



# COMMONWEALTH of VIRGINIA

Office of the Governor

Aubrey L. Layne, Jr.  
Secretary of Transportation

November 17, 2014

The Honorable Terence R. McAuliffe, Governor  
Patrick Henry Building, 3<sup>rd</sup> Floor  
1111 East Broad Street  
Richmond, Virginia 23219

The Honorable Stephen D. Newman  
Chairman, Senate Transportation Committee  
General Assembly Building, Room 304  
Richmond, Virginia 23219

The Honorable Thomas D. Rust  
Chairman, House Transportation Committee  
General Assembly Building, Room 406  
Richmond, Virginia 23219

Dear Governor McAuliffe, Senator Newman and Delegate Rust:

Attached for your review is the fifth annual "How Virginia Is Using Transit and Transportation Demand Management Programs to Address Highway Congestion and Single Occupant Vehicle Travel" as required by Chapter 733 of the 2010 Acts of Assembly, which requires the Secretary of Transportation to:

*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.*

Sincerely,

A handwritten signature in black ink, appearing to read "Aubrey Layne, Jr.", written over a horizontal line.

Aubrey L. Layne, Jr.

**REPORT OF THE  
SECRETARY OF TRANSPORTATION**

# **How Virginia Is Using Transit and Transportation Demand Management Programs to Address Highway Congestion and Single Occupant Vehicle (SOV) Travel**

**TO THE GOVERNOR AND  
THE GENERAL ASSEMBLY OF VIRGINIA**



## **REPORT DOCUMENT NO. 403**

**COMMONWEALTH OF VIRGINIA  
RICHMOND  
2014**

## **Table of Contents**

- I. Preface
- II. Executive Summary
- III. Introduction
- IV. Making An Impact in FY2014
  - Transit
  - Vanpools
  - TDM Programs
  - Promotion of Travel Options and Telework
  - Maintaining Modal Split
  - Improving Transportation System Efficiency
  - Economic Benefits
- V. Challenges and Opportunities to Fuel Momentum
- VI. Planning for the Future
- V. Awards and Commendations
- VIII. Appendix

## **I. Preface**

In 2010, the General Assembly directed the Secretary of Transportation (§ 33.2-106) of the Code of Virginia), in consultation and cooperation with the Commonwealth Transportation Commissioner and the Director of the Department of Rail and Public Transportation, to prepare an annual report detailing the most recent efforts undertaken in the Commonwealth to increase transit use and reduce highway congestion and use of single occupant vehicles.

This report was prepared by the Department of Rail and Public Transportation (DRPT) and responds to that directive. It was developed in coordination with the Virginia Department of Transportation; transit and transportation demand management/commuter services agencies; major public transportation stakeholders, including regional Metropolitan Planning Organizations (MPOs); regional Planning District Commissions (PDCs) and other organizations.

A survey on annual initiatives was requested from all transit and transportation demand management (TDM) agencies in the Commonwealth in August 2014. The results of those surveys, an inaugural *Transit and TDM Industry Survey* and other information gathering are presented in this report.

The Southeastern Institute of Research (SIR) provided assistance with preparation of this report.

## II. Executive Summary

This document is the Secretary of Transportation's FY 2014 report to the General Assembly summarizing recent efforts undertaken in the Commonwealth of Virginia to leverage the state's investment in passenger rail, transit and transportation demand management (TDM) programs to address highway congestion and single occupant vehicle (SOV) travel. The report addresses the annual reporting requirement of Chapter 733 of the 2010 Acts of Assembly.

Prepared in consultation and cooperation with the Commonwealth Transportation Commissioner and the Director of the Department of Rail and Public Transportation (DRPT), this report details the increasing impact the Commonwealth's transit and TDM programs are having in economic development and competitiveness, as well as providing our citizens with access to jobs, education and healthcare. This report also details how Virginia's passenger rail, transit, vanpooling, carpooling and TDM programs are expanding the Commonwealth's transit infrastructure in a holistic, increasingly seamless, efficient, and multimodal manner. Examples of FY 2014 rail, transit and TDM programs that are making an impact are presented throughout this report.

Statistics to include in this section based on the 2014 DRPT Transit and TDM Industry Survey:

- 77% say DRPT has played a key role in helping my service or agency obtain resources for our programs and services
- 81% say my service or agency works closely with DRPT to ensure we have the support we need for our programs
- 75% say Virginia's Department of Rail and Public Transportation (DRPT) plays a strong leadership role in transit and TDM in Virginia
- 97% say transit and TDM should play a major role in congestion mitigation throughout Virginia

(Source: 2014 DRPT Transit and TDM Industry Study. Percentages reflect the "top two box" scores, on a 1-5 scale.)

Major forces are now increasing the importance and practice of *performance impact assessment and reporting* for transportation systems, in general, and transit and TDM programs, in particular.

MAP-21, the Moving Ahead for Progress in the 21<sup>st</sup> Century Act, demands improved transportation investment decision making through performance-based planning and programming. Under MAP-21, performance management, program restructuring, and the creation of two new formula programs have increased accountability for program efficiency and measurable results. During the 2013 Virginia General Assembly Session, the Transit Service Delivery Advisory Committee (TSDAC) was established to advise DRPT in the development of a distribution process for transit capital and operating funds and help implement more performance-based funding for mass transit.

From passenger rail and transit to bicycle and pedestrian paths, Virginia's rail, transit and TDM programs are well prepared for this new performance-based funding era. DRPT and Virginia's transit and TDM agencies have an established track record of measuring program efficiency and effectiveness through modal split, reductions in vehicle miles traveled and other key metrics. Examples of Virginia's prowess in program impact measurement are presented throughout this report.

Seismic demographic trends such as population growth and the growth of urban areas, coupled with the growing demand for walkable communities are also increasing the importance of performance impact reporting. Based on projections from the 2010 Census, the U.S. Census Bureau's Population Division projects that Virginia's population will increase from 8 to 9.8 million residents by 2030. Virginia's largest urban areas will see the majority of this growth, which is consistent with several other forces reshaping America – *urbanization and walkable communities*.

Spearheaded by organizations like Smart Growth America, and supported by the Federal Highway Administration's (FHWA) Livability Initiative, the emerging cultural shift towards walkable and sustainable communities is taking hold throughout the nation and here in the Commonwealth of Virginia. There is a critical symbiotic relationship between transit and TDM programs and smart growth strategies in evolving urban areas into more sustainable, walkable communities. Smart growth strategies help to develop transportation systems that better serve more people while fostering economic vitality for both businesses and communities. These strategies include developing and offering a rich mix of transit options like buses, trolleys, subways, light rail, street cars and ferries which accommodate more travelers in the same space and create better options for getting between home and work.

Adding more roadway capacity, even if funding was not an issue, will not keep up with this growing population, nor address the demand for more walkable, sustainable communities. The most efficient solution is to manage the demand placed upon a community's transportation system through the thoughtful deployment of rail, transit, and TDM programs that are designed to efficiently move people, not cars. Deployment of these resources, however, requires knowledge of what programs will work best in each community. This knowledge comes from insights gained from program performance impact assessment and reporting.

### III. Introduction

This report was prepared pursuant to § 33.1-223.2:24 of the Code of Virginia, which requires:

“The Secretary of Transportation, in consultation and cooperation with the Commonwealth Transportation Commissioner and the Director of the Department of Rail and Public Transportation shall submit annually, not later than November 1, a report to the General Assembly 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 fifth annual report and builds upon the results documented in the 2013 report.

This report showcases how Virginia’s transit, rail and transportation demand management (TDM) programs are focused on delivering results – *making an impact*. Profiles of major initiatives are followed by specific examples of how Virginia’s statewide and regional transit and TDM programs are making an impact.

This report was developed in coordination with transit, commuter services and rail agencies; major public transportation stakeholders, including regional Metropolitan Planning Organizations (MPOs); regional Planning District Commissions (PDCs); and other organizations. Additional information is available on the websites for both DRPT (<http://www.drpt.virginia.gov/>) and VDOT (<http://www.viriniadot.org/>).

#### **IV. Making An Impact in FY2014**

All across the state, Virginians are on the move in more ways than ever before. Whether it is for commuting to and from work, or trips for shopping, entertainment, going to a restaurant, doctor's appointment, or visiting the many attractions Virginia has to offer, many Virginians use a travel option other than a single occupant vehicle. For many Virginian's travel choices include light rail, heavy rail, ferry, bus, streetcar, trolley, vanpool, carpool, biking and passenger rail. More and more, transit, van/carpooling, biking and rail are viewed as and are being used as a viable, holistic transportation system.

