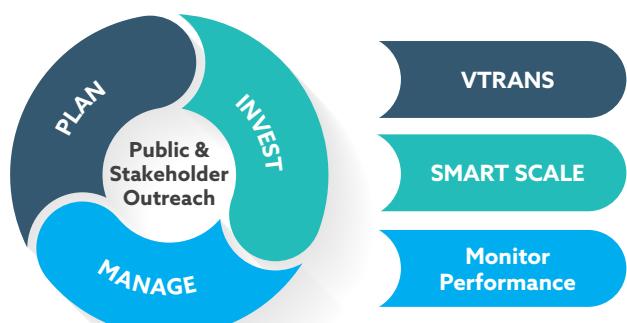
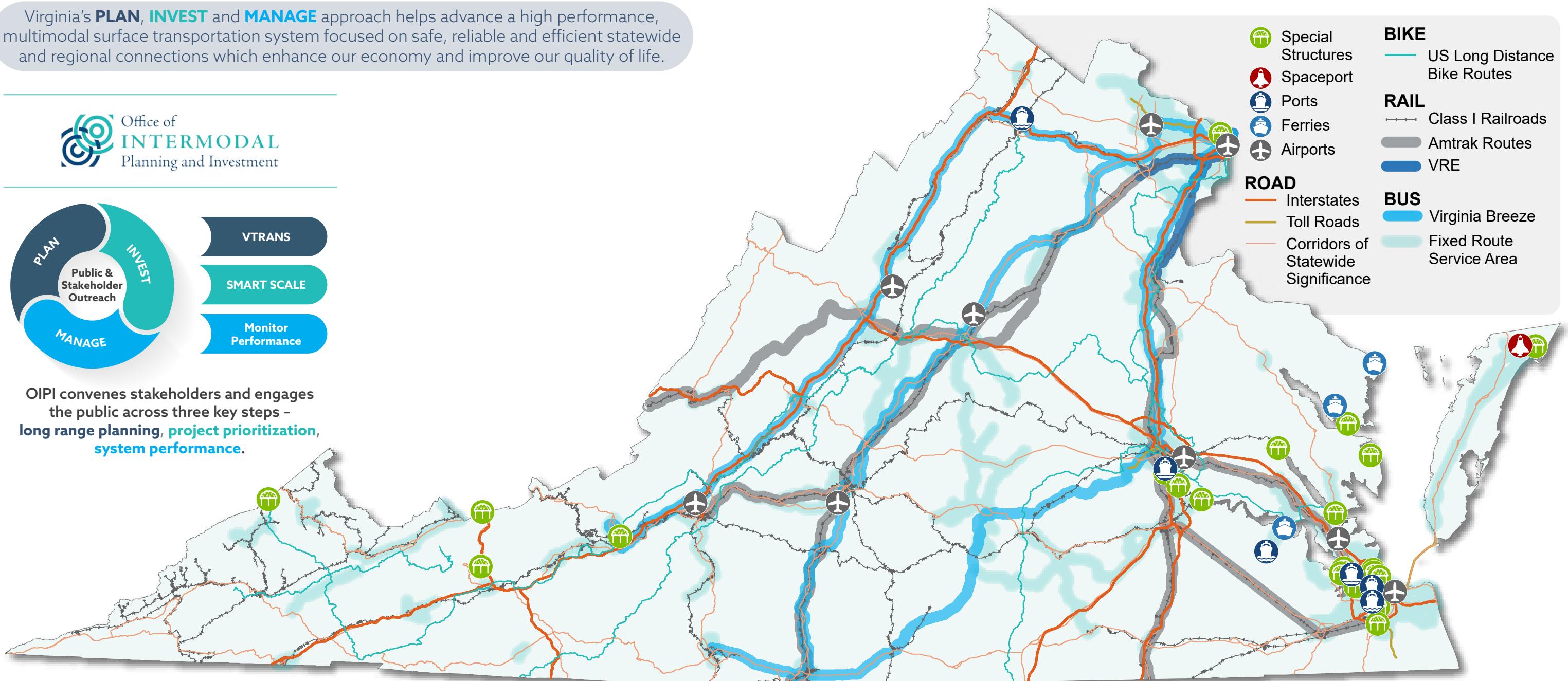


# STATEWIDE | Plan, Invest, Manage

Virginia's **PLAN**, **INVEST** and **MANAGE** approach helps advance a high performance, multimodal surface transportation system focused on safe, reliable and efficient statewide and regional connections which enhance our economy and improve our quality of life.



