

Long-Range Transportation Demand Management (TDM) Plan

*Valley Commuter Assistance Program (VCAP)–
Northern Shenandoah Valley Regional Commission*

Working Draft **report**

prepared for

Valley Commuter Assistance Program (VCAP)

prepared by

Cambridge Systematics, Inc.

with

Center for Urban Transportation Research
LDA Consulting
Southeastern Institute of Research

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Document History

Date	Author(s)	Version/ Status	Description of Changes
2/28/10	Lead Authors: Cambridge Systematics	Working Draft delivered to VCAP	Draft content refined through several iterations based on agency comments

Glossary of Acronyms

DRPT	- Virginia Department of Rail and Public Transportation
HOV	- High-Occupancy Vehicle
MPO	- Metropolitan Planning Organization
NSVRC	- Northern Shenandoah Valley Regional Commission
TDM	- Transportation Demand Management
VCAP	- Valley Commuter Assistance Program
VDOT	- Virginia Department of Transportation
Win-Fred	- Winchester-Frederick County Metropolitan Area

1.0 Purpose of the Plan

Transportation-Demand Management (TDM), according to the U.S. Department of Transportation, is any program “designed to reduce demand for transportation through various means, such as use of transit and of alternative work hours.” TDM agencies throughout Virginia promote ridesharing and other transportation alternatives to single-occupancy vehicles in order to assist individuals seeking transportation options to their workplaces and other destinations, to mitigate congestion on Virginia’s roadways, and to reduce environmental impacts caused by vehicle emissions, roadway expansion, and other transportation-related factors. Relative to other transportation programs, most TDM agencies have negligible capital costs and operate using short-term (one- to two-year) funding horizons. As a result, many of these agencies have not previously been empowered to fully participate in long-range planning processes.

The Valley Commuter Assistance Program (VCAP) is the designated TDM agency tasked with advancing alternatives to the drive alone commute through innovative programs serving the Northern Shenandoah Valley region. The program’s service area includes the City of Winchester and the Counties of Clarke, Frederick, Page, Shenandoah and Warren.



As the region is working to preserve its high quality of life, serve the transportation needs of residents, and expand local economic opportunities, VCAP has begun preparing for future needs today. This document presents VCAP’s long-range operational plan for 2010 through 2035. It builds upon the successes and challenges of the Northern Shenandoah Valley and the transportation infrastructure that services the region today. This plan outlines a strategic framework (goals and objectives) for the agency as well as program enhancements and financial resources that will be necessary to keep the Northern Shenandoah Valley region moving for years to come.

This document also fulfills the TDM plan requirement established by the Virginia Department of Rail and Public Transportation (DRPT). Beginning in 2009, DRPT requires all agencies receiving TDM grant funds to prepare, adopt, and submit a long-range TDM Plan for their agency. The purpose of this Plan is to: identify and detail the TDM programs currently provided in the agency’s service area, outline potential improvements to be carried out in the Plan’s timeframe, and illustrate the financial resources necessary to implement these programs and improvements. This document establishes the scope and benefits of each TDM agency’s programs and acts as the basis for DRPT to incorporate TDM programs statewide into all relevant state transportation plans, funding decisions, and programs.

More specifically, the Plan will:

- Serve as a management and policy document for the TDM Agency;
- Provide DRPT with information necessary to fulfill related planning and programming requirements;
- Document current and proposed future operating budgets for the TDM agency; and
- Provide all information necessary to include the TDM program into the Six-Year Improvement Program, Statewide Transportation Improvement Program, Transportation Improvement Program, and Constrained Long-Range Plan.

This Plan incorporates relevant information from the agency's existing TDM planning documents and is consistent with long-range plans prepared by local and regional planning organizations, the Virginia Department of Transportation (VDOT), and DRPT.

2.0 Overview of Valley Commuter Assistance Program (VCAP)

2.1 HISTORY OF TDM PROGRAM

The first TDM program in the Northern Shenandoah region was established in 1982 through a TDM/Commuter Services grants provided by VDOT. The program was created as a service of the Northern Shenandoah Valley Regional Commission (NSVRC), the Planning District Commission serving the Northern Shenandoah Valley. The program was originally known as “The Rideshare Project” until it was renamed Valley Commuter Assistance Program (VCAP). Today, VCAP serves primarily as a ridematching and commuter information service for long-distance commuters traveling from residences in the Northern Shenandoah region to jobs in Northern Virginia and the District of Columbia.

VCAP’s services have grown and evolved over the years, and the program has become an active partner in planning and marketing public transportation services and other alternatives to single-occupancy vehicle travel. In 2006, VCAP and NSVRC partnered with area commuters to establish the Valley Connector commuter bus service after the region’s only existing commuter bus route was discontinued. Today, VCAP, NSVRC, and Valley Connector continue to collaborate closely to develop and market commuter bus options that serve the needs of area residents. VCAP also partners with Commuter Connections, the regional TDM program serving the Washington Metropolitan Area, to provide instant on-line ridematching and other TDM services.

2.2 GOVERNANCE AND ORGANIZATIONAL STRUCTURE

2.2.1 Governance

VCAP is operated as a program within NSVRC, the regional Planning District Commission established in 1968 to encourage and facilitate local government cooperation in addressing regional problems and issues. NSVRC serves the City of Winchester; the Counties of Clarke, Frederick, Page, Shenandoah and Warren; and the Towns of Front Royal, Middletown, Luray, Strasburg, Stephens City, Berryville, Boyce, Edinburg, Mount Jackson, New Market, Shenandoah, Stanley, Toms Brook, and Woodstock.

NSVRC is governed by a Board of Commissioners, comprised of 23 elected officials and citizens appointed by member local governments. VCAP staff report directly to the NSVRC Executive Director. All VCAP activities that have budgetary implications or require local match funds must be presented to and approved by the NSVRC Board of Commissioners. VCAP staff attends monthly

NSVRC Board meetings and provides occasional reports on program performance and activities.

2.2.2 Organizational Structure

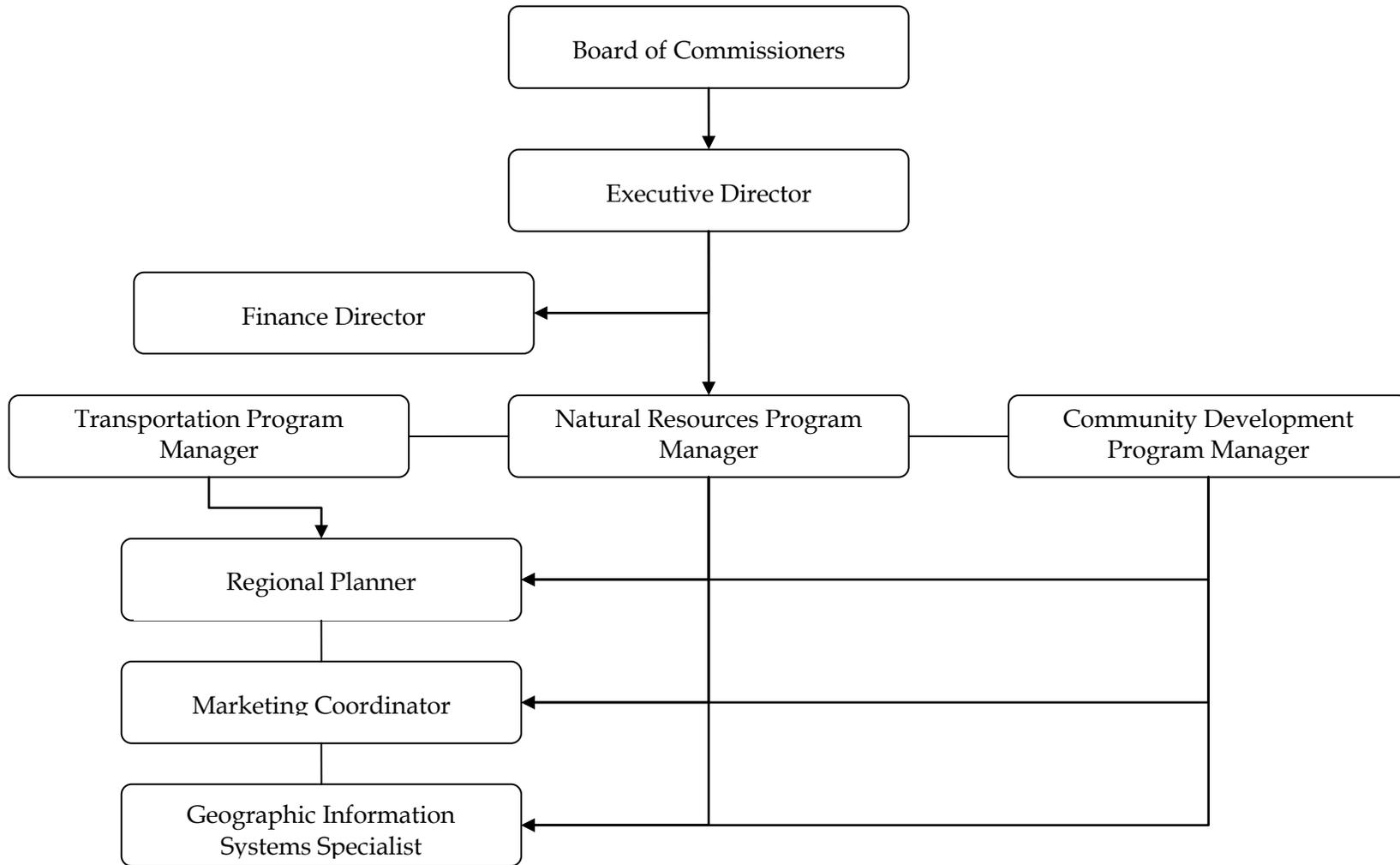
As shown in Figure 2.1, NSVRC provides services in three main program areas: transportation, natural resources, and community development. VCAP operates primarily as a NSVRC transportation program. The program employs two full-time staff members, whose titles and major responsibilities are shown in Table 2.1. The Rideshare Coordinator administers the rideshare program and provides direct customer services to VCAP clients. In a separate capacity, this staff person also serves as the Administrative Assistant for NSVRC. The NSVRC Marketing Coordinator markets VCAP’s services in addition to NSVRC’s other programs. VCAP also receives some staff support and resources from the NSVRC Transportation Program Manager, who manages the administrative operations of the Winchester-Frederick County Metropolitan Planning Organization, and the NSVRC Regional Planner, who provides technical assistance to local planning programs and staff members and coordinates regional land use and transportation planning initiatives.

Table 2.1 VCAP Staff Descriptions

FTE	Position	Job Description
1	Rideshare Coordinator	Administers rideshare program and provides ridematching and direct customer services.
1	Marketing Coordinator	Markets rideshare, commuter bus, and other TDM services.

Source: VCAP.

Figure 2.1 NSVRC Organizational Chart



Source: Cambridge Systematics, Inc. based on information from VCAP

2.2.3 Key Stakeholders

Several local governments and regional agencies comprise VCAP's key organizational stakeholder base. These stakeholders are the primary funders, service delivery partners, and beneficiaries of VCAP's services, including:

- *NSVRC* - As VCAP's governing agency, NSVRC is an important organizational stakeholder for the program. VCAP benefits from the shared overhead and services it receives as a program of NSVRC, while NSVRC benefits from increased awareness and use of nonsingle-occupancy vehicle transportation options promoted by VCAP.
- *Valley Connector* - Valley Connector is the only commuter bus service provider in the Northern Shenandoah region. VCAP was a key partner in the development of Valley Connector and continues to partner with the agency to promote Connector services and identify new service needs. Valley Connector staff also act as champions for TDM in the region.
- *NSVRC member jurisdiction governments and residents* - Residents, employers, and employees in the City of Winchester and the Counties of Clarke, Frederick, Page, Shenandoah and Warren are key stakeholders - whether they utilize VCAP services or not - because they benefit from the services provided. Although member jurisdiction governments currently may have little direct involvement with the program, VCAP depends upon these local jurisdictions for matching funds and in return provides services that impact mobility and quality of life in these jurisdictions.
- *Metropolitan Washington Council of Governments and Commuter Connections* - The Metropolitan Washington Council of Governments is the Metropolitan Planning Organization (MPO) for the Washington, D.C. region and houses Commuter Connections, the regional TDM program. VCAP partners with Commuter Connections to promote regional TDM services and provide some ridematching and Guaranteed Ride Home services.
- *Winchester-Frederick County Metropolitan Planning Organization (Win-Fred MPO)* - NSVRC provides staff and administrative support to the Win-Fred MPO, the Federally recognized transportation policy board for the "urbanized" portion of the Northern Shenandoah Valley. The MPO was created as a result of the designation of the Winchester-Frederick County Urbanized Area by the U.S Census in 2002 and is responsible for developing a Constrained Long-Range Plan, Transportation Improvements Program, and critical regional transportation planning studies. VCAP currently has little formal interaction with the MPO, but is a major stakeholder in their planning activities.
- *DRPT* - DRPT is VCAP's primary funding agency and is a partner in service delivery. VCAP looks to DRPT to support, guide, and promote TDM at the state and regional level.

- *Virginia Regional Transit Authority* – Virginia Regional Transit Authority is the largest nonprofit provider of local transit services in the Northern Shenandoah Valley and provides valuable transportation alternatives to driving to and from destinations within the region. VCAP promotes Virginia Regional Transit Authority services to local residents and partners with Virginia Regional Transit Authority and local jurisdictions to identify new service needs.
- *Winchester Transit* – Winchester Transit provides public bus and trolley services to residents of the City of Winchester. Like Virginia Regional Transit, Authority, Winchester Transit provides valuable transportation alternatives to driving to work and nonwork-related destinations within the Win-Fred Metropolitan Area.
- *VDOT* – VDOT formerly administered the TDM grants that VCAP relies on as a primary funding source. As the owner of the majority of the park-and-ride lots that VCAP customers rely on as meeting places for commuter buses, vanpools, and carpools; VDOT continues to be an important stakeholder for the program.

2.3 SERVICE AREA PROFILE

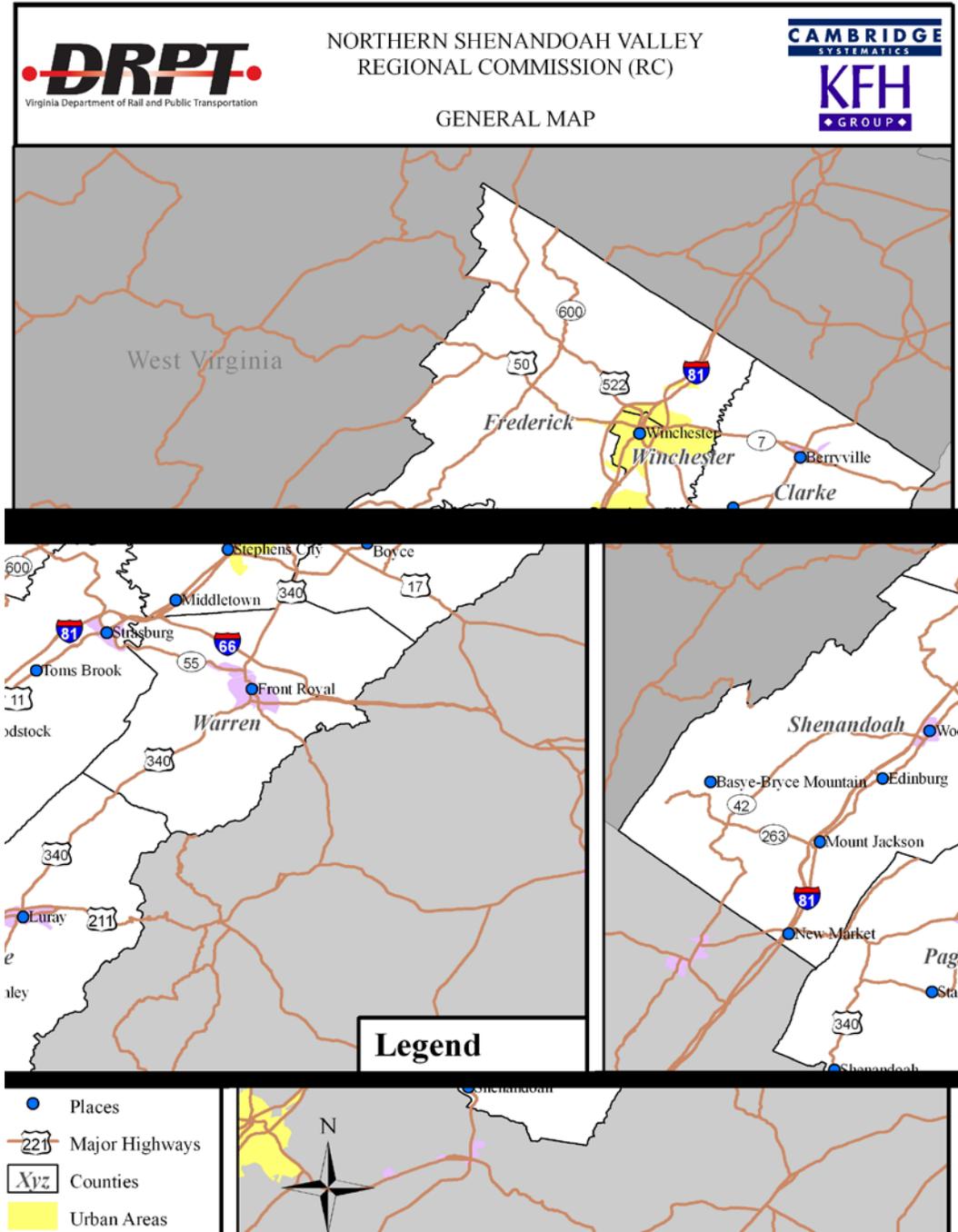
2.3.1 Description of Service Area

VCAP provides a range of TDM services to residents, employers, and employees in the City of Winchester and the Counties of Clarke, Frederick, Page, Shenandoah and Warren. Located about 70 miles east of the District of Columbia, VCAP’s service area is home to approximately 225,500 residents and 106,900 jobs.¹ Multiple schools and universities also are located in the area, including Randolph Macon Academy, Massanutten Military Academy, Shenandoah University, and Lord Fairfax Community College.

