October 2015

Executive Summary
Danville-Pittsylvania Long Range Transportation Plan
Year 2040 Update

Prepared for:
West Piedmont
Planning District Commission
(Danville MPO)
Martinsville, Virginia
Danville-Pittsylvania Area Long Range Transportation Plan

Danville-Pittsylvania Metropolitan Planning Organization
West Piedmont Planning District Commission

Danville-Pittsylvania Area Long-Range Transportation Plan
Year 2040

EXECUTIVE SUMMARY

October 2015

Developed by
Danville-Pittsylvania Metropolitan Planning Organization

In cooperation with
The Virginia Department of Transportation
The Virginia Department of Rail and Public Transportation
The Federal Highway Administration
The Federal Transit Administration

The contents of this report reflect the view of the author(s) who are responsible for the facts and accuracy of the data presented herein. The contents do not necessarily reflect the views or policies of the Federal Highway Administration and/or the Commonwealth of Virginia Transportation Board. This report does not constitute a standard, specification or regulation. FHWA acceptance of this report as evidence of fulfillment of the objectives of this planning study does not constitute endorsement/approval of the need for any recommended improvements nor does it constitute approval of their location and design or a commitment to fund any such improvements. Additional project level environmental studies of alternatives may be necessary.
The Danville-Pittsylvania Area Long-Range Transportation Plan: Year 2040 was developed by the Danville Metropolitan Planning Organization (MPO) and the West Piedmont Planning District Commission to provide the City of Danville and the surrounding urbanized areas of Pittsylvania County with a comprehensive set of transportation improvements that will meet both current travel demands and projected travel demands to the year 2040. These improvements encompass all modes of travel, including roadway, transit, rail, air, bicycle, and pedestrian, and were developed through a study process that included:

- Public input garnered through articles, mailings and public meetings;
- Updates to the regional travel demand model;
- Use of standard traffic engineering analysis techniques to determine existing and future roadway capacity and safety deficiencies;
- Analysis of all modes of travel and coordination with transit and intercity bus providers, airport and rail authorities, social service providers, and others involved in regional transportation;
- Development of transportation improvement recommendations to serve the transportation needs of the Danville region and address each of the eight planning factors mandated in federal transportation laws and regulations (specifically the requirements of the federal transportation act: Moving Ahead for Progress in the 21st Century (MAP-21);
- Review of these recommendations with government agencies and the general public; and
- Assess social and environmental impacts of the transportation recommendations.

The transportation improvements in this document are recommended to be constructed by the year 2040. As indicated above, improvements were considered for all modes of travel in the region. In addition, the proposed improvements meet federal planning requirements for fiscal constraint. The fiscal constraint requirements state that the proposed transportation projects could be constructed based on reasonable estimates of federal, state, and local transportation funding streams to the year 2040. Projects that meet these requirements for fiscal constraint are included in the final Financially Constrained Long-Range Transportation Plan. Where funds for proposed improvements have not been identified, projects have been included in the Transportation Vision Plan.

RECOMMENDED IMPROVEMENTS

Recommendations for improvements to the Danville-Pittsylvania area transportation system were developed based on analysis of transportation operations and safety, land use patterns, economic development needs, and modal opportunities. In addition, input was provided by representatives of local governing bodies and the Virginia Department of Transportation (VDOT). The recommended improvements address all modes of transportation and have been evaluated and prioritized to meet fiscal constraints.

1. Roadway Improvements

The roadway improvements included in the Danville-Pittsylvania Area Long-Range Transportation Plan: Year 2040 include projects currently programmed for funding in the Virginia Transportation Six-Year Improvement Program: Fiscal Years 2016-2021. These projects are also included in the Danville Metropolitan Planning Organization's
Transportation Improvement Program (TIP). Other roadway improvements that are not funded either in the Six-Year Improvement Program or in the TIP are also recommended - all recommended improvements in the 2040 Financially Constrained Transportation Plan; however, are potentially funded based on expected funding streams within the timeframe of the Plan to the year 2040.

The proposed financially constrained roadway improvements are shown in tabular form in Exhibit 1, in map form in Exhibit 2 and the improved typical roadway sections are depicted in Exhibit 3. Due to constrained financial resources, PE only funding (in italics) is also indicated in Exhibit 1 in the Fund Allocation in LRTP column for certain projects.

Beyond funding individual projects, funding is also provided for categorical improvements (see four items at bottom of Exhibit 1). These funds are intended to address specific needs and deficiencies while providing flexibility through annual programming of available funds. This Transportation Plan recommends that the allocation of Safety/ITS Operational Improvements be focused on the following areas:

A. Corridors and intersections identified as High Frequency Crash Corridors;
B. Implementation of the recommendations developed in the West Main - Memorial Drive and US Route 58 West Access Management Studies; and,
C. Implementation of the recommendations developed in the US Route 29 Access Management Plan - Blairs.

