

# **I-81 2025 CORRIDOR IMPROVEMENT PLAN**

I-81 Advisory Committee Meeting

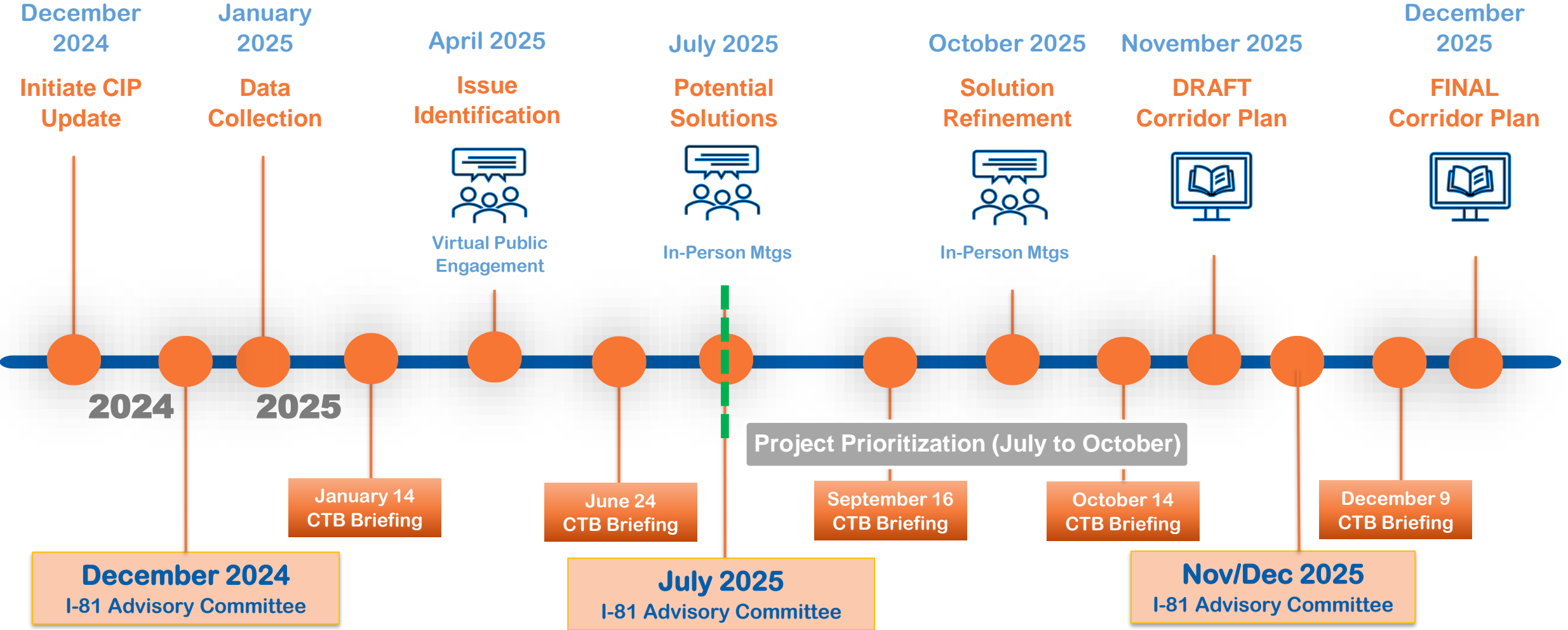
| Ben Mannell, AICP

July 14, 2025

# Agenda

- **I-81 CIP Schedule and Update**
- **I-81 CIP Update- Work to Date**
  - **Performance Measures**
  - **Public Feedback from Round 1 Engagement**
- **Upcoming Round 2 Public Meetings**
- **Next Steps**

# CIP Schedule: December 2024 – December 2025



# I-81 Corridor Improvement Plan Update

- 65 projects in the 81 Program have advanced or are advancing to construction
- Next tranche of projects need to be identified
  - Projects are complex and need to be identified early
  - Allows advanced activities- resulting in refined construction costs and shovel-ready projects
- Project identification is performance driven
- Solutions will be identified using a SMART SCALE-like process



