Information from the Crater Growth Management Plan will used to supplement preliminary 2031 socio-economic forecast prepared for the 2031 Transportation Plan update. The potential for expansion of transit services and travel demand management applications will also be addressed. The final version of the Crater Growth Management Plan may be found www.craterpdc.state.va.us

Environmental Justice Assessment – 2031 Transportation Plan

The map series found in Appendix B indicates distribution of minority population, persons below the poverty level and zero vehicle households by census tract. Data from the 2000 U.S. Census for each jurisdiction in the transportation study area has been used for this assessment at the tract level. These maps also indicate a highway project reference number for each constrained and vision plan project identified in the 2031 Transportation Plan update. A route map of the PAT service area is found in Section 6 – Tri-Cities Area Transportation Plans and Programs under Short Range Transit Development Plan. Employment levels, shopping centers and hospitals are profiled in the environmental justice map series and considered for both the highway and transit assessments.

For highway improvement projects, the Tri-Cities MPO uses level of service as a mobility performance measure to assess the trip making ability of low-income minority persons. The assessment considers level of service as a measure of how the benefits and burdens of planned transportation improvements are distributed in the transportation study area. Probably impacts on low-income minority concentrations are identified.

For transit projects, transit service accessibility is used for the performance measure of determining the trip making ability of low-income and minority population in the Tri-Cities Area. The study area population served by PAT service area is defined as .25 mile on either side of each fixed-route.

Assessment of Highway Projects

Each highway improvement project will have some impact on the resident population and land use activity. Specific information on the amount of impact would require project level field studies and inventories. At the planning system level, general statements on how project implementation would likely impact minority and poverty concentrations may be made. For the purpose of this assessment, a highway improvement project on new location that impacts an existing residential area is associated with having a more significant impact on the residential area than a project widening or the reconstruction of an existing facility.

A total of 109 constrained and 100 vision projects are listed in the Year 2031 Plan. Of the 209 constrained and vision projects, 14 involve new locations. Of those 14 new locations, 2 projects are related to the Crosspointe Centre development in Prince George financed by State Transportation Partnership Opportunity Funds, 3 are in Chesterfield related to the Branders Station Development and are being financed privately, 1 new location project is the Route 460 PPTA project and the
remaining 10 new location projects are identified as vision projects to be financed with private funding sources. The scope of new location projects typically involves the extension of an existing roadway into vacant land in order to accommodate development. Of the 209 total projects, 20 are recommended for widening. These projects involve increasing the number of travel lanes from 2 to 4 or 4 to 6. The widening of 2-lane facilities most likely occurs on heavily traveled collector or arterial streets. These projects can impact residential neighborhoods, especially if additional right-of-way needs to be acquired. These facilities are usually heavily traveled corridors with expanding commercial land use activities. If may be assumed that widening projects would have generally less impact in residential areas, including those neighborhoods with high minority and/or poverty concentrations. Of the 222 total projects, 114 are recommended for reconstruction or replacement of existing facilities. Reconstruction projects are the most common and typically affect the most citizens. It may be interpreted that reconstruction projects have positive and negative impact on residential areas. For example, the reconstruction of a deficient facility should make the roadway safer for vehicular and pedestrian use. At the same time, a facility reconstruction may result in more traffic and lead to the development of congestion. Generally, reconstruction projects do not involve as much right-of-way acquisition as new locations or widening projects. Also, due to generally greater residential setbacks in suburban areas, project impacts in the county portions of the study area are anticipated to be less than in city portions.

Volumes to capacity (V/C) ratios for facility improvements have been analyzed and documented in Section 4 – Highway Element. The year 2000 was used for current conditions and the year 2026 for future conditions with the planned improvement completed for this analysis. For purposes of this analysis a V/C ratio of .00 to .77 is considered as level of service (LOS) A – B. A V/C ratio of .78 to 1.0 is considered LOS C. A V/C ratio of 1.01 and greater is considered LOS D, E & F. The source of the LOS data used for this analysis is the 2026 Richmond traffic model.

**Petersburg**

In Petersburg, 7 of the 31 highway improvement projects involve the reconstruction of the Boydton Plank Road/ Defense Road corridor. These facilities are located in the southwest portion of the City that is experiencing industrial development and job expansion. 2000 Census data indicates the tract has a low level of poverty and about the same distribution of minority and non-minority residents. The LOS for many of these facilities is anticipated to decline from level A – B to level C by the year 2026 with the planned reconstruction projects. There appears to be no imbalance in the distribution of benefits or burdens associated with the planned improvement projects.

The Young’s Road relocation project is in the western portion of the City in a census tract comprised of a large minority population and a moderate level of poverty. The LOS in this corridor is anticipated to decline from LOS A-B to LOS C by the year 2026. This project has the potential of placing a burden on residents. While there are limited employment opportunities along Young’s Road, improvements to this facility will provide enhanced access from the northern portion of the City to the developing industrial area in southwestern portion of the City.

The Halifax Road reconstruction project is also located in the southern portion of the City in the developing industrial area. This portion of the City is not densely populated and has a relatively low level of poverty. The LOS along this corridor is expected to remain at A – B.

The I-85/I-95/Rt. 460 interchange has a present day LOS of C and is anticipated to decline to D, E or F by the year 2026. Minority residential areas with a moderate poverty concentration surround this interchange on 3 sides. The LOS for this junction of interstate facilities is expected to decline from C to D, E & F by the year 2026. This project has the potential of placing burdens on minority and low-income persons.
Colonial Heights

The City of Colonial Heights has a small minority population and no indication of poverty. The regional shopping center is located in this city along with a number of employment opportunities. Of 19 highway improvement projects analyzed, only 1 facility is expected to have a LOS better than C in the year 2026 and 4 are expected to be LOS D, E or F.

Hopewell

Of the 26 highway improvement projects listed in Hopewell, 14 involve widening from 2 to 4 lanes. With the exception of projects in the Route 36 corridor, the LOS for most planned improvements are expected to remain A – B thru the year 2026. Of the 14 widening projects, 9 are located in census tracts with significant minority populations and moderate poverty. The Courthouse/Berry widening project will likely place the most significant burden on low-income and minority persons of all projects in the City.

Chesterfield

Planned improvement projects are generally dispersed throughout the County portion of the study area. LOS information was not available for 18 private funded projects, including the 3 financially constrained private projects. Some concentrations of low-income minority population reside in tracts located immediately northwest of Petersburg. A moderate concentration of poverty minority population resides between Route 36 and the City of Colonial Heights. Several projects are located in this area. These projects could place some burden on low-income, minority residents. Of the 9 improvement projects for which LOS information was available, 5 are expected to decline to LOS C and 4 are expected to decline to LOS D, E or F by the year 2026 with planned construction.

Dinwiddie

Of the 17 total projects, LOS data were not available for 2 vision projects. The majority of the projects are concentrated along the Route 1 corridor and the river crossing to Chesterfield County. LOS is expected to be level D, E or F on 7 of the 17 projects with the planned projects constructed. The distribution of minority population appears to vary throughout the County with the larger concentrations in the southern portion of the Tri-Cities transportation study area. The 2000 Census indicates concentration of low-income minority population immediately West of Petersburg, some of which is resident population in nearby State hospital facilities. Some potential exists for burdens for residents along the River Road corridor, as the LOS is expected to decline in the vicinity of the river crossing.

Prince George

Minority population is fairly evenly distributed in the Prince George portion of the transportation study area with some concentration in the Fort Lee Area of the County. Poverty levels were found to be low, except for rural areas of the County. Most of these areas are outside of the transportation study area. Of the total 45 planned projects, 14 are related to the expansion of Fort Lee and generally located in the vicinity of the base entrances. Another concentration of proposed improvements is in the vicinity of the Route 460 just east of the I-295 interchange. Employment and the percentage of low-income minority population is significant in this portion of the county. The planned widening of Route 36 and improvements to Route 460 will offer enhanced access to employment concentrations. With the exception of several Fort Lee expansion related projects, the only projects anticipated being less than LOS C in the year 2026 is Route 10/156 in the eastern edge of the transportation study area and Route 156 in the vicinity of Middle Road.

Assessment of Transit Projects

For transit improvement projects, the Tri-Cities MPO uses transit service availability as an
accessibility performance measure. The trip making ability of low-income minority population residing in transit service areas is compared to areas presently not served by transit. Transit service access is defined as ¼ mile of an existing transit fixed-route. Transit service availability is addressed on a qualitative basis. With the exception of the downtown Richmond to downtown Petersburg demonstration service operated by Greater Richmond Transit Corporation, there is currently no fixed-route transit service in the Crater Planning District operating outside of the MPO boundary. FTA sponsored capital grants for provision of transportation services for the elderly and persons with disabilities have been used by human service agencies operating in the Crater Planning District. Transit service availability may be addressed on a qualitative basis for assessing environmental justice.

A comparison of the PAT route map found in Section 6 – Tri-Cities Area Transportation Plans and Programs with the series of census tract profiles on race, poverty, employment and auto availability from the 2000 U.S. Census found in Section 9 – Appendices, also in this document, provides a basis for a qualitative assessment of transit service environmental justice assessment.

**Petersburg**

Current fixed-route service in Petersburg generally serves low-income and minority population areas within the City. Transit service is not available in the portion of the City south of I-85 and west of Route 301. Transit service is also not available in the southeastern portion of the City along the Route 460 corridor. While these areas have less low-income/minority concentration that other portions of the City, they generally have higher concentrations of employment.

**Colonial Heights**

The low-income and minority population is small and there are no concentrations. PAT currently provides a feeder route service via I-95 from the downtown transfer area in Petersburg at Sycamore and Franklin streets to Southpark Mall in Colonial Heights. The Southpark Mall area has a very high concentration of employment opportunities.

**Hopewell**

Significant low-income and minority population reside in Hopewell. Concentrations are located in the central and south-central areas of the City. PAT currently provides a feeder route service from the downtown transfer area in Petersburg at Sycamore and Franklin streets along the Route 36 corridor to a point just inside the western corporate limits of Hopewell at a commercial area on the north side. The concentration of low-income and minority population within the transit service area in Hopewell is in the 3.32% to 8.64% range. The current transit service area in Hopewell is not heavily populated with low income and minority persons. Significant concentrations of low-income and minority population in Hopewell do not have transit service available. Major employment concentrations are located on the eastern portion of the City along the Route 10 corridor.

**Chesterfield**

PAT provides feeder route service from downtown Petersburg to the portion of Chesterfield County located along the Route 36 corridor to a point just north of the Amtrak Station. Concentrations of minority and low-income population along this route are in the 9.23% to 16.35% range. County areas with minority and low-income concentrations in the 16.36% to 35.71% range are located in the far western and eastern portions of the Tri-Cities Transportation Study Area. The higher employment concentration areas in Chesterfield are located in the eastern portion of the County near the Route 10 corridor.
Dinwiddie
Fixed-route transit service in Dinwiddie County is limited to a feeder route provide by PAT along West Washington Street along the Route 1 corridor to Central State Hospital area. This route serves minority and low-income populations areas with concentrations in the 10.3% to 25.0% range. Other census tracts in Dinwiddie generally have lower concentrations of low income and minority population. However, the areas served by transit are among the lowest in the County in terms of employment concentration.

Prince George
Transit service in Prince George is presently limited to the Route 36 corridor extending from the eastern limits of Petersburg to the Fort Lee major gate areas to the commercial area near the western limits of Hopewell on the south side of Route 36. This portion of Prince George has low-income and minority concentrations in the 0.0% to 6.2% range. This concentration is the lowest in the County. Census tracts located west of Route 460 and South of Petersburg have concentrations in the 10.4% to 21.0% range. Employment concentrations in the portion of the County that currently receive transit service are high.

Human Services Transportation Coordination
SAFETEA-LU contains statutory provisions under Section 3046 requiring the preparation of coordination plans focused on coordinating transportation services for persons with disabilities, older adults and individuals with lower incomes. A number of human service agencies receive grant funds through various federal programs. Enhancing the coordination of existing services provided by these agencies should improve efficiency and promote cost-effectiveness in the delivery of transportation services.

The Virginia Department of Rail and Public Transportation (VDR&PT) is currently sponsoring a study process to prepare a human services coordination plan for the Richmond Urbanized Area. A series of workshops are being conducted in both the Richmond and Tri-Cities portions of the urbanized area for this collaborative effort. Public and private agencies involved in human service transportation are participating. Both Petersburg Area Transit (PAT) and the Greater Richmond Transit Corporation (GRTC) receive capital funds from the Federal Transit Administration for human transportation services under the Job Access and Reverse Commute Program (Section 5316). Other agencies in the urbanized area receive Section 5310 (Elderly Individuals and Individuals with Disabilities Program) capital funding. SAFETEA-LU includes provision for a new program under Section 5317 (New Freedom Program). This program provides funding for enhanced transportation services for persons with disabilities. Provisions for implementing all three of these federal programs in the Richmond Urbanized Area are to be addressed in the coordination plan.

While MPOs are not required to be the lead agencies for development of the coordination plans, both the Richmond and Tri-Cities MPOs are represented in this SAFETEA-LU required planning process. VDR&PT has indicated that as long as progress continues on the preparation of the human service coordination plan, federal funding for the Section 5310 and 5316 programs will not be interrupted and the regional transportation plans will continue to be considered SAFETEA-LU complaint. At this time, there is no schedule for completion of the human
services transportation coordination plan for the Richmond Urbanized Area and the federal designation of a local agency to administer the 5316 and 5317 programs has not occurred.
Section 7 – Tri-Cities Area Transportation Plan
Recommended Projects and Financial Assumptions
Tri-Cities MPO Financial Plan for Implementing the 2031 Transportation Plan

This portion of the 2031 Transportation Plan update demonstrates compliance with the financial constraint requirement pursuant to CFR 23 Part 450.322(10). This section of SAFETEA-LU requires the inclusion of a financial plan that shows financial planning assumptions supporting the implementation of the transportation plan over the 23-year planning horizon period.

VDOT provided 2031 financial forecasts for highway maintenance and highway construction funding categories. Highway projects listed in the current State Six-Year Improvement Program for the years 2008 thru 2013 are already indicated by year of expenditure and are considered financially constrained. An annual inflation rate of 3 percent was applied to 2008 project construction cost estimates and the midpoint of future allocation year periods (FY2014 – FY2018; FY2019 – FY2023 and FY2024 – FY 2031) were used to show project cost for the year of expenditure for each fiscally constrained highway project in priority order. In addition, other specific sources of private and other public funds anticipated to be available for the implementation of other priority projects shown in bold are indicated in the project listings. All projects shown in bold type are considered by the MPO to be fiscally constrained. Table 7-2 indicates projected funds, anticipated amounts to be expended and a balance for most funding categories for which sufficient information was available. During the planning horizon period, additional projects will be developed and additional funds from the revenue balance column will be and moved to the projected expenditure column. Projects without 100% of funds needed for implementation during the year of expenditure are shown as vision projects in italic type. A summary of additional factors used for the 2031 highway funding forecast is as follows:

Assumptions
1) Maintenance allocations will increase 4% annually.
2) State revenues for 2014 – 2035 will grow by the average of the growth rate from 2008 – 2013.
3) Federal revenue annual growth is forecasted at the rate of increase in taxable gallons of gas as estimated by the Virginia Department of Taxation, which is 2.05%.
4) After the HB3202 bond issuance period has ended, it is assumed that there will be $300 million of new bond revenue, with its associated debt, each year beyond 2017 that will be distributed in the same manner as was the previous bond proceeds.
5) Non-interstate NHS is not assumed beyond 2013, with all distributed as Interstate funds.
6) It is assumed that future federal reauthorizations will follow the current funding scheme and base levels.