Improvements to the roadway network were developed based on consideration of overall regional travel demand patterns, land use patterns, socio-economic and environmental constraints. Initial recommendations were screened through a series of meetings with Danville and Pittsylvania County staff, as well as VDOT. Initial recommendations were also presented at public meetings for review and comment prior to developing a final draft of recommendations. Comments on the final draft of the Transportation Plan were also solicited at both an informal citizens meeting and at a formal public hearing.

2. Public Transportation & Airport Improvements

Transit service in the Danville area is provided by the City-operated Danville Transit System. The service consists of a fixed-route transit system, a demand responsive paratransit service, and a dial-a-ride operation that is available to the general public.

Danville Transit provides fixed route service (11 fixed routes), Reserve-A-Ride service, and paratransit (Handivan) service. Transit service operates six days a week (Monday-Saturday). Each type of service is described below.

Transit Services

- Fixed route service is provided by Danville Transit Mondays through Saturdays, from approximately 6:00 AM to 6:00 PM.
- Reserve-a-Ride service, providing transportation service to Danville residents during hours when fixed route service is not available and also providing service to locations not served by fixed route service is available Monday through Friday from 4:00 AM to 12:30 AM, and Saturday between 4:00 and 6:00 AM and between 5:00 PM and 12:30 AM.
## Exhibit 1
### Table of Recommended Roadway Improvements
#### Year 2040 Financially Constrained Plan

<table>
<thead>
<tr>
<th>2040 Map ID</th>
<th>Project Description (From/To)</th>
<th>Locality</th>
<th>Description</th>
<th>Proposed Typical Section</th>
<th>Estimated Cost at Year of Expenditure</th>
<th>Estimated Cost - Prior Allocation(s)</th>
<th>Year of Expenditure</th>
<th>Previous Allocation (Prior to 2016)</th>
<th>Fund Allocation in LRTP (2016-2040)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Route 58 Business &amp; Berry Hill Road (US 311) Intersection Improvements</td>
<td>Pittsylvania County</td>
<td>Add eastbound and northbound turn lanes. Modify signal</td>
<td>R4D</td>
<td>$3,290,000</td>
<td>$3,290,000</td>
<td>2018</td>
<td>$0</td>
<td>$3,290,000</td>
</tr>
<tr>
<td>2</td>
<td>Kentuck Road (VA Rte 729) Improvements</td>
<td>Pittsylvania County/City of Danville</td>
<td>Improvements at 3 locations</td>
<td>R2</td>
<td>$7,213,000</td>
<td>$7,213,000</td>
<td>2030</td>
<td>$0</td>
<td>$7,213,000</td>
</tr>
<tr>
<td>3</td>
<td>Sandy Creek Bridge Replacement (RI. 730)</td>
<td>Pittsylvania County</td>
<td>Replace Bridge</td>
<td>R2</td>
<td>$2,061,000</td>
<td>$2,061,000</td>
<td>2030</td>
<td>$0</td>
<td>$2,061,000</td>
</tr>
<tr>
<td>4</td>
<td>Mt. Cross Road (Rt. 750) - City Line to Old Mt. Cross (Phase 1 &amp; 2)</td>
<td>City of Danville</td>
<td>Widen to 4 Lanes with two-way center left turn lane</td>
<td>U5D</td>
<td>$17,279,000</td>
<td>$12,563,000</td>
<td>2020</td>
<td>$4,716,000</td>
<td>$12,563,000</td>
</tr>
<tr>
<td>5</td>
<td>Airport Dr. at Stinson Dr.</td>
<td>City of Danville</td>
<td>Geometric improvements.</td>
<td>U2</td>
<td>$840,000</td>
<td>$840,000</td>
<td>2030</td>
<td>$0</td>
<td>$840,000</td>
</tr>
<tr>
<td>6</td>
<td>Moorefield Bridge Road Improvements</td>
<td>Pittsylvania County/City of Danville</td>
<td>Improvements at 3 locations</td>
<td>RD</td>
<td>$4,844,000</td>
<td>$4,844,000</td>
<td>2035</td>
<td>$0</td>
<td>$1,000,000</td>
</tr>
<tr>
<td>7</td>
<td>US 29 (Central Boulevard) at VA 413 (Memorial Drive)</td>
<td>City of Danville</td>
<td>Improve alignment of southbound to westbound ramp</td>
<td>U4D</td>
<td>$1,616,000</td>
<td>$1,616,000</td>
<td>2035</td>
<td>$0</td>
<td>$1,616,000</td>
</tr>
<tr>
<td>8</td>
<td>Piney Forest Road (US 29 Bus.) at North Main Street (VA 293)</td>
<td>City of Danville</td>
<td>Upgrade and signalize intersection, modify circulation patterns (including realignment of Seminole Drive)</td>
<td>U4D</td>
<td>$2,949,000</td>
<td>$2,949,000</td>
<td>2035</td>
<td>$0</td>
<td>$1,000,000</td>
</tr>
<tr>
<td>9</td>
<td>Piney Forest Road and Central Boulevard (US 29 Bus.) – Piney Forest Road to Parker Road</td>
<td>City of Danville</td>
<td>Intersection and circulation improvements includes shift of Piney Forest Road connection to opposite Parker Road</td>
<td>U4D</td>
<td>$10,704,000</td>
<td>$10,704,000</td>
<td>2040</td>
<td>$0</td>
<td>$10,704,000</td>
</tr>
<tr>
<td>10</td>
<td>Berry Hill Road (US 311) from Route 58 Business to Industrial Park</td>
<td>Pittsylvania County</td>
<td>Improve pavement section to 24 feet in width</td>
<td>R2</td>
<td>$20,269,000</td>
<td>$20,269,000</td>
<td>2018</td>
<td>$0</td>
<td>$1,000,000</td>
</tr>
<tr>
<td>N/A</td>
<td>Safety/ITS/Operational Improvements (CN)</td>
<td>N/A</td>
<td>Various improvements</td>
<td>N/A</td>
<td>$4,500,000</td>
<td>$4,500,000</td>
<td></td>
<td></td>
<td>$4,500,000</td>
</tr>
<tr>
<td>N/A</td>
<td>Transportation Enhancements/Byway/Other Non-traditional Transportation Projects (CN)</td>
<td>N/A</td>
<td>Various improvements</td>
<td>N/A</td>
<td>$284,348</td>
<td>$284,348</td>
<td></td>
<td></td>
<td>$284,348</td>
</tr>
<tr>
<td>N/A</td>
<td>Rail Crossing Safety (CN)</td>
<td>N/A</td>
<td>Various improvements</td>
<td>N/A</td>
<td>$40,582</td>
<td>$40,582</td>
<td></td>
<td></td>
<td>$40,582</td>
</tr>
<tr>
<td>N/A</td>
<td>Bridge Rehabilitation/Replacement/Reconstruction (CN)</td>
<td>N/A</td>
<td>Various improvements</td>
<td>N/A</td>
<td>$8,090,896</td>
<td>$8,090,896</td>
<td></td>
<td></td>
<td>$8,090,896</td>
</tr>
<tr>
<td><strong>Total - Improvements</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>$83,980,826</strong></td>
<td><strong>$79,264,826</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total - Maintenance:</strong> Preventative Maintenance and System Preservation, Preventative Maintenance for Bridges, and Traffic and Safety Operation (MPO Wide)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**
(1) Map ID number matches number of map of location of improvements.
(2) Proposed improved roadway cross sections are illustrated in the panel labeled “Typical Roadway Sections.”
(3) Planning-level cost estimates based on average estimates for typical section or project description. Inflation has been included in estimate computation. Unless otherwise noted, cost estimates include preliminary engineering (PE), right of way acquisition and construction. Allocations in italic are for PE and right of way only (See #6, #8 and #10).
(4) Funds programmed in current FY2016-21 Six-Year Improvement Program have been subtracted from project allocation.
(5) Funds to be obligated as projects are identified.
Transit Services (continued)

