

**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. 292**

**COMMONWEALTH OF VIRGINIA  
RICHMOND  
2011**



# COMMONWEALTH of VIRGINIA

Office of the Governor

Sean T. Connaughton  
Secretary of Transportation

November 1, 2011

The Honorable Robert F. McDonnell, Governor  
Patrick Henry Building, 3rd Floor  
1111 East Broad Street  
Richmond, Virginia 23219

The Honorable Yvonne B. Miller  
Chairman, Senate Transportation Committee  
General Assembly Building, Room 315  
Richmond, Virginia 23219

The Honorable Joe T. May  
Chairman, House Transportation Committee  
General Assembly Building, Room 504  
Richmond, Virginia 23219

Dear Governor McDonnell, Senator Miller, and Delegate May:

Attached for your review is the second annual "How Virginia is Using Transit and Transportation Demand Management Programs to Address Highway Congestion and Single Occupant Vehicle (SOV) Travel" report as requested by the 2010 General Assembly session in Senate Bill 553. This report is provided by the Secretary of Transportation, and responds to the General Assembly's direction to:

- i. 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 blue ink, appearing to read "Sean T. Connaughton".

Sean T. Connaughton

Report to the Virginia General Assembly

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

## Executive Summary

In 2010, the General Assembly requested an annual report regarding efforts undertaken in the Commonwealth to reduce single occupant vehicle (SOV) travel. This report is the second annual report, developed pursuant to § 33.1-223.2:24 of the Code of Virginia.

Virginia's transit and transportation demand management (TDM) community is comprised of a unique mix of public and private partners who work together in well-defined roles to accomplish a joint mission: to reduce SOV travel and peak time congestion. Because one strategy cannot change commuting behavior, Virginia's transit and TDM community has taken a holistic approach that includes a mix of strategies working together to encourage commuters to stop driving alone and try one of the multitude of transit and TDM options available in Virginia. These options include bus and rail service, carpool and vanpool options, and telework.

Over the years, the Virginia Department of Rail and Public Transportation (DRPT) has worked with the transit and TDM community to refine and focus efforts to reduce SOV travel into strategic categories. The 2010 report first identified the top 10 strategies to reduce SOV travel, and this year's report builds on those strategies to provide further examples of how these strategies are working to reduce congestion on Virginia's highways.

Understanding the customer's needs is a critical first step to reducing SOV travel. By seeking customer feedback, Virginia transportation planners have been able to develop systems and services that address end-user needs to ensure those options prove successful.

Another key strategy has been to maintain and build upon Virginia's existing transit and TDM infrastructure. Virginia's investment in the "hardware" – vehicles and infrastructure – and the "software" – programs to inform and encourage system use – of transit and TDM allows individuals to experience more reliable transit service that also provides a convenient transportation option.

Virginia has taken steps to maximize the efficiency of its existing infrastructure. Embracing a multimodal approach has helped Virginia take steps towards a fully integrated and connected network of transportation options that will provide greater mobility than developing mega systems in a vacuum. At the same time, with the anticipated increase in population, Virginia is expanding and building new transit capacity. Because the existing transit and TDM system cannot sustain the anticipated increase in demand for transportation choices, Virginia has introduced new services into the transportation network and continues to evaluate potential service expansions in the future.

Virginia is working to provide new, innovative service delivery to capitalize on the advancement in technology and provide real-time information to commuters to make use of Virginia's transportation network as easy as possible.

Building awareness of the transportation options is a key component to changing behavior, and the transit and TDM community has dedicated resources to providing educational campaigns, promotional events and persuasive tactics to encourage Virginians to change the way they commute. In addition to building awareness of commuting options, Virginia is working to help commuters avoid travel all together through telework programs and incentives.

The transit and TDM community has worked to build stakeholder and employer awareness and support for transit and TDM services. Even commuters who do not take advantage of Virginia's transportation options benefit from these programs through reduced congestion. Employers understand that traffic congestion can lead to absenteeism, lost productivity, and higher recruitment and retention costs. By working to increase stakeholder and employer support and awareness of transportation choices, Virginia has built a base of appreciation and use of its robust transportation network.

Finally, as Virginia implements the aforementioned strategies, work continues to maximize existing funding levels and increase available funding to support transit and TDM services. Long-range strategic planning at the local, regional and state level has helped Virginia better plan for and invest in transportation options. At the same time, DRPT continues to evaluate current funding methodologies to determine a more efficient approach to maximize state investments.

There is no question that Virginia's top 10 strategies to reduce SOV travel have led to congestion reduction. Statewide ridership on transit systems in Virginia is up eight percent in May 2011 compared to May 2010, with many operators reporting a 10 percent increase during the same time period. State-supported Amtrak Virginia services continue to exceed monthly ridership goals; the Lynchburg Amtrak Virginia service saw a 30 percent increase in ridership in July 2011 compared to the same month last year. Approximately \$1.3 billion is generated annually as a result of savings in household transportation costs, which can be re-invested into the economy. Since 2008, Virginia has achieved a decrease in drive alone work trips from 70 percent to 64 percent, and other transportation options, such as transit and carpool/vanpool services, have seen an increase in participation from 30 percent to 36 percent. Virginia's efforts to promote the use of telework as a commuting strategy are paying dividends. In Northern Virginia, the Commonwealth's most congested region, telework continues to increase, doubling since 2001 from 13 percent to 27 percent.

Over the next twenty years, the Commonwealth will experience dynamic demographic and social trends that will increase the demand for transportation choices. Virginia's population is expected to grow by 36 percent, a rate faster than the United States as a whole. Further, Virginia's population over the age of 65 will double by 2035, while we also welcome the Millennial generation to the workforce, a generation raised on technology. This younger generation is expected to want improved transportation choices, with the ability to live, work, and play within a short walk or transit trip of these activities.

In order for the Commonwealth to meet the future transportation demands, the entire transit and TDM community will be required to continue knowledge sharing across the transportation industry, continue education and build awareness of multimodal transportation options, inspire regional planning to integrate land-use decisions and transportation investment, deliver a quality transit service to existing and new riders, offer more employer incentives to encourage commuter benefit offerings, emphasize the impact transportation choices can have on economic development, and build investment in telework as the most cost effective strategy to reduce congestion.

DRPT and the transit and TDM community have made great progress to reduce SOV travel and peak time congestion. As the demand for transportation choices increases, we will continue to work together to deliver a connected, robust and varied transportation network, and will continue to advance the 10 key strategies to change commuting behavior to reduce congestion on Virginia's highways.