Distribution Methodology
2) Beyond FY 2013
   a. Federal discretionary funds (Equity Bonus, Bridge, CMAQ STP Regional, etc.) are held in statewide construction and are not distributed to the construction systems but are distributed to the respective MPOs.
   b. When not specifically dedicated to a MPO, funds for a locality are determined by the percentage of the population residing in an urbanized area to determine the funds going to that MPO.
c. Interstate funds were distributed to districts based on needs percentage provided by the Transportation Mobility Division of VDOT related to VTRANS 2025.
d. Construction Federal Bridge funds were distributed based on primary needs percentages provided by the Structure & Bridge Division of VDOT.
e. Planning & Research, Maintenance, Construction Administration, City Street Payments, and Administration are distributed to districts based on the district’s four-year average allocations.

Table 7-1 Projected System Level Maintenance Funds for Highway Facilities in the Tri-Cities MPO Study Area by Year of Expenditure and Amount

<table>
<thead>
<tr>
<th>Year of Expenditure</th>
<th>Amount</th>
<th>Year of Expenditure</th>
<th>Amount</th>
<th>Year of Expenditure</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>4,442,958</td>
<td>2016</td>
<td>6,080,495</td>
<td>2024</td>
<td>8,321,578</td>
</tr>
<tr>
<td>2009</td>
<td>4,620,677</td>
<td>2017</td>
<td>6,323,715</td>
<td>2025</td>
<td>8,654,441</td>
</tr>
<tr>
<td>2010</td>
<td>4,805,504</td>
<td>2018</td>
<td>6,576,664</td>
<td>2026</td>
<td>9,999,619</td>
</tr>
<tr>
<td>2011</td>
<td>4,997,724</td>
<td>2019</td>
<td>6,839,730</td>
<td>2027</td>
<td>9,360,643</td>
</tr>
<tr>
<td>2012</td>
<td>5,197,633</td>
<td>2020</td>
<td>7,113,320</td>
<td>2028</td>
<td>9,735,069</td>
</tr>
<tr>
<td>2013</td>
<td>5,405,538</td>
<td>2021</td>
<td>7,397,852</td>
<td>2029</td>
<td>10,124,472</td>
</tr>
<tr>
<td>2014</td>
<td>5,621,760</td>
<td>2022</td>
<td>7,693,766</td>
<td>2030</td>
<td>10,529,451</td>
</tr>
<tr>
<td>2015</td>
<td>5,846,630</td>
<td>2023</td>
<td>8,001,517</td>
<td>2031</td>
<td>10,950,629</td>
</tr>
</tbody>
</table>

Table 7-2   Projected Revenues and Expenditures for Highway Improvements for the MPO Study Area by Funding Category and Locality for the Years 2008 - 2031

<table>
<thead>
<tr>
<th>Funding Category</th>
<th>Locality</th>
<th>Projected Revenues</th>
<th>Projected Expenditures</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bridge</td>
<td>MPO</td>
<td>9,140,014</td>
<td>5,023,380</td>
<td>4,116,634</td>
</tr>
<tr>
<td>Bridge Match</td>
<td>MPO</td>
<td>3,357,228</td>
<td>1,255,845</td>
<td>2,101,383</td>
</tr>
<tr>
<td>Congestion Mitigation &amp; Air Quality</td>
<td>MPO</td>
<td>24,919,477</td>
<td>6,527,529</td>
<td>18,391,948</td>
</tr>
<tr>
<td>Congestion Mitigation &amp; Air Quality Match</td>
<td>MPO</td>
<td>7,020,597</td>
<td>1,631,882</td>
<td>5,388,715</td>
</tr>
<tr>
<td>Enhancement</td>
<td>MPO</td>
<td>8,281,178</td>
<td>N/A</td>
<td>8,281,178</td>
</tr>
<tr>
<td>High Priority Projects - F</td>
<td>MPO</td>
<td>330,273</td>
<td>N/A</td>
<td>330,273</td>
</tr>
<tr>
<td>High Priority Projects - R</td>
<td>MPO</td>
<td>35,661</td>
<td>N/A</td>
<td>35,661</td>
</tr>
<tr>
<td>Rail Highway Crossing</td>
<td>MPO</td>
<td>174,918</td>
<td>N/A</td>
<td>174,918</td>
</tr>
<tr>
<td>Rail Highway Crossing Match</td>
<td>MPO</td>
<td>19,435</td>
<td>N/A</td>
<td>19,435</td>
</tr>
<tr>
<td>Safety</td>
<td>MPO</td>
<td>14,978,497</td>
<td>1,122,773</td>
<td>13,855,724</td>
</tr>
<tr>
<td>Safety Match</td>
<td>MPO</td>
<td>1,801,121</td>
<td>280,693</td>
<td>1,520,428</td>
</tr>
<tr>
<td>State Match</td>
<td>MPO</td>
<td>16,447</td>
<td>N/A</td>
<td>16,447</td>
</tr>
<tr>
<td>SAFETEA-LU</td>
<td>MPO</td>
<td>37,906,808</td>
<td>22,898,297</td>
<td>15,008,511</td>
</tr>
</tbody>
</table>

2031 Transportation Plan, June 2008
<table>
<thead>
<tr>
<th>Transportation Program</th>
<th>MPO</th>
<th>9,476,683</th>
<th>5,724,574</th>
<th>3,752,109</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regional Surface Transportation Program Match</td>
<td>MPO</td>
<td>55,912</td>
<td>N/A</td>
<td>55,912</td>
</tr>
<tr>
<td>TERMS Match</td>
<td>MPO</td>
<td>13,978</td>
<td>N/A</td>
<td>13,978</td>
</tr>
<tr>
<td>Interstate</td>
<td>MPO</td>
<td>178,300,219</td>
<td>113,999,000</td>
<td>64,301,219</td>
</tr>
<tr>
<td>NHS/Non Interstate</td>
<td>MPO</td>
<td>N/A</td>
<td>1,670,000</td>
<td>N/A</td>
</tr>
<tr>
<td>Primary</td>
<td>MPO</td>
<td>66,467,021</td>
<td>27,967,000</td>
<td>38,500,021</td>
</tr>
<tr>
<td>Secondary Prince George</td>
<td>13,865,987</td>
<td>1,699,286</td>
<td>12,166,701</td>
<td></td>
</tr>
<tr>
<td>Secondary Dinwiddie</td>
<td>7,679,546</td>
<td>2,798,000</td>
<td>4,881,546</td>
<td></td>
</tr>
<tr>
<td>Secondary Chesterfield</td>
<td>12,168,306</td>
<td>1,699,286</td>
<td>10,469,020</td>
<td></td>
</tr>
<tr>
<td>Urban Petersburg</td>
<td>25,168,306</td>
<td>11,725,172</td>
<td>13,443,134</td>
<td></td>
</tr>
<tr>
<td>Urban Hopewell</td>
<td>17,309,096</td>
<td>10,793,411</td>
<td>6,515,685</td>
<td></td>
</tr>
<tr>
<td>Urban Colonial Heights</td>
<td>13,158,564</td>
<td>6,918,277</td>
<td>6,240,287</td>
<td></td>
</tr>
<tr>
<td>Private Chesterfield (Branders Station)</td>
<td>57,200,000</td>
<td>57,200,000</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Local/State Revenue Sharing Prince George/VDOT (Lamore Drive)</td>
<td>1,375,000</td>
<td>1,375,000</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Fort Lee Military Construction Funds Fort Lee (Rt. 36 Overpass at River Rd.)</td>
<td>2,871,200</td>
<td>2,871,200</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>VA Military Strategic Response Funds Crater PDC</td>
<td>4,250,000</td>
<td>4,250,000</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>VA Transportation Partnership Opportunity Funds Prince George (Crosspointe Centre)</td>
<td>9,900,000</td>
<td>9,900,000</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>2008 Congressional Earmark Prince George</td>
<td>750,000</td>
<td>750,000</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

Transit capital and operating financial forecasts used for the 2031 Transportation Plan were developed from information prepared by VDR&PT and Petersburg Area Transit (PAT) during the summer of 2007 for the 2026 Transportation Plan revision. Information relating to a financial plan for PAT transit capital and operating projects may be found on pages 43 and 44 of *Section 6 – Tri-Cities Area Transportation Plans and Programs*. The transit financial plan uses the assumption that the operation of current transit service levels by PAT will be continued. The information used for the 2031 transit financial plan will be updated as a product of the transit development plan update project scheduled to begin after July 1, 2008.
Tri-Cities MPO 2031 Transportation Plan Highway Improvements

The following pages include a listing of projects that have been identified by members of the Tri-Cities Area MPO for inclusion in the year 2031 Plan. The need for these projects originated during the development of local comprehensive plans and/or highway needs assessments conducted at the local government level. At the metropolitan level, the need for these projects has been further supported. Input at the metropolitan level included the identification of socio-economic trends in land use and the modeling of the highway network as reviewed in sections 3 and 4 of this document.

Federal metropolitan planning regulations require that the MPO prepare a long-range (23-year) transportation plan that is financially constrained. Project costs must not exceed projected construction revenue during the year of project expenditure. VDOT has developed projections for the amount of construction funds expected to be available in the transportation study area during the next 23-year period by funding category. The VDOT has also prepared 2008 planning level project cost estimates using a statewide construction cost estimation model.

The following is a list recommended improvements projects for the Year 2031 Long-Range Transportation Plan. These projects have been determined by the MPO to be needed in order to help meet the regional transportation goals and objectives stated in Section 1- Introduction. Descriptive information provided for constrained projects, as shown in bold type, includes an identification number and location map by jurisdiction, termini, distance, type of improvement, funding source(s), a current project cost estimate and projected project cost during the year of expenditure. The project information provided also identifies any previous funding each project may have received. Projects are listed in general priority order under each funding program category by jurisdiction. Fiscally constrained projects are shown in bold type. The MPO has also identified additional projects needed over the next 23-year period. These projects are called vision projects and are considered to be of less priority than fiscally constrained projects. Vision projects are not expected to be implemented during the plan horizon period. These projects are not considered financially constrained. Vision projects are shown in italic type in the Year 2031 Long-Range Transportation Plan for illustrative purposes. It is anticipated vision projects will be advanced into the financially constrained project status during future long-range plan updates. Long-range transportation plan updates are currently required on a 4-year cycle under SAFETEA-LU.

The Commonwealth Transportation Board, except for the Congestion Mitigation and Air Quality (CMAQ) Program Regional Surface Transportation Program (RSTP) and federal mass transit funding, makes project allocations. The Tri-Cities Area MPO makes project allocations for the CMAQ Program RSTP Program and federal mass transit programs on an annual basis.
## Tri-Cities Area 2031 Transportation Plan
### Project List

#### Colonial Heights

<table>
<thead>
<tr>
<th>Project Name</th>
<th>From</th>
<th>To</th>
<th>Distance</th>
<th>Improve. Description</th>
<th>Lanes</th>
<th>Funding Source</th>
<th>Current Cost</th>
<th>Previous Alloc.</th>
<th>Future Alloc. Per.</th>
<th>YOE Cost</th>
<th>Bal. to Comp.</th>
<th>Other Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>I-95 Improvement on SB Off Ramp at Temple Ave.</td>
<td>N/A</td>
<td>Interchange Improv.</td>
<td>N/A</td>
<td>NHS/Interstate</td>
<td>6,080,000</td>
<td>FY09 - FY13</td>
<td>$5,123,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I-95 Improvement on NB On Ramp at Temple Ave.</td>
<td>N/A</td>
<td>Interchange Improv.</td>
<td>N/A</td>
<td>NHS/Interstate</td>
<td>6,119,000</td>
<td>FY09 - FY13</td>
<td>$419,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I-95 At Southpark Boulevard</td>
<td>N/A</td>
<td>Interchange Improv.</td>
<td>N/A</td>
<td>NHS/Interstate</td>
<td>N/A</td>
<td>Preliminary Scope to be Defined</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Projected Total Cost for NHS/Interstate Financially Constrained Projects
- Colonial Heights: $12,199,000
- Urban System: $9,351,000
- Bridge: $2,813,400

#### Dupuy Ave.

<table>
<thead>
<tr>
<th>Project Name</th>
<th>From</th>
<th>To</th>
<th>Distance</th>
<th>Improve. Description</th>
<th>Lanes</th>
<th>Funding Source</th>
<th>Current Cost</th>
<th>Previous Alloc.</th>
<th>Future Alloc. Per.</th>
<th>YOE Cost</th>
<th>Bal. to Comp.</th>
<th>Other Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dupuy Ave.</td>
<td>Battery Place</td>
<td>Lee Ave.</td>
<td>2 Mi.</td>
<td>Intersection Improv.</td>
<td>4 Urban</td>
<td>NHS/Interstate</td>
<td>7,687,000</td>
<td>FY09 - FY13</td>
<td>$4,682,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dupuy Ave.</td>
<td>Battery Place</td>
<td>Lee Ave.</td>
<td>2 Mi.</td>
<td>Intersection Improv.</td>
<td>4 Urban</td>
<td>NHS/Interstate</td>
<td>1,664,000</td>
<td>FY14 - FY18</td>
<td>$2,236,277</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dupuy Ave.</td>
<td>Battery Place</td>
<td>Lee Ave.</td>
<td>42 Mi.</td>
<td>Intersection Improv.</td>
<td>4 Urban</td>
<td>NHS/Interstate</td>
<td>4,570,000</td>
<td>FY24 - FY31</td>
<td>$8,756,953</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>James Ave.</td>
<td>Dupuy Ave.</td>
<td>Temple Ave.</td>
<td>15 Mi.</td>
<td>Reconstruction</td>
<td>4 Urban</td>
<td>NHS/Interstate</td>
<td>1,632,000</td>
<td>FY09 - FY13</td>
<td>$1,632,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Temple Ave.</td>
<td>Dupuy Ave.</td>
<td>Temple Ave.</td>
<td>15 Mi.</td>
<td>Reconstruction</td>
<td>4 Urban</td>
<td>NHS/Interstate</td>
<td>1,632,000</td>
<td>FY09 - FY13</td>
<td>$1,632,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Valley Rd.</td>
<td>Dupuy Ave.</td>
<td>Temple Ave.</td>
<td>27 Mi.</td>
<td>Reconstruction</td>
<td>4 Urban</td>
<td>NHS/Interstate</td>
<td>2,938,000</td>
<td>FY09 - FY13</td>
<td>$2,938,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wrights Ave.</td>
<td>Dupuy Ave.</td>
<td>Temple Ave.</td>
<td>19 Mi.</td>
<td>Reconstruction</td>
<td>4 Urban</td>
<td>NHS/Interstate</td>
<td>2,067,000</td>
<td>FY09 - FY13</td>
<td>$2,067,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dupuy Ave.</td>
<td>N/A</td>
<td>Dupuy Ave.</td>
<td>.25 Mi.</td>
<td>Intersection Improv.</td>
<td>4 Urban</td>
<td>NHS/Interstate</td>
<td>2,236,277</td>
<td>FY09 - FY13</td>
<td>$2,236,277</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Projected Total Cost for Urban System Financially Constrained Projects
- Colonial Heights: $9,351,000
- Urban System: $6,657,000
- Bridge: $2,813,400