- Handivan service is provided to pre-qualified riders who are unable to use fixed route service. Service is offered from 6:00 AM to 6:00 PM, Mondays through Saturdays. Advanced reservations are required the day before a trip.

Aviation Services

The Danville Regional Airport, located on Route 58 on the east side of the City, provides local facilities for air travel in the region.

The Danville Regional Airport has been expanding as a general aviation airport. The Instrument Landing Systems (ILS) antenna was repositioned, and the main runway was shortened from 6,500 to 5,900 feet and narrowed by 50 feet to comply with Federal Aviation Administration (FAA) mandates. Drainage work was also done to address the accumulation of rain water on the runway. Additionally, a hump was lowered in the middle of the runway to improve pilot visibility on the runway. As of January 2015, the project was substantially completed, and was paid for by a $10 million grant from the FAA.

3. Other Modes of Travel

Train service is provided at the Amtrak train station, which is located on Craghead Street in downtown Danville. Both passenger and freight rail use rail lines in the Danville area. Two Norfolk Southern Railway rail lines enter the study area in southeastern and southwestern Danville.
Inter-city bus service to the Danville region is provided at the Hub, an intermodal bus facility in downtown that serves both Danville Transit routes and Greyhound.

Pedestrian travel is facilitated through a network of sidewalks that are located primarily in the downtown and other commercial areas of the City. Many local streets are conducive to bicycle travel and there are several off-street bicycle facilities. Pittsylvania County also plans for and provides multi-use trails. The existing Ringgold Depot Trail extends along abandoned railroad right of way from Ringgold Depot east to the Halifax County border. It will be part of the statewide Beaches to Bluegrass trail system.

A number of projects to enhance pedestrian travel and safety, and to improve localized access and circulation, were identified as part of the Transportation Plan study process. The highest priority improvement is the link proposed between the western terminus of the Ringgold Depot Trail in Pittsylvania County and the Riverwalk Trail in Danville. The specific location for this link will be determined by a location study.

**FUNDING CONSIDERATIONS**

Recommendations for improvements to the Danville-Pittsylvania area transportation system were developed based on analysis of existing and projected future deficiencies along with input from representatives of local governing bodies and VDOT. In addition, the recommendations defined in the CEDS and recommendations from previous transportation planning documents developed for the Danville-Pittsylvania area were also considered in the development of improvement recommendations.

