

IMPROVE **81**

# I-81 CORRIDOR IMPROVEMENT PROGRAM

Governor's Transportation Conference 2022

**Dave Covington, PE**  
I-81 Program Delivery Director

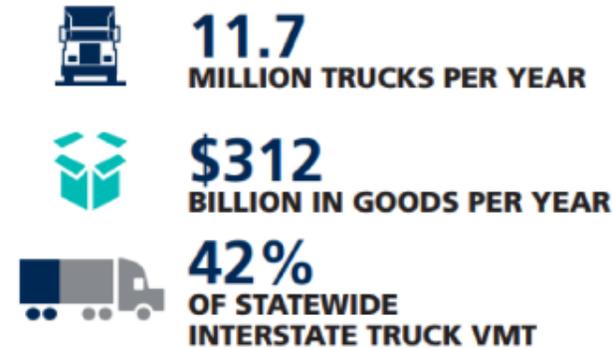
October 27, 2022

# I-81 Corridor Improvement Program

Passed by the General Assembly and signed into law by Governor Northam on April 3, 2019

Approximately \$2.8 billion investment in innovative and targeted improvements that will substantially affect the safety and reliability of this critical corridor.

An I-81 Advisory Committee was established to provide advice and recommendations to the Commonwealth Transportation Board (CTB) regarding the development of the I-81 Corridor Improvement Plan.



## Program Core Objectives



### Enhanced Safety

This program is implementing a series of improvements such as lane and shoulder widening to reduce the rate and frequency of crashes along the corridor.



### Reduced Congestion

The program improvements are reducing congestion and improving reliability by adding capacity in specific areas of the corridor and improving speed of incident clearance to help limit travel delays.



