



CULPEPER DISTRICT

| Sean Nelson, PE, District Engineer

February 21, 2024

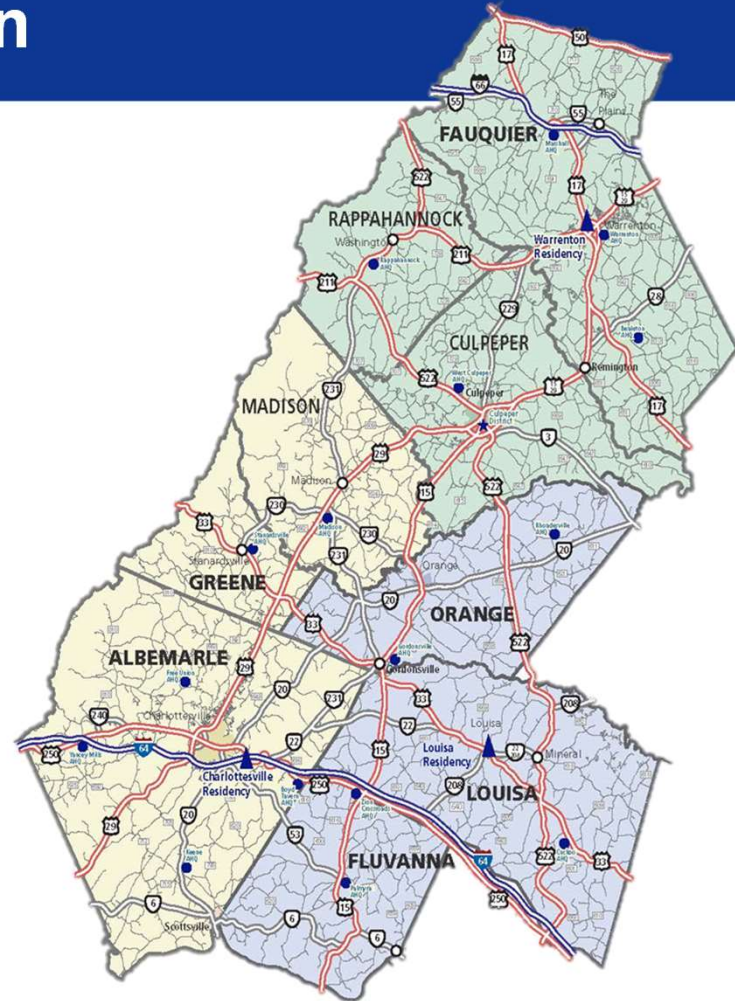
Culpeper District Organization

District Office

3 Residencies

- Warrenton (5 AHQ – Bealeton, Marshall, Rappahannock, Warrenton, West Culpeper)
- Louisa (5 AHQ – Cuckoo, Gordonsville, Palmyra, Rhoadesville, Zion Crossroads)
- Charlottesville (6 AHQ – Boyd Tavern, Free Union, Keene, Yancey Mills, Stanardsville, Madison)

500+ Employees



Culpeper District Leadership



Sean Nelson
District Engineer

Carrie Shephard, PE
Charlottesville Resident Engineer



Mark Nesbit, PE
Warrenton Resident Engineer



Scott Thornton
Louisa Residency Administrator



Stacy Londrey, Assistant District Administrator
Business, Planning and Investment Management



Mike Jacobs, PE
District Project Development Engineer



Greg Cooley, PE
District Construction Engineer



David Pearce, PE
District Maintenance Engineer



Troy Austin, PE
District Traffic Operations Director



Monica Woody
District Human Resources Manager



Lou Hatter
District Communications Manager



SMART SCALE Round 6: Charlottesville Residency



Smart Scale Project Name	Expected Application Type	Residency	Locality	Region	Applicant	Locality Concurrence
I 64 - 5th St Interchange Improvements	New	C'ville	Albemarle County	CA-MPO	CA-MPO	MPO & County Staff
Rio Rd - Hillsdale/Old Brook Rd. Intersection Improvements	New	C'ville	Albemarle County	CA-MPO	Albemarle County	County Staff
US 250 - Old Trail/WAHS	Re-Submission (No Change)	C'ville	Albemarle County	CA-MPO	Albemarle County	County Staff
Barracks Rd Pipeline Study	New	C'ville	Albemarle County	CA-MPO	Albemarle County	Waiting on Preferred Scenario
Ivy Rd Pipeline Study	New	C'ville	Albemarle County	CA-MPO	Albemarle County	Waiting on Preferred Scenario
Pantops Pipeline 1 recommend	Re-Submission (Concept to be Re-worked)	C'ville	Albemarle County	CA-MPO	CA-MPO	Confirmation from County and MPO
US 29 - Plank Rd.	New	C'ville	Albemarle County	TJPDC	Albemarle County	County Staff
US 33 - Rte 1050 Greenecroft & Rte 743 Intersection Improvement	Re-Submission (No Change)	C'ville	Greene	TJPDC	Greene	County Staff
US 29 - Rte. 616 Intersection Improvement	Re-Submission (No Change)	C'ville	Greene	TJPDC	Greene	County Staff

