



*February 27, 2020  
2020 Virginia Annual  
Concrete Conference*



# Virginia Interstate 81 Corridor Update



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# Key Messages

1. The I-81 Improvement Program is real, it is happening.
2. The Program consists of targeted improvements to enhance safety and operational reliability.
  - We are not widening the entire corridor from TN to WV.
3. Major construction is planned to begin Summer/Fall 2021.
4. Everything we do will be done with a sense of Urgency and Purpose.

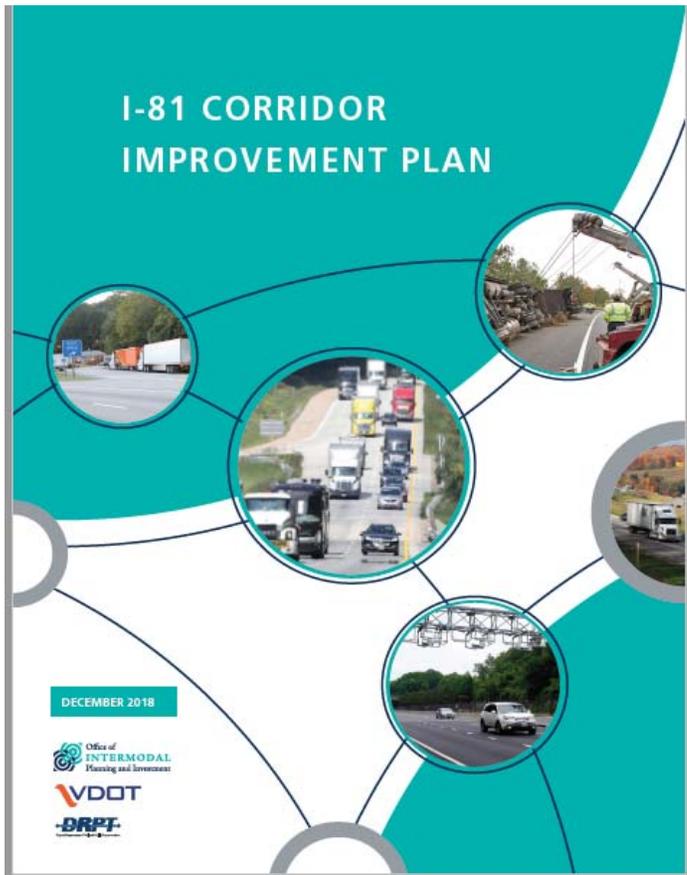
# How did we get here?

- 1. Need recognized early 2018**
- 2. Study began in April 2018**
  - Goal was to identify targeted improvements related to safety and operations (reliability)**
- 3. Study completed December 2018**
- 4. Senate Bill 1716 and House Bill 2718 introduced January 2019**
- 5. After amendments by Governor, signed into law April 2019**

# How is the Program funded?

- 1. The law established the I-81 Corridor Improvement Fund and Program**
- 2. Funding mechanisms:**
  - **Statewide truck registration fee increase (I-81 receives a portion)**
  - **2.1% Regional fuel tax increase (100% dedicated to corridor)**
  - **Statewide Diesel and Road tax increase (I-81 receives a portion)**
- 3. Includes a “kill switch”**

# I-81 Improvement Plan Overview



## Public Outreach

12 Public Input Meetings  
5 CTB Updates  
2,000 + Comments from the Public  
950 + Meeting Attendees

## Public Input Meetings – Seeking Feedback

- ✓ **June:** Identified problems; safety, congestion, and other issues
- ✓ **August:** Proposed targeted solutions and potential funding options
- ✓ **October:** Prioritized solutions and identified potential funding options and economic impacts