#### Rt. 144 Temple Ave.

<table>
<thead>
<tr>
<th>Project Name</th>
<th>From</th>
<th>To</th>
<th>Distance</th>
<th>Improve. Description</th>
<th>Lanes</th>
<th>Funding Source</th>
<th>Current Cost</th>
<th>Previous Alloc.</th>
<th>Future Alloc. Per.</th>
<th>YOE Cost</th>
<th>Bal. to Comp.</th>
<th>Other Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Removal of Bridges W. of I-95</td>
<td>N/A</td>
<td>Demolition</td>
<td>N/A</td>
<td>Bridge</td>
<td>2,813,400</td>
<td>FY19 - FY23</td>
<td>$4,383,186</td>
<td>$4,383,186</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Additional Bridge Projects to be Developed for the Tri-Cities Area

<table>
<thead>
<tr>
<th>Project Name</th>
<th>From</th>
<th>To</th>
<th>Distance</th>
<th>Improve. Description</th>
<th>Lanes</th>
<th>Funding Source</th>
<th>Current Cost</th>
<th>Previous Alloc.</th>
<th>Future Alloc. Per.</th>
<th>YOE Cost</th>
<th>Bal. to Comp.</th>
<th>Other Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rt. 144 Temple Ave.</td>
<td>Ash Ave. to Moore Ave</td>
<td>N/A</td>
<td>Inside Turn Lane</td>
<td>N/A</td>
<td>NHS/Interstate</td>
<td>800,000</td>
<td>FY09 - FY13</td>
<td>$800,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rt. 144 Temple Ave.</td>
<td>Dupuy Ave.</td>
<td>N/A</td>
<td>Improve Existing Signal</td>
<td>N/A</td>
<td>NHS/Interstate</td>
<td>7,720,000</td>
<td>FY09 - FY13</td>
<td>$7,720,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rt. 144 Temple Ave.</td>
<td>Fire Station</td>
<td>Temple Avenue</td>
<td>N/A</td>
<td>Traffic Signal Coord.</td>
<td>N/A</td>
<td>NHS/Interstate</td>
<td>349,000</td>
<td>FY09 - FY13</td>
<td>$349,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rt. 144 Temple Ave.</td>
<td>Richmond Rd.</td>
<td>C.H. Eastern U.C.</td>
<td>N/A</td>
<td>Signal Coord. Study</td>
<td>N/A</td>
<td>NHS/Interstate</td>
<td>360,000</td>
<td>FY09 - FY13</td>
<td>$360,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Southpark Boulevard</td>
<td>Construct RTL At Dimmock Parkway</td>
<td>N/A</td>
<td>Right Turn Lane</td>
<td>N/A</td>
<td>NHS/Interstate</td>
<td>230,000</td>
<td>FY14 - FY18</td>
<td>$230,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Projected Total Cost for Bridge Financially Constrained Project
- Colonial Heights: $2,813,400
- Urban System: $2,813,400
- Bridge: $2,813,400

<table>
<thead>
<tr>
<th>Project Name</th>
<th>From</th>
<th>To</th>
<th>Distance</th>
<th>Improve. Description</th>
<th>Lanes</th>
<th>Funding Source</th>
<th>Current Cost</th>
<th>Previous Alloc.</th>
<th>Future Alloc. Per.</th>
<th>YOE Cost</th>
<th>Bal. to Comp.</th>
<th>Other Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Streetscape at Government Center</td>
<td>N/A</td>
<td>Streetscape Improve.</td>
<td>N/A</td>
<td>Bridge</td>
<td>320,700</td>
<td>FY09 - FY13</td>
<td>$320,700</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Projected Total Cost for Future Enhancement Financially Constrained Projects
- Colonial Heights: $320,700
- Urban System: $320,700

<table>
<thead>
<tr>
<th>Project Name</th>
<th>From</th>
<th>To</th>
<th>Distance</th>
<th>Improve. Description</th>
<th>Lanes</th>
<th>Funding Source</th>
<th>Current Cost</th>
<th>Previous Alloc.</th>
<th>Future Alloc. Per.</th>
<th>YOE Cost</th>
<th>Bal. to Comp.</th>
<th>Other Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rt. 1301</td>
<td>Westover Ave.</td>
<td>Windsor Avenue</td>
<td>N/A</td>
<td>Add Turning Lane</td>
<td>N/A</td>
<td>CMAQ</td>
<td>1,206,000</td>
<td>FY09 - FY13</td>
<td>$1,206,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rt. 1301</td>
<td>Westover Ave.</td>
<td>Windsor Avenue</td>
<td>N/A</td>
<td>CMAQ</td>
<td>1,206,000</td>
<td>FY09 - FY13</td>
<td>$1,206,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rt. 1301</td>
<td>Ash Ave. to Moore Ave</td>
<td>N/A</td>
<td>Inside Turn Lane</td>
<td>N/A</td>
<td>CMAQ</td>
<td>800,000</td>
<td>FY09 - FY13</td>
<td>$800,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supplemental Funding for CMAQ Projects</td>
<td>N/A</td>
<td>N/A</td>
<td>Transportation Planning</td>
<td>RSTP</td>
<td>N/A</td>
<td>7,720,000</td>
<td>FY09 - FY13</td>
<td>$7,720,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Projected Total Cost for CMAQ Financially Constrained Projects
- Colonial Heights: $3,762,000
- Urban System: $3,762,000
- Bridge: $3,762,000

<table>
<thead>
<tr>
<th>Project Name</th>
<th>From</th>
<th>To</th>
<th>Distance</th>
<th>Improve. Description</th>
<th>Lanes</th>
<th>Funding Source</th>
<th>Current Cost</th>
<th>Previous Alloc.</th>
<th>Future Alloc. Per.</th>
<th>YOE Cost</th>
<th>Bal. to Comp.</th>
<th>Other Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rt. 144 Temple Ave.</td>
<td>Ash Ave. to Moore Ave</td>
<td>N/A</td>
<td>Inside Turn Lane</td>
<td>N/A</td>
<td>CMAQ</td>
<td>360,000</td>
<td>FY09 - FY13</td>
<td>$360,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rt. 144 Temple Ave.</td>
<td>Fire Station</td>
<td>Temple Avenue</td>
<td>N/A</td>
<td>Traffic Signal Coord.</td>
<td>N/A</td>
<td>CMAQ</td>
<td>349,000</td>
<td>FY09 - FY13</td>
<td>$349,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rt. 144 Temple Ave.</td>
<td>Richmond Rd.</td>
<td>C.H. Eastern U.C.</td>
<td>N/A</td>
<td>Signal Coord. Study</td>
<td>N/A</td>
<td>CMAQ</td>
<td>360,000</td>
<td>FY09 - FY13</td>
<td>$360,000</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Projected Total Cost for CMAQ Financially Constrained Projects
- Colonial Heights: $1,555,000
- Urban System: $1,555,000
- Bridge: $1,555,000

### Note
- **Potential Funding Sources** may include RSTP, CMAQ, Safety and Ozone Alerts.
- **Regional Balance** in FY31: $0

---

2031 Transportation Plan, June 2008  59
Colonial Heights Transportation Project Map - Year 2031
<table>
<thead>
<tr>
<th>#</th>
<th>UPCI</th>
<th>Project Name</th>
<th>To</th>
<th>Distance</th>
<th>Improvement, Description</th>
<th>Lanes</th>
<th>Funding Source</th>
<th>Current Cost</th>
<th>Previous Alloc.</th>
<th>Future Alloc.</th>
<th>Per.</th>
<th>YTD Cost</th>
<th>To</th>
<th>Bar to Comp.</th>
<th>Other Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I-95</td>
<td>I-95</td>
<td>I-264</td>
<td>2.16 Mi.</td>
<td>Reconstruction</td>
<td>4</td>
<td>NHS/Interstate</td>
<td>24,500,000</td>
<td>0</td>
<td>FY15 - FY18</td>
<td>24,500,000</td>
<td>24,500,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>I-264</td>
<td>I-95</td>
<td>I-276</td>
<td>2.15 Mi.</td>
<td>Reconstruction</td>
<td>4</td>
<td>Inter/State</td>
<td>26,000,000</td>
<td>0</td>
<td>FY14 - FY18</td>
<td>26,000,000</td>
<td>26,000,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>I-95/I-64</td>
<td>I-95</td>
<td>I-64</td>
<td>1.85 Mi.</td>
<td>Reconstruction</td>
<td>2</td>
<td>Inter/State</td>
<td>27,000,000</td>
<td>0</td>
<td>FY14 - FY18</td>
<td>27,000,000</td>
<td>27,000,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>I-95/I-64</td>
<td>I-95</td>
<td>I-64</td>
<td>1.85 Mi.</td>
<td>Reconstruction</td>
<td>2</td>
<td>Inter/State</td>
<td>34,500,000</td>
<td>0</td>
<td>FY14 - FY18</td>
<td>34,500,000</td>
<td>34,500,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>I-95/I-64</td>
<td>I-95</td>
<td>I-64</td>
<td>1.85 Mi.</td>
<td>Reconstruction</td>
<td>2</td>
<td>Inter/State</td>
<td>42,000,000</td>
<td>0</td>
<td>FY14 - FY18</td>
<td>42,000,000</td>
<td>42,000,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>I-95/I-64</td>
<td>I-95</td>
<td>I-64</td>
<td>1.85 Mi.</td>
<td>Reconstruction</td>
<td>2</td>
<td>Inter/State</td>
<td>49,500,000</td>
<td>0</td>
<td>FY14 - FY18</td>
<td>49,500,000</td>
<td>49,500,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>I-95/I-64</td>
<td>I-95</td>
<td>I-64</td>
<td>1.85 Mi.</td>
<td>Reconstruction</td>
<td>2</td>
<td>Inter/State</td>
<td>57,000,000</td>
<td>0</td>
<td>FY14 - FY18</td>
<td>57,000,000</td>
<td>57,000,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#</td>
<td>Project Name</td>
<td>From</td>
<td>To</td>
<td>Distance</td>
<td>Improve. Description</td>
<td>Lanes</td>
<td>Funding Source</td>
<td>Current Cost</td>
<td>Previous Alloc.</td>
<td>Future Alloc. Per.</td>
<td>YOE Cost</td>
<td>Bal. to Comp.</td>
<td>Other Information</td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>1436 Cedar Level Road</td>
<td>Kippax Dr.</td>
<td>Mesa Dr.</td>
<td>1.2 Mi.</td>
<td>Widening</td>
<td>4</td>
<td>Urban</td>
<td>17,879,000</td>
<td>7,086,000</td>
<td>FY14 - FY31</td>
<td>10,793,411</td>
<td>10,793,411</td>
<td>SYIP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>15931 River Rd.</td>
<td>WCL</td>
<td>Mesa Dr.</td>
<td>1 Mi.</td>
<td>Reconstruction</td>
<td>2</td>
<td>Urban</td>
<td>9,121,000</td>
<td>9,121,000</td>
<td>SYIP</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>5772 Courthouse/Berry</td>
<td>Oaklawn Blvd.</td>
<td>High Ave.</td>
<td>1.4 Mi.</td>
<td>Widening</td>
<td>4</td>
<td>Urban</td>
<td>10,588,000</td>
<td>950,000</td>
<td>FY14 - FY31</td>
<td>10,793,411</td>
<td>10,793,411</td>
<td>SYIP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Miles Ave.</td>
<td>Winston Churchill Dr.</td>
<td>Courthouse Road</td>
<td>N/A</td>
<td>Widening</td>
<td>4</td>
<td>Urban</td>
<td>4,256,000</td>
<td>4,256,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Berry St.</td>
<td>High St.</td>
<td>Churchill Dr.</td>
<td>1.4 Mi.</td>
<td>Reconstruction &amp; New</td>
<td>4</td>
<td>Urban</td>
<td>17,024,000</td>
<td>17,024,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Randolph Rd.</td>
<td>Churchill Dr.</td>
<td>8th St.</td>
<td>1.1 Mi.</td>
<td>Widening</td>
<td>4</td>
<td>Urban</td>
<td>5,000,000</td>
<td>5,000,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Sunnyvale/Oaklawn/15th</td>
<td>Churchill Dr.</td>
<td>N&amp;W R.R.</td>
<td>.7 Mi.</td>
<td>Widening</td>
<td>4</td>
<td>Urban</td>
<td>3,100,000</td>
<td>3,100,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>City Point Road</td>
<td>Main St.</td>
<td>Mesa Dr.</td>
<td>1.5 Mi.</td>
<td>Widening</td>
<td>4</td>
<td>Urban</td>
<td>6,750,000</td>
<td>6,750,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Terminal/Station/Ramsey</td>
<td>Randolph Rd</td>
<td>Recan Avenue</td>
<td>1.3 Mi.</td>
<td>Widening</td>
<td>4</td>
<td>Urban</td>
<td>5,850,000</td>
<td>5,850,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>High Avenue</td>
<td>Winston Churchill Dr.</td>
<td>Oaklawn Boulevard</td>
<td>.56 Mi.</td>
<td>Widening</td>
<td>4</td>
<td>Urban</td>
<td>2,500,000</td>
<td>2,500,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Danville Street</td>
<td>Mesa Dr.</td>
<td>17th Street</td>
<td>.8 Mi.</td>
<td>Widening</td>
<td>4</td>
<td>Urban</td>
<td>3,600,000</td>
<td>3,600,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>216 Avenue</td>
<td>West Broadway</td>
<td>City Point Road</td>
<td>.2 Mi.</td>
<td>Widening</td>
<td>4</td>
<td>Urban</td>
<td>1,000,000</td>
<td>1,000,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Elm Street</td>
<td>15th Avenue</td>
<td>8th Ave.</td>
<td>.8 Mi.</td>
<td>Widening</td>
<td>4</td>
<td>Urban</td>
<td>2,700,000</td>
<td>2,700,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Oaklawn Boulevard</td>
<td>F-295</td>
<td>West Corporate Limits</td>
<td>.8 Mi.</td>
<td>Widening</td>
<td>4</td>
<td>Urban</td>
<td>3,600,000</td>
<td>3,600,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>17th Avenue</td>
<td>City Point Rd.</td>
<td>15th Avenue</td>
<td>.45 Mi.</td>
<td>Widening</td>
<td>4</td>
<td>Urban</td>
<td>2,000,000</td>
<td>2,000,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Ashland Street</td>
<td>Courthouse Rd.</td>
<td>Old Iron Road</td>
<td>.2 Mi.</td>
<td>Realignment &amp; New</td>
<td>4</td>
<td>Urban</td>
<td>1,000,000</td>
<td>1,000,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Projected Total Cost for Urban System Financially Constrained Projects**: 9,121,000

