The following items were handed out at the September 7, 2017 NVTC Meeting.





#### I-66 Commuter Choice Program FY 2017 Annual Report to the Commonwealth Transportation Board

In January 2017, the Commonwealth Transportation Board (CTB), the Virginia Department of Transportation (VDOT), and the Northern Virginia Transportation Commission (NVTC) signed a 40-year Amended Memorandum of Agreement (MOA) for the Transform 66: Inside the Beltway Project allowing NVTC to use toll revenues from I-66 Inside the Beltway to fund multimodal projects. The I-66 Commuter Choice Program (formerly known as the I-66 Multimodal Program) is designed to benefit toll payers by easing travel through the congested I-66 Inside the Beltway corridor.

The principal objective of the I-66 Commuter Choice Program is to select projects that meet project improvement goals identified in the MOA, which are to move more people, enhance transportation connectivity, improve transit service, reduce roadway congestion, and increase travel options. Eligible applicants include all jurisdictions and other public transportation providers in Virginia Planning District 8. Project types eligible for funding include park-and-ride lots, bike share stations, express bus service and transit information screens.

The initial Call for Projects was authorized by the Commission in March 2016 and produced 19 applications. The initial program for FY2017, approved by both NVTC and the CTB in June 2016, consisted of 10 component projects totaling \$9.8 million. The awarded projects and funding levels are shown in the following chart:

FY2017 I-66 Commuter Choice Project	Total Funding
Fairfax Connector Express Service from Government Center to Foggy Bottom	\$3,336,836
Loudoun County Stone Ridge Enhanced Transit	\$1,940,939
PRTC Gainesville to Pentagon Commuter Service	\$887,900
Arlington County Peak Period Service Expansion to Metrobus Route 2A, Washington Blvd - Dunn Loring	\$1,000,000
Arlington Peak Period Service Expansion to ART Bus Route 55	\$450,000
Bus Stop Consolidation and Accessibility Improvements Lee Highway and Washington Blvd	\$462,000
City of Falls Church - Expanded Transit Access, Bike Share	\$500,000
Arlington - Multimodal Real-Time Transportation Information Screens	\$250,000
Loudoun County Transportation Demand Management	\$623,000
Arlington - Expanded TDM Outreach to the I-66 Corridor	\$350,000
TOTAL	\$9,800,675



This report provides the data for FY 2017, the first year of the I-66 Commuter Choice Program. The MOA specifies that NVTC submit an annual monitoring report to the CTB on all funded components, or projects. Section II.B.4 of the MOA specifies that the initial year report must contain "a description of the Components selected for funding in the past fiscal year and the benefits that were the basis for evaluation and selection of each such Component." This report provides a description, benefits, and status as of the June 30, 2017 reporting period for each of the FY 2017 projects.



#### Fairfax Connector Express Service from Government Center to Foggy Bottom

#### **Project Number:**

059-01-120-17

#### Description:

This project includes the creation of a new weekday, peak-period Fairfax Connector Express bus service route between the Fairfax County Government Center park and ride facility, and the State Department and the Foggy Bottom neighborhood in Washington, DC. The project will support the capital costs of purchasing four new buses and support operational assistance to provide two years of new weekday, peak-period Fairfax Connector Express bus service.

#### Benefits:

This project benefits the toll payers by providing users with transportation choice in the corridor. The service will also move more people in the corridor with fewer vehicles, decreasing demand on I-66 inside the Beltway and ensuring consistent travel speeds for toll users.

#### Status:

Service will begin at the start of tolling in December of 2017. Average weekday ridership data for the service will be collected in the spring of 2018 and included in the Commuter Choice annual project report to NVTC due June 30, 2018.



Fairfax Connector Express Service from Government Center to Foggy Bottom



#### **Loudoun County Stone Ridge Enhanced Transit**

#### **Project Number:**

107-01-120-17

#### **Description:**

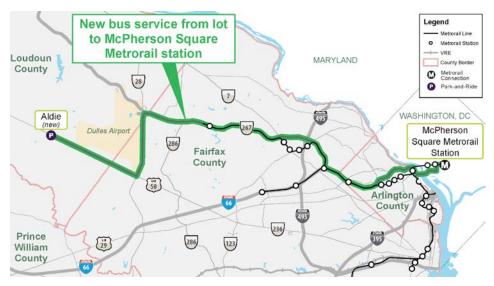
This project includes the construction of a 300-space park and ride lot and two years of operation for new commuter bus transit service from the new lot in the unincorporated community of Aldie. Aldie, located in Loudoun County between Chantilly and Middleburg, is adjacent to Arcola, an activity center identified by the Metropolitan Washington Council of Governments and one of the fastest growing parts of the county. The project application will support the capital costs of purchasing two new buses and support the operational assistance to provide two years of new bus service.