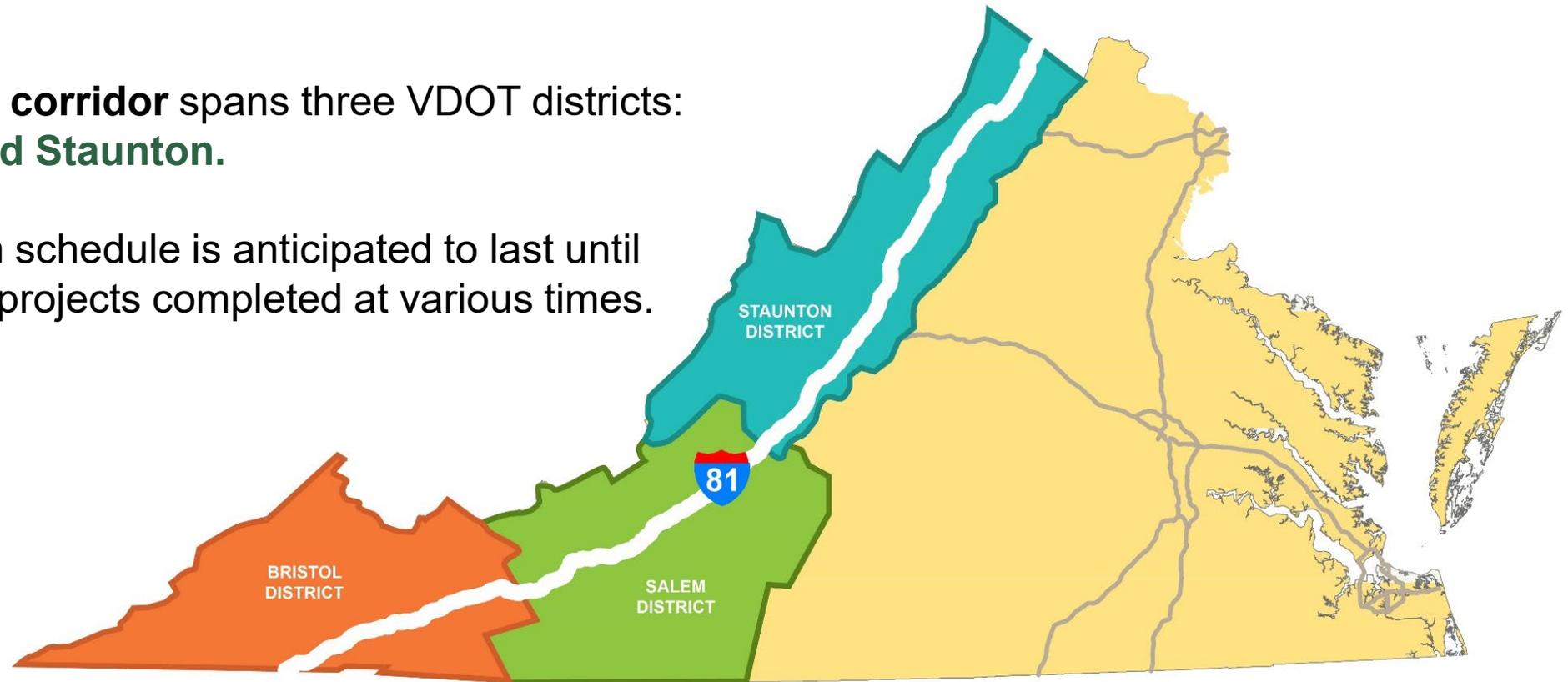
### Economic Development

I-81 is the main corridor and key economic artery of western Virginia. These improvements will ensure that goods and services critical to our economy move safely and efficiently through and within the region.

## Planned Improvements & Schedule

The **325-mile long corridor** spans three VDOT districts:  
**Bristol, Salem, and Staunton.**

The entire program schedule is anticipated to last until  
at least 2030, with projects completed at various times.



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## PROGRAM IMPROVEMENTS BY DISTRICT

View live traffic cameras along I-81 and other Virginia highways at [511virginia.org](http://511virginia.org)

- Planned Improvements
- Under Construction
- Project Complete



## IMPROVE 81

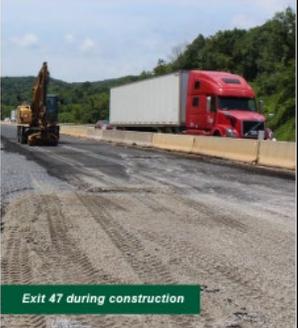
Fall 2022

### 81 INSIDER

#### More Projects Cross the Finish Line

The Interstate 81 Corridor Improvement Program (CIP) includes 34 ramp-extension projects with a common purpose: to enhance safety and traffic flow at interchanges. All of them extend acceleration or deceleration lanes to minimize conflicts between vehicles traveling at different speeds.

The largest and most challenging of these projects opened to traffic in late July at exit 47 (Marion) in Smyth County. Under a \$7 million design-build contract, A & J Development and Excavation Inc. added 0.8-mile to the acceleration lane from Route 11 onto northbound I-81. Commercial trucks and other vehicles had struggled to reach highway speed from this interchange due to a long, steep grade.



Exit 47 during construction

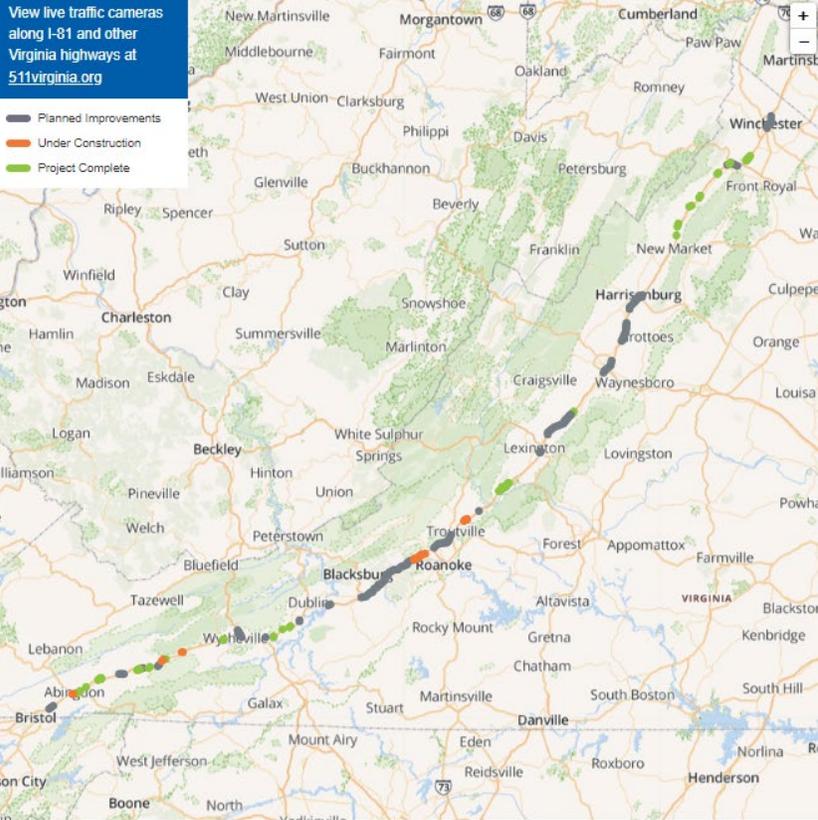
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## CORRIDOR OVERVIEW