## I. Introduction

This report was prepared pursuant to § 33.1-223.2:24 of the Code of Virginia, which, as stated below, 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 second annual report and builds upon the results asserted in the 2010 report. This report begins with a brief overview of Virginia’s transit and transportation demand management (TDM) operational infrastructure – who’s involved, what they do, and how they do it – followed by a discussion of strategies undertaken in 2011 to reduce single occupant vehicle (SOV) travel. In addition, this document presents an overview of the trends that will affect the future of Virginia’s transportation system and ways that Virginia’s transit and TDM community are planning to address and leverage these trends.

This report was developed in coordination with transit and commuter services agencies, and major public transportation stakeholders, including regional Metropolitan Planning Organizations (MPOs), regional Planning District Commissions (PDCs) and other organizations. Additional information is available on VDOT’s, DRPT’s and Telework!VA’s websites.

## II. Overview of Virginia’s Transit and TDM Community

One of the Secretariat of Transportation’s primary goals is to ensure that the Commonwealth has a safe and efficient multimodal transportation system that supports economic growth and prosperity. The Commonwealth’s transportation system’s efficiency is realized by moving more people in fewer vehicles, moving travelers out of peak travel periods, or, in the case of teleworking, eliminating travel altogether. These efficiency-oriented results are achieved through the use of transportation choices, including transit, carpooling, vanpooling, walking, biking and teleworking.

### **Virginia’s Partnership Approach – Virginia’s Transit and TDM Community**

In Virginia, increasing the use of transit and other options is orchestrated through a unique partnership of state, regional, local agencies and private companies. Key members include:

- Department of Rail and Public Transportation (DRPT)
- Virginia Department of Transportation (VDOT)
- Office of Intermodal Planning and Investment
- Planning District Commissions (PDCs)
- Metropolitan Planning Organizations (MPOs)
- Transportation Management Associations (TMAs)

- 62 transit agencies
- 18 Transportation Demand Management (TDM) agencies or local Commuter Services programs
- Network of private companies such as VPSI (national vanpool company) and NuRide (national ridematching service) through employers that use incentives
- 174 private sector businesses participating in DRPT’s Telework!VA program.

The emphasis of this report is DRPT’s and the transit and TDM community’s efforts to increase usage of transportation options among the segment of the population that has the ability and means to choose between multiple modes of travel – known as “choice riders.” In 2011, “choice riders” are using transit in greater numbers as evidenced by higher than expected ridership from transit agencies throughout the Commonwealth. Most notably, the *Tide*, Norfolk’s light rail line, has attracted nearly double its projected daily ridership since opening day; the Virginia Railway Express has seen record numbers of riders, with a system-wide average of around 20,000 passengers per day; and ridership on Amtrak Virginia services continue to trend above monthly goals.

Virginia’s transit and TDM community works as equal partners and assumes well-defined roles to accomplish their common mission – increasing the use of transportation options. As part of its core mission, DRPT provides technical and financial support to local transit and commuter service agencies through annual grant programs, consumer research, training and marketing assistance. In turn, local transit and commuter services agencies, with DRPT’s technical and financial support, implement programs at the regional and local level. Implementation is guided and supported by regional PDCs and MPOs, as well as private sector companies.

As transportation patterns shift over time, Virginia’s transit and TDM community has expanded to support a host of commuter needs, such as establishing new transit services in emerging activity centers and enhancing employer support services and telework support programs. Today, Virginia’s transit and TDM community addresses some of our most complex traffic-related challenges, such as congestion chokepoints and highway construction-related congestion mitigation.

This document highlights performance outcomes as to how this network of organizations decreases total vehicle miles traveled (VMT) and reduces pollution. By increasing the use of transportation choices, Virginia’s transit and TDM community has enabled the Commonwealth to continuously improve the efficiency of our overall transportation system.

<p><b>III. Virginia’s Transit and TDM Community’s Multifaceted Approach, Related Strategies and Highlights of Most Recent Initiatives</b></p>
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No one single mode of transportation can resolve congestion on the highways. Similarly, no single program can effectively advance and stimulate the use of other transportation options for all Virginians. A holistic approach, offering a comprehensive array of services and support programs has proven the best way to motivate drive-alone commuters to try various forms of transportation. In the 2010 report, DRPT asserted 10 strategic imperatives, or strategies, that make up Virginia’s transit and TDM community’s coordinated, multi-disciplined approach. Over the past year, DRPT has continued to advance those 10 strategies in order to more fully develop each approach to realize greater modal shift.

In this section, a brief description of each strategy is presented, followed by highlights of supporting initiatives that have been launched by the Commonwealth, local governments and regional transportation

authorities. It should be noted that the reported “examples of recent initiatives” represent a sample of all of the actions conducted by the 18 TDM agencies, 62 transit agencies, and various PDCs and MPOs in preparation of this report.

### **Strategy #1: Understand and Focus on Customer Needs**

Fundamentally, people must need and want travel options other than single occupant vehicle travel in order for those options to prove successful. The demand for travel options is growing throughout the Commonwealth, but the challenge to providing travel options is ensuring that those options are readily available and accessible, that people know about and are encouraged to try them, and that more people ultimately use them on a regular basis.

For over four decades, Virginia has held a customer-centric focus that has been developed and informed by a comprehensive marketing research program conducted by VDOT, DRPT and other community partners. Most of this research is inventoried on the Virginia Transportation Marketing Research Database, which is located within VDOT’s website – <http://www.vdot.virginia.gov/info/researchdatabase/index.asp>. Transit and TDM operators in Virginia are also employing methods to assure their services are meeting the end users’ needs.

#### *Examples of Recent Initiatives:*

- The Metropolitan Washington Council of Governments (MWCOC) completes a State of the Commute Survey every three years for the Commuter Connections network that collects extensive data from thousands of responses to questions on travel behavior and attitudes towards travel options. While this report is focused on the Northern Virginia region, DRPT augments this report by conducting a statewide State of the Commute Survey for the remaining regions in the Commonwealth. The resulting report provides an accurate picture of commuting patterns and motivations in Virginia. MWCOC has completed work on the most recent update to this report and DRPT’s efforts continue.
- VDOT, as part of its “I-66 Inside the Beltway” multimodal study, is surveying the general public about the perceptions of traveling in the I-66 corridor and soliciting feedback on potential transportation enhancements.
- VDOT, in collaboration with DRPT and the Richmond Regional Planning District Commission, is surveying Route 5 corridor residents and commuters about their preferences for bus service and the location of park-and-ride lots along the corridor.
- The Dulles Area Transportation Association (DATA) is conducting a survey of almost 4,000 employees at 15 businesses and airport operations, including the Transportation Security Administration (TSA). The employee commute survey will provide important baseline information for DATA and participating businesses on the current commuting patterns and transportation needs of airport employees. This information will be used to develop individualized strategies for the businesses to improve transportation services for their employees in the future, with a particular focus on lower wage and underserved employee populations.
- Greater Richmond Transit Company (GRTC), in partnership with DRPT, is undertaking the Broad Street Rapid Transit Study to increase overall mobility along this busy corridor, and is working with riders, businesses and the general public to gain feedback on the project.
- The Fredericksburg Area Metropolitan Planning Organization (FAMPO), the Northern Virginia Transportation Commission (NVTC) and the Potomac and Rappahannock Transportation Commission (PRTC) are collectively studying the feasibility of establishing a vanpool incentive program where vanpools in the Northern Virginia and Fredericksburg regions report their passenger data to the



National Transit Database, which is used to generate additional Federal funds for vanpool support and the region.