In FY2014, Virginia's transit and state sponsored passenger rail services provided more than 200 million passenger trips and an estimated 5 million additional trips were taken in vanpools. While some of the transit trips are taken by people that could be considered "transit dependent" many of these trips are taken by people that could have driven alone in their own automobile, but instead chose another mode. These people are call "choice riders" and more and more of these choice riders are choosing transit, rail, vanpools, carpools and biking to travel. The availability and use of these mode options help move more people and optimizes the use of Virginia's roads. Imagine if all of the people using transit, vanpools, carpools and teleworking each day got into their personal automobiles. Existing transit services and TDM services across the Commonwealth add up to one unassailable conclusion: transit and TDM in Virginia are making an impact.

#### **Transit**

There are 54 public transportation services operated by 44 transit agencies in Virginia. These agencies provide bus, commuter rail, light rail and heavy rail (Metrorail) services. Together these agencies provided approximately 200 million passenger trips in FY2014.

#### **FY2014 Transit Highlights**

##### Dulles Metrorail Extension

Construction of Phase 1 of the Dulles Metrorail Extension was completed and the new Silver Line opened for passenger service on July 26, 2014. Phase 1 included 11.7 miles and five new Metrorail stations connecting Reston and Tysons Corner, Virginia's largest employment center, to Washington, D.C.

##### Metroway Bus Rapid Transit Service

After nearly a decade of planning, the City of Alexandria and Arlington County opened Metroway, the region's first Bus Rapid Transit (BRT) service. Although, service operations started early in FY2015, August 24, 2014, the building of the dedicated travel lane and bus stops and stations took place during FY2014. This service offers more frequent, faster service than traditional bus routes, a dedicated travel lanes, and new hybrid-buses, which are more spacious, comfortable and fuel-efficient than older buses in the fleet. Metroway connects



neighborhoods in Alexandria and Arlington with Metrorail and Virginia Railway Express. Service will be expanded in FY2015 and will include an extension of the dedicated bus lanes.

### Richmond Bus Rapid Transit

In FY2014 the Commonwealth of Virginia through the collaboration of DRPT, the Greater Richmond Transit Company (GRTC) and the City of Richmond and Henrico County submitted an application to the U.S. Department of Transportation for a Transportation Investment Generating Economic Recovery (TIGER) grant for the final design and construction of the Broad Street Bus Rapid Transit system. In September 2014, state and local officials announced the Commonwealth of Virginia has been awarded \$24.9 million TIGER grant from the U.S. Department of Transportation to support the development of the BRTransit system which would run along the Broad Street Corridor. The \$24.9 million Transportation Investment Generating Economic Recovery (TIGER) grant will be matched by \$16.9 million from the Department of Rail and Public Transportation, \$7.6 million from the City of Richmond and \$400,000 from Henrico County, bringing the estimated cost for the project to about \$54 million. The Federal Transit Administration approved a categorical exclusion for this project which means the FTA has determined the project will not have a significant negative impact on the environment.

Seen as a more economic alternative to light rail, bus rapid transit carries the promise of frequent, dependable public transportation along Broad Street with the help of dedicated travel lanes, modern stations with elevated platforms, and other improvements. Officials estimate that the 7.6-mile system proposed for Richmond could reduce travel times on Broad Street by nearly 40 percent.

### The Tide

The Tide, Virginia's first light rail system, opened for service in Norfolk in August 2011 under management of Hampton Roads Transit (HRT). About 7.4 miles in length, The Tide services eleven stations providing access to dining, shopping, and entertainment across the City of Norfolk. HRT is currently studying expansion of The Tide to Virginia Beach through the Virginia Beach Transit Extension Study.

HRT and the City of Norfolk are also in the process of studying and planning a high capacity transit extension to the Naval Station Norfolk. The work will define potential routes and transit modes in Norfolk that will link The Tide with the Navy base.

### Columbia Pike Streetcar

This is a joint project between Arlington County and Fairfax County with the majority of the 7.4 mile streetcar being in Arlington. Columbia Pike corridor currently has the highest transit ridership within the Commonwealth for a corridor without fixed-guideway transit service. Most of the proposed 7.4-mile line would run in Arlington, connecting Pentagon City to the Baileys Crossroads and Skyline sections of Fairfax County. The completed system would eventually provide a seamless transit connection between the neighborhoods of South Arlington and

beyond, add transit capacity in the Braddock Road/Crystal City/Pentagon City/Pentagon/Columbia Pike corridor, relieves capacity constraints on VRE and Metro, and provide a more reliable transit option for travel within Crystal City. The respective Boards of Supervisors for Arlington and Fairfax counties have approved funding for the planning and design of the streetcar system.

#### Crystal City Streetcar

Arlington County is in the early stages of development of a streetcar project that will connect the Columbia Pike Streetcar system, Pentagon City, Crystal City and Potomac Yard. The County is working with the Federal Transit Administration to develop an environmental assessment to document the potential environmental effects of the project and the effects of the project on traffic, local communities, pedestrian safety, and cultural, historic and natural resources.

#### Virginia Railway Express

The VRE Operations Board adopted the VRE System Plan at its January 2014 meeting. The plan provides a framework for VRE system investments and actions VRE should pursue through 2040 to best meet regional travel needs. The system investments and service expansion recommended in the System Plan will enable VRE to carry over 40,000 new weekday trips by 2040, more than double the 19,000 daily trips carried today. The plan includes capital and operational investments that include additional rail cars and locomotives, expanded platforms to accommodate longer train consist, additional train storage and service extensions. For the plan to be fully realized, VRE will need DRPT and other railroad partners to improve tracks and relieve bottlenecks.

Construction of the new station in Spotsylvania County has begun. The construction had been delayed while a legal issue with the property was worked out. At Spotsylvania County's request, VDOT stepped in to secure legal access to the property through a Certificate of Take so the construction could begin on the 1,500 space parking lot.

Although it was announced at the beginning of FY2015, the significance of a private developer that will build a new VRE station in Prince William County warrants inclusion in this report. The station is being constructed by SunCal, one of the largest real estate development companies in the U.S. that specializes in large-scale, mixed-use master-planned communities. The station is part of the Potomac Shores 1,920-acre master-planned community situated on the bluffs overlooking the Potomac River in Prince William County. The station is expected to open in 2017 and will be another vital link in the region's commuter rail network. It is a tremendous example of what can be accomplished when the Commonwealth works together with private partners. Through this private-public partnership, the value of SunCal's contribution of Potomac Shore Station will also be used to match state funds for platform improvements at Brooke and Leeland Road stations in Stafford County. Other platform improvement projects are advancing at the Alexandria and Rippon Stations.

## **Vanpools**

Every work day there are an estimated 1,000 vanpools carrying riders to and from work. On an annual basis, an estimated 5million passenger trips are provide by vanpools. Virginia’s TDM programs help form new vanpools and keep existing vanpools on the road by helping find riders and providing financial assistance to help get a new vanpool up and running and to keep a vanpool operating when riders leave the vanpool. Vanpools are a great public-private partnership. They do not need continuous subsidies from state or local governments. Vehicles are owned, maintained and insured by private companies and the passenger fares cover 100% of the operating costs.

Another benefit of vanpools is that in the urban areas, vanpool data can be entered just like transit data into the National Transit Database (NTD). This database is used to determine some of the funding amounts from the U.S. Department of Transportation provides to states. The more data that is entered, the more funds come to the state. The TMD programs in Northern Virginia, Hampton Roads and Richmond have programs that collect vanpool data for NTD.

## **FY2014 Vanpool Highlights**

### Vanpool Alliance

The “Vanpool Alliance” program is a public-private partnership created in 2013 to enhance commuter travel options through vanpooling. The program allows new and existing vanpools that originate or complete travel in the Northern Virginia Region to enroll in the Vanpool Alliance. Participating vanpools report important travel and ridership information each month and, in return, receive support in marketing their program and help maintaining drivers and ridership. Perhaps most importantly to the vanpool riders, Vanpool Alliance participants receive \$200 per month per vanpool in exchange for the monthly reports they prepare and submit. Saving \$2,400 annually by enrolling in the Vanpool Alliance program means not only lower end user costs for commuters who vanpool, but improved carrying capacity for the Northern Virginia Region’s transportation infrastructure and additional FTA capital allocation for the participating transit programs.

The Vanpool Alliance is a cooperative effort between the George Washington Regional Commission (GWRC), the Northern Virginia Transportation Commission (NVTC) and the Potomac and Rappahannock Transportation Commission (PRTC). This innovative new program is being administered by PRTC. As more and more vanpools begin reporting their vehicle and passenger miles traveled to Vanpool Alliance, future FTA capital allocations - to the participating transit programs – will increase through National Transit Database (NTD) reporting.

