# **Thanks to our Event Sponsor**

# SAFETY SUPPLIES



#### HEAVY CONSTRUCTION CONTRACTORS ASSOCIATION DITCH DIGGERS DIALOGUE

Stephen C. Brich, P.E. Commissioner, Virginia Department of Transportation

**Bart Thrasher, P.E.** Chief Engineer, Virginia Department of Transportation

August 2020

# **VDOT + COVID-19: Our People**

# Safety is always top priority

Protect workforce and the public

# **Proactive planning**

- Monitor developments closely
- Planning started in January





# **VDOT + COVID-19: Our People**

# Nimble response

- Transitioned nearly 4,000 people to teleworking within two weeks
- Adapted to latest guidance from CDC, VDH
- Developed and implemented lessons learned in real time





# **VDOT + COVID-19: Our People**

## **Field crews**

- Social distancing @ facilities, vehicles, work sites
- Enhanced cleaning protocols
- Split shifts

# **Office staff**

- Virtual meetings, online collaboration
- Travel ban





# **VDOT + COVID-19: Funding impacts**

- At the start, Virginia and VDOT were in strong cash position
- Foresee impacts, but at this time, largely remain unknown
- General Assembly passed bill to allow Six-Year
   Improvement Program adoption until July 1, 2021 or sooner



# **VDOT + COVID-19: Funding impacts**

- Eliminated discretionary funding + implemented hiring freeze
- Construction and maintenance
  - Currently operating under FY2020 conditions
  - Continue to advertise and let projects and hire consultants
- Anticipate clarity following Aug. 18 Special Session
  - Guidance on funding projections for determination about Smart Scale, revenue-sharing and other funding programs



# **Business Plan Successes**





# **Performance Metrics: Project Development**

VDOT-Managed Projects On-Time On-Budget	Actual 79.4% 74.2%	Target 70% 74%
<b>Non-VDOT-Managed Projects</b>	S	
On-Time	<b>65.7%</b>	70%
On-Budget	<b>68.9%</b>	74%
All Projects		
On-Time	<b>70.9%</b>	70%
On-Budget	<b>70.9%</b>	74%

Preliminary On-Time and On-Budget Results for Fiscal Year 2020 as of July 28, 2020. Source: VDOT Dashboard



# **Performance Metrics: Contract Delivery**

<b>VDOT-Managed Contracts</b>	Actual	Target
<b>On-Time</b>	88.8%	77%
On-Budget	95.9%	85%
Non-VDOT-Managed Contract	ts	
<b>On-Time</b>	<b>52.2%</b>	77%
<b>On-Budget:</b>	87.3%	85%
All Contracts		
On-Time	73.0%	77%
On-Budget	92.2%	85%

Preliminary On-Time and On-Budget Results for Fiscal Year 2020 as of July 28, 2020. Source: VDOT Dashboard







# Maintain the infrastructure

# **Comprehensive Review**

Highway Maintenance and Operating Fund (HMOF) and State of Good Repair (SGR)