### PROGRAM IMPROVEMENTS BY DISTRICT

View live traffic cameras along I-81 and other Virginia highways at [511virginia.org](http://511virginia.org)

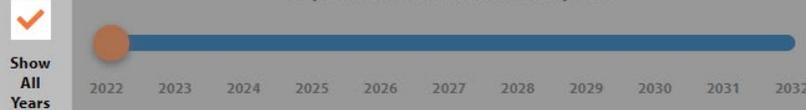
- Planned Improvements
- Under Construction
- Project Complete



### CAPITAL IMPROVEMENT PROJECTS

- 23** Staunton ?  
Exit 175 – 323  
[View Projects](#)
- 14** Salem ?  
Exit 89 – 168  
[View Projects](#)
- 27** Bristol ?  
Exit 1 – 86  
[View Projects](#)

### Projects Under Active Construction By Year:



**23** Staunton ?  
Exit 175 – 323  
[View Projects](#)

**14** Salem ?  
Exit 89 – 168  
[View Projects](#)

**27** Bristol ?  
Exit 1 – 86  
[View Projects](#)

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## I-81 Corridor News and Multimedia



**Newsletters**

81 Insider provides updates on project construction, design, technology and more. Summer 2022 issue is available below.

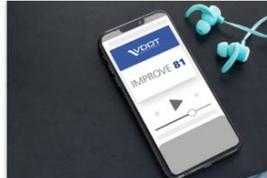
FEATURED NEWSLETTER



Summer 2022

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[Join our mailing list](#)



**Podcasts**

The Improve I-81 podcast follows the progress of the improvement projects along the I-81 corridor.

FEATURED PODCAST



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LISTEN ON  **Spotify**



**Videos**

Stay informed with our informational videos about the improvement projects along the I-81 corridor.

FEATURED VIDEOS




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| Mile Marker   | Improvement                                     | Jurisdiction                      | Construction Start | Construction End | Budget          | Directions      | Status               | Project ID | Traffic Impacts |
|---------------|---|-----------------------------------|--------------------|------------------|-----------------|-----------------|----------------------|------------|-----------------|
| 88            | Curve improvements (flashing chevrons)          | Pulaski County                    | August 2019        | October 2019     | \$163,000       | Northbound only | Project Complete     | 28         | N/A             |
| 90.2 - 90.7   | Extend acceleration lane at Exit 89             | Pulaski County                    | May 2020           | August 2020      | \$4.7M          | Northbound only | Project Complete     | 29         | N/A             |
| 94.2 - 93.7   | Extend acceleration lane at Exit 94             | Pulaski County / Pulaski          | November 2025      | December 2026    | \$3M - \$7M     | Southbound only | Planned Improvements | 38         | N/A             |
| 105.5 - 106   | Extend acceleration lane at Exit 105            | Montgomery County / Radford       | December 2025      | May 2027         | \$11M           | Northbound only | Planned Improvements | 30         | N/A             |
| 116.2 - 128.4 | Widen to three lanes between MM116 and Exit 128 | Montgomery County / Christianburg | April 2027         | March 2033       | \$215M - \$260M | Northbound only | Planned Improvements | 31         | N/A             |

## Capital Improvement Projects

There are currently **64 Capital Improvement projects** within the Program. Some of these projects include:

**+1**

### Widening

The addition of a third lane for added capacity and safety. Some projects include the addition of a third lane in both the northbound and southbound directions while some projects include the addition of a third lane in only one direction.



