



Welcome!

ASHE Potomac
October Meeting 2023
w/VDOT NOVA Leadership



Thank You Gold Sponsors!





Membership Renewals →



Gold Sponsor Renewals →





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Director (PDH)
Sadie Fahoul
EXP U.S. Services Inc



PDH for Tonight's Meeting



Scan the QR code with your mobile device
to fill out the PDH Form electronically!



Upcoming Events

- Tuesday, November 7th – Virginia Passenger Rail Authority (VPRA)
- Saturday, Nov. 4th - Young Member Event: Hike and Brewery
- Tuesday, December 12th – Holiday Party
- Wednesday, February 7th – Arlington County



WELCOME 2023 ASHE-POTOMAC CHAPTER

Northern Virginia District

| John Lynch, PE
District Engineer

October 2023

VDOT Northern Virginia Megaprojects Update

ASHE

Michelle Shropshire, P.E., DBIA, Northern Virginia
Megaprojects Acting Director
Virginia Department of Transportation

October 10, 2023

66 Express Lanes Opening

Express Lanes opened ahead of schedule in 2022

- **First 9 miles opened Sept. 12**
- **Remaining 13 miles opened Nov. 22**

Ribbon cutting held on Nov. 29



66 Express Lanes Performance and Usage

Mobility for Millions

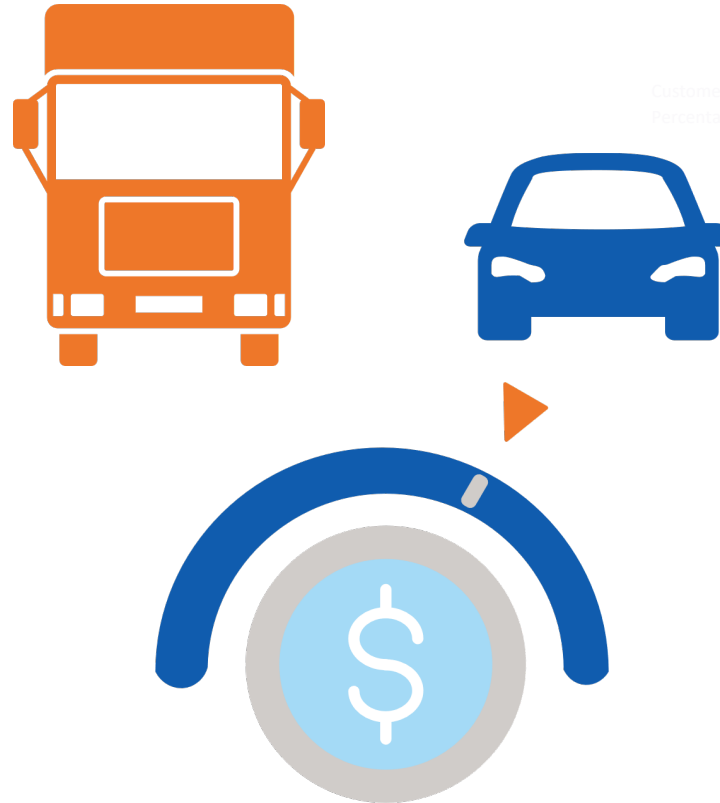
~1M Express Lane
trips/month

The 66 Express
OTB accommodates over 1M trips
every month.

Reasonable Pricing

80% of drivers pay under \$40
bill/ month

Only 20% of 66 Express OTB users
have a monthly bill over \$40.



Large User Base

>350k Vehicles

Over 350k unique vehicles have used
the 66 Express OTB as of July 2023

Affordable Option for All

\$30 bill/ month

On average, a light customer
pays about \$30/month using
the 66 Express OTB

66 Express Lanes Performance - Transit and Carpooling



HOV3+ and motorcycles
travel toll-free

Average 7,000 HOV trips/day in May
2023



Bus transit travel
toll free

An average of 1,200 transit trips (Fairfax Connector and Omniride/PRTC) benefit from free trips in 66 Express OTB every workday



Annual funding for enhanced
transit in I-66 corridor

\$800 million over the concession term, paid out annually to support additional transit in corridor



Schools benefit from safe
travel option

23 Fairfax County Public School bus routes using 66 Express OTB, safely transporting 400 students twice a day

495 NEXT Construction Update

Under construction, on track to be completed in 2026

Current Activities Include:

- Utility relocation work, grading, drainage installation and retaining wall construction
- Progressing on new Beltway bridges at Live Oak Drive, Georgetown Pike and Old Dominion Drive
- Construction underway on new and replacement noise walls

Major Milestones:

- **Late 2024/Early 2025:** Complete construction of new outside lanes
- **Mid-2025:** Complete installation of new noise walls
- **Late 2025:** Complete construction of new inside lanes and open new Express Lanes
- **Early 2026:** Complete new bike-pedestrian trail

Footprint of the wider future Beltway as viewed from the Old Dominion Drive overpass looking north.



Building new noise wall along northbound I-495 between Old Dominion Drive and Georgetown Pike.



95 Express Lanes Opitz Boulevard Ramp Project

- \$69.7 million project under design
- Constructing south-facing, reversible ramp from Opitz Boulevard bridge to 95 Express Lanes
- Provide sidewalk along the north side of Opitz Boulevard bridge
- Relocate existing slip ramp from southbound I-95 general purpose lanes to south of Dale Boulevard
- VDOT working with Transurban to implement
- Construction began October 2022
- Ramp scheduled to open summer/fall 2024; final project completion late 2024



Rendering of Proposed Improvements



I-495 Southside Express Lanes Study

- Environmental study to potentially extend Express Lanes system on southern section of I-495 (Capital Beltway)
- Study Area: 11 miles of the southern section of I-495 (Capital Beltway) Springfield interchange from (I-95/I-395/I-495) in Fairfax County, VA to the MD 210 interchange in Prince George's County, MD
- Coordinating with Federal Highway Administration (FHWA), Maryland Department of Transportation State Highway Administration (MDOT SHA) and other state and local agencies in VA and MD



I-95 Bi-Directional Study

- VDOT, with Transurban, currently conducting feasibility study to add capacity and 24/7 reversible tolling on 95 Express Lanes between Franconia-Springfield Parkway and Opitz Boulevard (or points south)
- Next steps:
 - Initiate environmental study
 - Establish preliminary scope, schedule, budget
 - Coordinate project development
 - Initiate outreach



NOVA DISTRICT TRAFFIC OPERATIONS FALL UPDATE

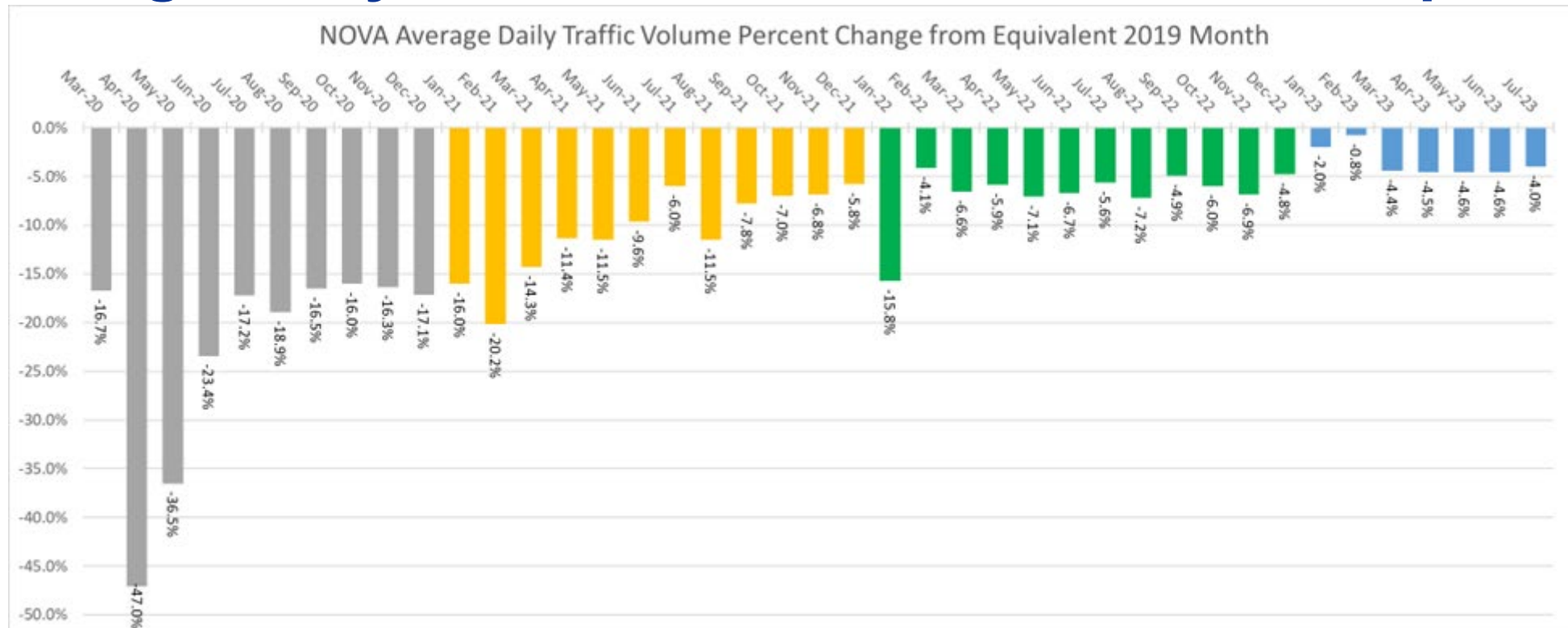
 Kamal Suliman
District Traffic Operations Director

October 10, 2023

Traffic Volume Trends (March 2020 thru July 2023)