The Vanpool Alliance started in October of 2013 with 207 participating vanpools and finished FY 2014 with 350 vanpools' enrolled, nearly 80 vans above the program's budget goal. Ensuring each new vanpool group has adequate ridership and insurance also means not every

application is approved. Indeed, the Vanpool Alliance processed about 400 applications to get to 350 participating vanpools. During FY 2014, The Vanpool Alliance improved the transportation system's efficiency by enrolling nearly 4,000 commuters into their program.

*“Vanpool Alliance has been successful in organizing independent vanpools through the cooperation of VDPRT, NVTC, PRTC, and GWRTC. Dedicated staff have pushed to ensure that program goals have been met and participants are well served and maintain a positive view of the program. To date, nearly 400 vanpools have been enrolled in the program’s six months of operations.”*

*(Source: 2014 DRPT Transit and TDM Industry Study)*

#### AdVANTage Vanpool Insurance Program

Several years ago DRPT and the Department of Risk Management (DRM) created the first vanpool insurance pool in the country. There is only one insurance company that provides insurance specifically for vanpool operators. However, the small vanpool operators found the insurance rates cost prohibitive. Virginia’s vanpool insurance pool program was created to provide a lower rate alternative. By creating a pool of funds from paid insurance premiums, the smaller vanpool operators could afford insurance that properly covered their vans. However, the program was labor intensive with all transactions being done manually by DRM and the George Washington Regional Commission (GWRC). In FY2014, DRPT provided a grant to GWRC to rebuild the AdVANTage website so many of the transactions such as paying insurance premiums, checking account status and signing up new vans can be performed online.

#### **TDM Programs**

The importance of Virginia’s TDM agencies cannot be overstated. Every day TDM agencies help commuters, employers and employees with travel options. Much of the work of TDM agencies involves behavior change – convincing choice riders that they should use transit, vanpool or carpool. They also do a great deal of marketing and promotion these travel modes and are responsible for much of the ridership on Virginia’s transit systems. A lot of work is conducted with employers to encourage and help set up transit/vanpool benefit programs, telework programs, carpool incentive programs and alternative work schedules. Ridematching, entering commuter information into a database that matches them with other commuters with similar commute origin and destination, is still the backbone of the services TDM programs provide.

TDM programs also provide Guaranteed/Emergency Ride Home (GRH) service. GRH provide commuters that use transit, vanpool, carpool or bike to work peace of mind that they will not be stranded at work because they do not have their personal automobile at work. If a qualifying commuter has to unexpectedly work late, or has to pick up a sick child from school or daycare, GRH will get them home or to their car.

DRPT tracks the number of passenger miles of travel saved by commuter assistance customers in Virginia in order to meet their objective of decreasing growth of Single Occupant Vehicles (SOV) travel in Virginia’s urban areas during peak travel times. Thanks to the efforts of transit

and TDM agencies throughout Virginia, in FY 2014 more than 18 million miles of passenger travel (or Vehicle Miles Traveled) were eliminated statewide.

## **2014 TDM Program Highlights**

### City of Alexandria - Local Motion

In 2014 Alexandria's Local Motion TDM program implemented a "Commuter Challenge," a friendly competition between Alexandria employers that encouraged all forms of alternative transportation: walking, biking, carpooling, vanpooling, bus, train, trolley and teleworking. The challenge ran from April 1 to April 12, and employees of participating companies recorded a daily commute log online. Employees had an opportunity to win a prize during the challenge, and three Employer Grand Prizes were awarded at the conclusion of the challenge. During the two-week challenge, there were 17,686 fewer single occupancy vehicle miles traveled; 13.27 tons less pollution; 1,050 gallons of fuel saved; and over \$14,977 in transportation costs saved.

### HRT - Traffix

The TRAFFIX TDM program is operated by Hampton Roads Transit. One of the important services TRAFFIX performs is working on site at the many military commands in Hampton Roads to promote transit, carpooling and form vanpools. The TRAFFIX program has been an integral part of HRT's Connect Hampton Roads effort to survey and obtain input from the public transit and transportation services for the future.

### Fairfax County DOT

The Fairfax County Department of Transportation (FCDOT) outreach to employers includes helping employers provide a monthly transit commuting benefit to employees. Qualifying employers will receive fifty percent of the monthly transit/vanpool benefits provided to employees over six months. A similar match is offered to employers that provide a monthly bike commuting benefit.

The Fairfax County Department of Transportation worked with the GMU Transportation program to create a GIS student challenge. This challenged entrants to design a campus and outlying area bike and pedestrian map to encourage safe access to the campus. The winning candidate was selected by a working group of FCDOT, GMU Transportation and GIS Faculty members. FCDOT then printed 3,000 copies of the bike map for distribution.

### RideFinders

RideFinder created the Charter 2015 Program. This initiative is in partnership with Richmond 2015 as a legacy project for the UCI World Championship races that will be held in Richmond in September of 2015. The Charter 2015 Program recognizes businesses at a Gold, Silver or Bronze level for supporting biking in the workplace. A kickoff meeting was held in November 2013 with approximately 85 attendees to launch the project. A recognition event was hosted in

conjunction with Williams Mullen Law Firm for the first 25 corporate enrollees in May, followed up by a press release and advertisements in the Richmond Times-Dispatch and Richmond Free Press with those partners' logos. The ultimate goal is to enroll at least 250 employers by September 2015. RideFinders created a Charter 2015 website and ran Charter 2015 advertisements. An article featuring RideFinders' partnership with Richmond 2015, "Charter 2015 initiative asks employers to be bike-friendly," ran in the Richmond Times-Dispatch on November 13, 2013 providing valuable unpaid media exposure.

#### Arlington County Commuter Services (ACCS)

ACCS organized Bike and Walk to School Day events with 31 schools. The organization partnered with BikeArlington and Arlington Public Schools for these events which garnered 5,000 student participants.

ACCS' marketing campaigns in English and Spanish included; brochures and Spanish language fotonovella; weekly Car-Free Diet Street Team events at Farmers' Markets, recreational centers, libraries, shopping centers and community centers; social media postings on Facebook, Twitter and Instagram; videos on YouTube, Arlington TV and websites; inserts, articles and ads in the Citizen newsletter; sponsorship and exhibition at the Arlington County Fair, Columbia Pike Blues Festival, Taste of Arlington, Arlington County July 4th Celebration, Rosslyn Jazz Festival, and Crystal City Run; and promotion of Car Free Day and Try Transit Week.

#### Dulles Area Transportation Association (DATA)

DATA uses a bilingual commuter assistance staff person to provide onsite ridematching to the Spanish speaking workers in and around the Dulles International Airport. In FY2014, DATA launched a new promotional campaign and website, Live More Commute Less, designed to encourage workers and residents in the Dulles area to carpool, vanpool and use transit instead of driving alone. As part of the promotions, DATA held a one-mile family fun run to draw attention to the Live More Commute Less initiative. This initiative promotes behavior change by focusing on the time and money saved by using commuting choices "to spend on what matters most."

#### Loudoun County Commuter Services (LCCS)

Over the course of FY 14, LCCS staff hosted numerous commuter fairs, "lunch and learn sessions" and commuter appreciation days held with Loudoun County employers. This included two consecutive Wednesdays in April, staff from LCCS hosted an event at Verizon in Ashburn called Wheelin' Wednesdays. This on-site bike repair demo and commuter fair included experts that showed Verizon employees how to fix flats and conduct basic bicycle maintenance. There were giveaways, prize drawings and Bike to Work Day registration events. For the non-cyclists, staff gave tips for improving the daily commute to the Verizon campus. Other events included commuter fairs and earth day celebrations, the Pentagon DOD fair, community "Green" functions, Reality Stores at the high schools and Bike to Work Day pit stops.

### NeckRide (Northern Neck Planning District Commission)

NeckRide worked with the Northern Neck-Chesapeake Bay Region Partnership to establish two business incubators, now called Enterprise Centers, which will also act as Telework locations for the region. One has already opened in Northumberland County. The second will open in the Fall of 2014 in Richmond County.

### RIDE Solutions

RIDE Solutions organized the first Sustainable Transportation Conference in Roanoke, in cooperation with the Cabell Brand Foundation and the Virginia Tech Carilion School of Medicine. This conference seeks to educate area leaders and advocates on TDM issues.

RIDE Solutions organizes the Clean Commute Challenge each year as part of Bike Month. The Clean Commute Challenge encourages commuters to pledge to use an alternative mode, and has a competitive element encouraging folks to form teams and log trips. This year, the Clean Commute Challenge beat records with over 71,000 miles pledged and 42,500 miles logged.

RIDE Solutions maintains an ongoing employer outreach effort across all three of its service regions. Notable employer efforts include a partnership with Randolph College in Lynchburg, an ongoing carpool program in pursuit of LEED credits for Norfolk Southern, and bike commuter support for Carilion Clinic.

