

Combined
Blue Items/Handouts/
Presentations
for
April 4, 2024
NVTC Meeting



## NVTC COMMISSION MEETING THURSDAY, APRIL 4, 2024 MAIN FLOOR CONFERENCE ROOM 2300 Wilson Blvd., Arlington, VA 22201 Public Streaming Via YouTube 7:00 p.m.

#### **UPDATED AGENDA**

5:45 p.m. Boxed Dinners Available for Commissioners Only
6:00 p.m. Executive Committee Meeting – NVTC Suite #230 Conference Room
7:00 p.m. Commission Meeting – First Floor Large Conference Room (public streaming)

NVTC is receiving general written public comment. **The deadline for written general public comments is 3:00 p.m., Thursday, April 4, 2024 via NVTC's website**. Comments will be provided to Commissioners prior to the April 4 meeting.

- 1. Opening Remarks
  - ACTION: Approve Commissioners Participating Electronically (if needed)
  - General Public Comments Received
- 2. ACTION: Approve the Minutes of the March 7, 2024 NVTC Meeting
- 3. ACTION: Approve the Consent Agenda (subject to approval of chair)
  - A. Authorize the Executive Director to Issue a Request for Proposals for State Government Relations Services
  - B. Authorize the Chair to Send a Letter of Endorsement of Fairfax County's Application to the Federal Transit Administration's FY 2024 Low or No Emission Grant Program and Grants for Buses and Bus Facilities Program
- 4. Washington Metropolitan Area Transit Authority (WMATA)
  - A. Presentation by the WMATA General Manager/CEO Randy Clarke
  - B. Report from the Virginia WMATA Board Members
  - C. Report from the Chair of the NVTC WMATA Committee
    - ACTION: Accept the NVTC Metro Operating Funding and Reform Working Group Report
  - D. Other WMATA News

- 5. Report from the Chair of the Legislative and Policy Committee
  - A. General Assembly Update
  - B. Transit Service Delivery Advisory Committee (TSDAC) Update
  - C. Federal Update
- 6. Transit Resource Center
  - A. Presentation: The Climate Benefits of Transit in Northern Virginia
- 7. VRE Report and Action Items
  - A. VRE CEO Report and Minutes
  - B. VRE 2050 System Plan
  - C. VRE Title VI Service Standards and Policies Monitoring Results
- 8. Department of Rail and Public Transportation (DRPT)
- 9. Executive Director Report
  - A. Executive Director Newsletter
  - B. NVTC Financial Report



April XX, 2024 --DRAFT--

Chair Hon, Matt de Ferranti

Vice-Chair Hon. David Snyder

Secretary-Treasurer Hon. Sarah Bagley

City of Alexandria Hon. Canek Aguirre Hon. Sarah Bagley

Arlington County Hon. Matt de Ferranti Hon. Libby Garvey Hon. Takis Karantonis

Fairfax County
Hon. Walter L. Alcorn
Hon. James N. Bierman, Jr.
Hon. Dalia A. Palchik
Hon. Daniel G. Storck
Hon. James R. Walkinshaw

City of Fairfax Hon. Catherine Read

City of Falls Church Hon. David F. Snyder

Loudoun County Hon. Juli Briskman Hon. Matt Letourneau

Commonwealth of Virginia Hon. Paul C. Smedberg

Virginia General Assembly

Senate Hon. Adam Ebbin vacant

House of Delegates vacant vacant

vacant vacant

Executive Director Katherine A. Mattice The Honorable Pete Buttigieg Secretary, U.S. Department of Transportation 1200 New Jersey Avenue, SE Washington, DC 20590-0001

Dear Secretary Buttigieg,

I am writing to share the Northern Virginia Transportation Commission's (NVTC) endorsement of Fairfax County's application to the Federal Transit Administration's FY 2024 Low or No Emission Grant Program (Low-No Program) and Grants for Buses and Bus Facilities Program (Buses and Bus Facilities Program). NVTC is committed to working with its local transit agencies — including Fairfax Connector — on transitioning to low- and zero-emission vehicles to fight climate change and improve the overall sustainability of our region, as demonstrated by NVTC's recent Northern Virginia Zero-Emission Bus Strategic Plan.

Fairfax County's request of \$57 million for the purchase of 60 hybrid buses through the Low-No Program and \$71.1 million for the purchase of 60 hybrid buses and 12 diesel buses through the Buses and Bus Facilities Program represents an important step in the transition of the Fairfax Connector bus fleet as the county and region plan for and prepare infrastructure to support a zero-emission transit future.

The Fairfax County Board of Supervisors has adopted a policy goal of carbon neutrality in facilities, fleet vehicles and county operations by 2040. The next generation hybrid buses will provide an ultra-low emission running option, improving air quality in our densely populated areas. These buses will enable Fairfax Connector to maintain existing service levels while reducing environmental impacts and working towards the county's emissions goal.

Thank you for your consideration of Fairfax County's grant application.

Best regards,

Matt de Ferranti NVTC Chair

## **WMATA Update for NVTC**

Randy Clarke, WMATA GM and CEO











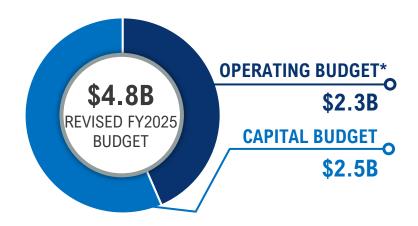


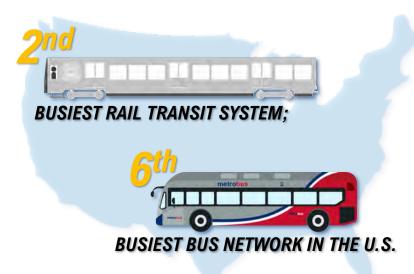






### **Metro At-A-Glance**











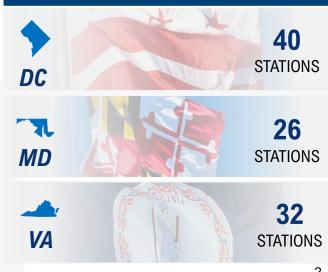
#### Within ½ mile of Metrorail stations and bus stops in the Compact area:

- **60%** of population (**2.8M** people)
- **70**% of jobs (**1.7M** jobs)
- 50% of employers (134,400 businesses)

The  $\frac{1}{2}$  mile around Metrorail stations is just 3% of the region's land but contains:

- 30% of property value (\$328B)
- **40**% of jobs
- 65% of new office development
- **50%** of new apartments
- 25% of affordable housing
- 13 Fortune 500 headquarters

#### 98 RAIL STATIONS





### 





increase in train trips

88% rail customer satisfaction

new stations systemwide

battery electric buses commissioned



escalators replaced

exceeded goal on Federal Diverse **Business Enterprise** 

.596 923 bus operators and 92 train operators

\$100M invested in partnership for affordable housing



reduction in fare evasion at stations with modified fare gates

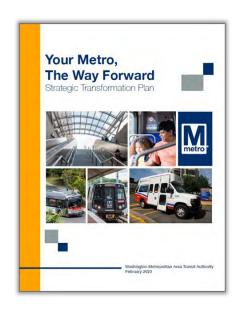
Metro's Cinder Bed bus garage to exclusively

DC bus routes operating overnight elevators replaced

12,000 employees. Countless achievements.

1 Metro.

## Metro's Strategic Transformation Plan is Our North Star to Deliver a Modern, World-Class Transit System



In February 2023, Metro adopted its Strategic Transformation Plan <u>Your Metro</u>, <u>the Way Forward</u>. The plan identified four strategic goals: Service Excellence, Talented Teams, Regional Opportunity & Partnership, and Sustainability. This plan was developed by the Board of Directors and management to guide Metro's decision-making over the next five years. It is serving as our North Star and guides how we fund the Metro service the region needs, wants and deserves. The plan establishes clear priorities for Metro, expands transparency around performance metrics, and promotes collaboration with our partners. Metrics identified in the plan are used to drive performance and operational decisions at Metro and are transparently measured in regular reports and our newly launched <u>Service Excellence Dashboard</u>.



Deliver safer and more reliable service to customers, progressing Metro's automation efforts.



Design transit service to move more people and equitably connect a growing region.



Attract, develop, and retain top talent where individuals feel valued, supported, and proud of their contribution.



Manage resources more efficiently to achieve a sustainable operating, capital, and environmental model.