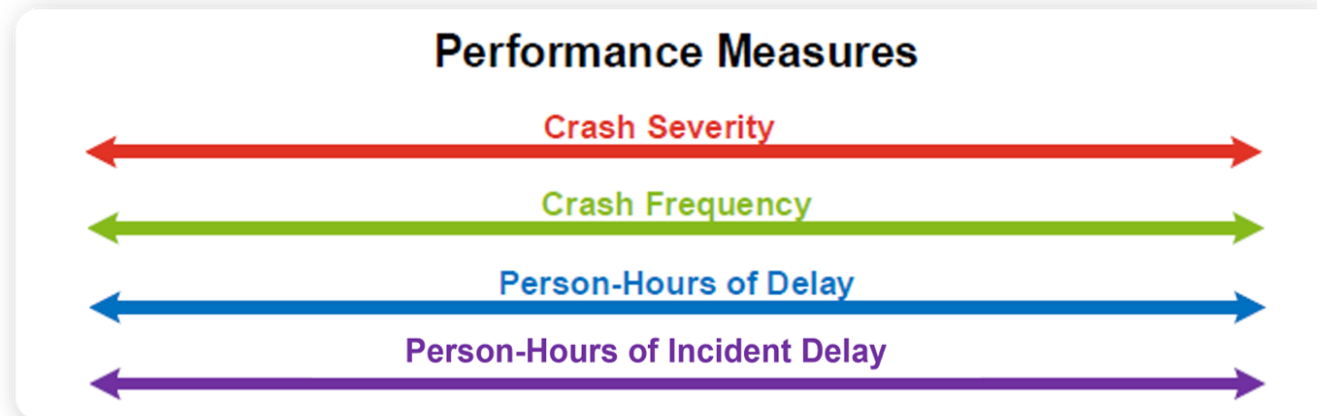
# I-81 CIP Update: Work to Date

- **Performance measures analysis- complete**
- **Round 1 public engagement- complete**
  - Performance measures and public validation
  - Feedback on issues
- **Potential solutions development- complete**
- **Round 2 public meetings- underway**
  - Summary of feedback from Round 1
  - Feedback on potential solutions

# Performance Measures Used

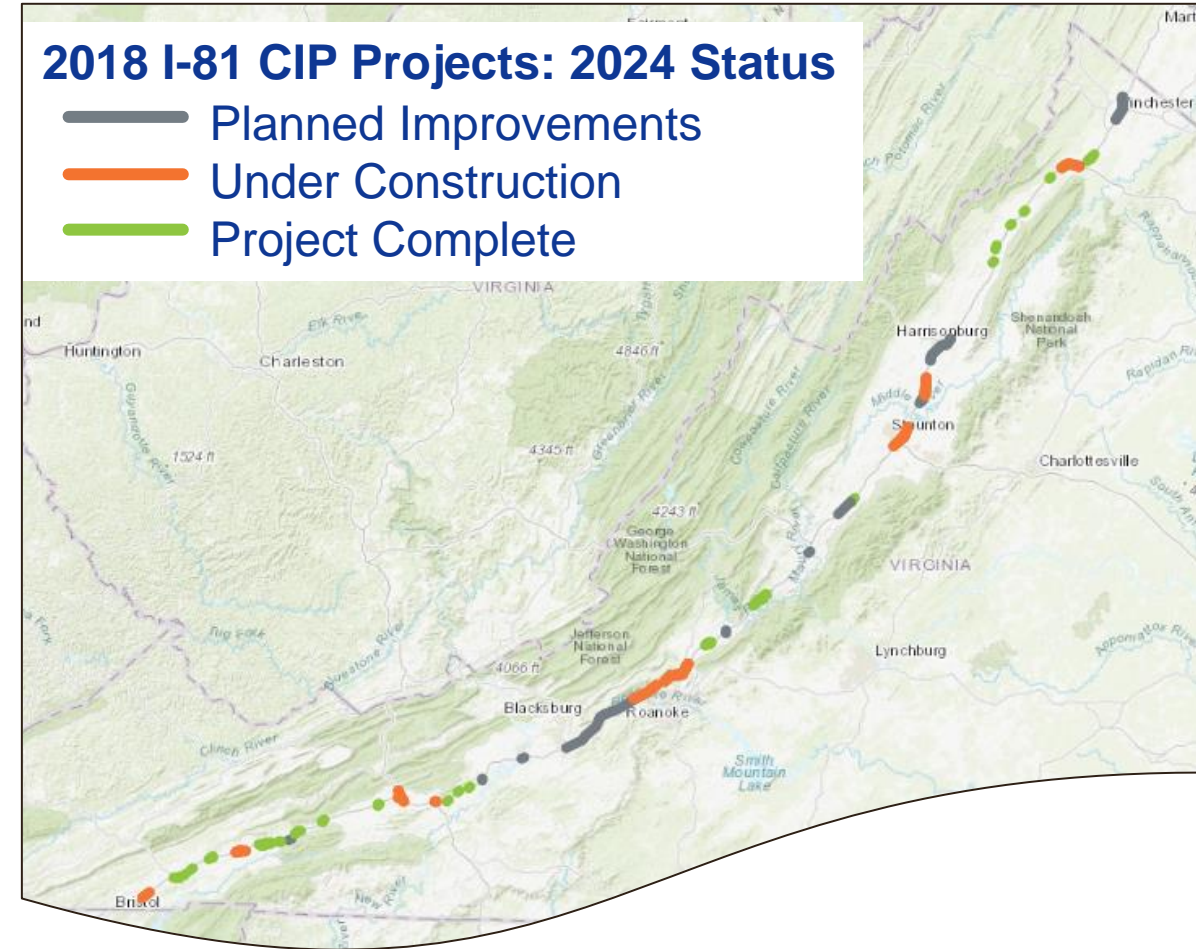
**Determine the top 25% of one-mile segments for the following performance measures in both directions of I-81**