VCAP’s service area, shown in Figure 2.2, is bordered to the west by the Shenandoah Mountain Range and West Virginia border and to the east by the Shenandoah National Park and Skyline Drive. The George Washington National Forest also occupies a large portion of the Valley east of I-81 and south of I-66. The region is characterized primarily by rural and agricultural land uses, punctuated by multiple towns containing low- to medium-density residential neighborhoods and clusters of commercial development.

¹ Virginia Employment Commission 2010 population estimate; Local Area Unemployment Statistics, April 2009 employment.

Figure 2.2 Map of VCAP Service Area



Source: Northern Shenandoah Coordinated Human Services Plan.

The Win-Fred Metropolitan Area is the urban center of the region, containing approximately one-third of the population of the Northern Shenandoah Valley. The City of Winchester is the largest urban center in the region, followed by the Town of Front Royal. Overall, population in the Northern Shenandoah Valley is dispersed, with only a few areas – Winchester, Luray, Front Royal, Stephens City, and Shenandoah – possessing a population density over 500 people per square mile. Development is concentrated in Frederick and Warren Counties near the I-81 and I-66 corridors.

2.3.2 Transportation Facilities

The Northern Shenandoah region is served by an extensive transportation system, including: Interstate, U.S., and state highway routes. The area also possesses a growing system of multimodal transportation facilities, including: commuter buses, local transit, bicycle paths, and sidewalks.

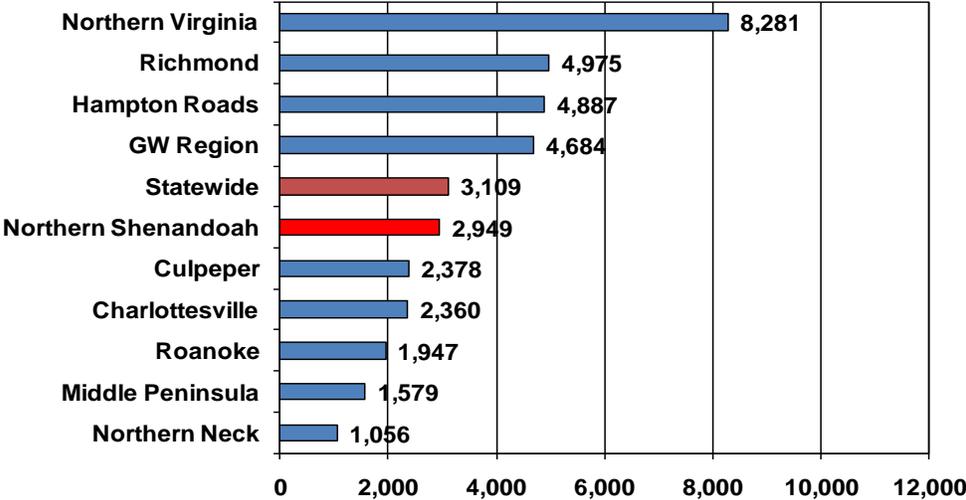
Roadways

The roadway system is by far the most widely used element of the region’s transportation network. I-81 is the primary north-south corridor through the region, connecting the City of Winchester to Harrisonburg and Staunton, Virginia to the south and Hagerstown, Maryland to the north. I-66 is the primary east-west corridor, connecting Front Royal to the Washington Metropolitan Area. State Routes 7 and 55 and U.S. 17, 50, 211, 340, and 522 also are major roadways in the region.

Peak hour congestion outside of the Northern Shenandoah Valley has been a longstanding concern for long-distance commuters traveling from the region to employment in the Washington Metropolitan Area. Over the past 10 years, peak and incident-related congestion also has become a growing concern within the region on and around I-81, I-66, and major routes in the Win-Fred Metropolitan Area (Routes 17/50, 7, 37, 277, and 522 are severely congested during peak periods). The majority of the “nonurbanized” portions of the Northern Shenandoah have not yet experienced congestion issues on their roadways.

While there are many other factors to congestion, vehicle miles traveled per road mile is one relatively simple way to calculate the degree of congestion for regional comparison purposes. According to this measure, congestion in the Northern Shenandoah region is slightly lower than the statewide average, but higher than in other Northern Virginia feeder regions (Figure 2.3).

Figure 2.3 Congestion Rates (Vehicle-Miles Traveled per Road Mile) in Virginia Regions



Source: Virginia State of the Commute Study, 2007.

Commuter Bus Service

Commuter bus services in the Northern Shenandoah Valley are provided through a coordinated effort between Valley Connector Regional Shuttle and Commuter Bus Service, NSVRC, and VCAP. Valley Connector provides weekday motor coach service between the Northern Shenandoah Valley, Northern Virginia, and Washington, D.C. Commuter routes connect Northern Shenandoah residents to multiple transportation networks outside the region (Metrorail, Amtrak, Maryland Area Regional Commuter Rail, Virginia Railway Express, Dulles Airport, and Reagan National Airport) to enable them to reach their destinations. Demand for these services is high, with most buses operating at or near capacity and ridership experiencing more than a 50 percent increase between spring 2008 and 2009. Four weekday bus routes currently are available:

- Valley Connector Route # 46 - Serves Woodstock, Front Royal, and Linden Virginia providing direct service to the Rosslyn Metrorail station, the Pentagon, and Washington, D.C.;
- Valley Connector Route # 48 - Serves Front Royal with direct service to the Vienna/Fairfax Metrorail station;
- Valley Connector Route # 57 - Serves Front Royal, Waterloo, and Berryville Virginia providing direct service to the Ballston Metrorail station, Rosslyn Metrorail station, and Washington, D.C.; and
- Valley Connector Route # 69 - Serves Winchester, Waterloo, and Front Royal Virginia providing direct service to the Ballston Metrorail station, Rosslyn Metrorail station, the Pentagon, and Washington, D.C.

Valley Connector also provides a morning and evening van service from Berryville to the Pentagon and Pentagon City, as well as direct service shuttle service to Dulles Airport from the Front Royal Park-and-Ride, Waterloo Park-and-Ride, and Berryville/Charlestown. Weekend shuttle service for special events is available upon request.

Valley Connector offers varied rate plans based on route and frequency of travel. A monthly pass for D.C. services currently costs \$330. The service is registered with the Washington Metropolitan Area Transit Administration as a vanpool, which allows them to accept payments through transportation benefits programs such as SmartBenefits and TranBen.

Local Public Transportation

Local transit services in the Northern Shenandoah region are provided by Winchester Transit - a public service owned and operated by the City of Winchester - and Virginia Regional Transit Authority - a nonprofit organization serving 15 counties throughout Virginia. Routes operated by these vendors serve the Win-Fred Metropolitan Area and individual jurisdictions in the Northern Shenandoah Valley. There currently are no transit services that connect the counties within the region.

Winchester Transit

Winchester Transit operates fixed-route bus and trolley services on regular schedules throughout the City of Winchester. Designated bus stops are located at intersections throughout the City and all buses are equipped with wheelchair lifts for handicapped or mobility impaired individuals. In 2008, Winchester Transit provided 139,672 rides.

Winchester Transit's fixed-route buses serve residential areas, shopping and commercial developments, medical facilities, and the downtown core of the city. The service currently operates only within the City of Winchester, however, the WinFred Transit Services Plan recommends several route extensions into Frederick County. The fixed-route service incorporates six loop routes that are run between 6:00 a.m. and 8:00 p.m. on weekdays and between 9:00 a.m. and 5:00 p.m. on Saturdays. Service on each City route is provided once an hour. Bus routes that provide limited service into the County operate on three-hour headways on weekdays between 6:00 a.m. and 6:00 p.m.

The eight routes (six permanent and two demonstration routes) that the City operates include:

- Berryville Avenue;
- Valley Avenue;
- Northside;
- Apple Blossom Mall;
- Amherst Street; and
- South Loudoun.

Winchester Transit trolley service is available on Monday, Wednesday, and Friday from 8:00 a.m. to 6:00 p.m. and on Saturday from 10:00 a.m. to 4:00 p.m. to

take passengers to primarily dining and shopping attractions in Winchester. On-demand paratransit service also is offered for those individuals with a temporary or permanent disability that would not allow them to take advantage of regular route service. Fare for all services is \$1 for adults; books of 20 tickets may be purchased for \$17 from any driver.

Virginia Regional Transit Authority

Virginia Regional Transit Authority provides local transit services in Frederick, Clarke, Warren, and Page Counties. Virginia Regional Transit Authority contracts with each of these jurisdictions separately to provide on-demand or fixed-route transit services. Transportation services operated by Virginia Regional Transit Authority in the VCAP service area include:

- **Front Royal Area Transit** - Front Royal Area Transit provides hourly weekday bus service between the hours of 8:30 a.m. and 5:00 p.m. to a variety of destinations in Front Royal located along a single loop route. Rides are provided for the low fare of \$0.50 per trip. All Front Royal Area Transit buses are handicap accessible.
- **Page County Transit** - Page County Transit operates two fixed-route services in the Town of Luray. The Luray-Front Royal route provides weekday morning and afternoon peak hour shuttle service from the Luray Park-and-Ride lot to the Family Dollar Distribution Center in Front Royal. The Luray Town route provides service from the Luray Shopping Center to destination throughout the Town on Monday, Wednesday, and Friday. Six buses run at half hour headways between 8:00 a.m. and 10:30 p.m.; two additional buses depart the Shopping Center at 1:30 p.m. and 2:00 p.m.
- **Clark and Frederick County Demand-Response Service** - Virginia Regional Transit Authority provides on-demand transportation services for residents of Clark and Frederick Counties on weekdays between the hours of 9:00 a.m. and 3:00 p.m. On Mondays Virginia Regional Transit Authority provides a special Winchester Hospital service. Fare for adults is \$1 and riders must call 24 hours in advance to schedule a ride.

Park-and-Ride Lots

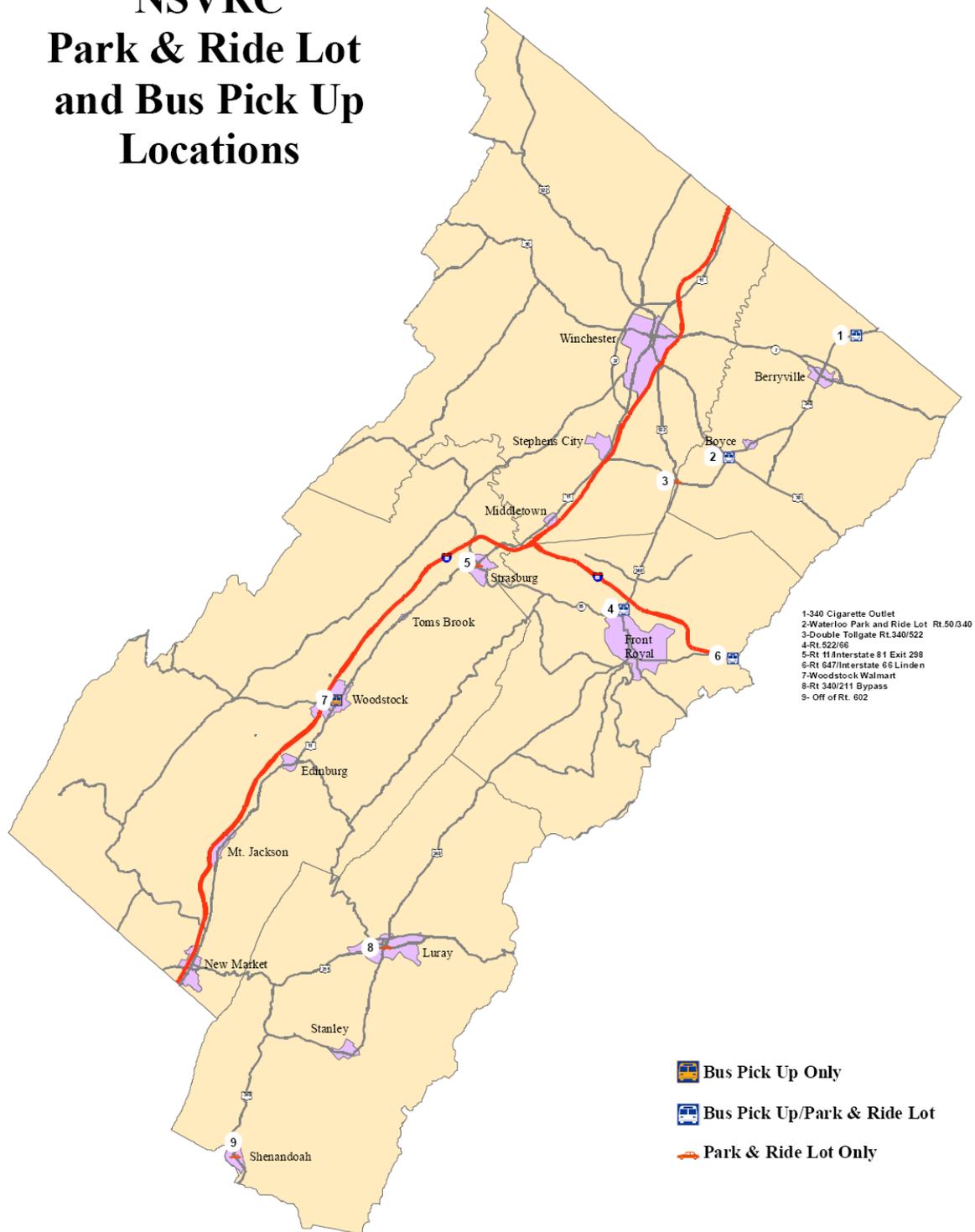
There currently are eight park-and-ride lots located in the Northern Shenandoah region (Figure 2.4) containing a total of approximately 782 parking spaces. These lots are located along major routes for commuters traveling to Northern Virginia or Washington, D.C. and serve as pick-up locations for Valley Connector buses, Virginia Regional Transit Authority shuttles, carpools, and vanpools. There currently are no park-and-ride facilities located in Frederick County or the Win-Fred Metropolitan Area. Figure 2.4 shows the locations of the commuter lots in VCAP's service area. Table 2.2 shows the location and number of spaces at each lot. The majority of park-and-ride lots in Northern Shenandoah are owned and maintained by VDOT. Valley Connector contracts with several local businesses

to provide park-and-ride spaces for commuter bus customers. In several areas informal park-and-ride locations have been established at Wal-Mart parking lots.