Improvements to the roadway network to better accommodate projected year 2040 traffic demands were developed based on consideration of overall regional travel demand patterns, land use patterns, socio-economic and environmental constraints, and economic development opportunities.

Analysis of forecasted conditions using the travel demand model indicated that no systems level transportation needs were identified in the year 2040. Systems level needs are defined as deficiencies in capacity on freeway, arterial and collector roadways where widening or major interchange improvements are forecast to be needed.

Initial improvement recommendations were screened through a series of meetings with Danville and Pittsylvania County staff, as well as VDOT. Initial recommendations were also presented at public meetings for review and comment prior to developing a final draft of recommendations. Comments on the final draft were also solicited at both an informal citizens meeting and at a formal public hearing.

1. **State Funding and Project Prioritization**

   House Bill 2 (HB2) directs VDOT to program funds to projects based on a set of evaluation criteria. House Bill 1887 (HB 1887) reforms the manner in which state funds are allocated for projects. Implementation of both laws includes references to the statewide transportation planning process - VTrans 2040. The relationship between these three processes is shown in Exhibit 4.
VTrans 2040 - A Statewide Plan that considers the Danville-Pittsylvania MPO area through assessment of:

- **Transportation Conditions Summary** - Generally travel around and through the Danville-Pittsylvania MPO area exhibits a high level of travel time reliability (low delays due to congestion).
- **Economic Conditions Summary** - The top industries (in terms of gross domestic product (GDP) are manufacturing and real estate. For the period 2012-2025, the top growth industry is Transportation/Warehousing.
- **Transportation-Economic Linkages** - All major activity centers are served by major roadways on the existing network.
- **Needs Assessment** - includes the following:
  
  A. The US 29 corridor is underserved by transit, park-n-ride and transportation demand management;
  
  B. The Danville Transit System does not serve a few major employment centers;
  
  C. Compared to other parts of Virginia, congestion is not a major issue in the Danville region. However, there are network bottlenecks that create safety and operation concerns due to high traffic volumes and limited network capacity;
  
  D. The Danville region is largely autocentric and is generally underserved by alternative modes of transportation;
  
  E. There is a need to improve freight reliability and network connectivity to alleviate issues with truck access to U.S. Route 29; and,
  
  F. Improve passenger reliability for service to multiple activity centers and employment centers along the U.S. Route 58 corridor.
HB 1887 Funding Programs - Establishes funding classifications for improvement projects. These include:

<table>
<thead>
<tr>
<th>Program</th>
<th>Percent of Available Funds</th>
</tr>
</thead>
<tbody>
<tr>
<td>State of Good Repair (Statewide)</td>
<td>45%</td>
</tr>
<tr>
<td>High Priority Projects Program (Statewide)</td>
<td>27.5%</td>
</tr>
<tr>
<td>Construction District Grant Program</td>
<td>27.5%</td>
</tr>
</tbody>
</table>

For the next six-year program period (Six-Year Transportation Improvement Program: FY 2017-2022), the statewide funding allocations for the District Grant Program are shown in Exhibit 5.

Exhibit 5
Funds Available for FY 2017-2022 SYIP
($ millions)

<table>
<thead>
<tr>
<th>District Grant Programs</th>
<th>HB2 Percentage</th>
<th>Available for HB 2</th>
<th>SGR Percentage</th>
<th>Available for SGR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bristol</td>
<td>7.1%</td>
<td>35.3</td>
<td>11.7%</td>
<td>38.9</td>
</tr>
<tr>
<td>Culpeper</td>
<td>6.2%</td>
<td>31.1</td>
<td>6.0%</td>
<td>19.9</td>
</tr>
<tr>
<td>Fredericksburg</td>
<td>6.9%</td>
<td>34.3</td>
<td>12.1%</td>
<td>40.2</td>
</tr>
<tr>
<td>Hampton Roads</td>
<td>20.2%</td>
<td>100.8</td>
<td>14.8%</td>
<td>49.1</td>
</tr>
<tr>
<td>Lynchburg</td>
<td>7.1%</td>
<td>35.7</td>
<td>7.6%</td>
<td>25.3</td>
</tr>
<tr>
<td>NOVA</td>
<td>20.7%</td>
<td>103.7</td>
<td>10.6%</td>
<td>35.1</td>
</tr>
<tr>
<td>Richmond</td>
<td>14.4%</td>
<td>72.2</td>
<td>17.4%</td>
<td>58.0</td>
</tr>
<tr>
<td>Salem</td>
<td>9.6%</td>
<td>48.1</td>
<td>12.1%</td>
<td>40.2</td>
</tr>
<tr>
<td>Staunton</td>
<td>7.8%</td>
<td>39.0</td>
<td>7.9%</td>
<td>26.1</td>
</tr>
<tr>
<td>High Priority Projects Program (Statewide)</td>
<td>100.0%</td>
<td>$500.1</td>
<td>100.0%</td>
<td>$332.7</td>
</tr>
</tbody>
</table>

Source: VDOT Presentation to Commonwealth Transportation Board, June 16, 2015

HB 2 Project Evaluation Factors
For ranking funding grant applications, VDOT has adopted a set of factors and weights. While there is some variation in the factors and weightings among localities in the state, for the Danville MPO area, the following factors and weights apply:

- Economic Development 35%
- Safety 30%
- Accessibility 15%
- Congestion Mitigation 10%
- Environmental Quality 10%
Considering the HB 2 Factors and relative weights and the amount of funding for Lynchburg District Construction District Grants ($35.7 million for FY 2017-2022 as shown in Exhibit 5), it is evident that projects benefiting economic development and safety will likely be scored higher than others. More costly projects are also less likely to be funded.