<b>Crash Severity</b>	fatal and severe injury crashes over the last 5 years
<b>Crash Frequency</b>	rate of crashes during the last 5 years
<b>Person-hours of Delay</b>	hours of delay caused by congestion, incidents, and weather events
<b>Person-hours of Incident Delay</b>	incidents or crashes that lead to at least one lane of the interstate being closed an hour or more



# Data Analysis Assumptions

- **Exclude 2020 data**
  - 5-year dataset: 2019 & 2021-2024
- **Exclude one-mile segments in 2018 I-81 CIP with widening and truck climbing projects already programmed for improvement**



# Performance Measures Summary

Milepost	District	Number of One-Mile Segments (both directions) in the Top 25% by Performance Measure			
		Crash Severity	Crash Frequency	Person Hours of Delay	Person Hours of Incident Delay
0–88	Bristol	44	49	9	2
88–175	Salem	30	33	29	23
175–325	Staunton	59	49	93	109

Source: VDOT Roadway Network System (RNS) Data, INRIX



# Round 1 Public Outreach (Virtual)—Problem Identification

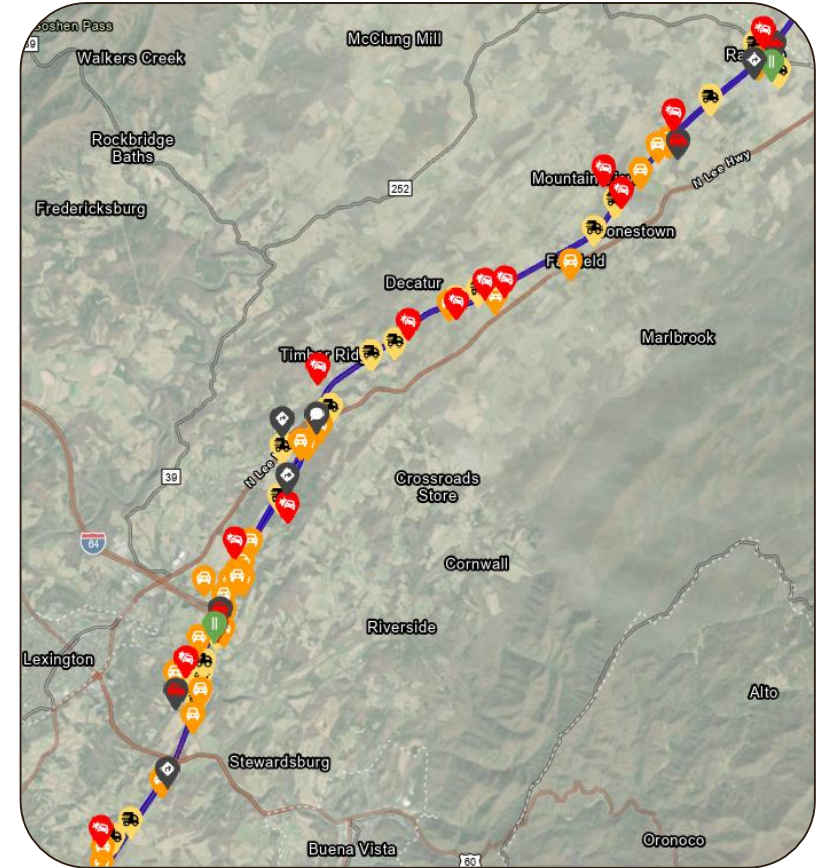
- Open April 1-15, 2025

## VIRTUAL ENGAGEMENT

 **4,000**  
COMMENTS





 **4,700**  
PARTICIPANTS

- Performance measures identified, public asked to validate based on their driving experience
- Location-specific issues identified and written comments provided