Figure 2.5 shows the ratio of park-and-ride spaces to commuters in the Northern Shenandoah region and other regions throughout Virginia. VCAP's service area has a comparable number of park-and-ride spaces to other Northern Virginia feeder markets, however, the ratio of spaces to commuters in the area is low - 10 spaces for every 1,000 commuters. Usage of park-and-ride lots is very high in the Northern Shenandoah Valley. The Front Royal lot - the largest commuter lot in the region - regularly exceeds capacity, with cars spilling over into undesignated parking areas. Sixteen percent of Northern Shenandoah residents surveyed for the 2007 Virginia State of the Commute study reported using a park-and-ride lot when commuting to work in the last year (Figure 2.6). The Fredericksburg region, which contains large commuter lots associated with Virginia Railway Express stations, is the only region outside of Northern Virginia that has a higher park-and-ride lot usage rate.

Figure 2.4 Park-and-Ride Lots in the VCAP Service Area

NSVRC Park & Ride Lot and Bus Pick Up Locations



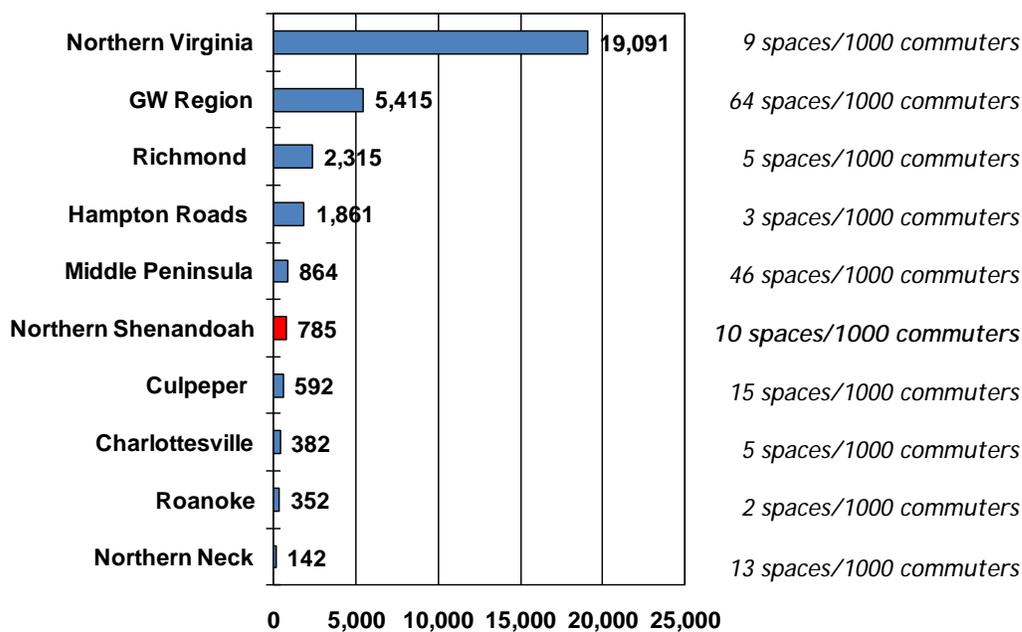
Source: VCAP.

Table 2.2 Park-and-Ride Locations in the VCAP Service Area

Jurisdiction	Location	Spaces
Clarke County	Waterloo (VA 340 at U.S. 50)	177
	Double Tollgate (Stonewall Jackson Hwy and Ray of Hope Lane)	20
	Cigarette Outlet (VA 340)	25
Page County	Luray (Route 340 and Route 211 Bypass)	110
	Shenandoah (Off Route 602)	30
Shenandoah County	Strasburg (Route 11 near I-81)	30
Warren County	Front Royal (I-66 and U.S. 340/522)	260
	Linden (I-66 and Route 647)	130
Total		782

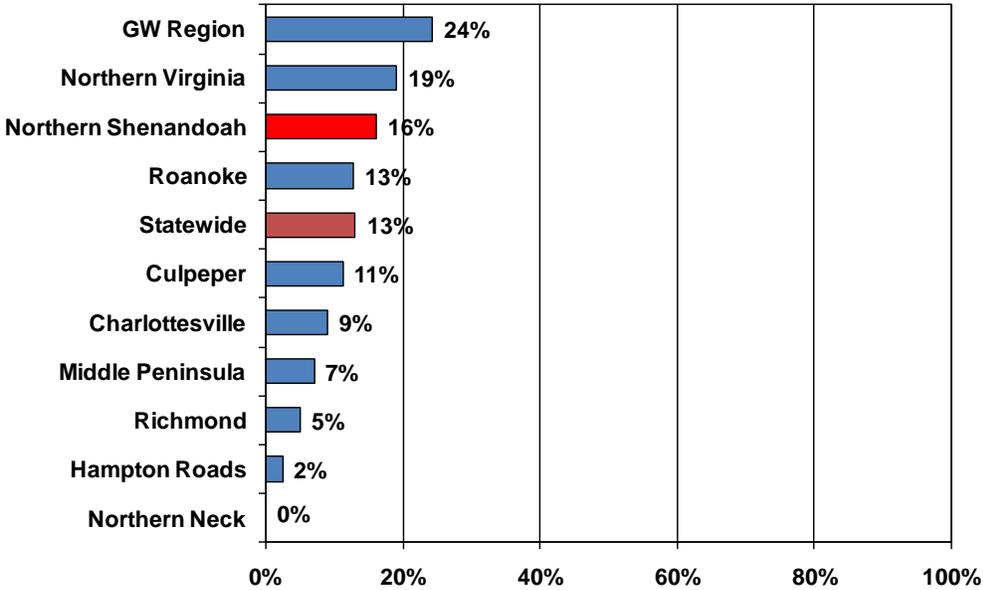
Sources: VCAP, VDOT, and Commuter Connections.

Figure 2.5 Ratio of Park-and-Ride Spaces to Commuters



Source: VDOT, 2006.

Figure 2.6 Park-and-Ride Usage in Virginia Regions



Source: Virginia State of the Commute Study, 2007.

2.3.3 Demographic Profile

Over the past 20 years VCAP’s service area has grown at a moderate rate comparable to other small urban regions in the State (e.g., Culpeper, Charlottesville). Between 1990 and 2000, the population of the Northern Shenandoah Valley increased by just over 26,000 residents, for a growth rate of 16.4 percent. This growth rate is slightly higher than the population growth rate for Virginia as a whole (14.5 percent). Of the 185,282 residents living in the Northern Shenandoah Valley in 2000, just over one-third lived in the City of Winchester or urbanized portion of Frederick County.

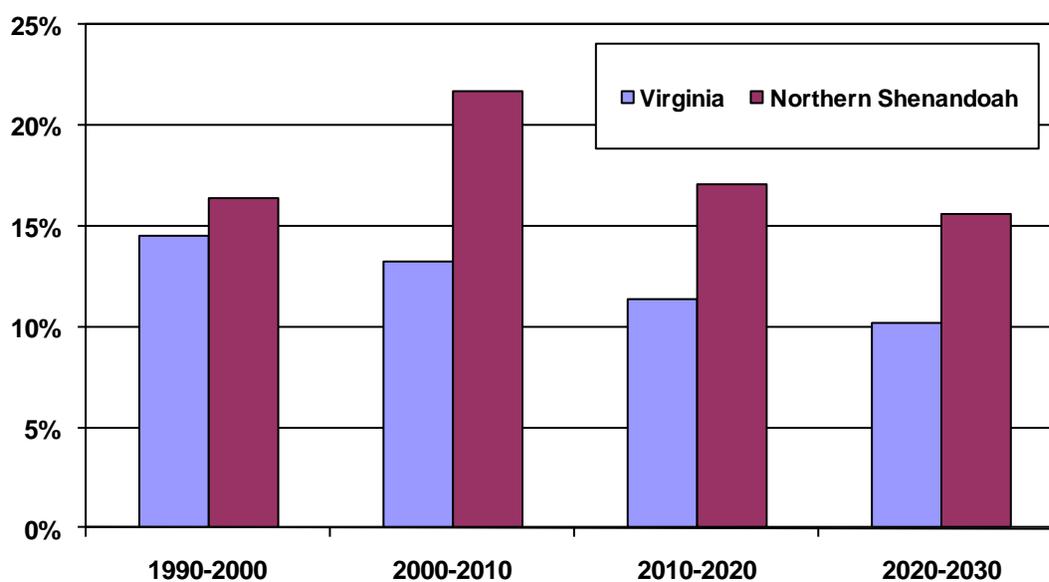
Since 2000, growth has accelerated in the Northern Shenandoah Valley while it has decreased across the State as a whole. By 2010, the region is projected to be home to 225,501 residents, an increase of nearly 22 percent from 2000. In comparison, the average population growth rate for Virginia as a whole is projected to decrease to 13 percent. Table 2.3 shows the demographic profile for the VCAP service area from 1990 to 2010. Figure 2.7 shows how anticipated growth in the area compares to growth throughout the Commonwealth of Virginia.

Table 2.3 Demographic Profile (1990-2010)

	1990	2000	2010
Population:			
<i>Total Population</i>	159,239	185,282	225,501
<i>Percent Growth</i>	-	16.4%	21.7%
Age Groups (Percent):			
<i>Under 20</i>	42,553 (27%)	44,036 (24%)	54,413 (24%)
<i>20 to 64</i>	95,366 (60%)	110,562 (60%)	138,647 (61%)
<i>65 and Over</i>	21,320 (13%)	25,200 (14%)	32,441 (14%)

Sources: Virginia Employment Commission and U.S. Census Bureau.

Figure 2.7 Population Growth Rate in Northern Shenandoah and Virginia



Sources: Virginia Employment Commission and U.S. Census Bureau.

2.3.4 Employment Profile

Employment patterns also can impact the types of TDM services demanded in an area. For example, areas with high levels of employment will have a greater focus on employer services than areas that are mainly residential. In April 2009, total employment in the Northern Shenandoah was 106,852.² Nearly half of the

² Local Area Unemployment Statistics Unit and Bureau of Labor Statistics, April 2009.

employed population in the region lives within the City of Winchester and urbanized portion of Frederick County.

The number and type of industries and employers located in the region has changed significantly over the last 10 to 15 years. Several large manufacturing and fiber/textile industries that were former major employers have left the region. Regional distribution centers for large retailers (e.g., Kohls, Wal-Mart, Family Dollar) are now among the largest local employers and commercial/industrial land uses in the area. These centers are primarily located along I-81 and I-66 for convenient access to surrounding Virginia markets.

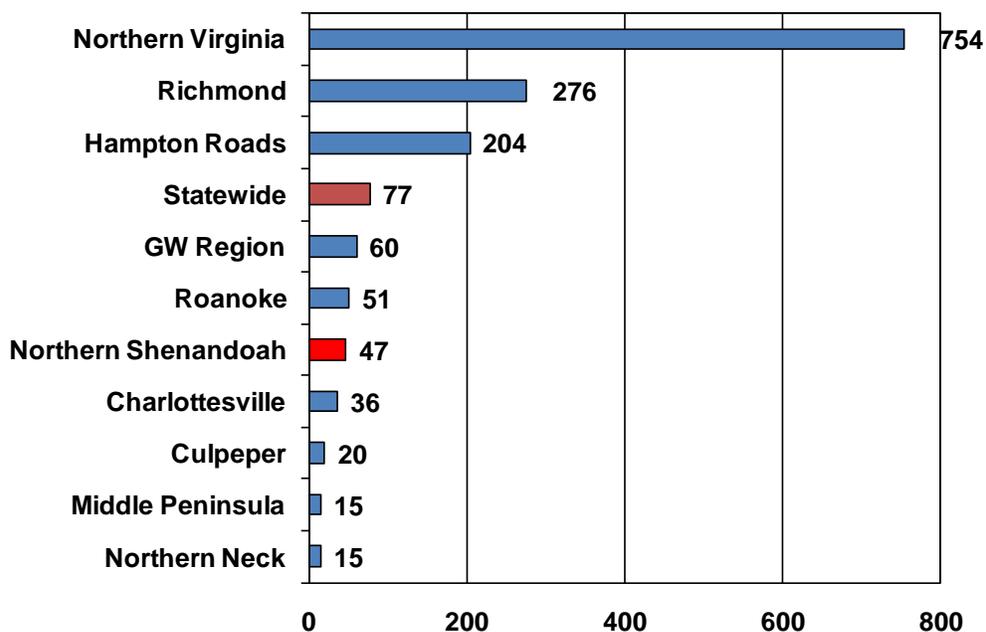
Table 2.4 shows the 10 largest employers in VCAP’s service area in 2009. The region contains four companies that employ over 1,000 workers, 14 companies that employ 500 to 1,000 workers, and 29 companies that employ 250 to 500 workers. Several employment clusters exist in the City of Winchester and Town of Front Royal, but overall employment density in the region is low. As shown in Figure 2.8, the Northern Shenandoah Valley has a lower than average employment density, but is comparable to the Roanoke and Charlottesville regions. This low density of employment is challenging to serve with transit but can be served through other innovative TDM approaches.

Table 2.4 Top 10 Employers in VCAP’s Service Area

Northern Shenandoah Planning District
1. Valley Health System
2. Frederick County School Board
3. Wal Mart
4. Shenandoah County School Board
5. Warren County School Board
6. Rubbermaid Commercial Prod LLC
7. Winchester City Public Schools
8. George’s Chicken
9. County of Frederick
10. Shenandoah University

Source: Virginia Employment Commission. 50 Largest Employers during 1st Quarter (January, February, March) 2009.

Figure 2.8 Employment Population Density in Virginia Regions



Source: 2000 Census, Employees per square mile.

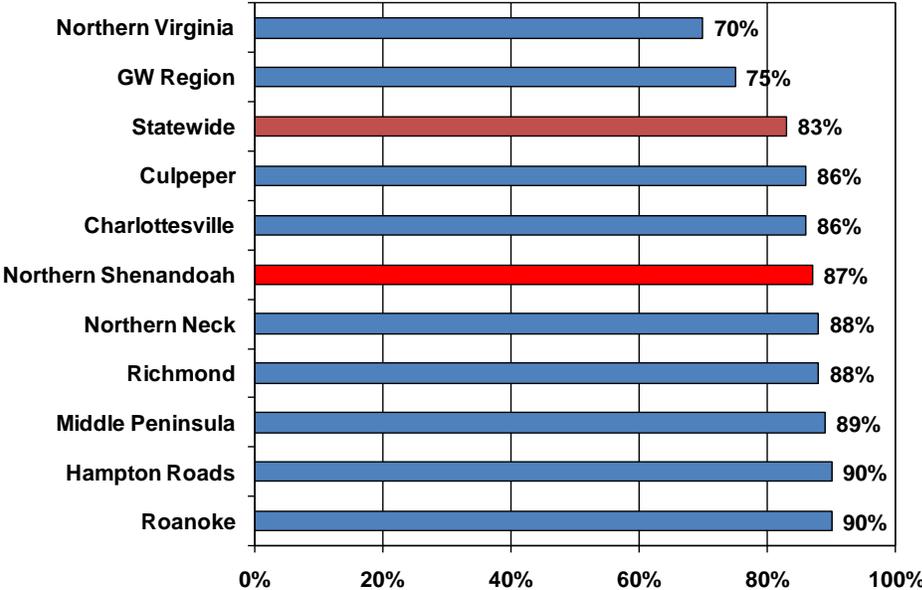
2.3.5 Existing Travel Patterns

Knowing where and how residents, workers, and visitors travel for work and nonwork activities helps determine the services that best fit their needs today and can help identify the types of programs that will attract customers to nonsingle-occupancy vehicle modes in the future. Considering current travel and commute trends, combined with future development and population projections, can give some clues to what types of services will be needed and where future programs and marketing should be targeted.