### **Maintaining Virginia's Modal Split**

Maintaining the modal split, or the share of drive-alone work trips compared to the use of other travel options, is perhaps the most direct indicator of the overall impact of Virginia's rail, transit and TDM community.

Based on the 2010 U.S. American Community Survey Journey to Work data, the share of drive-alone work trips in Virginia was 77.1 percent. This is the exact modal split recorded by the 2000 decennial census – 77.1 percent. While on the surface this result may seem unimpressive, it must be viewed in context. During this same period of time, from 2000 to 2010, Virginia's overall population grew from 7 million to 8 million, adding approximately 950,000 people. As approximately 60 percent of the population works, during the 2000 to 2010 period, Virginia added roughly 570,000 new commuters. Maintaining the SOV modal mix at 77.1 percent means the non-SOV percentage held at 22.9 percent. Applying this percentage to the over half million new commuters means 130,000 more people started ridesharing.

**79%**

say transit and TDM services in Virginia play a major role in getting commuters to and from work.

Source: 2014 DRPT Transit and TDM Industry Survey. 79% is the "top two" box score on a 1-5 scale.

Maintaining market share, in this case the share of people who rideshare, is a significant number.

In 2012 that rate was 21.6 percent, lower than the national average (22.5%) and ranking the state 18th best in the nation. Among Virginia's regions, the Northern region had the highest percentage (28.0%) of alternative commuting methods. The lowest percentages were found in the more rural Southwest (15.4%), Southside (17.1%), Valley (17.3%), and West Central (17.5%) regions.

Newly released Census data from the 2013 American Community Survey (ACS) demonstrates that, after years of sustained growth, the share of drive alone commuting trips has leveled off and even declined slightly in many places. The data also reveals that more and more Millennials are opting for alternatives commuting modes and eschewing the longstanding tradition of driving alone to work. In Virginia, the ACS data indicated about 9.4% of the Commonwealth's 4,018,400 workers age 16 and over commuted using shared ride arrangements including carpooling and vanpooling while 4.4% traveled to work using public transportation. Coupled with significant increases in the share of commuters who bicycle and/or walk to work and the growing number of telecommuters in the state suggests the Commonwealth is offering more and better alternatives to driving alone than ever before.

Not surprisingly, the number of Virginians using alternatives to single occupancy vehicles was most impressive in Northern Virginia, where alternatives to driving alone are most abundantly available. Indeed, two million jobs in Northern Virginia are within a quarter mile of a Metrorail, VRE or Amtrak commuter rail station, and this commuter rail system, is rapidly expanding. Fifty-four percent of all jobs in the region are within a half mile of a Metrorail station. There are 156 million transit trips taken annually in Northern Virginia, and more than half a million daily commuter trips are transit trips.

More and more Virginians are choosing transit to get where they need to go in the fastest growing region of the state. Bolstering the viability of a "build it and they will come" philosophy is Crystal City, where the modal split is 50 percent, the best modal split in Northern Virginia and the Commonwealth. "Crystal City's transportation assets have always led the region," observed Angela Fox, President and CEO of the Crystal City Business Improvement District. "Where else can you just as easily walk to a major airport as take a quick train to the U.S. Capitol?"

The U.S. Census Bureau's Population Division predicts that between 2010 and 2040, Virginia's population will increase by nearly 3 million, to a total population of almost 11 million residents, a 37 percent increase. Most of this growth is projected to occur in Virginia's segment of the Golden Crescent, the heavily populated, and most congested, geographic corridor that runs from Baltimore to Metro Washington, the Richmond region and Hampton Roads. Considering that seven out of ten Virginians currently reside in these areas, job growth will track closely with population increases, with 85% of Virginia's job growth expected to occur in the four most urban Planning District Commissions (Northern Virginia, Richmond, Hampton Roads, and



George Washington – Fredericksburg). Both of these factors, job and population growth, will place increasing pressure on the Commonwealth's finite supply of roadway, especially in these more congested urban areas.

As Virginia's population grows, so too will traffic congestion. Over the next 25 years, two thirds of Virginia's I-95 infrastructure will be at or above capacity. This will result in an estimated travel time increase as high as 40 percent. The lack of funding and space to significantly add more roadway capacity will continue to create a growing imbalance of supply and demand, resulting in increasing levels of congestion. The practical way to address congestion is by minimizing the demand placed on Virginia's road network in a manner that maximizes the efficiency of the Commonwealth's transportation system.

Virginia is investing strategically in its transit infrastructure to offer travelers viable alternatives to driving alone on the Commonwealth's finite supply of roadways. More Virginians than ever before live or work within a half a mile of a transit station, many of which now offer a variety of multimodal options to seamlessly connect with the local transit infrastructure.

*“One of the most important current benefits of transit in this region is its role in reducing single occupancy automobile trips, reducing overall vehicle miles traveled, and reducing our carbon footprint. This is vital to the DC Metropolitan Area as this area experiences some of the worst traffic congestion in the entire nation.”*

*“Our emphasis on bike transportation has been very effective in the Roanoke Valley to encourage bike infrastructure and mode shift, particularly in the City of Roanoke.”*

*“Expanded service in Lexington, Buena Vista and Rockbridge County [and] the ridership counties to grow each month.”*

*(Source: 2014 DRPT Transit and TDM Industry Study)*

## **Improving Air Quality by Reducing Greenhouse Gas Emissions - Measuring the Positive Impact TDM programs Have on Air Quality**

As with measurements for reducing vehicle miles traveled (VMT), statewide estimates for improvements in air quality tend to be understated. The most accurate impact calculations are typically available on a local level. Examples of transit and TDM programs that are making an impact by helping to improve the Commonwealth's air quality include:

### Arlington County Commuter Services

ACCS' elimination of 41,146 vehicle trips per day in FY 2014 means improving air quality in Arlington County. ACCS demonstrated it is making an impact and improving air quality by reducing CO2 emissions by 325 tons a day and 118,625 tons over FY 2014.

### RideFinders

RideFinders placed a three-quarter-page, clean air-focused ad in the Richmond-Times Dispatch in support of the statewide Keeping Virginia Beautiful program. In partnership with the Virginia Department of Environmental Quality, RideFinders ran clean air-focused commercials on local TV and radio stations. The organization also distributed over 5,000 clean air-focused brochures and over 3,000 clean air-focused posters to area businesses, and contributed a clean air-focused article to the Science Matters website. Through RideFinders' sponsorship of NPR and PBS' Science Matters programming, RideFinders received on-air recognition during WCVB PBS, WHTJ PBS, WCVW PBS and WCVB Public Radio broadcasts. Additionally, the organization created a Clean Air Fact Sheet to replace brochures focused primarily on cost savings.

### **Promotion of Travel Options and Telework**

As mentioned earlier in the report, TDM agencies conduct a lot of marketing and promotion of transit and ridesharing. With transit, vanpool, carpools and park-and-ride lots it is not always a “build it and they will come” situation. The public needs to be informed about these services, educated on their benefits and how to use them. In many cases a personalized, “hand holding” approach is needed. TDM agencies conduct transportation fairs, employment site promotions, print, web and radio advertisements, billboard advertisements and social media promotions. DRPT partners with Virginia’s transit and TDM agencies to promote Try Transit Week in September. DRPT established a Try Transit Week website and conducts print and radio advertisements in the urban markets. The transit and TDM agencies conduct local advertising in their respective markets. The public is encouraged to go to the Try Transit website and sign up to pledge to use transit and be entering in a drawing where one lucky winner will receive one-year of transit. This year many of the transit agencies provided passes for additional drawings of winners that were selected from pledges in the transit system’s respective areas.

DRPT also conducts marketing and promotion of the state sponsored Amtrak service. This marketing includes doing onsite promotions at colleges and universities near the Amtrak stations, advertising on billboards, magazines, newspapers, visitor guides and radio, sponsorships of events, and a variety of social media marketing and promotional contests to win Amtrak tickets.

### **Park and Ride Lot Infrastructure**

A noteworthy example of the increasing efficiency of the Commonwealth's transportation system is strategic expansion and increased promotion of the state's Park and Ride lot infrastructure.

### **GWRideConnect**

GWRideConnect is a free ridesharing service that assists commuters who are seeking daily transportation, such as vanpools, carpools and buses, from Fredericksburg, Stafford, Spotsylvania, Caroline and King George counties to employment locations in Washington, D.C., Northern Virginia, Richmond, Dahlgren and beyond.

With nine of Virginia's approximately 300 Park and Ride lots located throughout the region, VDOT's new Park and Ride Lot website is another valuable resource for George Washington Region's commuters who need to locate a convenient Park and Ride facility. This new tool is now featured on GWRideConnect's website, devoting considerable attention to "Commuter Lots" including a regional map of their Park and Ride Lots and information on Virginia Railway Express (VRE) feeder bus service provided by Fredericksburg Regional Transit (FRED) from several of their Park and Ride Lots.