SMART SCALE Round 6: Warrenton Residency



Smart Scale Project Name	Expected Application Type	Residency	Locality	Region	Applicant	Locality Concurrence
Rte 229 - Rte 694/729 (Ira Hoffman)	Re-Submission (No Change)	Warrenton	Culpeper	RRRC	Culpeper	County Staff
Rte. 605 - Rte. 603 (Greenwich Rd)	Re-Submission (No Change)	Warrenton	Fauquier	RRRC	Fauquier	County Staff
Rte. 28 - Old Dumfries Rd. (Rte 667)	Re-Submission (No Change)	Warrenton	Fauquier	RRRC	Fauquier	County Staff
Brandy Rd STARS Study	New	Warrenton	Town of Culpeper	RRRC	Town of Culpeper	Waiting on Preferred Scenario
Madison Rd Pipeline Study	New	Warrenton	Town of Culpeper	RRRC	Town of Culpeper	Waiting on Preferred Scenario
BUS 17 - Roebling Rd	Re-Submission (Concept to be Re-worked)	Warrenton	Town of Warrenton	RRRC	Town of Warrenton	Town Staff
BUS 29 Lee Hwy from Broadview to Blackwell	New	Warrenton	Town of Warrenton	RRRC	Town of Warrenton	Town Staff
Shirley Ave Pipeline Study	New	Warrenton	Town of Warrenton	RRRC	Town of Warrenton	Waiting on Preferred Scenario



SMART SCALE Round 6: Louisa Residency



Smart Scale Project Name	Expected Application Type	Residency	Locality	Region	Applicant	Locality Concurrence
US 250 - Rte 15 intersection	Re-Submission (Concept to be Re-worked)	Louisa	Louisa	TJPDC	Louisa	County Staff
US 250 - Rte 208 intersection	Re-Submission (Concept to be Re-worked)	Louisa	Louisa	TJPDC	Louisa	County Staff
Rte 15 - Rte 22 Intersection	Re-Submission (Concept to be Re-worked)	Louisa	Louisa	TJPDC	Louisa	County Staff
Rte 20 - Rte 611 Intersection	Re-Submission (TBD)	Louisa	Orange	TJPDC	Orange	County Staff

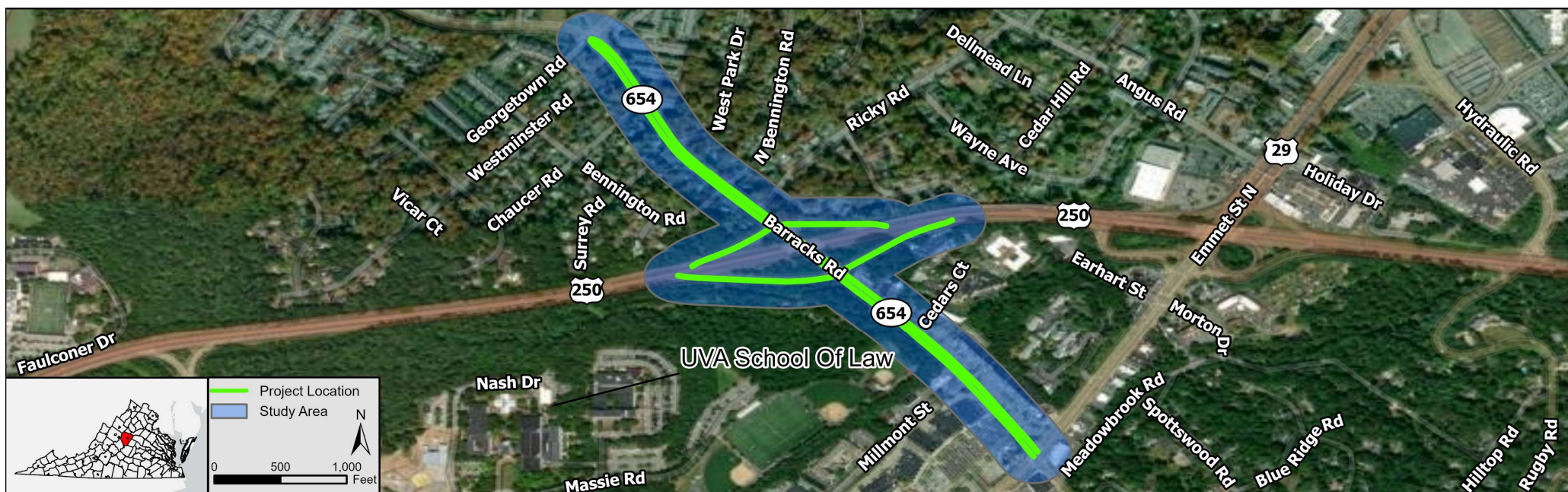
Project Pipeline study: Shirley Ave, Warrenton