# Round 1 Public Outreach Feedback Summary

## Location-Specific Issue Identification by District

Issue Type	Bristol	Salem	Staunton	Total
 1. Congestion	36%	31%	42%	39%
 2. Truck Operations	25%	26%	20%	22%
 3. Safety	18%	16%	23%	21%
 4. Speeding and Aggressive Driving	10%	16%	9%	10%
5. Geometry	5%	7%	3%	4%
6. Pavement Markings and Signing	3%	1%	2%	2%
7. Other	2%	3%	1%	2%

- Participant-identified
- Top four issue types accounted for **92%** of the total identified

# Round 1 Public Outreach Feedback Summary Continued

## Top 10 Written Comment Themes



**Need for additional lanes- 22%**



**Short/poorly designed ramps- 6%**



**Congestion and backups- 20%**



**Interchange and weigh station geometry- 5%**



**Heavy truck volumes- 19%**



**Pavement and drainage issues- 2%**



**Frequent crashes and safety concerns- 14%**



**Noise and local impacts- 1%**



**Aggressive/high-speed driving- 10%**



**Insufficient truck parking- 1%**

# Round 1 Public Outreach Comments by District

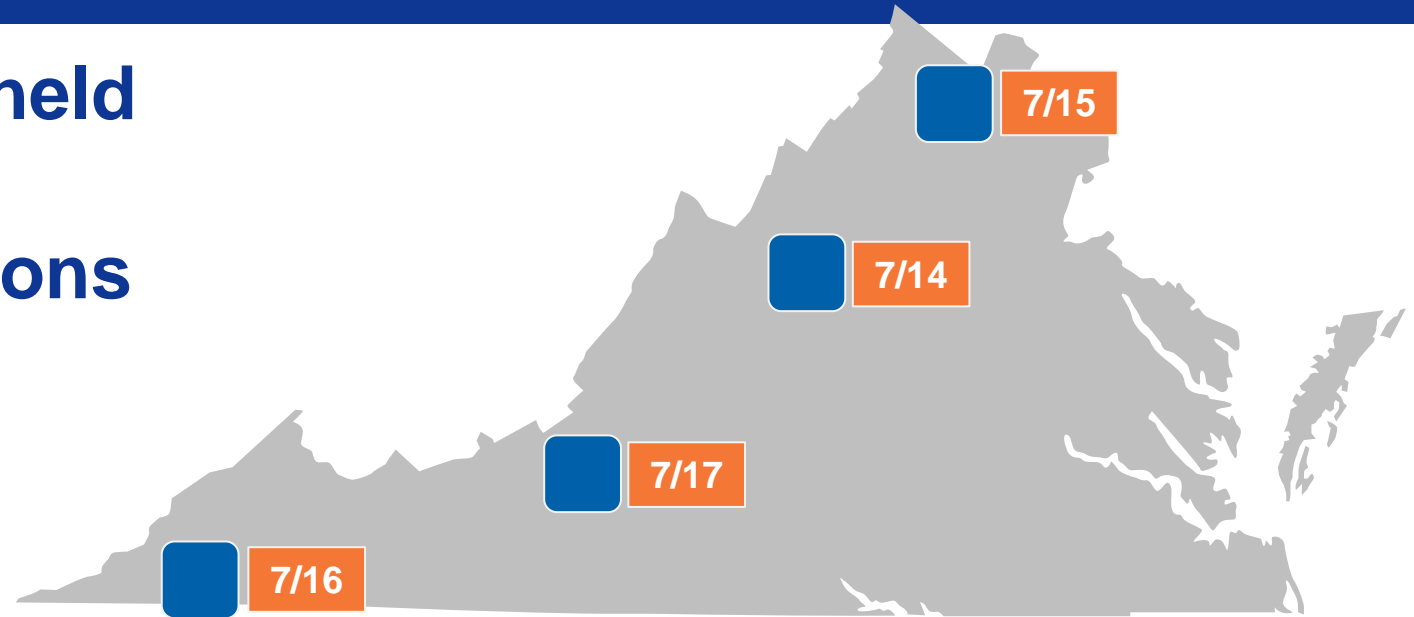
- **Written comment themes from each District**
  - Congestion or capacity constraints
  - Heavy truck volumes
  - Safety concerns
- **Comments on the above issues were focused in areas where there are currently programmed projects with construction activity or activity starting in the next 2-3 years**