#### Benefits:

This program will benefit toll payers by reducing the number of single-occupancy vehicles (SOV) on I-66 Inside the Beltway, providing bus connections and service to Washington DC via I-66, and converting SOV riders to transit riders.

#### Status:

The Stone Ridge II park and ride lot opened on July 10, 2017. Average weekday park and ride utilization and average weekday ridership on transit service from the park and ride lot will be collected during the spring of 2018 and included in the Commuter Choice annual project report to NVTC due June 30, 2018.



Loudoun County Stone Ridge Enhanced Transit



#### Potomac and Rappahannock Transportation Commission (PRTC) Gainesville to Pentagon Commuter Service

#### **Project Number:**

664-01-120-17

#### **Description:**

This project includes the implementation of a new commuter bus transit service between Gainesville and the Pentagon and two and a half years of operating costs. The funding request also includes amounts for route marketing, communication, and lease costs for additional park and ride facility spaces.

#### Benefits:

This project benefits toll payers by shifting single-occupancy vehicle trips to transit vehicle trips, thereby reducing congestion on the tolled facility. Since this will be a dynamic-variable toll facility, the reduction in single-occupancy vehicle trips also serves to maintain a lower toll rate for those that choose to pay to use the managed lanes, reducing congestion on I-66 Inside the Beltway.

#### Status:

PRTC implemented commuter bus service between the Gainesville area and the Pentagon in December of 2016. Average daily ridership over a two week sampling period during May 2017 was collected and reported to NVTC in the Commuter Choice annual project report for June 30, 2017.



PRTC Gainesville to Pentagon Commuter Service



#### Arlington County Peak Period Service Expansion to Metrobus Route 2A, Washington Blvd - Dunn Loring

#### **Project Number:**

013-01-020-17

#### Description:

By increasing bus frequency and decreasing route run times, this project will serve 150 new weekday riders, increasing daily ridership to 2,700. Currently, half of commuters in the Metrobus 2A service area are destined for jobs in Washington, D.C., according to the Household Travel Survey. These riders would otherwise be traveling on the I-66 Inside the Beltway corridor. The 2A operates on US 29 and Washington Boulevard, adjacent to I-66, and connects three jurisdictions. Requested operational funds will allow the 2A to run every 10 minutes, as opposed to 15, in the AM and PM peak periods for two years.

#### Benefits:

This service benefits toll-paying users of I-66 Inside the Beltway by providing additional peakperiod transit service on the parallel corridors of US 29 in Fairfax County, en route to the project corridor, and Washington Street in the City of Falls Church and Washington Boulevard in Arlington County in the project corridor. Increasing transit service will encourage more commuters to take the bus, thus removing cars from these roads and parallel commuting routes, including I-66.

#### Status:

Service was implemented on June 26, 2017. Frequency on Metrobus 2A increased from every 15 minutes to 10 minutes during the AM and PM peak. Average weekday ridership will be collected for Metrobus 2A during the Spring of 2018. Performance data will be included in the Commuter Choice annual project report to NVTC due June 30, 2018.



Arlington County Peak Period Service Expansion to Metrobus Route 2A, Washington Blvd - Dunn Loring



#### Arlington Peak Period Service Expansion to ART Bus Route 55

#### **Project Number:**

013-02-120-17

#### **Description:**

By adding a sixth bus to the route during the AM and PM peak periods, this project will allow for an extra 3.5 round trips daily. The improved frequency – buses will run every 12 minutes – will attract 175 new weekday riders, increasing daily ridership to 1,300. Currently, half of commuters in the ART 55 service area – Lee Highway between Rosslyn and East Falls Church – are destined for jobs in Washington, D.C., according to the Household Travel Survey. These riders would otherwise be traveling along the I-66 Inside the Beltway corridor. Requested funds support the rehabilitation of one bus and operational assistance for two years.

#### Benefits:

This service benefits toll-paying users of I-66 inside the Beltway by providing additional peakperiod transit service in the parallel corridor of Lee Highway. Increasing transit service will encourage more people to ride the bus, thus removing cars from Lee Highway and parallel commuting routes, including I-66 inside the Beltway.