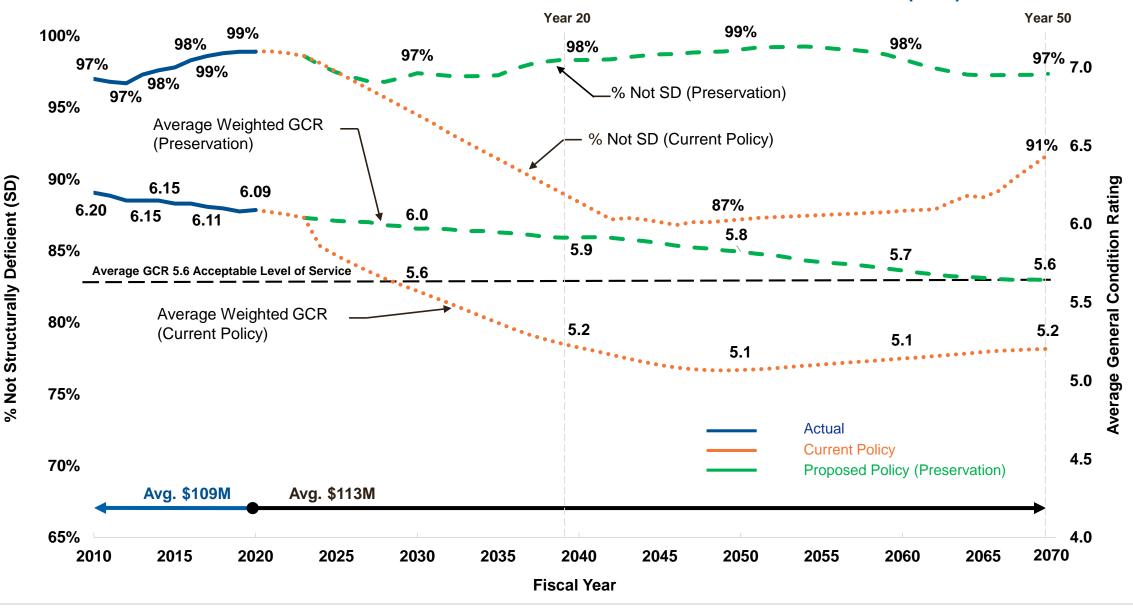
- 2019 Session of General Assembly HB 2784 The Robert O. Norris Bridge and Statewide Special Structures Fund
  - Comprehensive review
    - Current conditions and performance targets of pavements and bridges
    - Current investment strategies of HMOF and SGR Program
    - Recommend sustainable performance over 20-year period
    - Develop an investment strategy, including a plan to fund Special Structures

# Long Term Sustainability - Preservation Approach

- Focus on overall inventory condition
  - Not "Worst First"
- Current performance levels an additional \$122M/year to maintain
  - "Worst First" cost higher than proactive preservation
- Preservation approach maintains long term acceptable level of service
  - Uses existing funding level
  - Consistent with industry best practices Focus on balanced approach
- Remaining SDs are safe
  - Will continue to be monitored and programmed appropriately

### **Interstate Network – 50 Year Outlook**

2,404 Structures (12%) 26M SF Deck Area (28%)





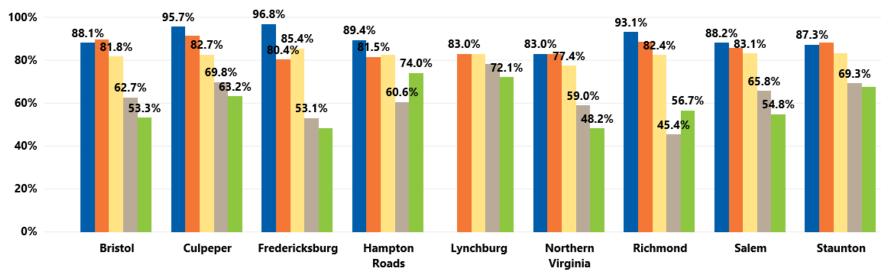
- All Future Expenditures are in 2019 Dollars
- Excludes Special Structures

# **Maintaining Infrastructure**

#### **Pavement Condition - 2020**

#### Percent of Pavement Rated Sufficient

Interstate % • Primary over 3500 % • Primary < 3500 % • Secondary Over 3500 % • Secondary < 3500 %</p>

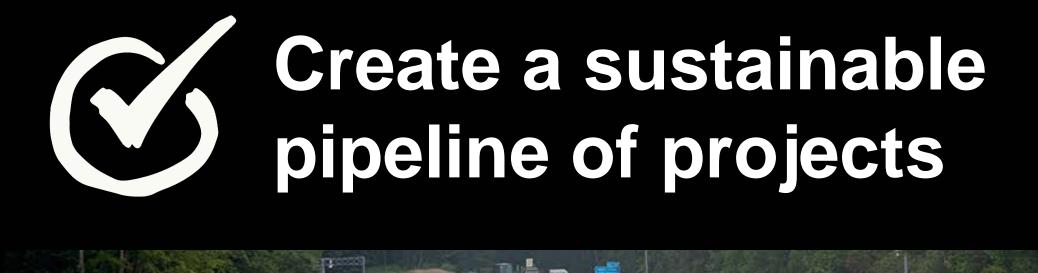


Pavement Condition by District

Target Bristol Culpeper Fredericksburg Hampton Roads Lynchburg Northern Virginia Richmond Salem Staunton Statewide