### **Continued Strong Ridership Growth**

- Customers took over 22 million trips systemwide in March 2024, 14 percent more than March 2023 and 85 percent of March 2019
- Both core and event-related ridership are strong:
  - Commute ridership: Peak hour Metrorail ridership averaged over 50K trips
     Monday-Thursday, up 25 percent from March 2023
    - Weekday parking at Metro lots increased 20 percent
    - Federal employee trips increased by 33 percent
  - All-day frequent service is driving bus ridership 28A on Leesburg Pike is at an all-time high, with 79 percent higher ridership than pre-pandemic
  - Weekend bus and rail ridership is up 20 percent year-over-year and above
     2019 levels customers are responding to frequent service
  - Silver Line Phase II ridership outpaced growth on the rest of rail with 30 percent year-over-year. Dulles station increased by 38 percent.
  - Tourism and special events:
    - Smithsonian recorded its busiest days since 2019 69,000 on Saturday, March 30
    - Navy Yard hit a new post-pandemic high, with 40,000 customer trips for the Nats home opener
    - Union Station ridership increased 23 percent over March 2023





### Reducing Fare Evasion and Enhancing Public Safety

#### **Communications**

- Customer awareness campaigns
- Signage
- Partnerships with schools

#### **Enforcement**

- Increased police visibility
- Citations ramped up in November 2022
- Secure DC

   passage in March
   2024 and
   beginning of
   enforcement

## Data and Research

- Better understanding of when and where fare evasion and other crimes occur
- Focus
   communication
   and enforcement
   resources

#### **Fare Policy**

- Simplified fares in FY2024
- Launched Metro Lift with over 500,000 trips taken since July 2023 launch

## Technology and Infrastructure

- Retrofitting faregates and adding higher fencing
- Replacing obsolete bus fareboxes
- Increasing ease of payment with mobile



## Fare Evasion Reduction Efforts Are Working

- Fare evasion on Metrorail is down by ~50 percent compared to March 2023
- Faregate Retrofits Stronger, taller barrier doors
  - 33 of 98 stations (34%) installed as of April 1
  - Systemwide completion expected by end of summer 2024
- Fare evasion reduction efforts are reducing Metrorail fare evasion
  - Retrofit stations show 79% reduction in fare evasion, nonretrofitted stations are down 16%
  - Ridership is up 16%; paid ridership is up 24%
  - Retrofits have converted about a third of no-tap ridership to paid ridership, leading Metro to estimate positive revenue of \$12M for FY2025



Making it easier to pay with mobile payment:

- Rail trips using mobile are up 74% year-overyear
- Bus trips using mobile are up 35% year-overyear



## Revised FY2025 Budget (as of Feb 2024)

#### **Regional Framework for a Balanced Budget**

The revised proposed budget adopts a regional approach that requires collaboration and contributions from all stakeholders. Aggressive expense management by Metro would keep FY2025 **gross expenses** at FY2024 levels (0% growth).

**Metro:** Salary and wage adjustments, recurring administrative efficiencies, and other cost reductions resulting in **\$119** million and **\$174** million in savings in FY2025 and FY2026, respectively.

Customers: At least 12.5 percent fare increase on Metrobus, Metrorail, and MetroAccess beginning in FY2025, and up to 25 percent on late nights and weekends (with \$2.50 cap).

**Jurisdictions:** Additional jurisdictional investment to replace prior reductions of jurisdictional funding to Metro and adjustments for ridership and inflation.

Use of Funds		Budget	2- Year Regional Transformation Framework	
(\$M)		FY2024	Revised FY2025 Proposed Budget	FY2026 Forecast
Expense	Initial Expenses	\$2,459	\$2,575	\$2,704
	Administrative Efficiency		- 50	- 52
	Salary and Wage Adjustment		- 38	- 77
	Inflation Reduction		- 11	- 25
	Target Service Cuts		- 20	- 20
	Total Savings		- 119	- 174
	Gross Expenses	\$2,459	\$2,457	\$2,530
	Additional PM (above \$60M)	- 139	- 104	- 114
	Expense after PM Transfer	2,320	2,352	2,416

Note: Amounts may not sum due to independent rounding

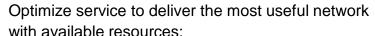
#### **Assumptions**

Personnel & Non-personnel: 0% salary and wage increase in FY2025 for L689, L922 and non-represented employees subject to the collective bargaining; CPI reduced from 5% to 3.5% in FY2025 and from 5.0 to 3.0% in FY2026



### Targeted Service and Fare Optimization (as of Feb 2024)





- Adapt Service. Adapt rail and bus service capacity with targeted changes while sustaining good frequency to grow ridership.
- Provide Access to More Destinations. Reduce customer travel times and increase access to jobs and opportunity.
- Optimize Use of Metro's Assets. Manage railcar and bus fleets to deliver high asset utilization and provide good service at low marginal cost.



**More Targeted Rail Service.** Efficiently deliver frequent all-day service to drive ridership and revenue growth. Schedule **peak service** periods to align with ridership levels. Operate more **six-car trains** where shorter trains provide sufficient capacity. Reduce service levels on holidays with low ridership.



**Redesigned Bus Network.** Maintain bus service levels and begin Better Bus implementation. The Year One Network reallocates existing resources to deliver more value to the region, adapting to how customers travel now.



**More Fare Revenue.** Increase fares by at least 12.5% to generate additional revenue. Reduce fare evasion with system-wide high-barrier faregate installation and increased fare enforcement. Make it easier to pay with mobile technology and reduced fare programs.

Fare Increase Scenario  Baseline	Revenue Impact (\$M) \$362.2	Ridership Impact (M)
Daseille	\$30Z.Z	233.3
5%	\$10.0	-4.1
12.5%	\$22.2	-10.2
12.5% + up to 25% late-night/weekend (with \$2.50 cap)	\$23.9	-11.3
20%	\$33.9	-15.2
25%	\$40.4	-19.0

#### **Fares**

- Balance increasing revenue and continuing to grow ridership
- Considering modifying weekend and late-night fares for additional revenue in response to strong ridership

#### **Parking Rates**

 Keep parking rates unchanged to encourage use of available capacity at parking facilities; raising parking rates would be expected to reduce growth in long-distance Metro commutes, lessening future fare revenue



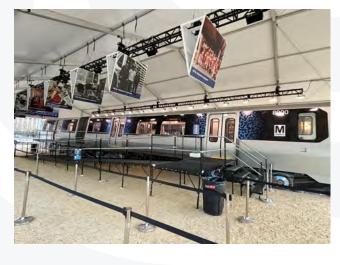
### **FY2025 Budget Path Forward**

- Metro's funding jurisdictions have communicated \$480M in additional operating funding in FY2025 above the 3 percent cap
  - \$200M from the District of Columbia
  - \$150M from Maryland
  - \$130M from Virginia
- Final subsidy levels will be set according to subsidy formula
- Anticipate April approval of FY2025 budget by WMATA Board

## Fleet of the Future Expo

- Fleet of the Future Expo was open on the National Mall from March 20 through April 3
- Showcased new world-class 8000series railcar design, a zero-emission bus, and a Pop-Up Shop with special Metro merchandise
- More than <u>40,000 visitors</u> experienced the expo over the two-week period















## NVTC's Metro Operating Funding and Reform Working Group Report

**April 4, 2024** 

**Andrew D'huyvetter**WMATA Senior Program Manager

## **NVTC's Metro Operating Funding and Reform Working Group Report**

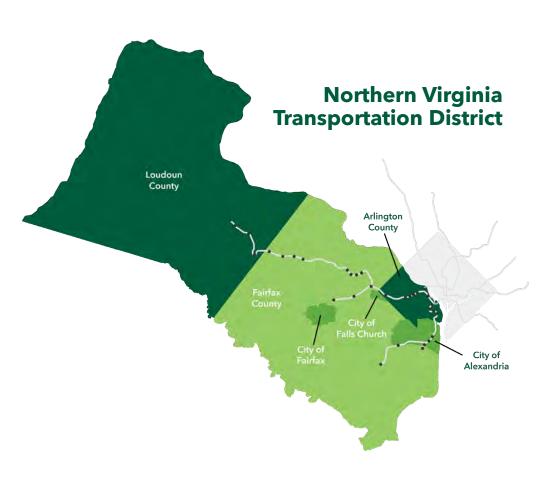


#### **Revenue Options**

- NVTC started a staff level Working Group in 2023 to develop a menu of revenue options to provide <u>technical</u> <u>information</u> to Commissioners and other stakeholders
- Revenue options provided to the Commission to inform potential conversations about the long-term solution for WMATA dedicated capital and/or operating funding

