



# COMMONWEALTH of VIRGINIA

Office of the Governor

Shannon Valentine  
Secretary of Transportation

November 1, 2018

Members of the General Assembly  
Pocahontas Building  
900 East Main Street  
Richmond, Virginia 23219

Dear Members of the General Assembly,

Attached for your review is the annual "How the Commonwealth is Using Transit and Transportation Demand Management to Reduce Congestion and Use of Single-Occupant Vehicles." § 33.2-106 of the *Code of Virginia* requires:

The Secretary, in consultation and cooperation with the Commissioner of Highways and the Director of the Department of Rail and Public Transportation, shall annually...submit to the General Assembly a report on actions taken by the Commonwealth, local governments, and regional transportation authorities to (i) increase transit use and (ii) reduce highway congestion and use of single occupant vehicles through programs and initiatives involving transportation demand management, transit use, telecommuting, carpooling, construction of commuter parking facilities, use of flexible work hours, and telecommunications technology.

Please do not hesitate to contact me should you have questions or comments.

With warmest regards,

A handwritten signature in black ink, appearing to read "Shannon Valentine", with a long horizontal line extending to the right.

Shannon Valentine

**REPORT OF THE  
SECRETARY OF TRANSPORTATION**

**How the Commonwealth is Using Transit and  
Transportation Demand Management to Reduce  
Congestion and Use of Single-Occupant Vehicles**

**TO THE GENERAL ASSEMBLY OF VIRGINIA**



**COMMONWEALTH OF VIRGINIA  
RICHMOND  
2018**

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## 1 Executive Summary

This document is the Secretary of Transportation's report to the General Assembly summarizing on-going and completed efforts in the Commonwealth of Virginia to leverage the state's investments in transit and Transportation Demand Management (TDM) programs. It was prepared pursuant to § 33.2-106 of the *Code of Virginia*, stating:

The Secretary, in consultation and cooperation with the Commissioner of Highways and the Director of the Department of Rail and Public Transportation, shall annually, not later than November 1, submit to the General Assembly a report on actions taken by the Commonwealth, local governments, and regional transportation authorities to (i) increase transit use and (ii) reduce highway congestion and use of single-occupant vehicles through programs and initiatives involving transportation demand management, transit use, telecommuting, carpooling, construction of commuter parking facilities, use of flexible work hours, and telecommunications technology.

This document is the ninth annual report and highlights actions to provide and promote transit and transportation demand services in Fiscal Year 2018. All data in this report is from the Department of Rail and Public Transportation (DRPT) unless otherwise noted.<sup>1</sup>

### Transit & Transportation Demand Management in the Commonwealth

Transit and TDM services exist throughout a majority of the Commonwealth. Transit takes on many forms including local fixed-route, demand-response, and paratransit services. Additional services exist throughout Virginia like bus rapid transit (BRT) services in Arlington, Alexandria, and most recently this year in Richmond; commuter bus services in Northern Virginia, Hampton Roads, and Richmond; state-sponsored intercity bus service along the I-81 and I-66 corridors; and light rail service in Norfolk.

TDM includes an assortment of programs and services designed to discourage the use of travel by single-occupant vehicle like: ridematching, carpooling, vanpooling, park-and-ride lots, telework, bike share, car share, guaranteed/emergency ride home, promotion of transit and TDM services, and providing travel options information to the public, employers, and employees. Information and ridematching services are provided through websites, smart phone apps, on-site displays, commuter stores, and mobile commuter stores, where the public can purchase transit passes, get matched in a carpool or vanpool, and learn about their commute options.

### Benefits of Transit and TDM

In addition to reducing the number of single-occupant vehicle trips, transit has many additional benefits including: saving household money, saving time, providing economic opportunities, mitigating traffic congestion, improving access to healthcare, and providing environmental benefits. Congestion mitigation is achieved through transit and TDM services that eliminate auto

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<sup>1</sup> Additional information is available at the websites of both DRPT and Virginia Department of Transportation (VDOT).

trips and move trips to off-peak travel time. As a result, transit and TDM also make Virginia's transportation system more efficient by moving more people, particularly through the most congested corridors.

Providing mobility options is another significant benefit of transit. Many Virginians prefer using transit, vanpool, or carpool rather than driving, and some Virginians do not have access to a vehicle and rely on these mobility options. Additionally, transit and TDM options increase the quality of life for many Virginians. Providing transportation options and services give Virginia a competitive edge in attracting and keeping business and workers. When making site selections, businesses increasingly consider areas served by transit in desired locations. Once they are here, businesses want services that help their employees find the best mode to commute.

Just like transit, TDM plays a vital role in Virginia's transportation system. By putting more people in buses, trains, carpools, and vanpools, and increasing the use of telework, TDM makes Virginia's transportation system more efficient by moving more people and better utilizing existing highway infrastructure.

## **Transit and Transportation Demand Management Funding in the Commonwealth**

### *Six Year Improvement Program*

Virginians have been able to enjoy the benefits of transit and TDM due to the leadership of the General Assembly past and present, authorizing dedicated streams of revenue. The Commonwealth Transportation Board (CTB) approved the Fiscal Year 2019 -2024 Six Year Improvement Program, investing over \$384 million in state transit revenues. This amount included \$193.5 million in operating assistance, \$180.7 million for capital projects, \$1.6 million for paratransit, and \$8.5 million for special projects, including TDM programs. Further, as the designated pass-through agency for federal transit funding to the Commonwealth, DRPT administers approximately \$72.8 million in federal funds the CTB allocates to transit agencies across Virginia. An additional \$8.1 million in federal funding and state matching funds allocated by the Metropolitan Area Planning Organizations were also administered by DRPT for TDM programs.

In accordance with Chapter 603 of the 2016 General Assembly, the Transit Capital Project Revenue Advisory Board projected an average of nearly \$130 million in statewide annual transit capital needs compounded by the loss of 44 percent of existing revenues dedicated to the program due to its reliance on 30-year Commonwealth Project Revenue (CPR) bonds that fully sunset in 2020. Unless replacement revenues for the CPR bonds were identified, Virginia would face an estimated \$178 million annual program deficit by 2027.

However, as DRPT reviewed grant applications for Fiscal Year 2019, transit capital grant applications did not match the needs previously anticipated by the Board and public transit agencies across Virginia. Several factors have been identified to explain this gap, including the recent authorization of alternative revenue sources that temporarily relieved the projected demand and pressures on the transit capital program,. These revenues include: the availability and successful scoring of major expansion transit capital projects in the SMART SCALE program, the dedication of newly authorized toll revenues collected on I-66 and I-395 to transit,

the use of statewide passenger and freight rail funds to complement Commuter Rail, dedicated local and regional funds collected in Northern Virginia, federal BUILD (formerly TIGER) grants supplementing major expansion projects, and dedicated state funding to encourage vanpooling. Additionally, the significant restructuring of the Commonwealth Mass Transit Trust Fund program enacted under Chapters 854 and 856 of the 2018 Acts of Assembly created a guaranteed set-aside of 53.5 percent of all transit revenues to WMATA, the largest capital and operating program recipient.

As DRPT completes its SYIP in future years and implements a series of transit reforms, the impact of the loss of Capital Project Revenues bonds and their possible impact on available transit capital spending will need to be monitored closely; and General Assembly action may still be needed to remedy the situation.

### Federal Transit Funding

DRPT is the Commonwealth's pass-through agency responsible for the receipt, allocation, and management of most Federal Transit Administration formula funding programs. Through an inter-agency agreement with VDOT, DRPT also administers funds from certain core federal-aid highway formula programs like the Congestion Mitigation and Air Quality (CMAQ) program and Surface Transportation Block Grant program (STBG) that are eligible for use on public transportation projects.

The Section 5307 Urbanized Area Formula Funding program makes federal resources available for transit capital and operating assistance in urbanized areas and for transportation-related planning. Virginia currently has four metropolitan areas where local transit providers are eligible for and directly receive annual Section 5307 appropriations: Washington, D.C., Virginia Beach, Richmond, and Roanoke. Section 5310 funds provide funding to human service providers. These entities provide services to senior citizens and individuals with disabilities. The Section 5311 Formula Grants for Rural Areas program provides capital, planning, and operating assistance to states to support public transportation in rural areas with populations of less than 50,000 where many residents often rely on public transit to reach jobs, workforce development, and healthcare. Additionally, DRPT must set-aside 15 percent of annual Section 5311 appropriations dedicated towards operation of intercity bus service that connects rural areas to the National Bus Network. In 2017, DRPT launched the first such service in Virginia, the *Virginia Breeze*.

### **Transit Usage and Trends in Virginia**

For Fiscal Year 2018, transit agencies across the Commonwealth provided 173,582,869 unlinked passenger trips. According to the Federal Transit Administration, unlinked passenger trips are the number of people who board public transportation vehicles regardless of how many vehicles they use to travel from their origin to their destination. For example, if an individual transfers from one bus to another bus while commuting to their workplace, that individual's trip counts as two passenger trips.

The Fiscal Year 2018 number amounts to a 1.9 percent decrease when compared to Fiscal Year 2017. While this represents a small decline in ridership year-to-year, it is significantly better



than the prior year decrease of 7.6 percent between Fiscal Year 2017 and Fiscal Year 2016; and it is smaller decline when compared to the national average. With the implementation of significant statewide transit reforms that will lead to improved services, the Washington Metropolitan Area Transit Authority's (WMATA) continued work towards improving its services, and changing outside factors such as rising gas prices, it is anticipated that a decline in transit ridership will either slow down or stop.

## Major Initiatives

***SMART SCALE:*** Enacted by the 2014 General Assembly, SMART SCALE is an important source of capital revenues that the Commonwealth uses for surface transportation projects. DRPT, VDOT, and the Office of Intermodal Planning and Investment are active participants in this process by providing technical and policy expertise and analysis for multimodal projects. DRPT also worked with localities and agencies to identify potential projects and provide technical assistance and project data to help round out the applications. In Round 1, eight public transportation projects received \$31 million in funding; while in Round 2 2018, 17 public transportation projects were selected for \$168 million in funding, a substantial growth due to the high scoring and the cost benefit ratios of public transportation projects.

The process is currently underway for Round 3 of SMART SCALE. The application submission deadline was August 1, 2018; and the scoring is ongoing. DRPT received 52 total applications. Of those, 18 projects had transit as the primary component, totaling \$231 million in requests; and 34 projects had transit as a secondary component.

***Toll Revenues to Transit:*** Two of the most congested roadways in the Commonwealth, I-66 and I-395 in Northern Virginia, will witness major transformations over the next few years due to implementation of new travel choices in the form of Express Lanes that will provide more reliable travel options while improving traffic flow in the general purpose lanes. The I-395 Express Lanes, I-66 Inside the Beltway, and I-66 Outside the Beltway projects will make major improvements to those roadways while increasing person throughput with concurrent investment in transit and TDM.

Express Mobility Partners, the Commonwealth's construction partner for the I-66 Outside the Beltway project, is providing an upfront concession payment of \$500 million to the Commonwealth for use on additional projects, including transit that will benefit users of the corridor. These projects were selected by Northern Virginia Transportation Authority and included eight transit projects, including six projects along Virginia Railway Express's (VRE) Manassas line. This is in addition to its contribution of \$800 million over the next 50 years to fund new and expanded transit services along the corridor.

For the I-66 Inside the Beltway project, the Commonwealth is dedicating a portion of the new toll revenues (after operations and maintenance costs and debt service are paid) to fund multimodal improvements benefiting commuters in the corridor. Known as the *Commuter Choice* program, the Northern Virginia Transportation Commission (NVTC) has an agreement with the CTB for management of the multimodal program. As of June 30, 2018, the CTB has provided funding for two programs of multimodal improvements recommended by NVTC.



Combined, the two programs total \$21.9 million and include 23 projects in seven local jurisdictions.

Lastly, for the I-395 Express Lanes project, Transurban, the operators of the express lanes, will return a portion of toll revenues back to the Commonwealth as an annual transit payment to fund multimodal improvements that will benefit toll payers. Annual transit payments to the Commonwealth will begin in 2020.

*Silver Line Metro Expansion:* The purpose of the Dulles Corridor Metrorail Project is to provide high-quality, high-capacity transit service in the Dulles Corridor. The Metropolitan Washington Airports Authority (MWAA) is the primary funding source for this project and leads the construction of the extension, while DRPT, WMATA, Fairfax County, and Loudoun County provide technical assistance during the construction of the 23.1-mile extension into Fairfax and Loudoun counties. Service started on the Phase I of the Silver Line on July 26, 2014. The second and final phase is currently under construction with a completion planned for 2020. Since its inception, total ridership is over 4.3 million annually.

*Richmond's Pulse: Bus Rapid Transit:* The Greater Richmond Transit Company's Pulse launched on June 24, 2018, and serves a 7.6-mile route along Broad Street and Main Street, from Rocketts Landing in the City of Richmond to Willow Law in Henrico County. There are 26 stations and over three miles of dedicated travel lanes. After initiating service, GRTC offered a free week of rides; and over 57,000 rides were provided that first week. Weekday ridership is averaging 6,000, far exceeding the anticipated 3,500 weekday riders.

*Virginia Breeze: Blacksburg to Washington, D.C:* Starting service on December 1, 2017, the Virginia Breeze is an intercity bus service connecting Blacksburg with Union Station in Washington, D.C. The daily route includes stops in Christiansburg, Lexington, Staunton, Harrisonburg, Front Royal, Dulles Airport, and Arlington. DRPT estimated first year ridership would be 7,125. As of September 30, 2018, ridership has reached over 14,000.

## **Transportation Demand Management Initiatives**

*Vanpool!VA:* The 2016 General Assembly included dedicated funding in the appropriations act for vanpool services in Virginia. DRPT created the Vanpool!VA program to increase person throughput in Virginia's most congested travel corridors. The program was developed with input from TDM agencies, transit agencies, and vanpool companies. DRPT created a competitive grant program where eligible recipients can apply for funding for programs or projects that increase vanpooling and vanpool ridership.

*Telework!VA and Telework Week:* The Telework!VA program promotes telework as a method to reduce congestion and helps businesses set up telework programs. DRPT conducted its eighth annual Telework Virginia campaign in March 2018. During that week, DRPT encourages businesses across Virginia to establish telework programs and allow qualifying employees to work from home at least one day during that week.

*TryTransit!VA and Try Transit Week:* DRPT has led Virginia’s Try Transit week for the past nine years. Held during the third week of September, Try Transit Week promotes all forms of transit—bus, rail, ferry, and vanpool.

*BiketoWork!VA and Bike to Work Week:* In what has now become an annual event, DRPT promoted the second annual Bike to Work Week from May 15-19. Bike to Work Week provides a boost to local initiatives and increases awareness of biking as a commute mode.

## **The Future of State Transit Oversight and Funding**

In recent years, DRPT has taken steps to assist transit agencies to perform more efficiently and effectively. Additionally, the General Assembly has made significant changes to the oversight and allocation of funding in DRPT’s Six Year Improvement Program. Several of these initiatives will be challenging in implementing for not only transit agencies, but also for DRPT. However, they will create better transit agencies for the Commonwealth’s citizens and its visitors.

*Transit Asset Management:* TransAM is the system that DRPT uses to track the asset inventories of the transit providers across the Commonwealth as required by federal transit asset management regulations. The asset data is currently used to determine when replacement assets should be funded as well as to forecast state of good repair needs. DRPT’s recipients are responsible for updating the inventories when vehicles are received or sold or when facilities are built or rehabilitated. Beginning this year, all transit agencies receiving federal funding are required to develop and implement transit asset management plans.

*Transit Development Plans:* DRPT requires that any public transit operator receiving state funding prepare, adopt, and submit a transit development plan (TDP). TDPs help transit operators in the Commonwealth improve their efficiency and effectiveness by identifying the need and required resources for modifying and enhancing services provided to the general public. TDPs offer opportunities to rethink transit’s mission in a given area and define actions to help the agency achieve its mission.

*Mass Transit Trust Fund Restructuring:* Chapters 854 and 856 of the 2018 Acts of Assembly consolidates the revenues that are deposited into the Mass Transit Trust Fund (MTTF) with all revenues allocated using newly calculated percentages. The funds are allocated as follows: 31 percent for statewide operating assistance grants, 12.5 percent awarded for statewide capital assistance grants, and 53.5 percent for distribution to NVTC for WMATA capital purposes and operating assistance, with the balance of up to three percent awarded as special project grants subject to CTB approval.

*Statewide Transit Operating Assistance:* Additionally, these chapters make changes to the distribution of state transit operating assistance. For Fiscal Year 2019, the first \$54.0 million of state grants for public transportation operating expenses from the MTTF revenues are rewarded on the basis of the annual operating cost of a given transit providers expressed as a percentage of the total amount of operating expenses for all providers. Starting in Fiscal Year 2020, all transit operating funding will be distributed based on performance factors.

*Statewide Transit Capital Prioritization:* The General Assembly also directed the CTB to develop a separate prioritization process for state of good repair/minor enhancement projects and major expansion projects. The process for state of good repair projects will be based upon transit asset management principles, including federal requirements for transit asset management pursuant to 49 U.S.C. § 5326 while the process for major expansion projects will be based on SMART SCALE factor areas (congestion mitigation, economic development, accessibility, safety, environmental quality, and land use).

*Urban Transit Agencies' Strategic Plans:* The General Assembly directed all transit agencies with a bus fleet greater than 20 buses serving an urbanized area greater than 50,000 to submit a strategic plan every five years. Agencies will be required to conduct: i) an assessment of state of good repair needs; ii) a review of the performance of fixed-route bus service; iii) an evaluation of opportunities to improve operating efficiency of the transit network; iv) an examination and identification of opportunities to share services where multiple transit providers' service overlap; and v) an examination of opportunities to improve services in underserved areas.

*WMATA Funding and Reforms:* Chapters 854 and 856 of the 2018 Acts of Assembly also provide \$154 million in additional dedicated capital funding for WMATA, Virginia's proportional share of the additional \$500 million in capital needs identified by WMATA and validated by the 2017 General Assembly's mandated study led by former U.S. Secretary of Transportation Ray LaHood. Both the Maryland General Assembly and the District of Columbia City Council have passed legislation to increase or dedicate additional revenues to meet their proportional share of the \$500 million. As a condition of its receiving this new funding, WMATA is required to implement reforms necessary to ensure accountability and the viability of the system. These reforms require:

- Maryland and the District of Columbia providing proportional shares annually towards the \$500 million;
- The Northern Virginia Transportation Commission certifying receipt of the WMATA annual budget, independent financial audit, National Transit Data annual profile, and other single-audit reports;
- NVTC reporting annually, by November 1<sup>st</sup>, to the General Assembly and the Governor on WMATA'S performance and condition.

The CTB is also empowered with enforcing specific WMATA accountability measures. There are four areas where the General Assembly has directed the CTB to withhold funding for WMATA for non-compliance. The CTB shall withhold:

- 20 percent of dedicated state funds if WMATA does not limit the role of its alternate directors in official meetings to participation in the absence of a principal director only.
- 35 percent of dedicated state funds if WMATA's operating subsidies for Virginia increase more than three percent from the prior year.
- 20 percent of dedicated state funds if WMATA does not adopt or update a strategic plan within 36 months and hold a public hearing on the strategic plan in Northern Virginia.

- 20 percent of dedicated state funding if WMATA fails to annually adopt a capital improvement program that covers a six-year period and hosts a public hearing on it by July 1 of each year in an NVTC jurisdiction.

*Additional Funding for Transit in Northern Virginia:* The 2018 General Assembly also allocated additional funding to the VRE and the Potomac Rappahannock Transportation Commission (PRTC) to meet their growing needs. The Commuter Rail Operating and Capital Fund will allocate \$15 million annually through a regional gas tax floor to be used by VRE; and an additional \$7.85 million in new regional gas tax floor revenues collected in PRTC jurisdictions will be dedicated to the localities for use by PRTC.

## **The Future of Transportation Demand Management**

*TDM Prioritization:* Part of DRPT's effort to improve the TDM program includes the setting of clear goals and priorities for funding. Goals are specific, measurable, achievable, realistic, and time-framed. DRPT is developing programs and projects that: i) increase the number of riders in carpools; ii) increase the number of riders in vanpools; iii) increase the number of businesses with telework programs and increase the number of teleworkers; iv) increase the number of employers with transit and vanpool commuter benefits; v) increase transit ridership; and vi) allow for guaranteed/emergency ride home programs that support users of transit, vanpool, and carpool.

*TDM Strategic Plans:* DRPT requires that any TDM program operator receiving state funding prepare, adopt, and submit a TDM plan. These plans show the need for TDM, how TDM will address the need, the TDM elements that will be implemented, and the resources needed to implement the plan. The plans also provide the basis for funding requests and provide DRPT with information during the grant programming process.