Interstate %	82.0 % 88.1 %	<b>95.7</b> %	<b>96.8</b> %	89.4 %		83.0 %	93.1 % 88.2 %	87.3 %	89.6 %
Primary over 3500 %	82.0 % 89.8 %	91.4 %	80.4 %	81.5 %	83.0 %	83.0 %	88.6 % 85.7 %	88.4 %	85.8 %
Primary < 3500 %	75.0 % 81.8 %	82.7 %	85.4 %	82.7 %	83.0 %	77.4 %	82.4 % 83.1 %	83.4 %	82.7 %
Secondary Over 3500 %	82.0 % 62.7 %	<b>69.8</b> %	53.1 %	60.6 %	78.3 %	59.0 %	45.4 % 65.8 %	<b>69.3</b> %	58.0 %
Secondary < 3500 %	60.0 % <b>53.3</b> %	63.2 %	48.3 %	<b>74.0</b> %	72.1 %	48.2 %	56.7 % 54.8 %	67.7 %	<b>59.4</b> %







# HB1414: Governor's Omnibus Transportation Bill

#### Three major components:

1	2	3
Restructures Virginia's Transportation Funding Model	Transforms Rail in Virginia	Improves Safety on Virginia's Highways

- Authorizes debt for the Interstate 81 Corridor Improvement Program, backed by the regional fuels tax
- Establishes the Interstate Enhancement and Operations Program
- Establishes the Special Structure Program to implement the fund enacted during the 2019 GA session
- Allows a portion of Route 58 corridor bond program to be used to complete Corridor Q



# HB1414: Governor's Omnibus Transportation Bill

Addresses the sustainability of our transportation funding model by:

- Raising the gas tax by five cents per year for two years
- After these increases, it indexes the gas and diesel tax to CPI instead of the sales price of fuel
- Imposing a new Highway Use Fee on fuel-efficient vehicles a tiered fee based on fuel economy, structured to ensure fuel-efficient vehicles are not penalized
- Cutting most passenger vehicle registration fees by \$10



# HB1414: Governor's Omnibus Transportation Bill

- When the legislation was adopted, additional investments in the following were planned:
  - Special Structures
  - Pavement Maintenance
  - Construction SMART SCALE and Safety
  - Transit
  - Rail
  - Port/Aviation/Space/DMV
- The impact of COVID-19 on transportation revenues is under review to meet existing commitments and these further investments



# **Central Virginia Transportation Authority + Fund**

- The Central Virginia Transportation Authority will administer transportation funding generated through an additional regional 0.7% sales and use tax and a 2.1% wholesale gas tax in counties, cities and towns in Planning District 15.
- Pre-COVID-19, annual revenue was estimated at \$200 million.





# Ensure efficient operations

# **Interstate Corridor Improvement Program**

#### Interstates 81/95/64

- First, identify operational improvements
  - Safety Service Patrol
  - Changeable Message Signs
  - Cameras
  - Variable Speed Limits
- Next, move to needed capital improvements
- Scoring process
- Targeted solutions



# **Interstate Corridor Improvement Programs**

#### Interstates 81/95/64

- I-81 Corridor Improvement Program
  - Implementing the plan
- I-95 Corridor Improvement Plan
  - Feedback collected
- I-64/664 Corridor Improvement Plan
  - First comment period runs through Aug. 14



# Plan for success.



# It all comes down to delivery.







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# Work Zone Safety

- Adjustments for 2020
  - New revision for Virginia Work Area Protection
    Manual
  - Use of portable temporary rumble strips in flagging operations
- CQIP Work Zone Checks Top 3 Findings
  - Flaggers not performing duties as required
  - Improper setup / worn and damaged work zone signage
  - TMA signage / certifications





# **Environmental Stewardship**

Environmental compliance is improving!