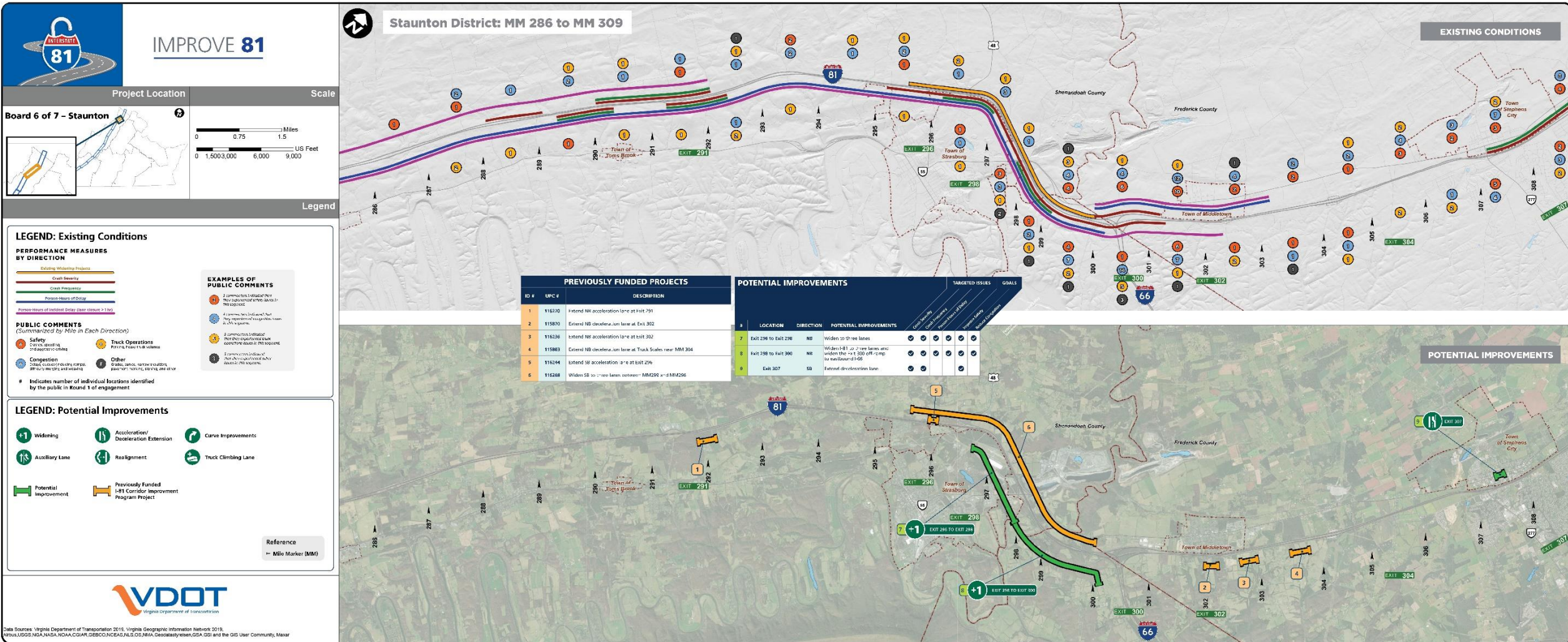
# Round 2 Public Meetings—Potential Solutions

- Four in-person meetings held week of July 14th
- Maps with potential solutions driven by performance measures
  - Operations
  - Capital
- Survey gathering public comment on potential solutions
- Meeting materials and survey will be posted on-line