**Regional Balance in FY31**: 0

**Projected Total Cost for Enhancement Financially Constrained Projects**: 487,664

**Projected Total Cost for Safety Financially Constrained Projects**: 548,066

**Projected Total Cost for CMAQ Financially Constrained Projects**: 1,501,231

**Projected Total Cost for RSTP Financially Constrained Projects**: 424,000

**Projected Total Cost for CMAQ Financially Constrained Projects**: 1,501,231

**Projected Total Cost for RSTP Financially Constrained Projects**: 424,000

**Projected Total Cost for TIP Financially Constrained Projects**: 9,121,000

**Regional Balance in FY31**: 0

**Additional Enhancement Projects to be Developed for the Tri-Cities Area**: 487,664

**Additional Safety Projects to be Developed for the Tri-Cities Area**: 548,066

**Additional CMAQ Projects to be Developed for the Tri-Cities Area**: 1,501,231

**Additional RSTP Projects to be Developed for the Tri-Cities Area**: 424,000

**Projected Total Cost for Urban System Financially Constrained Projects**: 9,121,000

**Projected Total Cost for Enhancement Financially Constrained Projects**: 487,664

**Projected Total Cost for Safety Financially Constrained Projects**: 548,066

**Projected Total Cost for CMAQ Financially Constrained Projects**: 1,501,231

**Projected Total Cost for RSTP Financially Constrained Projects**: 424,000

**Projected Total Cost for TIP Financially Constrained Projects**: 9,121,000

**Regional Balance in FY31**: 0
## Tri-Cities Area 2031 Transportation Plan
### Project List

#### County of Chesterfield

<table>
<thead>
<tr>
<th>#</th>
<th>UPC</th>
<th>Project Name</th>
<th>From</th>
<th>To</th>
<th>Improve. Description</th>
<th>Lanes</th>
<th>Funding Source</th>
<th>Current Cost</th>
<th>Previous Alloc.</th>
<th>Future Alloc.</th>
<th>YOE Cost</th>
<th>Bal. to Comp.</th>
</tr>
</thead>
<tbody>
<tr>
<td>68</td>
<td>62147</td>
<td>Rt. 144 Harrogate Rd.</td>
<td>at Treely Rd. (Rt. 1152)</td>
<td>Install LTL NB</td>
<td>Primary</td>
<td>874,000</td>
<td>874,000</td>
<td>FY09 - FY13</td>
<td>SYIP</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>80529</td>
<td>Rt. 10</td>
<td>I-295</td>
<td>Hopewell NCL</td>
<td>Primary</td>
<td>36,400,000</td>
<td>0</td>
<td>36,400,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Projected Total Cost for Primary System Financially Constrained Projects

*Total: 874,000, 874,000, 0 Reg. Bal. in FY31 2,595,170*

<table>
<thead>
<tr>
<th>#</th>
<th>Project Name</th>
<th>From</th>
<th>To</th>
<th>Improve. Description</th>
<th>Lanes</th>
<th>Funding Source</th>
<th>Current Cost</th>
<th>Previous Alloc.</th>
<th>Future Alloc.</th>
<th>YOE Cost</th>
<th>Bal. to Comp.</th>
</tr>
</thead>
<tbody>
<tr>
<td>52</td>
<td>Rt. 625 Branders Bridge Rd.</td>
<td>0.357 Mi. N. of Whitehouse</td>
<td>0.075 Mi. N. of Whitehouse</td>
<td>0.2820 Mi. Reconstruction</td>
<td>2</td>
<td>Secondary</td>
<td>1,144,000</td>
<td>1,039,000</td>
<td>FY09 - FY13</td>
<td>SYIP</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Rt. 746 Enon Church Rd</td>
<td>Rt. 10 Hundred Rd. East</td>
<td>I-295</td>
<td>Curve Realignment</td>
<td>2</td>
<td>Revenue Sharing</td>
<td>2,000,000</td>
<td>2,000,000</td>
<td>FY09 - FY13</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Projected Total Cost for Secondary System Financially Constrained Projects

*Total: 3,189,000, 3,039,000 Local Bal. in FY31 5,782,310*

<table>
<thead>
<tr>
<th>#</th>
<th>Project Name</th>
<th>From</th>
<th>To</th>
<th>Improve. Description</th>
<th>Lanes</th>
<th>Funding Source</th>
<th>Current Cost</th>
<th>Previous Alloc.</th>
<th>Future Alloc.</th>
<th>YOE Cost</th>
<th>Bal. to Comp.</th>
</tr>
</thead>
<tbody>
<tr>
<td>36</td>
<td>Rt. 619 Happy Hill Rd.</td>
<td>South Happy Hill</td>
<td>Rt. 144 Harrogate Rd.</td>
<td>Curve Realignment</td>
<td>2</td>
<td>Private/Local</td>
<td>1,200,000</td>
<td>0</td>
<td>1,200,000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Projected Total Cost for Safety Financially Constrained Projects

*Potential Funding Sources May Include RSTP, CMAQ, Safety and Bridge*

<table>
<thead>
<tr>
<th>#</th>
<th>Project Name</th>
<th>From</th>
<th>To</th>
<th>Improve. Description</th>
<th>Lanes</th>
<th>Funding Source</th>
<th>Current Cost</th>
<th>Previous Alloc.</th>
<th>Future Alloc.</th>
<th>YOE Cost</th>
<th>Bal. to Comp.</th>
</tr>
</thead>
<tbody>
<tr>
<td>234</td>
<td>East/West Freeway</td>
<td>I-85 or Rt. 460</td>
<td>I-295</td>
<td>Widening to 4 Lanes</td>
<td>4</td>
<td>Private/Local</td>
<td>4,076,800</td>
<td>0</td>
<td>4,076,800</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Projected Total Cost for Additional Safety Projects to be Developed for the Tri-Cities Area

*Regional Balance in FY31 0*

<table>
<thead>
<tr>
<th>#</th>
<th>Project Name</th>
<th>From</th>
<th>To</th>
<th>Improve. Description</th>
<th>Lanes</th>
<th>Funding Source</th>
<th>Current Cost</th>
<th>Previous Alloc.</th>
<th>Future Alloc.</th>
<th>YOE Cost</th>
<th>Bal. to Comp.</th>
</tr>
</thead>
<tbody>
<tr>
<td>36</td>
<td>Rt. 625 Happy Hill Rd.</td>
<td>South Happy Hill</td>
<td>Rt. 144 Harrogate Rd.</td>
<td>New Facility, PE &amp; RW</td>
<td>N/A</td>
<td>Private/Local</td>
<td>18,400,000</td>
<td>0</td>
<td>18,400,000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Projected Total Cost for Additional Safety Projects to be Developed for the Tri-Cities Area

*Regional Balance in FY31 0*

<table>
<thead>
<tr>
<th>#</th>
<th>Project Name</th>
<th>From</th>
<th>To</th>
<th>Improve. Description</th>
<th>Lanes</th>
<th>Funding Source</th>
<th>Current Cost</th>
<th>Previous Alloc.</th>
<th>Future Alloc.</th>
<th>YOE Cost</th>
<th>Bal. to Comp.</th>
</tr>
</thead>
<tbody>
<tr>
<td>36</td>
<td>Rt. 625 Happy Hill Rd.</td>
<td>South Happy Hill</td>
<td>Rt. 144 Harrogate Rd.</td>
<td>New Facility, PE &amp; RW</td>
<td>N/A</td>
<td>Private/Local</td>
<td>18,400,000</td>
<td>0</td>
<td>18,400,000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Projected Total Cost for Additional Safety Projects to be Developed for the Tri-Cities Area

*Regional Balance in FY31 0*
### Tri-Cities Area 2031 Transportation Plan

#### Project List

**Dinwiddie County**

<table>
<thead>
<tr>
<th>Project Name</th>
<th>From</th>
<th>To</th>
<th>Distance</th>
<th>Improve. Description</th>
<th>Lanes</th>
<th>Funding Source</th>
<th>Current Cost</th>
<th>Previous Alloc.</th>
<th>Future Alloc. Per.</th>
<th>YOE Cost</th>
<th>Bal. to Comp.</th>
<th>Other Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rt. 1 Boydton Plank Rd</td>
<td>WCL Petersburg N</td>
<td>I-85</td>
<td>1.5 Mi.</td>
<td>Widening</td>
<td>4</td>
<td>Primary</td>
<td>11,538,064</td>
<td>0</td>
<td>FY14 - FY23</td>
<td>17,975,928</td>
<td>17,975,928</td>
<td>See UPC 73268 Below</td>
</tr>
<tr>
<td>Rt. 1 Corridor Study</td>
<td>Rt. 603 Weakley Rd.</td>
<td>Rt. 613 Dabney Mill Rd.</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Rt. 142</td>
<td>Petersburg WCL</td>
<td>Rt. 1</td>
<td>1.36 Mi.</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>3,046,400</td>
<td>0</td>
<td>FY14 - FY23</td>
<td>3,046,400</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

#### Projected Total Cost for Primary System Financially Constrained Projects

| | 0 | 0 |

#### Projected Total Cost for Secondary System Financially Constrained Projects

| | 6,331,000 | 3,533,000 |

#### Projected Total Cost for Private/Local Financially Constrained Projects

| | 0 | 0 |

#### Additional Bridge Projects to be Developed for the Tri-Cities Area

| | Regional Balance in FY31 0 |

#### Additional Safety Projects to be Developed for the Tri-Cities Area

| | Regional Balance in FY31 0 |

#### Additional Enhancement Projects to be Developed for the Tri-Cities Area

| | Regional Balance in FY31 0 |

#### Projected Total Cost for Private/Local Financially Constrained Projects

| | 0 | 0 |

#### Projected Total Cost for RSTP Financially Constrained Projects

| | 5,098,936 | 266,000 |

#### Additional RSTP Projects to be Developed for the Tri-Cities Area

| | Regional Balance in FY31 0 |
### Project List

<table>
<thead>
<tr>
<th>Project</th>
<th>Description</th>
<th>From</th>
<th>To</th>
<th>Distance</th>
<th>Improve. Description</th>
<th>Lanes</th>
<th>Funding Source</th>
<th>Current Cost</th>
<th>Previous Alloc.</th>
<th>Future Alloc. Per.</th>
<th>YOE</th>
<th>Cost to Comp.</th>
<th>Other Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>Rt. 144 &amp; Rt. 645 Temple Avenue @ publication Road</td>
<td>N/A</td>
<td>N/A</td>
<td>Turn Lanes &amp; Sign Mod.</td>
<td>NHS/Interstate</td>
<td>1,310,000</td>
<td>0</td>
<td>FY14 - FY18</td>
<td>1,826,139</td>
<td>1,826,139</td>
<td>Fort Lee Expansion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>51</td>
<td>Route 36 Oaklawn Boulevard @ Hill Drive/Lee Avenue</td>
<td>N/A</td>
<td>N/A</td>
<td>Add Lanes &amp; Sign Mod.</td>
<td>NHS/Interstate</td>
<td>10,000</td>
<td>0</td>
<td>FY14 - FY18</td>
<td>15,439</td>
<td>15,439</td>
<td>Fort Lee Expansion</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| 52 | Route 460 Mary Rd. @ publication Road | N/A | N/A | Left Lane | NHS/Interstate | 490,000 | 0 | FY14 - FY18 | 1,200,000 | 1,200,000 | Regional Transportation

**Projected Total Cost for NHS/Interstate and Non-NHS/Interstate Financially Constrained Projects**
- Total Cost: $1,670,000
- FY14 - FY18
- Cost to Comp.: $1,626,139

---

### Tri-Cities Area 2031 Transportation Plan

#### Projected Cost for Route 460 PFTA Financially Constrained Project
- Total Cost: $1,626,139

---

### Projected Cost for Route 460 Public Private Transportation Act (PPTA)

**6.6 Miles New Facility**

- Combination of funding sources: Equity Investment, Earnings, Bank Debt, Private Activity Bonds, Public Investment
- N/A
- FY14 - FY18
- Cost to Comp.: $1,626,139

---

### Projected Total Cost for Route 460 Public Private Transportation Act (PPTA) Financially Constrained Project
- Total Cost: $1,626,139

---

### Additional Enhancement Projects to be Developed for the Tri-Cities Area

- Total Cost: $8,281,178

---

### Additional Project Cost for CMAQ Financially Constrained Projects
- Total Cost: $779,000

---

### Additional RSTP Projects to be Developed for the Tri-Cities Area

- Total Cost: $9,900,000

---

### Tri-Cities MPO supports the southern alignment currently preferred by the CTB and supports the Prince George County request that consideration be given to extending the proposed western terminus of US 14 through the southern industrial lands.

---

### Tri-Cities MPO supports the southern alignment currently preferred by the CTB and supports the Prince George County request that consideration be given to extending the proposed western terminus of US 14 southwest and providing more direct access to nearby industrial land uses.

---

### Additional RSTP Projects to be Developed for the Tri-Cities Area

- Total Cost: $9,900,000

---

### Road A

- Hardware Drive
- Total Cost: $3,100,000

---

### Road B

- Rt. 629 W. Quaker Rd.
- To: Rt. 629 W. Quaker Rd.

---

### Projected Total Cost for TPOF Financially Constrained Projects
- Total Cost: $9,900,000

---

### Projected Total Cost for Road 460 PFTA Financially Constrained Project
- Total Cost: $1,626,139

---

### Projected Total Cost for Route 460 Public Private Transportation Act (PPTA)

**6.6 Miles New Facility**

- Combination of funding sources: Equity Investment, Earnings, Bank Debt, Private Activity Bonds, Public Investment
- N/A
- FY14 - FY18
- Cost to Comp.: $1,626,139

---

### Projected Total Cost for Route 460 Public Private Transportation Act (PPTA) Financially Constrained Project
- Total Cost: $1,626,139

---

### Additional Enhancement Projects to be Developed for the Tri-Cities Area

- Total Cost: $8,281,178

---

### Additional Project Cost for CMAQ Financially Constrained Projects
- Total Cost: $779,000

---

### Additional RSTP Projects to be Developed for the Tri-Cities Area

- Total Cost: $9,900,000

---

### Road A

- Hardware Drive
- Total Cost: $3,100,000

---

### Road B

- Rt. 629 W. Quaker Rd.
- To: Rt. 629 W. Quaker Rd.