#### Reform, Accountability and Oversight

- Benchmarking Working Group investigated accountability and reform measures at other transit agencies
- 3% cap report illustrates the unintended consequences of the current legislative 3% operating cap and considerations for a revised cap



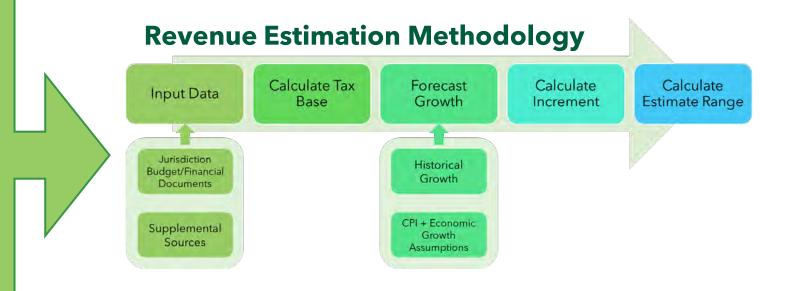
## NVTC's Metro Operating Funding and Reform Working Group Report



## Revenues Selected for Estimation by the Working Group

- Retail Sales & Use Tax\*
- Transient Occupancy Tax
- Grantor's Tax
- Regional Motor Vehicle Fuels Tax
- Motor Vehicle Sales Tax
- Vehicle Registration Fee\*
- Driver's License Fee\*
- TNC Sales Tax
- Parking Sales Tax
- Auto Repair Labor Tax

Estimates were generated at the NVTC District level



<sup>\*</sup>Estimates also generated at the state level

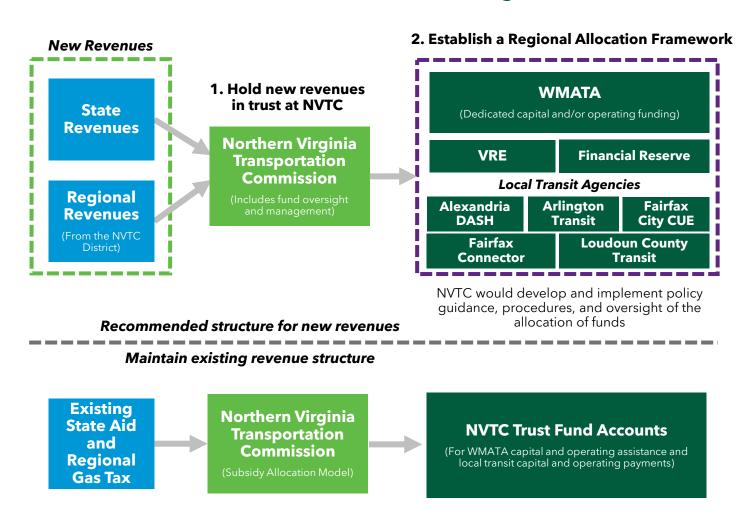
## NVTC's Metro Operating Funding and Reform Working Group Report



#### **Revenue Structure**

- Included in <u>2023 Annual Report on the</u> <u>Performance and Condition of WMATA</u> (p. 19)
- New revenues should support all transit operators in the Northern Virginia Transportation District, including WMATA, and NVTC should develop a technical and policy framework for NVTC to manage the funds
- New revenue sources should be in addition to and on top of existing VA funding structure. Keep existing structure and commitments largely the same
- Establishment of any dedicated revenues should not come at the expense of existing revenues or recipients

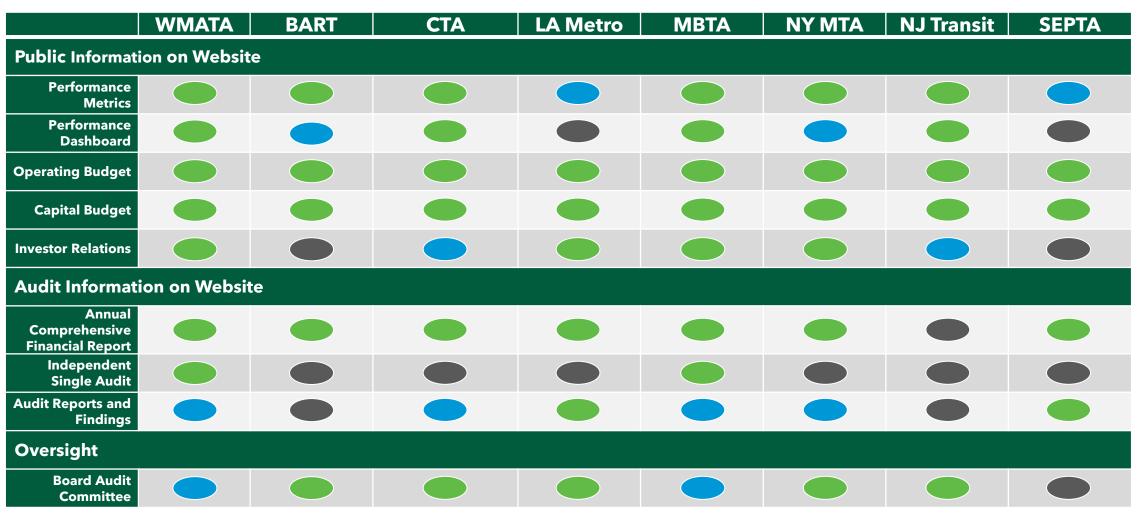
#### **Recommendation for New and Existing Revenues**

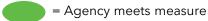


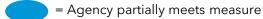
## **NVTC's Metro Operating Funding and Reform Working Group Report**



#### **Accountability measures**







## Overview of SJ 28 (Mass Transit in Virginia Legislative Study)



#### **Purpose**

- SJ 28 (Ebbin) was agreed to by the House of Delegates and Senate in early March
- The joint resolution establishes a joint subcommittee to study long-term, sustainable, dedicated operating and capital funding as well as cost-containment controls and strategies (WMATA-only) to ensure the Washington Metropolitan Area Transit Authority, the Virginia Railway Express, and the public transit systems that serve the NVTC and Potomac and Rappahannock Transportation Commission (PRTC) transportation districts.
- Joint subcommittee will complete its meetings for the first year by November 30, 2024 and for the second year by November 30, 2025

#### 2024 SESSION

history | hilite | pdf | print version

#### SENATE JOINT RESOLUTION NO. 28

Establishing a joint subcommittee to study long-term, sustainable, dedicated operations and capital funding as well as cost-containment controls and strategies to ensure the Washington Metropollian Area Transit Authority, the Virginia Railway Express, and the public transit systems that serve the Northern Virginia Transportation Commission and Potomac and Rappahannock Transportation Commission transportation districts meet the growing needs of public transit in the region. Report.

Agreed to by the Senate, March 5, 2024 Agreed to by the House of Delegates, March 4, 2024

WHEREAS, Northern Virginia is served by a network of public transit providers that move more than 1.5 million people each week; and

WHEREAS, the Northern Virginia Transportation Commission (NVTC) found that Northern Virginia's transit network generates \$1.5 billion in income and sales tax that goes to the Commonwealth's general fund each year, and

WHEREAS, the Washington Metropolitan Area Transit Authority (WMATA) is the backbone of Northern Virginia's transit system and plays a critical role in the Commonwealth's transportation network and economic growth; and

WHEREAS, the Virginia Railway Express (VRE) provides important commuter rail services that provide access from communities along Interstate 66 and Interstate 95 to the center of the District of Columbia, providing capacity to eliminate at least one highway lane from Interstate 95; and

