



Messaging the Value of Transit

VTA Conference - Harrisonburg, VA - May 2024

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Northern Virginia Transportation Commission

Who We Are and What We Do



Fund and provide oversight/stewardship of WMATA (Metro) and co-owners of Virginia Railway Express



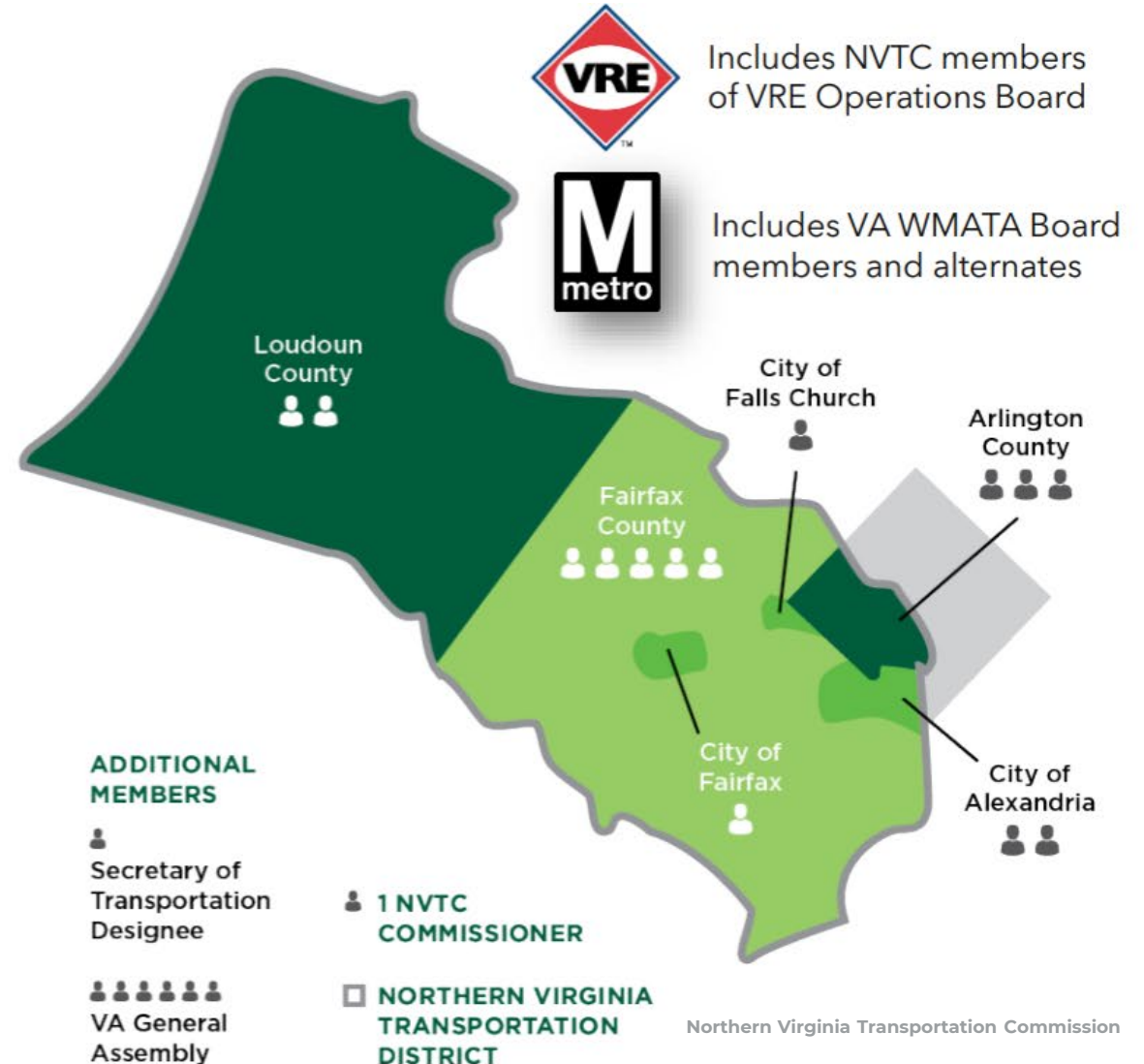
Manage state and regional funding for six local bus systems

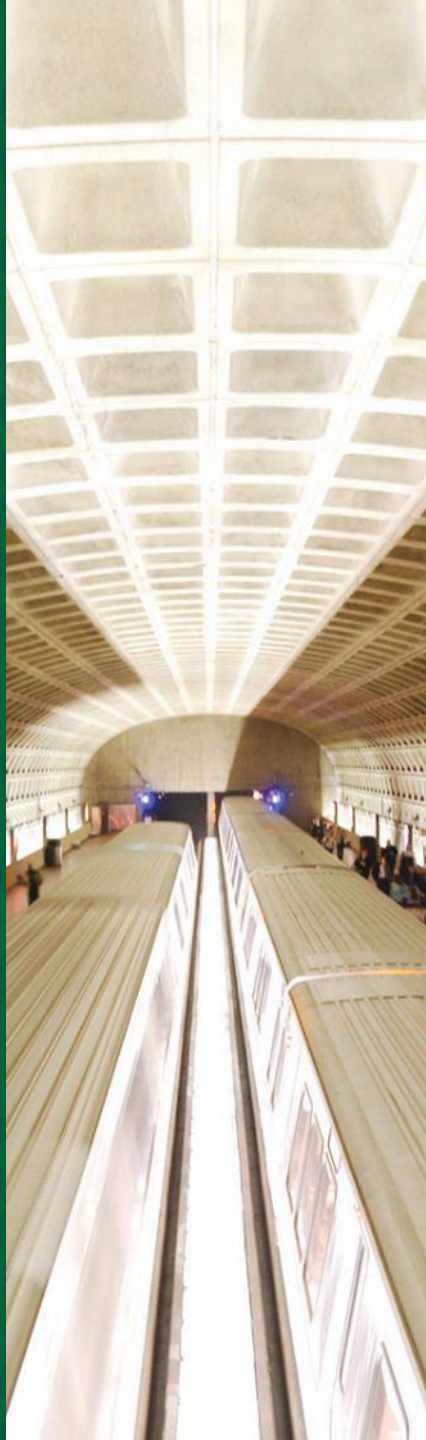


Administer the Commuter Choice Program (using tolls from I-66 inside the Beltway and I-395/I-95)



Work across jurisdictional boundaries to enhance transit service, coordinate policies and share research





Agenda

- What is the Value of Transit study?
- How did we message the results?
What were the tools?
- How can your region or city do something similar?
- What does success look like?

What is the Value of Transit study?

Why Study the Value of Transit?

- For over 50 years, the existence of high-quality, reliable transit has shaped development patterns in Northern Virginia
- The transit network supports the region's quality of life, economic competitiveness, and ability to get around the metro area
- Quantifying transit's impact on income and sales tax revenue helps demonstrate the system's importance to the entire Commonwealth



Study Builds Off Previous Work

Technical Report
**Fiscal Impact of Metrorail on
 The Commonwealth of Virginia**
 Prepared by
 Peat, Marwick, Mitchell & Co.
 1990 K Street, N.W.
 Washington, D.C. 20006
 November 1985

**Fiscal Impact of Metrorail
 On The Commonwealth of Virginia**
 Northern Virginia Transportation
 Commission
 November 10, 1994
 Prepared by
 KPMG Peat Marwick
 8200 Greensboro Drive, Suite 400
 McLean, Virginia 22102
Final Technical Report

**THE CASE FOR INCREASED
 FUNDING OF PUBLIC
 TRANSPORTATION IN
 NORTHERN VIRGINIA**
 A PRESENTATION BY THE NORTHERN VIRGINIA
 TRANSPORTATION COMMISSION
 December 7, 2005

**Contribution of Transit Services to the
 Northern Virginia Economy**
 Prepared for:
 Northern Virginia Transportation Commission
 Prepared by:
 Center for Regional Analysis
 George Mason University
 April 2015

**The Value of
 Metrorail and
 Virginia Railway
 Express to the
 Commonwealth
 of Virginia**
 Technical
 Memorandum
 NVTC
 NORTHERN VIRGINIA TRANSPORTATION COMMISSION
 THE VOICE OF TRANSIT IN NORTHERN VIRGINIA
 January
 2018
Photo Courtesy of Washington Metropolitan Area Transit Authority

What's the Purpose? Who's the Audience?