---

### Projected Total Cost for TPOF Financially Constrained Projects
- Total Cost: $9,900,000

---

### Projected Total Cost for Road 460 PFTA Financially Constrained Project
- Total Cost: $1,626,139

---

### Projected Total Cost for Route 460 Public Private Transportation Act (PPTA)

**6.6 Miles New Facility**

- Combination of funding sources: Equity Investment, Earnings, Bank Debt, Private Activity Bonds, Public Investment
- N/A
- FY14 - FY18
- Cost to Comp.: $1,626,139

---

### Projected Total Cost for Route 460 Public Private Transportation Act (PPTA) Financially Constrained Project
- Total Cost: $1,626,139

---

### Additional Enhancement Projects to be Developed for the Tri-Cities Area

- Total Cost: $8,281,178

---

### Additional Project Cost for CMAQ Financially Constrained Projects
- Total Cost: $779,000

---

### Additional RSTP Projects to be Developed for the Tri-Cities Area

- Total Cost: $9,900,000

---

### Road A

- Hardware Drive
- Total Cost: $3,100,000

---

### Road B

- Rt. 629 W. Quaker Rd.
- To: Rt. 629 W. Quaker Rd.

---

### Projected Total Cost for TPOF Financially Constrained Projects
- Total Cost: $9,900,000

---

### Projected Total Cost for Road 460 PFTA Financially Constrained Project
- Total Cost: $1,626,139

---

### Projected Total Cost for Route 460 Public Private Transportation Act (PPTA)

**6.6 Miles New Facility**

- Combination of funding sources: Equity Investment, Earnings, Bank Debt, Private Activity Bonds, Public Investment
- N/A
- FY14 - FY18
- Cost to Comp.: $1,626,139

---

### Projected Total Cost for Route 460 Public Private Transportation Act (PPTA) Financially Constrained Project
- Total Cost: $1,626,139

---

### Additional Enhancement Projects to be Developed for the Tri-Cities Area

- Total Cost: $8,281,178

---

### Additional Project Cost for CMAQ Financially Constrained Projects
- Total Cost: $779,000

---

### Additional RSTP Projects to be Developed for the Tri-Cities Area

- Total Cost: $9,900,000

---

### Road A

- Hardware Drive
- Total Cost: $3,100,000

---

### Road B

- Rt. 629 W. Quaker Rd.
- To: Rt. 629 W. Quaker Rd.

---

### Projected Total Cost for TPOF Financially Constrained Projects
- Total Cost: $9,900,000
Notes:

1) Projects shown in bold are considered to be constrained plan projects because a potential funding source has been identified. Projects shown in italics are considered to be vision projects because no potential funding source has been identified. Vision projects are transportation improvement needs that are not part of the financially constrained plan.

2) The "Current Cost" column indicates the most recent project cost estimate available for the project. The "Previous Allocation" column indicates any allocations made to the project during FY 08 or any previous year. The "Future Allocation Period" indicates the time period during which future allocations are anticipated to be made to the project. The "YOE" or Year of Expenditure column indicates the cost of the project during the years in which allocations are anticipated to be made. This estimate has been prepared by applying an inflation factor to the project "Current Cost". The "Balance to Complete" column indicates the amount of funds needed to fully fund a project during the "Year of Expenditure" indicated.

3) All project cost estimates have been developed for planning purposes only. These cost estimates are subject to change based on preliminary engineering and design considerations.

4) The ID number appearing in the first column is used for project tracking purposes only. Generally, projects of higher priority are listed towards the beginning of each program listing.

5) The Tri-Cities Area Metropolitan Planning Organization has the authority for making allocations for Congestion Mitigation & Air Quality (CMAQ) projects, Regional Surface Transportation Program projects, and mass transit programs. The authority for allocating other funding sources identified in this financially constrained plan rest with the Commonwealth Transportation Board, the Virginia General Assembly and the 6 local governments in the Tri-Cities Area.

6) The projected Secondary System funds for Chesterfield County only includes that portion of the total County land area located in the Tri-Cities Transportation Study Area. The balance of the County's Secondary System allocation is located in Richmond Transportation Study Area.

7) Cost estimates for Congestion Mitigation & Air Quality (CMAQ) projects are 80% federal and 20% State matching funds.

8) The Virginia Department of Transportation is currently soliciting for detailed proposals for the Route 460 PPTA project.

9) Preliminary financial forecasts prepared for Petersburg Area Transit (PAT) will likely be updated during the planned 2008 Transit Development Plan update project currently scheduled to begin after July 1, 2008.

10) In accordance with guidance received from the Virginia Secretary of Transportation in a letter dated February 7, 2007, this project is shown for construction in the Tri-Cities 2026 Transportation Plan Revision. The Virginia Department of Transportation has conducted an alternatives analysis and prepared a draft environmental impact statement for this project. A solicitation by the Commonwealth pursuant to the Virginia Public Private Partnership Act of 1995 has received response from three private entities for the financing and construction of a new Route 460 facility. At the present time, the Route 460 Public Private Partnership solicitation is in the conceptual stage. In order for the Route 460 Public Private Solicitation to proceed to the detailed proposal stage, the project must be shown for construction in the 2026 Transportation Plan. The detail proposal stage will include more complete information on project cost and funding sources. Should the Commonwealth Transportation Board decide not to issue a request for detailed proposals, the Tri-Cities MPO will modify the 2026 Transportation Plan Revision accordingly. The Route 460 Corridor is considered by the Commonwealth of Virginia and the Tri-Cities Area Metropolitan Planning Organization to be of strategic importance for national defense, freight management, hurricane evacuation, congestion reduction and economic development. The Route 460 Public Private Partnership solicitation is unique among projects identified in the 2026 Transportation Plan Revision because its magnitude in scope requires funding sources and strategies normally not used to demonstrate financial constraint in the Tri-Cities Area.
Section 8 – Related Transportation Planning
Factors in the Tri-Cities Area
Planning Factors
SAFETEA-LU has identified eight planning factors that need to be considered as long range metropolitan transportation plans are developed. Examples of how transportation plans and programs in the Tri-Cities Area have considered these factors are provided below.

Factor A – Support the Economic Vitality of the Metropolitan Area, Especially by Enabling Global Competitiveness, Productivity and Efficiency
An integral part of the goals statement for metropolitan transportation plan in the Tri-Cities Area is to assure compatibility between transportation plans and economic development activities. The Walthall interchange project on I-95 is an example of how a programmed transportation improvement has benefited economic development activities. Existing and future industries located in the vicinity of this interchange compete in global markets. The reconstruction of this interchange will continue to enhance the efficiency of product movement by truck.

The need to improve the Route 460 corridor between I-295 in Prince George and Rt. 58 in Suffolk continues to be the top regional transportation priority among local government leaders in the Tri-Cities Area. The concentration of freight traffic on Route 460 has increased to over 25 percent of total traffic in recent years. Safety issues, delays related to signalized intersections, hurricane evacuation for South Hampton Roads have raised the level of interest in improving this freight oriented transportation corridor.

Several regional warehouse distribution centers are presently located along this corridor. A large regional landfill located in Sussex County near Route 460. This facility accepts shipments from northeastern states by truck and rail. In addition, the ports of Hampton Roads are continuing to expand the volume of container activity using the Route 460 corridor. Much of this truck traffic is destined for major cities on along the east coast and the mid-west.

VDOT completed an alternatives analysis and draft environmental impact statement for the 55 mile Route 460 corridor. In November 2006, the Commonwealth Transportation Board selected one of the candidate alternatives that provides for a new 4-lane divided Route 460 facility south of the present roadway in the Tri-Cities. An Independent Review Panel was formed in early 2007, pursuant to the Virginia Private Public Transportation Act of 1995 (PPTA), to review and make recommendations on 3 private proposals to either construct a new facility or enhance the existing facility. The Commonwealth Transportation Board determined 3 conceptual project proposals satisfied requirements to be advanced to the detailed proposal stage. The current schedule is for a comprehensive project agreement to be prepared between the State and one of the private firms by June 2008. The Tri-Cities MPO has included the Route 460 project in the 2031 financially constrained plan as a PPTA funded project.

Consideration is also continuing to be placed on the development of an intermodal facility adjacent to the existing Norfolk/Southern rail facility in the vicinity of the I-295 and Route 460 interchange in Prince George County. In addition to serving Central Virginia shippers, the proposed intermodal facility would serve the transportation corridor between the ports of Hampton Roads and the Mid-Western portion of the U.S. Route 460 is a good example of a transportation corridor supporting the economic vitality of this metropolitan area and beyond.
Factor B – Increase the safety of the transportation system for motorized and nonmotorized users
The Route 460 Corridor also provides an example of how the need to improve safety of the transportation system has been considered by the transportation plan. The Virginia portion of the TransAmerica Feasibility Study included an analysis of accidents in the Route 460 corridor. This study found that during the 3-year period 1994-1996, the death rate was 3.5 on the segment between I-295 and Route 58, twice the statewide average for comparable facilities of 1.5.

An example of increased safety consideration for the future transportation system in the Tri-Cities Area is the increased use of technology with Intelligent Transportation Systems applications to monitor traffic movement at the I-85/I-95/Route 460 interchange.

The VDOT Richmond District office has completed a comprehensive effort to develop a regional architecture for Intelligent Transportation Systems (ITS) and is continuing the use of technology to enhance mobility and safety. The intent of developing ITS architecture for the Richmond/Tri-Cities Area has been to provide guidelines on how selected technologies should be deployed. Some examples of current ITS applications in the Tri-Cities include traveler information systems, incident management systems, variable message signs, and closed-circuit television cameras.

VDOT has contributed toward the development of the Virginia Strategic Highway Safety Plan. Summary information from the State Highway Safety Plan has been included later in this section of the 2031 Transportation Plan.

Factor C – Increase the accessibility and mobility options available to people and for freight
Petersburg Area Transit, the local fixed-route operator, provides accessible coaches for its patrons along with a complementary paratransit service for qualified persons residing within the transit service area. Although several demonstration routes are currently in service, the existing PAT service area does not cover the entire Tri-Cities. The distribution of transit service benefits in the Tri-Cities is factor is addressed under the environmental justice assessment in Section 6 - Tri-Cities Area Transportation Plans and Programs.

In addition, a number of private vendors provide wheel-chair accessible transportation services “for hire” in the Tri-Cities Area for persons with mobility limitations.

Factor D – Protect and Enhance the Environment, Promote Energy Conservation, and Improve Quality of Life
The maps contained in Appendix C identify selected environmental characteristics of the transportation study area. Consideration of these characteristics will serve to help protect the environment by identifying any major environmental concerns associated with planned transportation improvement projects early in the plan development process. Planned transportation improvement projects, such as highway or intermodal facilities, may impact natural, cultural and recreational resources. In order to identify and limit these impacts, State sponsored projects costing more than $100,000 are required by the Code of Virginia Section 10.1188 to have an environmental impact report (EIR). Federally sponsored projects are required by the National Environmental Policy Act (NEPA) and Code of Virginia Section 10.1183(9) to have either an environmental assessment (EA) or an environmental impact statement (EIS). State and federal regulations require the preparation of these environmental documents to show how proposed projects are likely to impact environmental resources.

In Virginia, the EIR must identify project impact on wildlife habitat; adverse effects that cannot be
avoided with project implementation; measures to minimize impacts; alternatives to the proposed construction and any irreversible environmental changes that would be the result of implementing the proposed project. State required EIR documents must also identify and describe the environmental resources present in the vicinity of the proposed project and evaluate how the planned project may affect environmental characteristics of interest. Examples of environmental characteristics required to be protected include rare plants and animals along with supporting habitats; historic sites, structures and/or landscapes; selected agricultural and forest lands; wetlands, water bodies and waterways; air quality, ground water and mineral resources.

By way of the consultation process outlined in SAFETEA-LU, the Tri-Cities MPO has received information from the Virginia Department of Game and Inland Fisheries that threatened and endangered animals known to exist in the Tri-Cities Area include: federal threatened state threatened bald eagle, state threatened peregrine falcon, state threatened loggerhead shrike, state threatened barking tree frog and state endangered black banded sunfish. Records maintained by this agency also indicate a federal threatened state threatened plant species called sensitive joint-vetch has been identified to exist in the Tri-Cities Area. Improvement projects listed in the Transportation Plan may impact these threatened and endangered animals and threatened plant.

One initiative aimed at protecting environmental characteristics in the Tri-Cities is the Lower Appomattox River Trail, Greenway and Blueway. This 22-mile linear multi-purpose trail and park network begins at City Point in the City of Hopewell and extends westward to Lake Chesdin in Dinwiddie County.

Transportation improvements improve the quality of life for users of the transportation system. Improvements such as facility reconstruction often eliminate traffic hazards and reduce travel time for system users. Improvements that enhance the capacity of existing facilities may create enhanced opportunities for further economic development along travel corridors.

A number of transportation enhancement and energy conservation projects have been implemented in the Tri-Cities Areas. Examples of these projects, including the CMAQ funded Ozone Alert Program and may be found in Section 8 – Related Planning Activities in the Tri-Cities Area of this document.

Pursuant to Section 450.316 of SAFETEA-LU, the Tri-Cities Area MPO has initiated efforts to consult with resource agencies and other organizations regarding compatibility of resource conservation plans/inventories and transportation plans. Comment on the 2026 Transportation Plan, as adopted in March 2004, was requested from 10 resource agencies and several regional economic development and other organizations responsible for other planning activities affected by transportation plans. Appendix D provides a listing of resource agencies contacted in March 2007, a sample letter requesting comments on the 2026 Plan. Each of the comments received were considered and several have been incorporated into the 2031 Plan update. Appendix C provides visual environmental overview of impacts likely to result as transportation improvement projects are implemented. A general discussion on environmental mitigation and a listing of potential mitigation strategies that may be deployed to offset the environmental impacts of planned transportation improvements is provided near the end of Section 8- Related Planning Activities in the Tri-Cities Area.

Factor E – Enhance the Integration and Connectivity of the Transportation System, Across and Between Modes, for People and Freight
The Intermodal Facility Study provides an example of how such a facility would be able to connect
modes for freight shipments by negotiating daily shipping costs on behalf of area shippers. By centralizing individual company freight shipments leaving the intermodal service area, the intermodal facility should be able to obtaining transportation services from truck, rail, air and port transportation providers at a lower cost than individual freight shippers could obtain.

The Southeastern High Speed Rail project and the Richmond to Hampton Roads High-Speed Rail projects provide examples how passenger rail service could be implemented to provide connection between modes for people and freight. Alternatives for corridor alignments and station locations will have impacts on the connectivity of the transportation system.

Also, existing fixed-route transit service provided by Petersburg Area Transit (PAT) offers connections for patrons with passenger rail service at the Ettrick Station located in nearby Chesterfield County.

Section 5 – Intermodal Element provides a discussion of the regional bikeway plan updated in August 2003 by the MPO along with a map reference showing recommended bikeway facilities for the Tri-Cities Area.