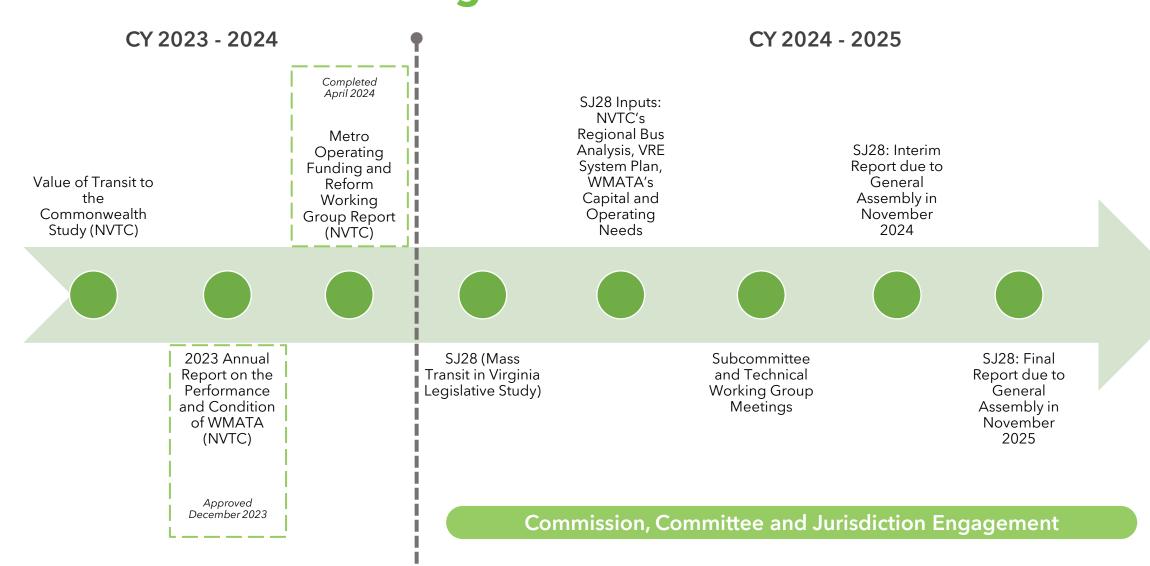
WHEREAS, the Commonwealth's multibillion dollar investment in Transforming Rail in Virginia enables VRE's and Amtrak Virginia's longterm growth and success; and

WHEREAS, the Northern Virginia Transportation Commission (NVTC) and Potomac and Rappahannock Transportation Commission (PRTC) play important funding, coordination, and governance roles for transit agencies operating within their districts; and

WHEREAS, the COVID-19 pandemic upended the financial operating model of all transit agencies across the United States, including those that serve Northern Virginia. through inflation and reduced ridership; and

## **NVTC and Partner Efforts to Address Transit Funding Issues in Northern Virginia**







# Climate Benefits of Transit in Northern Virginia

**Commission Meeting, April 4, 2024** 

## **Study Outline**



- 1. Overview of how transit generally benefits the climate
  - Different types of emissions
  - National transportation trends
  - Trends in the transit industry
- 2. Summary of Northern Virginia policies that intersect transit and the environment.
- 3. Climate benefits of transit are quantified.
- 4. Concludes with recommendations for the region.



## Why is this topic important for NVTC?



- Transportation is the greatest source of US emissions
- Northern Virginia's share of transportation emissions is ~10% higher than the average for the Washington, DC region
- Transit can help mitigate transportation emissions
- Transit ridership has recovered slower than driving and this has potentially significant climate impacts



"Metro's core business-moving people on public transportation-is inherently sustainable. Every trip taken with Metro instead of a car reduces the region's carbon footprint."

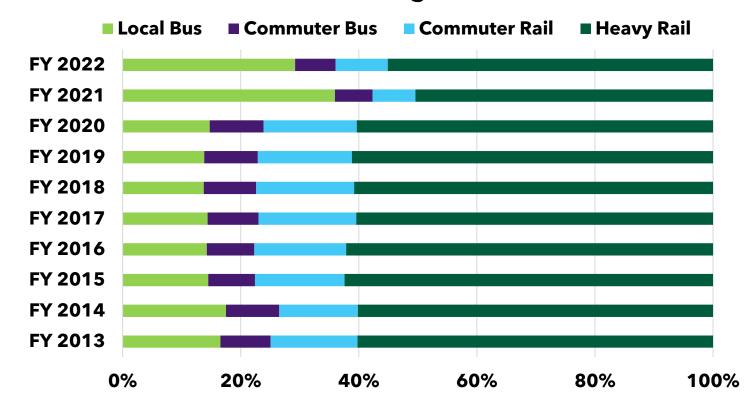
- Metro 2020-2021 Sustainability Report



The use of public transit in Northern Virginia reduces 120,000 to 160,000 Metric tons of  $CO_2$  annually<sup>1</sup>.

## Proportion of CO<sub>2</sub> emissions avoided by transit mode in Northern Virginia

- Commuter bus and commuter rail disproportionately benefit emissions
- Pandemic has had a big impact to emissions





The use of public transit in Northern Virginia reduces 120,000 to 160,000 Metric tons of CO2 annually<sup>1</sup>.



13,500,000 gallons of gasoline



**27,000** cars driven for one year (cars end-to-end would go from Washington, DC to Richmond, VA)



33 wind turbines running for a year



Over 15,000 homes' energy use for one year



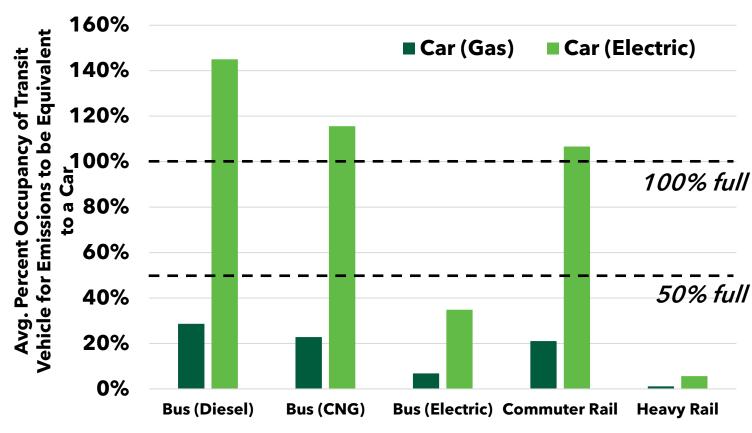
Almost 2,000,000 tree seedlings grown for 10 years



## All bus fuel types, even diesel buses, are a much greater environmental option than using cars.

- Transit vehicles can operate less than half full and still have lower emissions than gasoline cars
- The <u>more</u> a bus is used, the <u>lower</u> the number of bus passengers required to replace a gasoline car
- Electric cars are more competitive when it comes to reducing emissions

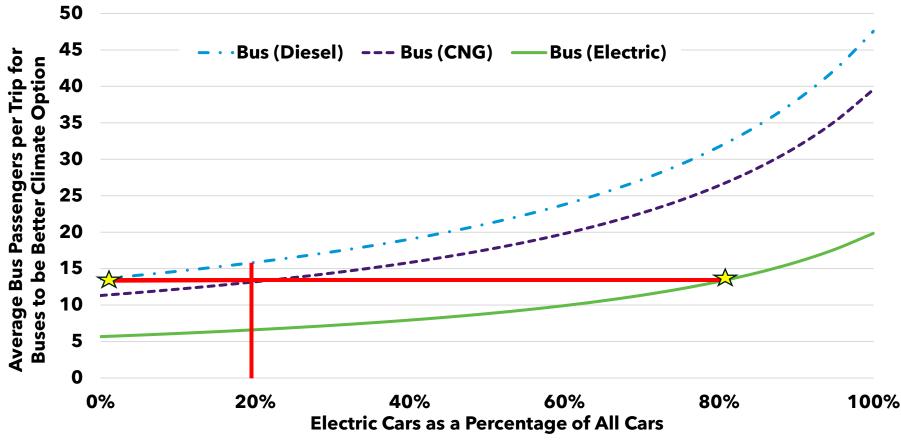
#### CO<sub>2</sub> emissions per passenger mile breakeven analysis



Electric cars need to make up a much larger proportion of on-road vehicles before other bus fuel types become better options.

- If <u>electric cars</u>
  <u>increase from 1% to</u>
  <u>20% of all cars</u>, an
  average <u>diesel bus</u>
  <u>needs only to carry 2</u>
  <u>additional people</u> to
  be a better
  environmental option
- 85% of all on-road cars need to be electric for electric buses to be as good for the climate as diesel buses are today

#### Breakeven analysis considering EV car composition





There are opportunities for the region's jurisdictions and transit agencies to learn from each other's policies.

- 27 transit-environmental policy documents were reviewed
- Content was categorized in three ways:
  - o Environmental Goals
  - o Transit Actions
  - o Performance Measures
- Very little overlap between jurisdictions

#	Transit Actions	Examples
1	Increase Ridership	Improve equity, improve rider experience, incentivize TOD
2	Vehicle	ZEB, electric paratransit or staff vehicles, renewable natural gas
3	Operations	Increase service, utilize regenerative braking
4	Facilities	Energy efficient lighting, solar panels, control stormwater runoff
5	Other Infrastructure	Bus priority infrastructure, on-route charging
6	Studies	ZEBs, transit facilities, alternative fuels
7	Other	Increase education, energy audits

## Recommendations

- 1. Increase ridership (shorter-term)
- 2. Reduce miles and hours when a transit vehicle is not taking passengers ("deadheading") where possible (shorter-term)
- 3. Increase the amount of transit in the region (medium-term)
- 4. Speed up buses using bus priority infrastructure and policies (medium-term)
- **5.** Transition to zero emission buses (longer-term)

"...the environmental benefits of transit only arise from many people riding the bus rather than driving, taking a taxi, or otherwise getting a ride in a private vehicle."