- Doing it right the first time prevents costly and time-consuming corrective actions due to failures of environmental controls
- 86 active projects with CGP and/or environmental commitments
- Bid environmental requirements appropriately

# **Environmental Stewardship**

Your actions impact VDOT's reputation

- Whether a permit is issued to VDOT or a contractor, VDOT expects full environmental compliance and VDOT's Environmental Performance Program (EPP) emphasizes the ownership of compliance
- Have developed positive and constructive good relationships with state and federal agencies
- The EPP provides regular feedback on project conditions to facilitate collaborative corrective actions prior to formal regulatory intervention



# **Notable Recently Let Projects**

- Notable Projects
  - I-95 Northbound Rappahannock River Crossing Design Build
    - Fredericksburg District: \$107.8 million
  - Route 277 Widen 5 Lanes
    - Staunton District: \$18.2 million
  - Route 3 Bus. Over Rappahannock River (Chatham Bridge)
    - Fredericksburg District: \$17.9 million
  - Rte. 29 NBL & SBL Bridges over NSRR
    - Lynchburg District: \$16.9 million
  - I-81 Auxiliary Lanes Exit 141 to 143
    - Salem District: \$27.3 million

# **Construction Division – Program Outline (FY2021)**

District	Construction		Maintenance		Total	
District	No. of Contracts	Contract Value	No. of Contracts	Contract Value	No. of Contracts	Contract Value
Bristol	7	\$53,311,395	14	\$27,647,655	21	\$80,959,050
Culpeper	2	\$5,291,425	4	\$1,240,688	6	\$6,532,113
Fredericksburg	7	\$36,192,258	12	\$24,485,499	19	\$60,677,757
Hampton Roads	2	\$45,179,101	21	\$38,224,372	23	\$83,403,473
Lynchburg	8	\$42,908,430	21	\$33,272,835	29	\$76,181,265
Northern Virginia	12	\$345,660,265	16	\$45,558,798	28	\$391,219,063
Richmond	12	\$27,023,332	18	\$29,235,159	30	\$56,258,491
Salem	7	\$310,623,139	19	\$49,039,420	26	\$359,662,559
Staunton	7	\$25,438,565	14	\$42,239,208	21	\$67,677,773
Statewide	2	\$959,700	1	\$260,000	3	\$1,219,700
Total	66	\$892,587,610	140	\$291,203,634	206	\$1,183,791,244

All VDOT managed projects to be advertised in 1 12021



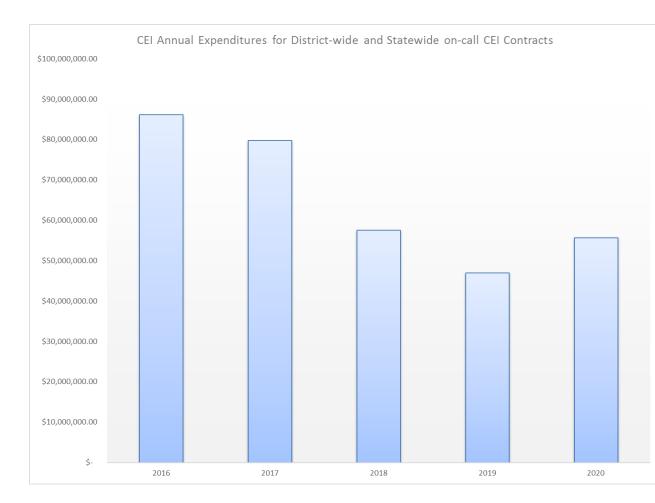
# **VDOT-Managed Contract Delivery – Performance Metrics**

District	On-Time*	On-Budget*	Quality
Bristol	88.2%	100.0%	96.5 %
Culpeper	100.0%	100.0%	95.9 %
Fredericksburg	100.0%	100.0%	97.7 %
Hampton Roads	85.0%	90.0%	95.6 %
Lynchburg	91.7%	100.0%	95.1 %
NOVA	90.6%	90.6%	94.8 %
Richmond	76.5%	91.2%	96.2 %
Salem	84.7%	96.6%	94.5 %
Staunton	97.2%	97.2%	97.2 %
Total	88.8%	95.9%	95.9%
State Target	77.0%	85.0%	91.0%