Factor F – Promote Efficient System Management and Operation
The monitoring of growth and travel patterns in the study area; the maintenance of a travel forecasting model; the establishment of the Congestion Management System; the application of Intelligent Transportation Systems; and, the implementation of transportation facility improvements all serve to promote system efficiency in the management and operation of the transportation system.

The Virginia Department of Conservation and Recreation recommends in its 2007 Virginia Outdoors Plan the application of a “Green Infrastructure” in Virginia. The concept of green infrastructure may be summarized as an approach to land development involving less loss of open space, agricultural and forest lands than more traditional land development patterns. Examples of ‘green infrastructure” include incorporating watershed management in transportation planning; more effective coordination of land use and transportation planning and enhanced funding for transportation improvements.

Factor G - Emphasize the Preservation of the Existing Transportation System
Facility maintenance of transportation infrastructure is a continuing State and local priority. Project level information on maintenance projects is included in the Tri-Cities Area Transportation Improvement Program.

Management Systems
Applicable federal transportation planning guidelines have required the institution of congestion and intermodal management systems in the Tri-Cities Area. The intent of the management systems are to assemble information on the performance of the transportation system to support future statewide and regional transportation planning existing and future facility improvements.

The Intermodal Surface Transportation Act considered the concept of a management system as "...a systematic process, designed to assist decision makers in selecting cost-effective strategies/actions to improve the efficiency and safety of, and protect the investment in, the nation's transportation infrastructure. A management system includes: 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."
The maintenance of the *Tri-Cities Congestion Management System (Process) Operations Plan* and periodic update of the *Intermodal Management System* for the Richmond MPO and Tri-Cities MPO are part of metropolitan transportation planning in the Richmond Urbanized Area.

**Congestion Management Process**

SAFETEA-LU requires that the metropolitan planning process in Transportation Management Areas (TMAs) include a congestion management process. Furthermore, in TMAs designated as nonattainment/maintenance areas for ozone, Federal funds may not be programmed for a project that significantly increases single occupancy vehicle (SOV) capacity unless the project is part of an approved CMP. The Tri-Cities MPO is currently designated as part of the Richmond TMA with a total urbanized area population over 200,000.

The Federal Highway Administration (FHWA) defines a CMP as

"... a systematic process that provides information on transportation system performance and alternative strategies to alleviate congestion and enhance the mobility of persons and goods. A CMP includes methods to monitor and evaluate performance, identify alternative actions, assess and implement cost-effective actions, and evaluate the effectiveness of implemented action."

Congestion refers to that level at which transportation system performance is no longer acceptable due to traffic interference. The CMP will aid in the identification of locations where congestion occurs and provide alternatives to relieve the congestion.

Listed below are the seven potential components of a CMP, as outlined in the Federal Register.

1. **Area of Application**
   
   The Tri-Cities Area to be covered by the CMP includes the Cities of Colonial Heights, Hopewell and Petersburg and the urbanized portions of the Counties of Chesterfield, Dinwiddie and Prince George.

2. **Transportation System Definition**

   Within the area of application, it is necessary to determine which transportation facilities should be included in the CMP. Proposed projects on these chosen transportation facilities will need to be evaluated using the CMP. Only the facilities of the National Highway System (NHS) are required by FHWA to be evaluated by the CMP. As determined by the Metropolitan Planning Organization, the Tri-Cities Area CMP network will consist of all transportation facilities, within the area of application, identified for inclusion in the proposed NHS. Other projects not occurring on the NHS, such as regionally significant or major projects on non-NHS facilities, may be evaluated on a project-by-project basis. Also, improvements on non-traditional transportation facilities, such as pedestrian and bicycle facilities, will be assumed to relieve congestion in the area.

3. **Performance Measures**

   Performance measures provide a means of evaluating the performance of the transportation system. These measures provide parameters necessary to identify the location and severity of congestion. Performance measures also allow evaluation of the effectiveness of proposed strategies/alternatives.

   In order to determine the level of congestion for a highway segment the Tri-Cities CMP will use a performance measurement of volume/capacity (v/c). This figure will be determined for each segment of highway in the transportation system model. Projected congestion will then be displayed graphically on the transportation system map and numerically in the CMS database. Such a process will allow the MPO to determine present congestion, as well as to
project possible future congestion on the network.

4. **Data Collection and System Monitoring**
   The process of collecting data and monitoring the transportation system should be an ongoing program to determine and monitor the level and severity of congestion that may occur and to evaluate the effectiveness of implemented actions. Existing data sources of the affected localities, the MPO and the Virginia Department of Transportation shall be utilized.

   The major data component of the Tri-Cities CMP is a database containing roadway characteristics, traffic counts, service volumes, etc. for each road segment in the CMP. The information in this database is updated by VDOT on a periodically as more current traffic counts become available. The current available CMP database is taken from the 1999-2000 *Virginia Statewide Highway Plan Roadway Inventory* prepared by VDOT. Traffic data from the roadway inventory was used to prepare the CMP network maps 2 and 3 in *Section 4-Highway Element* of this document. These maps indicate potential current and potential future congestion. The database includes projected traffic counts and service volumes for the road segments of the CMP. Because the projected data for the CMP is normally through means of traffic modeling, it may be necessary to more closely evaluate possible congestion when evaluating transportation alternatives. Some adjustments to the projected future traffic counts may be needed. These local adjustments will present a more accurate picture of traffic flow in the Tri-Cities Area.

5. **Identification and Evaluation of Proposed Strategies**
   This process of the CMP should identify potential strategies that will increase the efficiency of the transportation system. Strategies developed by the CMP may be reviewed for inclusion in the long-range plan. In this urban area, the congestion management strategies will contribute to the elimination of congestion identified by the CMP. Furthermore, the process will evaluate the effectiveness of the proposed strategies based on the performance measures identified for the Tri-Cities in terms of economic, technical and political feasibility.

   The following are some potential strategies for the Tri-Cities area:
   a. **Transportation Demand Management**
      Carpooling, vanpooling, alternate work hours, telecommuting, parking management, congestion pricing, growth management and land use planning, trip reduction ordinances
   b. **Traffic Operational Improvement**
      Intersection and road widening and other improvements to existing facilities, HOV facilities, traffic surveillance and control systems, traffic signal improvements, traffic redirection (see Appendix C for information on existing efforts in traffic operational improvement practices)
   c. **Public Transportation and Non-traditional Modes**
      Exclusive rights-of-way, new and/or expanded transit opportunities, park and rides, intermodal transfer facilities, traffic signal preemption, fare reductions, transit information systems, new and/or expanded bicycle and pedestrian facilities
   d. **Intelligent Transportation System Technology (ITS)**
   e. **Additional System Capacity**
      These are potential strategies for the Tri-Cities MPO. Other strategies may be identified as effective means of relieving congestion and may be evaluated.

6. **Implementation of Strategies**
   Once the strategies chosen as alternatives for relieving congestion have been evaluated,
they will be presented to the MPO. The congestion relief benefits of each as well as a cost analysis will be prepared for each strategy. From these projects, the MPO will choose projects that should be included in the Transportation Improvement Program (TIP). The TIP includes an implementation schedule for all projects and expected sources of funding.

7. Evaluation of the Effectiveness of Implemented Strategies
   A process shall be established to allow for the periodic evaluation of the effectiveness of implemented strategies and performance measures.

Intelligent Transportation Systems
In cooperation with local, regional and State transportation agencies, the development of an Intelligent Transportation Systems (ITS) program began in 1996 with a federally sponsored study that investigated the use of technology within the Richmond/Tri-Cities region. The study recommended the development of a regional 24-hour operations center to manage freeway traffic. This concept was accelerated due to major bridge reconstruction projects on I-95. VDOT’s Smart Traffic Center (STC) began operation in March 2000.

The STC is expected to become the most critical element of the ITS program in Central Virginia. It will serve as a hub for information related to activities that affect traffic on the interstate highways. Electronic signs, radios, video cameras, and detectors will be used to monitor the freeways and alert travelers to abnormal traffic conditions.

ITS elements in the Tri-Cities region will focus initially on the interstate highways. New variable message signs on I-95 southbound and I-85 northbound will be used to alert motorists to incidents and alternate routes. Video cameras will be installed at key locations to verify reports of incidents, expedite cleanup, and monitor resulting backups. The most urgent camera locations include the I-85/I-95 junction, the I-95/I-295 junction, and the I-95 interchanges in Colonial Heights and Petersburg.

Coordinating activities through the STC will create volumes of valuable traffic and accident data. If the data is analyzed and distributed to the public in a timely fashion, travelers could use the information when planning long distance trips and even short commutes. Since the data is so time sensitive, VDOT is looking to privatize the information dissemination function. Also, archiving this data will create great opportunities for future transportation planning and traffic modeling projects.

Normal traffic patterns throughout Central Virginia require VDOT to approach the Richmond and Tri-Cities regions collectively from a traffic management standpoint. In many cases, a major accident in one region forces VDOT to divert traffic in neighboring jurisdictions. Since many local and city streets are not under VDOT control, the appropriated jurisdictions must be contacted immediately so they may institute their pre-planned strategies. Fostering these relationships and helping localities to develop incident plans will be near-term goals for STC personnel. In the long run, these “low-tech” coordination activities may play the largest role in reducing accident related delays in the region.

VDOT and the MPOs in the Tri-Cities and Richmond regions expect to continue efforts to plan the further implementation of ITS strategies. As proven in other U.S. metropolitan areas, the benefits of transportation technologies are maximized when approached from a regional perspective.

Transportation Safety
The Virginia Strategic Highway Safety Plan considers transportation safety as a health issue.
Vehicle crashes in the Commonwealth affect more citizens than any single disease or type of crime. Crashes impact citizens and local communities in terms of medical costs, lost wages, insurance costs police, fire, and other essential services. This plan sets specific targets for the year 2010 to reduce 2005 levels of annual injuries and deaths due to motor vehicles crashes. Driver problems are identified include aggressive drivers, occupant protections, impaired drivers and unlicensed/suspended/revoked drivers. The plan defines an array of implementation strategies to achieve reductions in annual injuries and deaths. Some of the crash reduction strategies have been targeted to specific driver behavior problems are summarized as follows:

**Aggressive Driving**
- Increased number of targeted driver improvement programs;
- Increase public awareness of aggressive driver behaviors;
- Implement a public education and media program aimed at countering aggressive driving behaviors called *Smooth Operator Program*;
- Encourage acceptance by the General Assembly of advanced tools and techniques to support law enforcement efforts;

**Occupant Protection**
- Encourage the General Assembly to pass a primary seat belt law;
- Encourage the General Assembly to pass child passenger safety legislation to meet nationally recommended guidelines;
- Continue public education and enforcement programs such as “Click it or Ticket”;

**Impaired Driving**
- Determine the feasibility and impact of creating a dedicated funding stream (supported through fines and user fees) to support local driving under the influence enforcement programs, public education campaigns and substance abuse prevention and treatment services;
- Reduce excessive drinking of alcohol and underage drinking of alcohol by leveraging the Responsible Servers and Sellers Program (RSVP) and Managers Alcohol Responsibility Training (MART) to develop a policy for sellers of alcohol regarding underage alcohol drinking in their business establishments;

**Unlicensed / Suspended / Revoked Drivers**
- Increase the effectiveness of license suspension/revocation by the following:
  - Linking driving citations to driver record;
  - Increase enforcement around high risk “hit & run” areas;
  - Enhance the competency of drivers through an improved renewal system.

Under topic of transportation safety planning, the document cites a need for accurate and timely traffic records in order for statewide, regional and local transportation planning agencies to more fully integrate safety into plans and programs. Accident related information within corporate limits of the 3 cities is not readily available for consideration in the safety related rating criteria used for candidate Regional Surface Transportation Program (RSTP) projects. Accident related information is readily available for use in rating candidate projects located in the counties. The *Virginia Strategic Highway Safety Plan* explains that transportation safety planning is not a current documented or standard practice in the Commonwealth. Safety concerns are reviewed and addressed by various agencies that may be considered on-going transportation safety
planning activities.

The *Virginia Strategic Highway Safety Plan* establishes a transportation safety charter and formulates a series of measurable objectives to be accomplished by the year 2010. The planned reduction in deaths attributed to transportation crashes is targeted at 275 lives and reduced injuries targeted at 16,000. The Plan acknowledges transportation safety is a shared responsibility requiring a commitment by a number of agencies related to provision of public safety at all levels of government. This document is considered as the safety element of the *Tri-Cities Area 2031 Transportation Plan*.

**Energy Conservation**

The Tri-Cities MPO has adopted an energy contingency plan with the purpose of "identifying feasible transportation-related energy contingency strategies that have been or can be implemented in the Tri-Cities Area during future energy shortages." Included in the plan are recommendations for the implementation of programs, including ridesharing, park and ride programs, public transit and transportation management systems. More extreme recommendations include programs such as gasoline rationing and reduction of off-peak transit services. Some of the less restrictive energy conservation measures have been implemented in conjunction with the Tri-Cities Area Transportation Study.

Energy conservation efforts are benefited by the area's efforts to reduce congestion and improve air quality. The reduction in traffic delays by the implementation of selected CMAQ projects and provisions for a Congestion Management Process (CMP) reflect efforts by the Tri-Cities MPO to attain energy conservation related goals.

**Congestion Mitigation and Air Quality Program**

The SAFETEA-LU continued funding for the Congestion Mitigation and Air Quality (CMAQ) Program. The purpose of the CMAQ program is to provide State and local governments with federal funds for transportation projects that help meet the requirements of the Clean Air Act. CMAQ funding the Tri-Cities Area has been used since FY 1993 to finance an Ozone Alert Program (ridesharing), traffic signalization and traffic flow improvement projects. CMAQ funds are generally restricted to projects located in areas that are classified as nonattainment or maintenance by the U.S. Environmental Protection Agency. Candidate projects are rated based on locally endorsed criteria and selected for funding by the MPO – Policy Committee. Selected projects must meet federal eligibility standards and show a reduction in harmful mobile source air emissions. At the present time, approximately $1.6 million in federal and State CMAQ funds annually to the Tri-Cities MPO for eligible projects in the Richmond Ozone Nonattainment/Maintenance Area.

**Ridesharing**

In the Tri-Cities Area, Ridesharing services are provided by Ridefinders. Ridefinders is a non-profit organization affiliated with the Greater Richmond Transit Company (GRTC) with offices located in downtown Richmond. The goal of Ridefinders is to move more people in fewer vehicles to increase the efficiency of the transportation network. This goal is accomplished with agency assistance in establishing carpools, vanpools, transit services, or telecommuting. Ridefinders has made its services available to assist with Fort Lee expansion activities.

Ridefinders is financed with federal, State and local funds. The Tri-Cities MPO has made allocations to Ridefinders under the Congestion Mitigation and Air Quality (CMAQ) Program to support the Ozone Alert Program. In this program participating major employers in the Tri-Cities Area are
advised by Ridefinders of approaching days that ozone readings are forecasted by the State to be above healthful levels. The employers encourage employees to make special efforts to carpool on ozone alert days.