Purpose:

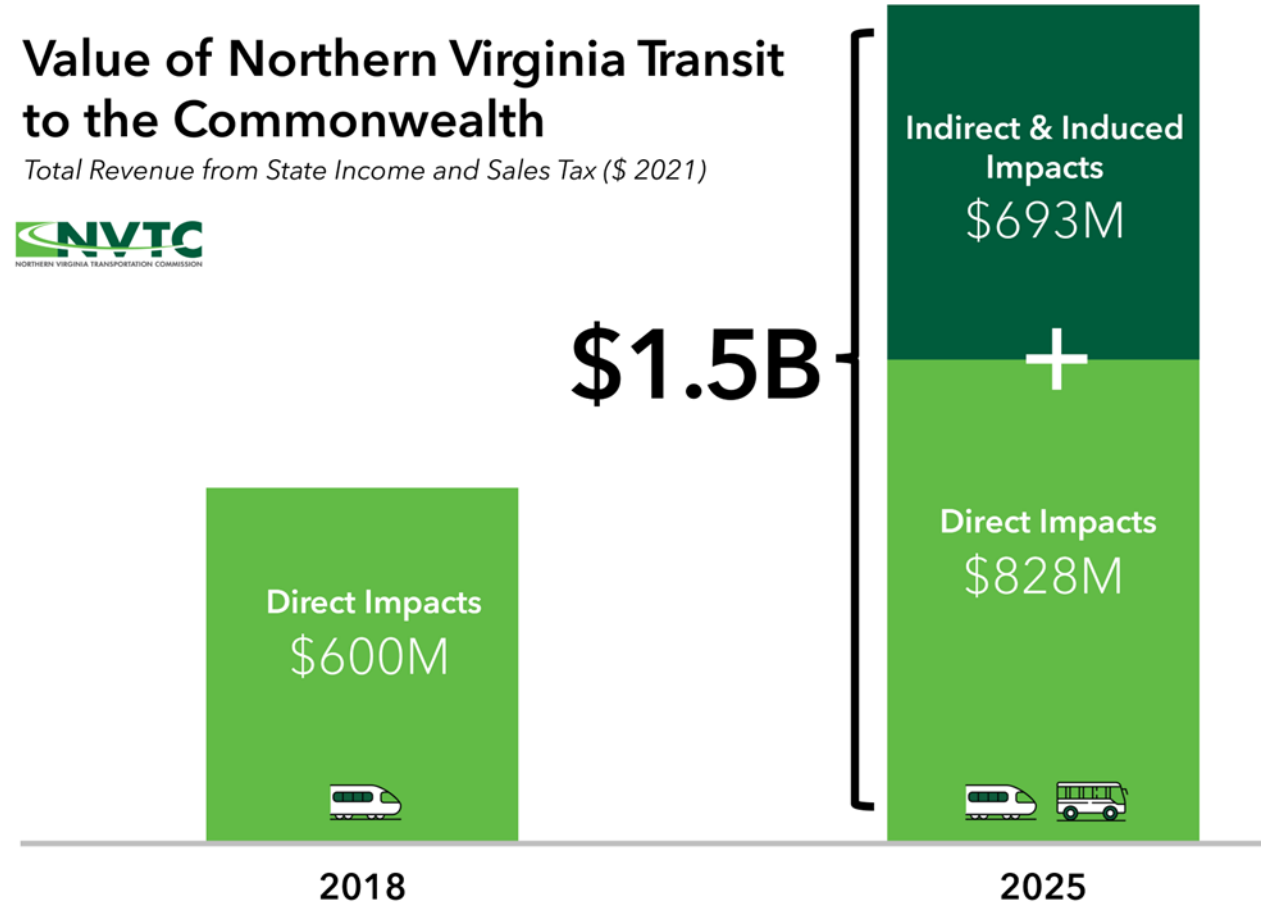
Advocate for increased funding for transit



What Did We Find?

Northern Virginia's transit network generates **\$1.5 billion*** in income and sales tax revenue to the Commonwealth

* (2021 dollars), 2025 analysis year



(Created May 2023)

Why Is Funding Transit Important?

- The **\$1.5 billion in revenue** that transit brings to the Commonwealth equals about **5% of Virginia's general fund** revenue. This money helps fund programs and services for people across Virginia.
- The Commonwealth has a **160% return on investment** for transit in Northern Virginia. For every \$1 spent, it receives the original dollar back plus an additional \$1.60 in return.
- Northern Virginians **using transit removes congestion from I-95 and I-66**, improving the reliability of travel for both people and freight across Virginia and along the East Coast.

Traffic Impacts

Without NoVa transit, there would be an extra **278,000** trips a day.

A line of these cars would be **790 miles** long and reach from **NYC to Chicago**.



Without transit...

more people must drive to more places, leading to:

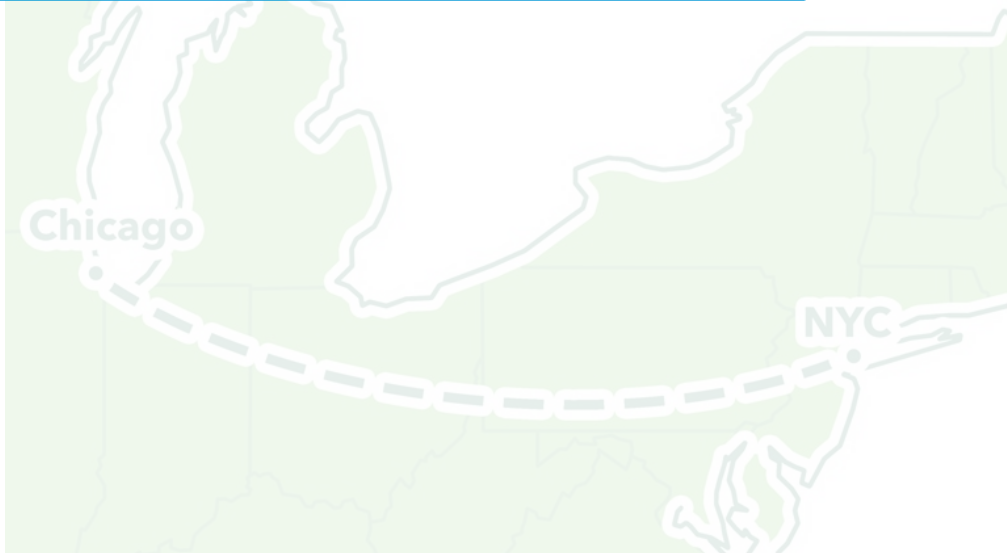
- 278,000 new vehicle trips per day
- 1.8 million more miles traveled by car during a typical day's commute
- 209,000 additional hours stuck in traffic for commuters each day (a 64% increase in delay due to congestion)

Traffic Impacts

Without NoVa transit, there would be an extra 278,000 trips a day.

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These are key stats, but they are so big that they're hard to grasp.



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Household Impacts

If transit did not exist, the existing road network could not support 128,000 existing households.