*Emergence of Bike Share Programs:* With the launch of five new local government sponsored bike share programs in just the past two years, Virginia has experienced a rapid growth of bike sharing. In 2017, the City of Richmond launched RVA Bike Share, Roanoke started BIKEShare by RIDESolutions, and Danville began Danville Rides. In 2018, Pace Bike Share started in Norfolk; and ROAM New River Valley also launched 2018, providing bike share in Christiansburg, Blacksburg, and Montgomery County. ROAM was the first bikeshare project supported with DRPT demonstration funding, in recognition of bikeshare as a first/last mile connection to transit.

*Express Lanes and Park-and-Ride Lots:* DRPT is encouraging TDM programs in Express Lane corridors to support market and conduct ridematching for carpools and vanpools. Transit, vanpools, carpools, and slugging work best when there is a good network of park-and-ride lots along the corridor.

*Technology and Innovation:* DRPT has been leading the way in assisting transit and TDM operating agencies find the right technological solutions and funding. Mobile applications have made it easier for the public to access transit and TDM information, see when the next bus or train is arriving, pay their fare or purchase tickets, unlock a bicycle from bike share service, and get matched with a carpool or vanpool.

## 2 Introduction

This report was prepared pursuant to § 33.2-106 of the *Code of Virginia*, stating that:

The Secretary, in consultation and cooperation with the Commissioner of Highways and the Director of the Department of Rail and Public Transportation, shall annually, not later than November 1, submit to the General Assembly a report on actions taken by the Commonwealth, local governments, and regional transportation authorities to (i) increase transit use and (ii) reduce highway congestion and use of single-occupant vehicles through programs and initiatives involving transportation demand management, transit use, telecommuting, carpooling, construction of commuter parking facilities, use of flexible work hours, and telecommunications technology.

This document is the ninth annual report and highlights actions to provide and promote transit and transportation demand services (TDM) in Fiscal Year 2018. All data in this report is from the Department of Rail and Public Transportation (DRPT) unless otherwise noted.<sup>2</sup>

### 2.1 Transit and Transportation Demand Management

Transit in the Commonwealth takes on many forms including: local fixed-route bus, demand-response bus, and paratransit services. Additional services exist throughout Virginia such as bus rapid transit services in Arlington, Alexandria, and Richmond as well as commuter bus service in Northern Virginia, Hampton Roads, and Richmond. In December 2017, the operation of an intercity bus service between Blacksburg and Union Station in Washington, D.C. started, which is funded by federal rural transit resources and farebox revenues. Heavy fixed-rail service in Northern Virginia is provided by WMATA; and VRE operates commuter rail on track leased from Norfolk Southern and CSX railroads. Finally, Hampton Roads Transit operates light rail service in the City of Norfolk (The Tide).

TDM is the application of programs, services, and policies that reduce vehicle demand on the transportation network or redistributes the demand to off-peak times or other routes and modes. TDM increases the efficiency of the transportation network by concentrating on the movement of people, not just vehicles. TDM programs are often referred to as Commuter Services or Commuter Assistance but include more than just trips to and from work. TDM efforts include:

- Elimination of vehicle trips by supporting telework opportunities;
- Reduction of trips by moving trips from single-occupant vehicles to rail and transit;
- Reduction of trips by moving trips from single-occupant vehicles to carpools and vanpools; and
- Increase in the awareness of transportation choices by promoting transportation options and educating the public on how to use them and their benefits.

Transit and TDM serve a variety of roles throughout the state. In Northern Virginia and Hampton Roads, they help relieve congestion and offer transportation options to eliminate

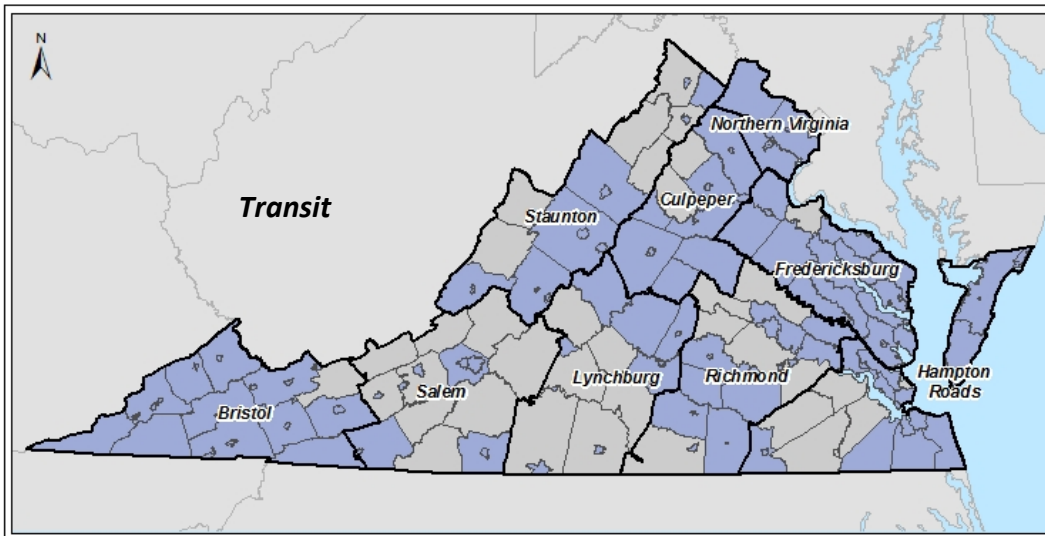
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<sup>2</sup> Additional information is available at the websites of DRPT and VDOT.

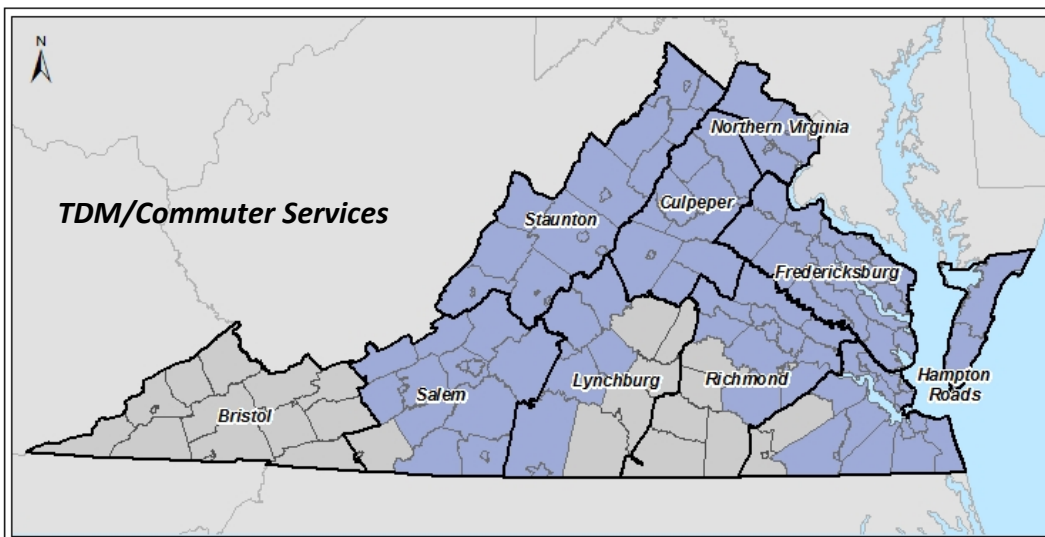
single-occupant vehicles. In other areas, such as Southwest Virginia, where congestion is not as significant an issue, transit and TDM still remove cars from the road while providing essential mobility options for specific populations who may not have other alternatives to job and health care access.

## 2.2 Transit and Transportation Demand Management Service Areas

The below maps highlight services areas for transit and TDM.



*Transit in Virginia: Counties, cities, and towns in blue have some form of public transportation.*



*TDM/Commuter Services in Virginia: Counties, cities, and towns in blue have some form of TDM/commuter service programs*



## 2.3 Benefits of Transit<sup>3</sup>

Public transportation is vital to Virginia. Three of the 75 largest transit agencies in the United States operate in the Commonwealth. Virginia’s largest agency, WMATA, is the nation’s third most heavily-used rail transit system, with more than 600,000 average weekday passenger trips. Additionally, VRE commuter rail system, which serves Northern Virginia, is one of the fastest-growing commuter rail services in the United States.

In Virginia, there are many public transit service operators that provide a choice of alternatives to driving private vehicles and travel services for people that do not have access to a personal vehicle or cannot drive. Some of the benefits of public transportation are:

**Public Transportation Saves Money:** The average household spends 18 cents out of every dollar on transportation; and 96 percent of this goes to buying, maintaining, and operating cars. Traffic congestion costs an average of \$1,700 per household per year – from wasted gasoline and lost productivity to increased automobile maintenance. Individuals who ride public transportation instead of driving can save, on average, more than \$10,000 annually.

**Public Transportation Saves Time and Reduces Congestion:** In the Washington, D.C. area, during peak commuting periods about 20 percent of a driver’s time is spent idling in traffic. Public transportation has a proven record of reducing congestion, and studies show that in the U.S. it has saved 865 million hours per year in travel. Additionally, every commuter railcar reduces 125 vehicles from our roads. A single bus can eliminate 40 vehicles; and vanpools remove over 6,000 cars a year from Virginia roads.

**Public Transportation Provides Economic Opportunity:** Public transportation is a smart investment. Every dollar dedicated to public transportation generates approximately four dollars in economic returns. Public transportation is a \$68 billion industry with over 7,700 organizations providing public transportation services and employing over 420,000 people in the U.S.

In 2017, the Transit Capital Revenue Advisory Board reviewed future funding for transit in the Commonwealth and conducted an economic analysis of transit’s impact. It determined that labor income from transit capital interment is estimated at \$560 million annually. Additionally, the Board noted that there would be an approximate \$4 million loss in state revenues attributed to taxes derived from transit operations if there was a loss in transit capital funding of approximately \$110 million.

*Newport News Shipbuilding, Virginia’s largest industrial employer, provides approximately 249,000 transit trips annually for its employees through Hampton Roads Transit’s GoPass 365 program.*

*Newport News Shipbuilding only has a 15,000 space parking lot for its 19,000 workers. It produces an \$8.4 billion output in the region.*

<sup>3</sup> Unless otherwise noted, The American Public Transportation Association provided the statistics in this section.



**Public Transportation is Their Preferred Mode of Travel for Many People:** Millennials and baby boomers are increasingly becoming multi-modal and moving to communities that provide robust public transportation options. Public transportation is also a lifeline for the individuals with limited mobility, the elderly, and for those who cannot or choose not to drive. It provides access to jobs, to schools, to visit friends, or to health care. Public transportation provides personal mobility and freedom for people from every walk of life.

**Public transportation riders are not the only beneficiaries:** When cars stay off the road, their pollutants stay out of the air. Our nation’s carbon emissions are reduced by 37 million metric tons annually, which is equivalent to the electricity consumption of every household in New York City, Washington, D.C., Atlanta, Los Angeles, and Denver. Public transportation reduces gasoline consumption. Due to its use, our country saves 4.2 billion gallons of gasoline per year. Public transportation provides economic revitalization. Residential property values perform an average of 42 percent better when located near high-frequency public transportation services.

## 2.4 Benefits of Transportation Demand Management

Just like roads and transit, TDM plays a vital role in Virginia’s transportation system. By putting more people in buses, trains, carpools and vanpools, and increasing the use of telework, TDM makes Virginia’s transportation system more efficient by moving more people without the need for more vehicles. The local, regional, and statewide TDM/commuter assistance programs provide much needed direct customer service to commuters, travelers, and businesses in Virginia. Every year, families, individuals, and businesses move into and within Virginia. Many people change jobs within Virginia as well. These changes in jobs and residential locations create a need for TDM programs to continually assist people with their travel options and promote the benefits of using transit, vanpool, carpool, and telework.

*In Fiscal Year 2018, Virginia’s transportation demand management program efforts accounted for a reduction of more than 3.2 million automobile trips and more than 126 million miles traveled.*

*Virginia’s TDM/commuter assistance programs, on average, changed the behavior of 34 percent of the customers they directly work with, placing these customers in higher occupancy modes of travel.*

**Changing Behavior:** TDM practitioners focus on changing the travel behavior of commuters. For the most part, transit and TDM are not “build it and they will come” services. It takes a lot of work to convince commuters to not to drive alone and to try transit, carpool, or vanpool. Promotion, marketing, and, in many cases, one-on-one discussions, are needed to change an individual’s commuting habit from driving alone to being interested in another mode, to trying another mode, to being a continuous user of transit, carpool, or vanpool. The sixteen TDM/commuter assistance programs in Virginia work on changing travel behavior every day.

**TDM Has Served the Commonwealth for Decades:** Since the 1970s when Virginia’s first carpool matching and ridesharing programs were established, TDM has been used to provide Virginia’s residents and workers with additional commuting choices. Initially established to

provide ride matching services to form carpools, TDM/commuter assistance programs now provide a multitude of services to the public and employers. With the support of DRPT, TDM/commuter assistance programs that work to reduce unnecessary single-occupant vehicle trips and help keep people moving on Virginia's road and transit systems. These programs provide the following services for the public and employers:

- Personalized Ridematching/Commute Options Information/Trip Planning
- Guaranteed/Emergency Ride Home Program
- Employer Services/Commuter Benefits and Telework Program Development
- Incentives and Rewards Programs
- Carpool and Vanpool Formation Assistance
- Marketing and Promotions
- Commuter Stores
- Bikesharing
- Promotion of Carsharing Programs

**Providing Peace of Mind:** Some commuters worry about not having their personal vehicle at work. Guaranteed Ride Home (GRH) and Emergency Ride Home (ERH) programs operated by Virginia's TDM/commuter assistance programs are there to take the worry out of taking the bus, train, carpool, or vanpool and not having one's personal vehicle at the office. GRH/ERH programs will get a person home or to a park-and-ride lot when something unexpected happens, and that person needs to leave work when their bus or train is not running or they cannot take your carpool or vanpool. GRH/ERH gives a person peace of mind. Last year, almost 6,000 Virginians registered for a GRH/ERH program and more than 1,700 trips were provided.

**Saving Money and Reducing Pollution:** Transit riders, carpoolers, vanpoolers, and teleworkers all save money by driving less. They save on the costs of auto maintenance, parking, tolls, and fuel. Last year, customers of Virginia's TDM/commuter assistance program saved more than 5 million gallons of gasoline. Even with today's low gas prices, a lot of money is still saved.

### 3 Transit and Transportation Demand Management Funding

#### 3.1 Six Year Improvement Program

The Six Year Improvement Program (SYIP) is the CTB's joint annual funding allocation program for the projects and initiatives administered by DRPT and VDOT. The SYIP reflects funding priorities across the state, updated project schedules and costs, and study results. The majority of DRPT's portion of the SYIP includes the funding allocations for public transportation capital purchases, operating assistance, and TDM and commuter assistance programs and projects. DRPT's SYIP for Fiscal Year 2018 allocated \$384.3 million of state transit revenues.

This amount included:

- \$193.5 million in operating assistance;
- \$180.7 million for capital projects;
- \$1.6 million for paratransit; and
- \$8.5 million for special projects.

Special projects include TDM/commuter assistance, experimental transit, operation studies, technical assistance, and transit internship programs. An additional \$8.1 million in federal CMAQ and Regional Surface Transportation Program (RSTP) funding allocated by the Metropolitan Planning Organizations was administered by DRPT.<sup>4</sup>

*Greenville Emporia Transit began bus service operations on October 2, 2017. The service consists of a 20-mile deviated fixed route circulator connecting various destinations within Emporia to the Greenville County Government Center/Southside Virginia Community College north of the city. Additionally, there is demand-response service in Emporia and rural Greenville County. Service will be expanding in 2018 with the arrival of a third bus and a paratransit equipped van.*

Beginning with the Fiscal Year 2019 SYIP, the Commonwealth Mass Transit Fund will begin to lose portions of approximately \$110 million annually in dedicated funding, as the ten-year life of the Capital Project Revenue (CPR) bonds will begin to phase out. Bonds will be completely exhausted by Fiscal Year 2020, with the exception of a one-time \$50 million bond authorization to WMATA in anticipation of Congressional reauthorization of the Passenger Rail Investment and Improvement Act (PRIIA).

The 2016 General Assembly passed House Bill 1359 (Patron-Delegate Chris Peace), establishing the Transit Capital Project Revenue Advisory Board (RAB) in recognition of the need to understand the impacts to local agencies of this significant loss of statewide funding, identify potential new funding sources for transit capital investments to replace the loss of bonds, and develop a project-based prioritization process for funding transit capital investments. The prioritization process and its ongoing implementation are described in detail in Section 7.6 of this report. In 2017, the RAB concluded that there would be estimated gap of \$35 million in

<sup>4</sup> Sections 10.1 and 10.2 highlight activities in Fiscal Year 2018 for transit agencies and TDM programs across the Commonwealth.

transit capital dollars starting in Fiscal Year 2020, and it would grow to an estimated gap of \$178 million by Fiscal Year 2027.

However, as DRPT began receiving transit capital grant applications in preparation for completing the Fiscal Year 2019 SYIP, the agency determined that grant applications were not matching the anticipated needs identified by local grantees to the RAB. Several possible reasons for this outcome are:

- Availability of alternative funding sources including SMART SCALE, Toll Revenues to Transit, State Passenger and Freight Rail Funds to Commuter Rail, Northern Virginia dedicated funds, federal BUILD grants, and dedicated state funding to vanpools;
- Ridership decline (see Section 4);
- Inability of transit agencies to meet four percent minimum local match requirement for transit capital projects;
- Backlog of open grants from prior years;
- Good maintenance of existing fleets allowing extended useful life of assets;
- Cost advantages of rehabilitation versus replacement;
- Increase in requests for vehicles that have a longer lifespan;
- Unpredictability and flat growth of federal funding.
  - For state of good repair projects. Congress enacted a \$7.6 billion budget recession in Federal Fiscal Year 2020 for highway and mass transit formula funding that could otherwise be released to state and local governments.
  - For large capital expansion projects such as the Future Capital Investment Grants (CIG) program, formerly known as New Starts. While Congress recently froze funding for projects without a Full Funding Grant Agreement, appropriators appear poised to reopen the program back up to projects in earlier stages of planning.

As DRPT completes its SYIP in future years and implements a series of transit reforms, the impact of the loss of Capital Project Revenues bonds and their possible impact on available transit capital spending will need to be monitored closely; and General Assembly action may still be needed to remedy the situation.

### **3.2 Federal Transit Funding in the Commonwealth**

Pursuant to Item 443, Chapter 2 of the 2018 Special Session I Acts of Assembly, “the maximization of all federal transportation funds available to the Commonwealth shall be paramount in the budgetary, spending, and allocation processes.” DRPT is the Commonwealth’s agency responsible for the receipt, allocation, and management of most Federal Transit Administration (FTA) formula funding programs. Additionally, through an inter-agency agreement with VDOT, DRPT administers funds from certain federal-aid highway formula programs like the CMAQ program and STBG that are allocated by the CTB for use on public transportation projects. The Appropriations Act mandates no less than 22 percent of Virginia’s STBG apportionment be allocated for public transportation purposes. DRPT may also serve as a direct applicant for, or support local transit agency applications to USDOT discretionary grant programs like BUILD (formerly known as TIGER), Low-No Emission Vehicles, and Bus/Bus

Facilities Construction. Federal funding for public transportation purposes is apportioned annually by Congress, with 20 percent of receipts of the federal excise tax on gasoline deposited into the Mass Transit Account.

Through multi-year surface transportation legislation, Congress authorizes the USDOT to allocate a fixed amount of funding to the FTA for administration of public transportation initiatives across the United States. Current authorization levels for formula and discretionary programs, enacted in December 2015 under the FAST Act, expire at the end of Federal Fiscal Year 2020. In order to lower the Congressional Budget Office analysis of the FAST Act, Congress included a \$7.6 billion budget rescission effective in Federal Fiscal Year 2020 for all federal-aid highways and transit funding that could otherwise be apportioned to states.

FTA programs are a combination of formula allocations to states and local transit agencies, as well as competitive discretionary grants with a variety of eligible applicants. Most programs require a 50 percent “local” match, which may come from a combination of state and local funding sources. The CTB allocates most federal transit funding in Virginia upon the recommendation of DRPT, with the exception of the Section 5307/5340 Urbanized Area Formula Grants which are apportioned directly to certain metropolitan areas based upon population size.

**Section 5307/5340 Urbanized Area Formula Grants:** The Urbanized Area Formula Funding program makes federal resources available to urbanized areas and to governors for transit capital and operating assistance in urbanized areas and for transportation-related planning. An urbanized area is an area with a population of 50,000 or more that is designated as such by the U.S. Department of Commerce, Bureau of the Census. Virginia currently has four metropolitan areas where local transit providers are eligible for and directly receive annual Section 5307 appropriations: Washington, D.C., Virginia Beach, Richmond, and Roanoke. Within each geographic area, the allocation is sub-allocated to specific local transit agencies.