- VDOT is undertaking a comprehensive park-and-ride lot study, in coordination with several TDM agencies, which will create an interactive online inventory of all state, county and city park-and-ride lots and provide the framework of a coordinated effort to identify park-and-ride needs throughout the Commonwealth.
- DRPT continues to engage in public involvement efforts for all studies underway. Current involvement efforts include outreach for the Super NoVa regional study, the I-95 Transit and TDM plan, and transit improvements along Route 1 (as requested in Senate Joint Resolution 292).

## **Strategy #2: Maintain and Build on Virginia’s Current Investment in the Existing Transit & TDM Infrastructure**

Fostering the transportation system in Virginia requires investment in both the “hardware” and “software” of the existing transit and commuter services infrastructure.

Transit and TDM “hardware” refers to the physical infrastructure needed to support services, such as buses and shuttles, park-and-ride lots, miles of High Occupancy Vehicle (HOV) lanes, and infrastructure to support expanded rail transit options, such as the Dulles Metrorail extension in Northern Virginia or the Tide light rail system in Norfolk. The “software” of transit and commuter services includes the marketing programs and services that educate, support, encourage and enable participation in available options to SOV travel. These include services such as ride matching, employer transit subsidies, guaranteed “ride home” services and vanpool insurance.

### *Examples of Recent Initiatives:*

- The Commonwealth Transportation Board (CTB) approved allocation of state funds to assist with state of good repair efforts for Virginia’s transit “hardware,” including funding for the purchase of 15 replacement railcars for Virginia Railway Express and 194 replacement service buses and vans. In addition, the CTB approved allocation of state funding for 46 service expansion vehicles.
- DRPT, in partnership with the Office of Intermodal and Planning Investment, is participating in the VTRANS 2035 Update to align the VTRANS 2035 goals and recommendations with the annual statewide transportation performance measures.
- DRPT’s regional need studies outline forecasted needs based on population and employment assumptions and provide recommendations for investments to meet those needs. For example, in collaboration with the Secretary of Transportation, DRPT prepared the I-95 Transit/TDM plan that examined potential transit and TDM needs along the I-95 corridor to maximize the capacity and reliability of the I-95 HOT/HOV Lanes. DRPT also proposed a phased implementation schedule for these transit and TDM improvements for the corridor starting in 2015.
- DRPT established the AdVANtage Vanpool Self-Insurance program, a collective partnership with the George Washington Regional Commission GWRideConnect program and the Division of Risk Management at the Virginia Department of the Treasury. Recognizing that insurance options for vanpools had declined to a critically low level, the AdVANtage program was launched to ensure that vanpool drivers in Virginia had more insurance choices when it came to vanpool protection. This new, low-cost insurance option helps ensure the viability of vanpools statewide.
- Virginia is one of only a few states in the country to develop a comprehensive asset inventory database that allows DRPT to predict years in advance the statewide transit replacement needs and costs. This

allows for more effective program management and improves the performance and reliability of transit service by replacing assets that have met their useful life in a timely manner. In 2011, DRPT received a federal grant to expand the system to evaluate capital needs for service expansion.

### **Strategy #3: Maximize Efficiency of Existing Transit & TDM Infrastructure**

Maximizing existing resources is just as important as maintaining and building on Virginia's investment in transit and TDM; Virginia must also continue to deploy strategies to maximize the efficiency of the existing system.

#### Examples of Recent Initiatives:

- The Office of Intermodal Planning and Investment is developing a statewide index to assess the multimodal accessibility of different places throughout the Commonwealth. Data points, such as proximity to transit infrastructure, will serve as an input to the planning data index and can be used to improve multimodal planning.
- DRPT routinely funds comprehensive operations analysis studies for transit systems that help identify underperforming routes, cost saving strategies and underserved markets that could represent opportunities for increased passenger revenue.
- DRPT provided technical assistance on technology deployment to providers such as PRTC, Harrisonburg Transit and Williamsburg Area Transport.
- DRPT is developing Multi-Modal and Public Space Design Guidelines as a resource for the Commonwealth and communities across Virginia. These multi-modal design guidelines will help Virginia evolve into a network of diverse, walkable, bikeable and transit-friendly communities by balancing the needs of different transportation choices with transportation supportive land use decisions and public right-of-way designs.

### **Strategy #4: Build New Capacity**

Virginia's transportation system must expand to absorb projected demand from the Commonwealth's increasing population and changing demographics. Increased capacity will be required to maintain the current level of transit and commuter service and related market share.

#### Examples of Recent Initiatives:

- Hampton Road Transit (HRT) opened a new 7.4 mile light rail line, the *Tide*, between the Eastern Virginia Medical Center Complex to Newtown Road, via downtown Norfolk in August 2011. HRT predicted The *Tide* would attract about 2,900 riders per day; however, weekday ridership figures have surpassed this estimate.
- DRPT continues to work with the Metropolitan Washington Airports Authority (MWAA) to construct phase 1 of the Dulles Corridor Metrorail Project and advance phase 2 of the project.
- The Town of Altavista, with assistance from DRPT, launched a new deviated fixed route bus line in January 2011. The service operates Monday through Saturday with 60-minute headways.
- Alexandria DASH initiated new express bus service to the Mark Center from the King Street MetroRail Station and Pentagon Transit Center.
- Blacksburg Transit launched a new commuter service between Christiansburg and Blacksburg in January 2011, and in July 2011, the Greater Roanoke Transit Company extended that service to Lynchburg to

connect to the state-funded Amtrak Virginia service that operates daily between Lynchburg and Boston, Massachusetts.