128,000
households



**13% of
households
in NoVa**

Employment Impacts

Value of Northern Virginia Transit to the Commonwealth



Calculating Total Employment Supported by Northern Virginia Transit



157,000
jobs*



154,000
jobs



Total Employment
311,000
jobs

Direct Impact

Jobs in NoVa that cannot be supported due to roadway congestion levels

Indirect Impact

Jobs that provide goods and services to directly impacted firms, e.g., accountants, IT support, deliveries

Induced Impact

Jobs that depend on people employed at the directly or indirectly impacted firms using their wages to buy things, e.g., work lunch, movie ticket, sporting event

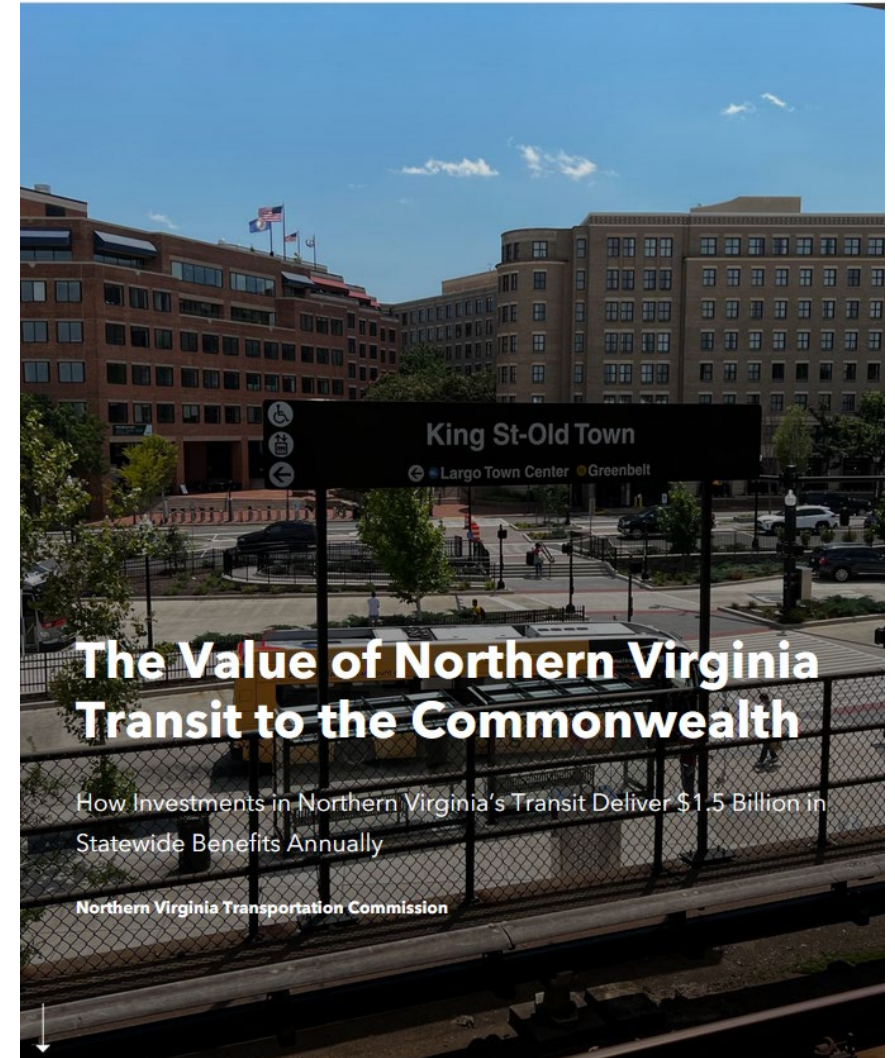
*76% of these jobs are within 1/2 mile of a Metro station

**How did we
message the
results? What
were the
tools?**

Telling the Story

Interactive Reports and Static Graphics

- Blend the data and narrative with ArcGIS StoryMaps
 - Allows a user to take their time and explore a lot of information
- Enhance the story using new maps and graphics
 - More complex technical data works best with interactive maps



The Tools



- ArcGIS Pro
- ArcGIS StoryMaps
- Adobe Stock
- Greenhouse Gas Equivalencies Calculator (EPA)

The Benefits


- Available with any Esri foundational user type
- Compatibility with phones, tablets and computers
- Visualization leads to more memorable and impactful messaging

What are ArcGIS StoryMaps?



Providing Context

We paired quotes from news articles with an interactive map showing the buildout of Metrorail in Virginia


The Value of Northern Virginia Transit to the Commonwealth

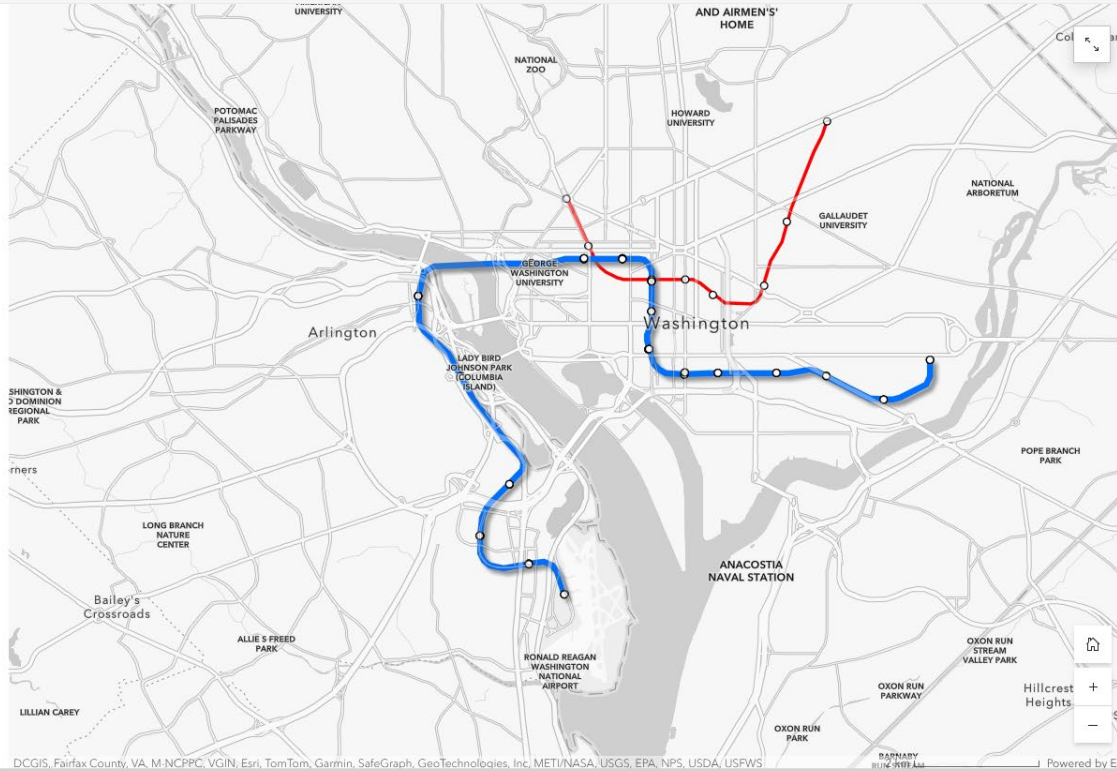
History of Northern Virginia T...
Value of Transit to the Common...
Traffic Impacts
Employment and Housing Impacts
Local Impacts