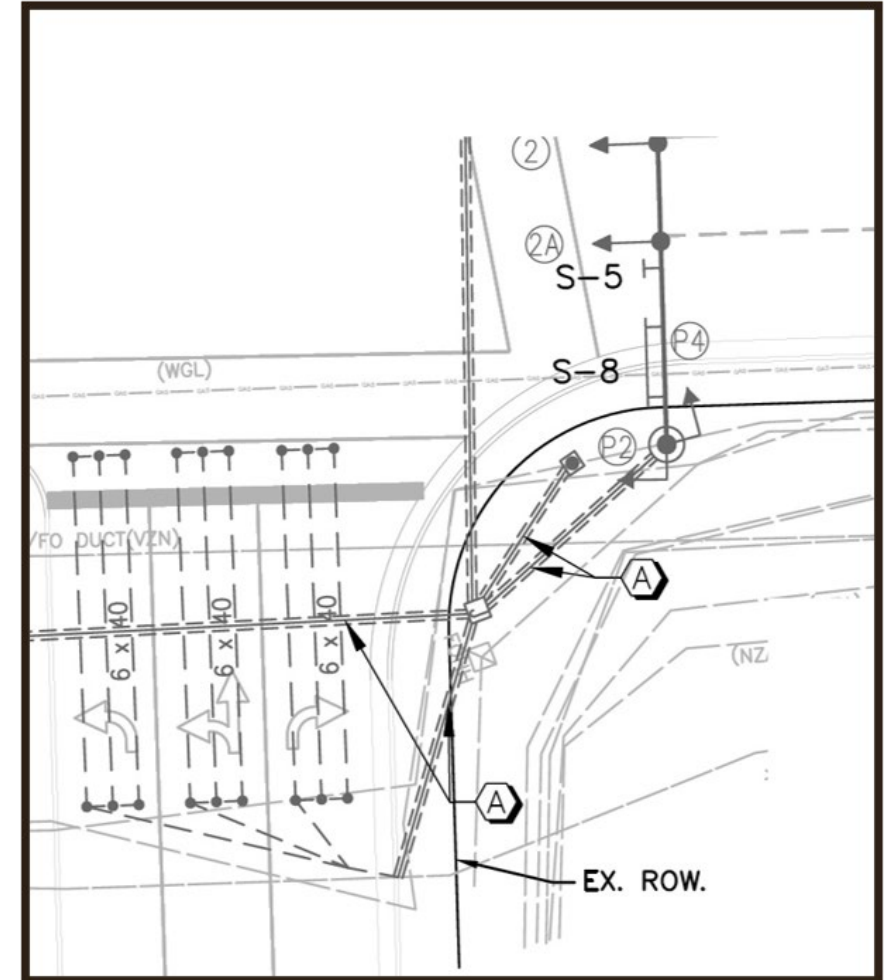
Overall traffic patterns have steadily stayed as a new normal condition since 2022

On average, daily traffic volume about 4.5% below pre-2020



Traffic Signal Plan Review – Top Design Issues

1. Final Quality Control
2. Alignment with Other Disciplines
3. Proposed Equipment and Construction within R/W
4. Signal Pole/Arm Layout and Signal Head Alignment
5. Current Standards and Design Practices
6. Lane Use Signs



Traffic Signal Plan Review – Top Design Issues (con't)

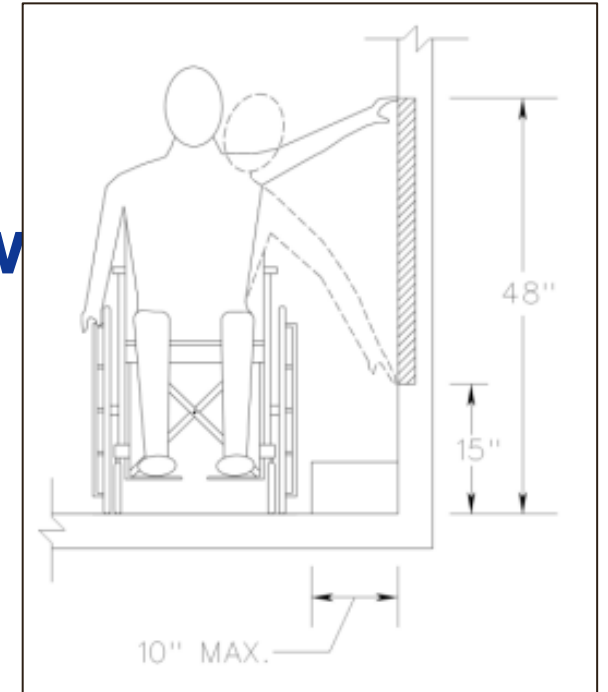
7. Proper Controller Cabinet Location and Orientation

8. Proposed Stop Line and Geometry for New Signal Control

9. Mast Arm Loadings

10. Consistent Signal Operations Charts

11. Pedestrian Maximum Reach Range



Refer to the Road Design Manual
Appendix A(1)

Change & Clearance Interval Documentation

Reminder: Follow TE Memo requirements!

Virginia Highway Safety Improvement Program (VHSIP)

NoVA Systemic Investment \$67,121,826

Progress as of 8/31/2023



Phase I

Phase II

Systemic Safety Improvement	Budget	Locations	CTB Planned PE completion	CTB Planned CN completion	CN % Complete
Flashing Yellow Arrow (FYA)	\$6,791,677	479	2020	2021	100%
High-Visibility Backplates (HVSB)	\$8,708,468	1011	2020	2021	100%
Signalized Pedestrian Crossings	\$21,150,000	300	2023	2025	43%
Unsignalized Intersections	\$1,670,254	134	2022	2024	57%
Curve Warning Delineation	\$902,052	101	2022	2024	54%
Centerline Rumble Strip – Primaries	\$271,295	12.07 mi	2023	2030	57%
Edgeline Rumble Strip – Primaries	\$250,000	7.92 mi	2023	2030	95%
Expanded Pedestrian Crossings	\$16,095,760	160	06/2025	12/2028	0%
Expanded Flashing Yellow Arrow	\$9,319,816	128	06/2024	12/2025	0%
2-Lane Rural Roads	\$1,962,504	26 mi	06/2024	06/2028	0%

Virginia Highway Safety Improvement Program (VHSIP)

Phase I Systemic Safety Improvements

Progress as of 8/31/2023






LIFE TO DATE

Systemic Safety Improvement	PE			CN		TOTAL	CN % Complete
	Not Started	Underway	Complete	Underway	Complete		
Signalized Pedestrian Crossings	0	8	126	58	161	353	45%
Unsignalized Intersections	0	0	1	58	85	144	59%
Curve Warning Delineation	0	0	0	46	98	144	68%
Centerline Rumble Strip – Primary Roadways	0	0	5.12 mi	0	14.58 mi	19.71 mi	74%
Edgeline Rumble Strip – Primary Roadways	0	0	0.37 mi	0	10.87 mi	11.24 mi	97%







Transparent tracking and reporting: <https://arcg.is/1f895n>

VHSIP Expanded Program (FY 2022-2027)

VDOT Systemic Initiatives Phase II

-  Expanded Flashing Yellow Arrow (FYA)
-  Expanded Pedestrian Crossings
-  Two Lane Rural Roads

Local Systemic Initiatives

-  High Visibility Signal Backplates (HVSB)
-  Expanded Flashing Yellow Arrow (FYA)
-  Pedestrian Crossings
-  Road Diets
-  Unsignalized Intersections
-  Curve Delineation

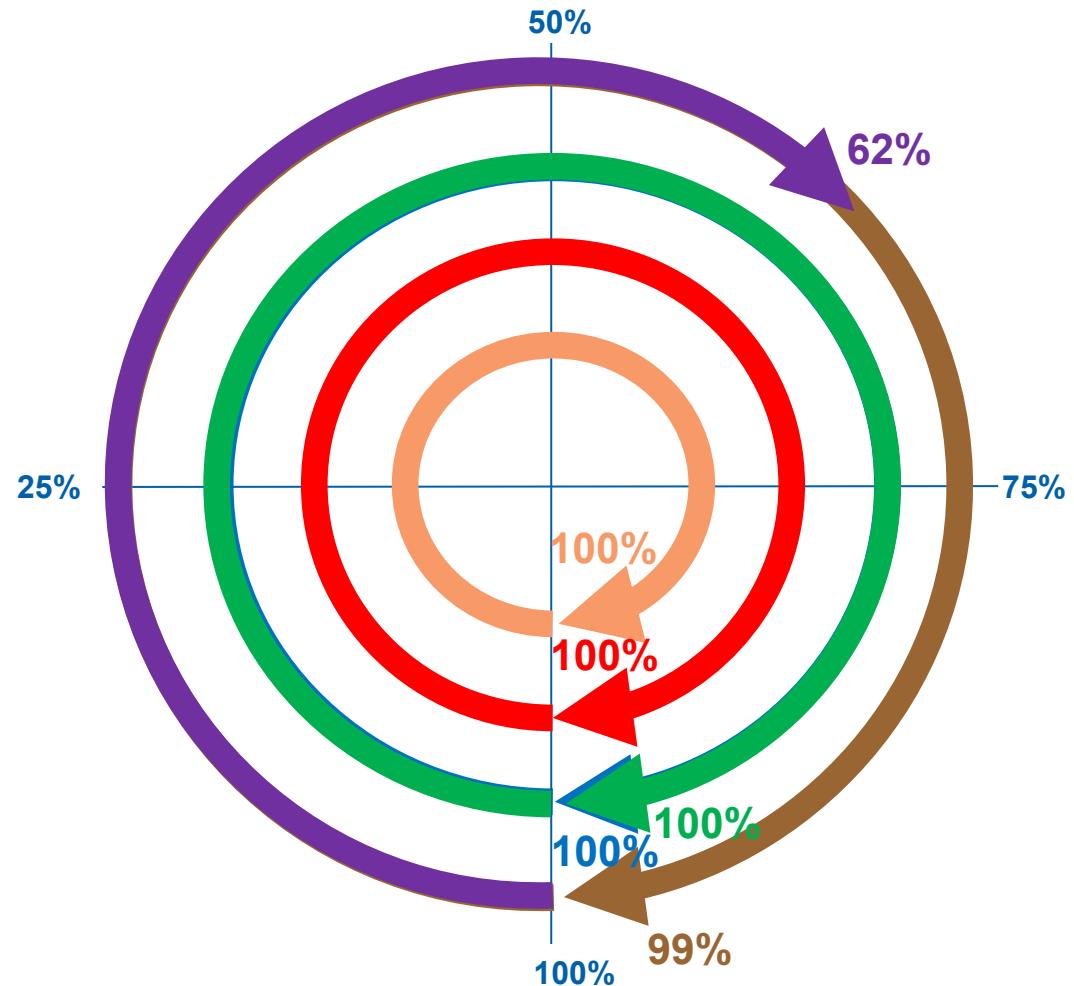
Spot Projects



NoVA District Signal System Initiatives Overview (as of 7/28/2023)