#### Status:

Increased peak period service on ART 55 was implemented on June 26, 2017. ART 55 frequency is now every 12 minutes during the AM and PM peak. Average weekday ridership will be collected for the ART 55 during the Spring of 2018. Performance data will be included in the Commuter Choice annual project report to NVTC due June 30, 2018.



Peak Period Service Expansion to ART Bus Route 55



#### **Arlington Bus Stop Consolidation and Accessibility Improvements**

#### **Project Number:**

013-03-010-17

#### **Description:**

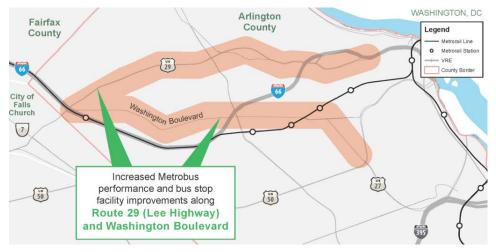
By consolidating underutilized and closely spaced bus stops along the Lee Highway and Washington Boulevard corridors, this project reduces travel times and increases new bus riders by 15 percent. Approximately30 bus stops will be improved through the addition of bus stop pads and pedestrian facilities (sidewalks, curb ramps and crosswalks) that are compliant with the Americans with Disabilities Act, and enhanced passenger amenities (shelters, benches, lighting, customer information, etc.). Requested funds will support capital costs.

#### Benefits:

This project benefits toll-paying users of I-66 Inside the Beltway by providing more streamlined bus service along Lee Highway; reducing both the amount of time a bus sits at the stop and the number of bus stops; and increasing bus speed through the corridor. Having more accessible bus stops will encourage more people to ride the bus, thus removing cars from Lee Highway and parallel commuting routes, including I-66.

#### Status:

Arlington County is in the planning/civil surveying phase of the project for the Lee Hwy and Washington Blvd corridors. To date, Arlington County has assessed current ART and Metrobus ridership data to include boarding and alighting data at the individual stop and corridor level, physical conditions of existing bus stop(s), bus stop accessibility and compliance with ADA standards, as well as amenities offered at individual stops along the Lee Highway and the Washington Boulevard corridors. Average weekday boarding data will be collected and included in the Commuter Choice annual project report to NVTC once the implementation is completed.



Arlington Bus Stop Consolidation and Accessibility Improvements



#### City of Falls Church Expanded Transit Access, Bike Share

#### **Project Number:**

610-01-010-17

#### Description:

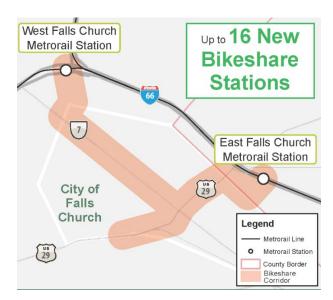
An additional 16 bike share stations, some adjacent to Metrorail stations, will serve as a first-mile/last-mile solution, with the potential to increase daily trips at the two Falls Church Metrorail stations by 450. These stations, which will fill a gap in the regional bike share network, will extend the catchment area of transit stations, increase travel options and reduce pressure on the regional highway system. Requested funds will provide three years of operating assistance and maintenance for bike share stations along N Washington Street and S Washington Street (Route 29), W Broad Street (Route 7), and the W&OD Trail in the City of Falls Church. The stations are proposed to be purchased and installed as part of a different funding program.

#### Benefits:

This project benefits the toll payers by reducing congestion on I-66 inside the Beltway. The component increases connections and access to Metrorail stations along the I-66 corridor. The increased connections will allow more people to travel by transit, thereby reducing vehicle demand and congestion on I-66 inside the Beltway.

#### Status:

The City is currently working through federal procurement requirements to acquire the bike share stations. Deployment is expected to occur in two phases in 2018 and 2019. Data on average number of bicycles checked in and out will be collected in spring of 2018, and performance data will be reported to NVTC in the Commuter Choice annual project report once stations are operational.



City of Falls Church Expanded Transit Access, Bike Share



#### **Arlington County Multimodal Real-Time Transportation Information Screens**

#### **Project Number:**

013-04-040-17

#### **Description:**

The provision of real-time information on transit arrivals, Capital Bikeshare and Zipcar availability, and I-66 travel times and toll rates will complement Arlington County's successful transportation demand management program and increase the number of daily Metrorail trips by 870. These multimodal, real-time transportation screens, which provide dynamic information, will be placed at the East Falls Church, Virginia Square-GMU, Clarendon, and Court House Metrorail stations; high utilization bus stops; and in residential and office buildings in the Rosslyn-Ballston corridor. Comprehensive, up-to-the minute information will allow commuters to make informed travel choices and increase transit use. Requested funds will cover the purchase of 50 screens and one year of annual cost out of four years.