1977 Blue Line Rosslyn to National Airport

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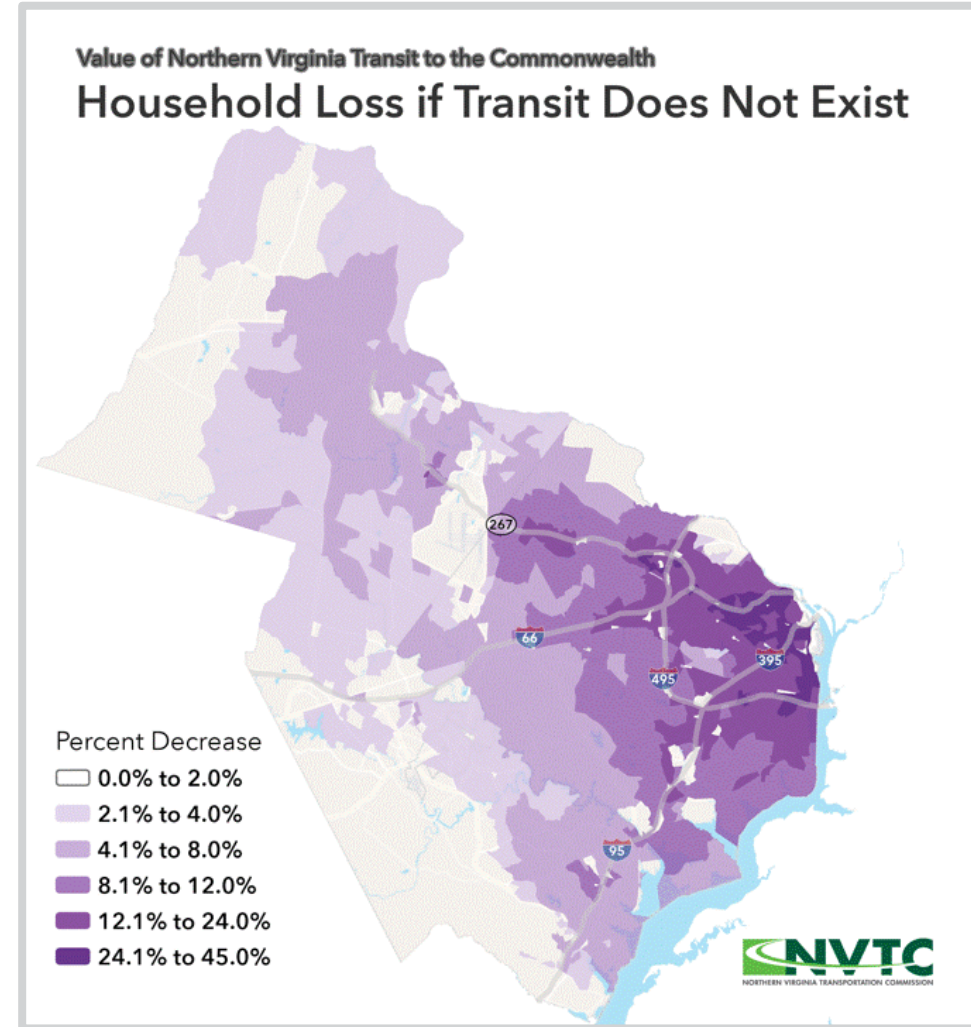
With the opening today of its 12-mile long Blue Line from National Airport to RFK Stadium, Washington's Metro subway grows from a downtown demonstration line into the spine of a regional transportation system that could rival the Capital Beltway in its effect on Washington.

The Washington Post, July 1, 1977



Providing Context

GIFs can add a layer of understanding while also drawing the audience in with a bit of animation



A Deeper Dive

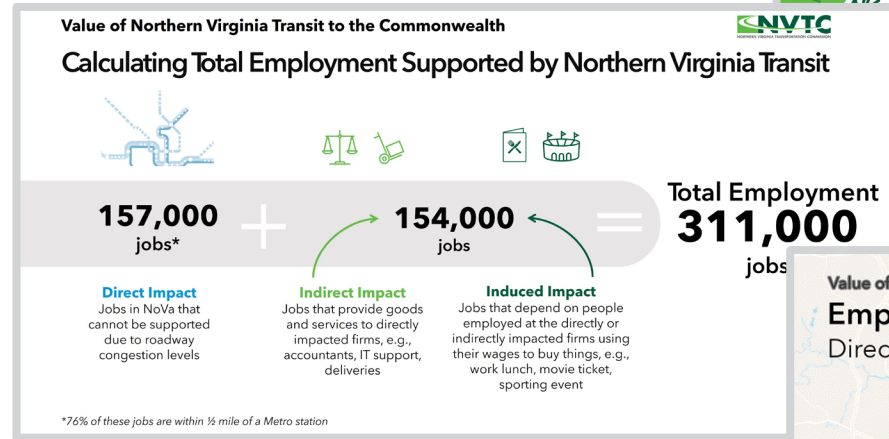
The Pentagon is a familiar landmark and the perfect example to prompt the audience's curiosity



Spreading the Word

Without NoVa transit, there would be an extra **278,000** trips a day.

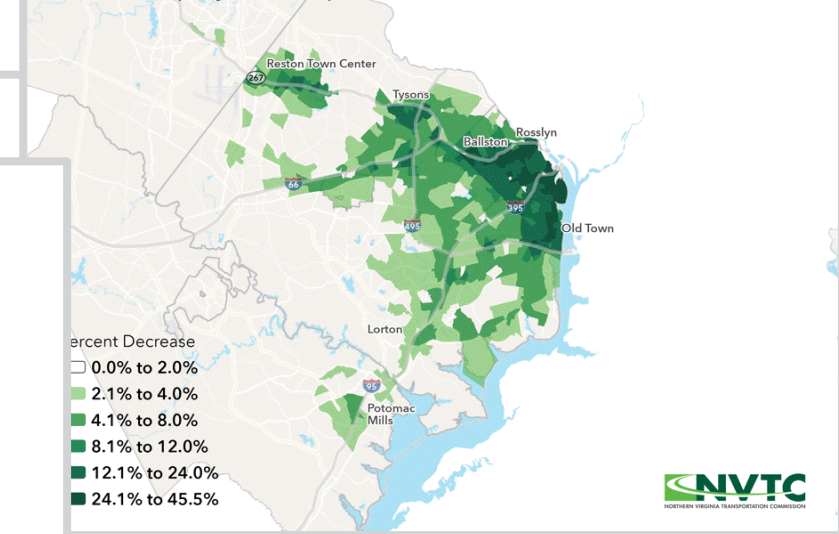
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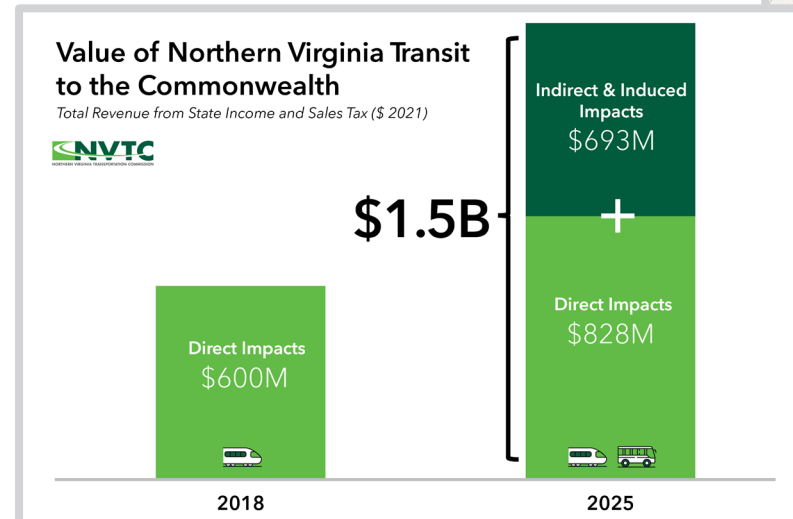
Value of Northern Virginia Transit to the Commonwealth

