I-81 CORRIDOR IMPROVEMENT PLAN

July 2018 Study Update

Commissioner Stephen C. Brich, P.E.
Senate Bill 971

- Directs the Office of Intermodal Planning and Investment (OIPI) to develop an I-81 Corridor Improvement Plan

- Approved on April 4th 2018

- Final report must be submitted to the General Assembly in early January 2019
As directed by SB 971, the plan will:

- Identify segments of I-81 for improvement
- Develop a set of improvements for each segment
- Evaluate financing options for all improvements
- Include corridor-wide incident management strategies
- Evaluate concepts to minimize impacts on local truck traffic and diversion of truck traffic
- Identify truck parking needs
- Assess economic impacts on corridor from tolling only heavy commercial trucks
- Ensure all revenues collected are used to benefit I-81 corridor
I-81 Corridor Significance

11.7 MILLION TRUCKS PER YEAR

$312 BILLION IN GOODS PER YEAR

42% OF STATEWIDE INTERSTATE TRUCK VMT

≈ 11,000 CRASHES OVER 5 YEARS

APPROX. 30 CRASHES PER YEAR (WITH CLEARANCE TIMES GREATER THAN 6 HOURS)

* Data sources include TRANSSCAN/WEIGHT PAY VMS for 2014 and 2015
Problem Identification

I-81 Elevation Profile

LEGEND:
- 3-LANE SECTION
- 2-LANE SECTION
Problem Identification

Effect of Trucks and Length of Grade

Description: Daily traffic volume 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)
Problem Identification

What Makes I-81 Unique - Delay

16% Incidents

6% Workzone

1% Weather

5% Holiday

72% Recurring

INTERSTATE
All VA Interstates

51% Incidents

15% Workzone

3% Weather

10% Holiday

21% Recurring

INTERSTATE
81

Virginia Department of Transportation
I-81 has the **lowest** proportion of **Recurring Delay** and the **highest** proportion of **Incident Delay** of any interstate in Virginia.

**Problem Identification**

**What Makes I-81 Unique - Delay**

<table>
<thead>
<tr>
<th>Interstate</th>
<th>Percent of Recurring Delay*</th>
<th>Percent of Incident Delay*</th>
</tr>
</thead>
<tbody>
<tr>
<td>I-64</td>
<td>61%</td>
<td>25%</td>
</tr>
<tr>
<td>I-66</td>
<td>87%</td>
<td>7%</td>
</tr>
<tr>
<td>I-77</td>
<td>36%</td>
<td>35%</td>
</tr>
<tr>
<td>I-81</td>
<td>21%</td>
<td>51%</td>
</tr>
<tr>
<td>I-85</td>
<td>29%</td>
<td>23%</td>
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<td>I-95</td>
<td>70%</td>
<td>15%</td>
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<td>I-264</td>
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<td>88%</td>
<td>8%</td>
</tr>
<tr>
<td>I-495</td>
<td>91%</td>
<td>4%</td>
</tr>
</tbody>
</table>

*Incidents defined as lane-impacting crash and disabled vehicle events on the interstate mainline that last > 30 minutes
Operations/Incident Management Improvements

Expanded operations/ incident management component will form basis of all potential recommendations packages

Potential options include:

• Safety Service Patrol
• Dynamic Messaging Signs
• Corridor management to improve parallel routes
• Instant Tow Dispatch
• Towing Response Incentive Program
Other Improvements Considered

• **Spot improvements**
  • Accel/decel lane extensions
  • Auxiliary lanes

• **Additional travel lanes**

• **Truck Climbing Lanes**

• **Truck Parking/Truck Parking Management**

• **Bridge reconstruction/ rehabilitation**
Public Involvement

Series of public meetings to be completed by November

• June: Problem Identification (safety and congestion issues)

• August: Potential Solutions and Tolling Scenarios Being Considered

• October: Potential Recommendations Packages Tied to Revenues and Economic Impact of Tolling
Public Involvement

Several options to provide general and location/issue specific comments:

- Display map dot activity
- Comment forms
- ArcGIS Online Map
- Email
- Phone
Next steps

• First public comment period closes August 6th
  • Over 700 public comments received through the end of June
• Use data and public feedback to develop recommended improvements
• August public meetings
  • Develop improvement recommendations and evaluate tolling feasibility
• October Public Meetings
  • Improvement recommendation packages and economic impact of tolling
• Develop final recommendations and submit report to CTB