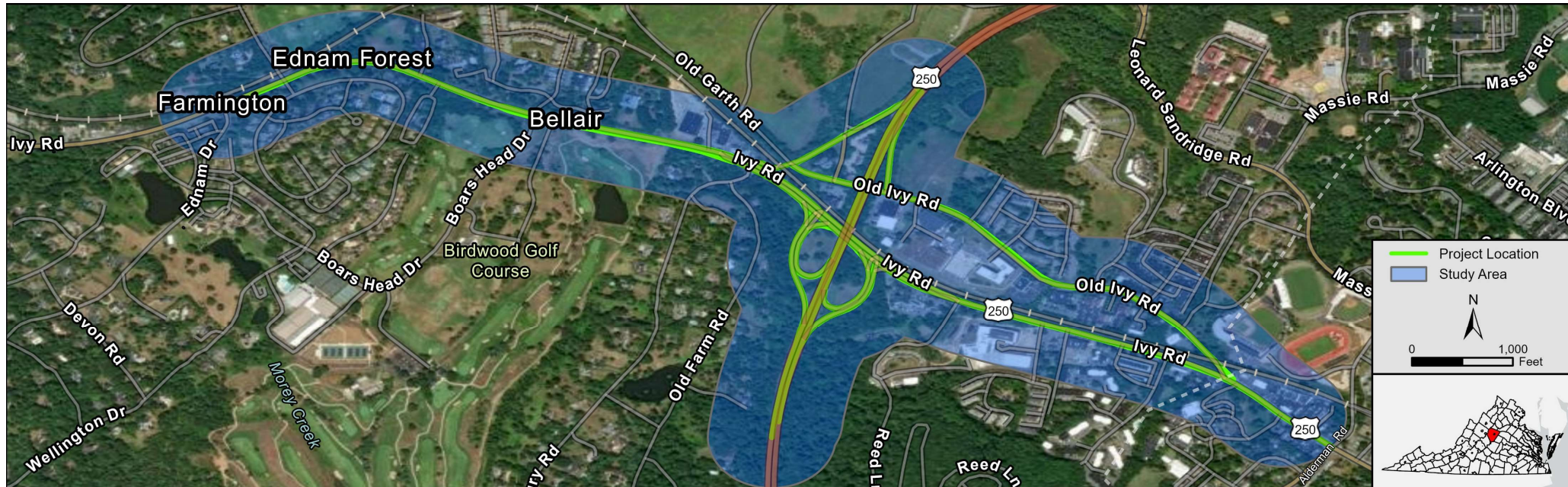
Project Pipeline study: Madison Rd, Culpeper



