Interstate 81 Corridor Improvement Plan

Nick Donohue
Deputy Secretary of Transportation
May 2018
Interstate 81 Overview

I-81 Corridor Significance

- 11.7 million trucks per year
- $312 billion in goods per year
- 42% of statewide interstate truck VMT
- Approximately 11,000 crashes over 5 years
- 30 crashes per year (with clearance times greater than 6 hours)

* Data sources include TRANSEARCH INSIGHT and VDOT data between 2012 and 2016
**Effect of Length of Grade and Trucks on I-81**

**2016 AADT Versus Passenger Car Equivalent (PCE) AADT**

<table>
<thead>
<tr>
<th>Location</th>
<th>2016 AADT</th>
<th>2016 AADT converted to PCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bristol **</td>
<td>41,700</td>
<td>69,700</td>
</tr>
<tr>
<td>Abingdon</td>
<td>46,200</td>
<td>63,700</td>
</tr>
<tr>
<td>Wytheville **</td>
<td>54,400</td>
<td>63,700</td>
</tr>
<tr>
<td>Christiansburg</td>
<td>46,900</td>
<td>76,100</td>
</tr>
<tr>
<td>Salem *</td>
<td>63,400</td>
<td>90,000</td>
</tr>
<tr>
<td>Roanoke</td>
<td>62,700</td>
<td>87,800</td>
</tr>
<tr>
<td>Buchanan *</td>
<td>28,600</td>
<td>62,600</td>
</tr>
<tr>
<td>Raphine</td>
<td>47,400</td>
<td>75,900</td>
</tr>
<tr>
<td>Harrisonburg</td>
<td>57,300</td>
<td>84,700</td>
</tr>
<tr>
<td>Winchester</td>
<td>66,700</td>
<td>80,400</td>
</tr>
</tbody>
</table>

**Source:** VDOT continuous traffic count stations and Statewide Planning System

**Description:** Traffic volume that has been adjusted to account for the effects of the number of trucks and type of terrain

**Definition:** PCE = Passenger Car Equivalent (factor used to convert trucks into passenger cars)

* Portions of section are three lanes in southbound (*) and/or northbound (+).
• Board shall study financing options for the I-81 Corridor

• Study shall evaluate—
  – Tolls on heavy commercial vehicles
  – High-occupancy toll lanes

• Study shall not evaluate tolling options that apply to all users of I-81

• Board may consider other funding and financing options, including regional fuels tax
SB971 – Legislation Requirements

• Board shall develop I-81 Corridor Improvement Plan. The plan shall—
  – Identify segments of I-81 for improvement
  – Identify targeted set of improvements, for each segment that can be financed by evaluated financing options
  – Include corridor-wide incident management strategies
  – Evaluate concepts to minimize impact of truck-only tolls on local truck traffic and diversion of truck traffic
  – Assess economic impacts on corridor for toll financing
Problem identification – review entire I-81 corridor to identify areas for improvement based on severity of identified problems

The following conditions will be evaluated:
• Safety – examining both crash rate and crash frequency
• Congestion – person hours of delay
• Resiliency – incident-related delay and multi-hour lane closures

Board will be updated at July meeting on findings
I-81 Corridor Improvement Plan
Elements #2 and #3

- Recommendations development – a fresh look at potential strategies and projects to address identified problems in the Corridor
  - Operational strategies will be considered first, where appropriate
  - Capital improvements will be targeted

- Tolling and financing analysis – evaluate potential financing and funding options to determine
  - Analysis will examine potential impacts on Virginia agriculture, manufacturing, and logistics sectors

- Board will be updated at its September meeting
Recommended Corridor Improvement Plan

- Identify key corridor-wide operational improvements to be funded
- Prioritize potential improvements using SMART SCALE process
- Evaluate potential packages of strategies and improvements that could be financed with revenues generated
- Identify recommended package and financing option

Board will have briefings at October and Nov/Dec meetings
Public Outreach Plan

- Initial outreach at Spring SYIP meetings

- 3 sets of public meetings along the Corridor in 4 locations
  - Problem identification (present data and solicit solution input)
  - Recommendations development and tolling feasibility/economic analyses
  - Recommendations packages

- Public meetings to be co-hosted by MPOs and PDCs on the corridor
Problem Identification Public Meetings

• Meetings will be from 4-7 PM in each location
  – 4-5 PM- briefing of public officials
  – 5-7 PM- citizen’s information meeting

• Meeting dates and locations:
  – June 6: Bristol - SW VA Higher Education Center
  – June 7: Salem - Salem Civic Center
  – June 12: Staunton (north) - Strasburg High School
  – June 13: Staunton (south) - Blue Ridge Community College
I-81 Corridor Improvement Plan
Next Steps

- Status report to CTB in July
- Host “Recommendations development” public meetings in July-August
- Status report to CTB in September
- Host “Recommended Corridor Plan” public meetings in September/October
- Draft report to CTB in October
- Revised report with recommended package to CTB at November/December