

## CTB Decision Brief

### Adoption of the I-81 Corridor Improvement Plan

**Issue:** In accordance with Chapter 743 of the 2018 *Virginia Acts of Assembly*, the General Assembly of Virginia directed the Commonwealth Transportation Board (CTB), to study financing options for improvements to Interstate I-81 (I-81) and with assistance from the Office of Intermodal Planning and Investment (OIPI), develop and adopt an I-81 Corridor Improvement Plan (Plan). Further, the General Assembly set forth key components of such Plan, including:

- 1) an examination of the entire length of I-81
- 2) identification of potential improvements and a targeted set of improvements that can be financed
- 3) examination of potential financing options for such improvements
- 4) corridor-wide incident management strategies
- 5) identifying actions and policies that if implemented minimize the diversion of truck traffic
- 6) assess potential economic impacts on Virginia agriculture, manufacturing, and logistics companies from tolling of heavy commercial trucks.

The General Assembly required public meetings to be completed by November 30, 2018.

**Facts:** OIPI, VDOT, DMV, Department of State Police, and DRPT (study team) conducted extensive stakeholder and public outreach that included 12 public meetings, focus groups and hearings that resulted in attendance by over 900 individuals and received more than 2000 public comments. Public outreach activities were held throughout the corridor which encompasses the Bristol, Salem, and Staunton Districts.

The study team evaluated all 325 miles of I-81 and based on performance, contributing factors and public input, a prioritization methodology was developed. The study team focused first on identifying problem areas based on severity and evaluated each of those segments for safety (crash rate and frequency), congestion (person hours of delay), and resiliency conditions (incident-related delay and multi-hour lane closures). For each of these problem areas a potential improvement was developed, with the exception of areas where transportation improvements could not address the problem(s). Operational improvements were considered first, then capital improvements were evaluated, scored and prioritized. In total, more than \$4 billion in needs were identified.

Beyond minimum criteria identified by the General Assembly, the Plan identifies related issues that are recommended for further study and evaluation. The study team proposes the creation of task forces to develop comprehensive strategies, and long and short-term solutions that address speed enforcement and truck parking, as well as on-going evaluation of potential multimodal improvements in the corridor.

Based on a data driven evaluation methodology similar to SMART SCALE, \$2.04 billion in capital improvements are recommended for implementation during the next 7-10 years. Based on industry input, \$2 billion during the next 7-10 years is a reasonable amount of work that can be supported by the engineering and construction industries.

Additionally, the Plan identifies \$43 million in immediate operations and incident management improvements. The study team excluded operational improvements from prioritization in alignment with CTB policy to address operational issues first, which were assumed a fundamental element.

However, capital projects identified in Salem, Bristol and Staunton districts were evaluated and prioritized based on the following measures:

- safety -- reduction in the number of fatal and injury crashes (40%)
- congestion mitigation -- decrease in person-hours of delay (40%)
- accessibility -- access to jobs (15%)
- access to jobs -- for disadvantaged populations (5%)

106 potential projects were identified for consideration in the three VDOT Districts, 33, 27, and 46 respectively. After applying weighting scenarios and funding distributions, the portfolio of projects was reduced to 63.

A two-step process was followed for determining the improvements. Step one assumed \$2 billion in improvements were divided 50/50 split between a District allocation and a corridor-wide allocation. The first \$1 billion was distributed by amount of I-81 centerline miles in each District and then projects were sorted by benefit-cost scores.

Step two was to allocate the remaining \$1 billion on a corridor-wide basis. All remaining projects were sorted by their respective benefit-cost score until the \$1 billion was allocated. The result of this distribution:

- Salem – 13 projects estimated at \$875 million
- Bristol – 27 projects estimated at \$285 million
- Staunton – 23 projects estimated at \$838 million

Further, the study team analyzed tolling and other financing methods to support the improvements' implementation. Lastly, the plan includes an analysis of economic impacts on Virginia trucks and specifically Virginia agricultural, manufacturing and logistics industries.

Based on the financial analyses completed, two alternatives appear to provide the necessary financing for these projects, a) two regional taxes and/or b) tolling with an Auto annual pass. Potential regional taxes include a 2.1% regional motor vehicle fuels tax and a 0.7% retail sales and use tax. These are the same rates as those imposed in Hampton Roads and Northern Virginia. Four potential tolling options were considered with three meeting the intent of Chapter 743 and generating sufficient revenues to meet the \$2 billion need, with debt financing, in improvements:

- trucks and non-commuters
- variable tolling between daytime and nighttime for trucks and non-commuters
- variable tolling with an Auto annual pass

Detailed financial analysis was conducted on the variable tolling with an Auto annual pass option. The assumed daytime/nighttime toll rates are: 15¢/7.5¢ per mile for Trucks and for Autos, 7.5¢/5¢ per mile with a \$30 Auto annual pass fee. This option generates an estimated \$145 million in 2020 (if implemented for the entire year) which is sufficient to finance the \$2.04 billion in improvements within the next 10 years. An additional \$100 million has been reserved in FY2021 and FY2022 in the financial analysis to address additional costs associated with solutions that are developed by the speed enforcement and truck parking task forces and potential multimodal improvements.

All financing options require General Assembly approval before they can be implemented. Annual revenues in the first year range from \$145 to \$204 million depending on the preferred option selected. If tolling becomes the preferred option adopted by the General Assembly, the study team recommends that the CTB allocate of \$43 million from the Toll Facilities Revolving Account to fund the tolling infrastructure and establishment of associated business processes.

**Recommendations:** The study team recommends approval of the I-81 Corridor Improvement Plan Executive Summary attached hereto as Appendix A.

**Action Required by CTB:** The CTB will be presented with a resolution for a formal vote to approve the I-81 Corridor Improvement Plan Executive Summary and subsequently, the final Plan for submission to the House and Senate prior to the first day of 2019 General Assembly Session.

**Result, if Approved:** If approved, the recommended improvements package in the final Plan will be finalized, posted on the I-81 website by December 21, 2018 and will be submitted to the General Assembly by prior to the first day of the 2019 General Assembly Session. The final Plan will also include economic impact analysis results, truck parking study results and any modifications the Secretary of Transportation deems appropriate, as long as revisions do not conflict with the Executive Summary. If during the 2019 session the General Assembly approves a financing strategy, the CTB and study team will initiate securing necessary federal approvals and operational improvements will commence.

**Options:** Approve, Deny, or Defer.

**Public Comments/Reactions:** None