Mode Split

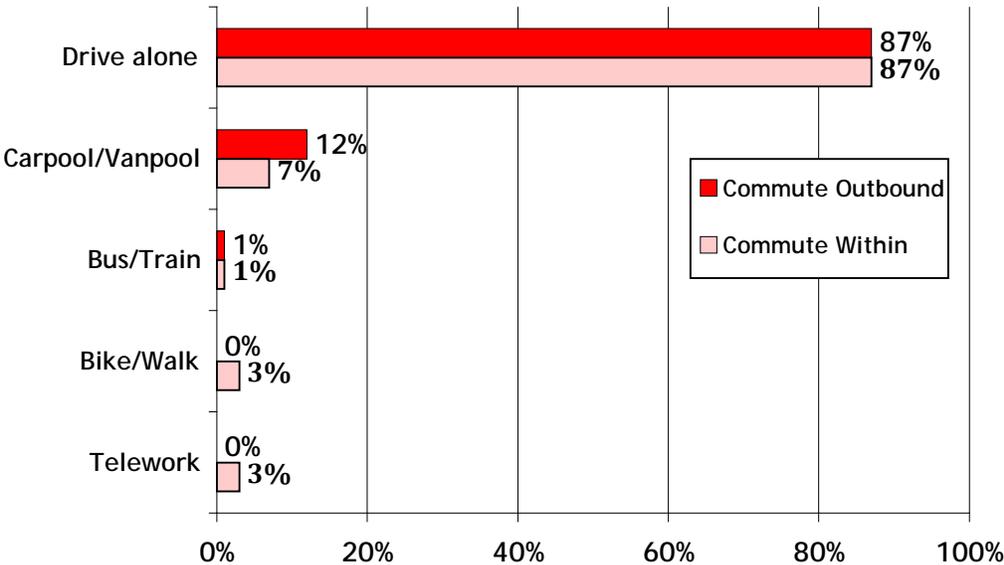
Mode split is commonly used as a performance measure for TDM agencies. In Virginia, approximately 77 percent of commuters drive alone, 11 percent carpool or vanpool, four percent take transit, four percent telework, and four percent walk or use other means. As shown in Figure 2.9, Northern Shenandoah has a higher than average percentage of drive alone commuters. Drive alone rates in the area are equally high both for workers who commute outside of the region and those who live and work within it. As shown in Figure 2.10, those outbound commuters that do not drive alone chose to carpool, vanpool, or take commuter buses. Interestingly, despite the large number of professionals commuting long distances from the Northern Shenandoah Valley, less than one percent of outbound commuters reported teleworking.

Figure 2.9 Drive Alone Rates in Virginia Regions



Source: Virginia State of the Commute Study, 2007.

Figure 2.10 Northern Shenandoah Use of Alternatives to Drive Alone Commute



Source: Virginia State of the Commute Study, 2007.

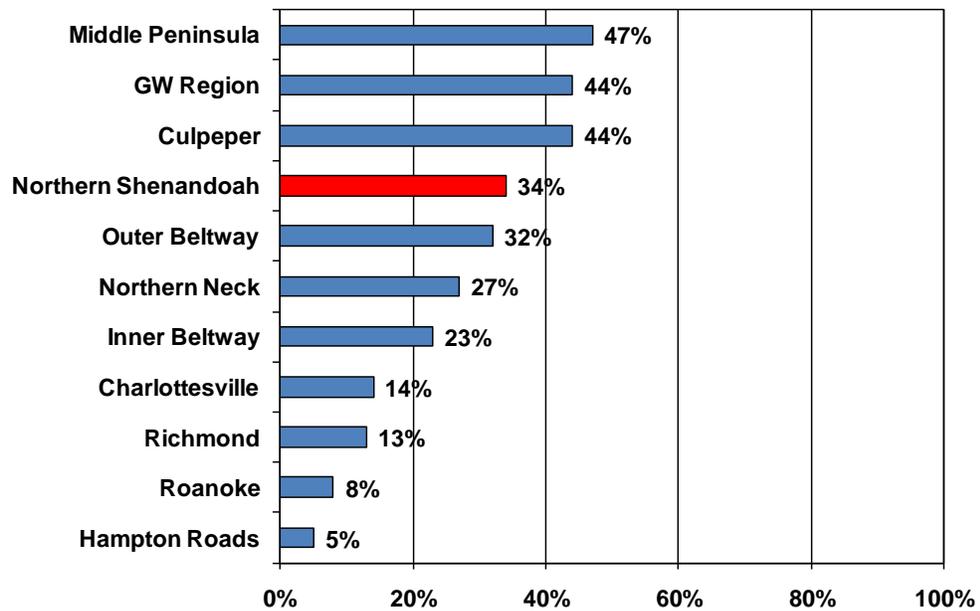
Commuting Patterns

Commuting patterns are one of the largest influences on a TDM agency’s programs and customers. Areas with a large percentage of inbound commuters may want to emphasize employer services, while areas with a large percentage of outbound commuters may want to focus on residentially based programs. Figure 2.11 and Table 2.5 detail current commuting patterns for the VCAP service area.

Overall, Northern Shenandoah Valley residents make over 92,000 work trips on a typical weekday. Over one-third of all employees in the region travel to jurisdictions outside VCAP’s service area for work. The greatest numbers of “outbound” work trips are to Fairfax and Loudoun Counties.

The majority of Northern Shenandoah Valley residents either work within their home jurisdiction or travel to another county in the Northern Shenandoah for employment. An additional 14,500 “inbound” commuters travel from outside jurisdictions to jobs in the Northern Shenandoah region each day. The largest numbers of workers traveling into the region are from Hampshire and Berkeley Counties in West Virginia.

Figure 2.11 Percent of Commuters Commuting “Outbound”



Source: Virginia State of the Commute Survey, 2007.

Table 2.5 Top 10 Areas Residents Commute To and Workers Commute From

Areas Northern Shenandoah Residents Commute to:		Areas Northern Shenandoah Workers Commute From:	
	Residents (%)		Workers (%)
Frederick County	18,962 (21%)	Frederick County	24,706 (29%)
Winchester City	17,767 (19%)	Shenandoah County	14,372 (17%)
Shenandoah County	12,888 (14%)	Winchester City	10,345 (12%)
Warren County	9,174 (10%)	Warren County	9,212 (11%)
Page County	6,914 (7%)	Page County	7,423 (9%)
Fairfax County	5,574 (6%)	Clarke County	3,844 (5%)
Loudoun County	4,319 (5%)	Berkeley County	3,221 (4%)
Clarke County	4,197 (5%)	Hampshire County	3,059 (4%)
Rockingham County	1,866 (2%)	Rockingham County	1,356 (2%)
Harrisonburg City	1,608 (2%)	Morgan County	1,095 (1%)
Total Resident Commuters:	92,436	Total Workers:	84,432

Source: Virginia Employment Commission.

The 2007 State of the Commute survey provides additional information about commute and travel patterns within the VCAP service area. Some important findings from this study include:

- Average one-way commute time/distance: *32 minutes / 25 miles*
- Percent reporting their commute is more difficult than last year: *34%*
- Percent of residents with no transit in home/work area: *70% home/56% work*
- Projected increase in vehicle miles traveled (2000-2025): *81% (Northern VA average)*

As Table 2.6 shows, the Northern Shenandoah region has a longer than average commute time and length compared to other regions in Virginia due to the number of long-distance commuters traveling to Northern Virginia and Washington, D.C. Although the average commute length in Northern Shenandoah is eight miles longer than the state average, the average commute time is only four minutes longer. This trend is in part because many residents travel long distances, but do not experience severe congestion until they reach I-66 or more densely populated areas in Northern Virginia.

As a result, Northern Shenandoah has a higher than average percentage of residents who report they are satisfied with their commute. As Figure 2.12 shows, 70 percent of residents in VCAP's service area report that they are satisfied with their commute. Satisfaction levels among those who work and live in the region are even higher than among commuters who travel outside the Northern Shenandoah Valley for work. However, throughout the region, over

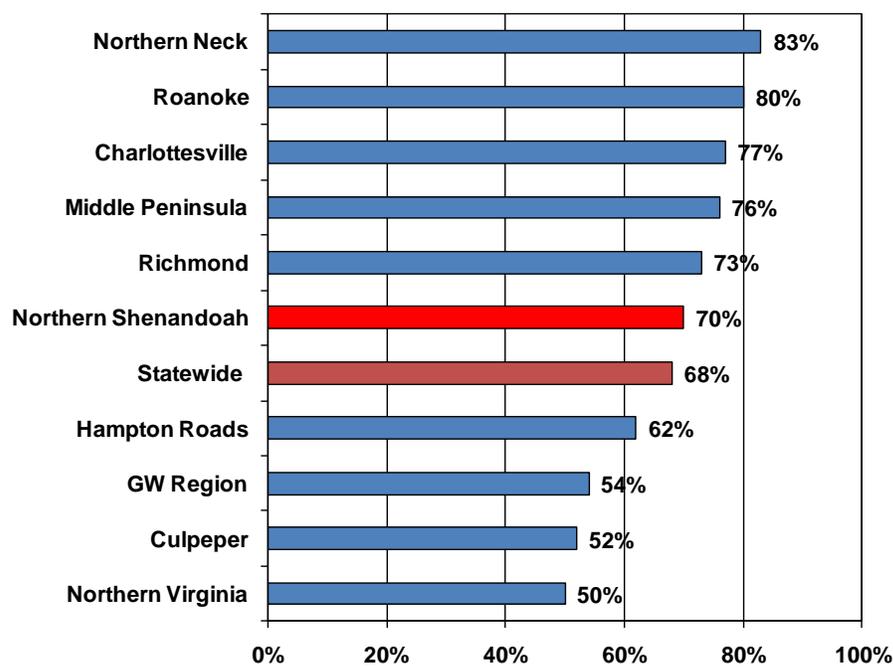
one-third of commuters report that their commute is more difficult now than it was last year.

Table 2.6 Average Commute Trip Time and Length

Region	Average Trip Time Minutes	Rank	Region	Average Trip Length Miles	Rank
GW Region	42	1	GW Region	30	1
Culpeper	40	2	Culpeper	29	2
Northern Virginia	35	3	Northern Shenandoah	25	3
Middle Peninsula	33	4	Middle Peninsula	23	4
Northern Shenandoah	32	5	Northern Neck	22	5
Northern Neck	29	6	Nonserved	19	6
Statewide	28	7	Charlottesville	18	7
Nonserved	26	8	Feeder	17	8
Charlottesville	26	8	Statewide	17	8
Feeder	24	10	Northern Virginia	16	10
Hampton Roads	23	11	Richmond	16	10
Richmond	23	11	Hampton Roads	14	12
Roanoke	20	13	Roanoke	14	12

Source: Virginia State of the Commute Study, 2007.

Figure 2.12 Percent Satisfied with their Commute in Virginia Regions



Source: Virginia State of the Commute Study, 2007.

2.4 CURRENT TDM PROGRAMS AND SERVICES

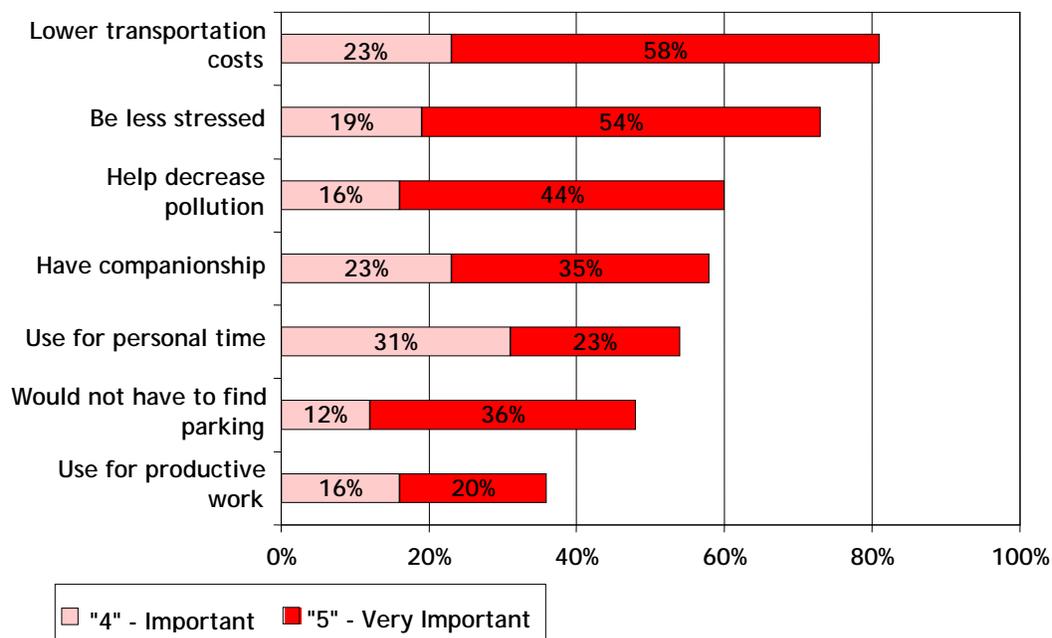
VCAP provides a range of TDM services and programs to residents and employees in the City of Winchester and the Counties of Clarke, Frederick, Page, Shenandoah, and Warren. The Northern Shenandoah VCAP program encourages formation of carpools and vanpools and utilization of the Valley Connector commuter bus system and local transit services. VCAP's services currently focus on three main areas: ridematching, commuter information dissemination, and commuter bus support.

2.4.1 Customers

Disseminating information on the range of transportation options available to residents and connecting commuters to carpool, vanpool, and commuter bus services is the core of VCAP's program. Although congestion within the Northern Shenandoah region is not a major concern outside of the I-66 and I-81 corridors, many residents rely on these routes to reach employment Northern Virginia or the District of Columbia. Several large employers in VCAP's service area have closed or relocated in the past 10 years and many commuters now travel 60 to 90 minutes to work outside of the region. VCAP identifies these extreme commuters as its key customers. The majority of commuters in VCAP's ridematching database travel to the Pentagon, Downtown D.C., or the Dulles Corridor. These commuters face average travel times of over one hour each way in noncongested conditions and nearly two hours in typical peak-hour traffic conditions.

Carpools, vanpools, and commuter buses traveling from the region offer comparable travel times as well as a variety of additional benefits for these commuters. For example, many extreme commuters from the Northern Shenandoah region are Federal employees who receive the maximum \$230 allowable commuter/transit benefit. By commuting via vanpool or commuter bus, these residents experience significant transportation cost savings compared to the cost of driving their personal vehicle, especially during periods of high gas prices. In addition, nonsingle-occupancy vehicle extreme commuters can use their lengthy travel time for less-stressful activities than driving, such as working or sleeping. These benefits are reflected in the primary motivations VCAP's customers report for using alternative modes, shown in Figure 2.13. The two most important reasons for these commuters to use alternative modes are lowering transportation costs and avoiding the stress of driving alone.

Figure 2.13 Reasons Northern Shenandoah Commuters Use Alternative Modes



Source: Virginia State of the Commute Study, 2007.

In addition to serving commuters, VCAP acts as an information clearinghouse for all persons interested in alternatives to driving alone and the benefits of mass transportation. Staff provides information on nonsingle-occupancy vehicle commuter incentives, Guaranteed Ride Home, and other programs. The program also assists local employers to establish shuttle services for employees and supports Valley Connector in identifying and implementing new commuter bus routes. VCAP does not frequently receive requests for nonwork-related travel assistance.

2.4.2 Programs and Services

Information about VCAP's programs and services can be found on the program's web site (www.vcapride.virginia.gov), which provides general commute information, commuter lot locations, "commuter calculator" tools, transit benefit information, and a wealth of other resources. Detailed descriptions of the programs and services provided or administered by VCAP staff are included below.

Carpools and Ridematching

VCAP assists in the creation of new carpools and works to keep these pools successfully operating. One major role of the program is to match commuters with carpools looking for new riders and to connect commuters with similar origins, destinations, and work schedules in order to form new carpools.