## Thank You!

**Xavier Harmony, PhD** 

Senior Program Manager



2300 Wilson Boulevard, Suite 230, Arlington, Virginia www.novatransit.org | @novatransit



## SYSTEM PLAN 2050 DRAFT PLAN REVIEW

**April 4, 2024** 



## System Plan History and Purpose

A transit agency long-range plan establishes an operations vision—a service concept we can work towards

### The world today is very different than in 2014!



Communities are changing and growing

- The Northern Virginia population is projected to grow by 35%.
- The Fredericksburg area is projected to grow by 65%.



Telework remains a fixture of post-pandemic work

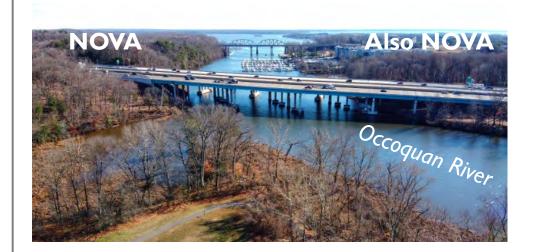
2019: **59%** of VRE riders indicated they <u>did not telework</u> at all 2022: **37%** said they do not telework at all



Around 2030, new infrastructure, partially funded by VRE/regional sources, will allow VRE to run 63% more service than today.

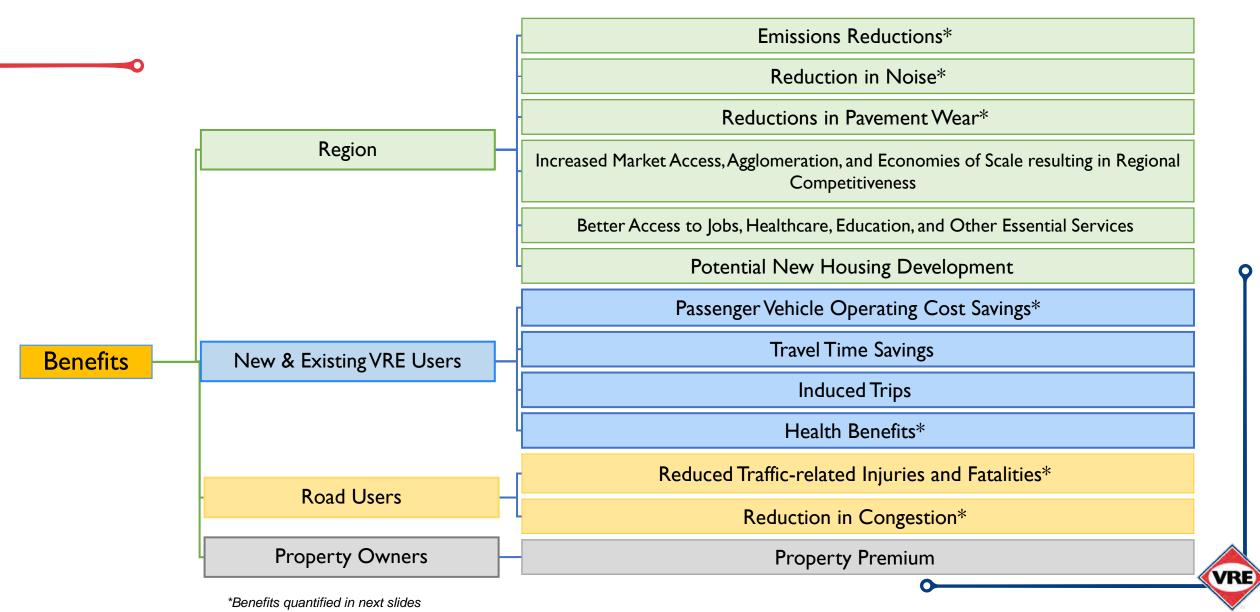
Northern Virginia does not end at the Occoquan River

Transit improvements for users south of our region benefit the NVTC jurisdictions





## **Benefits of VRE**



## System Plan 2050 Vision

VRE will grow to serve the region as the transportation service of choice, creating meaningful connections and economic opportunities in a safe, sustainable, and equitable manner.

## 2050 System Plan Goals



1. Safety and Reliability



2. Market Growth and Financial Stability



3. Regional System Integration and Equitable Service



4. Sustainability and Resiliency



## System Plan 2050 Update

Phase I
June – December 2022

Phase 2
January – October 2023

Phase 3
November – April 2024

- Coordination with peer agencies and stakeholders
- Vision and Goals development
- Ridership trend and potential new market analysis

- Develop and screen future service scenarios
- Public surveys, stakeholder outreach, data collection
- Focus on 2030 near-term service planning and implementation

- Long-term 2050 service scenario refinement and screening
- Determine costs and funding needs for future operations and infrastructure
- ID of infrastructure constraints and new capital projects



# In the Short Term: Today to 2030

VRE will move forward to expand service through the end of this decade, consistent with Transforming Rail in Virginia (TRV), with a service and investment plan that includes:



Running up to 63% more daily round trips on weekdays



Running full weekend service (26 daily trains)



Running trains in both directions in the AM and PM



Changing stopping patterns to allow express service



Adding a **new infill station** at Potomac Shores



Adding platform edges at select stations



Lengthening platform edges at select stations



Expand yards
at Broad Run and
Crossroads

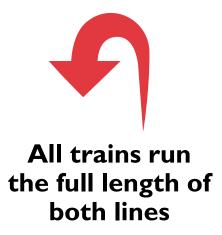


New mid-day storage at New York Ave. in D.C.

## Your VRE in 2050: Recommended Scenario



Weekdays
5am-10pm
Saturdays
6am-10pm
Sundays
7am-9pm





**Peak Direction:** A train every 20 min.

Reverse-Peak: A train every 30 min.



Every hour off-peak in both directions and on Weekends



~I express train **per** hour, weekdays (21% of trains)



29 round trips per line by 2050, almost **3x more** service than 2024



## Personal and Societal Benefits of VRE in 2050

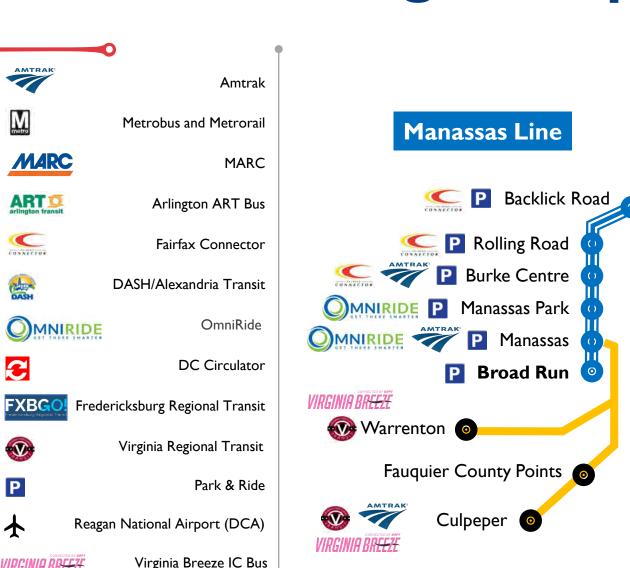
AU 1 2050 / 1 1 1	Induced trips (new to VRE)		All Trips			
All values are in 2050 (unless otherwise noted)	2030 Level of Service	2050 Level of Service	2030 Level of Service	2050 Level of Service		
Annual VMT Reduction	5,446,000	19,469,000	18,283,000	51,188,000		
Annual Vehicle Operating Cost Savings	\$891,000	\$3,184,000	\$5,981,000	\$16,744,000		
Increase in Passengers from No Build (2050)	178,900	634,800	2,431,800	5,391,100		
Annual CO2 Avoided (metric tons)	440	1,560	1,460	4,100		
Annual Travel Delay Avoided (Hours)	N/A		47,000	64,000		
Annual Freight Benefit of the RF&P Rail Corridor in 2030 (Spotsylvania to Alexandria)	\$157,160,000 (in 2020 \$)					
I-95 Truck Trips Avoided in 2030 <sup>2</sup>	4,180 daily truck trips on 1-95 (End-to-end, this equals a lane of trucks from the Pentagon to past Exit 126 in Spotsylvania—57 miles)					