# I-81 Operational Improvements Plan Summary

Improvement	Estimated Implementation Cost	Estimated Annual O&M Cost
Expand Traffic Cameras & CMS	\$10,750,000	\$ 615,600
Enhanced Safety Service Patrols	\$1,663,000	\$1,744,200
Contract Emergency Clearance	\$3,500,000	\$3,591,000
<b>Parallel facilities Improvements</b>	\$27,100,000	
<b>TOTAL</b>	<b>\$43,000,000</b>	<b>\$5,950,800</b>



# I-81 Operational Improvements Plan Summary

## 1. Cameras

- 51 new cameras
- Completion – Spring 2020

## 2. Changeable Message Signs

- 31 new changeable message signs (8 feeder routes, 23 mainline)
- Work begins this Spring

## 3. Flashing and Static Chevrons

- 8 locations
- Work completed



# I-81 Operational Improvements Plan Summary

## 4. Safety Service Patrol (SSP)

- 4 new routes, several routes expanded
- 18 additional patrol trucks added for expanded operations
- Service hours increased from 7 day x 12 hr. coverage to 7 day x 16 hr.

## 5. I-81 detour plans completed & distributed

## 6. Operational Planning Activities

- Emergency Lane Clearance Improvements
- Improvements along detour routes (Signal operations, minor geometric improvements at intersections, traffic re-entry strategies)
- Traffic Operations Center staffing increase

## 7. Truck Parking Study – Formation of a Task Force (VTRC lead)

## 8. Speed Enforcement – Formation of a Task Force (VTRC lead)

# I-81 Capital Improvements Plan Summary

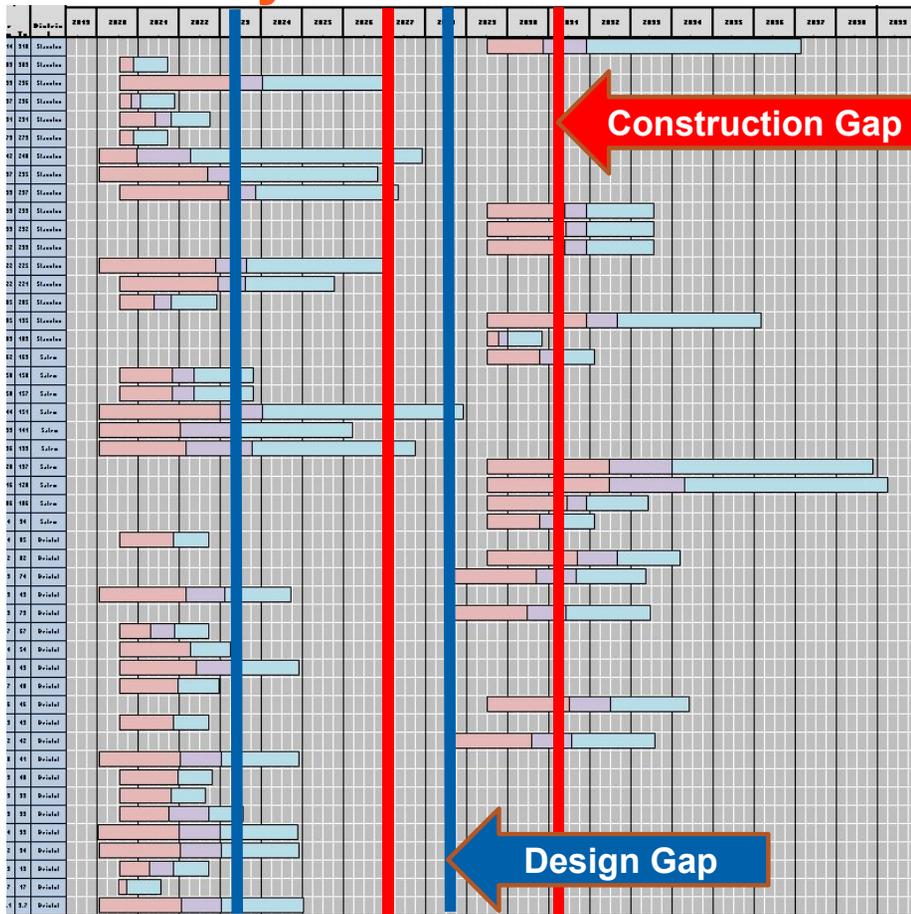
<i>District</i>	<i>Number of Projects by Type</i>							<i>Total Number of Projects</i>	<i>Total Cost (millions \$)</i>
	<i>Widening</i>	<i>Auxiliary Lane</i>	<i>Truck Climbing Lane</i>	<i>Acceleration Lane Extension</i>	<i>Deceleration Lane Extension</i>	<i>Curve Improvement</i>	<i>Shoulder Widening</i>		
Bristol District	1	3	3	6	10	4	0	27	<b>\$285.2</b>
Salem District	4	0	0	4	2	3	0	13	<b>\$875.3</b>
Staunton District	4	1	2	10	4	1	1	23	<b>\$838.1</b>
<b>Total I-81 Corridor Number of Improvements</b>	<b>9</b>	<b>4</b>	<b>5</b>	<b>20</b>	<b>16</b>	<b>8</b>	<b>1</b>	<b>63</b>	<b>\$1,998.8</b>