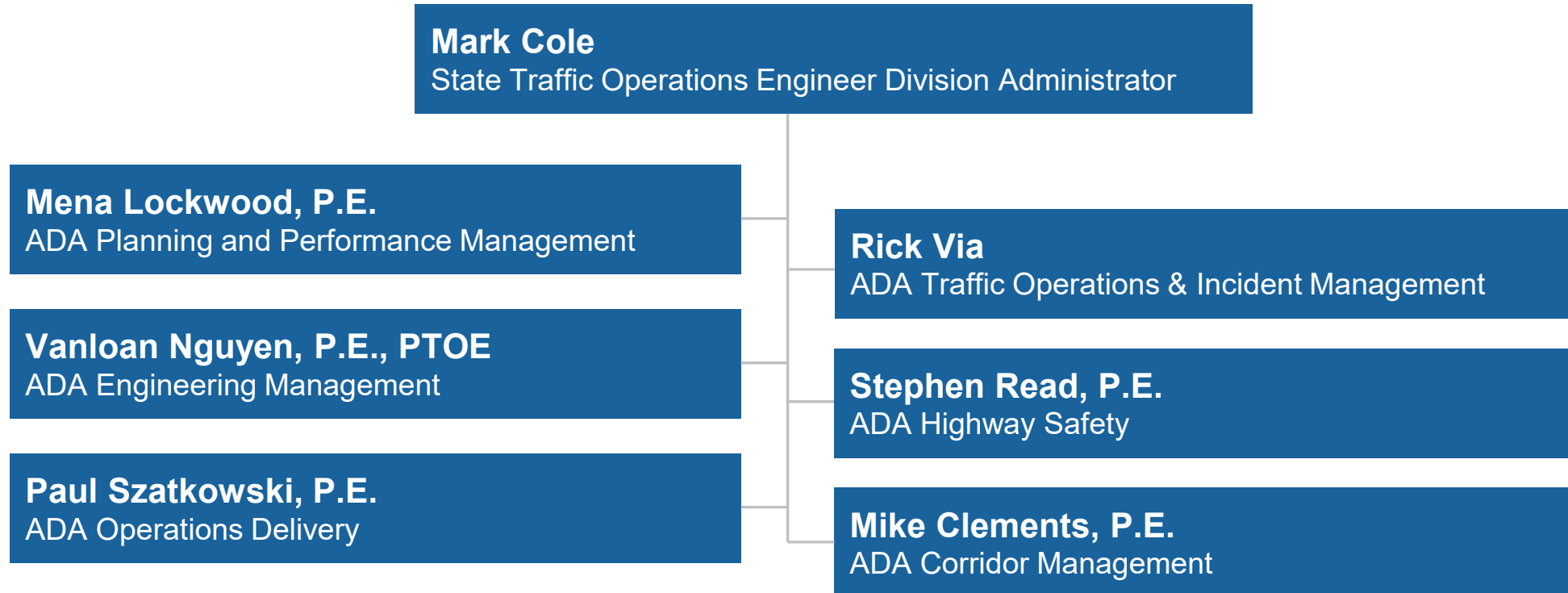
1,493 Traffic Signals in NoVA District

- High Speed Communications (1493)
- ATC / D4 Migration (1493)
- KITS Configured (1493)
- KITS Live (1493)
- ATSPM Configured (1472)
- ATSPM Active (924)



Central Office Traffic Operations Division (TOD)

Established in Fall 2022



Traffic Operations Division I&IMs

Website for all I&IMs that are under the purview of TOD:

https://www.virginiadot.org/business/traffic_engineering_memoranda.asp

New or Recently Revised I&IMs:

Number	Subject	Last Revised
TE-348	Traffic Signal Controller Actuated Warning Beacons (under revision, reference: TE-348 email)	June 2023/ May 2007
TOD-397	Virginia Intersection and Interchange Control Assessment Program (iCAP) Policy and Guidance	July 2023
TOD-398	Stop for Pedestrian Signs	July 2023
TOD-399	Design, Location and Installation Criteria of Stop for Pedestrians and Yield to Pedestrians fine signs for use in certain localities	July 2023
TOD-23-03	Vehicle Operations and Traffic Incident Response	August 2023
TOD-20-02.2	Two-Way Radio Communications	June 2023
TOD-13-03.4	Changeable Message Signs (CMS) Usage	June 2023

Operations Technology Design

- **Road & Bridge Specifications, Division VIII**
- **Security (Sec 501)**
- **Software interoperability (OpenTMS)**
- **Standard compatible hardware**
- **Preferred equipment currently in use**
- **Preapproved equipment list**



Operations Technology Construction

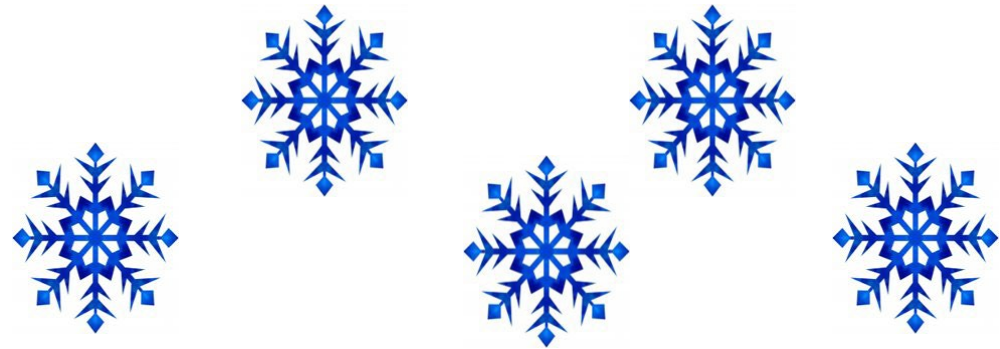
Coverage During Construction

- **Temporary Devices**
 - **Portable**
 - **Relocate**
- **Communication**
 - **Wireless**
 - **Temporary**
- **Power**
 - **Solar**
 - **Temporary**



NOVA DISTRICT MAINTENANCE FALL UPDATE

ASHE Potomac



Lauren Mollerup, P.E., C.C.M.

| Northern Virginia District
Maintenance Engineer

October 10, 2023

Northern Virginia District - Maintenance

Arlington, Fairfax, Loudoun, and Prince William

18 Maintenance Headquarters

- **Arlington 1**
- **Fairfax 9**
- **Loudoun 4**
- **Prince William 4**

- **About 400 Employees**
- **4,500 Vehicles – 97% of fleet is contracted**



Maintenance and Operations



Maintenance and Operations

\$2.1 billion annually

Locality Maintenance Payments
\$450 million annually

VDOT Maintenance and Operations Program
\$1.7 billion annually

Maintenance Activities—80%

Pavements

\$420
million

128,500 miles



Bridges

\$215
million

21,100 (VDOT 19,500)



Roadside

\$190
million



Routine Maintenance

Traffic Items

\$150
million



Other Maintenance

\$385
million



Operations Activities—20%

Special Structures Operations

\$50
million



25

Ferries

\$15
million



7

Traffic Operations Centers & SSP

\$95
million



5

Snow and Ice Removal

\$220
million



Distribution of Work

State Force Work

37%

Team of

5,000

Outsourced Work

63%

FY24 Maintenance and Operations Budget

Bridges	\$32.8M
Emergency & Incident Mgmt	\$73M
Facility & Other	\$29.7M
Pavement	\$103.4M
Routine Maintenance	\$54M
Traffic & Safety	\$34.2M
VITAL	\$0.5M
Total NOVA M&O Budget FY24	\$327.6M