In the case of the Washington, D.C. Section 5307 allocation, funds are first split among Virginia, Maryland, and the District of Columbia. Virginia then sub-allocates its share to local agencies. NVTC has elected to direct the majority of its share of 5307 apportioned funds to WMATA rather than other local transit systems operating in its member jurisdictions. PRTC directs its 5307 apportionments to the VRE and Fredericksburg Transit. In the case of the Virginia Beach Section 5307 allocation, funds are split between Hampton Roads Transit (HRT) and Suffolk Transit; and the Greater Richmond Transit Company and Petersburg Area Transit split 5307 funding for Richmond.

Additionally, states receive an annual Section 5307 Governor’s Apportionment which they may allocate to eligible smaller and mid-size urban areas at their discretion. The CTB currently allocates the Governor’s Apportionment to 13 local agencies across Virginia.

**Section 5310 Coordinated Human Service:** DRPT administers the FTA Section 5310 program, which provides services to improve the mobility for seniors and individuals with disabilities by removing barriers to transportation services and expanding the available transportation mobility options. The FTA 5310 programs fund the following:

- Funding accessible vehicles for public agencies and private non-profits agencies that are transporting seniors or individuals with disabilities;
- Operating funds to enhance paratransit beyond the minimum requirement of the American Disabilities Act;
- Expansion of service hours as well as days and areas; alternatives to public transportation; and voucher programs.

In the current fiscal year, DRPT awarded 32 agencies with 71 accessible vehicles. This included 19 agencies in rural and small urban areas as well as 13 agencies in urban areas. This service is especially important in rural communities where public transit is limited, and many individuals are unable to transport themselves.

DRPT provided 19 agencies in Virginia with operating funding to provide a variety of transportation services throughout the Commonwealth. Below are examples of how this funding is used locally:

- Bay Transit provided a voucher program with taxi cabs in the Northern Neck and Middle Peninsula area for dialysis treatment only available outside these areas.
- RADAR provided services for seniors in the Roanoke area on Saturday, which was not available before this program.

The Senior Transportation program uses state funds only to start a new service for seniors. In the current fiscal year, DRPT funded 12 agencies with grants in the range from \$5,000 to \$25,000 to provide a variety of transportation services for seniors. Some examples of how this money is spent:

- Mountain Empire Older Citizens in Big Stone Gap will provide transportation to seniors who are veterans in Southwest Virginia. Many of these trips are for medical purposes to veteran centers outside the area.
- Central Virginia Alliance for Community Living, Inc. provides shopping and other social trips for seniors in the Lynchburg area.

As Virginia's populations continues to age, this program will continue to expand and will provide much needed service to Virginians who do not have other transportation options.

**Section 5311 Formula Grants for Rural Areas:** The Formula Grants for Rural Areas program provides capital, planning, and operating assistance to states to support public transportation in rural areas with populations of less than 50,000, where many residents often rely on public transit to reach their destinations. The program also provides funding for state and national training and technical assistance through the Rural Transportation Assistance Program.

Additionally, the 5311 (f) program requires states to set aside 15 percent of the annual program appropriation for operating an Intercity Bus system or otherwise certify that private carriers in the state are already providing sufficient connectivity to rural areas. The FTA authorizes states to use up to 50 percent of this set-aside, matching the other 50 percent with fare box, in-kind matching, or state revenues; and it also requires intercity bus networks to connect rural communities as well as the national bus network.



Until 2013, Virginia historically certified that its rural intercity bus connectivity requirements were being met. However, a study commissioned by DRPT identified that the I-81 and I-66 corridors between Blacksburg and Washington, D.C. were underserved. In 2017, DRPT successfully launched its first Intercity Bus Service under the Section 5311(f) program, the *Virginia Breeze*, serving the I-81 and I-66 corridor with daily north and southbound services, including a direct terminal connection to Washington-Dulles International Airport. This service operates with a farebox and in-kind match. No state funds have been needed to operate the service; and in 2019, DRPT will study the needs for other intercity bus service across the Commonwealth. For more information about this service, please see Section 5.6.

**State Safety Oversight:** Federal law mandates that states provide comprehensive safety oversight of fixed-rail transit systems within their respective jurisdictions. In the case of Virginia, two mass transit systems fall under this purview: WMATA and the Hampton Roads Transit *Tide* light rail system.

For the Hampton Roads Transit *Tide* light rail system, DRPT performs full state safety oversight duties and responsibilities. For WMATA, a tristate compact including Virginia, Maryland, and the District of Columbia, known as the Metrorail Safety Commission (MSC), adopted by the 2017 Virginia Assembly as well as the 118<sup>th</sup> United States Congress will collectively perform SSO duties once the FTA certifies the MSC and returns safety oversight responsibility to the states.

In 2016, the FTA promulgated new rules to implement amendments to the federal State Safety Oversight program adopted by Congress in the FAST Act. The FTA provided an April 15, 2019 deadline for all states to achieve certification and compliance with the new rules or risk significant penalties to statewide FTA appropriations. DRPT achieved full certification for the Hampton Roads Transit *Tide* light rail system in 2018, nearly one full year in advance of the FTA deadline. DRPT, working through the MSC, continues to finalize the certification process for the WMATA; and it is expected to be completed in early 2019. On September 25, 2018, the MSC submitted its full application for safety certification to FTA.

However, public transit agencies in Virginia, Maryland, and D.C that receive annual Section 5307 appropriations continue to have five percent of funds withheld by the FTA due to the three jurisdictions not forming a new MSC by a 2017 deadline imposed by the FTA. The 2018 Virginia Appropriations Act allocated \$6.5 million to authorize DRPT to allocate funds to local transit agencies facing this withholding penalty via loan transfer from VDOT's Highway Construction account. Local agencies are only eligible if they have allocated all federal funding prior to the 2017 penalty and agencies are subject to loan repayment terms. To date, no Virginia agencies have sought such loans.

**FAST Act Reauthorization:** In 2015, Congress adopted the FAST Act, a five-year, multi-billion authorization of all USDOT modal programs, including public transportation. The FAST Act will expire September 3, 2020, at which time Congress will need to have adopted either a new multi-year authorization bill or temporarily extend the terms and spending levels of the



current FAST Act. As with any federal authorization bill, actual available spending is subject to separate, annual appropriations.

While the FAST Act provided a modicum of predictability for public transportation in Virginia by fixing annual appropriations for a five-year period, the overall rate of growth of federal investment in public transportation continues a relatively flat-growth trend. This places an increased funding pressure on states and communities like Virginia growing in size and transit demand, particularly at a time when Virginia is bringing significant prioritization and reform to its statewide transit capital program.

In addition to expiration of the FAST Act by Fiscal Year 2020, the portion of PRIIA relating to WMATA also expires. PRIIA provided a dedicated \$150 million annual authorization to make capital improvements to WMATA, contingent upon Virginia, Maryland, and D.C. matching \$50 million annually. PRIIA has successfully guaranteed \$300 million to meet WMATA capital needs which will continue regardless of Congressional action to reauthorize. In order to encourage Congress to reauthorize PRIIA long-term, the 2018 General Assembly authorized a one-time \$50 million CPR bond obligation for the first year of a new 10-year program authorization.

## 4 Fiscal Year 2018 Transit Usage and Trends in the Commonwealth

### 4.1 Statewide Ridership

For Fiscal Year 2018, transit agencies across the Commonwealth provided 173,582,869 unlinked passenger trips. According to the Federal Transit Administration, unlinked passenger trips are the number of people who board public transportation vehicles regardless of how many vehicles they use to travel from their origin to their destination. For example, if an individual transfer from one bus to another bus while commuting to their workplace, that individual's trip counts as two passenger trips.

The Fiscal Year 2018 number amounts to a 1.9 percent decrease when compared to Fiscal Year 2017. While this represents a small decline in ridership year-to-year, it is significantly better than the prior year decrease of 7.6 percent between Fiscal Year 2017 and Fiscal Year 2016. With the implementation of significant transit reforms that will lead to improved services, WMATA's continued work towards improving its services, and changing outside factors such as rising gas prices, it is anticipated that a decline in transit ridership will either slow down or stop.

Transit Mode	FY18	FY 17	%Change (FY18-FY17)
Bus	74,567,832	79,546,775	-6.3%
Commuter Rail <sup>5</sup>	4,633,936	4,676,123	-0.9%
Ferry Boat <sup>6</sup>	327,661	295,983	10.7%
Heavy Rail <sup>7</sup>	91,116,098	89,497,280	1.8%
Light Rail <sup>8</sup>	1,385,694	1,319,791	5.0%
Paratransit <sup>9</sup>	1,551,648	1,557,922	-0.4%
TOTAL	173,582,869	176,893,874	-1.9%

Ten transit agencies saw an increase in ridership whereas the majority of transit agencies, including many in Northern Virginia, saw a decrease in ridership. A decline in ridership

<sup>5</sup> Virginia Railway Express is the only commuter rail system in Virginia.

<sup>6</sup> Hampton Roads Transit is the only transit agency in the Commonwealth that operates a ferryboat system.

<sup>7</sup> WMATA is the only heavy rail operator in the Commonwealth. This number is for Virginia riders only. To be counted as part of Virginia's ridership, the individual's travel must either originate or terminate in the Commonwealth.

<sup>8</sup> The Tide, which Hampton Roads Transit operates, is the only light rail system in Virginia.

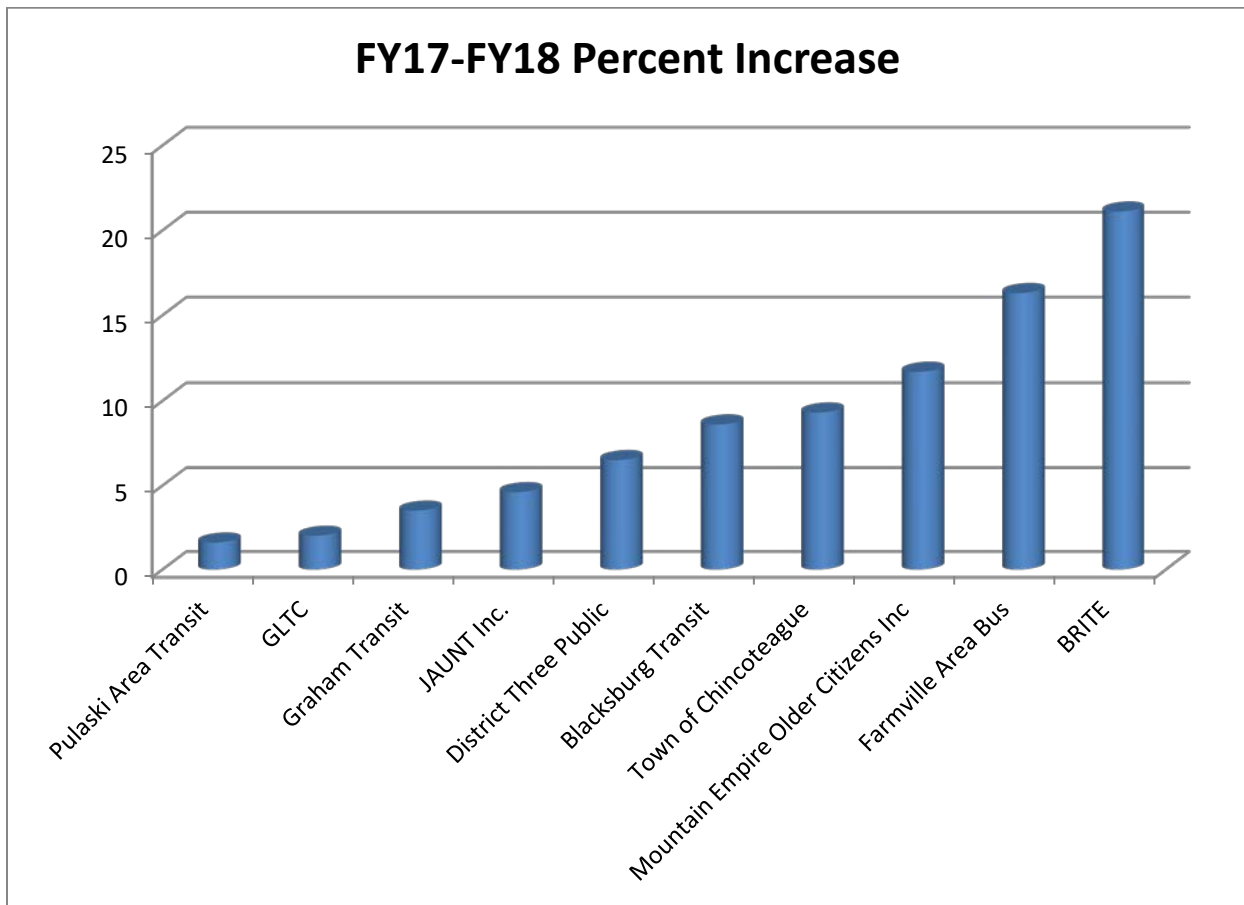
<sup>9</sup> The following agencies operate paratransit services: Alexandria Transit, ART-Arlington County, Blacksburg Transit, Bristol Transit, City of Harrisonburg Department of Public Transportation, Danville Transit System, Farmville Area Bus, Greater Lynchburg Transit Company (GLTC), Greater Roanoke Transit Company, Greater Richmond Transit Company (GRTC), Hampton Roads Transit, JAUNT, Inc., Petersburg Area Transit, Suffolk Transit, Williamsburg Area Transit Authority, Winchester Transit, and WMATA.

throughout Northern Virginia may be related to an increase in additional transportation options. For example, toll lanes are now available for single occupant vehicles along Interstate 66 Inside the Beltway. Additionally, uber and lyft services are more readily available for individuals in urban areas such as Northern Virginia, Richmond, and Hampton Roads. Further, teleworking is now offered more widely. The United States Census Bureau recently reported that eight million individuals now work primarily from home, which marked the first time that its usage exceeded public transportation use. Virginia is not alone in seeing a decrease in transit ridership. In 2018, the American Public Transportation Association reported an overall 2.9 percent decrease in transit ridership with a decline of 4.3 percent in bus ridership from calendar year 2016 to calendar year 2017.

Nonetheless, despite the overall decrease, ridership increased in many areas where these other transportation options are not readily available and where individuals have fewer choices outside single occupant vehicle travel.

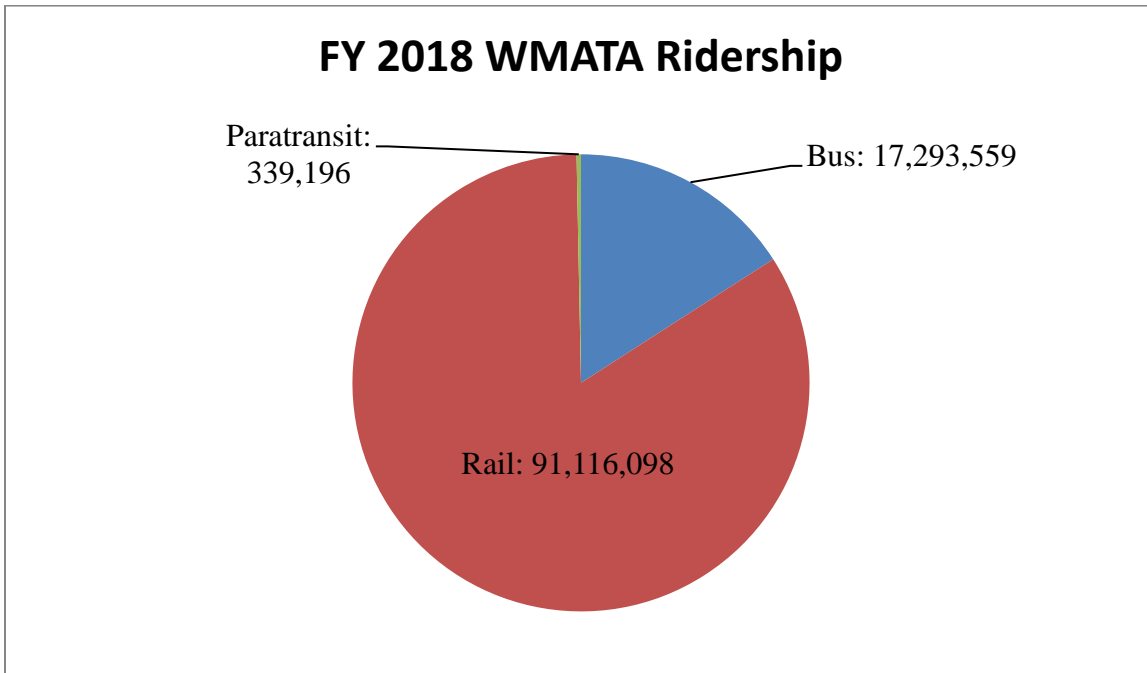
## 4.2 Transit Agencies with Increased Ridership

While transit ridership declined in Virginia like the rest of the country, many transit agencies in the Commonwealth saw increases in their ridership over the past year. The below chart shows the percentage increase in ridership from Fiscal Year 2017 to Fiscal Year 2018.



Many of these transit agencies that saw an increase in ridership serve small communities or rural areas where residents have few options if they do not have access to a vehicle. These agencies provided a much needed benefit to the community in helping the Commonwealth’s rural citizens travel to work or healthcare.

### 4.3 WMATA Virginia Ridership

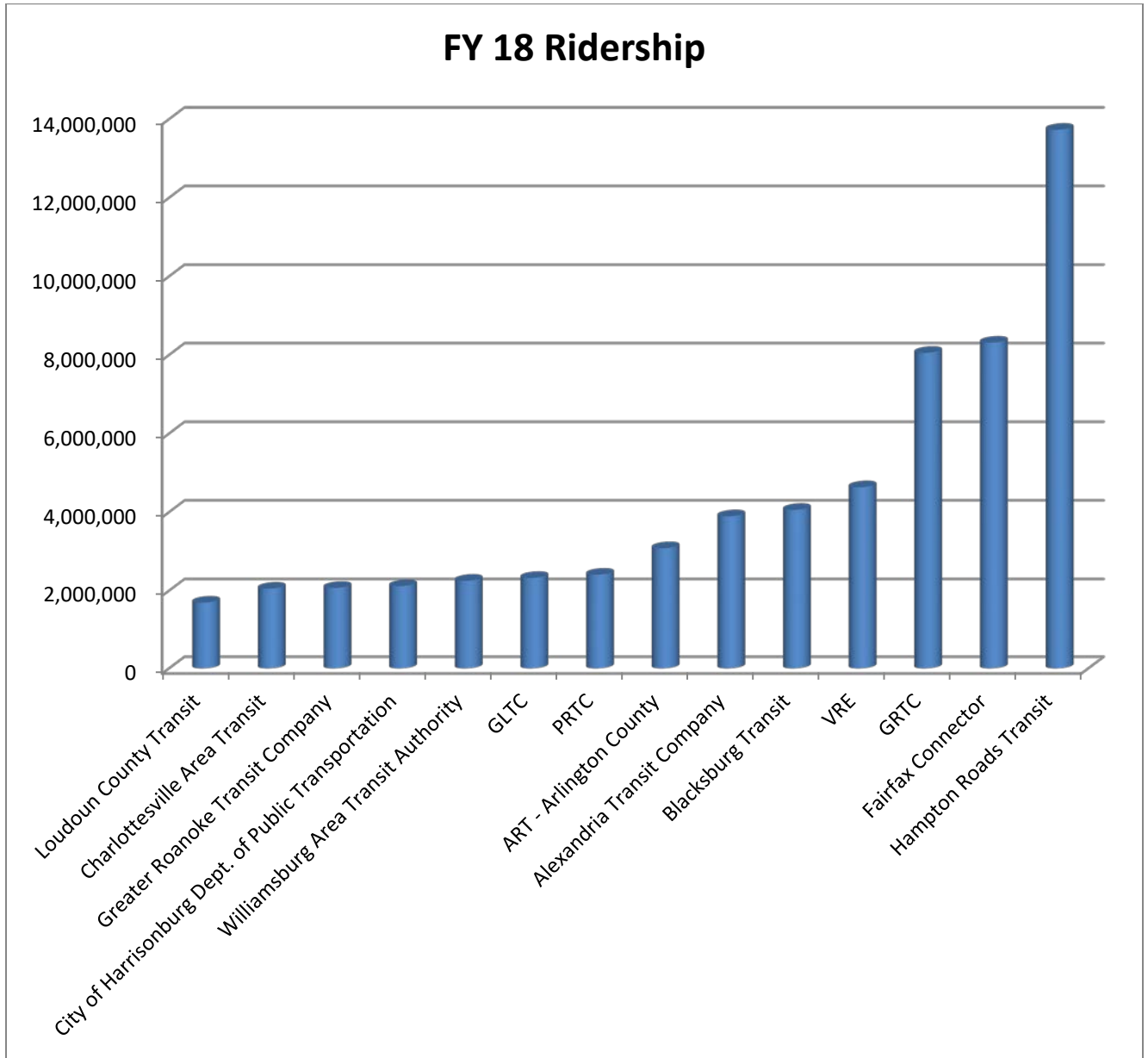


The above pie chart represents Virginia’s WMATA ridership. To be counted as part of this total Virginia ridership, an individual’s trip must either originate or terminate in the Commonwealth.