OIPI convenes stakeholders and engages the public across three key steps – long range planning, project prioritization, system performance.



OWNERSHIP
<b>VDOT operates the 3<sup>rd</sup> largest state-maintained highway system in the country</b> behind Texas and North Carolina. The Agency must strategically utilize its limited resources to oversee an annual \$7 billion budget.

LEADERSHIP
The Virginia Secretary of Transportation chairs the CTB to fund cost effective and beneficial multimodal projects that are assessed using quantitative tools through programs like SMART SCALE, DRPT's MERIT, Virginia's Highway Safety Improvement Program, the Interstate Operations and Enhancement Program, State of Good Repair, and Revenue Sharing, among others. These projects are funded in the six-year improvement program (SYIP).

RESPONSIVENESS
<b>VDOT repurposed rest areas and welcome centers to distribute essential supplies during the 2020 COVID-19 pandemic.</b> Additionally DRPT created a comprehensive COVID relief toolkit and handbook offering tailored strategies to limit vehicle capacity, heighten sanitation efforts and communicate why public transportation remains a safe and viable option.

INNOVATION
Virginia Space and the Mid-Atlantic Regional Spaceport place Virginia as one of only four states with a space port licensed to launch to orbit by the FAA and <b>one of only two that supports cargo delivery to the International Space Station (ISS)</b> .

IMPACT
<b>The Virginia Port Authority oversees inland and seaport container traffic which helps facilitate over \$90 billion in annual spending in Virginia</b> representing nearly 11 percent of Virginia's estimated output purchases.

Note: Values expressed are based on latest available data as of September 1, 2021.

# PLAN | How Our Multimodal Transportation System Supports Our Vision

**VISION:** Virginia's transportation system will be Good for Business, Good for Communities, and Good to Go. Virginians will benefit from a transportation system that advances Virginia businesses, attracts a 21<sup>st</sup> century workforce, and promotes healthy communities where Virginians of all ages and abilities can thrive.



## HIGHWAYS / TOLLS / EXPRESS LANES

VDOT maintains and operates a diverse network of highway infrastructure, roadside assets and traffic management systems, including approximately:

### 129,000 lane-miles of roadways:

- Interstates - over 5,000 lane miles
- Primary roads - nearly 23,000 lane miles
- Secondary roads - nearly 101,000 lane miles