### Acceleration/Deceleration Lane Extension

Allows drivers additional time to make appropriate speed adjustments on the entrance and exit ramps before merging into interstate traffic or encountering sharper curves and stop conditions on exit ramps.



### Curve Improvement

Installation of static and/or flashing chevron signs along specific curves to notify drivers of upcoming sharp or challenging curves where crashes are prevalent.

## Capital Improvement Projects

There are currently **64 Capital Improvement projects** within the Program. Some of these projects include:



### Truck Climbing Lane

An additional lane added to enable trucks to ascend a steep grade at a lower speed while maintaining regular traffic speeds for passenger vehicles.



### Auxiliary Lanes

Allows drivers additional time to speed up or slow down when merging on or off I-81. Typically constructed between two interchanges, these lanes help enhance safety by reducing traffic “weaving” between I-81 travel lanes and ramps.



### Shoulder widening

Wider shoulder lanes increase safety for the travelling public during emergencies such as flat tire or breakdown, provide recovery area for errant vehicles, and enhance safety for emergency responders.

# Project Development Process (Capital Projects)

**Total of  
64  
Projects**



## Capital Improvement Project Status – Bristol District

9 upcoming projects

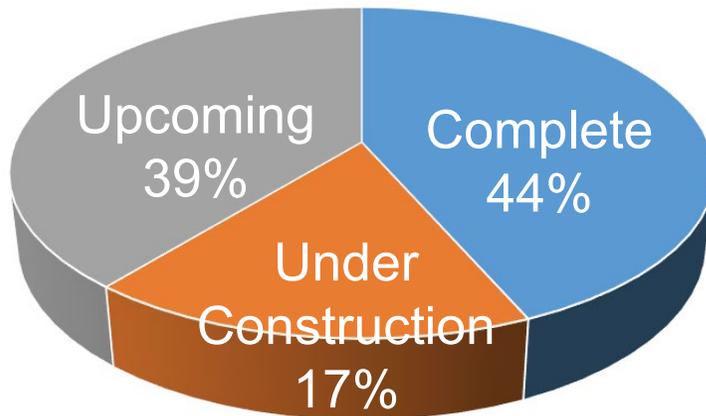
\$220 million

4 projects under construction

\$33 million

10 projects - construction complete

\$47.5 million



**Exit 47  
Smyth County**

**Northbound  
acceleration lane  
and ramp extension**



## Capital Improvement Project Status – Bristol District

- **Completed Projects:**

- Exit 19 NB Decel Lane Extension (Abingdon)
- Exit 26 SB Accel & Decel Lane Extension (Emory)
- Exit 39 SB Accel & Decel, NB Decel Lane Extension (Seven Mile Ford)
- Exit 44 SB Accel Lane Extension (Marion)
- Exit 47 NB Accel Lane Extension (Marion)
- Exit 67 Decel Lane Extension (South of Wytheville)
- Exit 84 SB Decel Lane Extension (North of Fort Chiswell)

- **Projects Under Construction:**

- Exit 17 SB Acceleration Lane Extension (Abingdon)
- Exit 39 to MM 40.6 NB Truck Climbing Lane (Seven Mile Ford)
- Exit 47 SB Accel; Exit 54 SB Auxiliary Lane (South of Rural Retreat)

## Capital Improvement Project Status – Bristol District

### Upcoming Projects:

- **Exit 10 to Exit 7 SB widening to three lanes (Bristol)**
- **Exit 32 to MM 33.5 NB Truck Climbing Lane (Glade Spring) – Advertise Summer 2023**
- **MM 34 to MM 33 SB Truck Climbing Lane (Glade Spring) – Advertise Summer 2023**
- **Exit 45 NB Decel Lane Extension (Marion)**
- **Exit 72 NB Decel Extension and I-77 Exit 41 to I-81 SB Exit 72 Auxiliary Lane – Design-Build with Request For Qualifications advertisement Spring 2023. (Wytheville)**
- **I-81 Exit 73 to I-77 Exit 41 SB Decel Lane Extension and Ramp Reconstruction (Wytheville)**
- **Exit 73 to Exit 72 SB Auxiliary Lane (Wytheville)**
- **Exit 81 SB Decel Lane Extension (Fort Chiswell)**