VCAP answers ridematch requests utilizing the regional ridematching database administered through the Metropolitan Washington Council of Government's Commuter Connections program. Commuters may call to receive one-on-one trip-planning and ridematching assistance from VCAP staff, they may use the Commuter Connections' on-line tool to receive instant ridematching information, or they may post ride requests on Commuter Connections' on-line bulletin board.

Vanpool Matching/Leasing

VCAP provides assistance to three kinds of vanpools within the Northern Shenandoah Valley: owner-operated vans; third-party vans; and employer-provided vans. VCAP and NSVRC do not own or operate any vans. The program refers commuters interested in starting a vanpool to Vanpool Service Inc. and ABS Vans, the two vanpool companies serving the region, for technical assistance and van leasing services.

VCAP helps to form and maintain vanpools by providing ridematching services using both their own database and the Commuter Connections database. VCAP advertises vanpool services and provides a variety of resources on its web site. VCAP also participates in the Virginia Vanpool Assistance Program. The Virginia Vanpool Assistance Program, sponsored by DRPT, provides temporary funding for vanpools having trouble filling all of their seats. There are two different programs: the VanStart Program, which funds empty seats during the critical start-up phase of new vanpools; and the VanSave Program, which is for existing vanpools that are experiencing problems in their passenger levels due to the loss of riders.³ VCAP currently does not contract with the Washington Metropolitan Area Transit Authority to reimburse Metrocheks or SmartBenefit Vouchers for vanpoolers.

Vanpools are encouraged to register with the database so that staff can provide support and assistance when commuters are starting new vanpools or need help in filling vacant seats. There currently are an estimated 20 vanpools serving the Northern Shenandoah Valley region. Of these vanpools, four are registered with VCAP.

Guaranteed Ride Home

VCAP currently participates in the Guaranteed Ride Home program for the Washington, D.C. area that is administered on a regional basis by the Metropolitan Washington Council of Government's Commuter Connections program. VCAP staff promotes Guaranteed Ride Home and helps individuals to

³ An eligible vanpool owner/operator may apply for VanSave assistance a maximum of once every 12 months per van. Assistance for both programs is granted at the discretion of the local VCAP Program based on eligibility of the applicant.

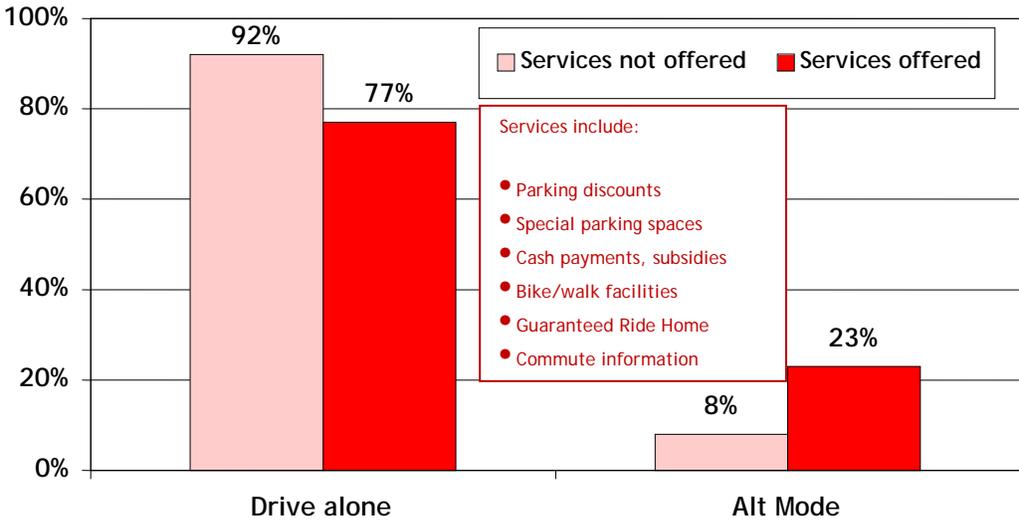
sign up for and use the program. The program currently is not highly used due to the length of most commuters' trips and the limited number of alternative transportation options within the Northern Shenandoah Valley.

Employer Services

There currently are 248 employers in the Northern Shenandoah Valley with over 100 employees. Although a large number of residents travel out of the area for work, VCAP strives to identify and partner with major employers in the region to increase awareness of commute options and establish employer-based TDM programs. VCAP provides employers individualized assistance to form van/carpools and develop custom employer-based ridematching databases.

Assisting employers to establish and provide TDM services has a noticeable impact on commuters' mode choice in the Northern Shenandoah Valley. As Figure 2.14 shows, NSVRC residents whose employers provide commuter benefits such as high-occupancy vehicle parking or transit subsidies are less likely to drive alone and more likely to use alternative modes.

Figure 2.14 Primary Mode if Employer Makes TDM Services Available

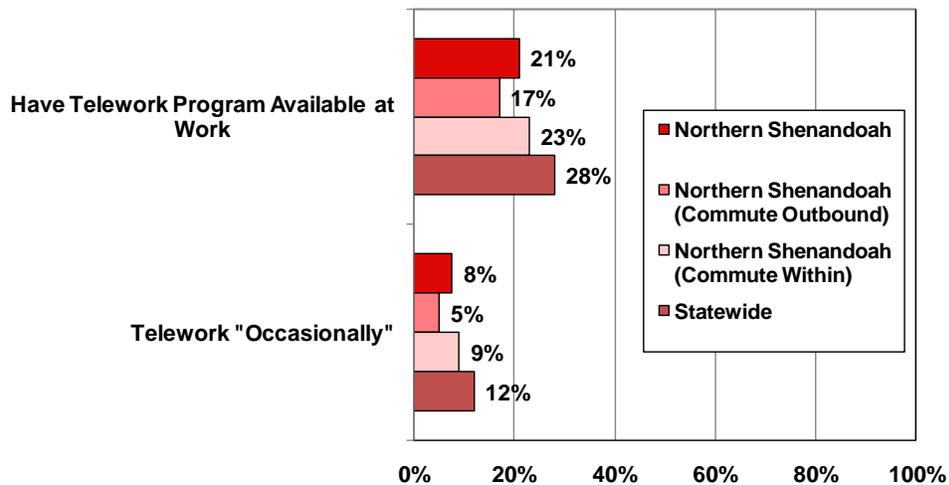


Source: Virginia State of the Commute Study, 2007.

Telework

There currently are two telework centers located in VCAP's service area, one in Winchester and one in Front Royal. VCAP provides information on the TeleworkVA! program on its web site, but currently does not dedicate significant resources to promoting telework. There may be potential to expand the program's involvement in this area in the future, however. As Figure 2.15 and Table 2.7 show, 21 percent of outbound commuters work for companies that have telework programs available and 18 percent of non-teleworkers "could and would" telework if offered the opportunity. In the Northern Shenandoah, this equals approximately 18,700 potential new teleworkers.

Figure 2.15 Teleworkers and Telework Programs in Northern Shenandoah



Source: Virginia State of the Commute Study, 2007.

Table 2.7 Potential New Teleworkers in Northern Shenandoah

	Statewide	Northern Shenandoah
Non-teleworkers who:		
Have telework-appropriate job responsibilities	31%	29%
Are interested in telework	24%	18%
– Occasional	15%	10%
– Regular	9%	8%
Potential New Teleworkers	751,000	18,700

Source: Virginia State of the Commute Study, 2007.

Bicycling/Walking

The City of Winchester and some towns within the Northern Shenandoah Valley currently contain relatively well-connected networks of sidewalks that provide pedestrian access to residential and commercial areas. The City of Winchester also contains several on-street bicycle lanes. Outside of these areas, however, bicycle and pedestrian facilities are limited and safety for nonmotorized travelers is a concern.

The Northern Shenandoah Valley has experienced a surge in demand for walking and bicycling facilities as it grows, particularly in the Win-Fred Metropolitan Area. In response, NSVRC and the Win-Fred MPO have developed the *Walking and Wheeling Plan* and *Win-Fred MPO Bicycle and Pedestrian Mobility Plan* as resources for the region's residents, jurisdictions, and developers. The *Win-Fred MPO Bicycle and Pedestrian Mobility Plan* outlines a strategic approach to the development of a transportation system that accommodates and encourages walking and bicycling throughout the region and identifies a network of walking and bicycling facilities to improve nonmotorized access for residents and visitors. Going forward, VCAP could play a role in supporting implementation of these plans' recommendations and act as an information clearinghouse for bicycle and pedestrian travel information in the region.

Public Transportation

VCAP provides its customers with information on Valley Connector commuter buses, as well as Virginia Regional Transit Authority and Winchester Transit local transit services. The program also supplies information on public transportation options such as Virginia Railway Express, Maryland Area Regional Commuter, and Washington Metropolitan Area Transit Authority Metro that are available in surrounding regions.

VCAP is an active partner in planning and supporting new transit services in the Northern Shenandoah region. Staff currently sit on the Front Royal Area Transit Technical Advisory Committee and attend meetings to discuss regional transit needs and solutions. VCAP has had success in the past partnering with transportation providers and employers to obtain demonstration grant funding to start new transit services. For example, NSVRC and VCAP helped obtain a DRPT grant to start Valley Connector commuter bus service and subsidized the program for several years.

NSVRC was recently awarded a grant to develop a Regional Mobility Coordination program to identify unserved areas and implement transit services in those areas. NSVRC staff will partner with public, private, and nonprofit transit service providers to complete the study, which will help develop a comprehensive transit network within the region through public-private partnerships.

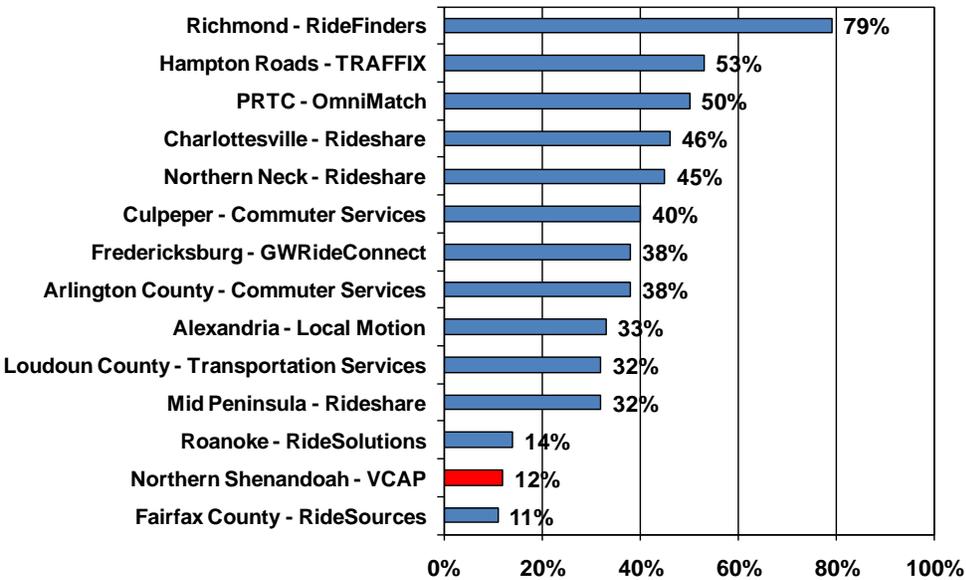
Marketing

VCAP focuses its marketing efforts on area residents who commute to work in Northern Virginia or Washington, D.C. A key objective of all VCAP marketing materials and efforts has been to expand commuters' awareness of carpool, vanpool, and transit options. VCAP uses a wide variety of methods to deliver this message and increase commuters' awareness of available services. These include:

- Ads on Valley Connector buses;
- Television ads;
- Radio ads and sponsorships:
 - Shadow Traffic Report.
- Exhibits and promotional giveaways at community events/fairs;
- Presentations to local officials and community/stakeholder groups;
- Special promotions:
 - Dump the Pump Day;
 - Commuter Appreciation Day; and
 - Clean Commute Day.
- Front Royal and Warren County Chamber of Commerce Newsletters;
- Web site advertising:
 - NSVRC;
 - VCAP; and
 - Comcast.
- Newspaper ads:
 - Northern Virginia Daily; and
 - Winchester Star.

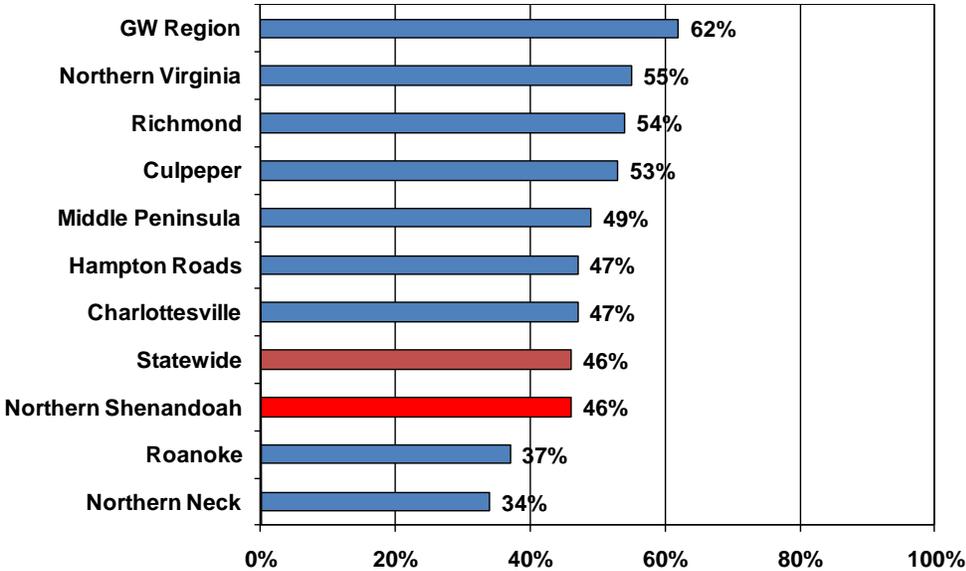
Although visibility of the program among commuters has increased as a result of co-advertising with the Valley Connector commuter buses and other marketing efforts, awareness of the program among residents is low. As shown in Figure 2.16 and Figure 2.17, nearly half of Northern Shenandoah Valley residents recall seeing or hearing advertising for commuter services, but only 12 percent are aware of VCAP or the services the program provides. Going forward, increasing the scope and effectiveness of the program's marketing efforts will be a key task. Balancing the benefits of co-marketing the program with Valley Connector and Commuter Connections with the need to increase VCAP's unique "brand identity" and name recognition will be an important element of this task.

Figure 2.16 Awareness of VCAP Program



Source: Virginia State of the Commute Study, 2007.

Figure 2.17 Advertising Recall



Source: Virginia State of the Commute Study, 2007.

Other TDM Services & Activities

VCAP also promotes the following programs and services:

- **511 Virginia** - VCAP promotes 511 Virginia, a service of the Virginia Department of Transportation. The dial-in service provides a variety of travel and traffic information, including contact information for VCAP and other transportation services. The 511 Virginia website (www.511virginia.org) provides multiple tools to help keep travelers informed.

2.4.3 Related Mobility Programs

VCAP's current services are primarily focused on commuter transportation alternatives. However, there are other programs within the Northern Shenandoah region that provide related services to improve mobility and transportation options for noncommuter groups.

NSVRC and VCAP currently are engaged in an effort to partner with the Shenandoah Area Agency on Aging to coordinate human mobility services across the region. The goal of this effort is to establish a Public Mobility program and central dispatch center to provide coordinated mobility services for senior, disabled, and transportation disadvantaged residents throughout the Northern Shenandoah Valley. Mobility providers currently serving the region include:

- **Human service transportation programs:**
 - Well Tran - Well Tran is a demand-responsive transportation program sponsored by the Shenandoah Area Agency on Aging. The program provides transportation for seniors and adults with disabilities for medical/dental (nonemergency), shopping, and other trips. Services are available on weekdays between the hours of 8:00 a.m. and 5:00 p.m. and riders must call at least three working days in advance to schedule their trip. Individuals eligible for Medicaid transportation are not eligible for medical rides with Well Tran, but are eligible for transportation for other purposes. There is a charge for this service, but discounts are provided according to income.
 - Northwestern Community Services Board - The Northwestern Community Services Board provides curb-to-curb and door-to-door transportation services to residents of the City of Winchester and Clarke, Frederick, Warren, Shenandoah, and Page Counties affected by emotional/behavioral disorders, mental illness, substance abuse, or developmental disabilities. The program operates seven vehicles (five handicap accessible) and provides approximately 4,200 trips per year for specific individual appointments and some recreational, evening, and weekend trips.
 - American Red Cross - The American Red Cross provides medical transportation to residents with no other travel options through its all-

volunteer driver program. Riders must call one week in advance to schedule their trip. The agency owns and operates two vans.