#### Benefits:

This project will benefit the toll-paying users of I-66 Inside the Beltway by providing real-time information on toll rates and multimodal commuting options, thereby removing vehicles from I-66 and surrounding roads and helping ease congestion.

#### Status:

The first screen is planned to be installed at Central Library in Arlington. Arlington County is coordinating with MWCOG and plans are in place for the pre-installation Commuter Connections survey. Surveys will be taken before and after the screens are installed, and performance data will be included in the Commuter Choice annual project report to NVTC due June 30, 2018.



Arlington County Multimodal Real-Time Transportation Information Screens



#### **Loudoun County Transportation Demand Management**

#### **Project Number:**

107-02-030-17

#### Description:

This project expands a successful transportation demand management (TDM) program by targeting commuters bound for locations along the I-66 Corridor Inside the Beltway or Washington, D.C. Currently, 83 percent of Loudoun commuters using transit, vanpools or carpools are destined for those locations, according to the Household Travel Survey. Expected to serve 900 new riders, the TDM program will provide marketing and incentives during a one-year promotional period. Incentives include reduced fares on express buses into D.C. or to Orange and Silver line Metrorail stations, a SmarTrip® promotion for new Metrorail riders, and financial rewards for new carpools and vanpools.

#### Benefits:

This program will benefit toll payers by reducing the number of single-occupancy vehicles (SOV) on I-66 Inside the Beltway and providing direct, tangible payments for the use of transportation alternatives. The program is scalable, depending on the desired benefit or availability of funding. Finally, the program will be designed to reach Loudoun County residents at their jobs within the corridor through partnerships with other jurisdictions in the region.

#### Status:

Loudoun County has contracted with Michael Baker International and a TDM media campaign will be launched in November. Baseline data will be collected before the TDM is implemented. Performance data will be collected after one year of operations and included in the Commuter Choice annual project report to NVTC due June 30, 2018.



#### **Arlington County Expanded Transportation Demand Management Outreach to the I-66 Corridor**

#### **Project Number:**

013-05-030-17

#### Description:

This project expands a proven TDM program by targeting commuters bound for locations along the I-66 Corridor Inside the Beltway or Washington, D.C. Robust employer and residential outreach and education services, including a focus on new carpool and vanpool initiatives, will eliminate 1,300 single-occupant car trips through the I-66 corridor inside the Beltway each day. These initiatives will provide convenient connections to existing transit, helping to resolve the first mile/last mile issue and feeding new riders into existing transit services. Requested funds will support incentives and marketing. Arlington Transportation Partners will provide, in kind, a .25 full-time equivalent residential outreach person to complement the grant-funded contract staff.

#### Benefits:

This project will benefit the toll-paying users of I-66 by providing information, incentives and encouragement to choose multimodal commute options, thereby removing vehicles from I-66 and parallel roads.

#### Status:

TDM outreach will be performed by Arlington County's TDM contractor. The contract was extended until February 2018 and the statement of work for the contractor is underway. TDM outreach will proceed once the contact is completed. Baseline data will be collected before the TDM is implemented, and annually thereafter. Performance data will be included in the Commuter Choice annual project report to NVTC due June 30, 2018.



Arlington County Expanded Transportation Demand Management Outreach to the I-66 Corridor

## THE VALUE OF METRORAIL AND VIRGINIA RAILWAY EXPRESS TO THE COMMONWEALTH OF VIRGINIA

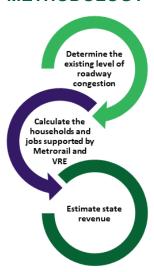


September 2017

#### **MAJOR FINDINGS**

Long credited with fueling economic development in Northern Virginia, Metrorail and Virginia Railway Express (VRE) also provide financial benefits to the state. The additional 85,000 households and 130,500 jobs that the two rail systems make possible in Northern Virginia generate over \$600 million each year in sales and income tax revenues that flow to Richmond. For every dollar the state invests in Metrorail and VRE, it receives \$2.50 in return. \$600 million, while just over 3 percent of general fund revenues, is significant. It covers Virginia's annual general-fund expenditures on state colleges and universities, about \$316 million, and state police, roughly \$266 million.