**CLRP IMPROVEMENT ALTERNATIVES**

The process of developing improvements for the 2040 Update to the Constrained Long Range Transportation Plan (CLRP) was initiated with the development of two improvement plan alternatives. With each alternative emphasizing a specific theme, these were:

1. **Berry Hill Industrial Park Access:** This alternative was developed to identify the improvements needed by the Year 2040 if the Berry Hill Industrial Park (southwest Pittsylvania County) were to be developed. Key projects in this alternative included:
   - Route 58 Business & Berry Hill Road (VA 311) Intersection Improvements
   - Mount Cross Road (Route 750) widening from Old Mount Cross Road to corporate limits (Phase 1 & 2)
   - Berry Hill Road (Route 311) widening from Route 58 Business to Industrial Park (Preliminary Engineering Only - $1 Million)

2. **Operations & Safety Focus:** This alternative was developed to address corridors and intersections, which based on the analysis of current conditions exhibit congestion and/or high crash frequencies. Key projects in this alternative included:
   - Access management measures on US Route 58 East (South Boston Highway) and West (Riverside Drive) and (Martinsville Highway)\(^1\)
   - Geometric improvements on Piney Forest Road
   - Mount Cross Road (Route 750) widening from Old Mount Cross Road to corporate limits (Phase 1 & 2)

The alternative improvement plans were presented at the Third Citizens Information Meeting on July 23, 2015. They were then discussed with the Project Management Team on August 25, 2015, at which the recommended improvement plan was selected. It was then presented to the MPO Board at a meeting held on September 16, 2015.

**VISION PLAN PROJECTS**

The total estimated costs for the transportation improvement projects that were identified as part of the transportation plan development process exceeded the estimated funding to the year 2040. As a result, the MPO project management team prioritized the proposed projects in order to identify projects proposed for inclusion in the Financially Constrained Transportation Plan shown previously in Exhibit 1. Those projects with a lesser priority that could not be funded based on the expected funding stream are proposed for inclusion in the region’s Transportation Vision Plan, shown in map format in Exhibit 6 and in tabular format in Exhibit 7.