- The Town of Blackstone launched new bus service to Fort Pickett. The service operates seven days a week with approximately 45 minute headways.
- PRTC implemented 10 new trips on its commuter service in response to record high ridership levels and chronic overcrowding present on a significant number of OmniRide commuter trips by deferring the retirement of four buses.
- District Three Public Transit began a new bus route, Abingdon/Washington County Work Express. Under the Section 5317 New Freedom program, District Three has established five weekly routes transporting citizens from rural areas to larger regional commercial centers for medical, shopping, dining and personal errands.
- Loudoun County opened its second county-owned/constructed lot in August 2011. The Harmony Park-and-Ride Lot at Scott Jenkins Memorial Park has 250 parking spaces, two bus shelters and two bike lockers.
- Virginia Railway Express received 20 new locomotives over the course of the fiscal year and constructed a second platform at the Woodbridge VRE station. At the Broad Run VRE station, Prince William County expanded parking by 200 spaces.
- In the Fredericksburg area, GWRide Connect assisted with forming 100 new vanpools, which effectively removed approximately 300,000 vehicles off the road, reducing 600,000 trips and 36,000,000 VMT.
- Arlington Transit (ART) introduced one new transit service route.
- Fairfax County introduced a new service, Eagle Express, which operates from the Franconia-Springfield Metrorail/VRE Station and the Fort Belvoir Community Hospital during peak periods.
- In addition to new services, operators in Arlington and Greene Counties and the City of Danville have extended service hours on existing routes to better accommodate ridership demand.
- DRPT is currently exploring ways to increase transit capacity in growing population areas, especially in localities where local officials have expressed their community's growing interest in expanding transit services. Current feasibility studies underway include evaluations for Craig and Southampton Counties, which will provide a basis to potentially advance the implementation of new transit service.
- DRPT continues to advance enhanced intercity passenger rail service (Amtrak) in the Commonwealth. In addition to the two Amtrak Virginia services introduced in 2009 and 2010, DRPT began work with Norfolk Southern, CSX, Amtrak and the City of Norfolk to extend the Richmond Amtrak Virginia service to Norfolk by October 2013.

#### **Strategy #5: Provide New, Innovative Service Delivery**

Virginia's transit and TDM community continues to introduce innovative transit and commuter service program enhancements across Virginia.

##### Examples of Recent Initiatives:

- Hampton Roads Transit developed an online ticket sales program to allow passengers to purchase light-rail day passes through the agency's website and mobile smartphones.
- Blacksburg Transit is deploying a rider information system, which provides real-time bus arrival prediction times at bus stops. Once fully implemented by the end of 2011, the system will be accessible from any cell phone either by text messaging or visiting the website to receive information on up to the next three departures for that particular stop.

- Fredericksburg Area Transit (FRED) is participating in the WMATA's "Smart Benefits" program for its VRE feeder service routes. Through this program, commuters can assign a portion of their benefits to cover the cost to purchase FRED passes and tickets. The agency also has outfitted all of its 31 buses with four cameras each and GPS.
- ART Transit has developed a real-time bus arrival system, which extracts data from the dispatch/AVL/CAD system and conveys it through a map module that allows the patron to select a stop by route or location with a screen pop-up showing next arrival times through a website.
- Carsharing (short-term car rentals) continues to expand in Virginia. Zipcar and Enterprise's WeCar programs have locations throughout Virginia including Northern Virginia, Richmond, Charlottesville, Williamsburg and Hampton Roads. Carsharing allows members to reduce their need for vehicle ownership (particularly for a second car) and overall VMT. Provided in areas with good public transportation, carsharing provides greater mobility and travel options. Commuter services programs and transit agencies regularly promote the carsharing services as an extension of their own services.
- Arlington County partnered with the District of Columbia to create the Capital Bikeshare program that provided over 1,100 bikes for rent from 114 bike stations.
- VDOT is working with WMATA and the cities of Falls Church and Alexandria to provide signal priority for buses along Route 7 between the King Street Metro Station and Tysons Corner.
- Several years ago, DRPT funded a pilot project to introduce NuRide, an on-line tool that helps people find rideshare matches and then gives them rewards for recording "greener" trips, to Virginia and the Metropolitan Washington, D.C. area. The program is now available in Charlottesville, Richmond, Hampton Roads and Northern Virginia. According to NuRide, there are now 14,215 members that have reduced more than one million trips since starting in Virginia.

#### **Strategy #6: Build Awareness of Transit and Other Travel Options**

Continuous outreach and public education has been a hallmark in Virginia's transit and TDM community to keep Virginians informed of the multitude of transportation options available in the Commonwealth. If Virginians are not aware of available services, they cannot utilize those offerings.

##### Examples of Most Recent Initiatives:

- Fairfax County RideSources attended 45 employer fairs across their region promoting the "One Less Car" marketing campaign and sponsored BRAC commuter and vanpool formation workshops for commuters heading to Fort Belvoir and NGA.
- The George Washington Regional Commission's GWRideConnect program re-launched its Commute Fairy radio advertising campaign during drive times, targeting drive alone commuters and offering a better alternative. The campaign was so successful it won its second award from the Virginia Association of Broadcasters.
- Charlottesville Area Transit launched a Facebook page for additional online promotion of CAT events, service changes and initiatives.
- Blacksburg Transit hosted interest meetings for employees working at Virginia Tech and within the Towns of Blacksburg and Christiansburg. In order to promote transit service, Blacksburg Transit held an "unveiling ceremony" to introduce the hybrid fleet to the community during Sustainability Week.
- For the months of June-September 2011, a citizen of the Town of Altavista provided free fares for all citizens within the Town. This \$1,200 gift provided free fares for over 5,600 riders.
- The Dulles Area Transportation Association (DATA) established a Facebook page, as a means of reaching individuals with an interest in mobility management. Along with the Facebook page, DATA developed

an “Employer Council Blog” to help improve communication and best practices sharing among this group.

- Arlington Transit offered a challenge to Arlington citizens to become “Car-Free Diet Skeptics,” and go car-free for 30 days. Participants were invited to share their experience at [carfreediet.com](http://carfreediet.com). The agency also launched a “How to Ride the Bus” training series to target low-income, non-native English speakers in Arlington neighborhoods.
- The Metropolitan Washington region holds an annual Car Free Day on September 22 to encourage commuters to reduce their use of their automobile by teleworking or carpooling, vanpooling or taking transit to work. In 2011, more than 12,000 commuters pledged to go car free or car light.
- DRPT convened the Mark Center BRAC Coordination “Regional Transit/TDM” working group that enabled transit providers, TDM agencies and Department of Defense stakeholders to exchange information about proposed transit services and learn about emerging commuter markets. This group also serves as an advisory to the VDOT Mark Center Task Force.
- DRPT worked with all transit agencies across the state for the fourth annual “Try Transit Week” – September 19-23, 2011. The event encourages Virginians to stop driving along and try a form of transit available in the Commonwealth. The event, which was promoted through a website and Facebook page, print and online ads, and grassroots efforts as the operator level, continued to draw thousands of pledges from Virginians.
- Understanding that a lack of education is often a barrier to trying a form of transit, DRPT developed a “YouTube” channel, which can be accessed through the agency’s website to inform the public about transit services in the Commonwealth. The channel offers “how to ride” videos to help ease first time riders’ questions about services in Virginia.
- DRPT also continued promotion of its RSS feed which provides news updates each week with teaser information linked to the full story through the feed. The RSS feeds provides DRPT with an additional promotion tool for new services and studies demonstrating the benefits of using transit.