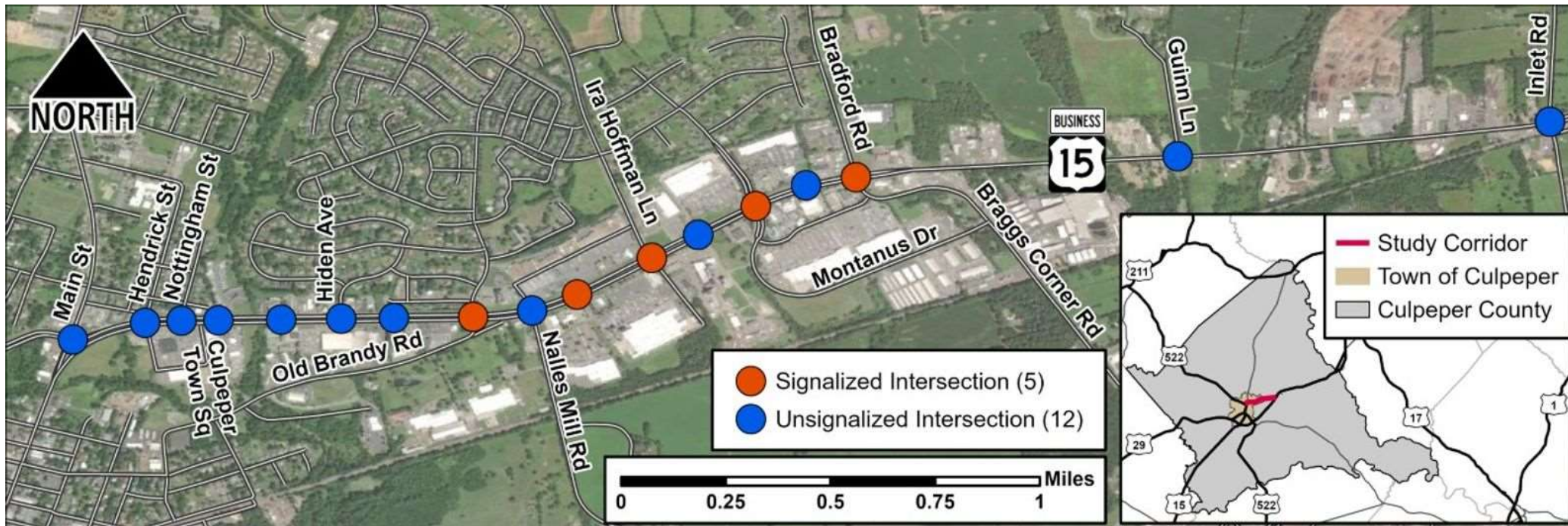
Project Pipeline: Barracks Rd, Charlottesville/Albemarle



Project Pipeline: US 250/Ivy Rd, Charlottesville/Albemarle



STARS study: US 15 Business corridor, Culpeper



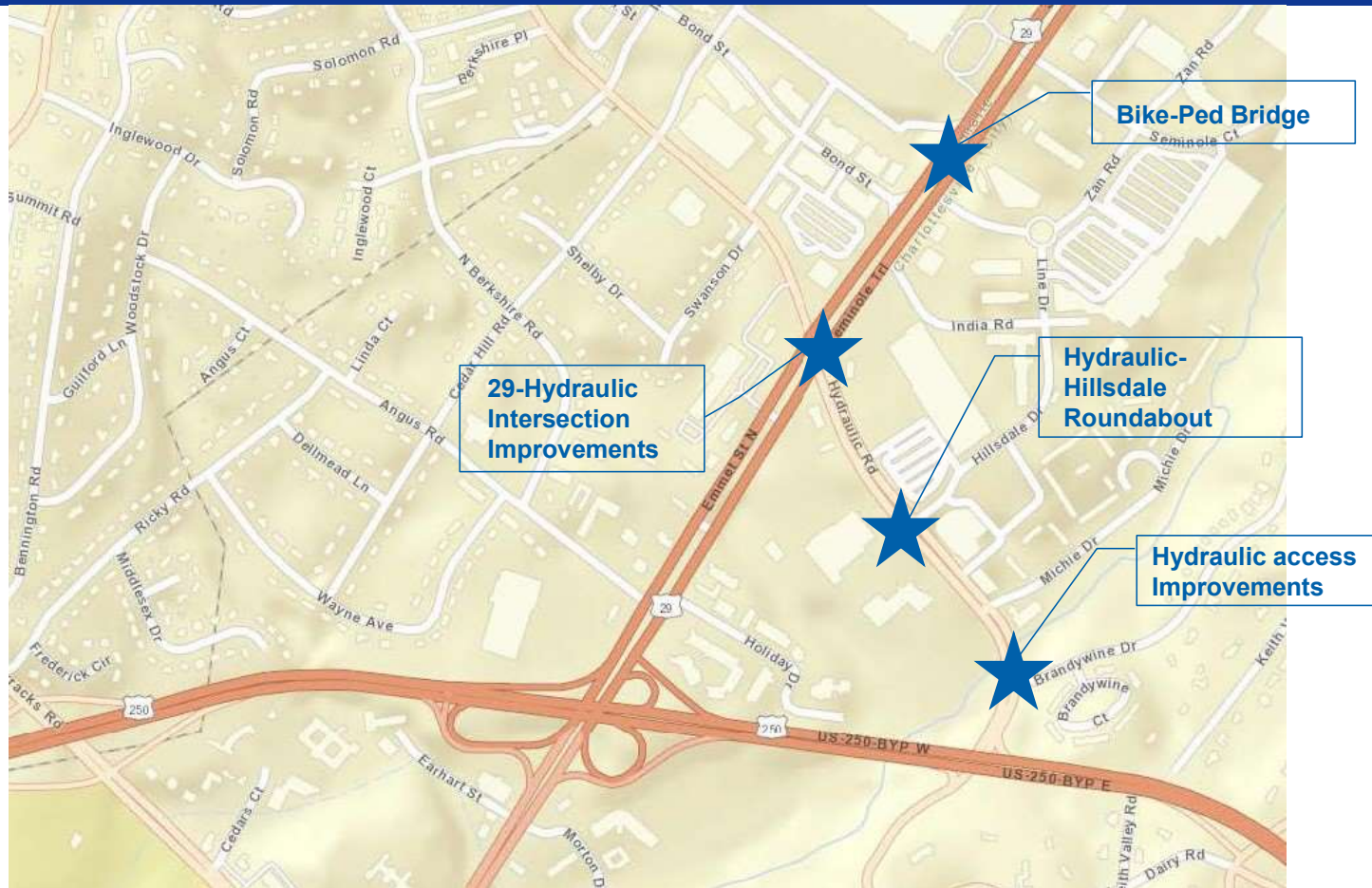
STARS study: US 15-29 corridor, Fauquier Co.