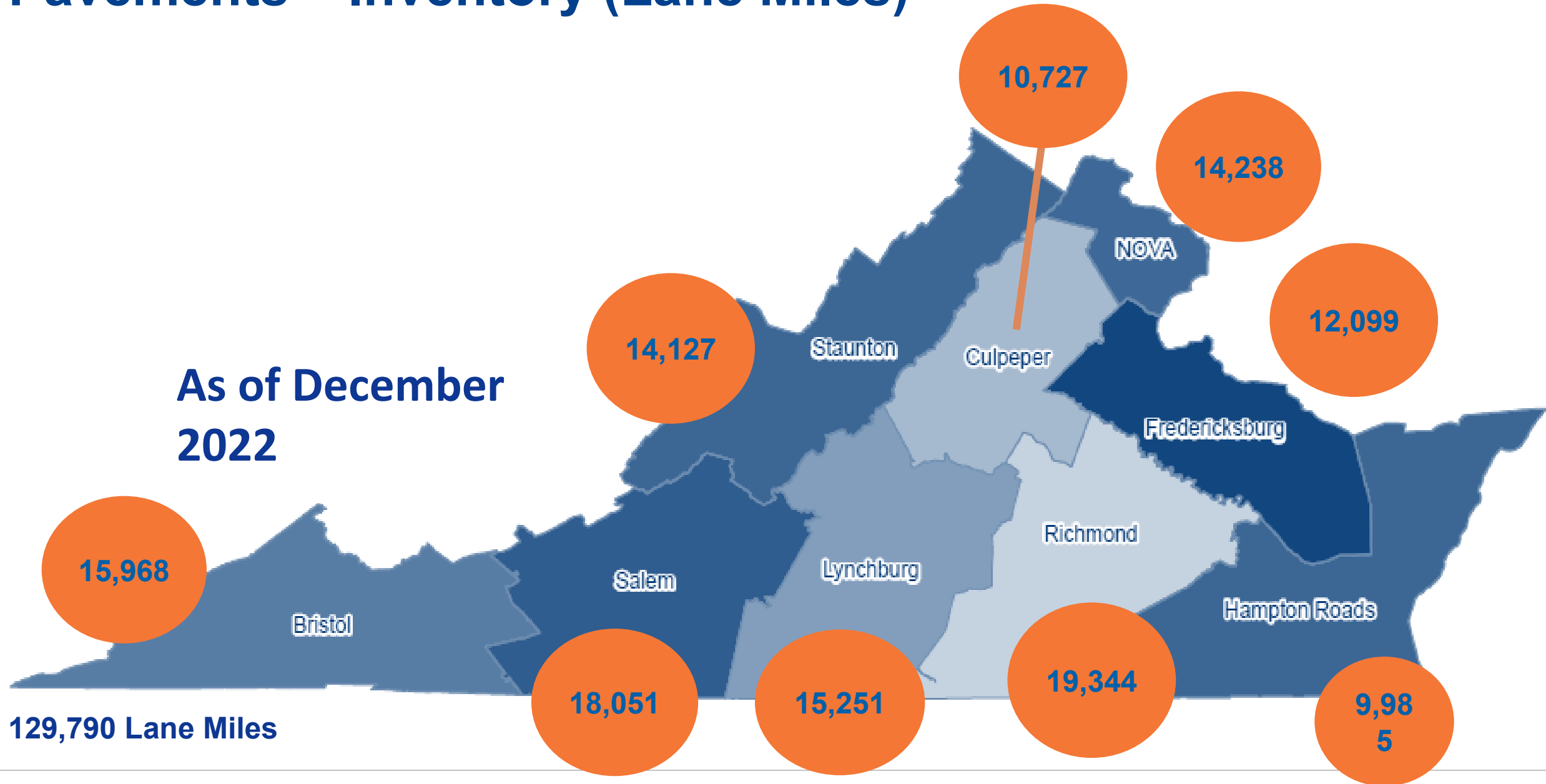
VDOT Maintenance

- Roadways and Bridges
- Ancillary Structures
- Guardrails
- Potholes
- Sweeping
- Mowing
- Litter Pick-up
- Signs
- Sound walls
- Sidewalks
- Equipment
- Emergency Response



Pavements – Inventory (Lane Miles)

As of December
2022



129,790 Lane Miles

2023 PAVING SUMMARY

In 2023, we have 27 contracts underway

- 2 Interstate Plant Mix
- 3 Primary Plant Mix, 1 Primary Latex and
- 17 Secondary Plant Mix, 2 Secondary Latex/ 2 Secondary Slurry

2023 Paving Summary

System	Lane Mile	Awarded \$	Total Contracts
Interstate	25	7.6	2
Primary	98	15.6	4
Secondary	831	97.1	21
PE UPC		3	
Total	954	123.3	27

2024 DRAFT PAVING SUMMARY

In 2024, we will advertise 29 contracts

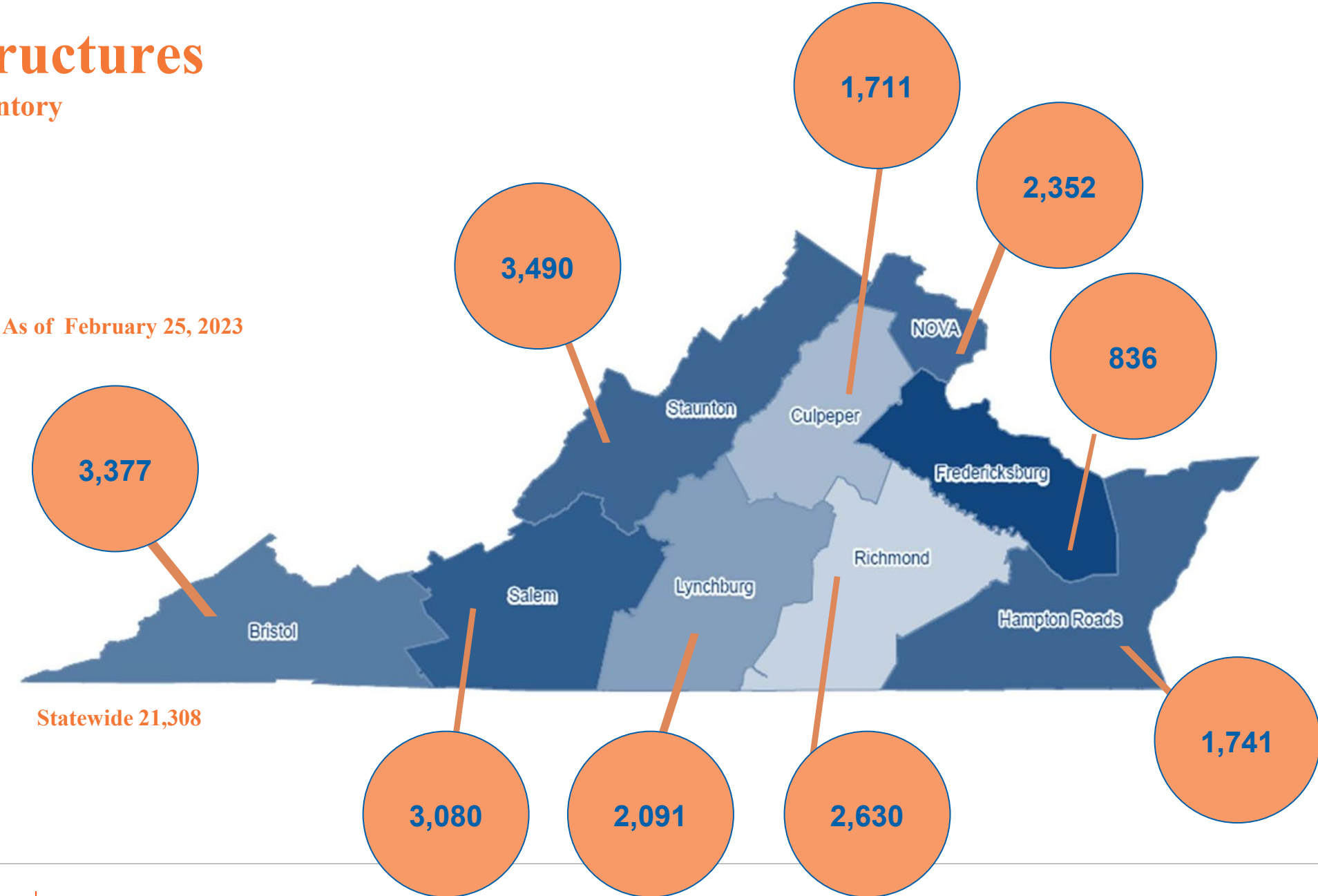
- 2 Interstate Plant Mix
- 5 Primary Plant Mix, 1 Primary Latex and 1 Primary Concrete Patching
- 16 Secondary Plant Mix, 2 Secondary Latex/ 2 Secondary Slurry

2024 Paving Summary

System	Lane Mile	Total Contracts
Interstate	44	2
Primary	178	7
Secondary	629	20
PE UPC		
Total	851	29

Structures

Inventory



Bridge Projects Summary

Recently Completed

- **Tysons/Old Meadow Road pedestrian bridge over I-495**
- **John G. Lewis Memorial Historic Truss Bridge Rehabilitation**
- **Route 29NB over Cub Run Bridge Superstructure Replacement**
- **Piggott Bottom Rd over Catoctin Creek Bridge Replacement**
- **Bridge Re-coating (3 Bridges)**
- **Hunter Mill Rd over Colvin Run Bridge Replacement**

Bridge Projects Summary

Under Construction

- **Route 1 SBL over Route 110 and I-395 (NBL & HOV) Bridge Repairs**
- **Route 7 and George Washington Boulevard Overpass**
- **Route 29 Widening**
- **Boundary Channel Drive at I-395**
- **Rosslyn Tunnel rehabilitation**
- **I-95 Southbound Auxiliary Lane**
- **I-95 over Powells Creek Bridge rehabilitation**
- **21st ST over I-66 Bridge Rehabilitation**
- **South Abingdon Street/34th Street over I-395 Bridge**
- **Shirlington Circle South Rotary Bridge**

In Design

- **Richmond Highway Corridor Improvements**
- **I-95 and Route 123 interchange improvements**

SNOW REMOVAL

Lanes miles to plow – 14,198

- **Interstate: 802**
- **Primary: 1,687**
- **Secondary: 11,634**

- **25 Salt Domes – largest dome at I-495 and Van Dorn holds 33,000 tons of salt**

- **Materials on Hand at start of season**

- **Salt: 120,000 tons**
- **Brine: 250,000 gallons**
- **Sand: 25,000 tons**



SNOW REMOVAL - Northern Virginia

Mobilization

We monitor the forecast closely and mobilize crews and resources.

12-18 hours prior to a small event
18-24 hours prior to a large event

Demobilization

Demobilization takes hours. Trucks must be offloaded of materials and spreaders removed.



SNOW FACTS 2022-23

NORTHERN VIRGINIA DISTRICT SNOW FACTS 2022-23



MOBILIZATION

We monitor the forecast closely and mobilize crews and resources. Trucks report, load, and deploy.

12-18 HOURS Before a smaller event

18-24 HOURS Before a large storm

If 2" of snow is forecast, residents may see trucks staged in neighborhoods.