\*Preliminary On-Time and On-Budget Results for Fiscal Year 2020 as of July 28, 2020. Source: VDOT Dashboard



# **Construction Engineering and Inspection**



<u>District</u>	<u>2016-2019</u> <u>Average</u>	<u>2020</u> <u>Projection</u>
Central Office	\$600,000	\$650,000
Bristol	\$5,000,000	\$4,500,000
Culpeper	\$5,000,000	\$3,500,000
Fredericksburg	\$4,250,000	\$4,000,000
Hampton Roads	\$13,500,000	\$11,250,000
Lynchburg	\$3,750,000	\$3,500,000
NOVA	\$11,500,000	\$8,000,000
Richmond	\$11,750,000	\$9,250,000
Salem	\$6,750,000	\$6,500,000
Staunton	\$5,250,000	\$4,500,000



## **Construction Division - Claims**

13 Claims Pending / Submitted in 2019 - 2020 fiscal year:

- 4 claims resolved at the State Construction Engineer level [Step 1 in 2-Step Administrative Claims Process]
- 1 claim pending with the State Construction Engineer
- 3 claims pending with Deputy Commissioner [Step 2 in the Administrative Claims Process]
- 5 claims currently in Litigation



## **Construction Program Summary – Claims**

### **Claims Overview:**

- Less than 3% of VDOT projects result in claims being submitted to the Administrative Claims Process
- Approx. \$16 million in claims, less than 1% of the total work in progress
- Current claims range from \$12,000 to \$4.3 million



## **Contract Advertisements (in millions)**

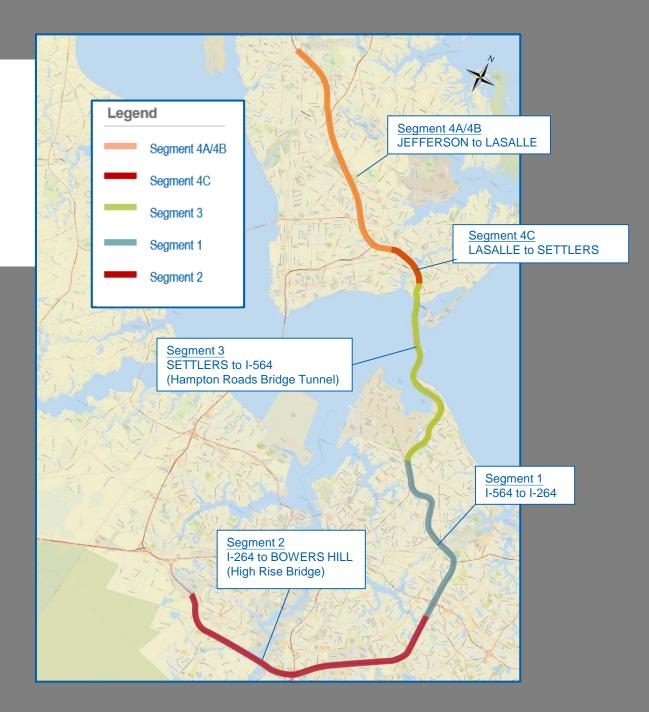
CY	Eng.	DB	DBB	Locality	Total
2015	\$305	\$345	\$1,175	\$280	\$2,105
2016	\$222	\$836	\$1,341	\$321	\$2,720
2017	\$242	\$506	\$1,143	\$322	\$2,213
2018	\$182	\$43	\$970	\$207	\$1,402
2019	\$163	\$159	\$915	\$467	\$1,703
2020	\$180	\$200	\$1250	\$370	\$2 billion



## **Upcoming and Potential Design-Build Projects**

- Upcoming Projects
  - Richmond City Bridges over I-95
    - Richmond District: \$30M
  - Boundary Channel Road Interchange
    - Northern Virginia District: \$15M
  - Hampton Roads Express Lane Projects
    - Segment 4C (LaSalle to Settlers) \$500M (CY 2021 Adv.)
    - Segment 1 (I-564 to I-264) \$175M (CY 2021 Adv.)
- Potential Corridor Improvements
  - I-81 Corridor Improvements

