# Northern Virginia Joint Transportation Meeting

December 8, 2020

Presented by: Monica Backmon

Executive Director, Northern Virginia Transportation Authority





# FY2020-2025 Six Year Program Planning & Prioritizing for the Region



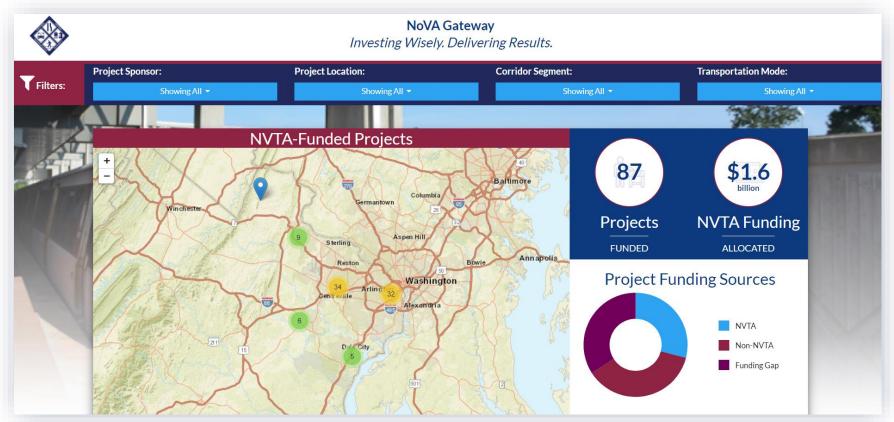
- \*\*Six Year Program Update Adopted, July 9, 2020\*\*
  - Authority's 5<sup>th</sup> Funding Program Most competitive to date
  - \$539 Million in Authority regional revenues programmed on 21 transportation projects encompassing various modes
    - Roadway/Intersection/Interchange; Metrorail/VRE Commuter Rail/ BRT/Bus Facility; and Bike/Pedestrian Facility
  - \$1.44 Billion in regional revenue funds requested for 41 projects
  - To date, the Authority is advancing 106 regional multimodal transportation projects, totaling \$2.5 billion, for congestion reduction throughout the region

\*\*Despite COVID-19 impacts on revenue, the Authority is able to preserve all project funding programs.



# Get Real-Time Project Status Updates NoVA Gateway





novagateway.org

 Newly launched tool that allows searches by project location, transportation mode, corridor segment and project sponsor – with just a click of a button!



# **COVID-19: Transportation Impacts and Opportunities**



- Analysis and updates of change in travel behavior due to COVID-19 (Authority conducted with AECOM)
  - GOAL: Explore impacts to operating conditions and future transportation project investment considerations
  - SCENARIOS & IMPACTS: Analyze plausible possible future scenarios, not intended to predict the future or imply any preferences

Scenarios
developed
based on
policies,
travel
choices, and
behaviors

TransAction model and Mobilitics<sup>TM</sup>

Inform
potential shortterm policies
and future
TransAction
analysis



## NVTA Analysis Scenario Comparison: Assumptions



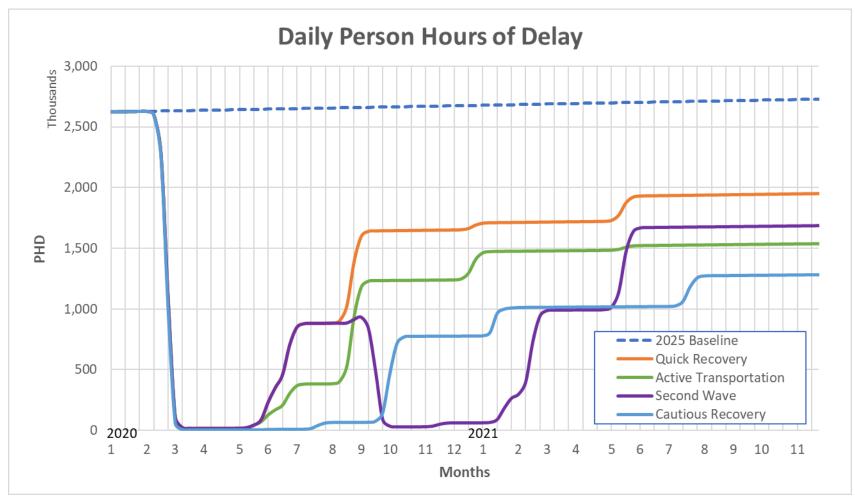
	Quick Recovery		Active Transportation		Second Wave		Cautious Recovery	
	Short Term	New Normal	Short Term	New Normal	Short Term	New Normal	Short Term	New Normal
Telework*	10%	10%	20%	15%	50%	10%	25%	15%
Jobs Lost*	3%	0.5%	5%	1%	10%	6%	8%	2%
<b>School Attendance</b>	90%	95%	90%	95%	0%	100%	40%	90%
Transit Safety Perception	85%	100%	75%	95%	25%	95%	40%	100%
Active Transportation	Pre-COVID Mode Share		60% trips <5 mi are walk/bike. Mode share increases 30%.		Pre-COVID Mode Share		Pre-COVID Mode Share	

<sup>\*</sup>Compared to pre-COVID levels (Telework % noted: Increase in telework; Jobs Lost % noted: Fewer jobs)