I: Source: DRPT 2022 Statewide Rail Plan

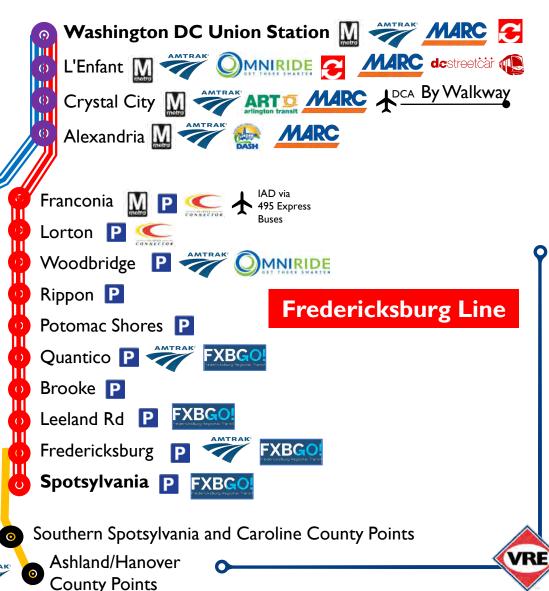


<sup>2:</sup> Average payload of a semi truck: 20.6 tons, typical length of a semi truck in VA: 72 ft

# VRE as the Region's Spine in 2050



New Feeder Bus



## Recommended 2050 Service Scenario

**Washington DC Union Station** System Map with Potential Connections L'Enfant Crystal City Alexandria **Backlick Road** Franconia Lorton Rolling Road Woodbridge Burke Centre **Manassas Line** Rippon **Fredericksburg Line** Manassas Park 58 Trains per Day Potomac Shores 58 Trains per Day Manassas **Ouantico Broad Run** Brooke Leeland Rd 19 Bus Trips per Day Warrenton o Fredericksburg **Fauquier County Points** 💍 Spotsylvania Culpeper County 6 Southern Spotsylvania and Caroline County and Town Points **Points** Potential New Commuter Bus Hanover County 35 Bus Trips per Day

**Points** 

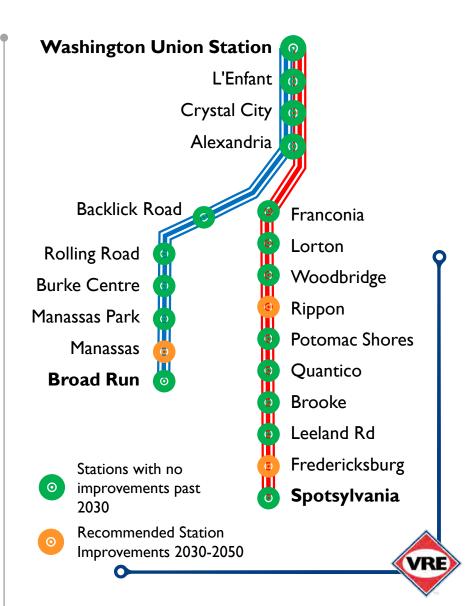
19 Bus Trips per Day



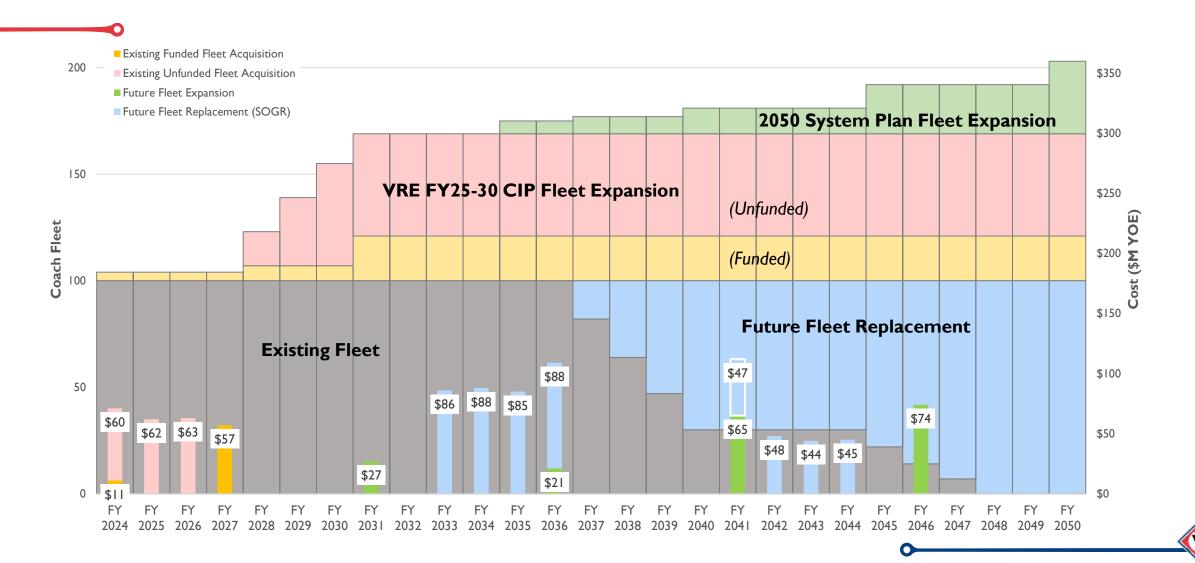
## Minimum Infrastructure Requirements 2050

Improvements	Fredericksburg Line		Manassas Line		Cost 2024\$	
Platform	Fredericksburg Station Two Platform Extensions		Manassas Station New East - Platform		\$38,200,000	
	Rippon Station Platform Extension					
Parking	Woodbridge	189 Spaces	Backlick Road	214 Spaces	\$157,800,000	
	Rippon	616 Spaces	Manassas	262 Spaces		
	Brooke	643 Spaces	Broad Run	35 Spaces		
	Leeland Rd	112 Spaces				
	Fredericksburg	650 Spaces				
10 Crossovers near Springfield, Lorton, Rippon, Potomac Shore, Brooke, and Leeland Road stations		otomac Shore,	8 Crossovers near Backlick Road, Rolling Road, Burke Centre, Manassas Park, and Manassas stations		\$163,600,000	
	16,000 ft Track Construction		12,800 ft Track Construction			
			Broad Run Third Track			
Total					\$359,600,000	

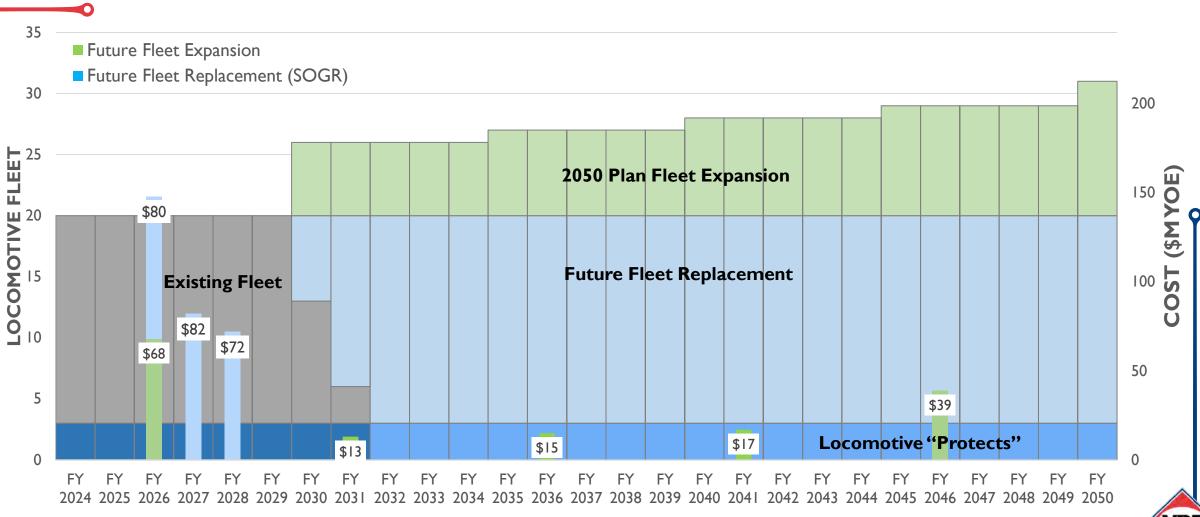
- Platform: based on the proposed 2050 operating scenario and TRV Phase IV build conditions
- Parking: based on the 2050 station boardings and the existing and planned parking count at current auto access mode-share rates
- Track: based on the need for bi-directional operations in the TRV Phase IV build conditions
- All cost estimates are in 2024 dollars and are "fully loaded" costs