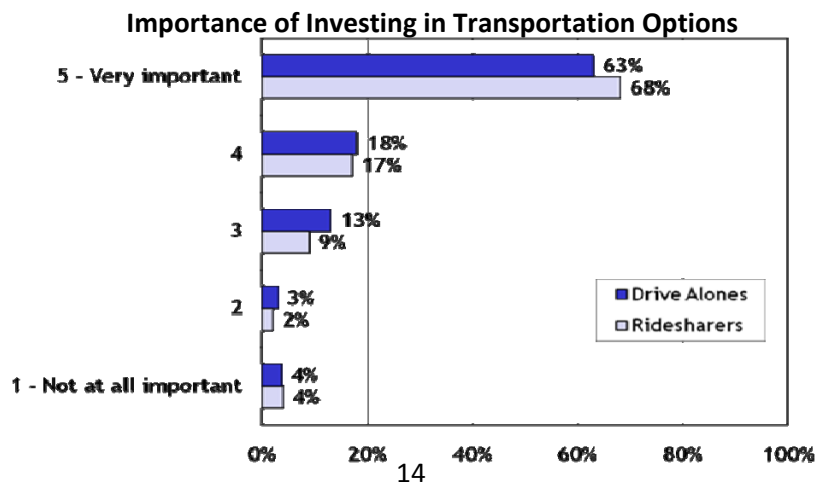
#### **Strategy #7: Help People Avoid Travel Altogether – Support Teleworking**

Eliminating the commute altogether is perhaps the most effective way to reduce peak time congestion. To this end, members have successfully advanced greater acceptance of work force practices, such as staggered work hours, compressed work weeks and teleworking. In the case of teleworking, financial assistance is offered to encourage employers to adopt teleworking practices.

- Telework!VA ([www.teleworkva.org](http://www.teleworkva.org)) helps companies offset the cost of starting up or expanding a telework program. Qualified employers can receive up to \$35,000 (up to \$50,000 Northern Virginia affected by the Dulles Metrorail Extension and I-495 HOT Lanes projects). In addition to funding, DRPT provides these employers with technical assistance to set up and administer their telework program. DRPT's Telework!VA program currently has over 90 private employers actively participating and more than 170 have participated since the program began in 2001. The funding for the \$35,000 financial assistance has been exhausted and businesses are now encouraged to use the Telework Tax Credit (see last bullet in this section) for their financial assistance.
- DRPT's program partners with TDM organizations in Northern Virginia, Hampton Roads and Richmond to educate the business community and provide employers with information on the benefits of telework, and to introduce them to the Telework!VA program. This is done through telework events and direct outreach with employers through the local TDM agencies.
- In cooperation with the Department of Human Resource Management, Office of Telework Promotion and Broadband Assistance and Virginia Information Technologies Agency, DRPT provides telework assistance to state agencies upon request.
- New Telework Tax Credit legislation approved in 2011, provides businesses with the opportunity (in tax years 2012 and 2013) to receive a tax credit up to \$50,000 to cover costs associated with conducting a company telework assessment and equipment and other items needed for new teleworkers. The goal of this program is to increase teleworking and reduce trips to and from work. DRPT hosted a webinar to educate businesses interested in the tax credit about the guidelines and policies for participation. Over 100 businesses attended the webinar and DRPT continues to provide information on the credit through the Telework!VA website.

**Strategy #8: Build Stakeholder Awareness, Appreciation and Support for Transit and Commuter Services**

Travel options benefit all Virginia residents, employers and visitors, even if they do not participate in those options. Studies show that people who drive alone are aware of the ways in which the ridesharing programs benefit their own driving experience and overall quality of life. The 2007 Virginia State of the Commute Study showed that 75 percent of drive-alone commuters said they benefited in some way from other people who practiced ridesharing. Based on this finding, it is not surprising that the Study also revealed that citizens who drive alone, support Virginia's investment in ridesharing at nearly the same rate as people who rideshare. As Virginia works to increase its investment in transportation choices, continued education on the holistic benefit of enhancing the system will continue to be key for DRPT and its partners.



*Questions: (Even though you might not carpool, vanpool or ride a bus), how important to you is it that Virginia invests in programs to support and make these transportation options more available to commuters?*

Examples of Recent Initiatives:

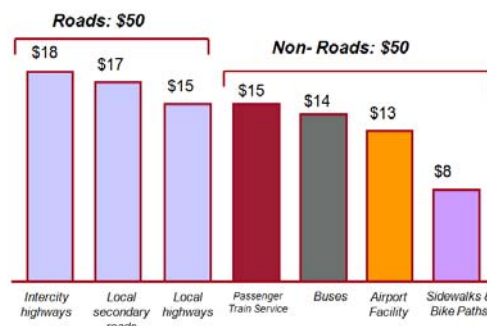
- Charlottesville Area Transit partnered with Ticket Advertising, nTelos Wireless Pavilion to place an ad promoting transit on the back of 110,000 hard-copy event tickets and participated in community events, including Clean Commute Day, Try Transit Week, Earth Week EcoFair, Government Services Day and many commuter fairs over the course of the year.
- The Potomac and Rappahannock Transportation Commission's OmniMatch program established an awards program recognizing Prince William County area businesses that provide significant commuter programs for their employees. The awards program gained local and regional media attention for the employer outreach program.
- Bay Transit now uses its website to disseminate information to local businesses and residents and offers a Spanish language version of its information brochure.
- JAUNT works closely with the Charlottesville/Albemarle's Regional Chamber of Commerce's Nonprofit and Aging in Place Councils, as well as with nearby jurisdictions in the service area.
- Hampton Roads Transit initiated a "GoPass 365" program that allows businesses and educational institutions to pay an annual fee for its employees to ride all of HRT's services at no charge.
- The Virginia Railway Express staff attended transit fairs at Fort Belvoir and Crystal City to educate BRAC employees who were relocating on available transit options. Throughout the year, VRE presents information about the benefits of commuter rail at the Northern Virginia Transportation Alliance seminar and at various jurisdiction councils.
- Richmond RideFinders works closely with local businesses and media to promote TDM programs and initiatives. In 2011, the agency received recognition for their efforts through awards from the Richmond Chapter of the Public Relations Society of America, Hermes Creative Awards and the Association for Commuter Transportation.