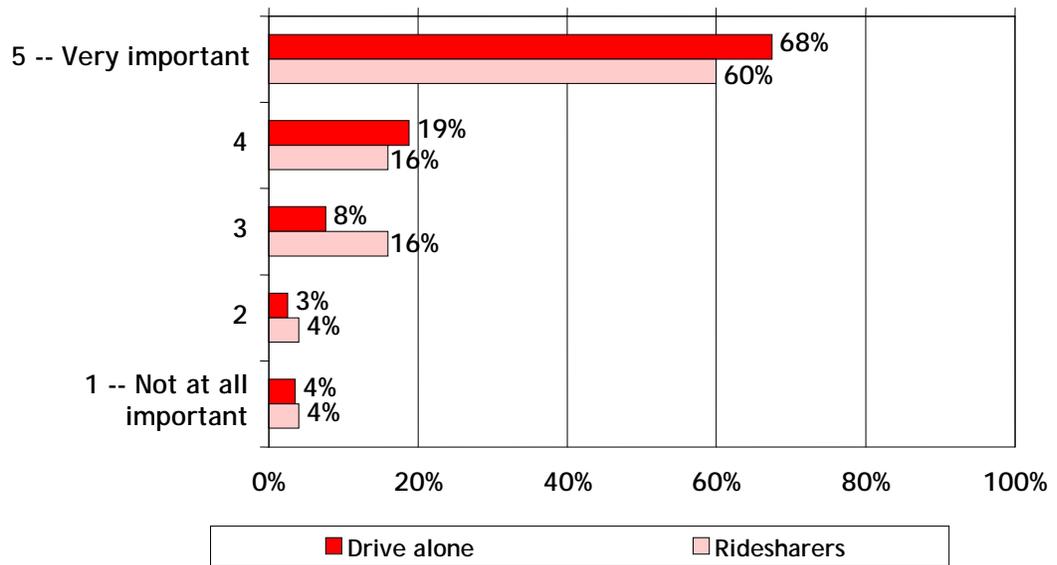
- Faith in Action - Provides transportation services for senior, frail, and chronically ill residents through an interagency coalition of volunteers from local congregations. Trips are provided primarily to medical facilities and shopping centers using volunteers' personal vehicles. Approximately 28 individuals currently use the Faith in Action service.
- Grafton - Provides transportation for participants in the nonprofit's programs for children and adults with autism, intellectual and cognitive disabilities, psychiatric conditions, and developmental disorders.
- Logisticare - Provides transportation to medical appointments for Medicaid and Medicare eligible recipients. Logisticare serves the entire Commonwealth of Virginia through vendors in seven regions. Vendors provide 60,000 trips per week statewide.
- Shen-Paco Industries - Provides weekday curb-to-curb transportation services to individuals with disabilities in Shenandoah and Page Counties who participate in the company's rehabilitation services program. The program operates four vehicles (two handicap accessible) and provides approximately 2,100 trips per year to its facilities in Luray and Quicksburg, Virginia.
- **Taxi and bus service providers:**
 - Ace Cab Service, Front Royal, Virginia;
 - Apple Taxi, Winchester, Virginia;
 - Blue Ridge Taxi Services, Strasburg, Virginia;
 - Colonial Taxi Services, Woodstock, Virginia;
 - County Cab Co., Mount Jackson, Virginia;
 - Elwood's Cab Co., Front Royal, Virginia;
 - LC Cab Company, Inc., Front Royal, Virginia;
 - Pat's Cab, Winchester, Virginia;
 - Physician's Transport Service, Winchester, Virginia;
 - Shenandoah Yellow Cab, Front Royal, Virginia;
 - Taxi Latino, Winchester, Virginia;
 - Taxi USA, Winchester, Virginia;
 - Valley Health Medical Transport, Winchester, Virginia; and
 - Yellow Cab Co., Winchester, Virginia.

3.0 Future VCAP Service Area Profile

This Plan is designed to address the TDM needs of the Northern Shenandoah region in the short term (one to six year), medium term (seven to 15 year), and long term (16 to 25 year). This section addresses how the region is expected to change over these time horizons.

Future transportation challenges in the region will be typical of a growing exurban area and TDM strategies can play an important role in addressing these challenges. As Figure 3.1 shows, support for future investment in transit and TDM in the Northern Shenandoah region is high. This support is shared by both single-occupancy vehicle commuters and current ridesharers.

Figure 3.1 Percent of Northern Shenandoah Commuters Who Think It's Important to Invest in Transit/TDM



Source: Virginia State of the Commute Study, 2007.

3.1 PROJECTED DEMOGRAPHICS

Over the next 20 years VCAP's service area is projected to continue to experience moderate population growth. The region is expected to grow more slowly than other exurban Northern Virginia feeder markets (e.g., Culpepper, Fredericksburg), but at twice the rate of more rural areas of the State (e.g., Central Shenandoah Valley, Middle Peninsula, Northern Neck). This population

growth is projected to gradually slow and “level out” somewhat over the coming decades. Population projections for VCAP’s service area are shown in Table 3.1. The region expects to add around 40,000 new residents during each 10-year period from 2010 to 2030.

Also of interest is the projected age structure of residents. The aging of the “baby-boom” population is anticipated to significantly impact public budgets due to a dramatic increase in the number of individuals dependent on public health care insurance and social security programs over the next 20 years. The percentage of Northern Shenandoah residents over 65 years old has remained relatively constant at 13 to 14 percent for the past 20 years. This figure is expected to increase to 20 percent by 2030, translating into a near doubling of the senior population in 20 years.

Serving the transportation needs of an aging population accustomed to a high level of mobility will have a significant impact on development patterns and the types of transportation services needed. Senior residents “aging in place” in rural areas of the Northern Shenandoah Valley will have especially keen transportation needs because they are more dependent on driving longer distances to reach basic services than seniors in urban areas, where more destinations are within walking distance and transit or other transportation options are available.

Table 3.1 Demographic Changes (2000-2030)

	1990	2000	2010	2020	2030
Population:					
<i>Total Population</i>	159,239	185,282	225,501	264,115	305,284
<i>Percent Growth</i>	-	16.4%	21.7%	17.1%	15.6%
Age Groups (Percent):					
<i>Under 20</i>	42,553 (27%)	44,036 (24%)	54,413 (24%)	62,799 (24%)	75,177 (25%)
<i>30 to 64</i>	95,366 (60%)	110,562 (60%)	138,647 (61%)	156,942 (59%)	169,153 (55%)
<i>65 and Over</i>	21,320 (13%)	25,200 (14%)	32,441 (14%)	44,374 (17%)	60,954 (20%)

Source: Virginia Employment Commission and U.S. Census Bureau.

3.2 PROJECTED EMPLOYMENT

Employment also is expected to increase in the Northern Shenandoah in the future. Table 3.2 shows that employment is expected to increase by more than 12 percent between 2009 and 2019, adding more than 13,000 new jobs. Population is expected to grow at a faster rate than jobs throughout the region, however, meaning that many residents will continue to commute long distances to employment in Northern Virginia and other regions.

Many of the jobs expected to move into the Northern Shenandoah region are in the manufacturing industry, similar to current major employers in the region (e.g., InterBake, Dupont, Sysco, Toray, Ferguson). These new arrivals will add to total employment and replace former manufacturing jobs that have closed or relocated out of the region over the past 10 to 15 years.

Based on current trends, the region also may experience an increase in professional employment in the future. Several large Federal employers are planning to open or relocate large offices in the Northern Shenandoah Valley in the near future. The FBI is planning to locate a new facility employing approximately 800 workers in the western portion of the region near the West Virginia border. The Federal Emergency Management Administration also will be relocating several offices to the City of Winchester.

Table 3.2 Estimated Employment Levels

	Estimated 2009	Estimated 2019	Change	Percent Change	Annual Growth
Total Employment*	106,852	120,315	13,463	12.6%	1.2%

Source: April 2009 Local Area Unemployment Statistics Unit and Bureau of Labor Statistics employment (Northern Shenandoah Planning District Commission), projected using projected annual growth rate for Virginia Employment Commission, Shenandoah Valley (LWIA IV).

3.3 AREAS OF GROWTH

Development over the next 20 years will be dispersed throughout the Northern Shenandoah Valley. The City of Winchester and urbanized portions of Frederick County in particular will continue to grow in population and size. Frederick County’s 2007 Comprehensive Plan states that the area will maintain a moderate rate of population and housing growth, focusing on a balanced distribution of growth, a variety of housing types, awareness of the public facilities needed to support residential growth, and energy efficient housing patterns. The County plans to utilize Traditional Neighborhood Design – development that emphasizes walkability, connectivity, increased density, environmental quality, and an integrated mix of land uses, community facilities, and housing types – as a growth management tool. The County also plans to promote multimodal mixed-use urban centers in several areas, including: Papermill Road and a new I-81 interchange; Stephens City near Route 277; West Jubal Early; and Crosspointe.

Smaller, village-scale areas of growth anticipated in Frederick County include: Senseny Road Triangle, Justes Drive School Cluster, Artrip, Warrior, Tasker, Lakeside at the Library, Kernstown, and Sunnyside.

The City of Winchester’s Comprehensive Plan, currently being updated, also identifies New Urbanist strategies as a goal to manage future growth and promote mixed-use, pedestrian-friendly development. The draft Winchester

Plan does not identify specific areas where concentrated or rapid growth is expected.

Growth also will occur in Warren and Clarke Counties as Towns within these Counties continue to grow and as development in Fairfax and Loudoun Counties begins to expand into the eastern portions of the Northern Shenandoah. After the decennial census in 2010, it is anticipated that the Win-Fred Metropolitan Area will be expanded to include portions or all of Warren and Clarke Counties. The Warren County Comprehensive Plan currently is being updated and will outline the County's vision for the region and its preferred approach for managing anticipated growth. This vision and approach will impact where future growth occurs and what development looks like.

Shenandoah and Page Counties are both projected to experience some population growth over the next 20 years, but have identified in their Comprehensive Plans the desire to remain predominantly rural in nature. Preserving natural resources, productive agricultural lands, quality of life, and a variety of local jobs are identified as primary goals in these plans.

3.3.1 Transportation Facilities

The region's transportation network will be impacted by increasing demand associated with population and economic growth. In particular, congestion will likely become more severe and impact larger portions of I-66, I-81, and urbanized areas. This problem also will likely spread to other major roadways in the region outside these corridors and the City of Winchester.

Current Northern Shenandoah Comprehensive Plans and the Win-Fred MPO Long-Range Transportation Plan identify several major transportation projects that currently are in development or that will be pursued in the future to serve growing travel demand in the region. These projects include:

- Approximately 100 future roadway, intersection, or interchange improvements (including to I-81) that address existing and projected 2030 commuter peak-hour traffic congestion.
- Permanent expansion of two Winchester Transit bus routes into Frederick County and Stephens City.
- Expansion of commuter bus service to the Greater Washington, D.C. Metropolitan Area.
- Exploration and promotion of future passenger rail service along the I-81 and I-66 corridors;
- Win-Fred MPO is studying a portion of the Route 7 corridor for a potential new park-and-ride facility. The Win-Fred MPO and Rural Transportation Planning Technical Committees also are studying a portion of Route 522 for a potential new park-and-ride facility.

- Access management studies for the following corridors: Route 7, U.S. 17/50, U.S. 522, U.S. 11, and Pleasant Valley Road.
- Formation of the Northern Shenandoah Valley Public Mobility Program (NSVPMP) to create a coordinated human services transportation system for the region with the deployment of new technologies, including: networked computer aided dispatching, automatic vehicle location, and Medicaid electronic payment.
- Expansion of I-66 High-Occupancy Vehicle lanes outside of the Northern Shenandoah Valley and increased restrictions limiting lanes to HOV-3.
- Extension of the Silverline Metrorail to Tysons Corner (estimated completion date 2013) and past the Dulles Airport into Loudoun County (estimated completion date approximately 2015).

In addition, NSVRC currently is developing the following plans to identify future transportation service and infrastructure needs to serve expected growth in the region:

- **Win-Fred MPO Long-Range Transportation Plan Update** - Staff from the NSVRC began the *Win-Fred MPO Long-Range Transportation Plan Update* in early 2009 per direction of the MPO Policy Board. Final plan adoption will be in the summer of 2010. The 2030 Transportation Plan will be multimodal; designed to accommodate travel in the region made not only by auto drivers but also by auto passengers, transit riders, bicyclists, and pedestrians.
- **Rural Long-Range Transportation Plan** - The VDOT has initiated a Rural Transportation Planning Program - modeled after the existing MPO program - to address the needs of nonmetropolitan areas of the State. NSVRC currently is collaborating with Northern Shenandoah jurisdictions outside the Win-Fred MPO to develop a 20-year vision plan for the region and to compile recommendations for roadway, transit, bicycle/pedestrian, and goods movement. VDOT intends to use these plans as a basis for identifying interstate and primary road priorities for the Virginia 6-year improvement program.

3.4 PROJECTED TRAVEL PATTERNS

Changes in demographics, employment, development patterns, and transportation infrastructure will all affect the travel patterns in and around the VCAP service area. Based on the trends documented in the previous sections, several changes in travel patterns are possible, including:

- **Congestion** - An estimated 81 percent increase in vehicle miles traveled across Northern Virginia between 2005 and 2025 will assuredly increase congestion in the region, particularly on primary roadways during peak hours.

- **Long-Distance Commuting** - Northern Virginia and Washington, D.C. will continue to be major commuter destinations for long-distance commuters, due to local employment growth lagging behind population growth.
- **Public Mobility/Aging Population** - A growing senior population and baby-boomers “aging in place” will create increased need for alternatives to driving, including: on-demand and fixed-route transit, human mobility services, pedestrian facilities, mixed-use development, and transportation services that cater to intraregional and nonwork trips.
- **Demand for Nonsingle-Occupancy Vehicle Travel Options** - Increased congestion on I-81 and I-66, High-Occupancy Vehicle lane expansion, and volatile gas prices may cause increased demand for carpooling, vanpooling, commuter bus routes, and park-and-ride lots among commuters.
- **Nonwork / Intraregional Trips** - Expanded employment opportunities and a growing number of commercial and other nonwork destinations within the region may increase demand for intraregional travel. Local and nonwork trips will become an increasingly important segment of travel to be served by nonsingle-occupancy vehicle modes.
- **New Urbanism / Traditional Neighborhood Design** - An increased focus in the Win-Fred Metropolitan Area on mixed-use, medium-density development that incorporates multimodal transportation options may impact residents’ mode choice for local trips and increase the viability of transit and other transportation alternatives.
- **Telework** - Increasing numbers of professional workers and increased availability of high-speed Internet access throughout the Northern Shenandoah region may increase the percentage of residents who telework occasionally or regularly.
- **Bicycle and Pedestrian Facilities** - Changing demographics and increased local travel may result in increased demand for bicycling and pedestrian facilities to serve transportation, recreation, and economic development (e.g., tourism) functions.

3.5 External Trends

In addition to the projected demographic and economic development trends that will affect TDM in the area, there are a number of external trends and factors that are likely to influence and shape the Northern Shenandoah Valley’s future. Some of these forces are described in this section.