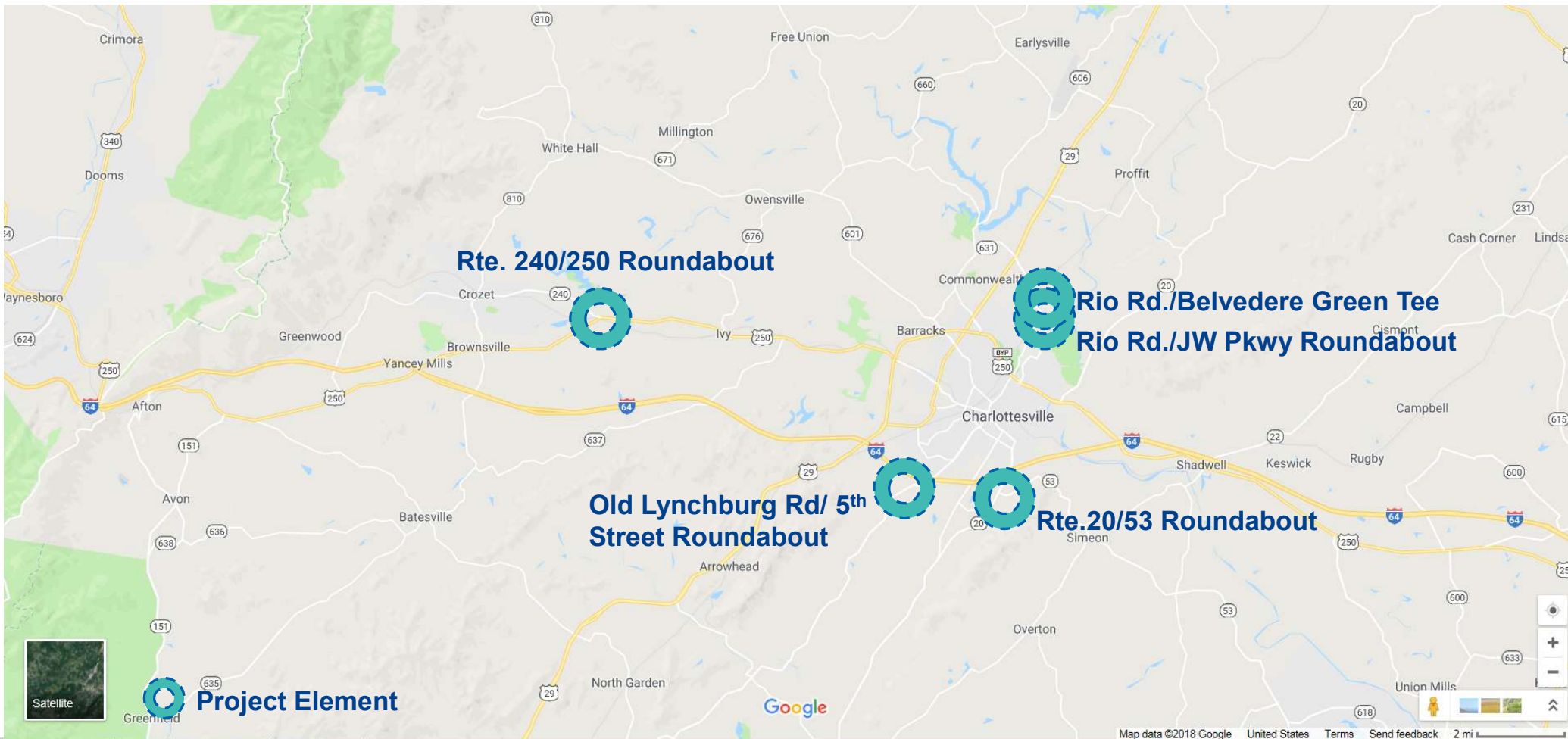
Design-Build Project Bundling



U.S. 29-Hydraulic Rd. Design-Build Bundle

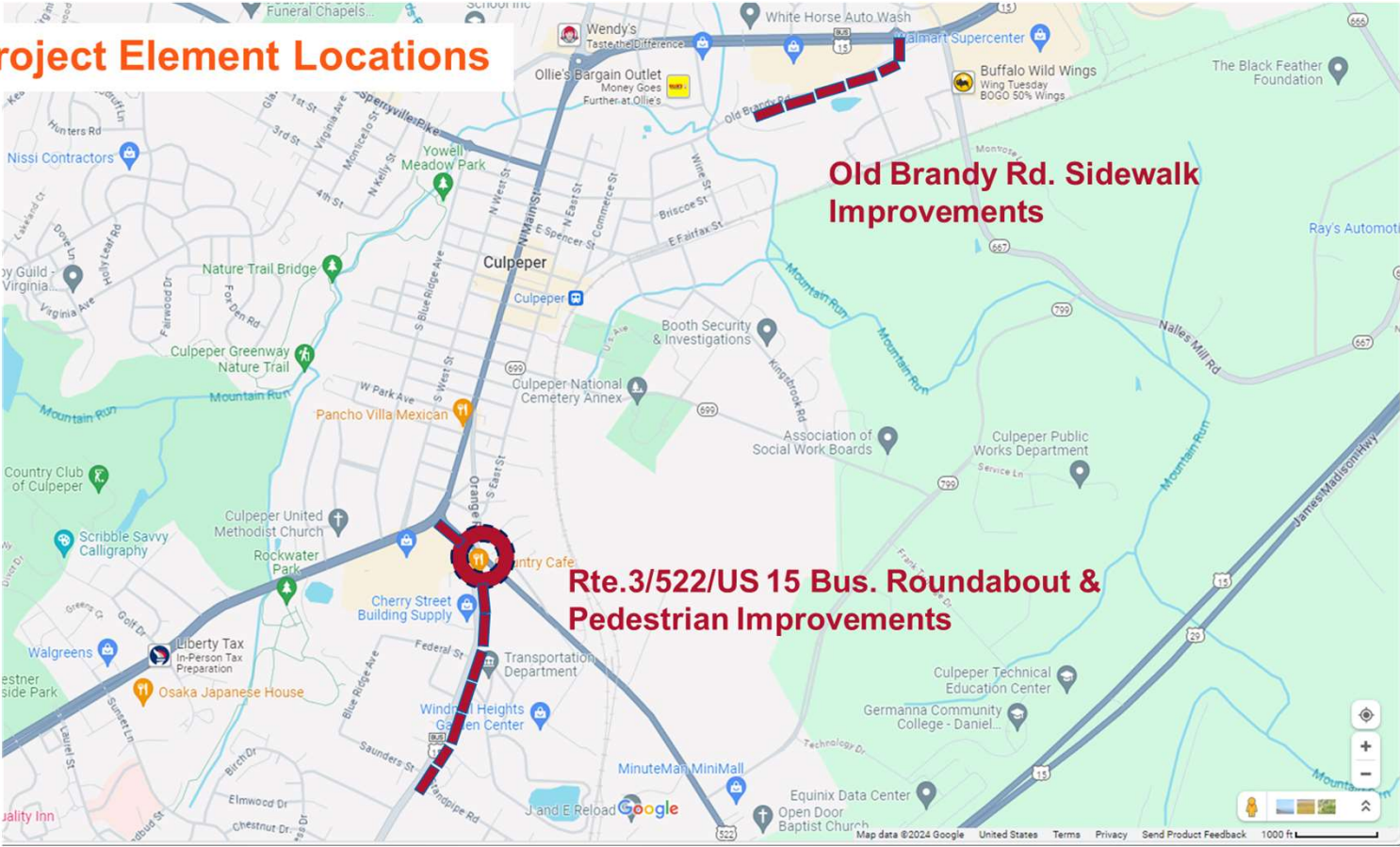


Albemarle Intersection Design-Build Bundle #2



Town of Culpeper Design-Build Bundle

Project Element Locations



Virginia Department of Transportation



Virginia Department of Transportation

1

U.S. 15 Turnkey Maintenance Pilot Project

Scope: An 11-mile stretch of U.S 15 in Louisa County will be improved through a resurfacing project. Routine maintenance will be performed where necessary in conjunction with roadway resurfacing.

Routine Maintenance to include:

- Roadway Resurfacing – Mill and Fill
- Trenching/Shoulder Widening
- Ditching – In accordance with Best Practices to promote positive drainage