**Strategy #9: Encourage Employer Support and Active Involvement in Offering Transit and Other TDM Alternatives**

Regional transportation studies conducted over the past two years in Hampton Roads, Richmond and Northern Virginia, have shown that today's business leaders feel they have a responsibility to help their employees get to work. Moreover, they view absenteeism, lost productivity, and recruitment and retention costs as consequences of traffic congestion.

A 2008 GRTC/Riderfinders' Study showed that when hypothetically asked how they would allocate \$100 in transportation funds in their community, business leaders allocated at least half of the funding to non-road infrastructure – transit, carpool support, walking and biking trails.

### Business Leaders Want Transportation Dollars Allocated Across All Modes



Given employers' interest in all commute options, members of the transit and TDM community place a great deal of emphasis on business-to-business outreach and program engagement.

#### Examples of Recent Initiatives:

- In the areas affected by the Virginia Megaprojects (major construction projects in Northern Virginia), VDOT and DRPT have joined together to provide employers and businesses a comprehensive set of transit and TDM services, including up to \$50,000 for telework.
- Telework!VA program previously provided telework support and resources to employers in Virginia. Up to \$35,000 was available through the program. With funding program depleted, DRPT has turned its focus to promotion of the Telework Tax Credit that provides up to \$50,000 in tax credits to private sector businesses.
- The NuRide rewards program is being used in Northern Virginia and by Richmond area RideFinders, Hampton Roads TRAFFIX, and Charlottesville and Central Shenandoah area RideShare.

#### **Strategy #10: Seek Sustained and Dedicated Funding**

Virginia's transit and TDM community requires sustained and dedicated funding. Maintenance funding alone will not be sufficient to fund transit and commuter services as the demand for such services continues to outpace local, state and federal resources.

DRPT and its partners are achieving positive results within existing funding constraints; however, as more transit services come on-line, ongoing operations and maintenance resources will be stretched thinner than they are today. As more and more communities realize the economic development potential that transit and TDM can bring, and as our population continues to grow and change, Virginia needs to continue to maximize existing resources; implement strategies to better manage capacity; and identify new, dedicated and sustained funding sources to maintain and expand transit capacity.

#### Examples of Recent Initiatives:

- Virginia's transit agencies, with assistance from DRPT, are preparing Transit Development Plans (TDPs) that will guide future service expansions. Since 2009, DRPT has worked with 21 transit operators to completed their TDPs. DRPT is currently assisting eight additional transit operators with their respective plans.
- The Office of Intermodal Planning and Investment is preparing an implementation plan for VTrans 2035, which includes action items such as establishing a transit enhancement fund, flexing more highway



- Virginia’s TDM agencies, with assistance from DRPT, recently developed or completed comprehensive long-range TDM plans. In 2009, DRPT required all TDM agencies receiving TDM grant funds to develop a long-range TDM plan to identify and detail the TDM programs currently provided in each region, outline potential improvements to be carried out in the plan’s timeframe, and illustrate the financial resources necessary to implement these programs and improvements. Moreover, every plan now contains information necessary to include into the Six-Year Improvement Program (SYIP), the Statewide Transportation Improvement Program (STIP), the regional Transportation Improvement Programs (TIPs) and the regional Constrained Long-Range Plans (CLRPs).
- DRPT created statewide strategic plans to provide short- and long-term focus in various areas to help guide DRPT investments in transportation. To date, a Statewide Public Transportation Plan, Statewide Rail Plan and Statewide ITS Strategic Plan have been developed.
- DRPT, in collaboration with transit stakeholders, transit systems, local governments and metropolitan planning organizations, is advancing the study required in Senate Joint Resolution 297 passed during the 2011 General Assembly session. The legislation directed DRPT to conduct a one-year study of transit programs and potential transit funding strategies in the Commonwealth.
- DRPT completed the study required in Senate Joint Resolution 63 passed during the 2010 General Assembly session, which required DRPT to evaluate potential dedicated revenue sources for intercity passenger rail operating and capital needs. In 2011, the General Assembly adopted one of the recommendations from the report to establish the Intercity Passenger Rail Operating and Capital Fund (IPROC). While no funding has been allocated to IPROC to date, establishing the fund was a historic first step to creating a sustainable intercity passenger rail system in Virginia.

**IV. Overall Results – Virginia’s Transit & TDM Community Delivers Results**

There are multiple ways to define success when it comes to the impact of Virginia’s efforts to use transit and TDM programs to address congestion and reduce SOV travel. Virginia’s transit and TDM community focuses on outcomes, such as the share of drive-alone trips reduced or eliminated, the shift in the percent of people who telework, the congestion related to construction projects, and the projected overall return on investment of transit and TDM strategies. Outcomes are measured through ongoing research, such as the Virginia State of the Commute Study.

**Impact #1: Statewide Transit Ridership**

The usage of transportation choices in the Commonwealth is seen through reported ridership data from Virginia transit operators. For example, from May 2010 to May 2011, reported monthly data revealed an eight percent increase in passenger trips. Notably, 21 transit operators reported monthly ridership increases greater than 10 percent during this same time period. A snapshot of these operators by region is as follows:

Northern Virginia

Arlington Transit, Loudoun Transit, Potomac and Rappahannock Transportation Commission, Virginia Railway Express and FRED Transit

Staunton Region

Winchester Transit, Harrisonburg, Rockbridge Area Transportation System Inc., RADAR (Covington & Clifton Forge) and Virginia Regional Transit – Staunton District

### Central Virginia

Charlottesville Area Transit, Virginia Regional Transit (Culpeper CTB District), Blackstone Area Bus, Farmville Area Bus and JAUNT

### Eastern Virginia/Hampton Roads

STAR Transit, Town of Chincoteague, Bay Transit and Hampton Roads Transit

### Southwest Virginia

Pulaski Area Transit, Four County Transit and City of Bristol

In addition, state-supported Amtrak Virginia ridership continues to grow. As of July 2011, both the Lynchburg and Richmond services have met their yearly ridership goals ahead of schedule (goals are based on the federal fiscal year of October 1, 2010 – September 30, 2011). Moreover, the Lynchburg service saw a 30 percent increase in ridership in July 2011 compared to the same month last year. The Richmond service did not begin until mid-July 2010; thus, a year-over-year comparison is not possible.