Employment Loss If Transit Does Not Exist

Direct Employment Impacts

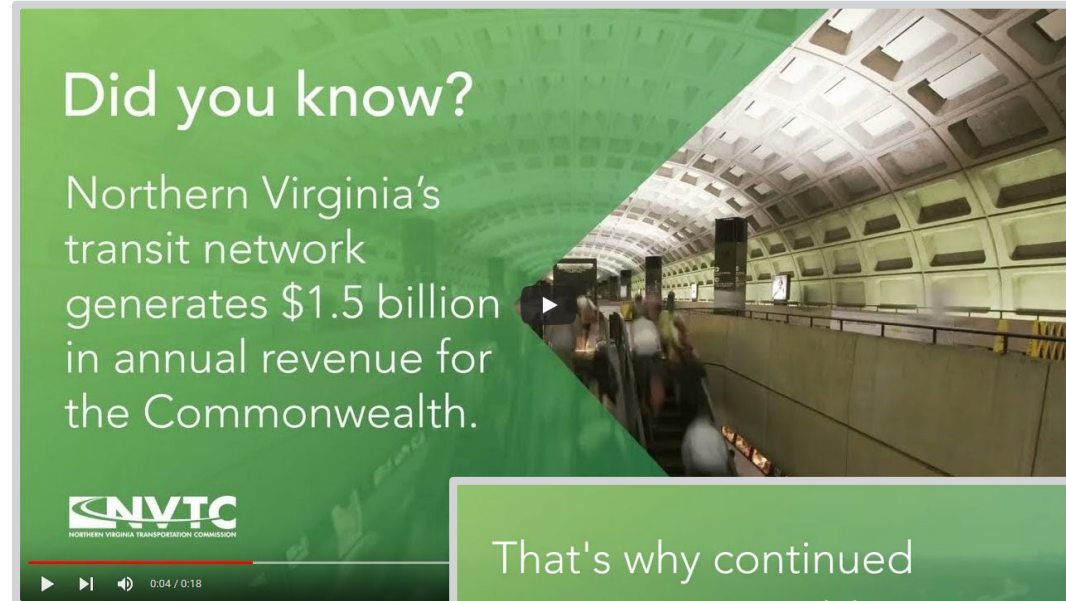


Consistent graphics in social media and presentations pull in the audience



Spreading the Word

- Our Communications Team created a paid YouTube advertisement to publicize results
- We had over **2,000** views and added **399** subscribers to our YouTube channel
- Example of a relatively small amount of money generating good returns



Spreading the Word

- Ensure the appropriate audiences are targeted for the messaging
- An ad page in the Virginia Capitol Connections Redbook targeted legislators and others in Richmond

Virginia **Capitol Connections**

2024

Virginia Senators
www.senate.gov

Mark R. Warner (D)
703 Hart Senate Office Building • Washington, DC 20510
P 202.224.2023 • www.warner.senate.gov

Tim Kaine (D)
231 Russell Senate Office Building • Washington, DC 20510
P 202.224.4024 • www.kaine.senate.gov

Virginia Representatives
www.house.gov

Robert J. Wittman (R-1st)
2055 Rayburn HOB • Washington, DC 20515
202.225.4261 http://wittman.house.gov

Jen Kiggans (R-2nd)
1037 Longworth HOB • Washington, DC 20515
P 202.225.4215 http://kiggans.house.gov

Robert C. "Bobby" Scott (D-3rd)
2328 Rayburn HOB • Washington, DC 20515
P 202.225.8351 http://bobbyscott.house.gov

Jennifer McClellan (D-4th)
2417 Rayburn HOB • Washington, DC 20515
P 202.225.6365 https://mcclellan.house.gov

Robert "Bob" Good (R-5th)
461 Cannon HOB • Washington, DC 20515
P 202.225.4711 http://good.house.gov

Ben Cline (R-6th)
2443 Rayburn HOB • Washington, DC 20515
P 202.225.5431 http://cline.house.gov

Abigail Spanberger (D-7th)
562 Cannon HOB • Washington, DC 20515
P 202.225.2815 http://cline.house.gov

Don Beyer Jr. (D-8th)
1119 Longworth HOB • Washington, DC 20515
P 202.225.4376 http://beyer.house.gov

H. Morgan Griffith (R-9th)
2202 Rayburn HOB • Washington, DC 20515
P 202.225.3861 http://morgangriffith.house.gov

Jennifer Wexton (D-10th)
1210 Longworth HOB • Washington, DC 20515
P 202.225.5136 http://wexton.house.gov

Gerry Connolly (D-11th)
2265 Rayburn HOB • Washington, DC 20515
P 202.225.1492 http://connolly.house.gov

70

Did You Know?

Northern Virginia's transit network generates **\$1.5 billion** in annual tax revenue for Virginia.

Our transit network takes **278,000 vehicles off the road each day.**

State funding for our transit network yields a **160% return on investment.**

That's why continued investment in public transit benefits **all** Virginians.