Despite Safe Track construction, WMATA ridership in Virginia has remained steady from Fiscal Year 2017 to Fiscal Year 2018. Overall, ridership only decreased 0.22 percent year-to-year. Rail ridership and paratransit services saw an increase in ridership while the bus ridership saw a significant decrease. However, WMATA is taking action to remedy the loss in bus ridership by conducting a bus transformation study that will be a regionally developed mobility strategy to define the roles of buses and their operators, embrace innovations, and create a plan to advance these objectives.

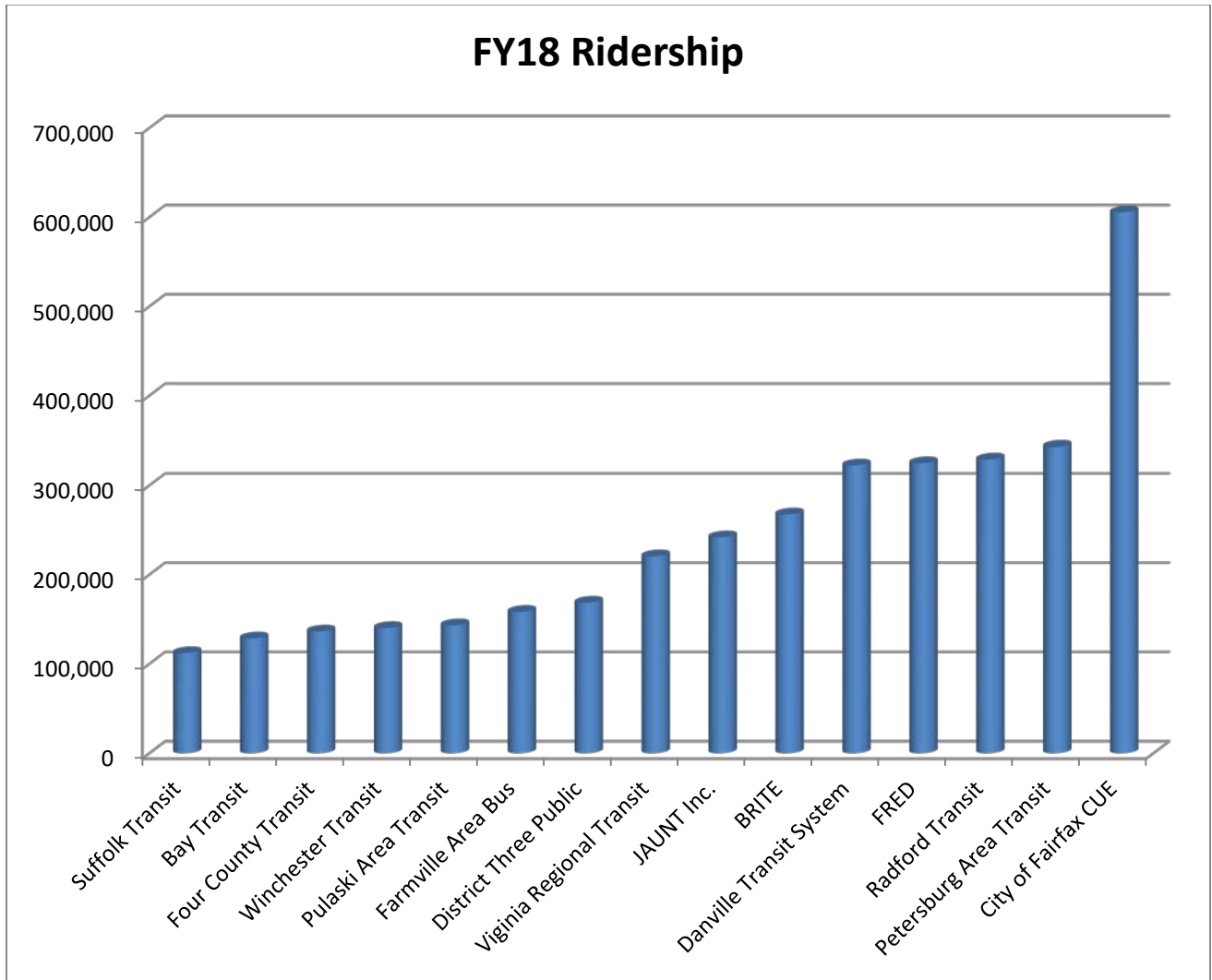
Further, construction will impact ridership on the WMATA rail system over the next year. Several stations along the blue and yellow lines will be closed during the Summer 2019 for repairs to the station.

#### 4.4 Transit Agencies with Ridership Greater than 1,000,000<sup>10</sup>

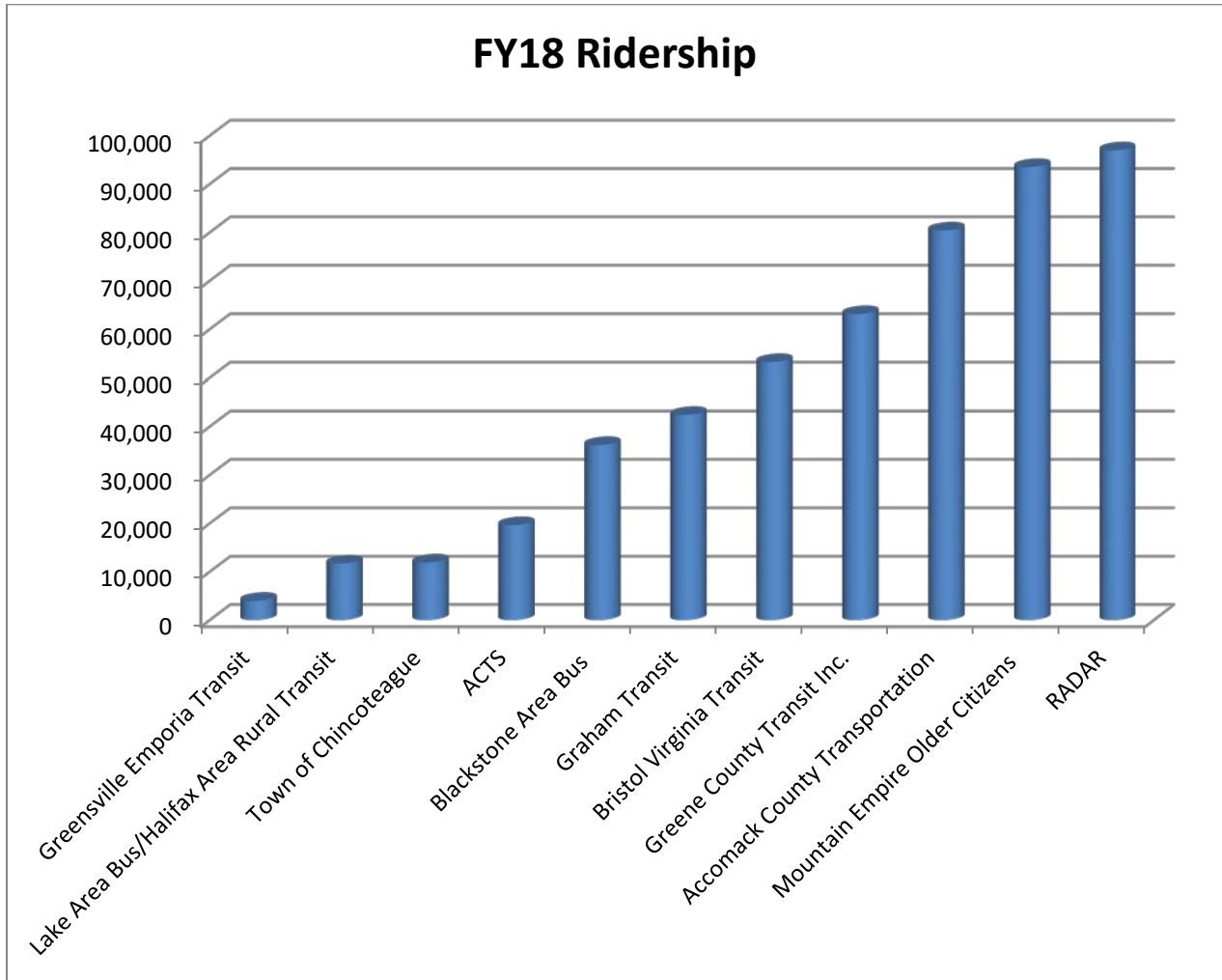


<sup>10</sup> WMATA is not included in this graph.

### 4.5 Transit Agencies with Ridership Between 1,000,000 & 100,000



#### 4.6 Transit Agencies with Ridership Less Than 100,000<sup>11</sup>



<sup>11</sup> Fiscal Year 2018 was Greenville Emporia Transit’s first year of service; it began operations in October 2017.



## 5 Major Initiatives

### 5.1 SMART SCALE



Established by the 2014 General Assembly, SMART SCALE is an important source of capital revenue that may be used for rail and transit projects. It complements the existing capital transit funds and prioritizes projects based on their effectiveness at meeting the transportation goals of

the Commonwealth, as established in VTRANS. This process then ensures that localities and transit agencies will be concentrating on developing the best projects for SMART SCALE applications in the future.

DRPT, VDOT, and the Office of Intermodal Planning Investment are active participants in the SMART SCALE process. Specifically, DRPT provides technical and policy expertise and analysis for multimodal projects as well as working with localities and agencies to identify potential projects and providing technical assistance and project data to help round out the applications.

The SMART SCALE funding prioritization process had its first round in Fiscal Year 2017 with eight public transportation projects across four districts receiving \$31 million dollars in total. In Fiscal Year 2018 during SMART SCALE's second round, 17 public transportation projects across six districts were selected for \$168 million of funding. This increase represents a significant commitment to transit and TDM. For the Fiscal Year 2018 projects alone, funding went to new rail and bus vehicles, commuter rail infrastructure, and bus station and stop improvements.<sup>12</sup>

It is important to note that only expansion projects are funded throughout SMART SCALE. State of good repair projects and programs continue to be funded using DRPT's transit capital program. It should be noted that current expansion projects funded through SMART SCALE will become a state of good repair project in future years, placing an additional burden on the transit capital program.

#### *Round 1 Completed Projects:*

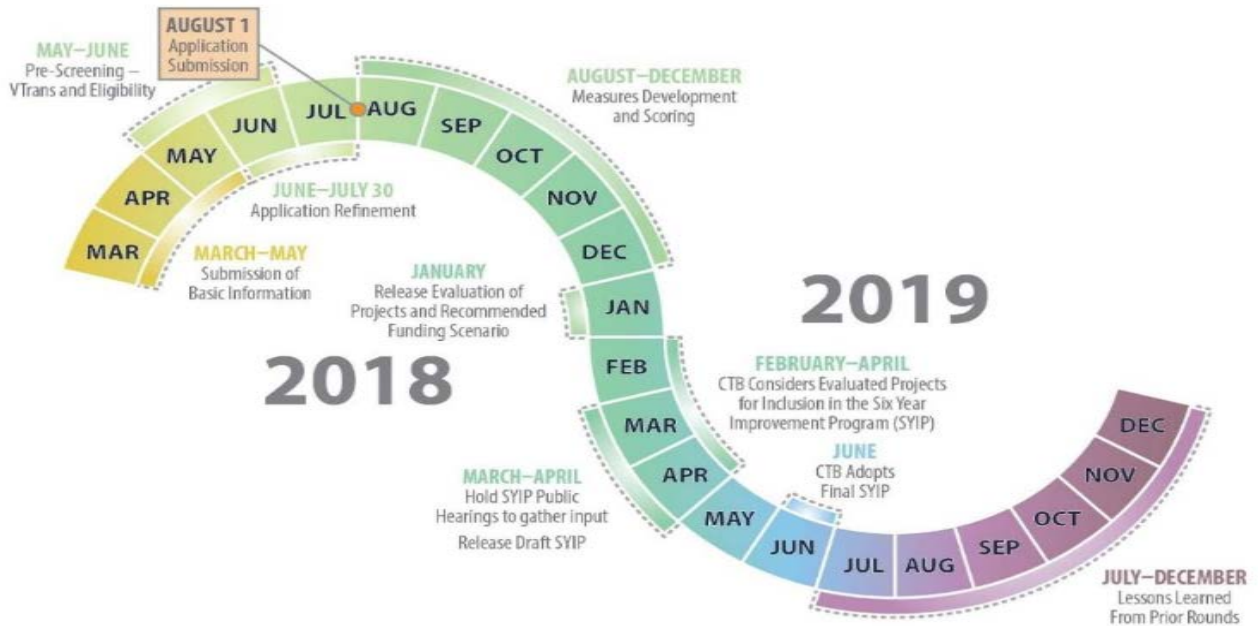
- *The Hopper: Lynchburg Central Business District Circulator*
- *Danville Transit System Bus Shelter & Transit Buses*
- *I-66 Mobile Commuter Store*

#### *Round 2 High Scoring Projects:*

- *VRE Fredericksburg Line Capacity Expansion*
- *Columbia Pike Smart Corridor*
- *Greater Roanoke Transit Company Smart Way Vehicle Expansion*

<sup>12</sup> A list of transit and TDM projects funded using SMART SCALE can be found in Section 10.3.

Round 3 of SMART SCALE is currently underway. The application submission deadline was August 1, 2018, and measures development and scoring is ongoing. DRPT received 52 total applications with transit components. Of those, 18 projects had transit as the primary component; and 34 projects had transit as a secondary component. Between February 2019 and April 2019, the CTB will evaluate projects for inclusion in the Fiscal Year 2020 Six Year Improvement Program. The process for SMART SCALE Round 3 is documented in the below info graph.



## 5.2 Toll Revenues to Transit and Transportation Demand Management

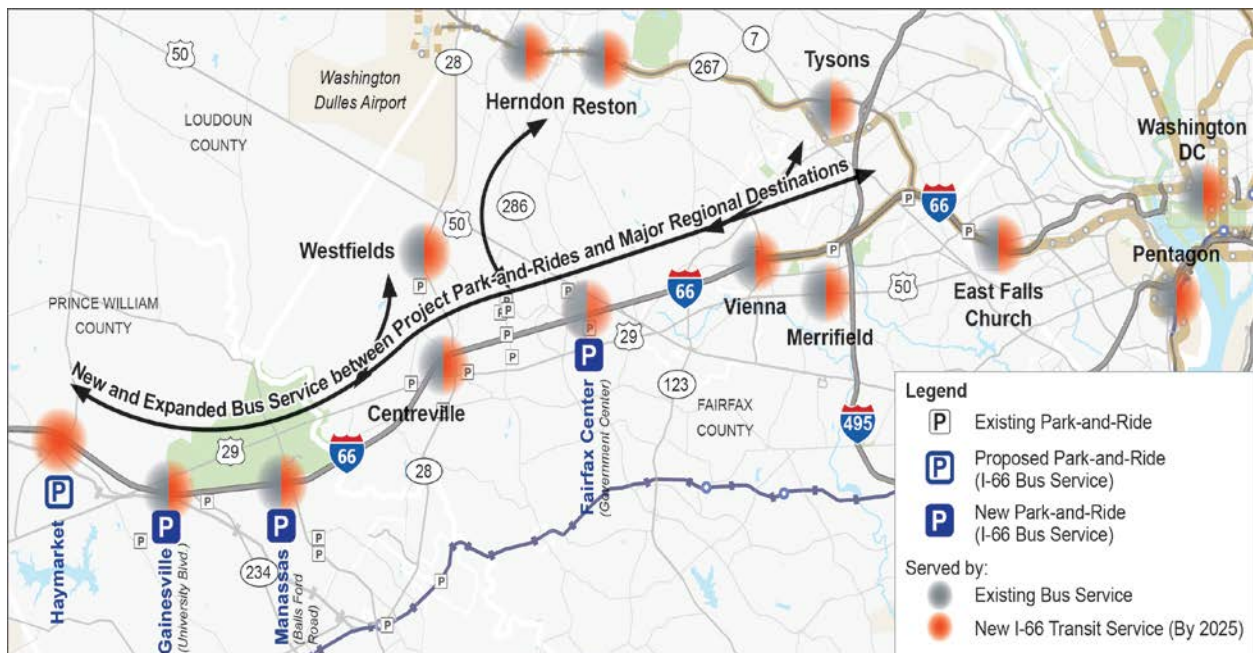
Two of the most congested roadways in the Commonwealth, I-66 and I-395 in Northern Virginia, will witness major transformations over the next few years due to implementation of new travel choices in the form of High-Occupancy Toll (HOT) Lanes and tolled Express Lanes that will provide more reliable travel options to residents and businesses while improving traffic flow in the general purpose lanes that will continue to remain free to use.

While the I-395 Express Lanes, I-66 Inside the Beltway HOT Lanes, and I-66 Outside the Beltway Express Lanes projects will result in major improvements to those roadways, the ultimate goal of the projects is to increase person throughput in those corridors whether by highway or transit. DRPT worked with VDOT, NVTC, PRTC, and local governments to develop tailored transit funding programs for each corridor. These programs will ensure a steady stream of toll revenues to enhance transit services in each corridor. These transit services will provide low-cost and reliable travel options to commuters, remove cars from those congested roadways, and help to optimize the transportation network by facilitating the movement of more people.

Like with SMART SCALE, toll revenues are funding expansion projects, not state of good repair projects. Therefore, today’s expansion projects funded under these initiatives will become state of good repair projects in future years placing an additional burden on the transit capital program.

**Transform 66- Outside the Beltway: In**

November 2016, the Commonwealth selected Express Mobility Partners (EMP) to build new Express Lanes on I-66 Outside the Beltway with the goal of increasing person throughput, by highway and transit, in this congested corridor. EMP will be responsible for all costs to design, build, operate, and maintain the I-66 Express Lanes without any upfront public contribution. EMP will modify nearly 23 miles of I-66 providing two new Express Lanes, alongside three existing general purpose lanes, in each direction from the I-495 Capital Beltway to Route 29 in Gainesville. The project will include 4,000 new commuter parking spaces at three new park and ride lots, dedicated Express Lanes access points, and space in the median reserved for future transit.



As part of the agreement, EMP will contribute \$800 million over the next 50 years to fund new and expanded transit services that, utilizing the Express Lanes, will operate between new and existing park and ride lots in the corridor and major employment centers in Washington, DC and Northern Virginia. The new transit services will begin operation when the Express Lanes open in 2022.

As part of its agreement for the project, EMP is also providing an upfront concession payment of \$500 million to the Commonwealth for use on additional projects that will benefit users of the

corridor. The following transit projects were selected by NVTa to receive funding from EMP's concession payment:

- \$128.5 million to VRE for improvements to enhance commuter rail service on its Manassas line;
- \$40 million for widening of the median to accommodate any future westward expansion of the Metrorail Orange Line;
- \$38.5 million to Fairfax County for the construction of a new commuter parking structure at Fairfax Corner;
- \$11.1 million to the PRTC for the construction of a new western maintenance and bus storage facility that would serve some of the new planned I-66 commuter bus services that is being funded as part of the project; and
- \$4.8 million to Arlington County for the expansion of bus bays at the East Falls Church Metrorail station to accommodate new I-66 commuter buses.

With the cooperation of local jurisdictions along the I-66 corridor, VDOT and DRPT developed a Transportation Management Plan (TMP) to inform the public about the project construction schedule and its impacts and mitigate traffic in the construction zones. The TMP also funds incentive programs to encourage the public to use transit, vanpooling, carpooling, and telework during project construction. TMP funded services and projects include:

- New commuter bus service from Northern Shenandoah Valley to Arlington County;
- Carpool incentives;
- Incentives to form new vanpools;
- Incentives to businesses in the corridor to establish or enhance telework programs;
- Bus fare reductions on Fairfax Connector and PRTC OmniRide routes serving I-66; and
- Supplemental bus service to maintain headways on existing PRTC OmniRide routes.