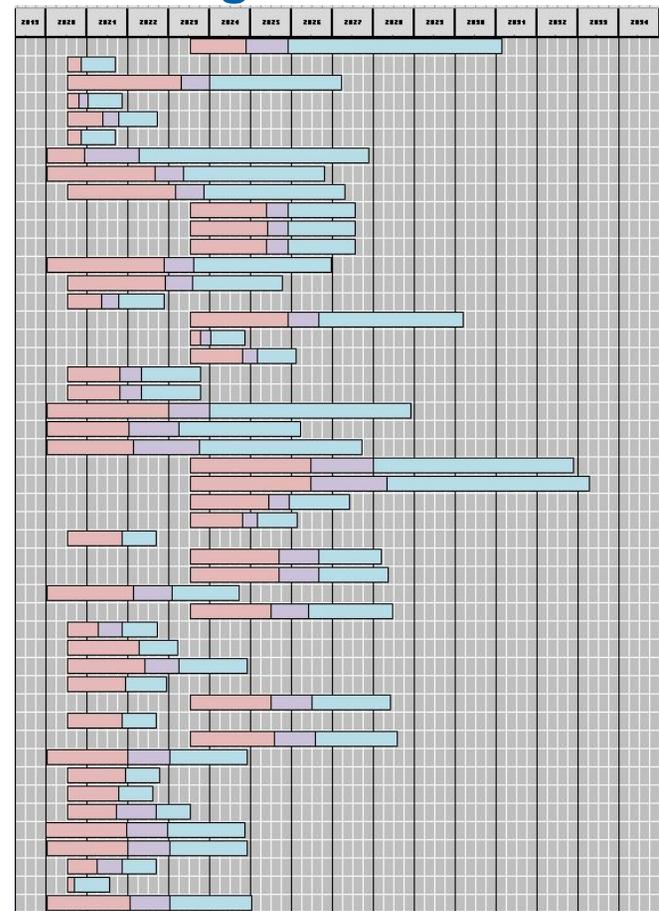


# I-81 Capital Improvements Funding and Scheduling

## Pay-Go Schedule



## Bonding/TIFIA Schedule



# I-81 Capital Improvements Funding and Scheduling

- **Yes, the text on the previous slides is too small. Download your own copy...**
  - Visit the VA CTB website at [www.ctb.virginia.gov](http://www.ctb.virginia.gov)
  - At the top, click on “**Projects**”, then “**Major Projects**”
  - Select “**I-81 Corridor Improvement Program**”
  - Scroll down to “**October 2019 Meeting in Natural Bridge**”
  - Select “**I-81 Study Project Prioritization**”