Learn more at:
novatransit.org/valueoftransit

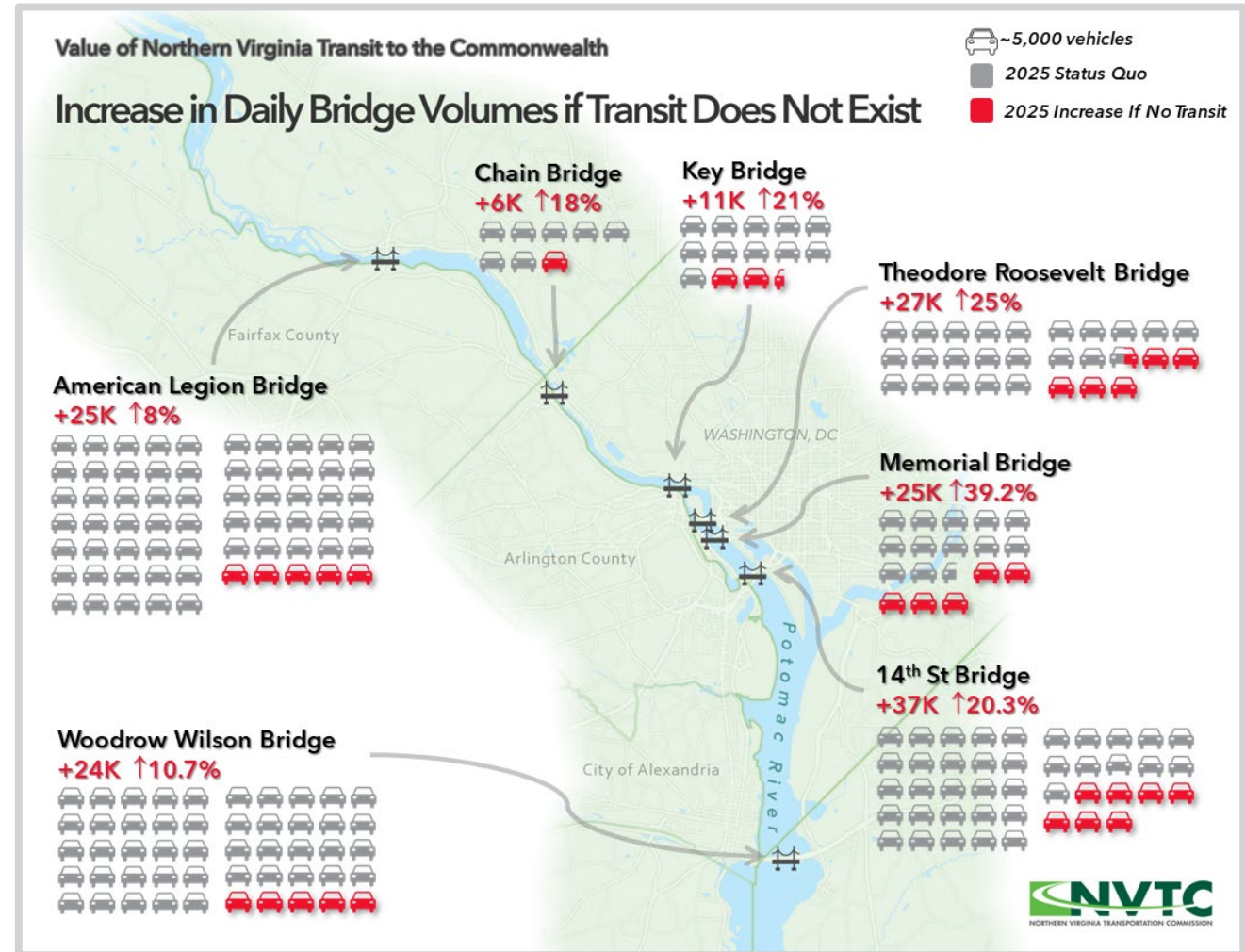
NVTC
NORTHERN VIRGINIA TRANSPORTATION COMMISSION

ART CUE DASH OMNI M VRT

Virginia Capitol Connections Redbook includes contact information for Virginia Senators, Representatives, US Congress members, and the Governor's offices.

Lesson Learned

- Graphics can be overly complicated, too!
- Do not assume that people are familiar with the system - something you find intuitive might not be to others
- It's an iterative process



**How can you
do something
similar?**

Methodology - Travel Modeling

Analysis Year: 2025

Compare vehicle miles traveled and vehicle hours of delay in



Status Quo Scenario

and



No Transit Scenario

Remove jobs and households from model until "No Transit" scenario has same congestion as "Status Quo" scenario

Methodology - Economic Analysis

The economic analysis drew upon travel model outputs (vehicle miles traveled and vehicle hours of delay) to estimate the impacts that would occur without Northern Virginia's transit network:

User and Environmental Costs

- Additional travel time costs, vehicle operating costs, crash costs
- Source: U.S. Department of Transportation (USDOT) 2023 Benefit-Cost Analysis Guidance for Discretionary Grant Programs

Economic Impacts

- Reductions in total employment and earnings
- Source: Bureau of Economic Analysis (BEA) Regional Input-Output Modelling System (RIMS II) multipliers

Fiscal Impacts

- Reductions in income and sales tax revenue to Virginia
- Source: Virginia Tax Annual Report, Bureau of Labor Statistics

Methodology - Economic Analysis

NVTC's messaging focused on the economic and fiscal impacts, as our main audience was legislators in Richmond.

Because congestion in our region is so bad, there's a large impact on housing and employment, and thus state tax revenue, in a "No Transit" scenario.

draw upon travel model outputs (vehicle miles traveled and vehicle hours of impacts that could occur without Northern Virginia's transit network.

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Fiscal Impacts

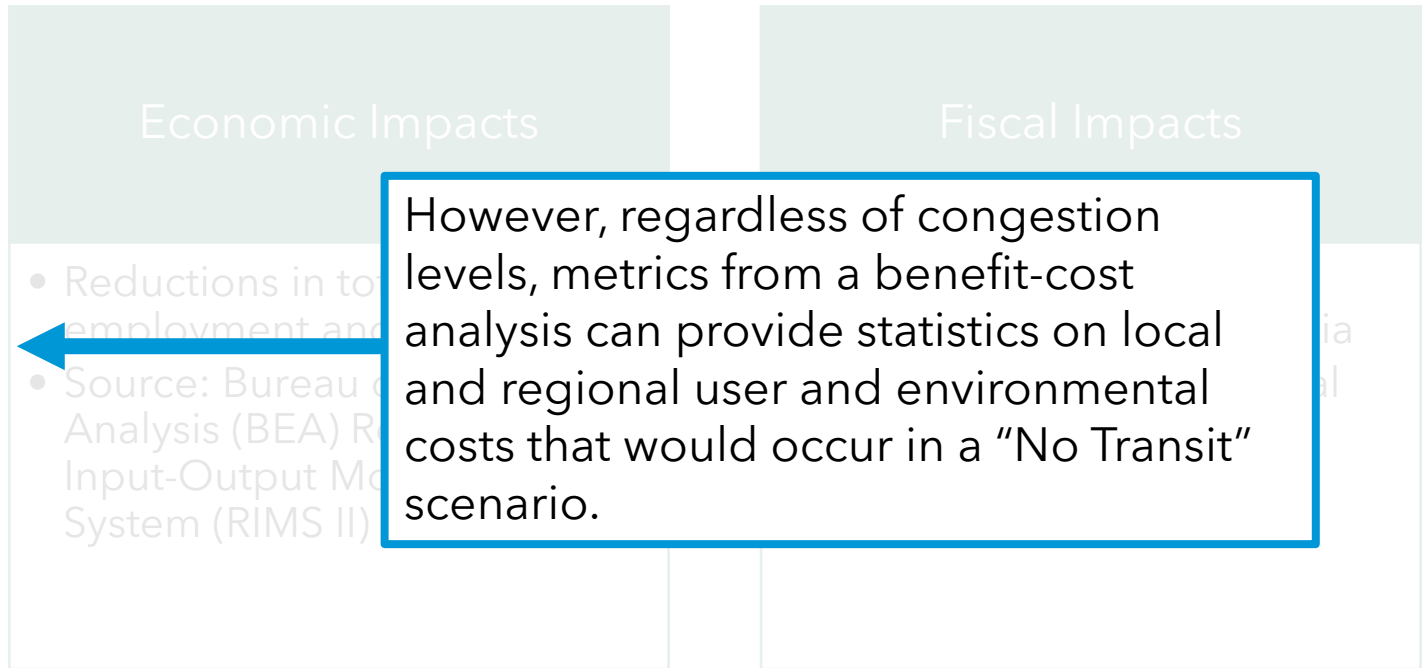
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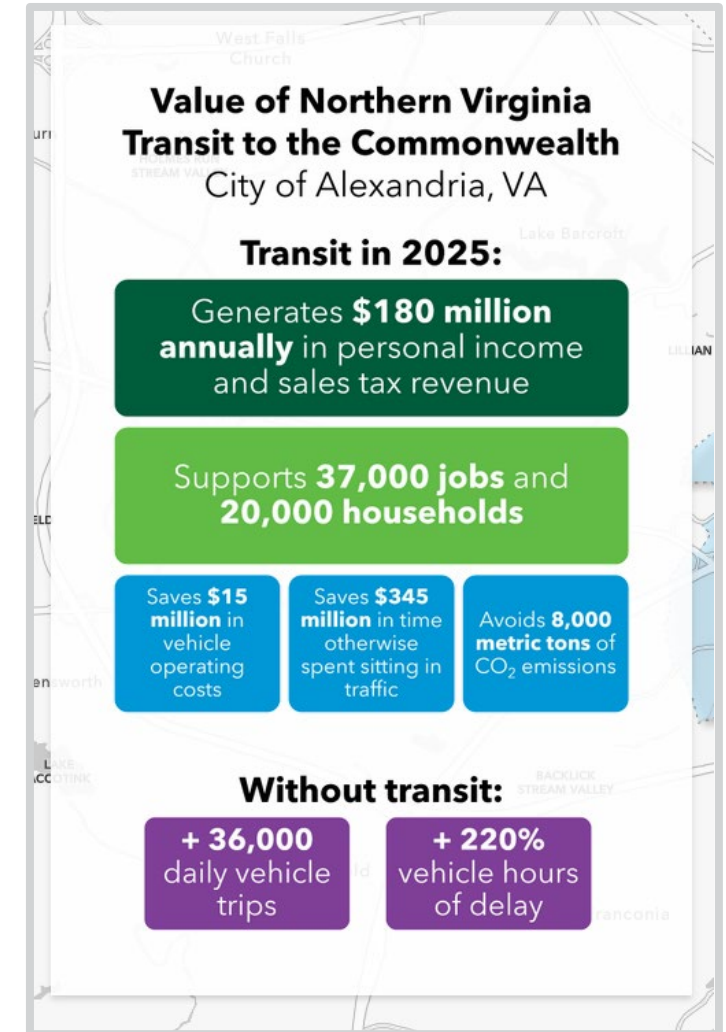
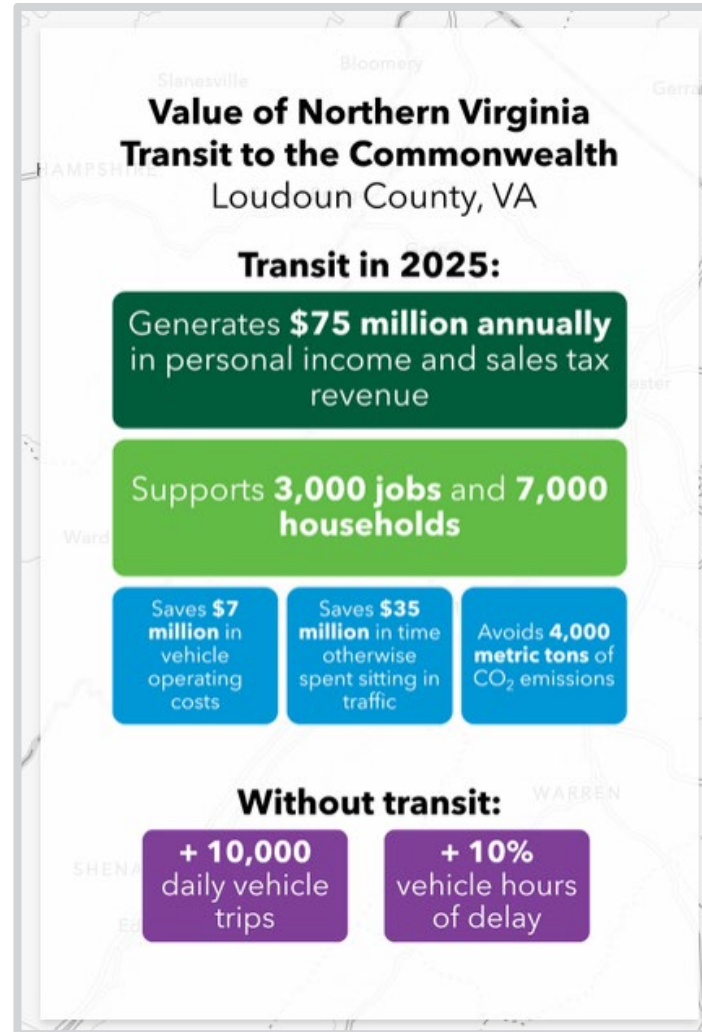
User and Environmental Costs