- Driveway Pipe – Flushing, potential replacement, or installation to promote positive drainage
- Shoulder Rehabilitation – Shoulder prep and Safety Edge
- Tree Trimming – Re-establish horizontal and vertical clearance
- Guardrail – Upgrade
- Pipe Replacement/Rehab – 10 pipes
- Pipe Cleaning – 39 pipes
- Sign Replacement – Upgrades, New
- Markings and Markers

Project Limits: U.S. 15 Louisa Co.; From Sheetz intersection to Louisa/Orange County line (From state mile post 121.30 to 131.92)

Timeframe: Advertise April 2024; construction complete November 2025



Operations Initiatives: ITTF Pilot Project

3 corridors in Culpeper District are being considered for a pilot project using Innovation and Technology Transportation Funding (ITTF).

- **U.S. 250 (Ivy Road) west of Charlottesville: 2.8-mile section with 8 existing, coordinated traffic signals**
- **U.S. 29 in Madison County: 3.9-mile section around the Town of Madison with 5 existing, coordinated signals**
- **Route 3 in Orange County: 4-mile section in eastern Orange with 4 traffic signals. This road carries heavy volumes of commuter traffic between Culpeper and Fredericksburg.**

The corridors carry significant traffic volumes, including daily commuter traffic, and have a high crash history.

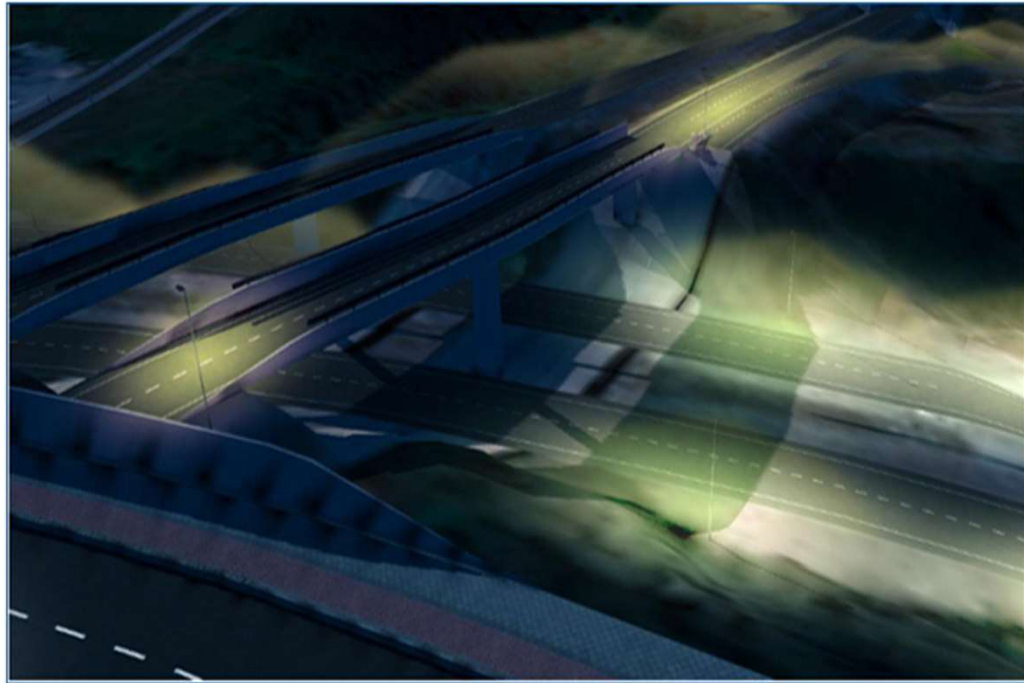
The pilot would purchase and install detection equipment that will allow development of updated signal timing plans and enhance collection of data for Automated Traffic Signal Performance Metrics (ATSPM) for the corridor signals.