# Hampton Roads Express Lane Projects Location Map



Hampton Road Express Lane F Segment 1 (Desig	Projects	Description: Converting 9 miles of existing GP shoulder into HOT PTSL in each direction
Schedule		Major Work Items
RFQ RFP Award Construction Complete	Sept. 2021 Jan. 2022 July 2022 Dec. 2025	<ul> <li>4 bridge replacements (EB/WB Tidewater Drive, EB/WB Chesapeake Boulevard)</li> <li>9 miles of shoulder rehabilitation/strengthening in each direction</li> <li>Roadway widening in spot locations to maintain minimum shoulder width</li> </ul>

- Right of way acquisition in spot locations
- Tolling gantries
- Overhead signing
- Noise walls

VD

# Hampton Roads Express Lane Projects

Segment 4a/4b (Design Bid Build)

Description: Converting 10.5 miles of existing HOV lane into HOT lane in each direction

Advertisement	May 2023
Award	July 2023
Construction Complete	Dec. 2025

### **Major Work Items**

- 1 bridge replacement (EB LaSalle Avenue)
- 1 mile of roadway widening to add buffer between HOT and GP, and maintain minimum shoulder width
- Right of way acquisition
- Tolling gantries
- Overhead signing

Schedule

Hampton Roads Express Lane Projects Segment 4c (Design Build)		<i>Description:</i> Adding 2.5 miles of interstate travel lane in each direction	
Schedule		M	ajor Work Items
RFQ RFP Award Construction Complete	April 2021 Nov. 2021 May 2022 Dec. 2025	•	<ul> <li>2 bridge replacements (EB Hampton River)</li> <li>4 bridge widening/rehabilitations (WB Hampton River, EB/WB King Street, WB Settlers Landing Road)</li> <li>2.5 miles of roadway widening in each direction to add interstate travel lane</li> </ul>

- Right of way acquisition
- Tolling gantries
- Overhead signing
- Noise walls

### I-81 Corridor Improvement Program Capital Project Development Process

We are here

# IMPROVE 81





### I-81 Corridor Improvement Program Capital Improvement Project Status

# IMPROVE 81

#### **Contract Status**

 Awarded 5 contracts to 5 different firms over past year

#### **Active Procurements**

- 4 projects currently in procurement under a two-phase approach.
- Delivery method will be finalized at the end of Phase I.

### **DBB** Projects

- Bristol
  - I-81 SB to I-77 NB Decel Lane and Ramp Work
  - MM 8.1 to MM 9.7 Accel Lane Extension

### **DB Projects**

- Salem
  - MM 136 to MM 139
  - MM 139 to MM 141
  - Bundled Construction with Targeted RFP September-October 2020

#### Bristol

Potential DB - MM 48.1 to MM 48.9 under review



I-81 Corridor Improvement Program Operational Improvement Project Status

# IMPROVE 81

### **Corridor-wide Operational Improvements**

- Curve Improvements (static and flashing Chevron signs) Complete
- Safety Service Patrol Enhancements Complete
- Towing and Recovery Incentive Program Underway with completion scheduled for December 2020
- Lift and Tow Complete
- Traffic Camera Installations 41 cameras now on VA 511, 7 awaiting integration to VA 511 (viewable to the Traffic Operations Center), 3 awaiting electric service installation.
- Changeable (Digital) Message Signs Under construction, ahead of schedule, fixed completion date October 28, 2021



### I-81 Corridor Improvement Program Takeaway Scorecard

# IMPROVE 81

Activity	Status	Completion
Curve improvements (8)	Complete	Fall 2019
Initial accel/decel lane extensions (8)	Underway	Fall 2020
Safety Service Patrol Expansion	Complete	July 2019
Additional Cameras (51)	Nearly Complete	Spring 2020
Additional Changeable Message Signs	Underway	October 2021
Arterial Upgrades	Underway	Spring 2021 - 2022
Remaining capital projects (32)	Underway	Varies by project