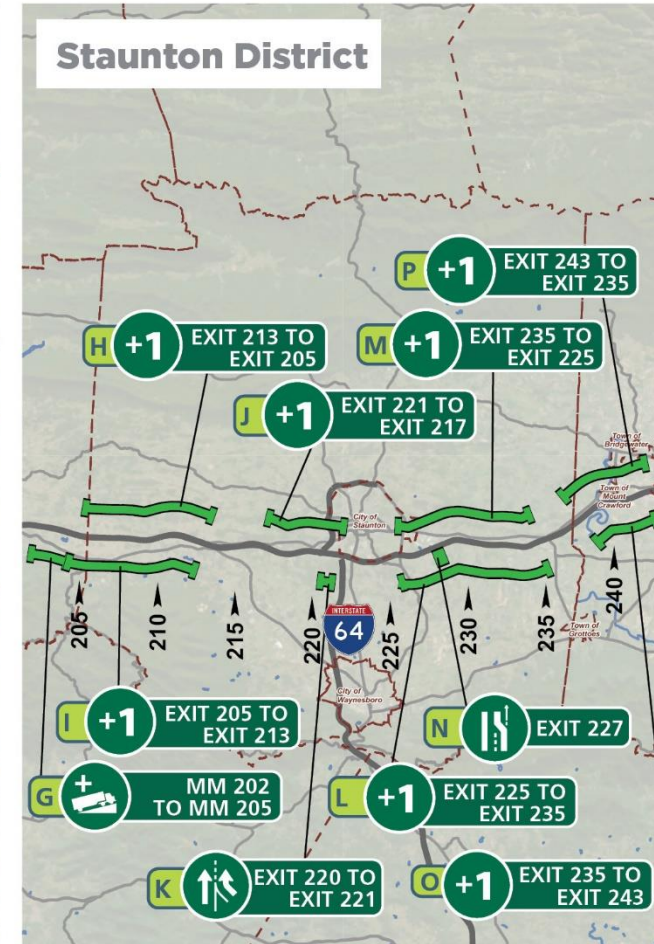
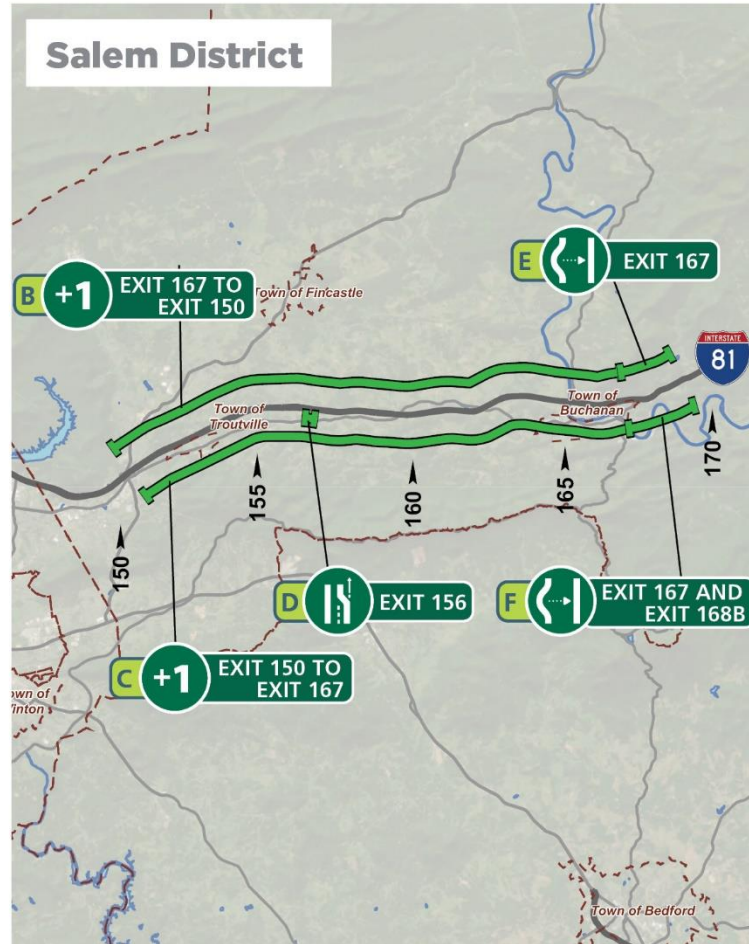
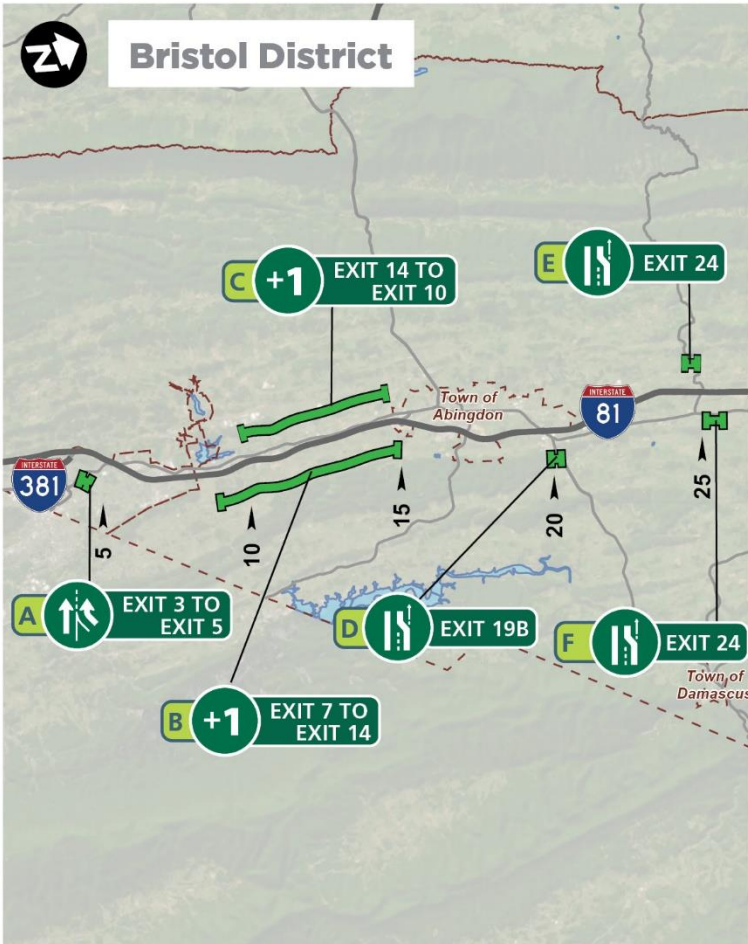
- 1 Staunton South- Blue Ridge Community College 5-7pm
- 2 Staunton North- Shenandoah University 4-6pm
- 3 Bristol Hilton Garden Inn (Exit 7) 5-7pm
- 4 Salem Civic Center 5-7pm