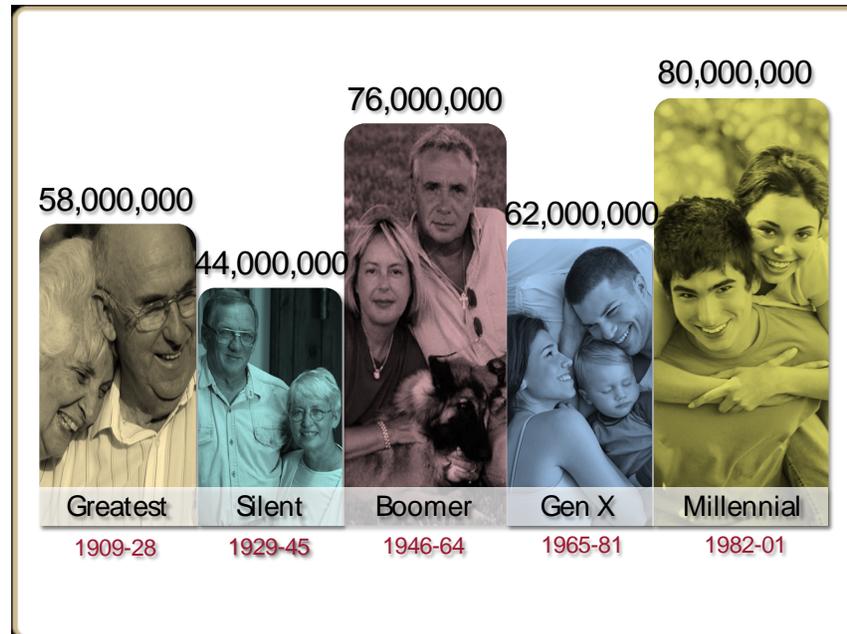
3.5.1 New Generation of Workers

America’s youngest generation, the Millennials (sometimes called Gen Ys or Echo Boomers), are poised to make a huge impact on ridesharing modes and

ridesharing support services for years to come. There are two primary factors that will fuel this change.

First, the sheer size of the Millennial population suggests that they will influence society, just as the unusually large Baby Boomer generation did and still does today. When compared to the other generations, Millennials represent the largest generation alive today – 80 million strong as shown in Figure 3.2.

Figure 3.2 Size and Age Profile of U.S. Generations



Source: Southeastern Institute of Research Boomer Project.

Second, over the past two years, Millennials have shifted to and remained in nonsingle-occupancy vehicle work commute modes at a greater rate than any older generation. Even the recent fall in gas prices has not reversed this promising trend among Millennials. Given the cause-oriented generational values and sheer size of this generation, Millennials will have a big impact on ridesharing and may represent a tremendous opportunity to significantly shift America’s modal split.

Millennials also are leading the way in reshaping rideshare support services. Just three years ago, most ridematching was done through large government-sponsored, centralized databases. Today, many commercial enterprises are tapping into commuters’ need for hyper-social connectivity by offering ridematching as part of social networks – Craigslist, Facebook, Goloco.org, Ridebuzz.org, and Greenyour.com. Millennials are leading the adoption curve of this new technology and new way to share a ride.

While Millennials make up a small percentage of the workforce now, they will make up the majority of the work force in years to come, surpassing the older generations just ahead of them – the smaller Gen X and baby Boomers.

It will be these future workers – 10 and 20 years from now – that will shape how our companies, cities, and transportation systems of the future will run.

3.5.2 Environmentalism and Sustainability

One of the most recent social movements being fueled by Millennials, as well as older generations, is the green or sustainability movement. When it comes to TDM, there are both consumer- and business-driven forces at work. Residents of the Northern Shenandoah have shown a tendency to site environmental reasons as a motivation for ridesharing and using alternative modes. Local jurisdictions, NSVRC, and the Win-Fred MPO also place preserving environmental and natural resources as a high priority in planning documents and activities. The view that ridesharing and TDM are the green alternatives to drive alone commuting could help TDM gain ground in this market. As was shown previously in Figure 2.13, 44 percent of ridesharers state that decreasing pollution is a “very important” motivation for using alternative modes of transportation.

Perhaps the more powerful green influence in the TDM world is what is happening with businesses. More and more companies want to be perceived as being green. In a recent Southeastern Institute of Research Study for the *Older Dominion Partnership*, 50 percent of the CEOs in Virginia want their companies to be perceived as “being green.” To this end, companies are embracing green practices and looking for ways to showcase their corporate greenness.

3.5.3 Growing Involvement of Employers in TDM

Over the past few years, the labor shortage, green movement, and corporate experiences with TDM have helped the TDM cause reach the tipping point in employer appreciation and use. Corporate America has now realized that it is in their self interest to embrace TDM programs to boost recruitment, retention, employee productivity, etc. Consequently, more and more companies are offering TDM services and programs and/or considering launching additional TDM services in the future. This trend creates an opportunity for VCAP to connect with the growing number of companies in the Northern Shenandoah and surrounding regions.

3.5.4 Changing Nature of Work

One of the more subtle reasons behind employers’ relatively recent acceptance of employer-based TDM services is the changing nature of work. More and more employers recognize that work is not some place you go, but rather something you do. Enlightened employers are measuring employee productivity not by time clocks but rather by outcomes – they are slowly evolving to a distributed workforce model.

This realization has been fueled by the pre-recession 2009 labor shortage and will be accelerated, again, by the significant labor shortages projected in the coming

decade when millions of Baby Boomers slow down or exit the labor market altogether. Employers desire to cater to their labor forces' physical work space desires often translates into compressed work weeks, greater flexibility to come and go, and the ability to work from off-site locations.

An early indicator of the powerful impact that the changing nature of work will have on commute patterns is the rise in popularity of telework. Teleworking offers the biggest opportunity to reduce vehicle miles traveled across the region as it basically eliminates the need for the trip altogether. Today, eight percent of the Northern Shenandoah workforce telecommutes, and according to the 2007 State of the Commute Survey, 18 percent of the rest of the Northern Shenandoah workforce would telework at least occasionally if given the opportunity.

3.5.5 Automobile Cost of Operation

Discussing the future of roads and highways most often leads to some form of user fees – tolls, increased gas taxes, congestion pricing, or vehicle miles traveled tax. Other forms of roadway pricing also may be introduced in the future and no matter what form these user fees take, it seems likely that at some point within the long-term timeframe of this plan, some type of user fee will be enacted on at least some portion of the roadway network. It can, therefore, be assumed that it will cost more to operate an automobile in the future.

Gasoline prices are another unknown element of the future of TDM; most industry leaders are in agreement that gas prices will be higher in the future. How much higher and when the increase will occur is still unknown, but with the 2008 spike in gasoline prices as an indicator, the price increase will likely have a major impact on the choice and use of travel modes.

4.0 VCAP Strategic Plan

As VCAP's service area continues to grow and change over the short, medium, and long term, the services required and desired by residents will change as well. The customer base that VCAP serves will grow and may change to include a more diverse group of employees, employers, and noncommuters (students, tourists, seniors). New services will need to be developed to serve new needs, and existing services and programs will need to be expanded to better meet the needs of all stakeholders.

This section outlines the strategic framework that will guide the growth and development of VCAP and its services over the short, medium, and long terms. An analysis of the program's strengths, weaknesses, opportunities, and threats in light of current area needs and projected future changes was conducted to produce goals and objectives the program will work towards, strategies the program will pursue to achieve their goals, and performance measures to monitor the program's progress.

4.1 STRENGTHS, WEAKNESSES, OPPORTUNITIES, AND THREATS

A Strengths, Weaknesses, Opportunities, and Threats Analysis provides an organized framework for evaluating an agency and the environment in which it operates. This analysis highlights strengths as areas in which VCAP already excels, while recognizing weaknesses as areas in which VCAP should work to improve its programming. Opportunities are elements that VCAP could use to its strategic advantage and convert into strengths, while threats are factors or events that could turn into weaknesses if not addressed proactively.

4.1.1 Strengths

- Dedicated, knowledgeable staff familiar with the transportation needs of Northern Shenandoah Valley residents and the unique needs of long-distance commuters.
- Integration of VCAP within the NSVRC allows the program to leverage administrative and support services to enhance the TDM program. This arrangement also enables the program to coordinate their activities to support regional planning efforts.
- The region's large population of long-distance commuters traveling to high-density, centralized employment areas makes vanpooling and commuter bus a viable money-saving transportation option for many residents. High-occupancy vehicle lanes outside the region and employers who offer high levels of commuter benefits also support a strong market for the program.

- Strong working relationship with the Valley Connector commuter bus allows VCAP to co-market their services and play an active role in identifying and implementing services that fit their customers' needs. Valley Connector staff also act as champions for TDM in the region.
- Established role on the Front Royal Area Transit Advisory Committee.
- Strong working relationship with Loudoun County and other regional TDM agencies.

4.1.2 Weaknesses

- Lack of local congestion, low-density distribution of workers and employers, and abundance of parking make ridesharing a difficult sell to local employers and residents who aren't long-distance commuters.
- Current economic conditions make local match funding difficult to obtain. Wide variation in population, land use, and future planning goals among local jurisdictions makes developing programs that serve the entire Northern Shenandoah Valley and that all jurisdictions are willing to provide funding for difficult.
- Transportation alternatives to single-occupancy vehicles are lacking in the region. Bicycle and pedestrian infrastructure is limited and lacks connectivity in many areas. Most jurisdictions are served only by demand-responsive transit that must be arranged 24 hours in advance.
- A limited number of local employers provide ridesharing incentives and no transit services cross jurisdiction boundaries, which may make ridesharing difficult for individuals who live and work in the region.
- Awareness of the program and its services is low among residents, employers, and local elected leaders.
- Limited performance data exists to show the impact of the ridesharing program and to "sell" the program to potential funders and/or stakeholders.

4.1.3 Opportunities

- New NSVRC Marketing Coordinator will dedicate at least half of their time to the rideshare program, which will allow for more extensive marketing and proactive development/expansion of programs and services.
- Expansion of I-66 High-Occupancy Vehicle lanes to Haymarket – east of the Northern Shenandoah Valley – and increased restrictions on these lanes (e.g., barrier separation or HOV-3 limits) will impact ridesharers on the corridor. New High-Occupancy Vehicle lanes and restrictions may increase demand for carpools, vanpools, and transit along I-66 so that commuters can take advantage of the time savings offered.

- Several large, Federal employers moving into the region present an opportunity for VCAP to develop services for reverse commuters and to access new funding sources (e.g., Job Access Reverse Commute grants).
- The Silverline Metrorail extension to Tysons Corner in 2013 and past the Dulles Airport into Loudoun County around 2015 will create a closer transit option into Northern Virginia and Washington, D.C. and may increase demand for carpool, vanpool, and shuttle services.
- The expansion of the Win-Fred Metropolitan Area to include Warren County and other portions of the Northern Shenandoah Valley will create additional opportunities for regional planning and provision of regional transit services (possibly through the formation of a regional transit agency). Increased coordination with the MPO also increases access to a variety of potential TDM funding sources (e.g., Congestion Mitigation and Air Quality grants).
- Growing senior/retired population will have increasing transportation needs that cannot be served by driving alone. Developing services to fulfill these needs presents an opportunity for VCAP to strengthen partnerships with local human mobility agencies and expand its own programs and customer base.
- An increased focus in the Win-Fred Metropolitan Area on mixed-use, medium-density development that incorporates multimodal transportation options may impact residents' mode choice for local trips and increase the viability of transit and other transportation alternatives.
- Warehouse/industrial employment centers offer opportunities to form carpool, vanpool, and shuttle services for shift workers in order to ensure low cost transportation options for low-wage employees.
- Statewide support for TDM by DRPT, may increase the variety of services available and raise awareness of TDM programs in areas outside of the Washington Metropolitan Area.
- Increasing congestion and professional job opportunities in and near the Northern Shenandoah Valley may increase interest in and opportunities for telework.

4.1.4 Threats

- Continued sprawling low-density development that is expected to occur in the area cannot be economically served by traditional transit services.
- Development policies that encourage ample free parking and roadway expansion create limited incentives for residents and employees in new developments to rideshare.
- Local intraregional travel may continue to be difficult to serve due to dispersed employment centers. TDM services may have to be developed on an employer by employer basis.

- Divergent needs and planning goals of the growing metropolitan region and more rural jurisdictions in the region may make planning and implementing regional TDM solutions difficult.
- Awareness of TDM and support for the VCAP program must be cultivated at all levels within the NSVRC, local jurisdictions, and the general public.
- Need to establish a brand identify that is distinct from Valley Connector and Commuter Connections.

4.2 VCAP MISSION AND VISION

The mission of the Northern Shenandoah VCAP program is to:

Within the Northern Shenandoah Valley, promote awareness of transportation and communication alternatives to the single-occupancy vehicle trip for out-bound and in-bound commuters, residents, local governments, business, and industry. Provide assistance that enables individuals and organizations to reap the economic and environmental benefits of using alternative programs and technologies. Enhance public mobility within the region by creating and implementing a Regional Transit Plan.

Through its efforts to fulfill this mission, VCAP supports the vision, goals, and objectives of the NSVRC, Win-Fred MPO, and member jurisdictions.

4.3 GOALS AND OBJECTIVES

4.3.1 Coordination with Other Plans and Programs

This Long-Range TDM Plan was developed in coordination with relevant existing plans developed at the local, regional, and state level. Key stakeholders and staff from related programs also were engaged in the planning process. The following plans were reviewed as part of the planning process to the extent possible:

- VCAP Planning Work Program and Marketing Plan (2010);
- Metropolitan Washington Council of Governments Constrained Long-Range Transportation Plan (2009);
- Win-Fred MPO Bicycle and Pedestrian Mobility Plan (2009);
- Page County Comprehensive Plan (2009);
- NSVRC Coordinated Human Services Mobility Plan (2008);
- Clarke County Comprehensive Plan (2007);
- Frederick County Comprehensive Plan (2007);
- Warren County Comprehensive Plan (2004);

- Shenandoah County Comprehensive Plan;
- Win-Fred MPO 2030 Transportation Plan (ongoing);
- City of Winchester Comprehensive Plan (ongoing);
- Transit Services Plan for Win-Fred MPO (ongoing); and
- VTrans 2035 (ongoing).

The visions, goals, objectives, and future activities contained in these plans informed and shaped the content of this Plan. The goals and objectives adopted in this Plan are designed to support these plans in order to assist VCAP, its stakeholders and local jurisdictions, and the Commonwealth of Virginia achieve their collective goals.

4.3.2 Process for Developing Goals and Objectives

The goals and objectives contained in this plan were developed through a collaborative process involving NSVRC staff with assistance and input from Cambridge Systematics, LDA Consulting, Southeastern Institute of Research, and Center for Urban Transportation Research. The process to identify and refine programmatic goals, objectives, and performance measures included:

- Review of existing VCAP documents to understand the role and services of the program;
- Interviews with VCAP staff to identify existing and future program needs;
- Review of all comprehensive plans and other documents created by NSVRC and its member jurisdictions;
- Development of a Strengths, Weaknesses, Opportunities, and Threats Analysis based on the reviewed documents;
- Formation of draft TDM goals based on:
 - Existing vision statements and transportation or TDM-related goals and objectives in reviewed documents; and
 - Interviews and Strengths, Weaknesses, Opportunities, and Threats Analysis.
- Review and revision of goals and objectives by VCAP staff.

During the development of goals, objectives, and performance standards for this plan, the following definitions were used:

- **Goal** - Is a broad, qualitative statement of what the agency hopes to achieve.
- **Objective** - Is a specific, measurable statement of what will be done to achieve goals.

- **Performance Standard (Measure)** – Is a quantitative or qualitative characterization of performance that evaluates the efficiency or effectiveness in conducting business operations.
- **Strategy** – Is a statement of the approach or method the program will pursue to attain goals and objectives.