- Additional travel time costs, vehicle operating costs, crash costs
- Source: U.S. Department of Transportation (USDOT) 2023 Benefit-Cost Analysis Guidance for Discretionary Grant Programs



Local Impacts

- Level of impact varies considerably across Northern Virginia
- Even when there is not a huge impact to jobs for one jurisdiction, there are still many local quality of life measures that transit supports



Local Impacts

What does a metric ton even look like?

What does a metric ton of a gas look like?

How do you comprehend 8,000 metric tons of emissions?

Avoids **8,000**
metric tons of
CO₂ emissions



8,000 metric tons of CO₂ is equivalent to...



106 tanker trucks' worth of gasoline



1,043 homes' energy use for one year



347,487 trash bags of waste recycled instead of landfilled



Carbon sequestered by **9,340** acres of U.S. forests in one year

**What does
success look
like?**

What Does Success Look Like?

Success is seeing your results shared by stakeholders that you identified as key audiences



Audience: State elected officials

2024 SESSION

ENROLLED

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 Metropolitan 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

ENROLLED

Audience: Local elected officials and jurisdictions



JEFFREY C. MCKAY
CHAIRMAN

COMMONWEALTH OF VIRGINIA
COUNTY OF FAIRFAX
BOARD OF SUPERVISORS
FAIRFAX, VIRGINIA 22035

Suite 530
12000 GOVERNMENT CENTER PARKWAY
FAIRFAX, VIRGINIA 22035-0071

TELEPHONE 703-324-2321
FAX 703-324-3955

chairman@fairfaxcounty.gov

April 16, 2024

Fairfax County General Assembly Delegation Members
General Assembly Building
201 North Ninth Street
Richmond, Virginia 23219

Dear Fairfax County Delegation Members:

On behalf of the Fairfax County Board of Supervisors (Board), I am writing to voice our concerns about the Governor's amendment to the FY 2025-2026 Biennial Budget that removes additional state funding to NVTC to match our local government contributions to Metro. These comments were approved by the Board on April 16, 2024.

As you know, WMATA (Metrorail, Metrobus, and MetroAccess) and Fairfax Connector services are vital to the mobility and economic growth of Northern Virginia and the Commonwealth. According to the 2023 Northern Virginia Transportation Commission (NVTC) Report, Northern Virginia's transit network generates \$1.5 billion in annual personal income and sales tax revenue for Virginia. Approximately \$1 billion of it can be attributed to the Metrorail system. Fairfax County, along with localities throughout the state, continues to provide hundreds of millions in local funds for transportation each year, and the County and the Commonwealth must continue to work together to ensure that transportation needs are met.

Thank you for your time and continued support of WMATA and our local transit service. If you need any clarification or further information, please call me at (703) 324-2321 or Noelle Dominguez at (703) 877-5665.

Sincerely,

Jeffrey C. McKay
Chairman

Audience: Transit riders / advocates



The screenshot shows the website for the Coalition for Smarter Growth (CSG). The header includes the phone number (202) 675-0016 and location DC, MD, VA. Navigation links include DONATE, EMAIL SIGNUP, TAKE ACTION, and social media icons for YouTube, Twitter, Facebook, and Email. The main navigation menu includes ABOUT US, OUR WORK, OUR REGION, RESOURCES, EVENTS, and NEWS. The page content features a section titled "Fund Metro!" and a "Helpful Resources" section with a list of links. One link, "The Value of Transit to Northern Virginia", is highlighted with a blue box.

(202) 675-0016 DC, MD, VA

DONATE EMAIL SIGNUP TAKE ACTION

CSG Coalition for Smarter Growth
DC • MD • VA

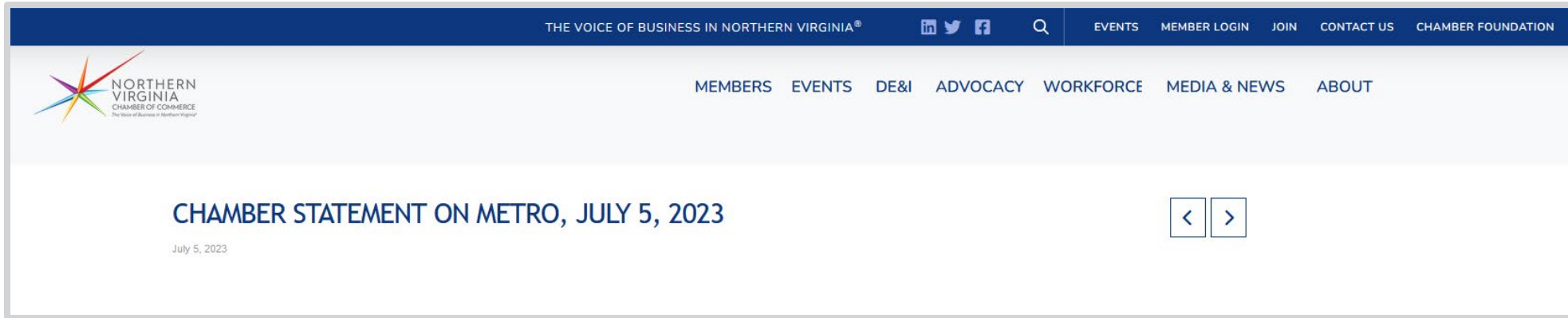
ABOUT US OUR WORK OUR REGION RESOURCES EVENTS NEWS

Fund Metro!