#### **METHODOLOGY**



To quantify the value that Metrorail and VRE bring to the Commonwealth of Virginia NVTC took the current traffic and development in the region, removed Metrorail and VRE from the picture, then moved development out of Northern Virginia to the District of Columbia or Marvland until traffic models showed a return to current levels of rushhour congestion.

Based on the number of jobs and homes moved across the Potomac River, NVTC then estimated how much less the commonwealth would take in from income taxes and the portion of the sales tax that goes directly to the state's general fund.

Part of what distinguishes this study from earlier ones is that it is dynamic, accounting for the level of activity that the regional transportation network can support. NVTC's approach is unique in that it evaluates the interaction between land use and transportation demand.

#### **COROLLARY FINDINGS**

The results of the first runs of the transportation model, which removed rail transit in Northern Virginia and held to the existing land use totals, demonstrate rail's importance for commuters in Northern Virginia. With the added congestion, commuters could not travel as far in the same amount of time. Their trip length decreased by about 5 percent, which is significant.

The impacts associated with a lack of rail transit in Northern Virginia are:

- 56,500 more lane miles of congestion on arterial roadways;
- 50 percent fewer transit trips in the peak period;
- 80 percent decrease in jobs accessible by transit for Northern Virginia households; and
- 130,000 fewer transit trips each weekday.

Commuters Riding Transit			
Jurisdiction	Existing	Existing without Rail Modes	
Arlington	49%	28%	
Alexandria	38%	24%	
Fairfax	17%	6%	
Loudoun	4%	2%	
Prince William	5%	3%	
Northern Virginia Total	18%	8%	

Source: Transportation Planning Board V2.3.66 Travel Demand Forecast Model

#### STUDY SUPPORT

NVTC's report was informed by the expert opinions of others. NVTC engaged its peers in the transportation community in a comprehensive technical review of the study's methodology and assumptions. These groups considered the work plan, technical approach, and findings, and provided comments on the study.

Northern Virginia Transportation Commission 2300 Wilson Boulevard, Suite 620, Arlington, VA 22201 703-524-3322 www.novatransit.org nvtc@novatransit.org

# The Value of Metrorail & Virginia Railway Express to Virginia

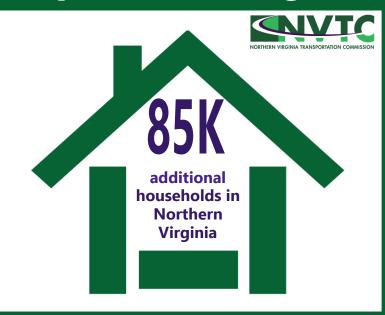


in sales and income tax revenue sent to the state's general fund that was generated by the additional households and jobs that rail supports



received by the commonwealth from the \$170 million it provided to Metro and VRE









additional daily transit trips in Northern Virginia

# The Value of Metrorail and Virginia Railway Express to the Commonwealth of Virginia

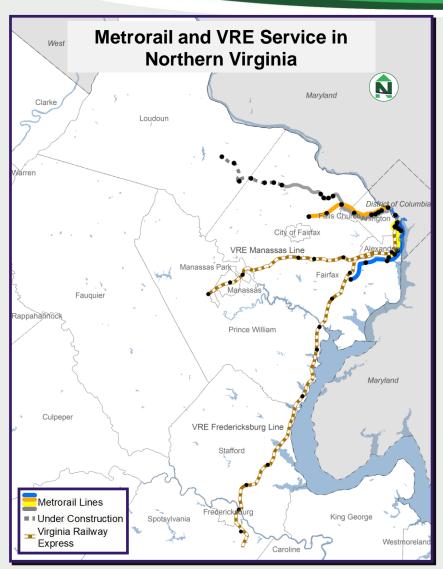
Overview and Findings September 7, 2017



NORTHERN VIRGINIA TRANSPORTATION COMMISSION

#### What is the value of Rail Transit?





- ✓ Metrorail and VRE move 293,000 people per day
- ✓ Rail transit fuels high density development around stations
- ✓ NVTC, COG, WMATA studies show local / regional impacts and benefits
  - \$235B in property value w/in ½ mile
  - \$3.1B/year in property tax revenues
  - Metrorail proximity increases property values by 7 to 9 percent

But how does rail transit in Northern Virginia benefit the Commonwealth as a whole?

#### Study Objectives and Methodology



#### **Study Objective**

 The goal of this effort was to evaluate the value at the state level of Metro and VRE in Northern Virginia.