Indeed, GWRideConnect's active promotion of ridesharing and the region's Park and Ride facilities has stimulated demand to the point that they now utilize CMAQ funds to lease commuter parking spaces from commercial property owners in the area. GWRideConnect currently leases 105 spaces in South Stafford and Spotsylvania County to help augment commuter demand.

#### HRT - TRAFFIX

TRAFFIX initiated a study with an engineering firm to identify a logical approach to Park and Ride issues. The organization analyzed the locations of current Park and Rides lots in relation to where public transportation operates, as well as what they need to do to plan for future Park and Ride lots once dedicated funding is available.

#### Loudoun County Commuter Services (LCCS)

LCCS proposed and launched the idea of a Park and Ride Look-Up Map. TDM staff collaborated with the Office of Mapping and Geographic Information to fully execute the idea. The Look-Up Map allows citizens to put in their home address and see what Park and Ride lots are near their home, as well as any transit service leaving from the lot.

#### **Economic Benefits**

When commuters don't have to spend as much money on gas, they can use the money they save for other endeavors like saving for college tuitions, making home improvements, going out to dinner or simply buying essentials like food and clothing. According to the University of Michigan's Transportation Research Institute (UMTRI), fuel economy of new vehicles sold in the U.S. is now at an all-time high. UMTRI calculates the average fuel economy (window-sticker values) of cars, light trucks, vans and SUVs purchased in August of this year was 25.8 mpg, up 0.2 mpg from July. Vehicle fuel economy is now up 5.7 mpg from October 2007.

According to the Virginia Department of Motor Vehicles, the price of regular gasoline was expected to average \$3.39 per gallon in 2014, compared with \$3.56 per gallon in 2013. Yet AAA's Daily Fuel Gauge Report showed the actual average price for gasoline fell to \$3.13 per gallon in August well below the DMV's projections. So, while Virginia's TDM programs continued to help consumers save at gas pumps around the state and redirected money back into local economies throughout Virginia, several major transit and TDM projects also had major impacts, including:

#### Richmond BRT

While bus rapid transit (BRT) carries the promise of frequent, dependable public transportation, the development of Richmond's BRT system will also redirect a substantial amount of money back into the local economy of Richmond by:

- Increases property values by 12% or \$1.1 billion over 20 years
- Creates 406 jobs during design and construction
- New riders switching from driving to BRT will save \$816 per year in transportation costs

#### I-95 Express Lanes

In addition to improving the efficiency of the region's transportation infrastructure, the construction of the I-95 Express Lanes in Northern Virginia also has significant benefits for the local economy. "The project [has] benefited jobs and business opportunities, particularly for women- and minority-owned businesses as well as small businesses. Steel work was completed by a local disadvantaged business enterprise (DBE), Interlock Steelworkers, Inc., exemplifying the Commonwealth's commitment to providing business opportunities that support jobs and generate economic growth," said Governor Terry McAuliffe in a press release from his office.

McAuliffe continued, "the project has **infused more than \$127 million into the local economy** through DBE and small, women, and minority-owned businesses (SWaM). With nearly \$193 million committed to more than 131 DBE/SWaM firms so far, the Virginia Department of Transportation and its 95 Express Lanes partners, Transurban and Fluor, are slated to exceed their DBE/SWaM project goals of \$189 million."

While construction of the I-95 and I-495 Express Lanes clearly infused millions of dollars into the local economy, some preliminary research has revealed an alternative perspective to economic development via transit and TDM. *The Mobility-Productivity Paradox*, a study presented by Todd Litman of the Victoria Transport Policy Institute published in March of 2014, questions "the assumption that constraints on motor vehicle travel (traffic congestion, high fuel prices, road tolls, etc.) reduce economic productivity, and policies which increase vehicle travel (roadway expansions, low road user fees, etc.) increase productivity and support economic development." Instead, Litman argues, "in regions with high levels of mobility, a significant portion of vehicle travel is economically inefficient: vehicle travel that consumers would forego

if they had better options and more efficient pricing, which increases total transportation costs, including costs to businesses." In these instances, policies and programs that reduce vehicle travel can consequently increase productivity and support economic development. In other words, though the study is marked as being "preliminary" and based on "limited and imperfect data," Litman is arguing that increased investment in TDM and transit infrastructure (buses, rail, carpooling and vanpooling) is more beneficial to the local economy than increased investment in transportation infrastructure (roads). For example, SOV drivers that switch to commuter rail, commuter bus, or vanpooling services via their local ridesharing organization are no longer directly paying for an internationally-manufactured automobile filled with foreign-sourced gas. Instead, their funds are directed towards local operators of transit and TDM service providers, directly supporting the staff that facilitates these programs.

### **Shaping a state's or region's economic development story**

According to Moody's Analytics, the U.S. economy is projected to generate approximately 2.6 million jobs in 2014, up from 2.2 million in 2013, largely on the strength of the healthcare, energy and high-tech sectors. As state's grapple to attract investment, businesses are increasingly sensitive to the interests of Millennials who will constitute 40% of the workforce by 2020 and 75% by 2025.

Indeed, a study the Southeastern Institute of Research (SIR) conducted for Arlington County Economic Development from June 24 – July 8, 2013 was focused entirely on Young Professionals' perceptions and attitudes. 400 young professionals who either lived, worked, or both lived and worked in Arlington were interviewed through an online survey that generated an array of perceptions on what was important to them and made Arlington attractive. The most important attribute Arlington offered was access to jobs with easy to use public transportation in most respondents top five. Respondents who both live and work in Arlington rated easy public transportation and safety as Arlington's top performing attributes while respondents who only live in Arlington were most satisfied with easy public transportation (88%), safety (83%) and bikeability/walkability – not car dependent (79%). Even among the 124 survey respondents who only worked in Arlington, easy to use and access public transportation was the top rated attribute at 72%, followed by a variety of employment options at 69%.

Similar studies around the country have shown Millennials are driving less, using transit more, as well as living and working in areas with a transit-rich infrastructure. The transit projects highlighted below showcase the importance of a robust transit infrastructure in shaping Virginia's economic development story and ensuring the state remains competitive in the 21<sup>st</sup> century:

### Arlington Streetcar - Columbia Pike and Crystal City

Arlington's streetcar initiative, in addition to enhancing the connectivity of the region, will deliver up to \$3 billion more economic benefit than an enhanced bus service on the same corridor.

As Arlington and Fairfax press forward with the development of a new Columbia Pike transit corridor, a return on investment study from HR&A Advisors Inc. suggests a streetcar will benefit both jurisdictions far more than bus.

"We selected the streetcar because it will provide transit capacity for the County's long-term growth and sustainability, maintaining our **economic competitiveness** and helping to create the next chapter in our transit-oriented success story," Arlington Board Chair Jay Fisetta said in a statement.

The streetcar will increase the pace of development faster than bus, HR&A found, and it will spur a faster appreciation of existing real estate. It will, said HR&A senior analyst Kyle Vangel, "position Columbia Pike to be more competitive" and "ultimately help them capture more demand."

The project is expected to result in:

- \$3.2 billion to \$4.4 billion in net economic benefits (compared to \$1.0-1.4 billion for enhanced bus service)
- 4,600 more jobs within 10 years
- \$315 to \$620 million more tax revenue for Arlington County

### VRE - Potomac Shores Station

SunCal, one of the leading privately held real estate development companies in the United States, will invest \$20 million into a new VRE station at their newly-launched Potomac Shores suburban development. Groundbreaking took place on July 31, 2014, with Governor Terry McAuliffe and a host of federal, state and local officials in attendance. McAuliffe hailed the new Potomac Shores VRE station as a critical part of his administration's transportation agenda, as well as a great example of collaboration between the Commonwealth and private sector partners. Acknowledging the critical economic benefits of expanding Virginia's transit infrastructure, Governor McAuliffe observed, "**A robust, effective transportation system is key to ensuring that Virginia can compete in a 21<sup>st</sup> century economy.**" The station is expected to open in 2017.

# 97%

say transit and TDM should be a part of transportation plans throughout Virginia to ensure the success of businesses already located in Virginia

Source: 2014 DRPT Transit and TDM Industry Survey. 97% is the "top two" box score, on a 1-5 scale.

# 100%

say transit and TDM should be a part of "campaigns" and programs to attract businesses to Virginia

Source: 2014 DRPT Transit and TDM Industry Survey. 100% is the "top two" box score, on a 1-5 scale.