### **Impact #2: Return on Investment**

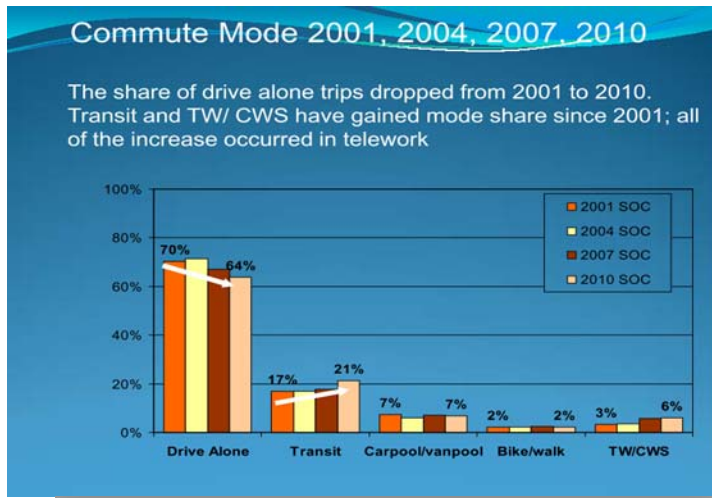
There is no question that transit and TDM programs are helping with highway congestion and reduction in drive alone travel. What is still unanswered is precisely at what cost and at what overall return on investment. Answering these cost-benefit questions from an overall state perspective is one of DRPT's continuing primary areas of work. In 2008, DRPT conducted an assessment of statewide public transportation benefits and determined the following:

- Total benefits of public transportation amounted to \$4.6 billion in the Commonwealth of Virginia in 2008. Economic development benefits alone account for over 60 percent of those benefits.
- The annual contribution of transit operations and maintenance to Virginia's economy is estimated at \$870 million.
- About \$1.3 billion in output is generated annually as a result of transportation cost savings being re-spent by households in the economy.
- Commuters would have to pay \$919 million more annually in transportation expenses (i.e. gasoline, maintenance, tires and insurance) to access jobs, schools, shops, hospitals and other destinations without transportation choices.

Many factors can influence how benefits are calculated. DRPT's assessment, which was conducted with the support of leading transportation economic consultants, provides a snapshot of Virginia's return on investment in public transportation.

### **Impact #3: Shift in Modal Split**

The shift in modal split, the share of drive-alone work trips compared to the use of other travel options, is perhaps the most direct indicator on the impact of Virginia's transit and TDM community. Based on the most recent 2010 State of the Commute Study data for the Metropolitan Washington region, drive-alone travel is on a declining trend. Since 2001, the share of drive-alone work trips has dropped from 70 percent to 64 percent, with other travel options gaining ground from 30 percent to 36 percent of all work-related trips. Increased use of transit and telework, along with compressed work weeks, were responsible for this overall increase in modal split.

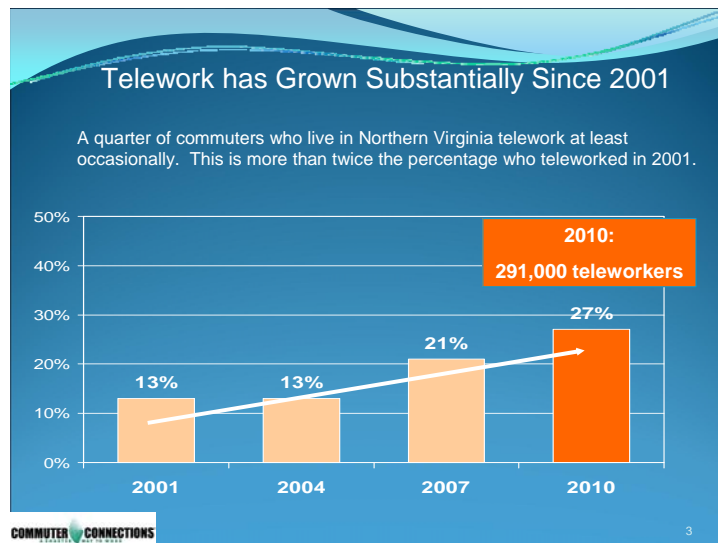


(Note: Metropolitan Washington data that includes Northern Virginia is available at this time.)

In the 2007 Virginia State of the Commute Study, Virginia’s overall modal mix is 83 percent drive-alone travel to 17 percent rideshare. The trend in the Metropolitan Washington region is likely being experienced across the Commonwealth over time.

#### Impact #4: Increase in Teleworking

The percent of commuters that telework at least occasionally is the optimal measure of success when it comes to teleworking. The 2010 State of the Commute Study showed that teleworking in Northern Virginia continues to increase. Since 2001, the percent of Northern Virginia commuters who telework has more than doubled, from 13 percent to 27 percent.



(Source: Metropolitan Washington Council of Governments 2010 State of Commute Study)

The first statewide Virginia State of the Commute Study, conducted in 2007, determined that 10 percent of Virginia's overall percentage of commuters telework at least occasionally.

## V. Future Demographic, Social and Transportation Trends That Could Impact Virginia's Transit and TDM Community

In last year's report, DRPT discussed trends that will continue to impact the need for transportation choices in Virginia. These trends will lead to an increase in demand for transportation choices and will push Virginia to continue to create a multimodal system that will encourage commuters to utilize other modes of transportation other than driving alone. Below is a summary of the trends asserted in 2010. DRPT continues to see these trends as critical components of Virginia's transportation future.

### *Demographic Trends*

- **Growing Population-** By 2035, Virginia's population will increase by approximately 2.8 million residents, a 36 percent increase. The Commonwealth's expected population growth rate far exceeds that of the United States as a whole (25 percent) during the same time period.
- **Aging Population** - There will be approximately 2 million individuals age 65 or older in 2035, compared to 1 million in 2011. Increases in the senior population and/or non-driver population will lead to increased demand for travel options, particularly non-work related mass transit options.
- **New Generation of Workers – The Millennials** - Millennials, also known as Gen Ys (9- to 29-year olds today), are poised to make a huge impact on the use of travel options in Virginia because over the past several years, Millennials have shifted to non-drive alone modes at a greater rate than any other generation. In the future, they will make up the majority of the workforce which will have a significant impact on the preferred commuting method in Virginia.