### Exhibit 7
Danville-Pittsylvania Transportation Vision Plan

<table>
<thead>
<tr>
<th>Map ID (1)</th>
<th>Project Description (From/To)</th>
<th>Estimated Cost [2]</th>
<th>Locality</th>
<th>Remarks</th>
<th>Proposed Typical Section [3]</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Piney Forest Road (US 29 Bus.) -- Audubon Drive to Beaver Mill Road</td>
<td>$20,100,000</td>
<td>City of Danville</td>
<td>Intersection and circulation improvements (includes shift of Beaver Mill Road/Wendell Scott intersection; connect Pinewind Drive and Deer Run Road to Beaver Mill Road)</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>VA 41 Extension -- VA 730 (0.4 miles west of VA 729) to VA 360/US 29 Bypass</td>
<td>$27,900,000</td>
<td>Pittsylvania County</td>
<td>Construct roadway on new alignment</td>
<td>U2</td>
</tr>
<tr>
<td>3</td>
<td>S. Boston Rd. (US 58) - Rt. 29 Exp. To City Line</td>
<td>$7,300,000</td>
<td>City of Danville</td>
<td>Safety &amp; Access Management</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>S. Boston Rd. (US 58) - City Line To Ringgold Depot Rd. (Rt. 726)</td>
<td>$5,600,000</td>
<td>Pittsylvania County</td>
<td>Safety &amp; Access Management</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Airport Dr. at Stinson Dr.</td>
<td>$1,500,000</td>
<td>City of Danville</td>
<td>Geometric improvements.</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Moorefield Bridge Road Improvements</td>
<td>$7,900,000</td>
<td>Pittsylvania County/City of Danville</td>
<td>Improvements at 3 locations</td>
<td>R2/U2</td>
</tr>
<tr>
<td>7</td>
<td>Ringgold to Riverwalk Trail Connector</td>
<td>$17,000,000</td>
<td>Pittsylvania County/City of Danville</td>
<td>Multi-purpose multi-modal trail connecting existing trail systems</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Piney Forest Parkway (US 29 Bus.) -- Mt. Cross Rd. to US 29 Bus.</td>
<td>$151,500,000</td>
<td>Pittsylvania County/City of Danville</td>
<td>Construct 4-lane parkway on new alignment</td>
<td>R4D</td>
</tr>
<tr>
<td>9</td>
<td>Piney Forest Road and Central Boulevard (US 29 Bus.) -- Piney Forest Road to Parker Road</td>
<td>$13,000,000</td>
<td>City of Danville</td>
<td>Intersection and circulation improvements (includes shift of Piney Forest Road connection to opposite Parker Road).</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>VA 863 -- US 58 to 0.8 miles south of VA 750</td>
<td>$57,900,000</td>
<td>Pittsylvania County</td>
<td>Construct roadway on new alignment.</td>
<td>R2</td>
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<tr>
<td>11</td>
<td>Oak Ridge Farms Interchange (w/ US 58 Bypass)</td>
<td>$14,600,000</td>
<td>Pittsylvania County</td>
<td>Interchange improvements.</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Berry Hill Connector Road - Oak Ridge Farms Interchange (w/ US 58 Bypass) to Berry Hill Road (US 311)</td>
<td>$34,600,000</td>
<td>Pittsylvania County</td>
<td>Construct 4-lane roadway on new alignment.</td>
<td>R4D</td>
</tr>
<tr>
<td>13</td>
<td>VA 750 (Mount Cross Parkway) - VA 863 to US 29 Business (Piney Forest Road)</td>
<td>$145,600,000</td>
<td>Pittsylvania County/City of Danville</td>
<td>Construct 2-lane parkway on new alignment (in 4-lane ROW)</td>
<td>R2</td>
</tr>
<tr>
<td>14</td>
<td>VA 863 -- VA 41 to US 29</td>
<td>$31,100,000</td>
<td>Pittsylvania County</td>
<td>Improve two-lane facility</td>
<td>R2</td>
</tr>
<tr>
<td>15</td>
<td>VA 360 -- Danville corporate limits to VA 41 Extension</td>
<td>$17,000,000</td>
<td>Pittsylvania County</td>
<td>Widen to four lanes</td>
<td>U4D</td>
</tr>
<tr>
<td>16</td>
<td>VA 730 and 733 -- VA 41 Extension to 0.1 miles south of railroad tracks on VA 733</td>
<td>$27,900,000</td>
<td>Pittsylvania County</td>
<td>Reconstruct to current two-lane standards, includes improvements to intersection at VA 730/VA 733</td>
<td>U2</td>
</tr>
<tr>
<td>17</td>
<td>Reconstruct interchange of 29 Bus. and 58 Bus.</td>
<td>$85,000,000</td>
<td>City of Danville</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Notes:
(1) Map ID number matches number on Transportation Vision Plan Map
(2) Planning-level cost estimates based on average estimates for typical section or project description. Inflation has been included in estimate computation and is based on expenditure in the Year 2040.
(3) Cross section types are illustrated in the panel “Typical Roadway Section.”
### Exhibit 7 (continued)
Danville-Pittsylvania Transportation Vision Plan

<table>
<thead>
<tr>
<th>Map ID (1)</th>
<th>Project Description (From/To</th>
<th>Estimated Cost (2)</th>
<th>Locality</th>
<th>Remarks</th>
<th>Proposed Typical Section (3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>18</td>
<td>US 58 Widening - from 29 Bypass to Rt. 729</td>
<td>$28,900,000</td>
<td>City of Danville</td>
<td>Widen to 6-lanes.</td>
<td>U6D</td>
</tr>
<tr>
<td>19</td>
<td>Riverside Drive (US 58 Bus.) Piedmont Dr. to Westover Dr.</td>
<td>$12,900,000</td>
<td>City of Danville</td>
<td>Safety &amp; Access Management</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>VA 41 -- VA 719 west to VA 863</td>
<td>$45,300,000</td>
<td>Pittsylvania County</td>
<td>Widen from 2 to 5 lanes</td>
<td>U4D</td>
</tr>
<tr>
<td>21</td>
<td>VA 360 -- VA 41 Extension to study area boundary</td>
<td>$55,300,000</td>
<td>Pittsylvania County</td>
<td>Improve two-lane facility</td>
<td>R2</td>
</tr>
<tr>
<td>22</td>
<td>VA 726 -- US 58 to Rt. 655</td>
<td>$12,600,000</td>
<td>City of Danville</td>
<td>Improve 2-lane facility.</td>
<td>R2</td>
</tr>
<tr>
<td>23</td>
<td>VA 729 (Kentuck Road) – US 58 to VA 730</td>
<td>$30,000,000</td>
<td>Pittsylvania County/City of Danville</td>
<td>Widen to four lanes</td>
<td>R4D</td>
</tr>
<tr>
<td>24</td>
<td>VA 750 -- VA 863 to VA 883 (study area boundary)</td>
<td>$18,000,000</td>
<td>Pittsylvania County</td>
<td>Widen to four lanes</td>
<td>R4D</td>
</tr>
<tr>
<td>25</td>
<td>Berry Hill Road (US 311) - Study area boundary (North Carolina line) to US 58</td>
<td>$30,400,000</td>
<td>Pittsylvania County</td>
<td>Improve two-lane facility</td>
<td>R2</td>
</tr>
<tr>
<td>26</td>
<td>Elizabeth Street/Edgewood Drive -- US 29 to US 29 Business</td>
<td>$14,600,000</td>
<td>City of Danville</td>
<td>Improve two-lane facility</td>
<td>U2</td>
</tr>
<tr>
<td>27</td>
<td>VA 863 -- 0.5 miles south of VA 719 to VA 41</td>
<td>$15,100,000</td>
<td>Pittsylvania County</td>
<td>Construct roadway on new alignment</td>
<td>R2</td>
</tr>
<tr>
<td>28</td>
<td>VA 863 -- 0.8 miles south of VA 750 to 0.5 miles south of VA 719</td>
<td>$36,900,000</td>
<td>Pittsylvania County</td>
<td>Improve two-lane facility</td>
<td>R2</td>
</tr>
<tr>
<td>29</td>
<td>VA 728 (Kentuck Church Rd) -- 0.7 mi. north of VA 729 to intersection of VA 360.</td>
<td>$23,600,000</td>
<td>Pittsylvania County</td>
<td>Improve two-lane facility</td>
<td>R2</td>
</tr>
</tbody>
</table>