# Staunton District Project Highlights

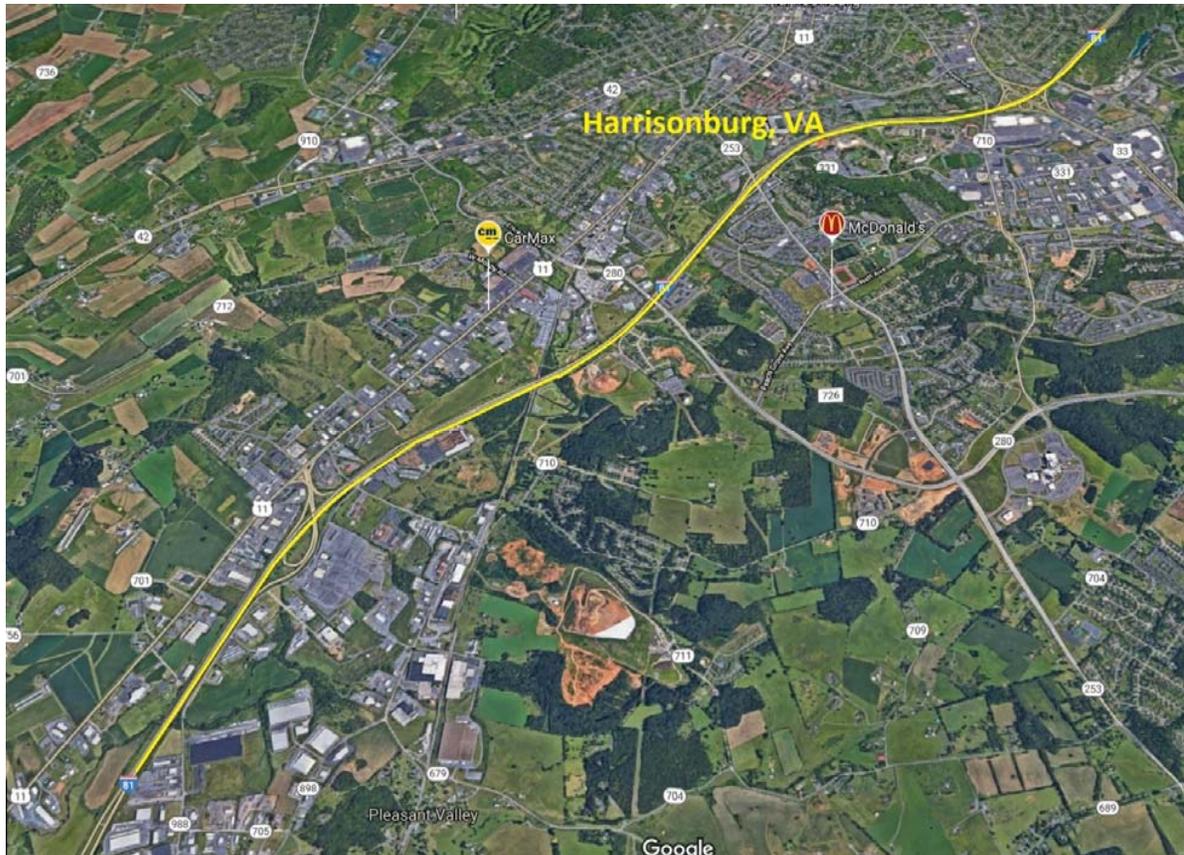
- Add southbound auxiliary lane between Exit 221 and Exit 220
- Widen northbound and southbound to three lanes between Exit 225 and Exit 221
- Add northbound truck climbing lane between MM 234 & 237.9
- Add southbound truck climbing lane between MM 238 & 235.6
- Widen northbound and southbound to three lanes between Exit 243 and Exit 248
- Widen southbound to three lanes between MM 300.1 and 296.7
- Widen northbound and southbound to three lanes between Exit 313 & Exit 317