### *Social and Cultural Trends*

- **Changing Nature of Work and Distributed Workforce** – Improvements in technology will continue to change employers' perspectives that work is not a place you go to but something you do. This shift is fueling the growth of teleworking that will be further compounded by the entrance of the Millennials – a generation raised in technology - to the workforce.
- **Technology Revolution** – Beyond opening doors for teleworking, web-based technology is reshaping rideshare support and the use of rideshare support services. Previously, most ridematching was done through large government-sponsored, centralized databases. Today, many commercial enterprises are serving commuters' needs for hyper-social connectivity by offering ridematching as part of a social network such as Craigslist, Facebook, Goloco.org, Ridebuzz.org and Greenyour.com. These technology enhancements bring another appealing dimension to ridesharing.

### *Future Transportation and TDM-Related Trends*

- **Growing Use of Employer-based Transportation Support Services** – Organizations are beginning to realize that offering employer-based transportation programs can boost recruitment, retention and employee productivity. More companies across Virginia are offering services and programs such as compressed work weeks, teleworking, carpool and vanpool onsite matching, and transit benefits.
- **Road-related User Fees** - Any increase in user fees – new tolls on Interstate 95, higher tolls on existing state roads, increased gas taxes or VMT tax - could impact future mode choice.

- **The Possibility of Higher Gas Prices in the Future** - Gas prices continue to rise and fall, and with continued instability, we could see an increase in ridership and ridematching activities. Further, in an economic recession, such as the climate we face today, household look to reduce family expenses, and reducing gas consumption by seeking new transportation choices is often considered “low hanging fruit” in the list of potential adjustments.

<b>VI. Future Program Refinements to Accelerate Use of Transit and Other Travel Options</b>
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Because DRPT continues to see similar trends in transportation demand as compared to 2010, and because ridership and use of TDM services continues to increase, DRPT’s strategies moving forward will expand on initiatives began in 2010.

**1. Discover Greater Insights and Continue to Share Knowledge Across Virginia’s Entire Transportation Industry:**

DRPT and VDOT will continue to lead the transit and TDM community’s research efforts and share insights to help transit and TDM agencies formulate the most effective action plans. The Secretariat’s Multimodal Advisory Group will be included in this process to further stimulate even greater collaboration and marketplace impact.

**2. Continue to Build Awareness:**

Education is the first step towards acceptance, and DRPT will continue its educational efforts while encouraging transit operators and TDM agencies to augment their efforts.

**3. Create More Appealing Services and Products:**

DRPT will continue to work with Virginia’s transit and TDM community to evaluate potential transit and TDM program enhancements to deliver the highest public benefit for the investment of state funds. New services, expanded routes and technology enhancements will be considered.

**4. Inspire Better Regional Planning:**

To be most effective, transportation planning must take a regional view to determine improvements that can be integrated into the existing regional transportation system while taking into account land use and transit-oriented development considerations. DRPT, VDOT and regional planning organizations will continue to embrace this important consideration.

**5. Offer More Employer Incentives:**

When employers are engaged in transit and TDM initiatives, there is a dramatic lift in participation among their employees. Employer-based incentives work and are dramatically cheaper than funding new roads. Furthermore, they can be immediately implemented to generate immediate results.

**6. Elevate the Work of Virginia’s Transit and TDM Community to an Economic Development Imperative for Communities Across America:**

The availability of transportation choices and economic development go hand-in-hand. Businesses often look at transportation options when choosing locations for their offices and new transit offerings can attract new development.

Economic development success in the future will be based, in part, on a community’s ability to develop and sustain its transportation system. Transit and TDM-related services have demonstrated that they deliver. Showcasing Virginia’s experience and commitment in this area should become part of the Commonwealth’s economic development story.

**7. Continue Investment in Telework:**

Business participants in DRPT’s Telework!VA program have increased 66 percent from FY2009 to FY2011. Although the funds under the current program for financial incentives provided to businesses through the Telework!VA program have been exhausted, the new Telework Tax Credit will provide the financial assistance needed to increase telework.

According to the 2007 State of the Commute Survey, 15 percent of non-teleworkers “could and would” telework occasionally if offered the opportunity. The potential to remove thousands of people from the road cannot be overlooked.

<b>Non-teleworkers who ...</b>	
<b>Have TW-appropriate job responsibilities</b>	<b>31%</b>
<b>Are interested in TW</b>	<b>24%</b>
- Occasional	<b>15%</b>
- Regular	<b>9%</b>
<b>Potential New Teleworkers (Not discounted)</b>	<b>751,000</b>

*(Source: Based on figures and projections from the 2007 Virginia State of the Commute Survey.)*

**8. Facilitate Information Sharing and Planning Efforts among State Agencies:**

The Office of Intermodal and Planning Investment is developing a cross-agency training program that will provide resources and materials to assist agencies under the Transportation Secretariat with multimodal project inception, planning and implementation. Developing a multimodal, connected transportation system from the state will facilitate greater mode sharing in Virginia.

**VII. Summary**

Over the past year, DRPT has continued to advance the strategies outlined in the 2010 report to further reduce highway congestion and SOV travel in the Commonwealth. Potential remains to further increase the impact that transportation choices has on Virginia’s congestion. Despite limited funding for infrastructure and support services, (marketing and public outreach) efforts to date have paid dividends. Virginia continues to see increases in ridership on transit and passenger rail services and participation in TDM options, such as teleworking and carpool/vanpool participation. With these increases comes a downward trend in drive-alone travel. In Virginia’s most congested region, Northern Virginia, the share of drive-alone travel has dropped from 70 percent to 64 percent since 2001.

DRPT will continue to work with the transit and TDM community to educate, promote and market Virginia’s existing travel options to encourage drive-alone commuters to view their commute differently and utilize transportation options. In addition, continued improvements to existing services will help retain ridership and create efficiencies in the future.

However, in order to address the anticipated increase in demand for transportation choices, Virginia must continue and increase its investment in transportation options, a decision that could mean substantial, far-reaching and immediate benefits to Virginia citizens.

While transit and TDM services cost significantly less than road construction, they still require increased and sustained funding to support operating and capital needs. DRPT will continue its work on the SJ297 study to provide recommendations for a more efficient funding methodology to maximize today's funding, but Virginia must also look to increase funding for its transportation options. Investing in transportation choices will help Virginia realize stronger economic development; reduce congestion and environmental impacts; and address demographic, social and cultural shifts that will lead to increased demand.

By moving more people in fewer vehicles, moving travelers out of peak travel periods or, in the case of teleworking, eliminating travel altogether, the Commonwealth of Virginia will have a safe and efficient transportation system that supports and improves every Virginian's quality of life for years to come.

#### **VIII. Appendix:**

Reports on recent 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).