### 5 Traffic Operation Centers

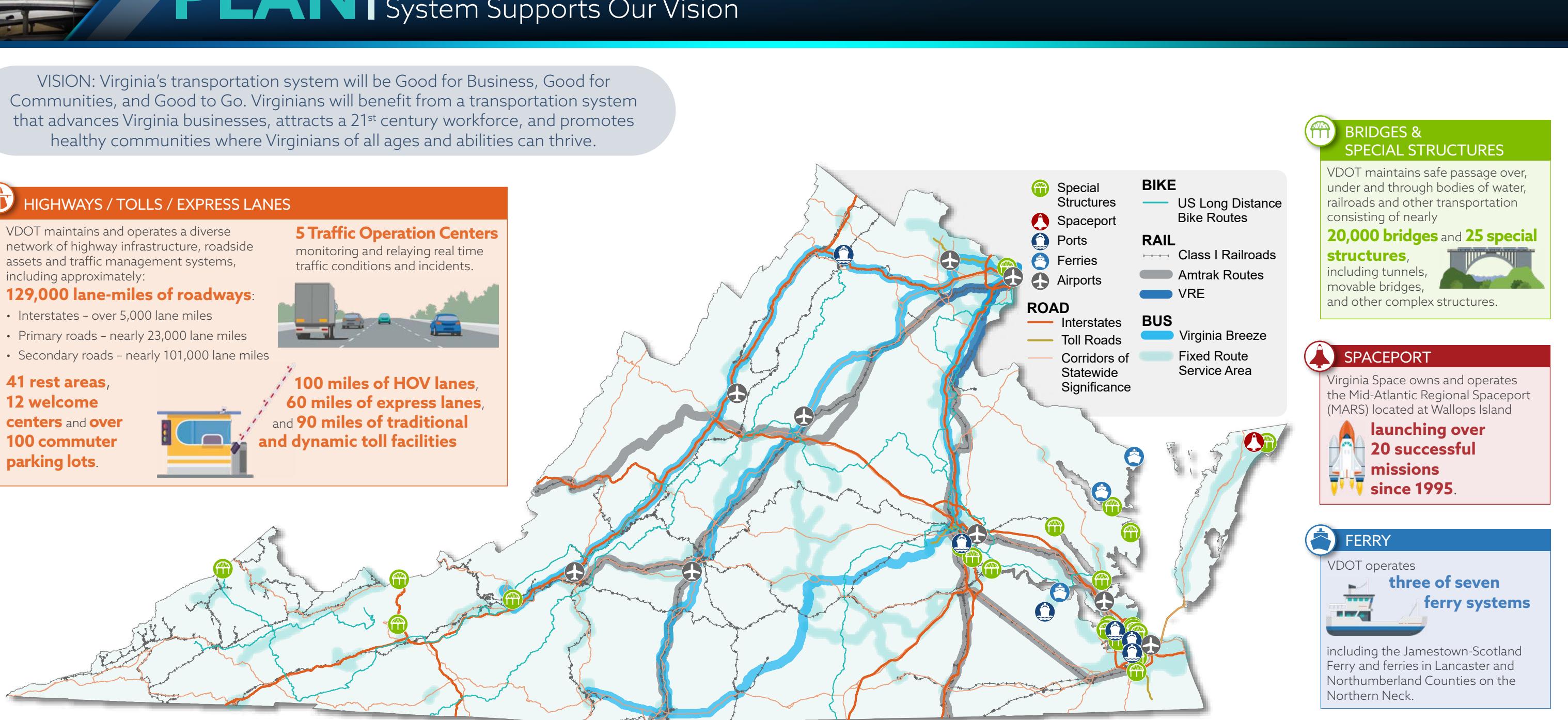
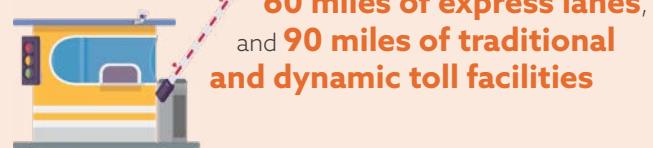
monitoring and relaying real time traffic conditions and incidents.



**41 rest areas,**  
**12 welcome centers** and **over 100 commuter parking lots.**



**100 miles of HOV lanes,**  
**60 miles of express lanes,**  
and **90 miles of traditional and dynamic toll facilities**



## FREIGHT RAIL

Virginia's **3,400 mile rail freight system** is owned and operated by **Norfolk Southern**, **CSX** (Class 1 railroads) and **11 shortline railroads**.



## PASSENGER RAIL / TRANSIT

DRPT works closely with public and private operators to facilitate rail, commuter service, and public transportation through:

**25 daily Amtrak intercity passenger trains over 9 routes through**



the Northeast Regional, Cardinal, and Silver/Palmetto services.

**Over 40 transit systems**, including fixed route bus, rail and bus transit, demand response, human services and demand management.

These systems serviced nearly **130 million transit trips (FY 2020)** down from 200 million in FY 2019 due to the COVID-19 pandemic.

## ACTIVE TRANSPORTATION

Virginia is home to over **2,000 bicycle lane miles** (on and off-road) supporting both commuting and outdoor recreation through nearly **900 miles** of dedicated bicycle facilities.



## PORTS (AIR, SEA, INLAND)

Virginia's air transportation system provides a gateway to the nation and world through **66 public use airports** - 9 commercial service and 57 general aviation facilities.



**Four cargo airports** operate at Washington Dulles, Richmond, Norfolk, Roanoke.



## BRIDGES & SPECIAL STRUCTURES

VDOT maintains safe passage over, under and through bodies of water, railroads and other transportation consisting of nearly

**20,000 bridges** and **25 special structures**, including tunnels, movable bridges, and other complex structures.



## SPACEPORT

Virginia Space owns and operates the Mid-Atlantic Regional Spaceport (MARS) located at Wallops Island

**launching over 20 successful missions since 1995.**



## FERRY

VDOT operates **three of seven ferry systems**

including the Jamestown-Scotland Ferry and ferries in Lancaster and Northumberland Counties on the Northern Neck.