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1. Map ID number matches number on Transportation Vision Plan Map
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3. Cross section types are illustrated in the panel “Typical Roadway Section.”

### FEDERAL PLANNING FACTORS

To ensure compliance with the Moving Ahead for Progress in the Twenty-First Century Act (MAP-21), the federal legislation governing transportation planning, and with the rules promulgated to implement MAP-21, the 2040 Transportation Plan was developed to address key planning factors. These factors are intended to ensure that transportation plans are developed to consider all transportation modes, the environmental and social impacts of transportation projects, and better plan for the future through such actions as early preservation of transportation rights of way.

**1. Economic Vitality** - Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.

The Plan places emphasis on ensuring multi-modal access to major industrial areas, such as Cane Creek Centre and the Berry Hill Industrial Park. The efficiency of freight movement can be enhanced through highway improvement projects, such as widening certain roadways,
constructing roadway connections to major arterials, and improving access to existing rail and truck facilities.

**Major Projects:**
- Improved access to existing and planned industrial areas along Route 729 east of the Route 29 Bypass will be provided by the proposed improvements to Kentuck Road’s key intersections.
- Access management on Route 58 East (South Boston Highway) and West (Riverside Drive and Martinsville Highway) to ensure the continued function of this roadway as a major regional connector.
- Improved regional access into major activity centers such as the Berry Hill Industrial Park and Cane Creek.
- Widening Mount Cross Road.

**Other Actions and Policies:**
- Improve transportation flow and efficiency by concentrating on the movement of people and goods to support mobility and the economic viability of Danville and Pittsylvania County.
- Promote air and rail freight service in the Danville-Pittsylvania area.
- Ensure that any proposed improvements to the Danville Expressway are consistent with its proposed inclusion into the federal interstate system of highways as Interstate 785. Such improvements should meet design guidelines for interstate freeways.

2. Increase Safety - *Increase the safety of the transportation system for motorized and non-motorized users:*

The Plan allocates substantial funding for corridor and intersection safety improvements along Piney Forest Road, Moorefield Bridge Road and along Central Boulevard (US 29 Business) and promotes policies for ensuring transit access to employment and retail centers.

**Major Projects:**
- Ramp alignment improvements at the Central Boulevard (US 29) interchange with Memorial Drive
- Intersection improvements at Piney Forest Road and North Main Street
- Intersection improvements at Piney Forest Road from Central Boulevard to Parker Road
- Kentuck Road and Moorefield Bridge Road geometric and safety improvements

**Other Actions and Policies:**
- Construction of lighted bus shelters at major stops.
- Improved transit transfer hubs in downtown and elsewhere.
3. Increase Security - Increase the security of the transportation system for motorized and non-motorized users:

The Plan provides redundancy for travel routes, minimizing bottlenecks for which no alternative routes are available.

**Major Projects:**
- Ramp alignment improvements at the Central Boulevard (US 29) interchange with Memorial Drive
- Implementation of Access Management Study’s recommendations

**Other Actions and Policies:**
- Improve high frequency crash corridors

4. Increase Accessibility and Mobility - Increase accessibility and mobility of people and freight:

The Plan focuses on addressing existing safety and capacity deficiencies, and provides for more direct routes to employment centers. It also identifies transit service enhancements and improvements.

**Major Projects:**
- Improved access to the planned Berry Hill Industrial Park economic development area.
- Access management on Route 58 East and West to ensure the continued function of this roadway as a major regional connector.
- Enhanced regional access (including proposed improvements on Piney Forest Road and Mount Cross Road) into major retail commercial activity centers in the Piedmont Drive corridor vicinity.

**Other Actions and Policies:**
- Improve transportation flow and efficiency by concentrating on the movement of people and goods to support mobility and the economic viability of Danville and Pittsylvania County.
- Support access by bicyclists and pedestrians to and between major recreation areas and other activity centers.
- The Transportation Plan supports improved access via automobile and transit to the planned major employment centers near the Danville Airport and the industrial areas north of Route 58 East and south of Route 58 West.
- Modification of local subdivision and site plan ordinances to provide for transit service stops at major destinations.