Helpful Resources

- [Fact Sheet \(updated Jan 15, 2024\)](#)
- [Statement of Principles](#)
- [Informative briefings to the WMATA Board](#)
 - [December 2023 - The doomsday budget if funding isn't identified, showing service cuts, fare hikes](#)
 - [September 2023 - Cost savings measures and options for closing the gap](#)
 - [June 2023 - Progress at WMATA, benefits, reasons for funding gap](#)
- [The Value of Transit to Northern Virginia](#)
- [Gov Youngkin's proposed transportation budget urging service cuts at Metro \(p. 10\)](#)
- [Draft Maryland 6-Year Consolidated Transportation Program with \\$150 million for Metro but a 40% cut to state support for local transit among other cuts](#)

Audience: Business community



THE VOICE OF BUSINESS IN NORTHERN VIRGINIA®

MEMBERS EVENTS DE&I ADVOCACY WORKFORCE MEDIA & NEWS ABOUT

CHAMBER STATEMENT ON METRO, JULY 5, 2023

July 5, 2023

< >

NORTHERN VIRGINIA CHAMBER OF COMMERCE
The Voice of Business in Northern Virginia

Lastly, we are committed to finding a way to ensure the system finds a solid foundation and can build towards financial sustainability. We understand the importance of WMATA in our regional economy as the system in Virginia alone generates \$1.5 billion in annual tax revenue. However, if we do not take this opportunity to reform WMATA for the better, we will be repeating this cycle every few years.

The Chamber will be assembling a group of Virginia-focused organizations to discuss our next steps. It is apparent, much like the 2019 funding cycle, Virginia will lead the way. We will continue to keep you informed.

Audience: Business community

The MetroNow Dispatch

MetroNow Dispatch 10.2023

This month we highlight the urgency of WMATA's operating budget and the role of MetroNow as a champion in Northern Virginia for their service and dedication to the community.



METRONOW
OCT 31, 2023

Here are MetroNow's top transit picks this month:

1. ⌚ **244 days until the transit cliff:** FY 2025 budget starts July 1, 2024.
2. 🗳️ **Registration open for this year's Capital Region Transportation Forum!:** Hear from the region's top transportation leaders at Georgetown University on Nov. 30th.
3. 📊 **Visualizing the Value of Transit:** A new online tool from the Northern Virginia Transportation Commission shows growth, financial return of public transit in NOVA.
4. 🚨 **Fare evasion bill in the District:** Proposed legislation from councilmember Brooke Pinto would boost enforcement and attempt to fix a "loophole" in current law.
5. 🚇 **All aboard! (automatically):** Metro is piloting automatic doors on Red Line trains, an early step towards the full readoption of automatic train operations.
6. 💰 **Metro funding looming large in Virginia:** WMATA officials joined state political leaders in October to discuss readjustment of the 3% cap.

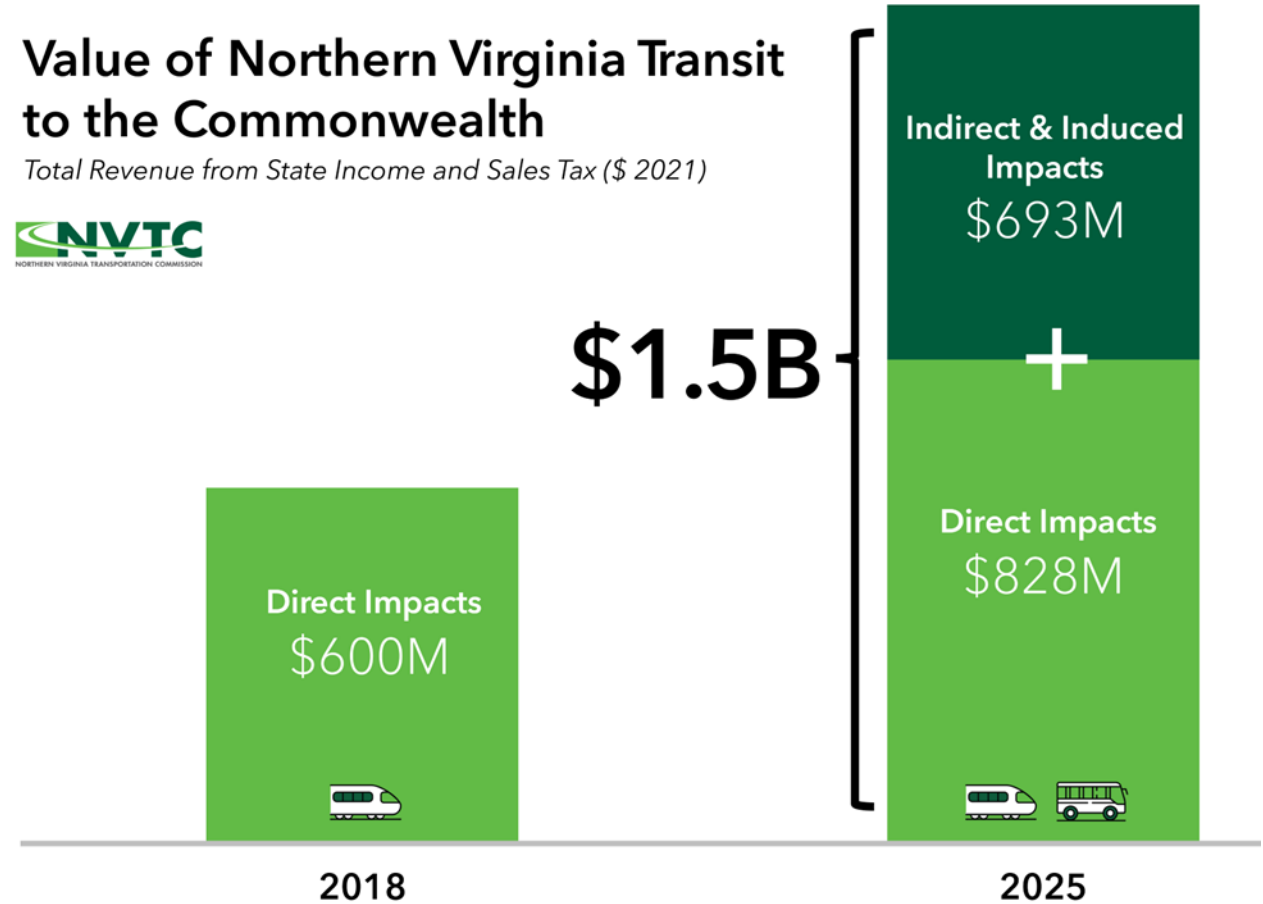
Transit Supports Virginia

Northern Virginia's transit network generates **\$1.5 billion*** in income and sales tax revenue to the Commonwealth

* (2021 dollars), 2025 analysis year

Value of Northern Virginia Transit to the Commonwealth

Total Revenue from State Income and Sales Tax (\$ 2021)



(Created May 2023)

Thank You

Ann McGrane

Senior Program Manager, Transit Technology

Sophie Spiliotopoulos

Senior Program Analyst

**Explore the Value of
Transit StoryMap**



2300 Wilson Boulevard, Suite 230, Arlington, Virginia

www.novatransit.org | [@novatransit](https://twitter.com/novatransit)