PIECES OF EQUIPMENT: 3,500

CLEARANCE GOALS (AFTER STORM ENDS)

6"+: 72 hours

4-6": 48 hours

2-4": 24 hours

Crews start treating once precipitation starts. They start plowing once 2" of snow has accumulated.

18 MAINTENANCE AREA HEADQUARTERS

Arlington: 1 • Fairfax: 9 • Loudoun: 4 • Prince William: 4

25 Salt domes and sheds

Our largest dome, at I-495 and Van Dorn Street in Alexandria, holds **31,000** tons of salt.



MATERIALS ON HAND

BRINE 250,000 GALLONS

SALT 120,000 TONS

SAND 25,000 TONS



14,198 LANE MILES TO PLOW

Interstate: 802

Primary: 1,687

Secondary: 11,634 (includes 17,246 subdivision streets)

Crews work interstates, major roads, and main subdivision roads in priority order.



ANTI-ICING

- Reduces bonding to asphalt and concrete
- Most effective during first hour of storm
- Performed if pavement temps are above 20° F and weather won't begin as rain

Depending upon the storm and the window of time, we may perform a partial or full anti-icing treatment of bridges, overpasses, elevated surfaces, primary and/or secondary roads.

? Did you know? Brine is a mix of 23% salt and 77% water. It is sprayed as a liquid that dries to create white "brine lines" on the pavement.

SNOW MAPS



In northern Virginia, roads are divided among 648 maps assigned to plow drivers. Interstates and high-volume roads are made passable, then bare pavement where possible. Neighborhood main roads are made passable, then remaining streets and cul-de-sacs.

WHAT DOES "PASSABLE" MEAN?



- In neighborhoods, an 8'-to-10' path for emergency vehicle access.
- Drivable with extreme caution, but is snow-packed and not curb-to-curb or to bare pavement.
- Crews will sand hills, curves and intersections to help with traction.

HOW YOU CAN HELP

- Monitor weather closely, as forecasts can improve or worsen quickly.
- Adjust commutes, telework, or avoid driving during a storm and after until road conditions improve.
- Park in driveways or on the same side of the street.
- Wait to shovel driveways until plows have come, as they will push some snow back.
- Have enough gas, wiper fluid, proper tires, medication, and an emergency car kit.
- Be patient: crews need time and room to work. While we do not clear sidewalks, crews are asked to be mindful, especially near schools. There is often limited room to pile snow in significant storms, to make roads passable. Residents and businesses are asked to clear near their properties. Check with your locality for ordinances.

TWITTER
Follow @vadotnova for the latest news, updates, photos, and information

511 VIRGINIA
Check traffic conditions before you travel at 511virginia.org

CUSTOMER SERVICE CENTER
Report road hazards at 800-4CR-ROAD (367-7628) or my.vdot.virginia.gov

VDOT PLOWS
Visit vdotplows.org for plow status and locations once 2" of snow has accumulated

EMERGENCY INFORMATION
See virginia.vdot.org/novaemergency for updates, FAQs, and other resources

STAY INFORMED 

Stay Informed



- [@vadotnova](https://twitter.com/vadotnova) on Twitter for updates, real-time conditions, safety messaging, and live ride-alongs
- virginiadot.org/novaemergency One-stop shop for links to news releases, Twitter feed, status updates, VDOT Plows, customer service, FAQs and other resources
- 511virginia.org for road conditions and traffic cameras
- vdotplows.org for status of subdivisions once 2" have fallen

Additional Resources: <https://bit.ly/vdotnovasnow>

Northern Virginia District - Maintenance



Thank you!

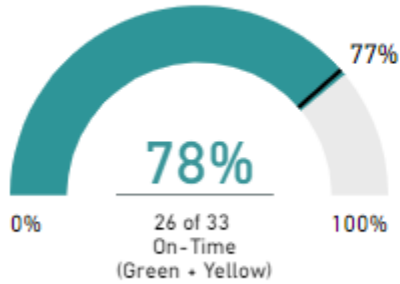
NOVA DISTRICT CONSTRUCTION UPDATE

Northern Virginia District

Nicholas J. Roper, PE
District Project Development Engineer

October 2023

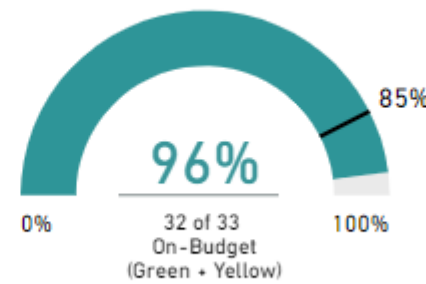
ON-TIME PERFORMANCE



Status	Completed		Total	
	Count	Award	Count	Award
R	7	\$36M	7	\$36M
G	26	\$96M	26	\$96M
Total	33	\$133M	33	\$133M

(Target : 77% of Projects Complete Delivery Phase On-Time)

ON-BUDGET PERFORMANCE



Status	Completed		Total	
	Count	Award	Count	Award
R	1	\$4M	1	\$4M
G	32	\$128M	32	\$128M
Total	33	\$133M	33	\$133M

(Target : 85% of Projects Complete Delivery Phase On-Budget)

33 Projects total

26 Delivered on time

7 Delivered late

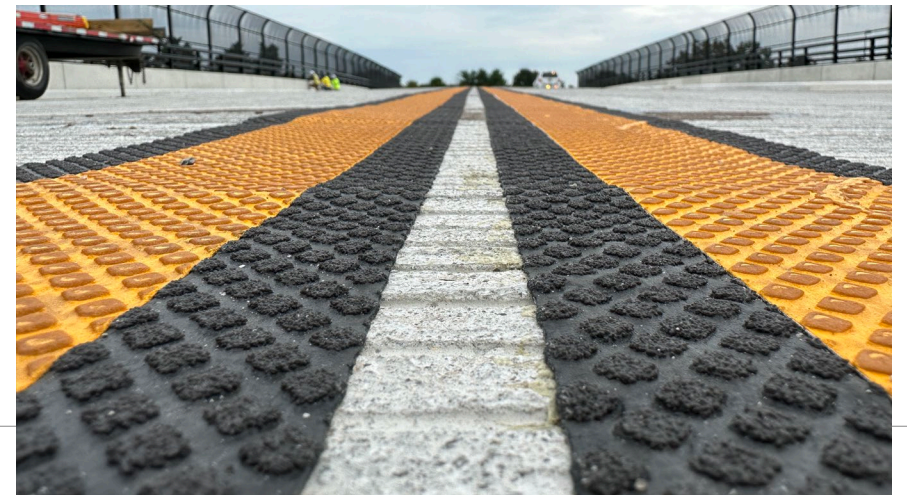
Predominately delayed because of procurement issues

Featherbed Bridge over Catoctin Creek



Hunter Mill Rd. over Colvin Run

George Washington Blvd. over Route 7



Route 7 Widening



Boundary Channel/I-495 Interchange



**Progressive Design Build
moving forward nicely!**

I-95 at Route 123 in Woodbridge

Completed Phase 1A

Validated GMP

Starting Phase 1B

Design to 60% complete

Reduce risk with borings, etc.

Move on to Phase 2 with GMP or
take exit ramp



2023 PROJECT DEVELOPMENT UPDATE

Northern Virginia District

Nicholas J. Roper, PE
District Project Development Engineer

October 2023

NOVA District Project Development Summary

Current Status

Administration	CY for Advertisement	No. of Projects	Construction Estimate	Total Project Estimate
VDOT 35% Projects 55% Value	2023	29	\$218.7M	\$233.9M
	2024	19	\$208.8	\$294.9M
	2025	9	\$39.7M	\$70.7M
	2026+	24	\$1B	\$1.5B
	TOTAL	81	\$1.47B	\$2.1B
Administration	CY for Advertisement	No. of Projects	Construction Estimate	Total Project Estimate
LAP 65% Projects 45% Value	2023	15	\$19.6M	\$23.8M
	2024	23	\$145.4M	\$206.9M
	2025	24	\$123.8M	\$164.4M
	2026+	90	\$916.2M	\$1.3B
	TOTAL	152	\$1.2B	\$1.7B
Grand TOTAL		233	\$2.67B	\$3.8B

Scheduled to be advertised through end of CY2024 . . .

48 projects with value of \$528.8M

86 projects with value of \$759.5M

38 projects with value of \$230.7M

Consulting Opportunities October 2023-December 2024

• Consultant procurements currently/soon underway

Admin	UPC	Description	Jurisdiction	Construction Estimate	Total Estimate	PE Start Date	Procurement
VDOT	119086	Arlington Blvd Safety Improvements	Arlington	\$18.3M	\$31.3M	June 22	PSP
	120777	Braddock and Old Lee Road Improvements	Fairfax	\$11.28M	\$19M	Sep 22	PSP
	T27749	#SMART24 ARLINGTON BLVD & MANCHESTER ST LEFT TURN LANE ENHANCEMENT	Arlington	\$3.02M	\$3.9M	Spring 2024	On Call
	123833	#SMART24 ROUTE 7 WIDENING (ROUTE 123 TO I-495)	Fairfax	\$44.1M	\$78.6M	Spring 2024	PSP
Local	121755	ARCOLA MILLS DRIVE - SEGMENT 1 WIDEN TO 4 LANES	Loudoun County	\$47.1M		Jun-24	Contact Locality
	121756	NORTHSTAR BOULEVARD WIDEN TO 4 LANES	Loudoun County	\$34.4M		Nov-24	
	121757	RYAN ROAD WIDEN TO FOUR LANES WITH SHARED USE PATHS	Loudoun County	\$30.6M		Jun-24	
	122978	SUNRISE VALLEY CYCLE TRACK INNOVATION TO HERNDON	Fairfax County	\$16.5M		May-24	