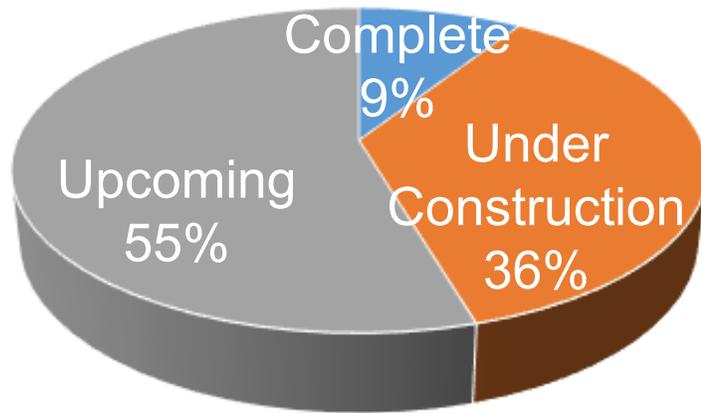
## Capital Improvement Project Status – Salem District

- 6 upcoming projects - \$796 million
- 4 projects under construction  
\$300 million
- 1 projects - construction complete  
\$4.8 million



### Exit 137-141 Salem and Roanoke County

Northbound and  
southbound widening



## Capital Improvement Project Status – Salem District

- **Completed Projects:**
  - Exit 89 NB Acceleration Lane Extension (Pulaski)
- **Projects Under Construction:**
  - Troutville Rest Area SB Entrance and Exit Extension (2 projects) - Troutville
  - Exit 137 to Exit 141 Widening NB and SB  
(Design Build, 2 projects bundled) - Salem
- **Upcoming Projects:**
  - MM 116 to Exit 128 Widening NB Only – Construction 2027 (Christiansburg to Ironto)
  - Exit 128 to Exit 137 Widening NB Only – Construction 2027 (Ironto to Salem)
  - Exit 143 to Exit 150 Widening NB & SB – Construction 2025 (Roanoke to Troutville)

## Capital Improvement Project Status – Salem District

- **Upcoming Projects Continued:**
  - **Exit 162 NB Accel Lane Extension – Construction 2025 (Buchanan)**
  - **Exit 105 NB Accel Lane Extension – Construction 2026 (Radford)**
  - **Exit 94 SB Accel Lane Extension – Construction 2025 (Pulaski)**

## Capital Improvement Project Status – Staunton District

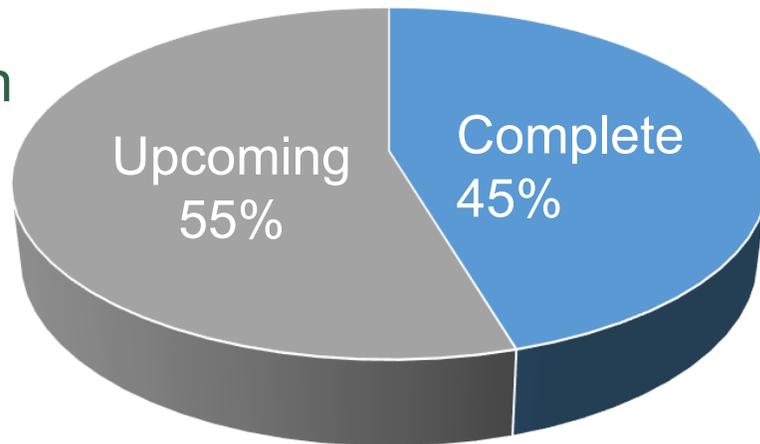
12 upcoming projects

\$963 million

0 projects currently under construction

10 projects - construction complete

\$19.8 million



### Exit 205 Rockbridge County

Acceleration lane extension,  
off-ramp widening, and turn  
lane construction



## Capital Improvement Project Status – Staunton District

### Completed Projects:

- Exit 302 NB Accel, Exit 302 SB Decel, Exit 283 SB Accel,
- Exit 269 NB Decel, Exit 279 SB Accel
- Exit 291 NB Accel, Exit 296 SB Accel, Exit 304 NB Accel
- Exit 205 SB Accel, Exit 205 NB Accel (Raphine)