**Transform 66- Inside the Beltway:** In December 2017, I-66 from the I-495 Capital Beltway to Rosslyn was converted from HOV-2 to HOT lanes in the peak travel directions during the peak periods. This change allows single occupancy vehicles to legally utilize I-66 Inside the Beltway during peak periods for the first time ever by paying a toll. Vehicles with two or more occupants travel for free (HOT-2). In 2022, the facility will further convert from HOT-2 to HOT-3 when the I-66 Outside the Beltway Express Lanes becomes operational. VDOT operates and maintains the tolling infrastructure on I-66 Inside the Beltway, and the Commonwealth is dedicating a portion of the new toll revenues (after operations and maintenance costs and debt service are paid) to fund multimodal improvements benefiting commuters. The CTB has entered into an agreement for managing the multimodal program funded with toll revenues with the NVTC. Each year NVTC will develop a program of multimodal improvements that it will present to the CTB for approval. NVTC is also responsible for ensuring the projects are completed and achieving the promised benefit and for reporting on the projects annually to the CTB.





As of June 30, 2018 the CTB has provided funding for two programs of multimodal improvements recommended by NVTC. Combined, the two programs total \$21.9 million and include 23 projects in seven local jurisdictions.<sup>13</sup> Overall, these projects will move over 2,800 people daily and reduce travel delay by 157,000 hours annually.

**I-395 Express Lanes:** In August 2017, VDOT began construction of a third lane within the existing dedicated HOV facility on I-395. When the new lane is completed in late 2019, VDOT will convert the existing eight-mile long HOV facility into a tolled Express Lanes facility. The reversible I-395 Express Lanes will operate 24 hours a day in the peak direction of travel. Vehicles with three or more occupants will travel for free in the Express Lanes, and vehicles with fewer than three occupants can utilize the Express Lanes by paying a variable toll that is set based on levels of congestion. As part of its agreement to operate the facility, Transurban will return a portion of toll revenues back to the Commonwealth as an annual transit payment to fund multimodal improvements that will benefit toll payers. Annual transit payments to the Commonwealth will begin in 2020.



The CTB has approved an agreement for management of the multimodal program funded with toll revenues with NVTC and PRTC. Beginning in 2020, NVTC and PRTC will jointly develop a program of multimodal improvements that will be presented to the CTB for approval. NVTC and PRTC will also be responsible for ensuring the projects are completed and achieve the promised benefit and for annual reporting on the projects to the CTB.

In 2016, DRPT worked with local jurisdictions and transit systems from Arlington to Spotsylvania County to produce a new I-95/I-395 Transit/TDM Study. The final report includes a list of new and expanded transit services and TDM program enhancements that can be implemented to improve travel using the annual transit payment to be provided by Transurban from toll revenues. The study determined that if fully implemented, the transit and TDM improvements could increase person throughput by 350,000 trips.

DRPT and VDOT are funding a \$2 million TMP during construction of the I-395 Express Lanes project. The purpose of the TMP is to mitigate the impacts of construction by providing information on the project to commuters as well as travel alternatives during the construction period. Specific TMP funded services and projects include:

- Increased peak hour bus service to the Pentagon on the existing PRTC Dale City OmniRide route and Metrobus 18P and 21D routes;
- Relocation of the Commuter Store at the Pentagon Transit Center from a mobile store that utilizes two bus bays to a permanent structure;
- Carpool and vanpool incentives;
- Employer outreach in the I-395 corridor; and

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<sup>13</sup> A list of these projects can be found in Section 10.4.

- Incentives to businesses to establish new telework programs.

Without question, these three initiatives will increase travel options for thousands of commuters throughout the Northern Virginia area and assist in making transit and TDM usage a more viable option for many.

### 5.3 Silver Line Metro Expansion

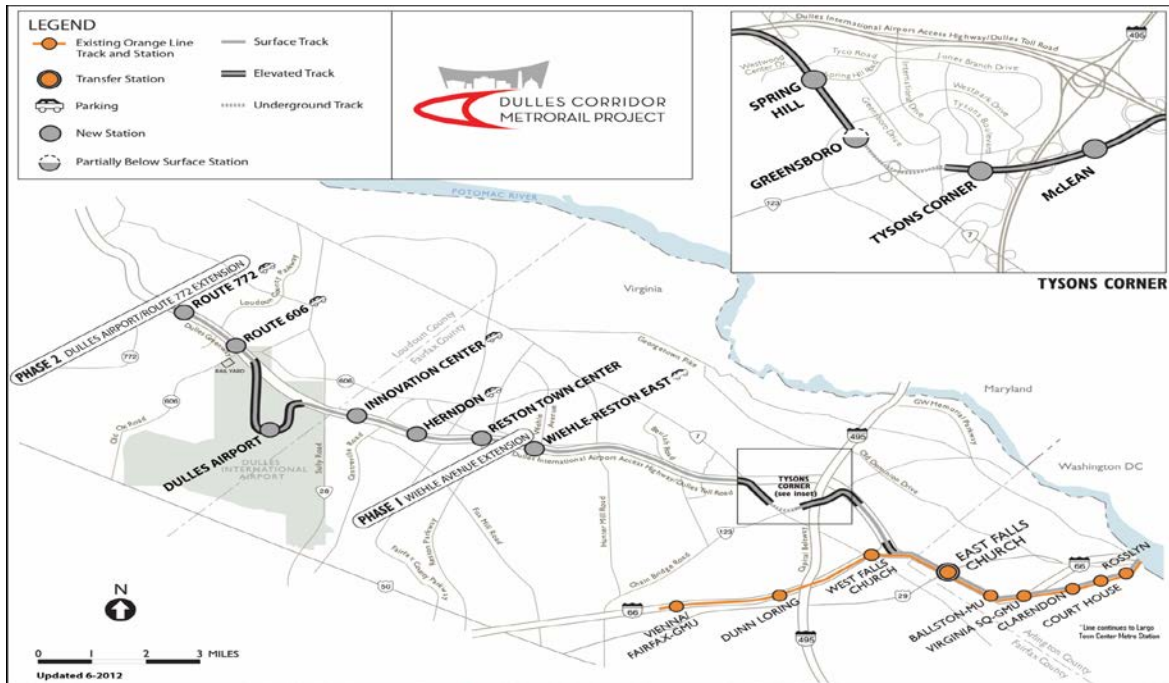
The purpose of the Dulles Corridor Metrorail Project is to provide high-quality, high-capacity transit service in the Dulles Corridor. MWAA is the primary funding source for this project. DRPT, WMATA, Fairfax County, and Loudoun County provide technical assistance during the construction of the 23.1-mile extension of Metrorail in



the rapidly growing Dulles Corridor in Fairfax and Loudoun counties, Virginia. Phase 1 was completed in Summer of 2014, with the Silver Line providing rail service connecting downtown Washington with Tysons Corner and Reston. The completed stations that are part of Phase 1 are McLean, Tysons Corner, Greensboro, Spring Hill, and Wiehle-Reston East. Service started on the Silver Line in Fiscal Year 2015 with total ridership of 4,169,758 individuals (Note: Silver Line service started on July 26, 2014). As of Fiscal Year 2018, total ridership has grown to 4,318,103 individuals.

The project is now entering the second and final phase, extending the Silver Line into Reston Town Center, Herndon, Washington Dulles International Airport, Route 606, and Ashburn with an expected completion date in 2020.

The below map shows stations for the entire project.



### 5.4 Richmond’s Pulse: Bus Rapid Transit

The Greater Richmond Transit Company’s Pulse launched on June 24, 2018, and serves a 7.6-mile route along Broad Street and Main Street, from Rocketts Landing in the City of Richmond to Willow Lawn in Henrico County. There are 26 stations and over three miles of dedicated travel lanes. A map of the route is below.

In September 2014, GRTC was awarded a \$24.9 million federal TIGER grant towards construction of Richmond’s bus rapid transit system.

Prior to construction, the Pulse was anticipated to provide the following benefits:

- Support 406 jobs in the local economy.

*DRPT has supported the **Richmond Transit Network Plan** which realigned GRTC service across the City. The implementation of the plan will ensure that there is more efficient and direct access to the BRT from neighborhoods, such as Fulton, where there were identified service gaps and obstacles to connectivity between the neighborhood and the nearby BRT stations. GRTC had made many service updates in the past, but it had not conducted a system-wide route change to this level in its history. The service changes recommended across the city would neither change the operational costs of the system nor increase the need for vehicles.*

*The number of people within a half-mile of frequent service (bus service every 15 minutes) would increase 200 percent from 36,000 today to 114,000. Also, the number of jobs with a half-mile of frequent service would increase 25 percent from 91,000 to 117,000.*

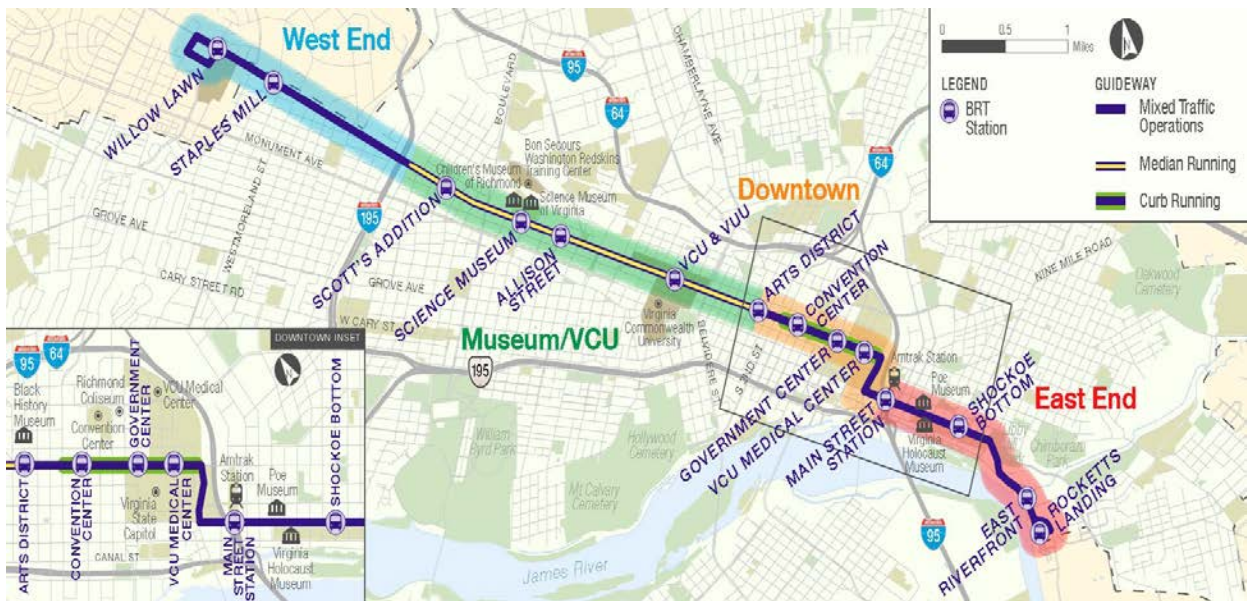
*From July 1, 2018, through August 11, 2018, GRTC has provided 880,570 rides (20,966 per day) on all its routes.*



- Generate \$35 million for the economy (from construction).
- Provide the city with nearly \$5 million as a result of increased real estate revenues.
- Potentially stimulate a 12 percent increase in property values in the corridor over 20 years, raising values by \$1.1 billion and increasing property tax revenues by about \$4.9 million per year on average over 20 years.

After initiating service of the Pulse on June 24, 2018, GRTC offered a free week of rides on all its routes. According to data provided by GRTC, it provided over 226,000 riders with nearly 57,000 rides on the Pulse during the free week. Since the end of the free promotion, the Pulse continues to be a success. From July 1, 2018 (the first day of paid service) through August 11, 2018, the Pulse service has provided 174,049 rides (approximately 4,144 rides per day).

Beginning on August 1, 2018, GRTC entered into a \$1.2 million agreement with Virginia Commonwealth University allowing its students and employees to ride on all GRTC routes, including the Pulse, for free. As part of this agreement, GRTC will have to provide Pulse service at ten minute intervals throughout the day.

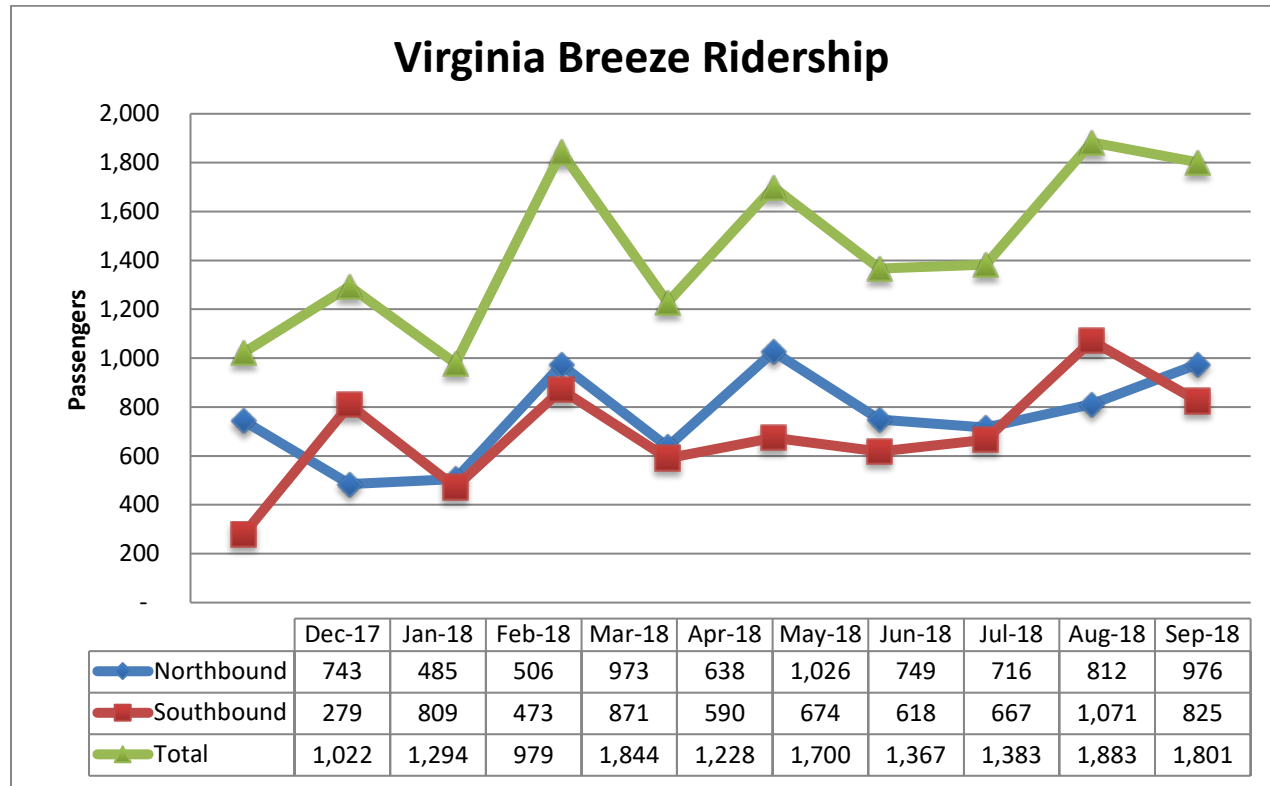


## 5.5 Virginia Breeze: Blacksburg to Washington, DC

Starting service on December 1, 2017, the Virginia Breeze is an intercity bus service connecting Blacksburg with Union Station in Washington, D.C. The daily route includes stops in Christiansburg, Lexington, Staunton, Harrisonburg, Front Royal, Dulles Airport, and Arlington. It also provides connections to local transit service in Blacksburg, Staunton, and Harrisonburg.

DRPT completed a study in 2013 and determined that the heavily traveled I-81 and I-66 corridors presented an underserved, yet viable, market to pilot an intercity bus service. This service compliments other initiatives such as the I-66 Inside and Outside the Beltway projects and the on-going study of I-81 congestion by removing single-occupant vehicles from these

heavily traveled interstates. Thus far, the ridership has far exceeded the expectations outlined in the study. In the first year (December 2017-November 2018), DRPT estimated ridership to be 7,125 individuals. Through September 30, 2018, total ridership was 14,501, double the predicted ridership. A monthly breakdown of ridership is below.



Intercity bus service creates a connection between rural areas and the larger regional or national system of buses. Bus schedules are developed to make practical connections to current intercity carriers making travel accessible, reliable, and convenient. Under the FTA Section 5311 rural transit formula program, Virginia is required to utilize up to 15 percent of its annual appropriation towards facilitating intercity bus service in the Commonwealth where it is otherwise underserved or does not exist.

DRPT will be completing a study in 2019 that will determine additional underserved routes for service in the future.

## 5.6 Transit Technology and Integrated Mobility

The rapid evolution and emergence of transit technology and mobility services is emerging as the next evolution of public transportation. DRPT knows the importance of understanding these topics and exploring ways to assist transit agencies in using emerging transit technology and adapting to changes brought by them. Subsequently, transit agencies will be more efficient and more attractive options for riders. With Transportation Network Companies (TNCs) expanding, and with original equipment manufacturers (OEMs) entering the field, DRPT is taking an active

role to support the challenges ahead through projects and a statewide plan to address transit technology and integrated mobility.

### **Driver Assistance System (DAS)**

**Demonstration Project:** DRPT initiated a two-part pilot demonstration project in Fall 2017 to provide transit agencies in Virginia access to a pedestrian collision avoidance system through a statewide contract with Rosco Collision Avoidance, Inc. In this project, revenue vehicles will be retrofitted with pedestrian collision avoidance systems. DASs are a low level of vehicle

automation and serve to improve safety and performance of vehicles. These systems include physical hardware elements such as cameras, sensors, and digital displays to alert operators to potential conflicts, as well as software elements to record and report incidents and trends.

The first part of the project is a statewide procurement contract that any transit agency may use to purchase the driver assistance system, retrofitted to existing transit vehicles, and includes installation and training to operate the system. This was the first statewide procurement of its kind in the country, when completed in December 2017.

The second part of the project is a demonstration project by DRPT to test up to 50 revenue service vehicles to identify whether the installation of a pedestrian collision avoidance system results in a reduction of incidents or near-misses, and/or a savings in fuel use and maintenance costs for the selected agency. A secondary goal of this project is to increase the public visibility of automated and connected vehicles in transit. The project will evaluate the technology system, and as such, project success will not be based on the selected transit agency's performance. Data collected before and during the project will be summarized in an analysis report shared with the participating agency as well as other stakeholders. Data includes the number of collisions (nature and severity of collision), driver satisfaction, on-time performance, and total cost of maintenance per vehicle. Additionally, data will be collected on the speed of the retrofit; if the retrofit process takes too long, it may prove disruptive to service for smaller fleets by temporarily removing part of a small fleet.

The demonstration project is funded through a State Demonstration Project Assistance Grant and CTB's Innovation and Technology Fund (ITTF), with an expected four percent local match. DRPT sent a solicitation of interest to all transit agencies in the state in October 2017 and received responses from nine transit agencies. These agencies are:

- Alexandria DASH;
- Blacksburg Transit;
- BRITE;

*The Greater Richmond Transit Company's Pulse Bus Rapid Transit uses traffic signal priority to expedite buses through intersections while minimizing the impact on traffic. This system assigns priority using red light truncation, green light extension, and queue jumping functionality; uses onboard encoded emitters and wayside detectors to request priority when bus is within range; and logs data, provide reports, and real-time feedback to the transit company. To learn more about the Pulse, please see section 5.4.*

- FRED Transit;
- Greater Lynchburg Transit Company;
- Hampton Roads Transit;
- Harrisonburg Transit;
- Virginia Regional Transit; and
- WMATA.

DRPT, the Virginia Transportation Research Council (VTRC, the research division of the Virginia Department of Transportation), and other entities will be involved in monitoring this effort. Purchase orders and installation is currently underway with full deployment of the systems by fall 2018.

**Statewide Ridematching Application:** This project is a partnership between DRPT and the Roanoke Valley-Alleghany Regional Commission to implement a ridematching application for areas of the Commonwealth outside of Northern Virginia. The new application will replace the existing and separate ridematching applications operated by the GRTC RideFinders, HRT-TRAFFIX, RIDE Solutions, RideShare and Middle Peninsula Rideshare commuter assistance programs. The public will be better served by having these commuter assistance programs use the same ridematching application rather than separate applications that do not connect with each other. The new ridematching application will have the latest technology and functions that include planned and real-time carpool matching, multimodal trip options and routing, vanpool tracking and rider matching, and guaranteed/emergency ride home program functions. The application will have website and mobile application self-service access for the public and administrative access for the commuter assistance programs and DRPT.

A review and selection committee, consisting of representatives from commuter assistance programs and future users of the application, developed a scope and system needs document. A Request-For-Proposal was issued in July 2018 with anticipated work to begin in Fall 2018.

**Statewide Integrated Mobility Plan:** DRPT is updating its Statewide ITS Strategic Plan, which identifies transit ITS needs throughout Virginia, with a new focus on transit technology and shared mobility and how it will change the statewide transportation system in the future. The Integrated Mobility Plan will identify short-term investment needs and opportunities, which will inform the selections of demonstration projects, and explore future technologies that will impact mobility options. Surveys, stakeholder meetings, and research on best practices and case studies will assist in creating strategies and approaches for transit agencies and DRPT.