### Reston Station: Dulles Corridor's First Transit-Oriented Urban Center

Built through a public-private partnership between Fairfax County and Comstock Partners, Reston Station is transforming the Dulles area into a transit-oriented employment corridor at the center of Reston's urban core. The new Silver Line Metrorail service connects downtown Washington with Tysons Corner and the just-opened Wiehle-Reston East Station. The station rounds out the first phase of construction on the Silver Line, and will be the westernmost stop until 2018, when the second phase of construction will bring the metro to Dulles and Loudoun County.

- The Wiehle-Reston East Station opened on July 26, 2014.
- On the first weekday of rush-hour service, ridership at the station ranked 12<sup>th</sup> in the entire Metrorail system.
- The new facility features over 3,500 parking spaces and a full-service bus depot, making it the largest underground garage on the East Coast.
- The new Metro station also boasts a bus facility, where buses come from surrounding neighborhoods to feed the Metrorail stop. Typically, 50 to 60 buses an hour run through the station's underground transit loop from Prince William, Fairfax and Loudoun counties.
- The station also has a large indoor bike storage facility, and is regularly served by a wide variety of limousine and cab companies.

The promising early ridership numbers support labeling of Reston Station as the Dulles Corridor's first transit-oriented urban center, and the new urban core of Reston. The station is a leading example of mixed-use development, with residential, retail and office space, as well as a hotel, concert and event venues, and numerous public art installations.

Once fully developed, Reston Station will include approximately 1.5 million square feet of mixed use, transit-oriented development located directly above the Wiehle-Reston East Metro Station. Once fully developed, Reston Station will include millions of square feet of office, residential and hotel development located above and around the Metro station facilities emerging in the Dulles Corridor.

### Loudoun Station: Metro's Silver Line Terminus in 2018

Loudoun County's only transit-oriented development, Loudoun Station, is located at what will be the terminus of Metro's Silver Line extension, adjacent to Dulles International Airport. When completed, Loudoun Station will include more than 3 million square feet of mixed use TOD next to the Loudoun Station-Route 772 Metro facility. Centrally located in the most affluent and fastest growing county in Virginia, Loudoun Station will feature 300,000 square feet of retail in a mixed-use urban setting. Currently, 70,000 square feet of retail has been delivered with 357 luxury apartments above. The 70,000 square feet of restaurant and retail spaces and an 11-screen Starplex Cinemas are opening in 2014.

Once Silver Line construction is completed, Loudoun Station will provide quick access to Metrorail and a speedy commute through the Dulles Corridor to Washington Dulles International Airport, Reston, Tysons Corner and downtown Washington, D.C. The community offers ample parking, an on-site bus transit facility, and immediate pedestrian access to the Metro station.

Planned for 1.3 million square feet of Class A office space, Loudoun Station offers unbeatable advantages to businesses seeking a Metro location, prime visibility and optimum convenience. The mixed-use community combines distinctive architecture and urban parks with easy access to public transportation, Dulles International Airport and numerous amenities.

This remarkable office environment also provides opportunities for high-profile visibility and signage along the well-traveled Dulles Greenway, and within one of the nation's most prominent business communities. Corporate neighbors include Raytheon, Booz Allen Hamilton, Cisco Systems, AOL, Verizon and Microsoft. Loudoun Station's tenant-friendly location features a central green and plazas that create an engaging daytime and nighttime atmosphere within this live-work-play setting.

While Phase II of the Silver Line construction will not bring Metrorail service to Loudoun Station until 2018, the developer is remaining true to their commitment to TOD. The company is already operating feeder bus service from Loudoun Station to the recently opened Wiehle-Reston East Station. Comstock built a large commuter parking lot adjacent to their Loudoun Station development to serve as a staging area for residents who wanted express bus service from Loudoun Station to the newly opened Wiehle-Reston East station. This express bus service was launched on the first day of the Silver Line's operation to Reston.

97%

say transit and TDM should be important in Virginia's future economic growth.

Source: 2014 DRPT Transit and TDM Industry Survey. 97% is the "top two" box score, on a 1-5 scale.



## V. Challenges and Opportunities to Fuel Momentum

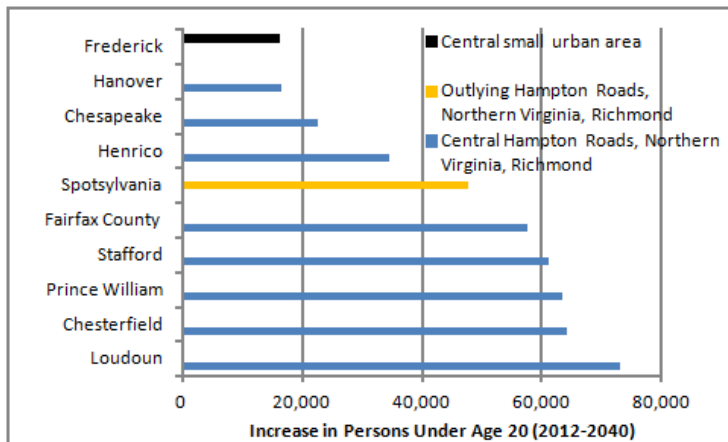
### More Marketing

America is undergoing a seismic age shift. Moreover, the emerging attitudes and preferences of Millennials, Gen Xers and Baby Boomers on where they live, work and play are transforming the traditional economic development model. Forward-thinking communities are shifting their focus from courting large Fortune 500 companies to supporting community-minded placemaking initiatives and homegrown business enterprises.

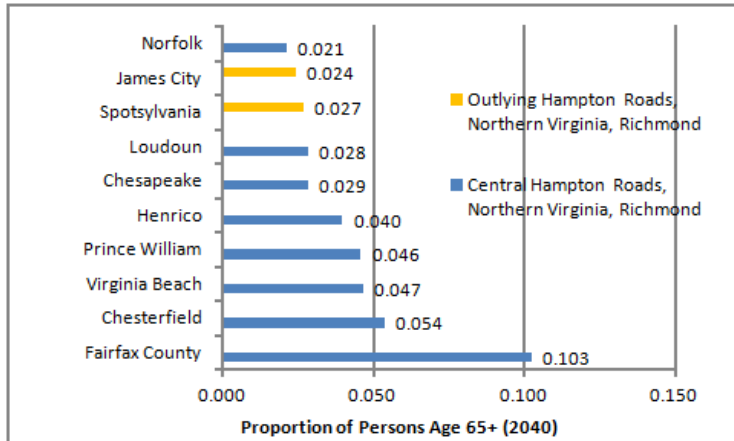
This new economic development model is based on the premise that if you build a great place where people want to be, companies will follow. It's a natural consequence of America's shift from an older industrial, manufacturing-based economy to a more diversified economy that values creativity, entrepreneurship and innovation. The communities that have embraced this new perspective – Austin, Portland, Denver and Asheville – are cultivating an advantage in regional-level economic development appeal with the aid of transit.

Why is this important? With the coming age shift, there will be relatively fewer young people available in America's core worker segment – the 25-54 age range. In the future, a community's ability to successfully attract and retain both Millennials and entrepreneurial Baby Boomers will separate winning and losing communities.

Millennials are gravitating to downtowns and activity centers preferring a car-free, 15-minute community lifestyle. Aging Boomers, meanwhile, are retiring in greater numbers. They're examining their new lifestyle options, and they increasingly prefer getting around without having to rely solely on driving. The following two charts illustrate this shift towards urban areas:



Source: Virginia Office of Intermodal Planning and Investment, 2014



Source: Virginia Office of Intermodal Planning and Investment, 2014

According to a 2014 report from the Virginia Office of Intermodal Planning and Investment, Millennials drove less in 2009 than individuals of the same age in 2001, and current annual vehicle miles travelled are less than those officially projected by both the US Department of Transportation and the US Energy Information Administration. According to report, this clearly suggests evidence that Millennials’ housing and transport preferences differ from those of earlier generations (e.g., the authors cite a survey indicating that 44% of persons age 18-34 actively sought to replace driving with another mode of transportation, compared with a figure of 33% for persons age “35 to 44” and a figure of 26% for persons age 55+.)

Consequently, in the future, transit will become a major economic development tool. And perhaps it already is; Denver, Portland, Salt Lake City, and other “hot” communities are already offering state-of-the-art transit services in their downtown areas for free.

### Better Impact Measuring

The power of impact measuring cannot be understated when it comes to determining a transportation system’s true impact. By properly measuring and quantifying a program’s ability to move SOV drivers off the road, a system’s return-on-investment can be gauged and compared.

DRPT in partnership with the transit agencies have created performance measures for transit service. These performance measures will be used by DRPT in their allocation of a portion of the operating assistance grant funding to transit agencies. Also created are data collection standards that the transit agencies will use to collect and report ridership and other operational data.

Measuring results and performance is important for all aspects of transportation. For example, the following figures empirically showcase the approximate impact of Virginia’s vanpool programs.