# INVEST | How We Improve Performance and Prepare for the Future

Virginia's investment in transformative projects and the implementation of future plans will continue to strategically enhance systemwide multimodal and intermodal connectivity resulting in more travel options for residents, commuters and visitors and more efficient goods movement to global markets across and through air, sea, and inland freight transportation systems.

## ACTIVE TRANSPORTATION

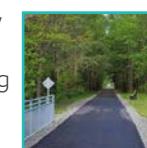
**Signature Project:** Fall Line Trail

Ongoing project to connect seven localities in central Virginia to promote active transportation, recreation, and economic development in a 43 mile north-south spine.



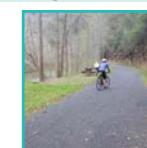
**Plan Studies:** Multi-Use Trails

General Assembly requirement to develop new Multi-Use Trail opportunities through development of a prioritization, master planning and funding needs assessment process.



**Plan Studies:** Shenandoah Valley Rail Trail

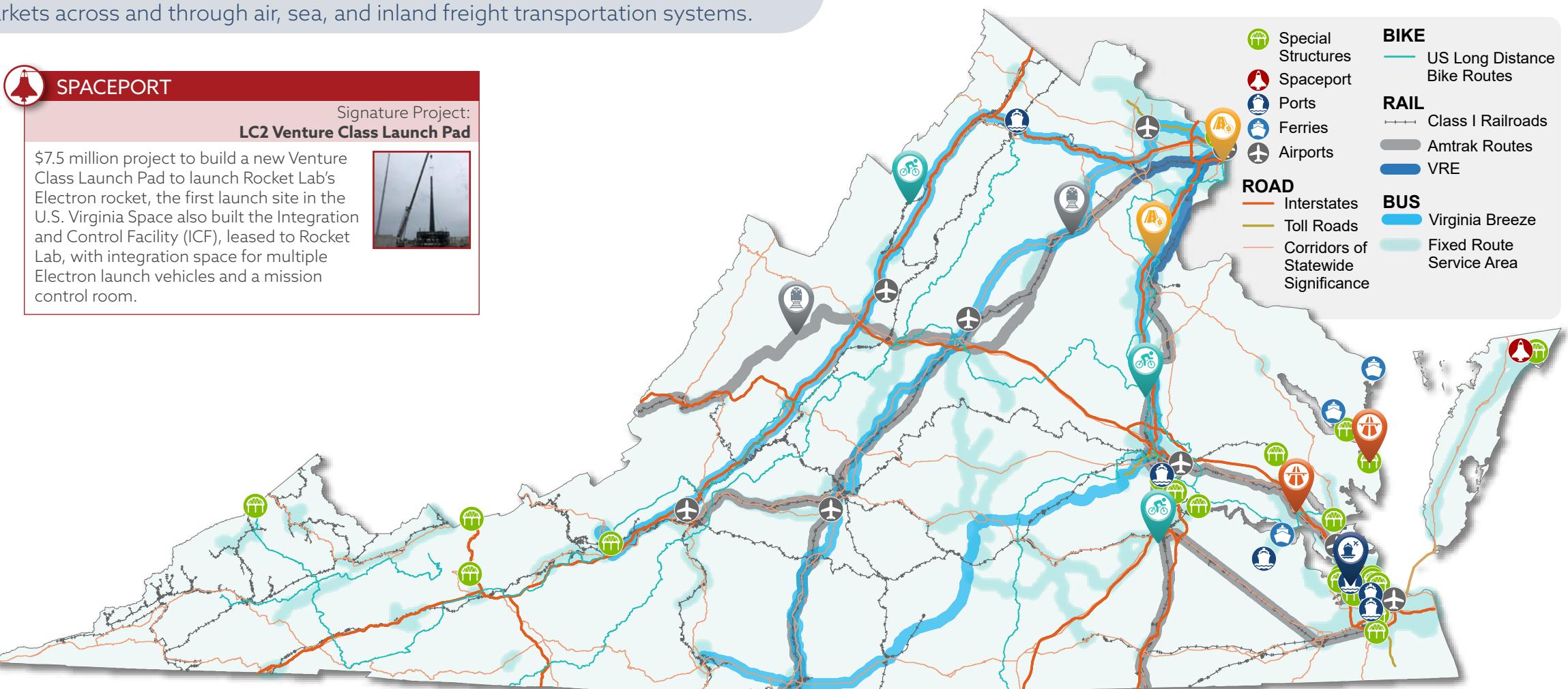
DCR is working with VDOT and DRPT to evaluate the conversion of an inactive Norfolk-Southern railroad segment into a 48.5-mile multiuse recreational trail.