## Capital Costs — Coach Fleet

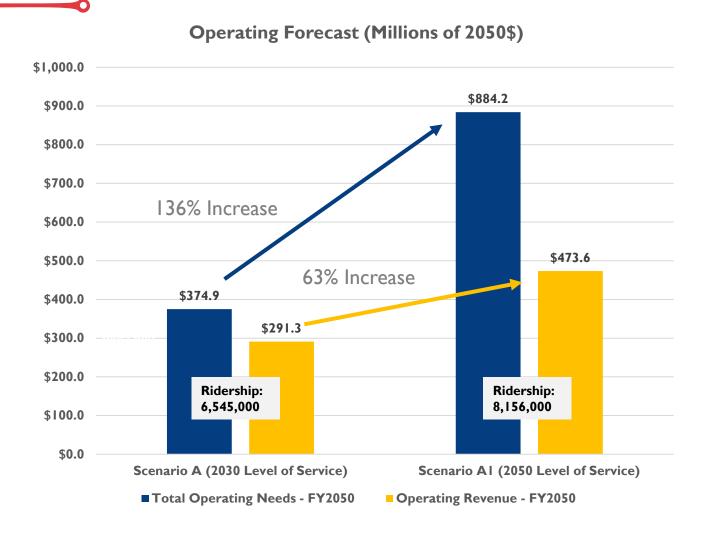


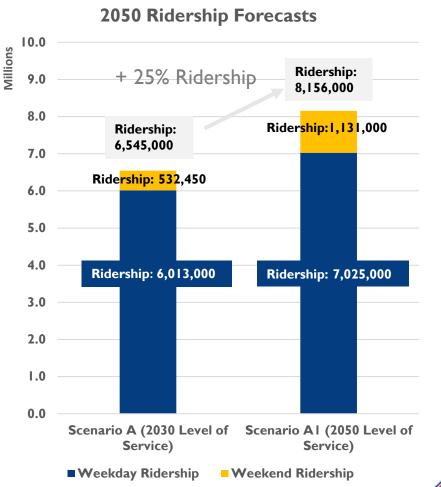
## Capital Costs - Locomotive Fleet



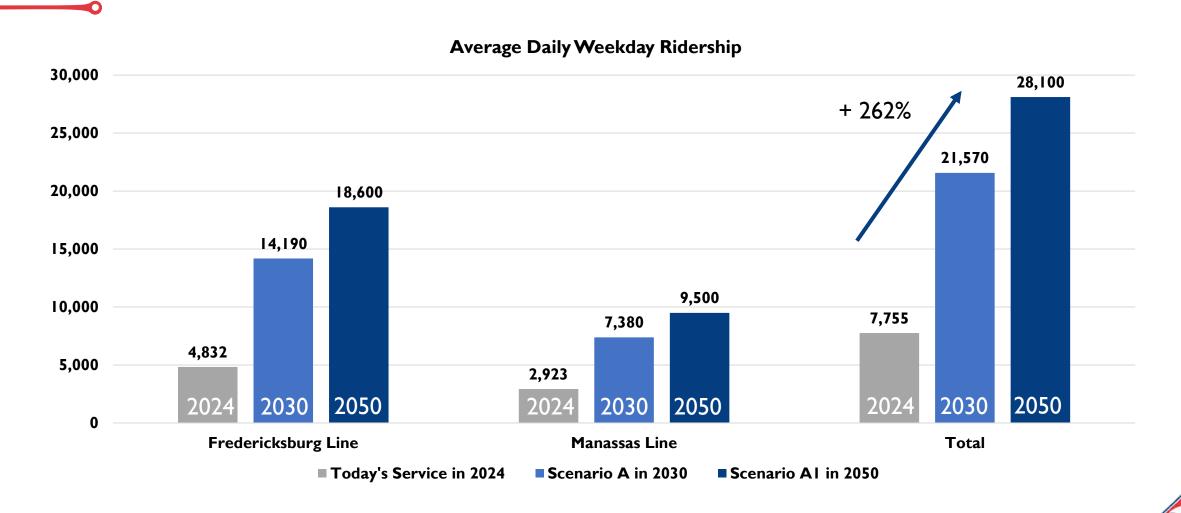
<sup>\*</sup> Including 20% of spares in the locomotive fleet. Replacement costs include the cost of three (3) "protect" locomotive replacements. All cost estimates are in the year of expenditure dollars.

# 2050 Financial Forecasts: Operating





## Average Daily Ridership Forecasts By Year



## **NEXT STEPS**

- I. May 2<sup>nd</sup> PRTC Board Presentation
- 2. June 21st VRE Ops. Board Action
- 3. Return to NVTC in July 2024







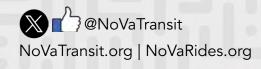
Advancing transit in Northern Virginia since 1964



cing Transit
thern Virgin
institut
unding,
popera
spertis



Executive Director Newsletter





**April 2024** 



## A Message from Kate Mattice

It's probably no surprise to regular readers of this newsletter that public transit is good for the environment. A train or bus carrying multiple people takes cars off the road and avoids the greenhouse gas emissions that come with them. But how do we quantify that advantage? That's where NVTC's newest report comes in. Our "Climate Benefits of Transit in Northern Virginia" report explores regional policies that connect transit to the environment and examines the climate impacts of transit in our region.

One key finding: The use of public transit in Northern Virginia reduces 120,000 to 160,000 metric tons of CO2 annually. The report concludes that all buses, including those that burn diesel fuel, are better for the environment than the cars, SUV's and light trucks that people might otherwise drive.

The report also makes recommendations, like increasing ridership of public transit and growing the amount of available public transit in Northern Virginia. These are common sense measures that can help Virginia and the Greater Washington region meet ambitious climate goals.

The "Climate Benefits of Transit in Northern Virginia" report is just one example of our ongoing research efforts as we work to inform decision making throughout our region, as well as across the Commonwealth. In March, NVTC hosted experts from our local governments, transit agencies and other regional organizations to plot a course for future research projects. Our Strategic Transit Policy Research Roadmap will help guide NVTC's transit policy research over the next four-to-six years. The stakeholder input ensures that we are conducting research that will be most useful to our partners.

I'm also proud of NVTC's long history of publishing thoughtful research and reports that have real-world impacts on the growth and sustainability of the region's transportation network. Feel free to check out our history of NVTC research products, online tools and interactive maps on our website at <a href="https://novatransit.org/resources">https://novatransit.org/resources</a>.

It's the kind of work that we've done since our creation in 1964 and will continue to do, helping shape our region for decades to come.

Executive Director

### In This Issue

- 4 New Commissioner and alternate sworn in
- 5 Federal program to help NVTC identify locations for 'on-route' recharging of electric buses
- 6 Metro hosts 'Fleet of the Future' celebration
- 7 Metro releases annual report
- 8 Regional partners join NVTC to plot course for future research projects
- 9 TSDAC reviews Virginia transit trends, available funding
- 10 Welcome Daniel Knickelbein
- 11 Staff learn strategic thinking tools in annual training



**April 11**Program Advisory

**April 16-17**Commonwealth

Committee

Transportation Board

April 19

VRE Operations Board

May 2
Commission Meeting

May 16
Joint WMATA & Legislative
& Policy Committees

May 22-23
Virginia Transit Association
Annual Conference

NoVaTransit.org NoVaRides.org





@NoVaTransit



#### New Commissioner and alternate sworn in

Chair Matt de Ferranti swore in one new Commissioner and one alternate Commissioner at the March Commission meeting. James "Jimmy" Bierman, Jr. joined the Commission as a member of the Fairfax County Board of Supervisors. Alternate Justine Underhill comes to the Commission from the City of Falls Church. Daniel Storck of Fairfax County, who joined the Commission as an alternate in 2020, now serves as a principal Commissioner.

Additionally, the Commission commended departing Commissioners. The terms of House of Delegates appointees Aimee Gilroy, Joseph Kornhoff, David Skiles and John Tuck III expired at the start of the new General Assembly Session. The Commission is awaiting the appointment of four members from the House of Delegates and one from the Senate.