District Operations is also investigating the potential for using LIDAR for detection and data collection and AI processors to be used in conjunction with the technology.

Operations Initiatives: Interstate 64

Several improvement projects on Interstate 64 at Afton Mountain:

- Additional changeable message boards to supplement the existing signs from Afton Mountain east to Charlottesville
- Upgrades to the fog light system near the top of the mountain
- Interchange lighting at exit 99 at the summit of Afton Mountain



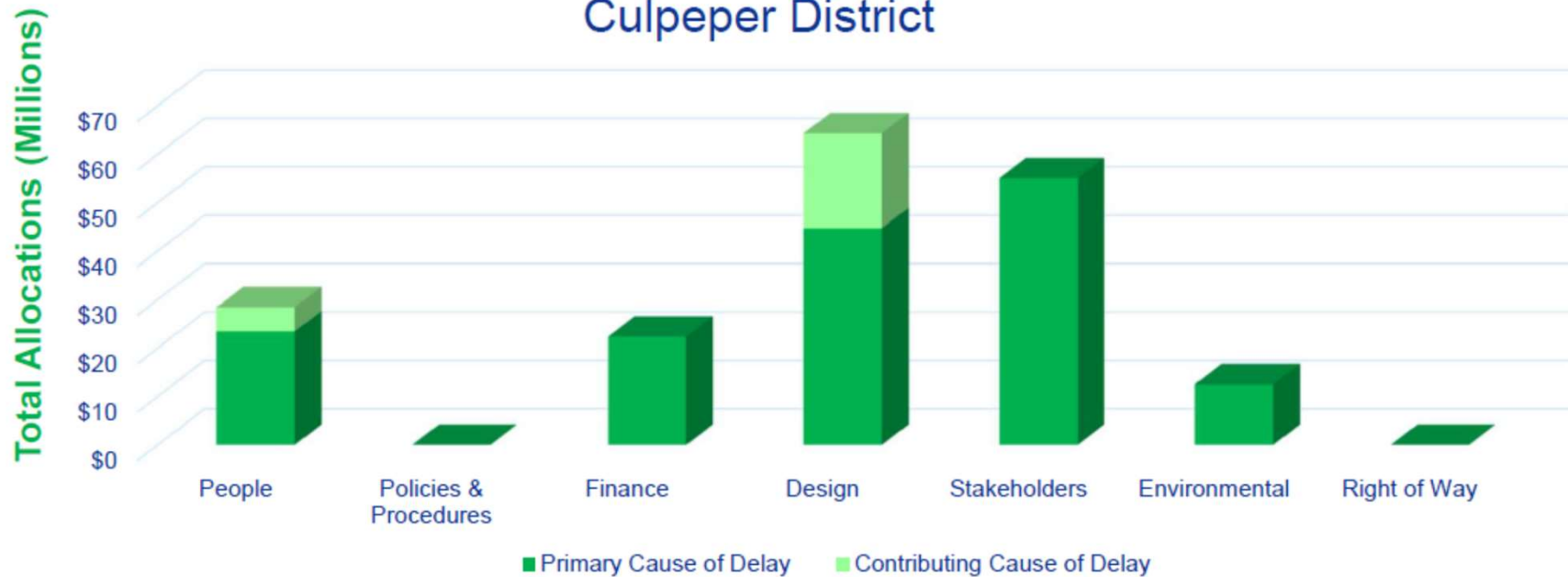
Rendering of proposed lighting at I-64 exit 99, Afton Mountain

Project Development Drivers

- ❖ People
- ❖ Policies & Procedures
- ❖ Finance
- ❖ Design
- ❖ Stakeholders
- ❖ Environmental
- ❖ Right of Way

Project Development Issues Causing Schedule Delays

Primary & Contributing Causes of Delays on
VDOT Administered Projects
Culpeper District



Project Development Drivers

Design

- Consultant Design
- In House Design
- Survey
- Design Criteria
- CADD

Project Development Issues Causing Schedule Delays