## SPACEPORT

**Signature Project:** LC2 Venture Class Launch Pad

\$7.5 million project to build a new Venture Class Launch Pad to launch Rocket Lab's Electron rocket, the first launch site in the U.S. Virginia Space also built the Integration and Control Facility (ICF), leased to Rocket Lab, with integration space for multiple Electron launch vehicles and a mission control room.



## HIGHWAYS / BRIDGES / SPECIAL STRUCTURES

**Signature Project:** I-64 Capacity, Safety Improvements - Segment 3

\$244 million, 8.36 mile reconstruction project in York County to enhance mobility and safety on the Peninsula to/from Hampton Roads.



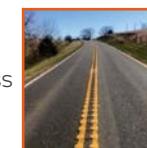
**Signature Project:** Gwynn's Island Bridge

The bridge (one of Virginia's 25 special structures) opens to marine traffic more than any other state-maintained movable bridge. In 2021 and 2022 VDOT will improve the condition of the bridge's mechanical elements, improving traffic operation reliability.



**Plan Studies:** Systemic Safety Implementation Plan

Implements Strategic Highway Safety Plan (SHSP) infrastructure focus areas installing eight proven safety countermeasures across Virginia on road locations that meet the defined criteria.



## PASSENGER RAIL / FREIGHT RAIL / TRANSIT

**Signature Project:** Transforming Rail in Virginia

Financed through a \$3.7 billion agreement in 2021 with Amtrak, VRE, and CSX partnerships to double passenger rail service in the state and create a path to separate freight and passenger traffic service.



**Plan Studies:** Transit Equity and Modernization Study

DRPT is working with various partners and the public to evaluate opportunities to expand and deliver equitable, accessible and modern transit services to more Virginians, especially those in underserved communities.



## TOLLS / EXPRESS LANES

**Signature Project:** Fredericksburg Express Lanes (Fred Ex)

As part of the Improve 95 initiative, a \$527 million, 10 mile extension of the I-95 express lanes south to Route 17 (I-95 Exit 133) providing an uninterrupted 50-mile Express Lanes corridor from Fredericksburg to Washington D.C.



**Plan Studies:** I-495 Express Lanes Northern Extension (495 NEXT)

Analysis and designs for a 3 mile extension from Dulles Toll Road and I-495 interchange to the George Washington Memorial Parkway includes a parallel shared use path and improvements expected to reduce congestion and improve safety through the corridor.



## PORTS (AIR, SEA, INLAND)

**Signature Project:** Norfolk Harbor Channel

\$350 million project to deepen channel depth to 55 feet by 2024 giving Virginia the deepest port on the East Coast. The project will also allow safe, efficient two-way vessel movement for ultra-large container ships and their corresponding cargo loads.



**Plan Studies:** South Norfolk Intermodal Terminal (NIT) Expansion

\$400 million expansion to terminal's south-side container stack yard. Added two ship-to-shore cranes to handle Super Post Panamax ships and expedite container to truck moves.



Note: Values expressed are based on latest available data as of September 1, 2021.

# MANAGE | How We Monitor Performance and Inform Decisions to Achieve Future Transportation Goals

Virginia uses a data-driven process supported by indicators, measures and trends to communicate progress towards established performance targets across its multimodal surface transportation system. This page interprets performance trends for a select set of measures across five goals areas to communicate performance change, resulting outcomes, current progress and changes on the horizon which will influence and alter future transportation performance. The Biennial Report presents Virginia's statewide performance measures, including performance through 2020 and fiscal year 2021.