How to Do Business in Northern Virginia

- **VDOT Administered Projects – see Professional Services Procurement webpage at www.virginiadot.org**
- **Locally Administered Projects – contact localities**

Contracting Opportunities – VDOT Administered Projects October 2023-December 2024

ADMIN	UPC	JURISDICTION	DESCRIPTION	Construction Estimate	Advertisement Date
VDOT	107937	Fairfax County	RTE 286 (FAIRFAX COUNTY PARWAY) - WIDEN FROM 4 TO 6 LANES	\$90.8M	Jan-24
	121700	Arlington County	#BF - NOVA YEAR 2 STRUCT. RECOAT 3 STRUCTURES	\$7.5M	Jan-24
	118817	Loudoun County	#SGR21VB(FED ID 11288) BRDG REHAB - RTE 699 OVER W&OD TRAIL	\$2.2M	May-24
	121172	Loudoun County	RTE 606 (OLD OX RD) - SHARED USE PATH	\$4.6M	Feb-24
	121702	Arlington County	#BF - CLOSE JOINTS WITH MINOR REPAIRS ON 5 BRIDGES ON I-395	\$5.1M	Feb-24
	5559	Fairfax County	ROLLING ROAD - RTE 638 - WIDEN TO 4 LANES - PH II	\$43.4M	May-24
	117083	Fairfax County	POST FOREST DRIVE AND RANDOM HILLS ROAD SHARED USE PATHS	\$4.2M	Sep-24
	114103	Loudoun County	ROUTE 7 AND ROUTE 9 EASTBOUND RAMP EXTENSION	\$2.1M	Dec-24

Also

- Paving: 26 VDOT projects @ \$129.5M, Oct-Dec 23

Fairfax County Parkway

- Fairfax County Parkway is the District's "Main Effort" in late 2023-2024
- 3 separate contracts with \$292M in total construction
- All 3 contracts under construction in 2024



Phase 1

Popes Head Road and Shirley Gate Road Interchange

- \$89.2M; fully funded
- Advertised as design-bid-build in June 2023
- Low bid \$49M -- @ \$8M less than the design estimate
- Scheduled to be awarded in Oct 2024



Phase 2

Fairfax County Parkway Widening

Northern Segment (Approximately 4 miles)

- \$110.9M; fully funded
- Final design underway & right of way initiated
- Advertise as design-bid-build January 2024

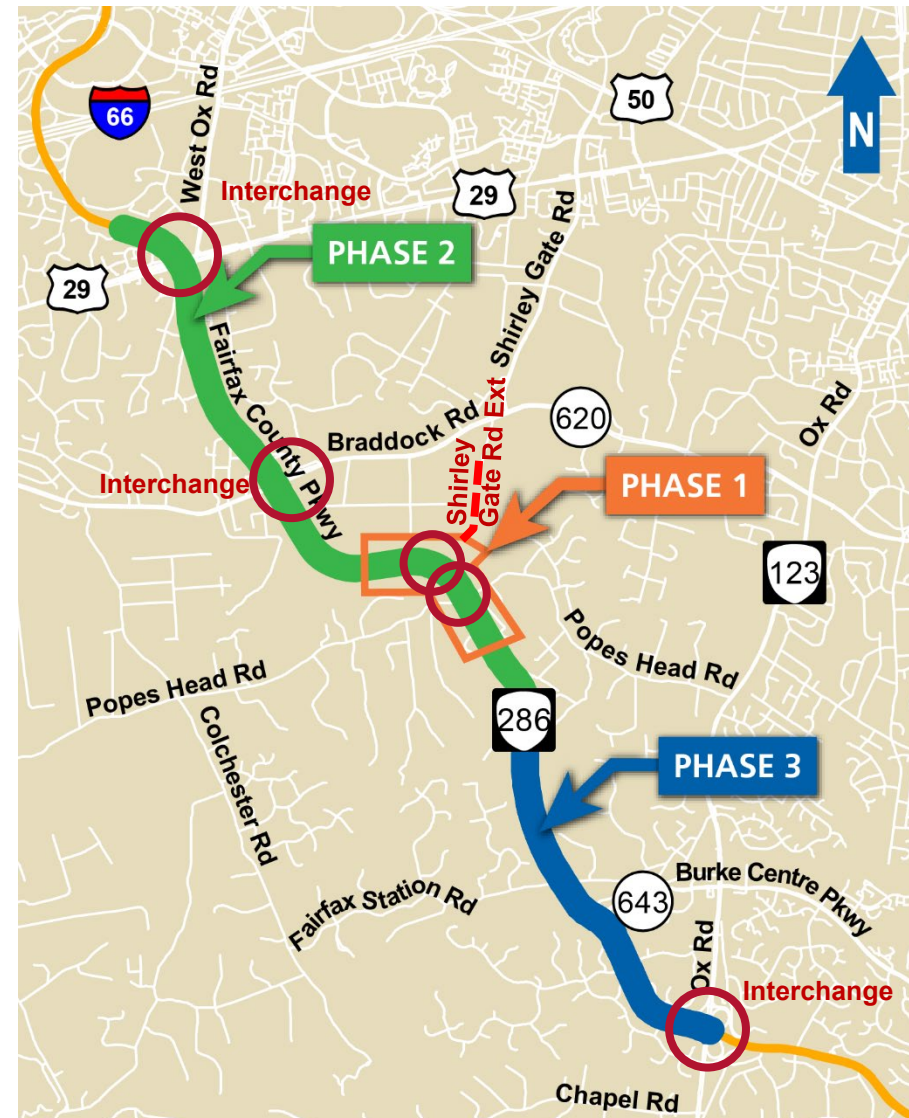


Phase 3

Fairfax County Parkway Widening

Southern Segment (Approximately 2 miles)

- \$128.8M for final design, right of way and construction
- Design-Build delivery
- RFP release scheduled for October 2023

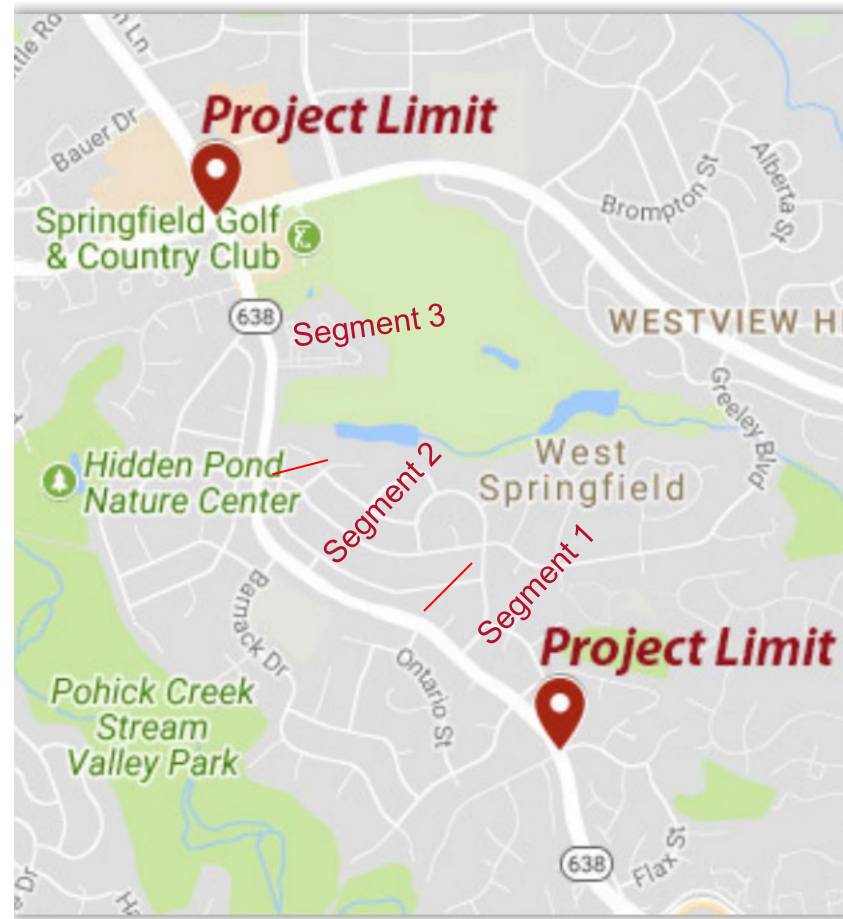


Interchange at Fairfax County Parkway, Popes Head Road and Shirley Gate Road

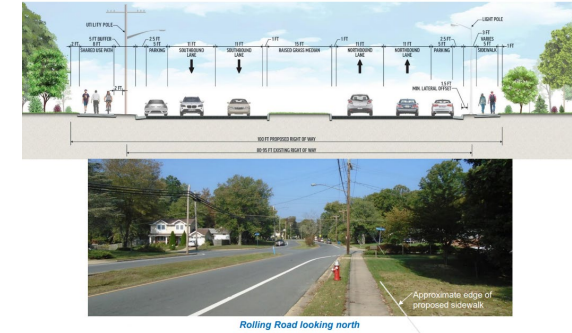


Rolling Road Widening from 2 to 4 lanes

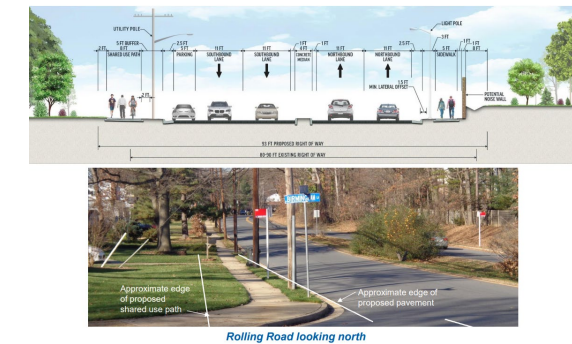
- Located between Old Keene Mill Rd and Fairfax County Parkway approximately 3 miles west of Springfield VA
- 1.4 mile widening from 2 to 4 lanes
- Dense residential neighborhood with 3 distinct design segments
- Oldest project in NOVA District ⇒ design began in 1986!!!
- Construction phase estimated at \$43 Million
- Advertisement scheduled in May 2024