- There are approximately 1,000 vanpools in operation throughout the Virginia, primarily in Northern Virginia, Fredericksburg, Richmond and the Hampton Roads area.
- The typical commuter vanpool transports about ten people (they range in size from 7 to 15-passenger vehicles) to and from work every day.
- Approximately 10,000 people in Virginia commute to and from work every day in vanpools removing about 9,000 vehicles from our roads daily.
- On average, a typical vanpool travels nearly 80 miles per day roundtrip.
- $1,000 \text{ vanpools} \times 80 \text{ daily round trip miles (DRTMs)} = 80,000 \text{ miles per day} \times 252 \text{ working days/year} = 20,160,000 \text{ miles per year}$
- $9,000 \text{ vehicles removed from Virginia's roadways daily} \times 80 \text{ DRTMs (the vast majority would have driven in their single occupant vehicle)} = 720,000 \text{ miles of vehicle travel/day eliminated} \times 252 \text{ working days} = 181,440,000 \text{ vehicle miles of travel eliminated per year from vanpooling!}$
- Vanpooling compliments transit and helps extend a transit programs "reach" serving routes without the critical mass to cost effectively support traditional bus service
- Vanpooling is considered "qualified transit" by the Federal Transit Administration and transit programs in the state (including GRTC, HRT and PRTC) that partner with vanpool operators collect and remit their operating data to the National Transit Database (NTD) for additional FTA funding consideration.
- A typical vanpool traveling about 80 DRTMs generates about \$12,000/year in additional 5307 funding allocation.
- While the vast majority of vanpools in Virginia are privately operated and cost the state nothing, approximately 600 vanpool groups are currently participating in NTD reporting relationships with GRTC, HRT and PRTC generating additional 5307 Formula allocation.

Two TDM agencies among the State's programs, Arlington County Commuter Services (ACCS) and Richmond's RideFinders, conducted detailed program assessments that carefully measured a much broader range of program elements and resulting impacts in FY 2013. These two TDM agencies quantified in great detail the impact they have on their respective communities in terms of reducing trips and vehicle miles traveled, energy consumption and reductions of vehicle emissions that impact air quality. It should be noted that in the case of ACCS, which has a mature transit infrastructure and is part of a major metropolitan region, the detailed program assessment yielded exceptionally impressive results. RideFinders is perhaps a more typical TDM program.

In FY 2014, ACCS conducted a detailed program impact assessment, and once again their advocacy for using alternatives to single occupant vehicle travel, coupled with an expanding transit infrastructure, yielded impressive results. While RideFinders did not conduct a similarly detailed program assessment in FY 2014, they are still able to report impactful reductions of vehicle miles traveled in central Virginia using data on newly formed carpools and vanpools. Details on the impact these two TDM programs had in FY 2014 include:

- In FY 2014, ACCS made it easier for people to switch from driving alone to taking transit, walking, biking, carpooling and vanpooling. ACCS reduced traffic in Arlington County by about 41,146 vehicle trips during an average workday in FY 2014. Eliminating 41,146 vehicle trips resulted in the reduction of over 755,703 vehicle miles traveled (VMT) each business day, or almost 189 million VMTs in FY 2014!
- RideFinders offers a myriad of services to support and advance carpooling, vanpooling, transit use, teleworking, walking and biking. In 2013, RideFinders completed a comprehensive program evaluation to quantify the agency's impact on the Richmond region. The 2013 study profiled RideFinders' significant impact as their TDM programs removed over 5,000 vehicle trips from the Richmond region's roadways every day. This amounts to approximately 125,000 vehicle miles reduced daily, or nearly 34 million vehicle miles traveled in FY 2013. Continuing their efforts in FY 2014, RideFinders reported the creation of 17 new vanpools, which removed 122 vehicles from Virginia's roads. These vanpools helped eliminate 3,306 vehicle miles of travel daily or approximately 829,806 vehicle miles of travel reduced annually.

#### More Funding

Virginia's population is slated to grow from 8 million to over 10 million by 2030. With that growth comes significant transportation needs, and the state's transit industry plans to help meet those needs. In addition to improving core capacity and creating new connections, planned capital-funded initiatives will maximize the capacity of the system during peak periods and improve the service, speed and reliability of transit in priority corridors.

Yet while the promise of expanded transit service is exciting, there's some dark clouds looming on the horizon. The anticipated revenue from Virginia's 2013 transportation law will now be radically reduced because it was tied to the Federal Marketplace Fairness Act (Internet Tax) that has failed to pass Congress.

Virginia's transit industry is headed for a potentially disastrous capital fiscal cliff. In 2018, 60 percent of the Virginia transit industry's annual capital funding for equipment and stations is set to expire. Operating a 21<sup>st</sup> century transit system with antiquated equipment will lose choice riders, at best. At worst, it will slow down the industry's transformation, negatively impacting Virginia's reputation as a one of the best places to live, work and play.

Continuing and even increasing investment in our state's transit system will keep us moving ahead. Most importantly, it will create jobs. According to APTA, \$1 billion in spending on transit capital supports 16,000 jobs.

## **VI. Planning for the Future**

DRPT continues to plan for transit, rail and TDM services to better serve Virginia. Planning is conducted in partnership with transit agencies, TDM agencies, VDOT, railroad companies and regional and local planning organizations.

Planning initiatives that were conducted in FY2014 are:

### **Statewide Transit and Transportation Demand Management Plan**

This plan was finalized in January 2014 and as developed in coordination with transit and TDM operators and other Commonwealth transportation agencies. Information was also received from major public transportation stakeholders including MPOs, PDCs, and other organizations. The content and recommendations of this plan will serve as transit and TDM input into the Commonwealth's Surface Transportation Plan, which supports VTrans2035. This plan provides guidance and direction for transit and TDM development in Virginia by addressing:

- Existing public transportation conditions in the Commonwealth
- Guidelines for transit and TDM levels of service that recognize the broad range of area-types within which transit and TDM services must be provided
- A blueprint for addressing needs for the future, with a focus on supporting the Commonwealth's key investment priorities within a changing population dynamic and on ensuring the transit systems achieve and maintain a "state of good repair"
- Recommendations to the Surface Transportation Plan
- Guidance on fiscal requirements and strategies to maximize Virginia's investment in public transportation.

### **Virginia Statewide Rail Plan and Rail Resource Allocation Plan**

The comprehensive rail plan and companion resource allocation Plan were finalized in FY2014. The plans provide a defined vision for passenger and freight rail transportation in Virginia through 2040. It profiles the Commonwealth's current rail assets, services, and capacity chokepoints, identifies needed improvement projects, and establishes funding sources, funding needs, and phasing for rail projects. Projects were identified using public and stakeholder input, and extensive evaluation of future population and employment trends, land use, and travel demand. The Virginia Statewide Rail Plan is part of a multi-modal, interagency transportation planning effort that is guided by VTrans, Virginia's statewide long-range multimodal policy plan that establishes the vision, goals and investment priorities for the Commonwealth's transportation systems.

### **Multimodal System Design Guidelines**

The guidelines were finalized in October 2013. The Multimodal System Design Guidelines provide a holistic framework for multimodal planning with a step-by-step process of identifying centers of activity, designating connected networks for all travel modes, and designing and

retrofitting specific corridors that fit with the surrounding context. This process can be applied to the full range of contexts throughout Virginia to plan connected regional transportation networks to serve all travel modes. In January 2014, VDOT incorporated the guidelines into the Road Design Manual which will allow for a streamlined approach to integrating multimodal facilities into existing right of way. The New River Valley Metropolitan Planning Organization (MPO) has also incorporated the guidelines into their Bicycle and Pedestrian Master Plan, and Fairfax County has implementing the guidelines.

### **Washington, D.C. to Richmond High Speed Rail**

The hiring process for contractors for this project began in FY2014 and the contract was awarded and finalized in FY2015. This project will complete an environmental review and preliminary engineering for intercity passenger rail improvements in the Southeast High Speed Rail I-95 corridor from south of Richmond to the Potomac River.

### **Transportation Demand Management (TDM) Plan Guidelines**

DRPT completed the development of guidelines outlining how the TDM agencies should develop and update their six-year TDM Plans. TDM Plans are used by TDM agencies to implement their TDM programs and funding applications to DRPT. The plans tie funding for TDM programs to a detailed plan.

### **Transit Development Plans**

All transit agencies are required to create a Transit Development Plan that agencies follow for implementing effective and efficient transit service, including capital and funding needs. In FY2014 TDPs were developed by Altavista Transit, District III Transit, STAR Transit, City of Suffolk and Radford Transit.