Shared mobility, by definition, is about the coordination of different transportation modes (vehicle, bicycle, or other modes) between various users of the transportation system. Concepts include potential partnerships with Transportation Network Companies (TNCs), such as Uber and Lyft, autonomous and connected vehicles, driver assistance systems, ridesharing (carpooling, vanpooling), and microtransit. Work on the Integrated Mobility Plan started in June 2018 and will coordinate with transit agencies, TDM agencies, and the Transit Technology Roundtable, a consortium of transit technology professionals, consultants, and academics.



## 6 Major Transportation Demand Management Initiatives

### 6.1 Vanpool!VA



In 2016, DRPT created the Vanpool!VA program to increase the number of vanpools and vanpool riders throughout the Commonwealth. The program was developed with input from TDM agencies, transit agencies, and vanpool companies.

As part of Vanpool!VA, DRPT created a competitive grant program where eligible recipients can apply for funding for programs or projects that increase vanpooling and vanpool ridership. Examples of eligible vanpool projects are:

- Vanpool support to increase federal transit funding. DRPT provides start-up funding to provide a monthly stipend to vanpool operators in exchange for reporting of operating data. The operating data is then reported to FTA through the National Transit Database, resulting in an increase in federal 5307 funding to sustain the vanpool financial support;
- VanStart assistance that provides funding for new vanpools to help them in the operation startup phase;
- VanSave assistance that will keep a vanpool in operation when more than one rider drops out of the vanpool;
- Incentives to encourage commuters to try vanpooling; and
- Statewide marketing and ride matching tools.

DRPT will soon launch a Vanpool!VA website that will serve as a one-stop information portal. The new website will serve the public, vanpool operators, TDM agencies, and transit agencies. DRPT will also develop and implement a promotional campaign to educate the public on the benefits of vanpooling and how vanpooling works.

### 6.2 Telework!VA and Telework Week

Created by DRPT in 2001, the Telework!VA program promotes telework and helps businesses set up telework programs. The Telework!VA program consists of:



- The [www.teleworkva.org](http://www.teleworkva.org) website, a one-stop resource for businesses, individuals, and government agencies looking to learn more about telework. Included within this website are step-by-step instructions and e-learning tools on how to implement a successful telework program, sample telework policies and agreements, success stories from companies with proven programs, strategies for managing teleworkers, and how to be a productive teleworker.
- Technical assistance to businesses: In Northern Virginia, DRPT provides free technical assistance from telework experts to businesses to help them set up a telework program. The

Northern Virginia technical assistance is a partnership with VDOT which provides funding for the technical assistance.

- Technical assistance on tax credits to businesses: DRPT also helps businesses with understanding and meeting the requirements of Virginia’s business tax credit for telework. Under the tax credit legislation, businesses may qualify for a tax credit up to \$50,000 for expenses incurred with implementing a telework program for their employees.

In March 2018, DRPT conducted its eighth annual Virginia Telework Week campaign. During Telework Week, DRPT encourages businesses across Virginia to establish a formal or pilot telework program and allow qualifying employees to work from home at least one day during Telework Week. DRPT coordinates with the local TDM/Commuter Assistance program to spread the word about telework and Telework Week.

### 6.3 TryTransit!VA and Try Transit Week

For the past nine years, DRPT has led Virginia’s Try Transit Week campaign. Held during the third week of September, Try Transit Week promotes all forms of transit—bus, rail, ferry, and vanpool. To raise awareness and to encourage public participation, DRPT holds a contest where the Grand Prize winner receives a one-year transit pass and two round-trip tickets on Amtrak. The public can enter the contest by going to [www.trytransitweek.org](http://www.trytransitweek.org) and completing a form pledging to try transit.

## Try Transit Week



vanpool. To raise awareness and to encourage public participation, DRPT holds a contest where the Grand Prize winner receives a one-year transit pass and two round-trip tickets on Amtrak. The public can enter the contest by going to [www.trytransitweek.org](http://www.trytransitweek.org) and completing a form pledging to try transit.

### 6.4 BiketoWork!VA and Bike to Work Week

In what has now become an annual event, DRPT promoted the second annual Bike to Work Week during the week of May 15th. Bike to Work Week provides a boost to local initiatives and increases awareness of biking as a commute mode. This year, a bike to work website, [biketoworkva.org](http://biketoworkva.org), was created and included a calendar of events for the month of May, which is national Bike Month, news about biking, information about bike share services in the Commonwealth, the benefits of biking, and information for employers on how they can make biking to work easier for employees.



## 7 The Future of State Transit Oversight and Funding

In recent years, DRPT has taken steps to assist transit agencies to perform more efficiently and effectively. As described in Sections 7.1 and 7.2, DRPT has implemented the use of the transit asset management and transit development plans to accomplish these goals.

Chapters 854 and 856 of the 2018 Acts of Assembly make significant changes to the oversight and allocation of funding in DRPT's SYIP beginning in Fiscal Year 2019. These initiatives will be challenging in implementing for not only transit agencies, but also for DRPT; however, they will create better transit agencies for the Commonwealth's citizens and its visitors. Without question, better transit agencies will increase ridership across Virginia. Many of these reforms are being implemented in conjunction with the Transit Service Delivery Advisory Committee (TSDAC).

### 7.1 Transit Asset Management

TransAM is the system that DRPT uses to track the asset inventories of the transit providers across the Commonwealth as required by federal transit asset management regulations. The asset data is currently used to determine when replacement assets should be funded as well as to forecast state of good repair needs of the transit providers. DRPT's recipients are responsible for updating the inventories when vehicles are received or sold or when facilities are built or rehabilitated.

In 2015, U.S. Department of Transportation found that an estimated 40 percent of buses and 23 percent of rail transit assets were listed in marginal or poor condition with a backlog of \$90 billion in deferred maintenance and replacement. The transit backlog continues to grow, which impacts safety and affects the ability of transit systems to serve their customers.

Beginning in 2018, the FTA required all public transit agency recipients to report on the performance and condition of their capital assets through Transit Asset Management Plans (TAM). DRPT has been at the forefront of applying transit asset management principles to its own statewide transit capital program, joining with the Pennsylvania Department of Transportation several years ago to develop the *TransAM* software, now recognized nationally as a model for all states to achieve new federal TAM guidelines.

*In 2016, the Central Shenandoah Planning District Commission worked with the numerous transit systems in the area and VRT to simplify the transit system in Augusta County, Staunton, and Waynesboro. The consolidated system was christened **BRITE** in July 2017. In order to implement the consolidated service, a new bus stop installation program was completed and all of the buses in the service area were rebranded with the new **BRITE** name and logo over the last two years.*

*In Fiscal Year 2017, the transfer of the administrative and maintenance facility in Fishersville from VRT to Central Shenandoah Planning District Commission was finalized. DRPT provided funding and technical assistance to support the transition and launch of the new consolidated service. As a result, the system is easier to use, more predictable for riders, including new riders.*



Below are specifics about assets that are reflected in TransAM:

- All assets must be updated bi-annually on January 15 and July 15. This process includes removing old assets and adding newly received assets to the inventory as well as updating condition codes and mileage.
- Rolling Stock:
  - Inventory should include all revenue vehicles that are purchased with state-controlled funding sources or state-controlled federal funding.
  - Vehicles that are being used to fulfill programmatic goals and that the transit agencies intend to seek state funding to replace at the end of its useful life.
  - Mid-life overhauls
- Equipment:
  - Service Vehicles
  - Large pieces of equipment such as lifts or bus washes.
- Facilities:
  - Administration and maintenance
  - Passenger and parking.
    - FTA defines “passenger stations” as significant structures with a separate right of way. A bus stop on a street or in a median is not a station if the bus stop does not have a separate enclosed building. Open shelters, canopies, lighting, signage, or ramps for accessibility alone are not enough to establish a “passenger station.”
    - All transportation, transit or transfer centers, park-and-ride facilities, and transit malls if they have an enclosed structure (building) for passengers for items such as ticketing, information, restrooms, concessions, and telephones
    - All facilities for which a transit agency has direct or shared capital responsibility must be entered into TransAM.

These requirements have been created in order to support both transit development plans and the legislatively-required prioritization of state transit capital funding. If data is missing or entered incorrectly, it may impact the funding that the agency receives.

## 7.2 Transit Development Plans

DRPT requires that any public transit (bus, rail, ferry) operator receiving state funding prepare, adopt, and submit a Transit Development Plan (TDP). These plans also provide a solid foundation for funding requests and feed directly into the programming process.

Beyond these administrative motivations, TDPs help transit operators in the Commonwealth of Virginia improve their efficiency and effectiveness by identifying needs and required resources for modifying and enhancing services provided to the general public.

The purposes of a transit development plan are:

- To serve as a planning, management, and policy document for the transit operators;
- To inform DRPT of transit operators’ capital, operating and maintenance needs;
- To provide the basis for inclusion of an operator’s capital and operating programs in planning and programming documents such as: the SYIP, Statewide Transportation Improvement Program, and Constrained Long Range Plan;
- To provide a clear understanding of unmet or unfunded needs;
- To develop and track the progress of mid- and long-term visions for transit in the region;
- To plan to continually improve efficiency and effectiveness of public transportation services; and
- To be better prepared to respond to internal and external factors.

*Amtrak service returned to Roanoke for the first time in 40 years on October 31, 2017. This state-supported service provides one-seat service to Washington, DC and cities in the Northeast Corridor.*

*Valley Metro contracted with Virginia and uses its Smart Way Buses to provide round trip bus service between the Virginia Tech campus in Blacksburg and the downtown Roanoke Train station. Smart Way Buses link the Roanoke Valley and the New River Valley at a cost of \$4.00 each way.*

Transit development plans will continue to be updated and used by transit agencies that fall outside the parameters set by the 2018 General Assembly for the creation of urban strategic plans.

### 7.3 Urban Transit Agencies’ Strategic Plans

The General Assembly directed all transit agencies with a bus fleet greater than 20 buses serving an urbanized area population greater than 50,000 to submit a strategic plan every five years. A transit strategic plan is meant to serve as a planning document that provides overall strategic guidance for improving the provision of transit services within each agency’s serving area. These plans provide an in-depth study of a transit system designed to identify strengths, areas for improvements, and provide suggestions to improvement efficiency and increase ridership. In addition, these plans give a foundation for future funding requests, directly advising each agency’s programming process. The planning horizon is ten years. This includes the fiscal year for which funds are being sought and the subsequent nine year. The minimum ten-year horizon will provide a clearer understanding of unmet or unfunded needs. The following agencies are required to complete a strategic plan:

Alexandria (DASH)	Arlington Transit
Blacksburg Transit	Charlottesville Area Transit
Fairfax Connector	Fredericksburg Transit
GLTC-Lynchburg	GRTC-Richmond
GRTC-Roanoke	Hampton Roads Transit
Harrisonburg Transit	Loudoun Transit

Petersburg Area Transit	Potomac Rappahannock Transportation Commission
Radford Transit	Williamsburg Area Transit

These strategic plans build upon DRPT’s efforts in implementing transit development plans, transit asset management as well as the implementation of the Richmond Transit Network Plan. Currently, Hampton Roads Transit and the Greater Lynchburg Transit Company are serving as pilots and are beginning work on their strategic plans.

The purpose of the strategic plans is:

- To serve as a strategic planning, management, and policy document for transit operators in larger urban areas;
- To identify areas for improved operational efficiency;
- To assess the type of operating services for different service areas and needs;
- To review and assess the performance of routes, route design standards, and schedule standards;
- To examine transit needs in order to identify ways to improve access for underserved areas;
- To inform DRPT of transit operators’ capital, operating and maintenance needs;
- To provide the basis for inclusion of an operator’s capital and operating programs in planning and programming documents such as: SYIP, Statewide Transportation Improvement Program (STIP), Transportation Improvement Program (TIP) and Constrained Long Range Plan (CLRP);
- To provide a clear understanding of unmet or unfunded needs;
- To develop and track the progress of short-, mid- and long-term goals for transit in the region; and
- To continually aim to improve efficiency and effectiveness of public transportation services.

The General Assembly requires that CTB adopt an implementation plan that phases in these new plans over five years.

Additionally, for all transit agencies that serve areas with populations between 1.5 and 2 million, there are additional regional planning requirements that must be coordinated by the local MPOs as part of the strategic planning process. This includes:

- The identification and prioritization of projects
- The establishment of performance benchmarks incorporating state and federal requirements
- The development and implementation of a regional subsidy allocation model
- The distribution of funds solely designated for transit and rail and that are administered by a regional body to enter into agreements for the operation and maintenance of transit and rail facilities.

These strategic plans must be submitted to DRPT to qualify for allocated funding in accordance with the implementation plan and no later than Fiscal Year 2024.

## 7.4 Mass Transit Trust Fund Restructuring

The new legislation consolidates the revenues that are deposited into the MTTF so that individual sources are no longer earmarked for a specific program. Instead, all revenues deposited in the MTTF are now allocated using the newly calculated percentages. The revenues deposited into the MTTF with prior year deductions, including Fiscal Year 2018, are as follows:

- \$0.02 of the state recordation tax to the MTTF (*Code of Virginia* §58.1-815.4.) to state operating assistance grants;
- \$0.01 of the state recordation tax to transit capital;
- 0.35 percent of motor vehicle fuel tax to transit operations per *Code of Virginia* §58.1-2289;
- 0.24 percent of motor vehicle fuel tax to special programs per *Code of Virginia* §58.1-2289;
- 3.11 percent of motor vehicle fuel tax to transit capital per *Code of Virginia* §58.1-2289;
- 14.7 percent of the 1986 Special Session Revenues (formula allocation);
- 60 percent of the 0.125 percent addition to the general sales and use tax passed by the 2013 General Assembly (formula allocation)

*DRPT provides training funds through the Rural Transit Assistance (RTAP) to assist rural and specialized transit operations to further the development of management skills and professional networks by attending transit training, seminars, workshops, and conferences. Approximately twenty transit agencies from Southwest Virginia to the Eastern Shore receive this assistance.*

As is evident, the funding sources are derived from various economic sectors which serve to mitigate large swings in annual revenues. By protecting transit funding from these potentially large swings, transit agencies can depend upon a more reliable source of funding as they make long term plans, which will allow agencies to focus on increasing ridership.

Beginning in Fiscal Year 2019, these funds are distributed in accordance with the Code of Virginia and specific Appropriations Act language as follows:

- Up to 3.5 percent of the MTTF to support costs of project development, project administration, and project compliance per *Code of Virginia* §33.2-1604;
- \$1.2 million (current Appropriation Act language) of the MTTF for state safety oversight
- \$1.5 million (current Appropriations Act language) of the MTTF for paratransit capital projects and enhanced transportation services for the elderly and disabled

The remaining funds are allocated with a minimum of 31 percent for state operating assistance grants, 12.5 percent awarded as capital assistance grants, 53.5 percent for distribution to WMATA for capital purposes and operating assistance, and the balance of up to three percent awarded as special projects grants subject to CTB approval.

## 7.5 Statewide Transit Operating Assistance

In addition to changes in the distribution of dollars to the MTTF, Chapters 854 and 856 of the 2018 Acts of Assembly also made changes to the allocation of state transit operating assistance. For Fiscal Year 2019, the first \$54.0 million of state grants for public transportation operating expenses from the MTTF revenues are rewarded on the basis of the annual operating cost of a given transit provider expressed as a percentage of the total amount of operating expenses for all providers. State law also requires performance-based allocations of state transit operating assistance above the \$54.0 million threshold. The factors for the performance-based operating assistance allocation model and their associated weightings for Fiscal Year 2018 and Fiscal Year 2019 are as follows:

- Net cost per passenger (50 percent): total operating costs less depreciation and any operating income derives from a source other than taxpayers divided by ridership;
- Customer per revenue hour (25 percent): ridership divided by revenue hours;
- Customers per revenue mile (25 percent): ridership divided by revenue miles.

Starting in Fiscal Year 2020, all transit operating funding will be distributed based on performance factors. At the time of this report's completion, the TSDAC is continuing its work on the transit operating formula. It is anticipated that the CTB will approve guidelines for the future allocation of these dollars in early 2019.

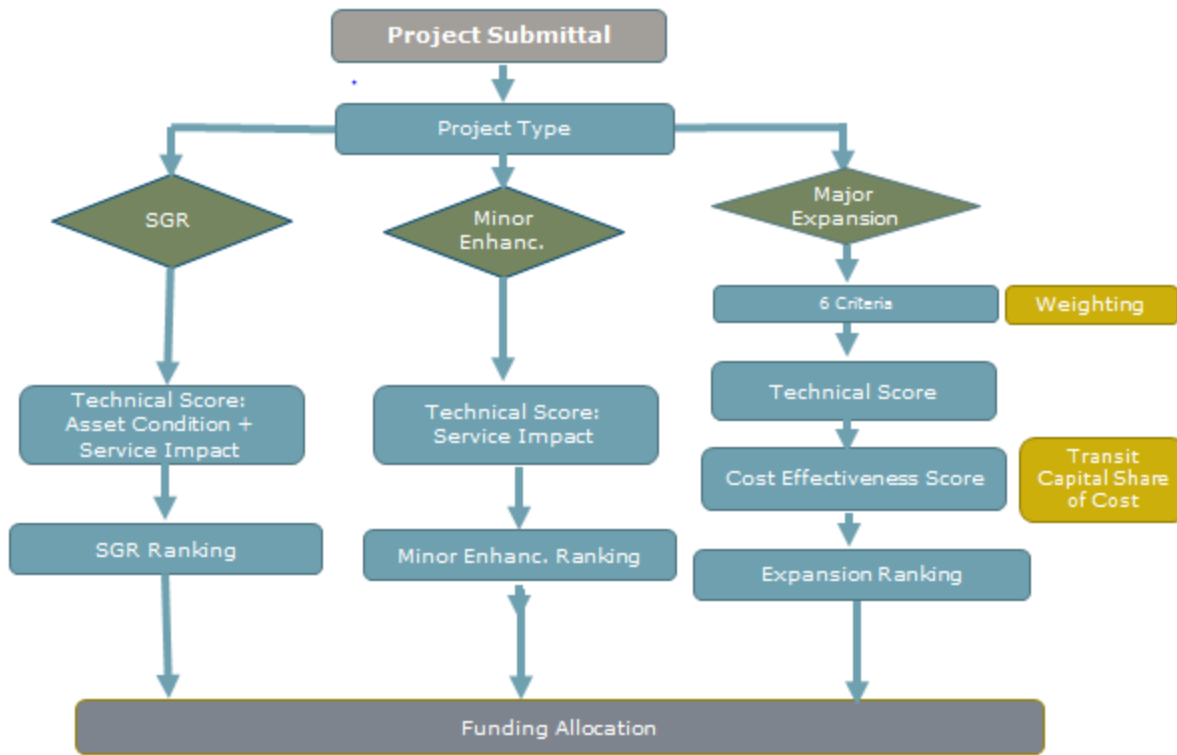
## 7.6 Statewide Transit Capital Prioritization

The General Assembly also directed the CTB to develop a separate prioritization process for state of good repair projects and major expansion projects. The process for state of good repair projects shall be based upon transit asset management principles, including federal requirements for Transit Asset management pursuant to 49 U.S.C. § 5326 while the process for major expansion projects shall be based on SMART SCALE factors (congestion mitigation, economic development, accessibility, safety, environmental quality, and land use).

DRPT developed the transit capital prioritization process in coordination with TSDAC and with extensive outreach to MPOs, transit agencies, and local governments. To implement this process, DRPT used a framework developed by the RAB:

- State of good repair and minor enhancement comprises 80 percent of program funding,
- CTB can use discretion to shift funds from major expansion to state of good repair,
- The establishment of a single matching rate across all asset types with state of good repair and minor enhancement matched at a higher rate than major expansion,
- The local match rate will remain at four percent.

There will be three tracks for scoring within the prioritization process as demonstrated in the chart below:



State of good repair refers to capital projects or programs to replace or rehabilitate an existing asset. Minor enhancement projects or programs refer to capital projects or programs that add capacity, new technology, or customer enhancement that meet the following criteria: total cost of less than \$2 million or, for expansion vehicles, an increase of less than five vehicles or less than five percent of the fleet size, whichever is greater. Increases in paratransit fleets to meet increasing service demands will be evaluated in the same manner and minor enhancement projects. Major expansion projects or programs refer to capital projects or programs to add, expand, or improve service with a cost of exceeding \$2 million or for expansion vehicles, an increase of greater than five vehicles or five percent of fleet size, whichever is greater.