## Short-Term Impacts (Jan. 2020 – June 2021) Impact on Person Hours of Delay

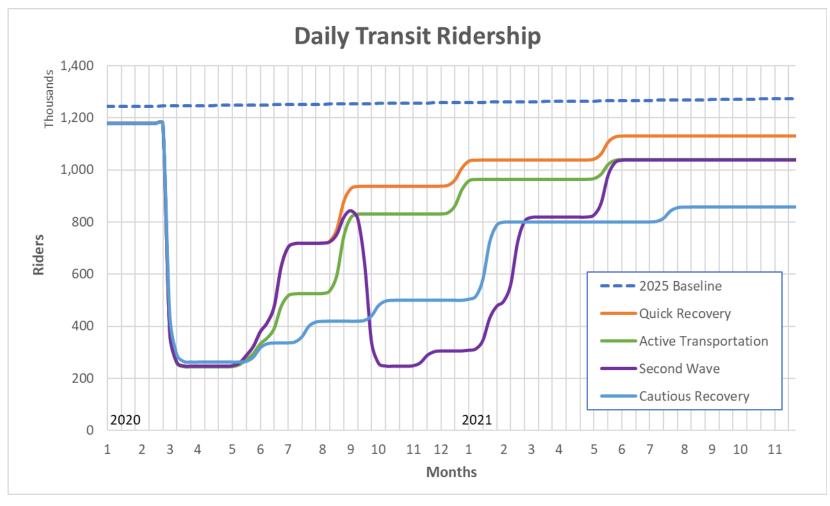






## Short-Term Impacts (Jan. 2020 – June 2021) Impact on Transit (Bus/Rail) Ridership







# Looking Ahead: What Does This Mean?



## Transportation Silver Linings

- Reduced driving, less congestion, lower emissions
- Recovery of local bus services

#### Areas of Potential Concern

- Rate of transit recovery, especially rail/longer distance bus commutes
- Perception of transit safety

### Unknowns (short-term)

• K-12 return to in-classroom instruction

## Unknowns (long-term)

- Work-from-home practices/preferences
- E-commerce trends (click versus brick)
- Commercial/residential real estate trends

#### Additional Considerations

- 24% NoVA population increase (2016 2040)
- 37% NoVA employment increase (2016 2040) \*based on analysis in TransAction



## **TransAction Update**



- Region's long-range transportation plan updated every five years
   Current plan adopted October 2017
- Projects required to be in TransAction for eligibility of 70% revenues
- Include assessment of COVID impacts on transportation
- 3 Goals: Improve Mobility; Increase Accessibility; and Build Resiliency
- TransAction update anticipated for Fall of 2022 adoption





## **TransAction Update**



Phase 1

Identification of Needs/Priorities

March 2021 – October 2021

Analysis of Corridor/Segment Packages

Phase 2

November 2021 – April 2022

Phase 3
Reporting, Review, and Finalization

May 2022 – November 2022

- Model Strategy/Development
- Regional Transportation Needs
- Goals, Objectives, Measures
- Candidate Regional Projects
- Define Scenarios
- Public Engagement
- Communications/Website

- Analysis
- Scenario (Sensitivity) Analysis
- Benefit/Cost Analysis
- Ranking of Projects
- Public Engagement

- Preparation of the Update
- Public Engagement
- Re-Evaluation Analysis
- Adoption







## Virginia Regional Multi-Modal Mobility Program (RM3P)

RM3P is a collaborative program to improve safety, reliability, and mobility for travelers in the Northern Virginia region. Through the RM3P initiative, public and private sector transportation safety and service providers across Northern Virginia will adopt technologies to improve multimodal travel conditions. Funded under the Commonwealth of Virginia's Innovative Technology and Transportation Fund (ITTF), the RM3P is led by the Virginia Department of Transportation (VDOT), the Northern Virginia Transportation Authority (NVTA), and the Virginia Department of Rail and Public Transportation (DRPT).





#### Data-Exchange Platform



The Data-Exchange Platform (DEP) will be a reliable, continuously updated, cloud-based data storage. and exchange system. It will be used by regional partners and third-party providers to capture, process, and exchange information on real-time and historic multi-modal travel conditions. This platform will feed necessary data to other RM3P program elements and disseminate value-added and full-grown. data produced by these elements.

### **AI-Based Decision Support System**



The Al-Based Decision Support System (AI-DSS) will help predict the impact of disruptions to the transportation network and provide coordinated response options to

agencies. The automated tool for operators will use travel data to monitor emerging conditions and recommend plans for coordinated, multi-agency responses to congestion, incidents, and events.

#### **Commuter Parking Information System**



RELIABILITY The Commuter Parking Information System (CPIS) will entail a real-time, app-based parking availability information system that provides reliable information about parking space availability at lots serving bus, vanpool, and carpool commuters.

#### Multi-Modal Analytical Planner

The Multi-Modal Analytical Planner (MMAP) will be a collaboration tool for transportation service providers to pinpoint unmet needs in the transportation network. This



highly interactive tool

will enable mobility providers to study the impacts of "what-if" scenarios and better plan for travel demand by identifying underserved areas, especially during disruptive events.

#### Dynamic Incentivization

Dynamic Incentivization (DI) will be a data-driven system offering the public incentives to modify their travel choices and behaviors in response to real-time travel conditions. The incentives will be offered by regional agencies and third-party providers.



RM3P



















Contact us at <a href="mailto:TheAuthority@thenovaauthority.org">TheAuthority@thenovaauthority.org</a>