## Economic Competitiveness and Prosperity

Performance Measures:

**Presents highway congestion and reliability and passenger rail and transit on-time performance and reliability.**

Pre-Pandemic Direction (2019):

**Stable performance**

Pandemic Direction (2020-2021):

**Improving performance (less travel, especially commuting)**

Specific Trend:

**The amount and severity of congested and unreliable travel during peak periods on Virginia highways remained stable from 2016 through 2019. In 2020, congested and unreliable travel during peak periods declined by around 75 percent.**



## Accessible and Connected Places

Performance Measures:

**Presents accessibility to jobs, transit ridership and level of service, and passenger rail ridership.**

Pre-Pandemic Direction (2019):

**Improving performance**

Pandemic Direction (2020-2021):

**Declining performance (less travel demand and service)**

Specific Trend:

**Transit level of service and ridership steadily increased through 2019. Progress in FY 2020 was continuing, until the impact of the pandemic shifted travel patterns leading to ridership decreasing 66 percent and passenger rail ridership decreasing 87 percent in FY 2021.**



## Safety for All Users

Performance Measures:

**Presents fatalities, serious injuries, and injuries in crashes involving vehicles, bicycles and pedestrians, and transit vehicles.**

Pre-Pandemic Direction (2019):

**Stable performance**

Pandemic Direction (2020-2021):

**Mixed performance (depends on the measure)**

Specific Trend:

**Lower vehicle miles traveled during 2020 did not translate to lower fatal and serious injury vehicle crashes. In fact, there were more fatalities on Virginia roadways in 2020 than there were in 2019, leading to increasing crash rates.**



## Proactive System Management

Performance Measures:

**Presents condition of highway bridges and pavements, and state of good repair for transit vehicles and assets.**

Direction (2019-2021):

**Improving performance (no meaningful impact from the pandemic)**

Specific Trend:

**Bridge condition continues to improve, while pavement condition has remained steady, with some improvement on secondary roads and declines on Interstates. Most of Virginia's transit agencies continue to meet or exceed state of good repair targets.**



## Healthy Communities and Sustainable Transportation Communities

Performance Measures:

**Presents multiple dimensions of sustainability, including vehicle miles traveled per capita, emissions, mode share, and low-emission and zero emission vehicles.**

Pre-Pandemic Direction (2019):

**Improving performance**

Pandemic Direction (2020-2021):

**Improving performance**

Specific Trend:

**From 2016 through 2019, VMT per capita remained steady in Virginia, before decreasing by 14 percent in 2020. Over the past three years, total registered low-emission vehicles have increased from 1.7 percent in 2018 to 2.4 percent by 2020.**

## CURRENT PROGRESS

### FY 2022 – 2027 SYIP

In June 2021, the CTB adopted the FY 2022-2027 SYIP - the first complete SYIP reflecting the 2020 Omnibus Package and \$323 million in one-time funding from the 2021 Transportation Initiative.

**The SYIP programs \$24 billion for multimodal mobility improvements, system operations, and preservation, including \$5.6 billion for rail and public transportation and \$17.2 billion for the highway system.**

## LOOKING FORWARD

Proactive planning activities, partnerships, and pilots are preparing Virginia to understand and manage future performance impacts across its multimodal transportation network.

### FUTURE PERFORMANCE

- Virginia DEQ is implementing **Drive Electric Virginia** to ensure 95% of Virginians are within 30 miles of an electric vehicle charger.
- The Port of Virginia has deployed six **all-electric ship-to-shore cranes** at VIG and NIT since 2019, with two more to be delivered in early 2022. These cranes will sustainably service ultra-large container vessels for decades to come.
- DRPT launched a **Statewide Integrated Mobility Initiative** to assess on-demand transportation technology enabled services which will compete with, complement and impact current transit operations.
- VDOT is partnering with DRPT and NVTA to implement one of the nation's first unified, predictive, transportation programs through the **Regional Multimodal Mobility Program (RM3P)**. A data-exchange platform and Artificial Intelligence (AI) will support dynamic responses to traffic events and alert users to on-demand multimodal options by 2023.
- The DOAV launched the **Virginia Flight Information Exchange program** as a platform to share unmanned aerial systems (UAS) information and address key safety and policy concerns across Virginia state and local agencies. The Exchange is the first state-sponsored Supplemental Data Service Provider (SDSP) in the FAA's UAS Traffic Management (UTM) ecosystem enabling low-altitude drone operations.