### **Route 1 Multimodal Alternative Analysis**

This study focuses on a 14-mile stretch of Richmond Highway from the I-96/495 Beltway through Fairfax County to Route 123 at Woodbridge in Prince William County. The Alternatives Analysis builds on previous work such as the VDOT Centerline Study and the DRPT SJR 292 Report as well as the Fairfax County and Prince William County Comprehensive Plans. The analysis will define key transportation issues for local and through travelers, and consider a range of transportation solutions to address these issues and future travel needs. Solutions for consideration will include a combination of transit, roadway and pedestrian and bicycle improvements and consider future land use and development on the corridor. Through stakeholder participation, public input and technical analysis, the study will result in a recommended program of transportation improvements and a Locally Preferred Alternative for transit. During FY2014, two public meetings were held to obtain input from the public. DRPT is partnering with VDOT, the Office of Intermodal Planning and Investment, Fairfax County and

Prince William County to oversee and direct management of this project. The project will be concluded in November.

## **VII. Awards and Commendations**

Many of Virginia's transit and TDM agencies and the men and women that work at these agencies are being recognized from state and national transportation organizations for their great work and success. This recognition exemplifies the good service and hard work of Virginia's transportation agencies and the people that work there.

### White House Honors "Champions of Change" for Transportation

Josh Baker is the General Manager of Radford Transit, a partnership between the City of Radford and Radford University. Josh is also the Transportation Coordinator for New River Valley Community Services and a long serving member of the board of directors of the Community Transportation Association of Virginia (CTAV). On May 13<sup>th</sup>, Josh was recognized at the White House as a "Champion of Change" for his leadership in transportation. Created as an opportunity for the White House to feature individuals doing extraordinary acts to empower and inspire members of their communities, Josh was honored by Secretary of Transportation Anthony Foxx as the leader of a major investment in the development of a brand new Public Transit system in the City of Radford. Josh pioneered the concept and worked with community leaders, local university administration, state officials and the Federal Transit Administration to garner support for this much needed community service. Josh dedicated his work and time over the course of three years to help make the new service a reality. It's the first time in over 30 years there has been any transit available to the City of Radford and Radford University, and it was badly needed. Radford Transit has grown rapidly providing over 325,000 passenger trips annually, even providing transfer connections throughout the entire region. Now residents can move effortlessly and reach their destinations within and between the communities of Radford, Pulaski County, Montgomery County and the Towns of Blacksburg and Christiansburg.

### The Association for Commuter Transportation (ACT) International Conference Award Winners

RideFinders, a division of GRTC, was recognized as the nation's Outstanding TMA in 2014 by the Association for Commuter Transportation (ACT) Conference. ACT is an international trade association and leading advocate for commuter transportation and transportation demand management. This award goes to the transportation management association (TMA) that is deemed to have best used its public/private partnerships to achieve local and regional transportation goals. RideFinders is the commuter assistance program serving the Richmond region and provides commute assistance and transportation demand management services to residents, employees, employers and visitors. The program offers a variety of transportation demand management (TDM) services designed to reduce reliance on single-occupant vehicles. RideFinders winning project quantified the travel and environmental impacts in the Richmond region and documented the overall impacts of RideFinders' TDM program.

The effort was part of a phased project with Southeastern Institute of Research and LDA Consulting. RideFinders used performance effects of major program touchpoints (website, Emergency Ride Home program, carpool and vanpool matching, and the Commuter Store) from its fiscal year 2012 evaluation to update the impact data. During fiscal year 2013, two additional services were added: commuter express and fixed route bus. Travel surveys were conducted with riders who used each service to provide the necessary data for estimated effects. RideFinders launched a marketing and public relations campaign to spread awareness throughout the region, including partnering with area television stations.

The results were impressive. RideFinders helped more than 11,400 people find convenient and sustainable work transportation, directly eliminated more than 34 million VMTs, removed about 5,700 vehicle trips per day from area highways, eliminated 34 million pounds of greenhouse gases, and helped save 1.9 million gallons of gasoline.

#### 2014 Virginia Transit Association Annual Conference Award Winners

The Virginia Transit Association (VTA) is a coalition of transit professionals from public and private transit organizations. Each year VTA hold a conference to provide information on the latest federal and state rules and legislation affecting transit, and provide a forum for peer exchange of information. VTA also present awards for outstanding service. These are the award winners from the 2014 conference.

Hampton Roads Transit (HRT): Outstanding Program Award: HRT developed and implemented a performance and improvement program, called TransitStat, in July 2013 to provide HRT with a new process for monitoring and improving current programs within the agency by frequently reviewing, analyzing, and monitoring key performance data. HRT created a panel, composed of a cross-section of their executive management team, to lead monthly presentation forums and work with departments to identify areas for cost-savings and performance improvement. The new TransitStat program at HRT is proving to be a powerful tool that is encouraging HRT employees across the agency to engage in creative problem solving and make data-driven decisions to deliver quality services while controlling costs.

HRT also received an honorable mention for VTA's Outstanding Public Transportation Marketing Award for creating a multi-media campaign designed to attract the attention of the millennial generation (28 and younger). This animated series of ads contrasted Ned, stuck in the old habit of driving his own car to work and other activities, and Jill, using the convenience of various transit options while shopping or commuting to work. The "Ned and Jill" campaign ran for 8 weeks and reached 92% of the Hampton Roads region generating a marked increase in call volume, web visits, and ridership.

JAUNT: Executive Director Donna Shaunesey received two awards at the 2014 VTA Annual Conference. These included the "Unsung Hero Award" for her work with the Transit Service Delivery Advisory Committee, and the "Helen Poore Transit Professional Distinguished Service Award" recognizing transit professionals who have made outstanding contributions to advance transit in their region and who have been actively involved in VTA. Ms. Shaunesey will be



retiring from her long and distinguished transit careers in the winter of 2015. She also received an award from the Community Transportation Association of Virginia (CTAV) for her years of service to that group.

Greater Richmond Transit Company (GRTC): Outstanding Public Transportation Marketing Award (Large System): GRTC's "Get Ready to Connect" campaign was developed to appeal to a younger audience and encompasses a variety of new real-time bus information tools such as GRTC's new and improved Trip Planner, Bus Tracker, the Official GRTC Mobile App, and a completely updated website. Beyond the real-time technology tools, the campaign featured riders sharing the ride and connecting with one another while visiting popular Richmond destinations such as restaurants, theaters, museums, sporting events, shopping, and other destinations along GRTC bus routes. The campaign used actual GRTC riders.

GRTC's retired General Manager, Eldridge Coles, was also recognized, receiving the "Helen Poore Transit Professional Distinguished Service Award" recognizing transit professionals who have made outstanding contributions to advance transit in their region and who have been actively involved in VTA.

GRTC was also recognized by the Richmond Chapter of the Public Relations Society of America, receiving three "Commonwealth Awards of Merit" in the Integrated Communications, Community Relations and Publications categories.

Arlington Transit (ART): Outstanding Public Transportation Marketing Award (Small System): Arlington Transit's "ARTists for PAL" bus design contest asked Arlington County middle and high school students to create a bus wrap design using the theme of "Share Our Streets – Be a PAL," Arlington's biking, walking and driving safety initiative. The winning design by an eighth grade student was used to wrap an ART bus that travels around the County reminding people to "Be a PAL." The contest brought public attention to the ART bus system and to the "Be a PAL" safety campaign while also educating area students about transit in Arlington County. PAL stands for "Predictable, Alert, Lawful" and targets bikers, walkers and drivers encouraging them to travel safely by being predictable, alert and mindful of obeying traffic laws.

Blacksburg Transit: Retired Director Rebecca Martin received the "Helen Poore Transit Professional Distinguished Service Award" recognizing transit professionals who have made outstanding contributions to advance transit in their region and who have been actively involved in VTA.

Loudoun County Transit: Retired Director Nancy Gourley received the "Helen Poore Transit Professional Distinguished Service Award" recognizing transit professionals who have made outstanding contributions to advance transit in their region and who have been actively involved in VTA.

Bay Transit: Ken Pollock, Transit Director, was given a service award for his work on the Transit Service Delivery Advisory Committee.

### Metropolitan Washington Council of Governments 2014 Employer Awards

Potomac and Rappahannock Transportation Commission (PRTC) received the Employer Services Sales Team Achievement Award for their TDM program outreach efforts with employers and their employees.

Virginia Megaprojects VDOT and DRPT received the Employer Services Organizational Achievement Award for their work establishing and managing an Employer Services Team that worked with businesses and their employees in Tysons Corner and along the 495 Express Lanes project area to get more employees out of their cars and into vanpools, carpools, transit and teleworking. The goal of the Employer Services Team was to reduce the number of auto trips traveling through the construction zones of the Dulles Metrorail Extension and 495 Express Lanes projects.

## **VIII. Appendix**

Reports on FY2014 initiatives from transit and TDM agencies across Virginia that were provided as input to this report are available on DRPT's website, [www.drpt.virginia.gov](http://www.drpt.virginia.gov).