The transit capital program will be structured to provide a minimum of 80 percent of the annual allocation to state of good repair and minor enhancement projects with a maximum of 20 percent available for major expansion projects. This structure reflects program trends and the availability of other funding sources to support major expansion projects. The CTB retains the discretion to shift funding from major expansion to state of good repair based on program needs. The CTB also retains the discretion to direct any carryover balances appropriated prior to Fiscal Year 2020 based on program needs.

In order to provide predictability and to ensure projects are funded at a level sufficient to move forward, state of good repair and minor enhancement projects will be matched at maximum state match rate of 68 percent of total project cost. Major expansion projects will be funded at a maximum state rate of 50 percent of total project cost providing applicants with funding that can

be leveraged against other state and federal funding programs. Local matching funds, at a minimum of four percent of total project cost, are required for all transit capital projects.

State of Good Repair projects will be evaluated considering asset condition (up to 60 points) and service impact (up to 40 points). The asset condition score depends upon the asset’s age at the time of application. For vehicles, the asset condition score is the average of the age and mileage-based scoring tables. For non-vehicle assets, only the age score is used.

Service impact considers the asset impact on service (direct or indirect), and to what extent an asset affects the rider experience and system efficiency. Points for service impact will be awarded in four categories, with up to 10 points awarded per category:

- **Service Frequency, Travel Time, and/or Reliability:** Speeds up transit routes or allows for increased frequency. Significant impact on reliability either through preventing breakdowns or removing vehicles from mixed traffic.
- **Operating Efficiency:** Provides for a significantly more cost-effective service.
- **Service Accessibility and/or Customer Experience:** Implements a significant improvement in a customer’s ability to access the system or a significant improvement in the ease of use of the system.
- **Safety and Security:** Provides a significant improvement in safety or security.

Service impact scoring is primarily qualitative based on project type and takes into consideration specific project features and characteristics. Projects will automatically receive the minimum score for the criteria based on the default values (high, medium, low impact).

Minor Enhancement projects will be evaluated considering the same service impact methodology that is applied to State of Good Repair projects.

Major expansion projects and programs represent a small number of applications annually; however, they are significant in funding requested. The General Assembly established that the prioritization of major expansion projects would be based upon the same six factor areas as SMART SCALE. DRPT, in conjunction with TSDAC, recommended a similar structure with measures focused on a transit-only application pool, scaling of measures, weighting based on the SMART SCALE typologies, and a cost-effectiveness measure based on the transit capital funding requested. Below are the six factors and the objective of each:

Category	Measure	Measure Weight
Congestion Mitigation	Change in peak period transit system ridership attributed to the project	100%
Economic Development	Project consistency with regional and local economic development plans and policies, and support for local development activity	100%



Accessibility	Project improvement in accessibility to jobs and workforce development	50%
Accessibility	Disadvantaged population (low-income, minority, or limited English proficiency) within walking distance of project	50%
Safety	Project contribution to improving safety and security, reducing risk of fatalities or injuries	100%
Environmental Quality	Reduction in daily vehicle miles traveled resulting from project	100%
Land Use	Transit supportive land use served by the project	100%

Candidate major expansion projects will be scored based on the factors, the cost of the project, and based on the information included in the project application. The final score for major expansion projects is determined by calculating the anticipated benefits relative to the amount of transit capital funding requested. The factors will be evaluated according to the following typology categories and weighting frameworks within existing MPO and PDC boundaries. These were selected by the MPOs and PDCs and adopted by the CTB as part of the SMART SCALE process. An MPO or PDC, in consultation with the Transportation District Commissions (where applicable) may request that the CTB approve a different typology for the purpose of transit capital prioritization, by resolutions of their policy board.

The weighting frameworks are:

Factor	Congestion Mitigation	Economic Development	Accessibility	Safety	Environmental Quality	Land Use
<b>Category A</b>	45%	5%	15%	5%	10%	20%
<b>Category B</b>	15%	20%	25%	20%	10%	10%
<b>Category C</b>	15%	25%	25%	25%	10%	0%
<b>Category D</b>	10%	35%	15%	30%	10%	0%

Region in which the Project is Located	Typology
Accomack-Northampton PDC	Category D
Bristol MPO	Category D
Central Shenandoah PDC	Category D
Central Virginia MPO	Category C
Charlottesville-Albemarle MPO	Category B
Commonwealth Regional Council	Category D
Crater PDC	Category D
Cumberland Plateau PDC	Category D
Danville MPO	Category D

Fredericksburg Area MPO (FAMPO)	Category A
George Washington Regional Commission	Category D
Hampton Roads PDC	Category D
Hampton Roads TPO	Category A
Harrisonburg-Rockingham MPO	Category C
Kingsport MPO	Category D
Lenowisco PDC	Category D
Middle Peninsula PDC	Category D
Mount Rogers PDC	Category D
New River Valley MPO	Category C
New River Valley PDC	Category C
Northern Neck PDC	Category D
Northern Shenandoah Valley RC	Category D
Northern Virginia Transportation Authority (NVTa)/Transportation Planning Board (TPB)	Category A
Rappahannock-Rapidan RC	Category D
Region 2000 LGC	Category D
Richmond Regional PDC	Category D
Richmond Regional TPO (RRTPO)	Category B
Roanoke Valley TPO (RVTPO)	Category B
Southside PDC	Category D
Staunton-Augusta-Waynesboro MPO	Category C
Thomas Jefferson MPO	Category C
Tri-Cities MPO	Category C
West Piedmont MPO	Category D
WinFred MPO	Category C

A project that has been selected for transit capital funding (state of good repair, minor enhancement, or major expansion) must be rescored and the funding decision reevaluated if there are significant changes to either the scope or cost of the project.

The CTB approved this approach at its October meeting for implementation in Fiscal Year 2019.

## 7.7 WMATA Funding and Reforms

Chapters 854 and 856 of the 2018 Acts of Assembly also authorized \$154 million in additional annual dedicated capital funding for WMATA, Virginia's proportional regional share of the up to \$500 million in additional capital needs identified by WMATA and validated by the 2017 General Assembly's mandated study led by former U.S. Secretary of Transportation Ray LaHood. Both the Maryland General Assembly and the District of Columbia City Council have passed spending bills that provide dedicated funding towards meeting their respective proportional shares. DC authorized an additional tax on rideshare companies like Uber and Lyft, while Maryland elected to provide its additional share from existing resources in 2019 and new sources beginning in 2020.

As a condition of its receiving the new funding from Virginia, WMATA is required to implement other reforms necessary to ensure the near-term and long-term viability of the system.

Specifically, these reforms require:

- Maryland and the District of Columbia providing their proportional shares of any increases to WMATA’s capital improvement program up to \$500 million;
- NVTC certifying receipt of the WMATA annual budget, independent financial audit, National Transit Data annual profile, and other single-audit reports;
- NVTC reporting annually by November 1<sup>st</sup> to the General Assembly and the Governor on WMATA’s performance and system condition.

*WMATA is the largest transit provider in Virginia. In addition to removing thousands of vehicles daily from the crowded Northern Virginia highways, it is estimated that WMATA provides the following benefits:*

- *\$34 million: increase in property tax revenues from high demand for properties within ½ mile of a Metro station.*
- *\$342 million: savings in car operating expenses for households in WMATA service region.*
- *\$600 million: income and sales taxes to Virginia from economic activity generated by Metro.*

The CTB is also empowered with enforcing specific WMATA accountability measures. There are four areas where the General Assembly has directed the CTB to withhold funding for WMATA for non-compliance.

**WMATA Board Governance:** the CTB shall withhold 20 percent of dedicated state funds if WMATA does not limit the role of its alternate directors in official meetings to participation in the absence of a principal director only. The legislation directed WMATA to adopt revisions to its bylaws by July 1, 2018 that aligns the role of alternate directors with the legislative requirements. The WMATA Board approved the required changes to its bylaws on June 28, 2018.

The CTB recognizes the significant contributions and subject-matter expertise that current alternate directors provide to the work of the WMATA Board and will consider policies that will allow alternate directors to continue to provide those contributions while also honoring the intent of the General Assembly to reform the Board.

The CTB approved the following guidelines related to WMATA Board Governance:

- By July 1, 2018, the WMATA Board must adopt revised bylaws that clarify the role of alternate directors. (This requirement has been fulfilled.)
- The CTB shall consider the following as prohibited activities by alternate directors at an official WMATA Board or committee meeting (unless the alternate director is acting in the absence of a Board director): (i) participating in the discussion among Board directors; (ii) making or seconding a motion; (iii) voting on motions, resolutions or other Board actions; (iv) being counted toward the required quorum; (v) attendance or participation in any

Executive Session of the WMATA Board or its committees; (vi) any action in violation of WMATA Bylaws. Attendance by alternate directors at official WMATA Board or committee meetings, excluding Executive Sessions, shall not be a basis for withholding funding, nor shall the provision of information or reports to directors at a WMATA committee meeting in response to a request to do so by the director chairing the committee meeting.

- WMATA shall provide a written notification to the CTB by July 1 of each year that it has adopted bylaws that prohibit the participation of alternate directors as required by statute and that no violations of the bylaws by alternate directors have occurred during the previous year.
- WMATA shall immediately notify the CTB in writing if a violation of its bylaws by an alternate director or some other action prohibited by the CTB policy occurs.

**Three Percent Cap on Growth in Operating Assistance:** the CTB shall withhold 35 percent of dedicated state funds if WMATA's operating subsidies for Virginia increase more than three percent from the prior year.

The following operating costs are legislatively excluded from this calculation:

- Any service, equipment, or facility that is required by any applicable law, rule, or regulation;
- Any major capital project approved by the WMATA Board before or after the effective date of the legislation; and
- Any payment/obligation resulting from a legal dispute or proceeding.

The CTB approved the following guidelines related to the three percent cap on annual growth in total Virginia operating assistance to WMATA:

- Evaluation will occur yearly starting with Fiscal Year 2020 budget compared to Fiscal Year 2019 actuals;
- Increase in DC or MD subsidies will not trigger CTB withholding; and
- Allowance for a release of withheld funds if the WMATA Board adopts an amended budget to reduce year-over-year subsidy increase below three percent.

With regard to the legislative exemptions from the three percent cap noted above, the CTB is adopted the following interpretive guidelines:

- Any service, equipment, or facility that is required by any applicable law, rule, or regulation:
  - Includes, but is not to, compliance with any safety directives to WMATA issued by the MSC, FTA, the National Transportation Safety Board (NTSB), or any other relevant safety oversight agency; actions taken to comply with the Americans with Disabilities Act (ADA); and actions taken to comply with Title VI requirements.
- Any major capital project approved by the WMATA Board before or after the effective date of the legislation:
  - The planned Potomac Yard Metrorail Station in Alexandria and the completion of Phase 2 of the Silver Line Metrorail project in Fairfax and Loudoun Counties are specific

approved major capital projects that shall not be included in the calculation of any WMATA budget increase. The operating assistance impacts of other capital projects that expand service frequency, duration or scope, shall be included in the calculation.

- The operating assistance impacts of capital projects that address a State of Good Repair need may be excluded from the calculation of any WMATA operating assistance increase.
- Operating subsidy increases resulting from service disruptions caused by implementation of approved capital projects to address State of Good Repair needs or from emergency system shutdowns shall not be included in the calculation of any WMATA budget increase.
- Any payment/obligation resulting from a legal dispute or proceeding.

In addition to the legislative exemptions from the three percent cap, the CTB approved the following additional exemptions:

- Operating subsidies for specific WMATA transit services that are 100 percent funded by a single WMATA member jurisdiction or from other non-WMATA funding sources;
- Regularly scheduled adjustments to the regional subsidy allocation formulas by WMATA.

**WMATA Strategic Plan:** the CTB shall withhold 20 percent of dedicated state funds if WMATA does not adopt or update a strategic plan within 36 months and hold a public hearing on the strategic plan in Northern Virginia. Additionally, the strategic plan must include a plan to align services with demand and to satisfy the other recommendations included in the report prepared by former U.S. Secretary of Transportation Ray LaHood.

The CTB approved the following guidelines related to the requirements for a strategic plan.

- The WMATA Board must have adopted or updated a strategic plan within the preceding 36 months and have held at least one public hearing in an NVTC jurisdiction beginning July 1, 2019;
- The first strategic plan shall include a plan to align services with demand and to satisfy the other recommendations included in the LaHood Report;
- WMATA must adopt or update a strategic plan every three years; and
- WMATA shall provide a written notification to the CTB by July 1 of the year of any strategic plan update that it has: (i) adopted or updated a strategic plan that complies with the legislative requirements; and (ii) held a public hearing on the strategic plan update in a locality embraced by the NVTC.

**WMATA Capital Improvement Program:** the CTB shall withhold 20 percent of dedicated state funding if WMATA fails to annually adopt a capital improvement program (CIP) that covers a six-year period and hosts a public hearing on the CIP by July 1 of each year in an NVTC jurisdiction. The CTB approved the following guidelines related to the requirements for an annual CIP:

- WMATA must annually adopt or update a detailed CIP covering the current fiscal year and the next five fiscal years and have held at least one public hearing on such capital improvement program in an NVTC jurisdiction by July 1 of each year;

- The CIP must show detailed projects and projected revenue sources for the six-year period; and
- WMATA shall provide a written notification to the CTB by July 1 of each year that it has: (i) adopted a CIP that complies with the legislative requirements; and (ii) held a public hearing on the CIP in an NVTC jurisdiction.

## 7.8 Additional Funding for Transit In Northern Virginia

The 2018 General Assembly also allocated additional funding to VRE and PRTC to meet their growing demand.

Chapters 854 and 856 of the 2018 Acts of Assembly created the Commuter Rail Operating and Capital Fund, which will allocate \$15 million annually to be used to support commuter rail. This funding will come from the establishment of a regional gasoline tax floor revenues collected in PRTC jurisdictions that are members of the Northern Virginia Transportation Authority (Prince William County, City of Manassas Park, and the City of Manassas) as well as NVTC jurisdictions (City of Alexandria, City of Arlington, City of Falls Church, City of Fairfax, Fairfax County, and Loudoun County). Additionally, \$7.85 million in new regional gas tax floor revenues collected in PRTC jurisdictions will be dedicated to the localities for use by PRTC; and the transient occupancy tax collected in Prince William County, the City of Manassas Park, and the City of Manassas must also be used for public transportation. PRTC members that are not a part of NVTA (City of Fredericksburg, Spotsylvania County, and Stafford County) must maintain public transit spending levels at an average no less than 2015-2018 rates.

*Virginia Railway Express provides access to high-paying jobs in Northern Virginia and Washington, DC and an alternative to SOV travel along the I-95, I-66, and Route 29 corridors. Its existing services provide the equivalent to 36 lane miles of interstate capacity worth up to \$5.4 billion.*

*It is anticipated that future service projections will provide the equivalent to 96 lane miles of interstate capacity worth \$9 to \$14 billion at a cost of \$4.1 billion. These increase investments also decrease highway construction and maintenance costs as well as \$2.5 billion in emissions, accidents, and vehicle operations costs.*



## 8 The Future of Transportation Demand Management

DRPT continues to work with its TDM grant recipients to help them develop their TDM programs, improve efficiency, and achieve better results. Recently, DRPT completed a study of performance measures for TDM. From this study and DRPT's research on new TDM modeling and measurement tools, DRPT is developing comprehensive TDM prioritization and performance measures that prioritize TDM needs and improve the efficiency and results of these programs and projects. The process to define prioritization and performance measures is guided by the principles that the TDM program must be accountable, efficient, transparent, and measurable.

### 8.1 TDM Prioritization

Part of DRPT's effort to improve the TDM program includes the setting of clear goals and priorities for funding. Goals will be specific, measurable, achievable, realistic, and time-framed. Looking at what should be priorities of DRPT's TDM funding program, DRPT is looking at programs and projects that:

- Increase the number of and riders in carpools;
- Increase the number of and riders in vanpools;
- Increase the number of businesses with telework programs and increase the number of teleworkers;
- Increase the number of employers with transit and vanpool commuter benefits;
- Increase transit ridership;
- Increase mobility options; and
- Guaranteed/Emergency Ride Home programs that support users of transit, vanpool and carpool.

DRPT will be implementing these program modifications for the Fiscal Year 2020 TDM application cycle.

### 8.2 TDM Strategic Plans

Currently, DRPT requires that any TDM program operator receiving state funding prepare, adopt, and submit a TDM Plan. These plans show the need for TDM, how TDM will address the need, the TDM elements that will be implemented, and the resources needed to implement the plan. The plans provide the basis for funding requests and provide DRPT with information during the application process. TDM plans serve a similar purpose as Transit Development Plans. TDM plans:

- Serve as a planning, management, and policy document for the TDM program operators;
- Inform DRPT and the TDM operators' governing boards of the TDM program operating needs;
- Develop short, mid, and long-term goals and objectives and measurement process;
- Track the progress of the TDM program;
- Plan to continually improve efficiency and effectiveness of TDM services; and



- Better prepare the TDM operators to respond to internal and external factors.

### 8.3 Emergence of Bike Share Programs

Over the past few years, bikeshare has emerged as a viable first/last mile connection to public transportation. With the launch of five new local government sponsored bike share programs in just the past two years, Virginia has experienced a rapid growth of bike sharing. In the last two years, the following bikeshares have started service:



- RVA Bike Share: Richmond (2017)
- BIKEShare by RIDESolutions: Roanoke (2017)
- Danville Rides: Danville (2017)
- Pace Bike Share: Norfolk (2018)
- ROAM New River Valley: Towns of Christiansburg and Blacksburg as well as Montgomery County and Virginia Tech (2018)
- Capital Bikeshare: Expanded service into Northern Virginia (2018)

DRPT funded the start of ROAM New River Valley with a grant while RIDESolutions used part of its TDM operating grant to sponsor bike stations.

Bike share services are seen as an economical way to provide connections to transit, particularly first and last mile connections, expand non-auto travel options for residents, workers and tourists, and help increase the health and quality of life in all types of communities. With the emergence of dockless bike share systems, electric bikes, and scooters, local governments, colleges, and universities will need to establish policies that keep bike sharing affordable and accessible while keeping the public safe. Bike sharing is still growing in Virginia and will continue to grow for the foreseeable future.

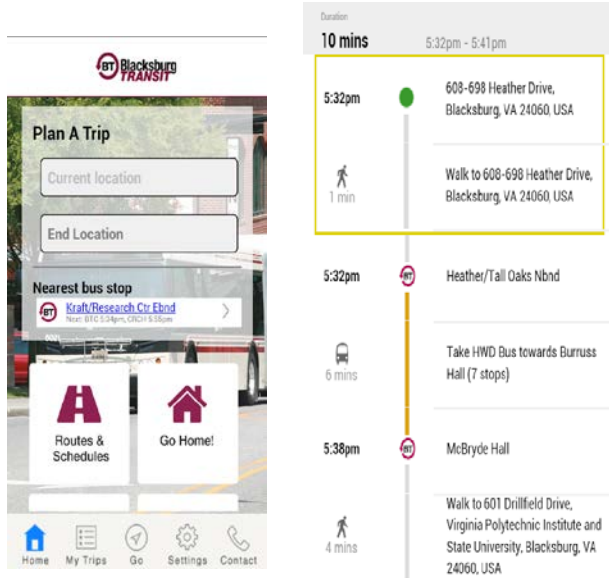
### 8.4 Express Lanes and Park-and-Ride Lots

The expansion of Express Lanes in the Commonwealth is an opportunity to encourage ridesharing. Express Lanes provide a reliable trip which enhances the appeal of bus service. With vehicles with HOV2+ or HOV3+ traveling the Express Lanes not paying a toll, there is an opportunity to create more carpools and vanpools. DRPT is encouraging TDM programs in Express Lane corridors to do more promotion and ridematching for carpools and vanpools.

Transit, vanpools, carpools, and slugging work best when there is a good network of park-and-ride lots along the corridor. Park-and-ride lots with easy access to Express Lanes and highways offer a convenient meeting place for carpools, slugging, vanpools, and bus service. Park-and-ride lots increase the use of carpools, slugging, vanpools, and transit, and the Commonwealth must continue investing in park-and-ride spaces.

## 8.5 Technology and Innovation

Over the past several years, there have been rapid advances in technology and innovative services. The outlook for the next several years indicates that even more technology changes and innovation are coming. Many of these technologies have been implemented by transit and TDM operators. For example, mobile applications have made it easier for the public to access transit and TDM information, see when the next bus or train is arriving, pay their fare or purchase tickets, unlock a bicycle from a bike share service, and get matched with a carpool or vanpool.



As noted in Section 5.3 of this report, DRPT has been leading the way in assisting transit and TDM operating agencies in finding the right technological solutions and funding. As we have seen with ridematching companies, these startups can come and go quickly, and it is important to invest state funding wisely and have clear goals for implementing new technology or partnering with a technology based company.

As helpful as these new technologies are, it is important to note that they are tools to enhance the transit and TDM service experience but do not replace transit and TDM services.