# I-81 CIP Public Meeting Board—Sample





# District Improvements—Samples



## LEGEND: Potential Improvements

- +1** Widening
- Acceleration/Deceleration Extension
- Curve Improvements
- Auxiliary Lane
- Realignment
- Truck Climbing Lane

# I-81 Corridor Improvement Plan—Potential Solutions Summary

District	Solutions Summary	Improvement Type						Total
		Widening	Auxiliary Lane	Truck Climbing Lane	Accel/Decel Lane Extension	Curve Improvement	Realignment	
Bristol	No. of Improvements	1	1	0	5	2	0	9
	Total Mileage*	6.2	0.5	0	2.3	2.5	0	11.5
Salem	No. of Improvements	1	0	1	1	0	1	4
	Total Mileage*	16.5	0	2.6	0.3	0	2.1	21.5
Staunton	No. of Improvements	10	1	2	7	0	0	20
	Total Mileage*	48.5	0.7	5.5	1.9	0	0	56.6
Total	No. of Improvements	12	2	3	13	2	1	33
	Total Mileage*	71.2	1.2	8.1	4.5	2.5	2.1	89.6

\* I-81 corridor centerline mileage



# Financial Constraints

- **\$2 - 2.25 billion in revenue anticipated to be available for new projects**
- **Potential solutions identified in 2025 CIP far exceed anticipated revenue**
- **SMART SCALE-like prioritization will be used to narrow potential solutions list**



# Next Steps

- **Study team will use public feedback from the July meetings to inform recommended solutions**
- **Fall public meetings**
  - **Present refined solutions that have been prioritized using a SMART SCALE-like process**
- **Present refined solutions to the I-81 Advisory Committee and CTB**
- **Anticipate adopting updated Corridor Improvement Plan in December**

# Questions and Comments

## **VDOT Study Managers:**

**Ben Mannell, AICP and Rob Williams, AICP**

**VDOT Transportation and Mobility Planning Division**

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## **Study Website:**

**[Improve81.org/get-involved/2025-cip-update/](https://Improve81.org/get-involved/2025-cip-update/)**

## **Study Email:**

**[VA81CorridorPlan@VDOT.Virginia.gov](mailto:VA81CorridorPlan@VDOT.Virginia.gov)**