5. Environmental Enhancement and Quality of Life - Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns.
The Plan provides a multi-modal approach to address potential service to economic
development opportunities, and is consistent with State plans for roadways, transit and trails.
Finally, major improvements have been located away from environmentally sensitive areas.

**Major Projects:**
- Construction of improvements to Mount Cross Road will reduce congestion entering the retail commercial area along Piedmont Drive, resulting in improved safety, traffic flow, and air quality.
- Implementation of access management recommendations along U.S. Route 58 East and West will result in improved safety, traffic flow, and air quality.

**Other Actions and Policies:**
- Promote high density growth in areas (Downtown, Danville Mall, and Piney Forest) served by transit.
- All projects recommended in this transportation plan were assessed for their environmental, socioeconomic, and energy impacts.
- Improve transportation flow and efficiency by concentrating on the movement of people and goods to support mobility and the economic viability of Danville and Pittsylvania County.
- Encourage consolidation of driveway access points and tighter controls on access.
- Support transit service for transportation-disadvantaged.
- Provide focused transit service to major destinations.
- Identify and support transit-dependent communities.
- Support access by bicyclists and pedestrians to and between major recreation areas and other activity centers.
- Maintain existing focus on transportation maintenance.
- Continually identify and upgrade unsafe intersections and roadways (via semi-annual corridor and intersection studies).
- Promote air and rail freight service in the Danville-Pittsylvania area.
- Promote ridesharing by involving employers and employees in improving transportation.

6. **Enhance Intermodal Connectivity** - Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight.

The Plan provides for enhanced intermodal access by improving capacity, geometry and safety on major inter-city routes and to existing and planned employment centers. It also provides for access improvements at the airport and enhanced transit accessibility to industrial areas.

**Major Projects:**
- Access management on Route 58 East and West,
- Widening of Mount Cross Road
• Access management improvements on US Route 29 - Blairs

**Other Actions and Policies:**

- Improve transportation flow and efficiency by concentrating on the movement of people and goods to support mobility and the economic viability of Danville and Pittsylvania County.
- Ongoing focus on maintaining and improving the geometry and signage on radial roadways into and out of the city.
- Support access by bicyclists and pedestrians to and between major recreation areas and other activity centers

7. **System Management** - Promote efficient system management and operation.

The Plan emphasizes development of transportation system management approaches to addressing deficiencies.

**Major Projects:**

- Geometric improvements at the following locations:
  - Airport Drive and Stinson Drive
  - Central Boulevard and Memorial Drive
  - Piney Forest Road and North Main Street
  - Piney Forest Road (Central Boulevard to Parker Road)
  - Route 729 (Kentuck Road)
  - Route 863 (Moorefield Bridge Road)

**Other Actions and Policies:**

- Reduce spot congestion through ongoing intersection and corridor studies.
- Keep existing focus on transportation maintenance.
- Utilize transportation modeling software as storage basis for traffic data, both existing and historical; make increasing use of geographic information systems.
- Develop and maintain a list of critical intersections and corridors for congestion analysis.
- Support access by bicyclists and pedestrians to and between major recreation areas and other activity centers.
- Incorporate management systems into transportation decision-making process when developing the transportation improvement program (TIP).

8. **Preserve Existing Transportation System** - Emphasize the preservation of the existing transportation system.

Many of the Transportation Plan recommendations relate to upgrading existing facilities to meet current safety, drainage, pavement, and bridge structure standards. The Plan includes substantial investment in existing facilities, including transit, airport and roadway
improvements. It emphasizes improvements at existing alignments, interchanges and intersections, and it provides for bridge replacements and pavement section upgrades.

**PUBLIC INVOLVEMENT AND PLAN ADOPTION**

The citizen participation program followed the process and procedures of the *Public Involvement Participation Plan and Notification Procedures Manual*. Three informal Citizen Information meetings were held on February 25, 2015, April 16, 2015, and July 23, 2015. The first meeting focused on identifying issues and concerns, the second meeting presented improvement alternatives, and the third meeting presented the recommended alternatives. All meetings were held at the Danville Regional Airport.

Notices of the meetings were published in the local newspaper, and posted on the MPO website. In addition, notice was posted on the City’s public access cable channel. Direct notices were sent to targeted mailing lists of interested individuals and organizations. For example, individuals who had attended previous corridor study meetings received letters notifying them of the meetings. In addition, articles were published in the local newspaper describing the planning process, and detailing the purpose, location, and schedule of the meetings.

In addition, presentations of the recommended plan were provided to the Pittsylvania County Board of Supervisors on October 5, 2015 and to the Danville City Council on October 8, 2015.

A formal public hearing was held on October 21, 2015. Its purpose was to provide the public with the opportunity to comment prior to the adoption by the Metropolitan Planning Organization. Following review and consideration of the comments provided both at the citizen information meetings and at the public hearing, the *Danville-Pittsylvania Area Long-Range Transportation Plan – Year 2040* was adopted by the Danville Metropolitan Planning Organization on October 28, 2015.