**Transportation Security**

450.306(a) (3) of SAFETEA-LU contains language indicating the security of the transportation system for motorized and non-motorized users is to be considered as part of the scope of the metropolitan planning process. The concept of transportation system security in the context of a natural or man-made incident is fairly new for the MPO planning process in Tri-Cities. In August of 2001, the Association of Metropolitan Planning Organizations (AMPO) received a technical paper titled “The MPO Role in Management and Operations” by John Mason. Potential roles identified by Mason for MPOs in the area of transportation security include the following:

1. **Traditional:** The MPO incorporates system management and operations (M&O) Role; in its ongoing transportation planning activities The focus would be on specific M&O projects that arise as part of the transportation planning process; but the primary responsibility for operations-type projects would rest elsewhere, most likely with the region’s operations agencies.

2. **Convener:** The MPO would act as a forum where operations plans could be discussed and coordinated with other plans in the region. Regular meetings on operations issues would be held, but the MPO would still not be responsible for developing a regional operations plan.

3. **Champion:** The MPO works aggressively to develop a regional consensus on operations planning. MPO planners work with operating agencies to create programs and projects that improve system performance. The MPO takes the lead in developing regional agreements on coordinated operations.

4. **Developer:** The MPO would develop regional operations plans in addition to incorporating operations strategies into the transportation plan. System-oriented performance measures would be used to identify strategic operations gaps in the transportation system.

5. **Operator:** The MPO would be responsible for implementing operations strategies that were developed as part of the MPO-led planning process.

The Tri-Cities MPO has some prior experience with the Traditional Security Role. In FY 2005 homeland security needs at Fort Lee’s Lee and Sisisky gate entrances received consideration by the MPO. Turn lane and signal modification improvement projects at these locations on Route 36 were selected for Regional Surface Transportation Program (RSTP) funding. It is likely the Tri-Cities MPO will continue in the role of identifying specific projects thru the transportation planning process that enhance security at the entrances to the Fort Lee military installation.

**Transportation Enhancement Program**

The *Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA, enacted the Federal Transportation Enhancement Program. This program is continued under provision of SAFETEA-LU. Opportunities for the enhancement of the nation's transportation system are encouraged with the development of unique and creative projects that will increase the value of a transportation resource,
make it more aesthetically pleasing, and integrate it into its surrounding community. In order to be eligible for enhancement funding, a project must fall into one or more of the following categories:

1. Provision of Facilities for Pedestrians and Bicycles.
2. Provision of Safety and Educational Activities for Pedestrians and Bicyclists
3. Acquisition of Scenic Easements and Scenic or Historic Sites
4. Scenic or Historic Highway Programs
5. Landscaping and Other Scenic Beautification
6. Historic Preservation
7. Rehabilitation and Operation of Historic Transportation Buildings, Structures or Facilities including Historic Railroad Facilities and Canals
8. Preservation of Abandoned Railway Corridors Including the Conversion and Use Thereof for Pedestrian and Bicycle Trails
9. Control and Removal of Outdoor Advertising
10. Archaeological Planning and Research
11. Environmental Mitigation to Address Water Pollution Due to Highway Runoff or Reduce Vehicle-caused Wildlife Mortality While Maintaining Habitat Connectivity
12. Establishment of Transportation Museums
Several of the localities in the Tri-Cities Area have been awarded transportation enhancement funds. Following is a partial list of past enhancement project in the Tri-Cities Area.

<table>
<thead>
<tr>
<th>Project</th>
<th>Locality</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appomattox River Heritage Trail</td>
<td>City of Petersburg</td>
<td>Renovation of historic passenger train station and planning land acquisition and at least partial construction of approximately two miles of pedestrian/bicycle trail along the Appomattox River</td>
</tr>
<tr>
<td>Appomattox River</td>
<td>City of Petersburg</td>
<td>Partial restoration of historic passenger train station; planning, land acquisition and construction of pedestrian/bicycle trail along river.</td>
</tr>
<tr>
<td>(Phase I) Route of Lee's Retreat Consortium</td>
<td>Multi-County</td>
<td>The first phase will consist of development and printing of informational brochures, planning and design of pull-off sites, route signage, land acquisition and utility relocation. The second phase is construction of each pull-off, installation of the solar-powered radio transmission equipment, signage and actual system initiation.</td>
</tr>
<tr>
<td>(Phase II) Driving Tour of Lee's Retreat</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central Virginia Civil War Consortium</td>
<td>51 Historical Sites</td>
<td>The project intends to improve and interpret Civil War sites between Fredericksburg and Petersburg accessible from the north and south. The promotion is to be nationally and internationally marketed.</td>
</tr>
<tr>
<td>Blandford Cemetery Wall Restoration and Crater Road Corridor Plan</td>
<td>City of Petersburg</td>
<td>This project includes rebuilding and restoring the historic cemetery walls that line Crater Road and Rochelle Lane along the western boundary of the cemetery.</td>
</tr>
<tr>
<td>Grove Avenue Enhancement Project</td>
<td>City of Petersburg</td>
<td>Streetscape and public right-of-way enhancements.</td>
</tr>
<tr>
<td>Grove Avenue Enhancement Phase II</td>
<td>City of Petersburg</td>
<td>Streetscape and public right-of-way enhancements</td>
</tr>
<tr>
<td>City Point's Rails &amp; Waterways</td>
<td>City of Hopewell</td>
<td>Project to design pedestrian wayside exhibit system. Will include landscaping, improvements of sites and pedestrian paths and relocation of utilities underground.</td>
</tr>
<tr>
<td>City Point's Rails and Waterways Historywalk</td>
<td>City of Hopewell</td>
<td>Envisioned as a continuous pedestrian trail extending along the streets of the City Point</td>
</tr>
<tr>
<td>White Oak Battlefield Site Interpretation</td>
<td>Dinwiddie County Association for the Preservation of Civil War Sites, Inc.</td>
<td>Establish interpretation and landscape management program, including land and viewscheduled protection measures, site maintenance, visitor safety measures, and trail construction.</td>
</tr>
</tbody>
</table>
Rural Transportation Program
The development of a rural transportation plan for the rural portion of the Crater Planning District has been undertaken by a joint effort of VDOT, CPDC and rural localities in PDC #19. Through coordination with the rural program, the Tri-Cities MPO will be better able to provide safe and efficient connectivity between the Tri-Cities transportation system and the transportation systems of those jurisdictions outside of the metropolitan area. Coordination and cooperation among metropolitan and rural jurisdictions within the Crater Planning District will provide for a successful regional transportation system.

The Crater Planning District provides staff support to the Rural Transportation Technical Assistance Committee which includes locally designated staff contact persons from Dinwiddie, Greensville, Prince George, Surry, Sussex, Emporia and staff from the Virginia Department of Transportation, Virginia Department of Rail and Public Transportation and the Federal Highway Administration. This group will coordinate the rural transportation planning process and plans with the Tri-Cities Area MPO transportation planning process.

In addition to preparation of a rural transportation plan, this program provides transportation planning technical assistance. Examples of such assistance include the following:

- Coordination with local governments, project consultants and VDOT regarding the development of a transportation plan for the City of Emporia.
- Coordination with High Speed Rail Studies in the Southeast High Speed Rail and Route 460 corridors.
- Provision of support for the Route 460 Advisory Committee, in conjunction with the Hampton Roads Planning District Commission.
- Continuation of transportation project specific Geographic Information Systems (GIS) mapping.
- Provision of local transportation planning assistance as requested by local governments;
- Provision of assistance to the Virginia Department of Transportation in the development of a Statewide Plan, as requested.

Tri-Cities 2031 Transportation Plan and Potential Environmental Mitigation
Transportation planning in metropolitan areas is a regional process used to identify transportation issues and needs. This process is a collaborative effort among participating local government and agency representatives. As a transportation plan update is prepared, changes in housing and employment trends, travel patterns and trends are studied and used to identify existing and future transportation problems. The MPO then identifies alternatives to meet current and future projected demands that will provide a safe and efficient transportation system that meets travel needs while minimizing adverse impacts to the environment.

The Tri-Cities Area 2031 Transportation Plan identifies and recommends a series of improvement projects in the metropolitan planning area over the next 23 year period. The inclusion of a recommended improvement in the long-range transportation plan represents a preliminary expression of project support by the MPO membership. The recommendations made during the planning process are preliminary in nature. Detailed environmental analysis conducted through the
National Environmental Policy Act (NEPA) does not apply to long range transportation plan. With the exceptions for regional ambient air quality, offsetting environmental impacts during the long range planning process is not required under applicable State and federal regulations. While detailed environmental analysis is not required, it is important to consult with environmental resource agencies during development of a long-range transportation plan. This interagency consultation provides an opportunity to compare transportation plans with environmental resource plans, develop discussion on potential environmental mitigation activities, areas to provide the mitigation, and activities that may have the greatest potential to restore and maintain the environment.

Detailed project level environmental analysis occurs later in the project development process as the improvement approaches the preliminary engineering stage. At the preliminary engineering stage, project features may be narrowed and refined, and the environmental impacts and environmental mitigation strategies can be appropriately ascertained. Virginia’s State Environmental Review Process directs the project-by-project interagency review, study and identification of environmental concerns. Related requirements that typically apply at this stage involve public hearings, environmental permit-processing, and NEPA studies. Usually, a variety of environmental documentation, permit and mitigation needs are identified and environmental findings are closely considered and evaluated. Common project environmental mitigation measures (required silt-fence barriers, precautions to control dust, etc.) are managed using Road and Bridge Standards that apply to all construction activities. Special environmental concerns may differ widely by project and location. As environmental studies are conducted and undergo public and interagency review, needed mitigation plans are specified and committee to within the environmental documents on the particular transportation project or activity. Environmental management systems then are used to monitor, and ensure compliance with the environmental mitigation commitments.

Potential environmental mitigation activities may include: Avoiding impacts altogether, minimizing a proposed activity/project size or its involvement, rectifying (restoring temporary impacts), precautionary and/or abatement measures to reduce construction impacts, employing special features or operational management measures to reduce impacts, and/or compensating for environmental impacts by providing suitable, replacement or substitute environmental resources of equivalent or greater value, on or off-site. Where on-site mitigation areas are not reasonable or sufficient, relatively large off-site compensatory natural resource mitigation areas generally may be preferable, if available. These may offer greater mitigation potential with respect to planning, buffer protection and providing multiple environmental habitat value (example: wetland, plant and wildlife banks).

Mitigation activities and mitigation areas will be consistent with legal and regulatory requirements relating to the human and natural environments. These may pertain to neighborhoods and communities, homes and businesses, cultural resources, parks and recreation areas, wetland and other water sources, forested and other natural areas, agricultural areas, endangered and threatened species, and the ambient air. The following table illustrates some potential mitigation activities and potential mitigation areas for these resources:
## Tri-Cities 2031 Transportation Plan and Potential Mitigation Strategies

<table>
<thead>
<tr>
<th>Resource</th>
<th>Key Applicable Requirements</th>
<th>Potential mitigation activities for project implementation</th>
<th>Potential mitigation areas for project implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neighborhoods and communities, and homes and businesses</td>
<td>Uniform Relocation Assistance and Real Property Acquisition Policy Act at 42 USC 4601 et seq.</td>
<td>Impact avoidance or minimization; context sensitive solutions for communities (appropriate functional and/or esthetic design features).</td>
<td>Mitigation on-site or in the general community. (Mitigation for homes and businesses is in accord with 49 CFR 24)</td>
</tr>
<tr>
<td>Cultural resources</td>
<td>National Historic Preservation Act at 16 USC 470</td>
<td>Avoidance, minimization; landscaping for historic properties; preservation in place or excavation for archaeological sites; Memoranda of Agreement with the Department of Historic Resources; design exceptions and variances; environmental compliance monitoring</td>
<td>On-site landscaping of historic properties, on-site mitigation of archeological sites; preservation in-place</td>
</tr>
<tr>
<td>Parks and recreation areas</td>
<td>Section 4(f) of the U.S. Department of Transportation Act at 49 USC 303</td>
<td>Avoidance, minimization, mitigation; design exceptions and variances; environmental compliance monitoring</td>
<td>On site screening or on-site replacement of facilities; in some cases, replacement of affected property adjacent to existing</td>
</tr>
<tr>
<td>Wetlands and water resources</td>
<td>Clean Water Act at 33 USC 1251-1376; Rivers and Harbors Act at 33 USC 403</td>
<td>Mitigation sequencing requirements involving avoidance, minimization, compensation (could include preservation, creation, restoration, in lieu fees, riparian buffers); design exceptions and variances; environmental compliance monitoring</td>
<td>Based on on-sites/off site and in-kind/out-of-kind sequencing requirements; private or publicly operated mitigation banks used in accordance with permit conditions</td>
</tr>
<tr>
<td>Forested and other natural areas</td>
<td>Agricultural and Forest District Act (Code of VA Sections 15.2-4305; 15.2-439; 15.2-4313); Open Space Land Act (Section 10.1-1700-1705, 1800-1804)</td>
<td>Avoidance, minimization; Replacement property for open space easements to be of equal fair market value and of equivalent usefulness; design exceptions and variances; environmental compliance monitoring</td>
<td>Landscaping within existing rights of way; replacement property for open space easements to be contiguous with easements replacement of forestry operation within existing agriculture/forestral district</td>
</tr>
<tr>
<td>Agricultural areas</td>
<td>Farmland Protection Policy Act of 1981 at 7 USC 4201-4209, Agricultural and Forest District Act (Code of VA</td>
<td>Avoidance, minimization; design exceptions and variances; environmental compliance monitoring</td>
<td>Landscaping within existing rights of way; replacement property for open spaces easements to be contiguous with</td>
</tr>
<tr>
<td>Section</td>
<td>Description</td>
<td>Implementation Details</td>
<td>Compliance</td>
</tr>
<tr>
<td>---------</td>
<td>-------------</td>
<td>------------------------</td>
<td>------------</td>
</tr>
<tr>
<td>Sections 15.2-4305; 15.2-4307 – 4309; 15.2-4313</td>
<td>Easement; replacement of forestry operation within existing agricultural/forestal district</td>
<td>Avoidance, minimization; time of year restrictions; construction sequencing; design exceptions and variances; species research; species fact sheets; Memoranda of Agreements for species management; environmental compliance monitoring</td>
<td>Relocation of species to suitable habitat adjacent to project limits</td>
</tr>
<tr>
<td><strong>Endangered and threatened species</strong></td>
<td>Endangered Species Act at 16 USC 1531-1544</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Ambient air quality</strong></td>
<td>Clean Air Act at 42 USC 7401-7671, and Conformity regulations at 40 CFR 93</td>
<td>Transportation control measures, transportation emission reduction measures</td>
<td>Within air quality nonattainment and maintenance areas</td>
</tr>
</tbody>
</table>
Section 9 – Appendices
Appendix A

TRI-CITIES AREA
METROPOLITAN PLANNING ORGANIZATION (MPO)
PARTICIPATION PLAN
(January 2007)

The intent of the Tri-Cities Area MPO Participation Plan is to offer reasonable opportunities for
the public to be informed and involved in the development of transportation plans and programs
in the metropolitan area. The public and interested parties, including affected agencies and
certain expressly identified population groups, are encouraged to help identify highway, transit,
pedestrian, bikeway and other transportation needs and comment on proposed improvements in
the metropolitan planning area. In the Tri-Cities, the metropolitan transportation planning area
refers to the cities of Petersburg, Colonial Heights and Hopewell and the adjoining portions of
nearby counties of Prince George, Dinwiddie and Chesterfield anticipated to be developed over
the next 20-year period.