# Federal program to help NVTC identify locations for 'on-route' recharging of electric buses

NVTC is receiving free technical assistance from a federal program to help NVTC analyze how local public transit agencies in Northern Virginia could share infrastructure that allows electric buses to recharge while running their routes. "Onroute charging" enables buses to recharge their batteries on the go, rather than having to return to a garage to plug in, potentially extending the range of the buses. This could improve reliability and lower infrastructure costs for battery electric buses (BEB).

Several of our bus providers in Northern Virginia have overlapping routes that could be effective for shared on-route charging, including ART, DASH, Fairfax Connector and Metrobus. The analysis will identify potential locations for those chargers.

The Infrastructure Investment and Jobs Act (IIJA) created the Joint Office of Energy and Transportation, which works with the National Renewable Energy Laboratory (NREL) to provide technical assistance. Senior Program Manager Ann McGrane submitted a successful request on behalf of NVTC for assistance from the Joint Office to evaluate potential sites for shared charging and consider how the operational model would function. This year-long analysis comes at no cost to NVTC or local or state governments. NVTC will work closely with Northern Virginia's public transit agencies to advance this study.

Examining on-route charging is one of six strategies identified by NVTC's <u>Northern Virginia Zero-Emission Bus Strategic Plan</u>, which we published earlier this year.











#### Metro hosts 'Fleet of the Future' celebration

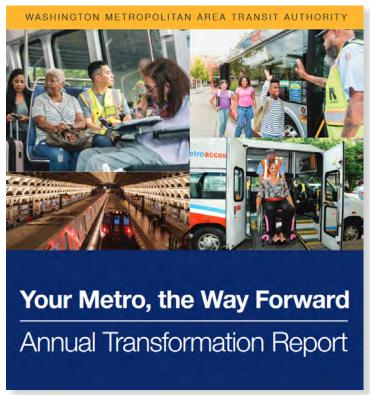
Executive Director Kate Mattice had the honor of being invited to join Metro's Fleet of the Future celebration on the National Mall on March 19. Metro GM/CEO Randy Clarke and Metro Board Chair and Commissioner Paul Smedberg led the night's festivities, all with a full-size mockup of the next generation of Metrorail cars in the background. The display

gave visitors an opportunity to see what Metro's 8000-series railcars will look like. The 82-foot model train includes Metro's first-ever open gangway between cars and other modifications from earlier fleets. Metro also showed off its first electric bus on site.











## Metro releases annual report

Metro released its inaugural <u>annual report</u> on its Strategic Transformation Plan (STP) at its Executive Committee meeting on March 7, highlighting progress made toward several key initiatives including rail automation, zero-emission buses and crime prevention. The STP's goals of Service Excellence, Talented Teams, Regional Opportunity and Partnership, and Sustainability serve as a framework for Metro's decision making across the organization. The annual report also noted year-over-year monthly ridership increases of over 4.5 million trips and the highest levels of rail and bus customer satisfaction in several years.



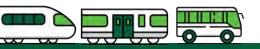
# Regional partners join NVTC to plot course for future research projects

Senior Program Manager Xavier Harmony hosted a regional workshop focused on transit policy research on March 20 at NVTC's offices in Court House. Xavier and his consultant team solicited feedback and input into a Strategic Transit Policy Research Roadmap, which is being developed to help guide NVTC's transit policy research over the next four-to-six years. With almost 20 attendees from jurisdictions, transit agencies and other regional bodies, the

workshop identified a number of issues and themes important to the region's transit, as well as useful feedback for developing the research roadmap.

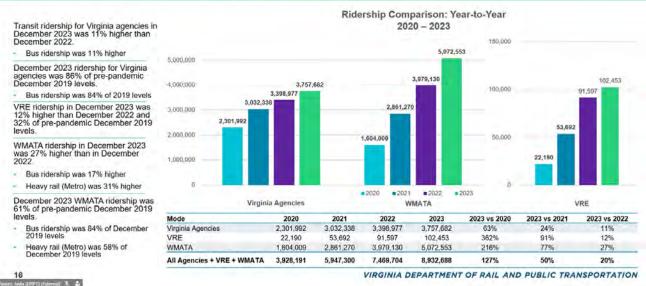
Preliminary results will be presented to the Program Advisory Committee on April 11 and the draft roadmap will be presented to the full Commission at the May 2 meeting.

#### **Policy Research Roadmap Framework** The guiding principles that define NVTC's role and **NVTC MISSION AND VISION** priorities The long-term aspirations for the research VISION program The issues that are most important and that NVTC RESEARCH PRIORITIES is best placed to take the lead on. Concept of operations on how to develop a PROGRAM STRUCTURE AND sustainable, actionable program based on **PIPELINE** research priorities Specific, achievable initiatives that will help NVTC PARTNERSHIPS AND FUNDING deliver its research vision Northern Virginia Transportation Commission





#### Statewide Ridership Comparison: December Year-to-Year





# TSDAC reviews Virginia transit trends, available funding

Executive Director Kate Mattice participated in a meeting of the Transit Service Delivery Advisory Committee (TSDAC) March 28, the organization that provides guidance to the Department of Rail and Public Transportation (DRPT) on the allocation approach to state transit aid. The meeting contained updates on transportation-related bills in this year's General Assembly Session, including Metro funding, the upcoming Northern Virginia Transportation Study and ridership trends across the Commonwealth showing major gains--bottom line, transit growth is remarkable!

The committee also dove into DRPT funding available for allocation in the FY 2025 Six Year

Improvement Program (SYIP). DRPT is currently reviewing funding applications for transit operations, capital, special programs, the Transit Ridership Incentive Program and the Federal Transit Administration's Enhanced Mobility program. DRPT will present its proposed SYIP to the Commonwealth Transportation Board in May, with approval anticipated in June.

Meanwhile, DRPT anticipates only a slight increase in overall transit operating funding in FY 2025.









## Daniel Knickelbein

Daniel Knickelbein joined NVTC in March as a senior program analyst. He will primarily support the **Commuter Choice** program and has already expressed interest in supporting the Envision Route 7 Bus Rapid Transit system program as well as our legislative work. Daniel joins us most recently from Chicago, where he worked as a Transportation Planner at TranSystems. Daniel's previous experience also includes working

for a Council of Governments in the Chicago area and the Broward Metropolitan Planning Organization in Fort Lauderdale, Florida. Daniel has a bachelor's degree in political science from Macalester College in St. Paul, Minnesota and is looking forward to exploring the DMV area and learning more about the unique structure of governments in the Commonwealth.



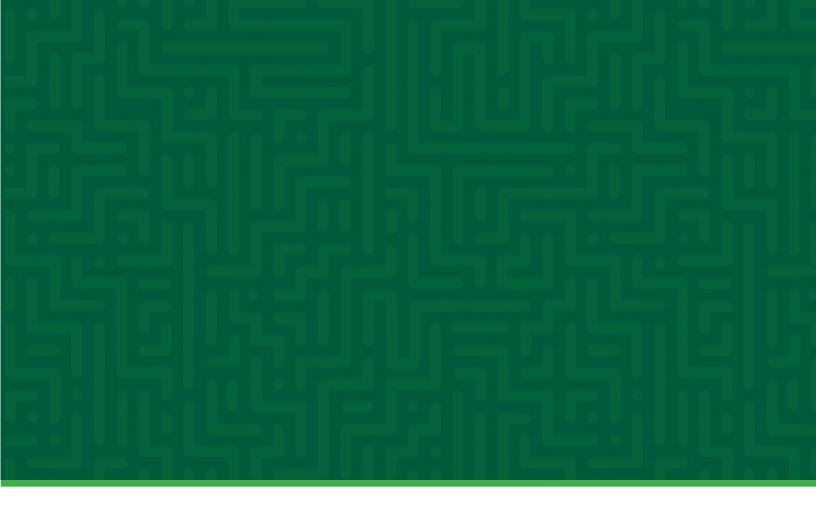
## Staff learn strategic thinking tools in annual training

NTVC staff gathered for our once-a-year training session on March 22 with a focus on strategic thinking. The session led us through the steps on how to think about NVTC's vision and mission, as well as individual programs and projects, and how to translate big picture thinking into our day-to-

day work. I want to thank our facilitator, Margarita Rozenfeld, for her creative approach to keeping our staff engaged throughout the learning process, as well as Chair Matt de Ferranti, who joined us for lunch and shared a few words of encouragement and thanks for the work we do.









Advancing transit in Northern Virginia since 1964

> 2300 Wilson Blvd., Ste. 230 Arlington, VA 22201

> > NoVaTransit.org NoVaRides.org