## 9 Conclusion

Fiscal Year 2018 was an exciting and productive year for transit and TDM in the Commonwealth. The partnership between DRPT and VDOT has led to SMART SCALE and toll revenues continuing to provide new streams of revenues for the expansion of transit services throughout the Commonwealth, especially in Northern Virginia. Additionally, the Six Year Improvement Program and federal funds continue to provide much-needed support to transit agencies, from major urban centers in Northern Virginia and Hampton Roads to small rural communities in Southwest Virginia. Technology and innovation are playing a more prominent role in the transit industry with the introduction of driver assistance systems in nine agencies as well as traffic signal priority used by the Pulse Bus Rapid Transit System in Richmond. Two of the biggest success stories of the year were the completion and start of service for the Pulse as well as the overwhelming ridership on the Virginia Breeze between Blacksburg and Washington, D.C. Lastly, TDM continues to play a key role in removing single-occupant vehicles from Virginia's highway through its VanPool!VA, Telework!VA, TryTransit!VA, and BiketoWork!VA initiatives.

The success of these endeavors would not have been possible without the General Assembly's leadership. The General Assembly's role in increasing transit use and decreasing the number of single-occupant vehicles continues with the passage of Senate Bill 856 and House Bill 1539 during the 2018 legislative session. The introduction of urban transit strategic plans, the restructuring of the mass transit trust fund, and changes to the allocation of transit capital and operating dollars will lead to more effective and efficient transit systems. This is in addition to the much-needed additional funding for the Washington Area Metropolitan Transit Authority and the Virginia Railway Express. Consequently, the Commonwealth should see an increase in transit ridership. Additionally, DRPT is replicating similar reforms to its distribution of dollars to TDM programs throughout the Commonwealth. Virginia's role in decreasing single occupant vehicle travel cannot be successful without a strong TDM program.

Without question, as the Commonwealth's population continues to grow with more individuals needing transportation options, transit, vanpooling, carpooling, telework, and other TDM services. These services will play a significant role in helping meet the demands and needs of Virginians while reducing congestion and the number of single-occupant vehicle trips as well as increasing the use of transit.

## 10 Appendix

### 10.1 Fiscal Year 2018 State Capital Assistance to Transit Agencies

Agency	Service Areas	Capital Assistance
Alexandria Transit Company	Alexandria	
Altavista Community Transit System (ACTS)	Altavista	Replacement paratransit van
Arlington County Transit (ART)	Arlington	
Bay Transit	Charles City, Essex, Gloucester, King and Queen, King William, Lancaster, Mathews, Middlesex, New Kent, Northumberland, Richmond County, and Westmoreland	Eight replacement paratransit vans Three bus shelters
Blacksburg Transit	Blacksburg	Four bus shelters Facility upgrades and equipment Two replacement paratransit vans 14 revenue fleet rebranding Bus construction administration building
Blackstone Area Bus System (BABS)	Amelia, Blackstone, Brunswick, Buckingham, Cumberland, Lunenburg, Nottoway, and Prince Edward	Two replacement paratransit vans Surveillance/security equipment
Bristol Virginia Transit	Bristol	Replacement Van
Central Shenandoah Planning District Commission (BRITE)	Augusta, Staunton, and Waynesboro	Bus force account capital cost of contracting (rural & urban)
Charlottesville Area Transit (CAT)	Albemarle, Charlottesville	Replacement 35-foot trolley Support vehicle Replacement paratransit van
Chincoteague Pony Express	Chincoteague	
City of Fairfax (CUE)	Fairfax City	

Danville Transit	Danville	Rehabilitate transit facility parking Passenger shelter project Bus construction/fuel station Five surveillance/security equipment Seven paratransit vans
District Three Public Transit (Mountain Lynx)	Abingdon, Bland, Carroll, Galax, Grayson, Marion, Smyth, Wythe, Wytheville, and Washington	Three replacement paratransit vehicles Replacement paratransit vehicle
Fairfax County (Fairfax Connector)	Fairfax County	
Farmville Area Bus (FAB)	Farmville	Six paratransit vans Bus engineering and design of administrative/maintenance facility
Four County Transit	Buchanan, Dickenson, Russell, and Tazewell	Two replacement paratransit vehicles Support vehicle Five replacement paratransit vans
Fredericksburg Regional Transit (FRED)	Caroline, Fredericksburg, Spotsylvania, and Stafford	Replacement Paratransit van Support vehicle
Graham Transit	Bluefield	Two replacement paratransit vans
Greater Lynchburg Transit Company (GLTC)	Amherst and Lynchburg	Support vehicle Surveillance/Security equipment
Greater Richmond Transit Company (GRTC)	Chesterfield, Henrico, and Richmond	Three support vehicles 20 replacement vans 17 40-ft replacement buses
Greater Roanoke Transit Company (Valley Metro)	Roanoke	Three replacement paratransit vans
Greene County Transit	Greene County	Two replacement paratransit vans
Greenville-Emporia Transit	Greenville and Emporia	Two expansion paratransit vans 12 bus shelters and concrete pads

Hampton Roads Transit (HRT)	Chesapeake, Hampton, Newport News, Norfolk, Portsmouth, and Virginia Beach	Nine 29 foot replacement buses 11 35 foot replacement buses Bus Rehab/Renovation of Administrative/Maintenance Facility Rehabilitation of Nine Rail Cars/Locomotives Ferry Technology Infrastructure Light Rail Advance Warning Intersection Control Systems Norfolk Naval Station DEIS
Harrisonburg Department of Public Transportation (HDPT)	Harrisonburg	Replacement paratransit van Two 35-ft expansion buses
JAUNT	Albemarle, Buckingham, Charlottesville, Fluvanna, Louisa, and Nelson	Three expansion paratransit vans 17 replacement paratransit vans Support vehicle Bus rehabilitation/renovation of administrative/maintenance facility
Lake Country Area Agency on Aging	Brunswick, Halifax, and Mecklenburg	
Loudoun County (LC Transit)	Loudoun County	Nine lease buses Six 45-ft commuter coaches
Mountain Empire Older Citizens (MEOC)	Lee, Norton, Scott, and Wise	Eight replacement paratransit vans Support vehicle
Petersburg Area Transit (PAT)	Petersburg	Replacement 30 ft. bus Replacement paratransit van Security cameras
Potomac and Rappahannock Transportation Commission (PRTC) (Omniride, OmniLink)	Manassas, Manassas Park, and Prince William	
Pulaski Area Transit (PAT)	Pulaski	Two replacement paratransit vans Bus shelter 10 bus stop signs



RADAR	Alleghany, Clifton Forge, Covington, Henry, Lexington, Martinsville, Roanoke, and Rockbridge	Four replacement paratransit vans
Radford Transit	Radford	
STAR Transit	Accomack and Northampton	Two 30-ft replacement buses Replacement paratransit van
Suffolk Transit	Suffolk	Expansion 30 foot bus Two bus shelters Two expansion paratransit vans
Virginia Railway Express	Alexandria, Fairfax, Fredericksburg, Manassas, Manassas Park, Prince William, Spotsylvania, and Stafford	
Virginia Regional Transit (VRT)	Culpeper, Fauquier, Loudoun, Orange, and Warren	Two bus rehabilitation/renovation of administrative/maintenance facility Two support vehicles Four replacement paratransit vans Expansion paratransit vehicle
Washington Metropolitan Area Transit Authority (WMATA)	Alexandria, Arlington, Fairfax County, Fairfax City, Falls Church, and Loudoun	
Winchester (WinTran)	Winchester	Two replacement paratransit vans
Williamsburg Area Transit (WATA)	James City, Williamsburg, and York	Two replacement bus trolleys Two support vehicles Lease of bus related facilities Rehabilitate/rebuild buses 3 <sup>rd</sup> part project management Bus 3 <sup>rd</sup> party contract preliminary engineering

## 10.2 Transportation Demand Management Programs

<b>Program</b>	<b>Operating Agency/Agencies</b>	<b>Service Area</b>
Arlington County Commuter Services	Arlington County Department of Environmental Services	Arlington County
Commuter Services by RRRC	Rappahannock-Rapidan Regional Commission	Counties of Culpeper, Fauquier, Madison, Orange and Rappahannock; Towns of Culpeper, Gordonsville, Madison, Orange, Remington, The Plains, Warrenton, and Washington
Fairfax County Commuter Services	Fairfax County Department of Transportation	Fairfax County
GO Alex	Alexandria Department of Transportation and Environmental Services	City of Alexandria
GWRideConnect	George Washington Regional Commission	Fredericksburg; Counties of Caroline, King George, Spotsylvania and Stafford
LiveMore	Dulles Area Transportation Association	Parts of the counties of Fairfax, Loudoun and Prince William around the Dulles International Airport
Loudoun County Commuter Services	Loudoun County Department of Transportation and Capital Infrastructure	Loudoun County
Middle Peninsula Rideshare	Middle Peninsula Planning District Commission	Counties of Essex, Gloucester, King and Queen, King William, Mathews and Middlesex; Towns of Tappahannock, Urbanna and West Point
Northern Neck Rideshare	Northern Neck Planning District Commission	Counties of Lancaster, Northumberland, Richmond, and Westmoreland
PRTC OmniMatch	Potomac Rappahannock Transportation Commission	Prince William County; Cities of Manassas and Manassas Park
RideFinders	Greater Richmond Transit Company	Cities of Richmond, Colonial Heights, Hopewell, Petersburg; Town of Ashland; Counties of Charles City, Chesterfield, Goochland, Hanover, Henrico, New Kent and Powhatan

RideShare	Central Shenandoah Planning District Commission, Thomas Jefferson Planning District Commission	Counties of Albemarle, Augusta, Bath, Fluvanna, Greene, Highland, Louisa, Nelson, Rockbridge and Rockingham; Cities of Buena Vista, Charlottesville, Harrisonburg, Lexington, Staunton, and Waynesboro
RideSmart	Northern Shenandoah Valley Regional Commission	City of Winchester; Towns of Luray, Front Royal, and Stephens City; Counties of Clarke, Frederick, Page, Shenandoah and Warren
RIDE Solutions	New River Valley Regional Commission, Region 2000 Planning District Commission, West Piedmont Workforce Investment Board	Counties of Alleghany, Amherst, Appomattox, Bedford, Botetourt, Campbell, Floyd, Franklin, Giles, Henry, Montgomery, Patrick, Pittsylvania, Pulaski and Roanoke; Cities of Radford, Roanoke, Salem, Lynchburg, Martinsville, Danville, Covington; Towns of Bedford, Blacksburg, Christiansburg, Clifton Forge, Rocky Mount and Vinton
TRAFFIX	Hampton Roads Transit	Counties of Essex, Gloucester, Isle of Wight, James City County, King George, Surry and York; Cities of Chesapeake, Hampton, Newport News, Norfolk, Portsmouth, Suffolk, and Virginia Beach
TyTran	Tysons Transportation Management Association	Tysons Corner

### 10.3 SMART SCALE Rounds 1 & 2: Transit & Transportation Demand Management Projects<sup>14</sup>

Project	Locality	Description	Anticipated Benefits
DASH Bus Service & Facility Expansion	City of Alexandria	Construct additional bus parking and storage for the acquisition of six expansion buses and future purchases to be used for the implementation of the West End circulator	Will have an estimated annual ridership of 200,000 and will reduce daily single-occupant vehicles trips by 300 and will add 6,000 new daily peak-period trips
West End Transitway-Southern Towers Transit Facility	City of Alexandria	Construct improvements within Southern Towers complex including two new BRT stations, stops for local transit services, and pedestrian improvements	Will ease congestion along I-395 corridor by adding between 10,000 to 16,000 riders as part of a larger BRT development
<b>Arlington TDM Strategies</b>	<b>Arlington County</b>	<b>Reduces congestion through proven commuter services program focused on the Dulles Toll Road/I-66/Metro Silver Line corridors maximizing the use of multi-modal transportation options</b>	<b>Estimated to reduce 30,000 daily trips as well as reducing subsidies required for Metrorail services, improving job access, and emissions reduction</b>
Ballston/MU Metrorail Station West Entrance	Arlington County	Expands the throughput and capacity of the station and provide additional access for riders via walking and bus connections	Estimated to remove 13,000 vehicles daily
Columbia Pike Smart Corridor	Arlington County	Will add four additional Capital Bikeshare stations, additional bike parking at existing transit stations, and real-time transit information throughout the corridor	Estimated to reduce daily single-occupant vehicle trips by 500 and add 900 new daily peak period trips

<sup>14</sup> Projects in bold are completed and are now operational.

Rosslyn/Ballston Corridor Multimodal Connections	Arlington County	Enhanced multi-modal connections by purchasing six new transit buses and adding protected bike lanes	Will divert approximately 500 trips from cars to bikes and transit on top of existing ridership
Brandy Station Park & Ride Lot Expansion	Culpeper County	Formalizes lot and expands from 45 to 95 spaces	Reduces vehicle miles traveled by creating a better environment for carpooling and reducing single-occupant vehicle trips along Routes 15 and 29
Cogbill Road/ Chippenham Parkway Park and Ride	Chesterfield County	Construct a 142 space park and ride lot	Reduce annual vehicle miles along major corridors served by I-95 and Chippenham Parkway by 949,198 miles
<b>Danville Transit Bus Purchases &amp; Shelter Construction</b>	<b>City of Danville</b>	<b>Purchases two buses and construct bus shelters to provide free service for college students at Averett University</b>	<b>Provides relief on Route 29 traffic during peak hour movements as well as during Averett University events</b>
Warrenton Park & Ride Expansion	Fauquier County	Expands lot from 212 to over 350	Induces more ridesharing activity among commuters to Northern Virginia along Route 29 corridor
Broad Street Pedestrian & Transit Stop Improvements	Henrico County	Improve multimodal function, transit access, and handicap accessibility along 1.6 mile Broad Street corridor between Forest Avenue & Willow Lawn Drive	Will provide safer and more convenient access to transit along the corridor thereby increasing transit ridership along a route that will feed into the Pulse BRT
Parham Road Pedestrian & Transit Stop Improvements	Henrico County	Improve multimodal function, transit access, and handicap accessibility along a 0.45 mile corridor of Parham Road	Will provide safer and more convenient access to transit along this busy corridor
Acquisition of Loudoun County Transit Buses	Loudoun County	Acquisition of 40 new 40 ft. transit buses to provide connections to existing and future Silver Line Metro stations	Will serve 1,300 riders daily and 550 at peak-period times
<b>The Hopper-Downtown Lynchburg Bus Circulator</b>	<b>City of Lynchburg</b>	<b>Acquisition of a bus to provide a free circulating trolley service to downtown area</b>	<b>Assists individuals in navigating the downtown Lynchburg area</b>

VRE Fredericksburg Line Capacity Expansion	Multiple-Northern Virginia	Conversion of five car train to eight car trains by the purchase off 11 new coach trains and extensions of construction of platforms in Rippon, Quantico, Lorton, Franconia-Springfield, and Alexandria	Anticipated to increase ridership by 40 percent by 2040 with 3,500 new daily peak period riders
Blacksburg Transit Expansion Bus Purchase	Multiple-Roanoke MPO	Purchase of two articulated buses	Will add over 700 daily peak period trips and will assist in meeting growing demand due to increase in Virginia Tech student population
Greater Roanoke Transit Company Automatic Vehicle Locator/Real-Time Project	Multiple-Roanoke MPO	Provide real time information to passengers waiting at bus stops	Estimated to create an additional 141 new daily peak-period trips and result in over 550 new transit miles each year by creating a safer, more reliable, and more timely transit service
Greater Roanoke Transit Company Bus Expansion	Multiple-Roanoke MPO	Acquisition of buses to accommodate additional capacity along two routes in the US 460 corridor	Estimated to add 84 new peak period daily passenger trips along these two routes
Smart Way Vehicle Expansion Project	Multiple-Roanoke MPO	Acquisition for three coach buses for additional Smart Way commuter service between Blacksburg and Roanoke	Will provide service to over 65 peak period riders per day and will remove vehicles from I-81 corridor
Peninsula Regional Park & Ride Enhancement	City of Hampton/City of Newport News	Improves two park and ride facilities in Hampton and Newport News by increasing capacity as well as expanding pedestrian & bicycling amenities	Will assist with passenger reliability, network connectivity, bottleneck relief, TDM strategies, and walkable places
Hampton Roads Transit Regional Commuter Express Bus	City of Norfolk	Acquisition of five new transit buses for commuter routes and an extension of current service. New routes will provide service to Chesapeake Center, Victory Crossing Center, and Naval Station Norfolk	Will provide service to Norfolk Naval Station which is one of the largest employers in the region and will eliminate single-occupant vehicle trips between Chesapeake and Portsmouth that require water crossings
Petersburg Station Park and Ride Parking Deck	City of Petersburg	Construction of a 200 space park and ride adjacent to the Petersburg Area Transit transfer center	Will service local, commuter, and intercity bus services and connect commuters to Richmond



Smart Cities: Central Transit SP/EV Preemption	City of Richmond	Installation of this system that will manage priority and preemption requests to assist with emergency response, transit schedules, emissions, and multimodal operations	Estimated to add an additional 350 peak period transit riders by aiding the efficiency of GRTC's network, including the Pulse BRT, within the City of Richmond
Edgewood Street Transit Accessibility Improvements	City of Roanoke	Provide transit stop improvements as well as missing gap sidewalks between bus stops	Provide more formal accommodations for transit users by improving safety and transit usage
New Commuter Parking Lot Route 1/Commonwealth Drive	Spotsylvania County	Construction of a 700 space commuter lot in the Massaponax area	Connects with Fredericksburg Regional Transit as well as provides vanpool and carpool opportunities to Northern Virginia and Richmond
Commuter Lot Expansion	Stafford County	Addition of 300 parking spaces at an existing 545 space lot	Provides infrastructure for transit, vanpooling, and carpooling out of the Fredericksburg area to Northern Virginia
Brooke & Leeland VRE Station Expansions	Stafford County	Addition of platforms to accommodate eight-car trains as well as a parking lot expansion at the Leeland Station and multi-modal facilities construction at both stations	Estimated to add an additional 2,000 daily peak-period trips that would otherwise use I-95 to travel to Northern Virginia
Waynesboro Towne Center Park & Ride	City of Waynesboro	Improvement of current lot as well as the addition of a bus stop and bus loading zone	Additions will allow lot to be serviced by BRITE as well as vanpools and carpools
Williamsburg Area Transit Authority Bus Purchase & Bus Shelters	City of Williamsburg	Addition of one medium duty bus for a new route in Upper York County area and three expansion bus shelters	Will provide 108,000 annual trips with 210 new peak-period daily riders by providing connections from the underserved York County to James City County, Williamsburg, and Newport News as well as Amtrak and Hampton Roads Transit

## 10.4 Transform 66-Inside the Beltway Projects

Locality	Project
<b>Arlington County</b>	Additional peak hour service on the ART 55 route
	Additional peak hour service on the Metrobus 2A route
	Bus stop consolidation on Lee Highway and Washington Boulevard
	Purchase and installation of multimodal real-time information screens
	Corridor ITS enhancements to allow for better monitoring of conditions and faster responses to incidents
	Upgrades to the county's traffic management center
	Enhanced TDM outreach in the corridor
<b>City of Fairfax</b>	Access and technology improvements at CUE system bus stops
<b>Fairfax County</b>	Purchase of two buses and funding of two years of operations for new Fairfax Connector service between the Government Center and Foggy Bottom
	Purchase of four buses and funding of two years of operations for new Fairfax Connector service between the Vienna Metrorail Station and the Pentagon
	Ten new bike share stations in the vicinities of the Vienna and Dunn Loring-Merrifield Metrorail Stations
<b>City of Falls Church</b>	Up to 16 new bike share stations
	New Metrobus 3T service
<b>Loudoun County</b>	250 space commuter parking lot in the community of Aldie and two years of operations for new Loudoun County Transit commuter bus service from the new parking lot to Washington, DC
	TDM outreach and marketing to the I-66 corridor, carpool, and vanpool incentives and transit information display screens
	Purchase of two buses and two years of operations for extension of Loudoun County Transit 88X route to service the Dulles South Park & Ride Lot
	Purchase of three new buses and funding of two years of operations for new Loudoun County Transit route between Purcellville and the Wiehle-Reston East Metrorail Station
<b>City of Manassas</b>	Bicycle parking improvements at Manassas VRE Station

<b>PRTC (serving Prince William)</b>	New PRTC OmniRide commuter bus service between Gainesville and the Pentagon
	Additional peak hour service on PRTC OmniRide commuter bus service between Linton Hall and the Tysons Corner Metrorail Station
	On-demand commuter lot shuttles between neighborhoods in Gainesville and Haymarket and nearby commuter park and ride lots
	Flexible vanpool program software
<b>Regional (managed by NVTC)</b>	Targeted outreach to promote transit and other transportation options