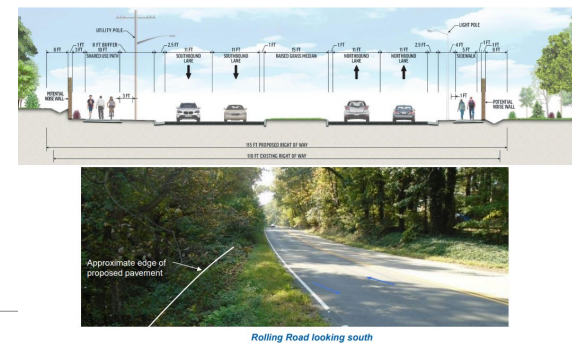
Segment One - Viola Street to Birmingham Lane



Segment Two - Birmingham Lane to Barnack Drive



Segment Three - Barnack Drive to Old Keene Mill Road



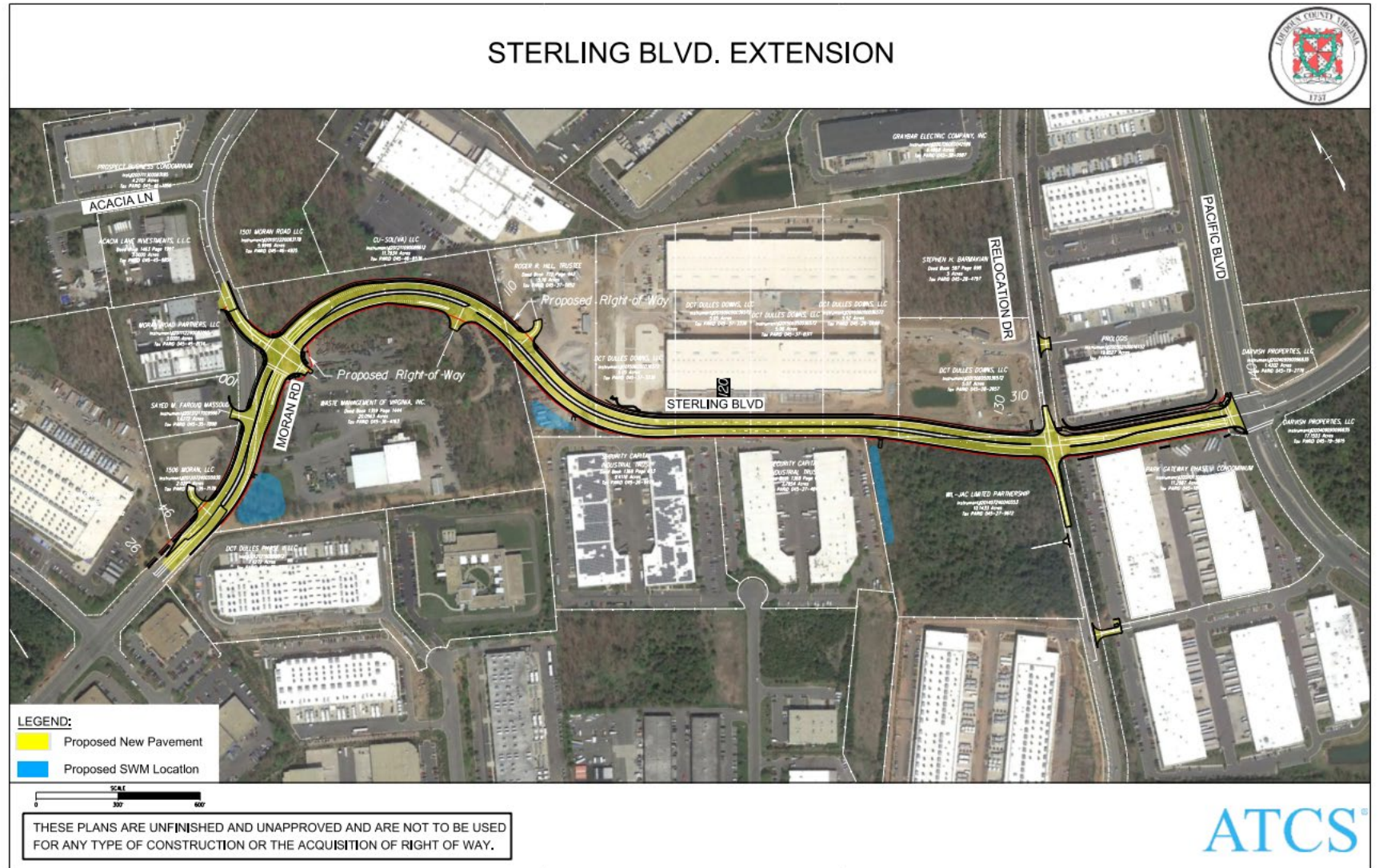
Contracting Opportunities - Locally Administered Projects

October 2023 - December 2024

ADMIN	UPC	JURISDICTION	DESCRIPTION	Construction Estimate (\$)	Advertisement
Local	109293	Manassas	#HB2.FY17 SUDLEY ROAD NB WIDENING	\$7.7M	Dec-23
	104292	Loudoun County	RTE 625 - WAXPOOL ROAD INTERSECTION IMPROVEMENT	\$7.29M	Mar-24
	105783	Loudoun County	STERLING BOULEVARD - 4 LANE CONSTRUCTION ON NEW ALIGNMENT	\$15.69M	Mar-24
	107962	Alexandria	RTE 7 - INTERSECTION IMPROVEMENTS AT BEAUREGARD, PHASE II	\$9.7M	May-24
	112816	Fairfax	GEORGE T. SNYDER TRAIL	\$12.79M	Jun-24
	109307	Alexandria	#HB2.FY17 TRAFFIC ADAPTIVE SIGNAL CONTROL	\$7.8M	Jun-24
	115545	Fairfax	#SMART20 - FAIRFAX BLVD/WARRICK AVE. INTERSECTION IMPROVE	\$6M	Jul-24
	111674	Loudoun County	#SMART18 - WAXPOOL RD/LOUDOUN CTY PKWY INTERSECTION IMPROV	\$11.8M	Dec-24

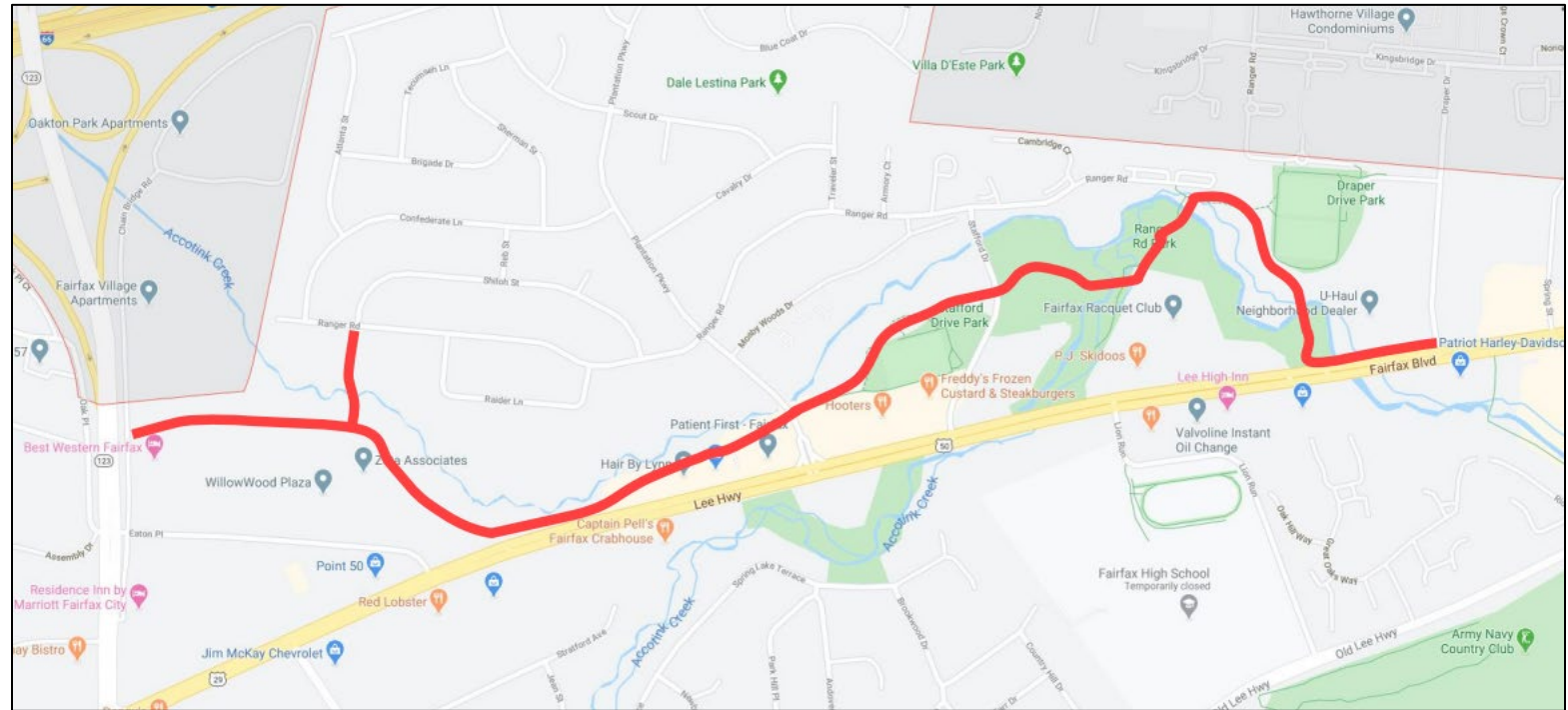
Sterling Boulevard (Loudoun County)