### Projects Under Construction: None

### Upcoming Projects:

- Exit 221 to Exit 220 SB Auxiliary Lane – Construction Fall/Winter 2023 (South of Staunton)
- Exit 221 to Exit 225 NB and SB Widening – Construction Summer 2023 (Staunton)
- Weyers Cave NB and SB Truck Climbing Lanes – Construction Spring 2025
- Exit 242 to Exit 248 NB and SB Widening – Construction Summer 2025 (Harrisonburg)
- Exit 299 to Exit 296 SB Widening – Construction Fall/Winter 2024 (Strasburg)

## Capital Improvement Project Status – Staunton District

- **Upcoming Projects Continued:**
  - **Exit 313 to Exit 317 NB and SB Widening – Construction 2027 (Winchester)**
  - **Mt. Sidney Rest Area SB Decel Lane Extension – Construction 2026**
  - **Mt. Sidney Rest Area SB Accel Lane Extension – Construction 2026**
  - **Mt. Sidney Rest Area NB Accel Lane Extension – Construction 2026**
  - **Rockbridge County Shoulder Improvements – Construction 2026**
  - **Exit 188 NB Accel Extension – Construction 2025**

## Operational Improvements

The Program also includes a host of **Operational Improvements** which enhance safety as well as mobility, particularly during emergency events. Examples of operational improvements include:



### Digital Message Signs

Digital message boards help to alert drivers in real time of incidents along the interstate and assist with directing them to alternate routes.



### Additional Traffic Cameras (CCTV)

The additional traffic cameras assist the Traffic Operations Center during emergency events as well as provide information to travelers via the VA 511 system.



### Enhancements to Safety Service Patrol

Additional hours of operations and additional routes help to protect the travelling public during vehicle emergencies, speed up recovery time, and protect incident zones.

## Operational Improvements

The Program also includes a host of **Operational Improvements** which enhance safety as well as mobility, particularly during emergency events. Examples of operational improvements include:



### Detour Route Improvements

One of the biggest challenges of the I-81 Corridor is the lack of reliable alternative routes. Low cost, high return investments in signal systems and minor geometric improvements help to efficiently move traffic around incidents on the interstate.



### Enhancements to Clearance Times

Reducing incident clearance time saves time, money, and enhances reliability along the interstate system. The implementation of a Towing and Recovery Incentive Program (TRIP) and lift-and-tow devices help to clear incidents more quickly to keep traffic moving.

# Operational Improvement Project Status

| Operational Improvement Type                 | Status          |
|--|-----------------|
| Safety Service Patrol (SSP) enhancements     | <b>COMPLETE</b> |
| Lift and tow on SSP vehicles                 | <b>COMPLETE</b> |
| Towing and Recovery Incentive Program (TRIP) | <b>COMPLETE</b> |
| Traffic camera installations                 | <b>COMPLETE</b> |
| Digital message sign installations           | <b>COMPLETE</b> |
| Arterial Signal Improvements                 | <b>ONGOING</b>  |



## Operational Improvement Project Status

### Parallel Route Upgrades

Minor geometric improvement projects to facilitate access to and from I-81 during incidents are complete (3 projects in Rockbridge County)

### Traffic Signal Upgrades

Bristol District – 1 project complete, 1 project advertised for construction, 1 project to be advertised in 2023.

Salem District – 1 project complete, 1 project under construction (Dec. 2023 completion), 1 project to be advertised December 2022.

Staunton District – 2 projects to begin construction early 2023, 2 projects to be advertised for construction November 2022.

## Contacts

### Communications Contacts

#### I-81 CIP Communications Specialist

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### Program Team

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# Discussion