Components or objectives of the existing public involvement process followed by the Tri-Cities
MPO have been revised to incorporate elements required of a Participation Plan process by CFR
23, Part 450.316 pursuant to Safe, Accountable, Flexible, Efficient Transportation Equity Act: a
Legacy for Users SAFETEA-LU),(Public Law 109-59, August 10, 2005). Sections A thru C of
the Participation Plan describe the process for the Participation Plan. Section D addresses the
agency consultation elements required by CFR 23, Part 450.316 for the development of the
metropolitan transportation plans and programs.

Section A: Participation Plan Elements

1. In order to allow for adequate time for public review and comment of the draft
   participation plan, public notification will be provided 45 days in advance of
   consideration of action on this document by the Policy Committee of the Tri-Cities MPO.
   Public notification will be provided 30 days in advance of consideration of action by the
   Policy Committee of the Tri-Cities MPO on proposed long range transportation plan
   updates, transportation improvement programs and amendments to these planning
   documents.

2. Meeting notices will be provided electronically to local news media, including local
   public television, one week in advance of each regular Policy Committee and Technical
   Committee meeting. Reasonable access to available information about MPO sponsored
   transportation studies in the metropolitan area will be provided.

3. Meeting notices will be provided electronically to interested and available parties in the
   Tri-Cities Area, including 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, agencies or entities responsible for safety/security operations, providers of non-emergency transportation services receiving financial assistance from a source other than title 49, U.S.C, Chapter 53, and other interested parties with reasonable opportunities to be involved in the metropolitan transportation planning process.

4. Available resources will be used by the MPO to visually convey information related to metropolitan transportation plans and programs.

5. Public information related to transportation plans and programs and meeting notices of the Tri-Cities MPO will be provided electronically on World Wide Web, including draft and final versions of the Participation Plan.

6. Public meetings sponsored by the Tri-Cities MPO will be held at convenient and accessible locations and times. A citizen information period will be provided during each regular MPO meeting. Citizens may use this opportunity to express views on metropolitan transportation plans and programs directly to the MPO membership.

7. Public input received during the development of the metropolitan transportation plan and the transportation improvement program will be given consideration by the MPO. Significant public comments received will be reported by staff to the Policy Committee and the Technical Committee.

8. Outreach efforts seeking input on metropolitan transportation plans and programs from low income and minority households traditionally underserved by existing transportation systems will be continued and documented.

9. Public notices advising citizens in the metropolitan area of the availability of draft transportation plans, transportation improvement programs and conformity reports in local public libraries will be continued. Additional opportunity for public comment will be provided if the final metropolitan transportation plan or transportation improvement program or conformity analysis differs significantly from the version initially made available for public review.

10. The implementation of the Tri-Cities Area Participation Plan will be coordinated with the statewide transportation planning public involvement and consultation processes developed, as appropriate, with agencies and officials responsible for other planning activities within the metropolitan area that are affected by transportation.

11. The overall effectiveness of procedures and strategies contained in the Participation Plan to ensure a full and open participation process will be reviewed periodically by the Tri-Cities MPO.
Section B: Disposition of Significant Comments

1. When significant comments are received on the draft metropolitan transportation plan or the transportation improvement program as a result of the Participation Plan or the Interagency Consultation Process required under the Environmental Protection Agency (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 transportation improvement program.

Section C: Agency Consultation on Other Planning Activities

1. As the transportation plan and the transportation improvement program are developed, the MPO shall consult, as appropriate, with agencies and officials responsible for other planning activities in the metropolitan area affected by transportation in order to coordinate planning functions to the maximum extent practicable.

2. The nature of the consultation shall include comparison of metropolitan plans and transportation improvement programs, as they are developed, with the plans maps, inventories, and planning documents developed by other agencies.

3. Public and private agencies responsible for planned growth, economic development, environmental protection, airport operations, freight movements, land use management, natural resources, conservation, and historic preservation in the Tri-Cities shall be included in the agency consultation process, as appropriate.

4. Metropolitan transportation plans and transportation improvement programs shall be developed with consideration for governmental agencies and non-profit organizations receiving Federal assistance from a source other than the U.S. Department of Transportation for the design and delivery of non-emergency transportation services.

5. The MPO will consider the future development of an operations plan for consulting with other governmental agencies responsible for the development of plans affected by transportation in the metropolitan area.
Appendix B: 2000 Census Tract Profile of the Transportation Study Area by Minority and Poverty Concentration
Colonial Heights & Hopewell Transportation Projects 2031
Employment Concentrations

Source: US Census Bureau, Census Transportation Planning Package 2009
Employment figures omit self-employed in own not incorporated business and unpaid family workers

2031 Transportation Plan, June 2008
Appendix C: Environmental Overview of the 2031 Transportation Plan and a Listing of Environmental Resource Agencies
Appendix D:
Tri-Cities Area MPO
SAFETEA-LU Resource Agency Contact List (February 2007)

U.S. Fish and Wildlife Service
Ms. Karen Mayne, Supervisor
Virginia Field Office
6669 Short Lane
Gloucester, VA 23061
Office: 804-693-9032
Fax: 804-693-9032
karen_mayne@fws.gov

U.S. Geological Survey
Ms. Suzette Kimball, Director
Eastern Regional Director
11649 Leetown Road
Kearneysville, WV 25430
Office: 304-724-4521
Fax: 
Email:

U.S. Department of Agriculture
M. Denise Doetzer, State Conservationist
Natural Resources Conservation Service
1606 Santa Rosa Road, Suite 209
Richmond, VA 23229-5014
Office: 804-287-1691
Fax: 804-287-1737
Email: denise.doetzer@va.usda.gov

U.S. Army Corps of Engineers
Elmer Merryman, P.E.
Central Virginia Area Office
930 20th Street
Fort Lee, VA 23801-1602
Office: 804-734-4041
Fax: 804-861-8487
Email:

Virginia Department of Environmental Quality
Gerard Seeley Jr., Director
Piedmont Regional Office
4949-A Cox Road
Glen Allen, VA 23060
Office: 804-527-5020
Fax: 804-527-5106
gseeley@deq.virginia.gov
Virginia Department of Environmental Quality
Jim Sydnor, Air Quality Division Director
629 East Main Street
Richmond, VA 23219
Office: 804-698-4424
Fax:
jesydnor@deq.virginia.gov

Virginia Department of Conservation and Recreation
Joseph H. Maroon, Director
101 North 14th Street, 17th Floor
Richmond, VA 23219
Office: 804-225-3440
Fax: 804-225-3447
Email:

U.S. EPA Region 3
Judith M. Katz, Director
1650 Arch Street (3APOO)
Philadelphia, PA 19103-2029
Office: 215-814-2100
Fax:
Email:

Virginia Department of Forestry
Carl Garrison, III, State Forester
Fontaine Research Park
900 Natural Resources Drive
Suite 800
Charlottesville, VA 22903
Office: 434-977-6555
Fax: 434-296-2369
Email:

Virginia Department of Game and Inland Fisheries
J. Carlton Courter, III, Director
4010 West Broad Street
Richmond, VA 23230
Office: 804-367-1000
Fax: 804-367-9147
Email:
## Appendix E:

### Fort Lee Expansion Traffic Study:

**Status of Recommended Transportation Improvement Projects (03/07/08)**

<table>
<thead>
<tr>
<th>Location</th>
<th>Description</th>
<th>RSTP or CMAQ</th>
<th>State Six Year Program</th>
<th>DAR</th>
<th>Total Cost</th>
<th>Notes on Project Funding Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shop Rd. Gate &amp; Jefferson Park Road UPC 85970</td>
<td>Signal Installation</td>
<td>X</td>
<td></td>
<td></td>
<td>230,000</td>
<td>230,000 in RSTP Plus 100,000 by Fort Lee for improvements to Shop Gate Rd. storage lane Completed</td>
</tr>
<tr>
<td>Hickory Hill Improvements (Route 109) UPC 84728</td>
<td>Additional lane into Fort Lee &amp; intersection improvements at Route 460</td>
<td>X</td>
<td></td>
<td></td>
<td>3,250,000</td>
<td>750,000 from VMSRF and 2,500,000 in RSTP PE Underway RW 2009 CN 2010</td>
</tr>
</tbody>
</table>

**Subtotal** 3,480,000

### Intermediate Roadway & Intersection Improvements

<table>
<thead>
<tr>
<th>Location</th>
<th>Description</th>
<th>RSTP or CMAQ</th>
<th>State Six Year Program</th>
<th>DAR</th>
<th>Total Cost</th>
<th>Notes on Project Funding Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temple Ave. &amp; Oaklawn Blvd. (Rts. 144 &amp; 36) UPC T4870</td>
<td>Construct Split Intersection</td>
<td>X</td>
<td></td>
<td></td>
<td>3,500,000</td>
<td>2,000,000 in RSTP &amp; 1,500,000 in VMSRF Funding Approved No Schedule</td>
</tr>
<tr>
<td>Oaklawn Blvd. (Rt. 36) UPC T5033</td>
<td>Add EB traffic lane between Sisisky Blvd. &amp; Jefferson Park Rd.</td>
<td>X</td>
<td></td>
<td></td>
<td>1,900,000</td>
<td>State Funds Available, No Schedule</td>
</tr>
<tr>
<td>Oaklawn Blvd. &amp; Jefferson Park UPC 19003</td>
<td>Add turn lane at intersection &amp; modify traffic signal</td>
<td>X</td>
<td></td>
<td></td>
<td>360,000</td>
<td>Project scope being refined and will likely be funded by MPO w/CMAQ</td>
</tr>
<tr>
<td>Temple Ave. &amp; Puddledock Rd.</td>
<td>Construct turn lanes &amp; modify signal</td>
<td></td>
<td></td>
<td></td>
<td>1,210,000</td>
<td></td>
</tr>
<tr>
<td>Oaklawn/Hill/Lee</td>
<td>Modify Signal</td>
<td></td>
<td></td>
<td></td>
<td>10,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>----------</td>
<td>----------</td>
<td>----------</td>
<td>----------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oaklawn Blvd. &amp; River Rd.</td>
<td>Construct Turn Lane &amp; Install Signal</td>
<td>440,000</td>
<td>Fort Lee Mil. Con. project as River Rd. is closed to the general public</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>County Dr. &amp; Courthouse Rd. (Rts. 460 &amp; 106)</td>
<td>Modify Signal</td>
<td>10,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jefferson Park Rd./Allin Rd./Adams Ave./Bull Hill Rd.</td>
<td>Construct Roundabout</td>
<td>X</td>
<td>4,540,000 VDOT revised cost estimate 11-14-07 Fort Lee Application for DAR Funding Pending</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jefferson Park Rd. &amp; Middle Rd.</td>
<td>Add NB thru lane and install signal</td>
<td>510,000*</td>
<td>750,000 federal appropriation from FY 2008 Omnibus bill*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Courthouse Rd. &amp; Bull Hill Rd.</td>
<td>Realign roadway to create split intersection, new signals, add turn lanes</td>
<td>2,760,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td></td>
<td><strong>15,240,000</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Washington St. &amp; Puddledock Rd.</td>
<td>Modify signal</td>
<td>10,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Courthouse Rd. &amp; Bull Hill Rd.</td>
<td>Modify Signal</td>
<td>10,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>County Dr. &amp; Baxter Rd.</td>
<td>Install Signal</td>
<td>270,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Courthouse Rd. &amp; Baxter Rd.</td>
<td>Install Signal</td>
<td>270,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jefferson Park Road</td>
<td>Widen Jefferson Park Rd. – 1 lane for turn lanes</td>
<td>1,900,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Middle Road</td>
<td>Widen Middle Rd. – 1 lane for turn lanes</td>
<td>1,550,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td></td>
<td><strong>4,010,000</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>22,730,000</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix E: Plan Adoption Resolution and Certification Statement

RESOLUTION OF THE TRI-CITIES AREA METROPOLITAN PLANNING ORGANIZATION ENDORSING THE 2031 TRANSPORATION PLAN AND TRANSPORATION CONFORMITY ANALYSIS

WHEREAS, the U.S. Department of Transportation provides financial assistance to public agencies for transportation technical studies; and

WHEREAS, the U.S. Department of Transportation requires approval of regional transportation plans and programs by the Metropolitan Planning Organization (MPO) in accordance with 23 U.S. C. Part 450; and

WHEREAS, the Tri-Cities Area Transportation Policy Committee is the duly designated Metropolitan Planning Organization for the Tri-Cities Area; and

WHEREAS, the Tri-Cities Area Metropolitan Planning Organization, pursuant to its adopted participation process, has considered public comments received on the 2031 Transportation Plan and the Transportation Conformity Analysis of the 2031 Transportation Plan; and

NOW, THEREFORE BE IT RESOLVED, the Policy Committee of the Tri-Cities Area Metropolitan Planning Organization hereby endorses the 2031 Transportation Plan and the Transportation Conformity Analysis of the 2031 Transportation Plan.

______________________________
Chair, Tri-Cities Area Metropolitan Planning Organization

Date: _________________________
METROPLANT TRANSPORTATION PLANNING PROCESS AND SELF-CERTIFICATION

The Virginia Department of Transportation and the Tri-Cities Metropolitan Planning Organization hereby certify that the transportation planning process for the southern portion of the Richmond, Virginia Urbanized Area is addressing the major issues in the metropolitan planning area and is being conducted in accordance with applicable requirements of:

I. 49 U.S.C. Section 5323(k) and 23 U.S. C. 134;

II. Title VI of the Civil Rights Act of 1964 and the Title VI Assurance executed by State under 23 U.S. C. 324 and 29 U.S. C 794;

III. Section 1101 of the Transportation Equity Act for the 21st Century (Pub. L. 105-178) regarding the involvement of disadvantaged business enterprises in the FHWA and the FTA funded project (Sec. 105 (f), Pub. L. 97-424, 96 Stat. 2100, 49 CFR Part 23);


V. The provision of 49 CFR part 20 regarding restrictions on influencing certain activities; and

VI. Sections 174 and 176(c) and (d) of the Clean Air Act as amended (42 U.S. C. 7504, 7506 (c) and (d)).


Tri-Cities Metropolitan Planning Organization

Virginia Department of Transportation

Signature

Signature

Title

Title

Date

Date