## I-81 Exit 221 and Exit 225 – Widen to three lanes



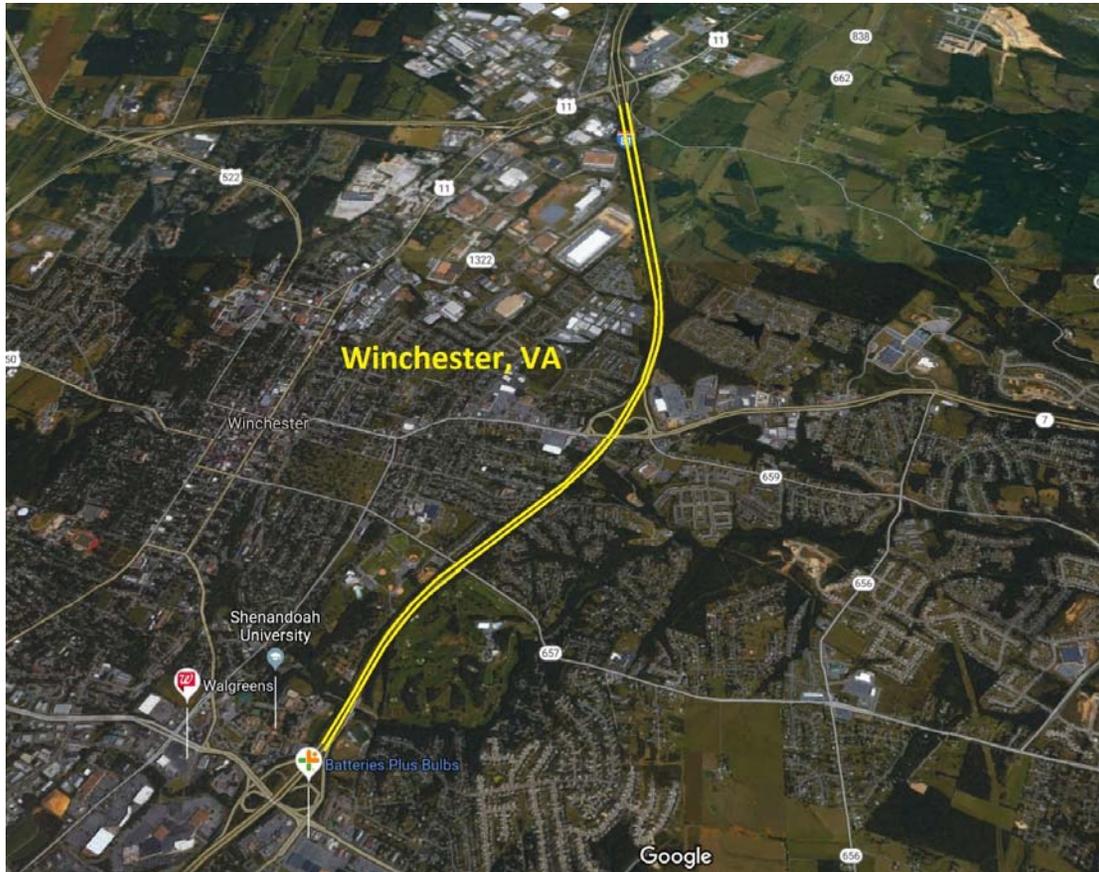
- Through Staunton, VA
- Approximately 7 Lane-miles of widening
- Connects to System-System interchange with I-64
- Estimated value = \$140M
- Currently advertised for design

## I-81– Exit 243-248 – Widen to three lanes.



- Through Harrisonburg, VA
- Approximately 12 Lane-miles of widening
- Major interchange with Route 33
- James Madison University on both sides of I-81
- Estimated value = \$271M