#### **Technical Review Team**

WMATA, TPB, FTA, GMU, and other nationally recognized transit experts.

### How is this different than other studies?

- Used the regional travel demand model to quantify the level of land use and activity the transportation network can support.
- Looked beyond impacts on local generated revenues and focuses on state revenues.

#### NVTC's Approach and Modeling



(1) Determine the Existing Level of Roadway Congestion

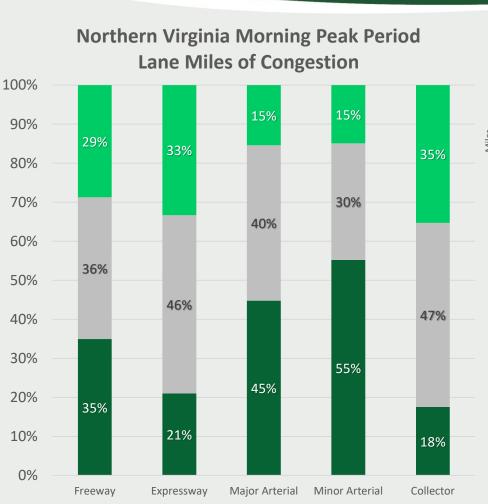
(2) Remove Metro & VRE from the Transportation Network

(3) Redistribute Land Use Until Network Reaches Existing Roadway Congestion

(4) Estimate State Revenue Loses from Land Use Redistribution

#### **Congestion Analytics**

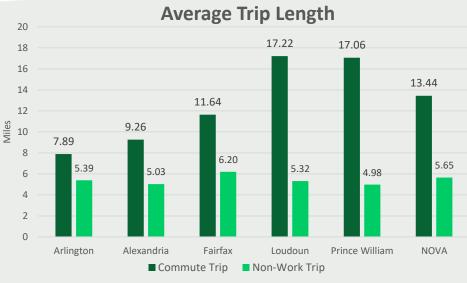




■ Near Capacity

Over Capcity

■ Uncongested

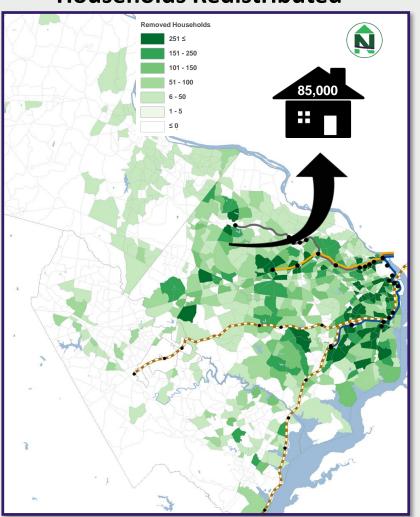


Commuters Riding Transit				
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Prince William	5%	3%		
NOVA Region	18%	8%		

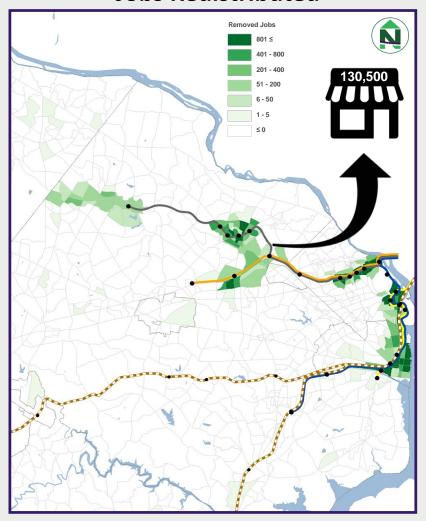
#### Redistributing Land Use



#### **Households Redistributed**



#### **Jobs Redistributed**



Value of Metrorail and VRE to the Commonwealth of Virginia

Report Findings: Revenues, Riders, and Cost Savings



# More than \$600M

in sales and income tax revenue sent to the state's general fund generated by the additional households and jobs that rail supports

## 250% R@I

received by the
Commonwealth from the
\$170 million it provided to
Metro and VRE



additional daily transit trips in Northern Virginia



## Value of Metrorail and VRE to the Commonwealth of Virginia



## This report is a product of the Northern Virginia Transportation Commission

Kate Mattice, Executive Director

Dan Goldfarb, PE, Principal Researcher / Lead Author

Andrew D'huyvetter, AICP, Researcher / Author

Nobuhiko Daito, Ph.D., Researcher / Author

For more information, contact Karen Finucan Clarkson at karenfinucanclarkson@novatransit.org or 571-483-3223