- Extension of Sterling Boulevard from Pacific Boulevard to its connection with Moran Road (Route 634)
- Four-lane urban major connector with divided median, associated turn lanes, a shared used path on one side of the road and a sidewalk on the other.
- Improved access to the Loudoun Gateway Metrorail Station and connect with Shellhorn Road.
- Construction estimate: \$15.7M



George T. Snyder Trail (City of Fairfax)

- Construction of 2 mile trail along Accotink Creek between Chain Bridge Road (Route 123) and Fairfax Boulevard (Route 50)
- The City intends to connect this trail to the shared use path along Route 123 built by the I-66 Outside the Beltway project
- Will provide Trail users the opportunity to travel east approximately 33 miles to Washington DC or west approximately 20 miles to Haymarket, Virginia along the I-66 corridor.
- I-66 Outside the Beltway Concessionaire Funding
- Construction Estimate: \$12.8M



IIJA in Northern Virginia

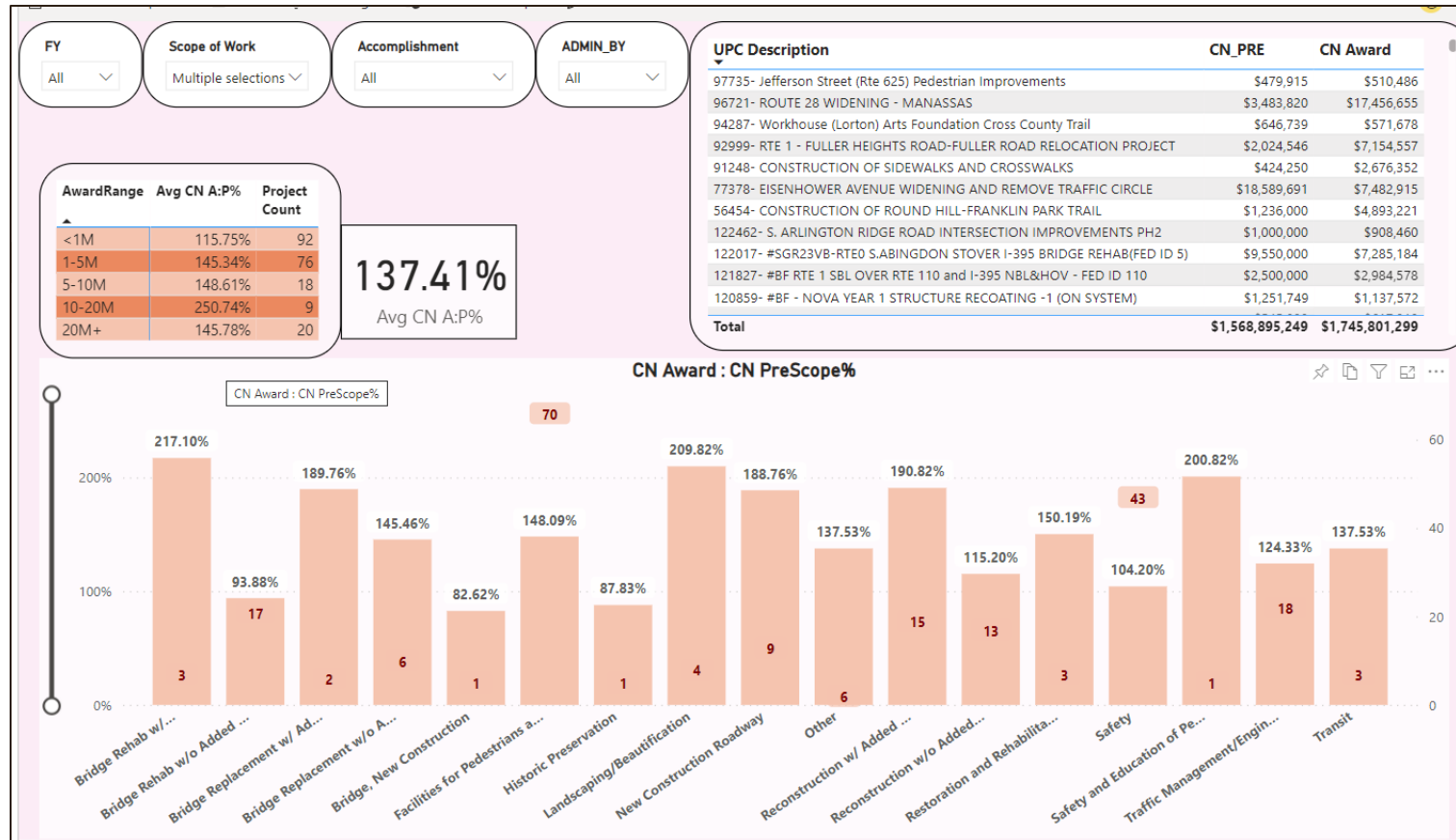
- **SMART SCALE: NOVA District received \$154.4 million for 13 projects**
- **Special programs have initiated high value projects that are currently in design**
 - **Interstate Operations and Enhancement**
 - \$76M I-95/Route 123 (Exit 160) Interchange Improvements; pilot Progressive Design-Build
 - **Highway Safety Improvement Program**
 - \$24.4M Route 28 (Centreville Rd) Innovative Intersections
 - \$9.6M Rollins Ford Road Roundabouts
- **Bridge Program**

Type of Project	Projects	Total Estimate	% Est
Painting	7	\$15,285,169	52%
Repair/Preserve	8	\$27,463,383	
Rehab/Replace	6	\$58,725,036	48%
Total	21	\$101,473,588	

71% {

Cost Estimating - Selecting Contingency

- Cost Estimating Manual provides guidance on selecting contingency from a range of values – how do you evaluate risk and choose?
- NOVA Power-Bi Report developed to assess historical performance to help identify risk associated with typical projects in the early stages of project development



NOVA District Award vs. Pre-scoping Estimate FY18-FY23

VDOT & LAP Projects

AwardRange	Avg CN A:P%	Project Count
<1M	115.75%	92
1-5M	145.34%	76
5-10M	148.61%	18
10-20M	250.74%	9
20M+	145.78%	20

137.41%
Avg CN A:P%



AwardRange	Avg CN A:P%	Project Count
<1M	92.32%	33
1-5M	135.28%	38
5-10M	105.05%	12
10-20M	238.30%	4
20M+	142.47%	7

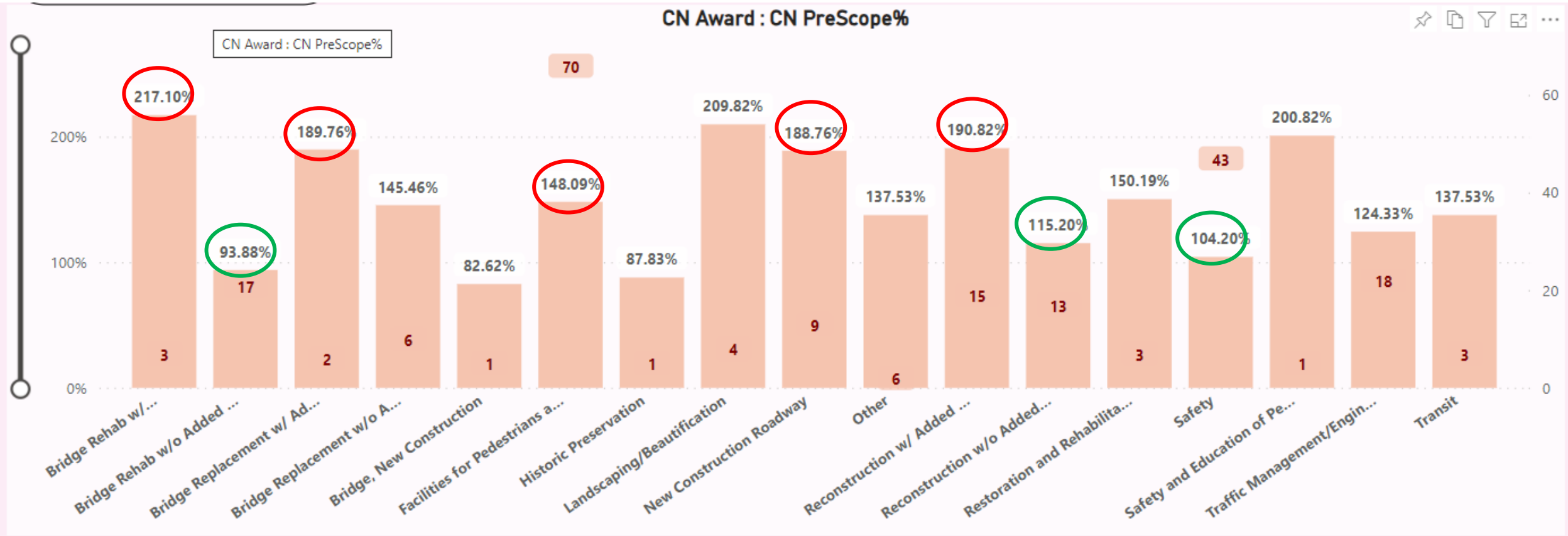
121.26%
Avg CN A:P%

AwardRange	Avg CN A:P%	Project Count
<1M	128.86%	59
1-5M	155.39%	38
5-10M	235.73%	6
10-20M	260.70%	5
20M+	147.56%	13

149.95%
Avg CN A:P%

- Data includes 215 projects awarded - VDOT & LAP
- CN = Total Construction Estimate, not just bid/award
- Conventional project development – no paving projects
- Good performance—115.75% —on projects with CN Award < \$1M
- Struggle with projects in the \$10M to \$20M range – 250.7%
- Estimate at Award for projects ≥ \$1M typically approaches 150% of the pre-scoping estimate
- But also need to look at the scope of work . . .

NOVA District Estimating Assessment FY18-FY23



Consider historical performance when selecting contingency!