## I-81– Exit 313-317 – Widen to three lanes.

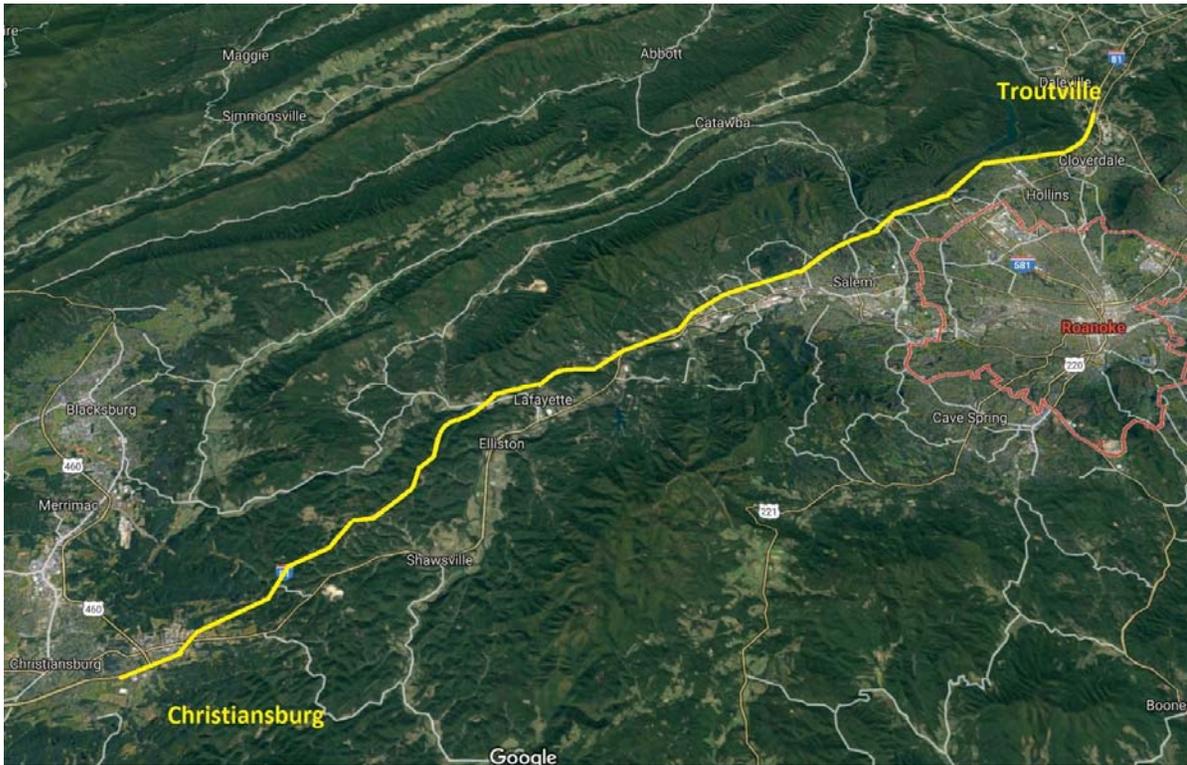


- Through Winchester, VA
- Approximately 8 Lane-miles of widening
- Major interchanges at Routes 50, 7, and 11.
- Shenandoah University on both sides of I-81
- Estimated value = \$204M

## Salem District Project Highlights

- **Widen northbound to three lanes from MM 119 to Exit 128**
- **Widen northbound to three lanes from Exit 128 to Exit 137**
- **Widen northbound and southbound to three lanes from Exit 137 to Exit 141**
  - Links up with SMART SCALE funded improvements from 141 to 143
- **Widen northbound and southbound from MM 144 to Exit 150**

## I-81– MM 116 to MM 151– Widen to three lanes.

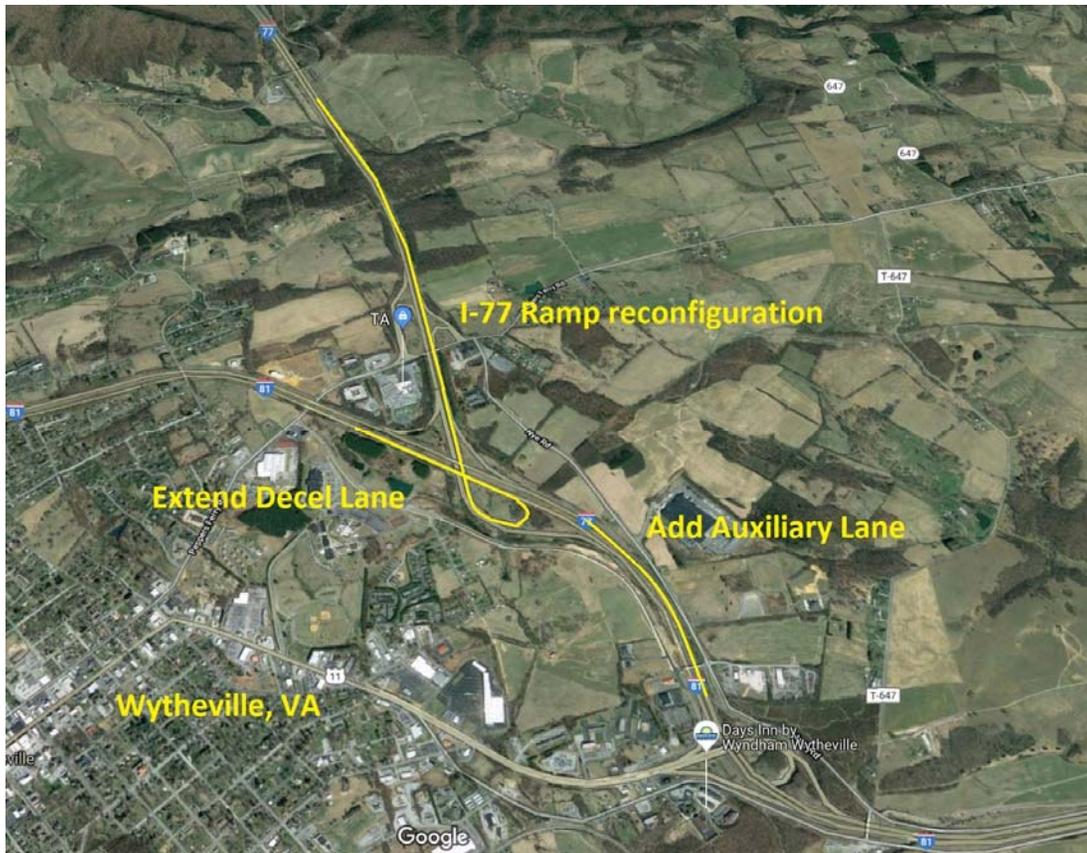


- From Christiansburg to Troutville
- 43.1 Lane-Miles of widening
- System-System interchange with I-581
- Estimated value = \$848M

# Bristol District Project Highlights

- Widen southbound to three lanes between Exit 10 and Exit 7
- Add northbound truck climbing lane from Exit 32
- Add a southbound truck climbing lane between MM 34 and MM 33
- Add northbound truck climbing lane from Exit 39
- Add SB auxiliary lane between Exit 54 and Smyth Safety Rest Area
- Add SB auxiliary lane between Exit 40 on I-77 and Exit 72 on I-81 and extend acceleration lane
- Add SB auxiliary lane between Exit 73 and Exit 72

# I-81– I-77 System-System Interchange Improvements



- Improve operational and safety characteristics of I-81/I-77 Interchange
- Major System-System Interchange.
- Three projects – decal extension, ramp re-configuration, auxiliary lane improvements
- Estimated value = \$75 M

# So, what does this mean for us?

## 1. The Program is perpetual

- This provides opportunity for technology and productivity investments

## 2. Labor and Material challenges

- This program is in addition to our normal District construction program.
- We need to enhance our labor and material resources

## 3. Improvements in safety and operational reliability are coming

# What does the Department need from you?

## 1. The foundation of the Program is urgency and purpose

- We need for the industry to respond in kind.

## 2. We need your help

- We need your motivation and innovation
- We all need to give 125% to ensure the viability and success of the Program

## 3. We need you to bring your A+ game.

# Questions?