4.3.3 Agency Goals, Objectives, and Strategies

Following the process described in Section 4.3.2, VCAP has identified the following long-term goals (see Table 4.1 for a complete list of associated objectives and strategies):

1. **Increase awareness of the Valley Commuter Assistance Program and the visibility of TDM in regional planning processes.**
 - VCAP has one of the lowest levels of awareness in the state relative to other rideshare programs, and ad recall also is low. VCAP must look for ways to further build awareness of the region’s rideshare services. Commuters may not know where to turn for the assistance they want and need. VCAP should invest in a consistent and ongoing marketing program, as it is clear that decisions about mode choice are being made continuously. A quarter of ridesharers from the Northern Shenandoah Valley indicated that they just started using the mode less than one year ago. Thus, the need to encourage commuters to consider alternate modes and the responsibility of providing information is constant. Marketing communication materials should reinforce the biggest opportunity audience – serving long-distance commuting needs – and promote commuter cost savings and stress reduction as compelling personal benefits of ridesharing for this group. Additional promotional campaigns such as testimonials or environmental messages should be tailored to different audiences.
2. **Increase the availability and use of alternate modes of transportation that serve the needs of ALL Northern Shenandoah Valley residents.**
 - The Northern Shenandoah Valley’s extreme commuters are a key opportunity market to increase use of alternative modes in the region. These commuters represent a third of the region’s residents who work outside of their home and have some of the longest commutes in the State. In addition, these people believe congestion is getting worse, not better. Relative to some other areas in Virginia, rideshare infrastructure in the Northern Shenandoah Valley could be improved to increase alternative mode use. Virginia State of the Commute data suggests that there is a shortage of park-and-ride lots – low ratio of spaces to commuters and relatively higher usage level compared to other regions across the State. Local transit infrastructure and bicycle/pedestrian facilities also are in short supply and could be expanded both to increase

alternative mode share for local trips and to support tourism and local economic development goals.

- VCAP's service area is home to a growing number of seniors, disabled individuals, and others with unique transportation needs that may not be adequately served by current services. VCAP can play a valuable role in connecting these underserved populations to transportation options available in the region by acting as a transportation information clearinghouse for area residents and by supporting local/regional efforts to identify, implement, and/or expand services that meet these residents' needs.

3. Contribute to economic development and increased economic opportunities in the Northern Shenandoah Valley.

- VCAP's services allow many NSVRC residents to access high-paying jobs in the Washington Metropolitan Area each day and to return to the Northern Shenandoah Valley to support local businesses and housing markets with their wages. In order to continue to serve this primary opportunity market VCAP will focus employer outreach on the distant Metro market and team up with Virginia's other Metro D.C. western feeder markets (e.g., Culpeper) to include rideshare promotional materials in the Northern Virginia rideshare agencies' business outreach efforts. VCAP will continue to take advantage of the Telework!VA's infrastructure tools and assistance, which represents a great opportunity for the Northern Shenandoah Valley and involves little investment and appears to offer significant return.
- In addition to supporting local economic development by serving long-distance commuters, VCAP can help to make the Northern Shenandoah Valley a more attractive location for businesses by partnering with local employers to develop transportation solutions for their employees and by organizing reverse commuter services for Federal employees whose jobs have begun relocating to the region.

Table 4.1 outlines the specific TDM goals, objectives, and strategies VCAP will pursue over the short, medium, and long term in order to achieve these goals.

Over the short term (1 to 6 years), the focus of VCAP's growth will be on expanding and enhancing the region's key TDM programs and services. The program will work to expand its programs to serve currently unmet or underserved needs in the region while continuing to enhance its core ridematching, carpool/vanpool support, and information dispersal services. In the medium term (7 to 15 years), VCAP will build the foundations for new programs and services. More substantial changes and/or additions are planned for the long-range timeframe of 16 to 25 years.

Implementing these strategies will require additional funding and resources. Resources required to implement the strategies outlined in Table 4.1 (e.g., staff,

operating/administrative costs, subsidies) are addressed in Section 5.0 of this plan.

Table 4.1 VCAP Goals, Objectives, and Strategies

1. **Goal: Increase awareness of the Valley Commuter Assistance Program and the visibility of TDM in regional planning processes.**

1.1. *Objective: Increase the number of residents and employers who are aware of the VCAP program and who actively use the program's services.*

Short-Term Strategies (one to six years):

- 1.1.1 Develop a marketing plan to raise general awareness of VCAP's services, target commuters who are most likely to use high-occupancy modes (e.g., extreme commuters to Northern Virginia and Washington, D.C.), and identify direct marketing opportunities and strategies
- 1.1.2 Continue to improve the VCAP web site to share a greater amount of information in the most user-friendly way possible.
- 1.1.3 Increase awareness of the VCAP program and promote TDM strategies by participating in promotional events, including: regional job fairs, community events, etc. Promote specific TDM-related events such as Earth Day, Bike to Work Day, etc.
- 1.1.4 Distribute VCAP materials at a variety of destinations and activity centers, including: libraries, Chambers of Commerce, colleges and universities, transit facilities, real estate offices, social service offices, and human service organizations.
- 1.1.5 Work with the Metropolitan Washington Council of Governments to increase VCAP's visibility in Commuter Connection's regional TDM marketing and maximize the region's return on investment from membership.
- 1.1.6 Continue to co-market VCAP with other commuter/transportation services and through high-visibility marketing campaigns such as advertisements on local and commuter buses, roadside billboards, and signs at park-and-ride lots.
- 1.1.7 Seek partnership opportunities with radio, television, and print media for public service marketing.
- 1.1.8 Develop Facebook and Twitter pages to provide additional outreach to commuters.
- 1.1.9 Develop and maintain a quarterly VCAP newsletter

Medium-Term Strategies (7 to 15 years):

- 1.11 Develop a citizen advocacy network.

Long-Term Strategies (16 to 25 years):

- 1.1.10 Continue to expand programs and advertising activities to serve newly developed markets.
-

1.2. *Objective: Foster partnerships with regional governments and agencies to increase the visibility of TDM and establish “buy-in”.*

Short-Term Strategies (one to six years):

- 1.1.11 Develop and implement a formal follow-up program for all VCAP customers. Follow-up could be conducted through a brief phone, mail, or on-line survey and will gather information on the results of TDM services provided (e.g., ridematch, mode switch), satisfaction with services provided, and additional customer needs.
- 1.1.12 Using the customer follow-up survey, database audits, and other tools, develop and monitor a set of program performance measures in order to evaluate program delivery and demonstrate the value of TDM services provided. Using these measures, develop a brief presentation or pamphlet to create “sell” the program to elected officials, local agencies, potential funders, and the general public.
- 1.1.13 Brief the NSVRC Board of Directors at regular intervals on important topics, including VCAP program performance and the benefits of TDM.
- 1.1.14 Identify opportunities to increase TDM involvement with local agencies and planning processes by conducting presentations at meetings, participating in Advisory Boards, or other activities.
- 1.1.15 Continue to participate in the Regional Transit Study Steering Committee
- 1.1.16 Promote the integration of rideshare with the Win-Fred MPO and the Rural Transportation Planning Program. Explore ways to participate in the Win-Fred Technical and Policy Advisory Boards and the Rural Transportation Planning Technical Committee.

Medium-Term Strategies (7 to 15 years):

- 1.11 Identify funding opportunities to expand TDM services
- 1.1.17 Continue to identify stakeholders (e.g., economic development agencies, local jurisdiction planning staff) and explore opportunities to serve as a resource/consultant for incorporating TDM practices into plans (e.g., Comprehensive Plan updates) and developing alternative transportation solutions to mobility challenges.

Long-Term Strategies (16 to 25 years):

- 1.12 Continue to expand VCAP’s role as a TDM consultant/resource for local jurisdictions, developers, and others.

1.3. *Objective: Maintain a high level of customer service.*

Short-Term Strategies (one to six years):

- 1.11 Develop and implement a regular follow-up with customers to ensure accuracy of ridematch database information, assess customer satisfaction, and identify additional service needs. Follow-up with all customers within 30 days of contacting VCAP and annually thereafter.
 - 1.12 Conduct brainstorming session with other regional TDM agencies (e.g., Loudoun County, Fairfax County, Rappahannock-Rapidan Commuter Services) to determine ways to increase collaboration and increase the quality and efficiency of TDM service delivery.
 - 1.13 Partner with the Metropolitan Washington Council of Governments to improve the on-line ridematching tool by increasing user-friendliness and incorporating functions that serve the needs of rural and long-distance commuters.
 - 1.14 Maintain the currency and quality of the commuter database in order to maintain a high match rate.
-

-
- 1.15 Explore opportunities to enhance the VCAP web site and use other technologies to increase the accessibility of VCAP services and other commuter/transportation information.

Medium-Term Strategies (7 to 15 years):

- 1.16 Continue to pursue professional development opportunities to develop VCAP staff knowledge and ability to provide high-quality service.

Long-Term Strategies (16 to 25 years):

- 1.17 Continue to regularly assess customer satisfaction and take steps to address identified areas for improvement.

2. Goal: Increase the availability and use of alternate modes of transportation that serve the needs of ALL Northern Shenandoah Valley residents.

2.1. Objective: Increase the number of carpools and vanpools serving the Northern Shenandoah Valley by providing ridematching and expanding ridesharing infrastructure.

Short-Term Strategies (one to six years):

- 1.11 Maintain and grow the VCAP ridematching database. Continue to serve an average of 20 new rideshare applicants per month.
- 1.12 Complete a regional park-and-ride study. Play an active role in developing priority park-and-ride lots identified in existing regional plans and identifying future park-and-ride needs and locations. Explore opportunities to partner with local businesses and organizations to lease park-and-ride spaces as a “stop-gap” measure in areas of high demand.
- 1.13 Continue to partner with Valley Connector to establish vanpools that serve destinations and schedules not currently served by existing vans and commuter buses (e.g., workers/travelers departing after 6:15 a.m.). As demand for particular routes/schedules grows, work to transition vans to commuter bus service.
- 1.14 Contract (or continue to contract) with the Washington Metropolitan Area Transit Authority to participate in the SmartBenefits program and serve as a center for vanpools to redeem their incentive vouchers.
- 1.15 Partner with GWRideConnect to promote the AdVANtage program as an inexpensive vanpool liability insurance option.
- 1.16 Continue to explore use of social media (e.g., Twitter, Facebook) and new technologies (e.g., smart phones, NuRide, Zimride) to increase the convenience of ridematching and the variety of trips (work and nonwork) served.

Medium-Term Strategies (7 to 15 years):

- 1.17 e.g., e.g., Explore opportunities to partner with the Metropolitan Washington Council of Governments to improve Guaranteed Ride Home services in the Northern Shenandoah Valley.

Long-Term Strategies (16 to 25 years):

- 1.18 Continue to play an active role in identifying and developing priority park-and-ride lots to meet regional demand.
-

2.2. *Objective: Support development and expansion of local and commuter transit services.*

Short-Term Strategies (one to six years):

- 1.11 Continue to support Valley Connector commuter bus services through operating assistance grants or by contracting Valley Connector to provide transit services using TDM grant funds.
- 1.12 Continue to collaborate with Front Royal Area Transit, Winchester Transit, and other local transit agencies to identify viable transit routes in the Northern Shenandoah Valley.
- 1.13 Continue to work with the Regional Transit Study Steering Committee to promote regional public mobility.
- 1.14 Work with local colleges and universities to identify transportation needs and implement shuttle, bus, or other transportation services.
- 1.15 Participate in planning discussions regarding extension of passenger rail services (e.g., Virginia Railway Express) to the Northern Shenandoah region
- 1.16 Partner with Valley Connector and other regional transportation providers to establish shuttles to Metrorail (including new Silver line stations), Virginia Railway Express, and other transit services outside the Northern Shenandoah Valley.
- 1.17 Explore transit and nonsingle-occupancy vehicle transportation services that will attract “choice” riders.
- 1.18 Continue to partner with Valley Connector and local Visitors’ Centers to provide transportation services that serve visitors’ needs and to promote the Northern Shenandoah Valley as a tourism destination. (e.g., locating transit stops at tourist destinations/hotels, transit service to and from Dulles Airport, day trip service to and from Washington D.C.).

Medium-Term Strategies (7 to 15 years):

- 1.19 Continue to support Valley Connector to increase the frequency of service on existing commuter bus routes as demand increases and to establish van and bus routes serving destinations and schedules that are not currently served (e.g., local route to Manassas).
- 1.110 Partner with Front Royal Area Transit, Winchester Transit, Virginia Regional Transit Authority, and other local transit providers to develop feeder service to park-and-ride lots. (Creating these services will require local providers to extend their service hours and begin running buses earlier in the day.)

Long-Term Strategies (16 to 25 years):

- 1.111 Continue to partner with Valley Connector, Front Royal Area Transit, Winchester Transit, and other local transit providers to identify viable transit routes to serve increasing demand for commuter and noncommuter travel.
 - 1.112 Support establishment of a regional public transportation provider to improve intraregional transportation options within the Win-Fred MPO and greater Northern Shenandoah Valley region. Options identified in the Win-Fred Transit Services Plan include: expanding Winchester Transit, creation of a Transportation District, creation of a Service District, or creation of a Regional Transit Authority.
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- 2.3. *Objective: Support coordinated delivery of transportation services that serve the needs of senior, disabled, and low-income residents.*

Short-Term Strategies (one to six years):

- 1.11 Assist in the creation and operation of a Human Mobility Transportation Center that coordinates regional human mobility transportation services and acts as a dispatch center for Northern Shenandoah Valley residents and transportation providers.
- 1.12 Increase coordination/partnerships with private taxi companies.

Medium-Term Strategies (7 to 15 years):

- 1.13 Continue to support the efforts of the Human Mobility Director and operation of the Human Mobility Transportation Center.

Long-Term Strategies (16 to 25 years):

- 1.14 Continue to identify the unmet transportation needs of senior, disabled, and low-income residents in the Northern Shenandoah Valley and pursue coordinated approaches to serve them.

3. Goal: Contribute to economic development and increased economic opportunities in the Northern Shenandoah Valley.

- 3.1. *Objective: Increase the number of local employers and employees served through outreach programs.*

Short-Term Strategies (one to six years):

- 1.11 Create and maintain an employer-based TDM program for the region. Annually increase the number of employers contacted and with active workplace TDM programs.
- 1.12 Seek partnerships with local businesses to promote VCAP and provide services that make the Northern Shenandoah Valley an attractive environment for businesses and employees.
- 1.13 Develop a list of area employers to target for TDM outreach (e.g., employers on key transportation corridors, companies with large employee bases)
- 1.14 Develop a packet of outreach materials designed to increase TDM awareness and "buy-in" among employers.
- 1.15 Conduct site visits to area employers to provide one-on-one assistance

Medium-Term Strategies (7 to 15 years):

- 1.16 Continue to maintain the employer-based TDM program and annually increase the number of employers in the Northern Shenandoah Valley with active workplace TDM programs.
- 1.17 Host events at employers and conduct on-site instant ridematching using on-line tools.

Long-Term Strategies (16 to 25 years):

- 1.18 Continue to seek partnerships with local businesses to promote VCAP and provide enhanced services that make the Northern Shenandoah Valley an attractive environment for businesses and employees.
-

3.2. *Objective: Increase access to jobs in the Northern Shenandoah and surrounding regions.*

Short-Term Strategies (one to six years):

- 1.11 Work with the FBI and other Federal employers relocating to the Northern Shenandoah Valley to establish a Reverse Commuter Plan and services. Coordinate with Valley Connector to create reverse commuter bus service utilizing buses that currently remain in the Washington region throughout the day and return in evening. For example, support development and operation of new Valley Connector reverse commute van service serving Washington D.C., Dulles Airport, and Northern Shenandoah Valley (estimated to begin service in 2011).
- 1.12 Work with local telework centers in Winchester and Front Royal to promote their services to employers in Northern Virginia and Washington, D.C.
- 1.13 Explore opportunities to utilize Telework!VA's infrastructure tools and assistance.
- 1.14 Focus employer outreach on the distant Metro D.C. market to serve your primary opportunity target – long-distance commuters. Consider partnering with Virginia's other Metro D.C. western feeder markets (e.g., Culpeper) to include VCAP promotional materials in the Northern Virginia rideshare agencies' business outreach efforts

Medium-Term Strategies (7 to 15 years):

- 1.15 Partner with local jurisdictions and employers to identify opportunities to create transportation services sponsored/subsidized through public private partnerships (e.g., the Virginia Regional Transit Authority route cofunded by Page County and Family Dollar). Survey local residents and employers to identify potential routes for regional Workforce Shuttles.
- 1.16 Explore program options to serve commuters with nonstandard work hours.

Long-Term Strategies (16 to 25 years):

- 1.17 Continue to identify opportunities to enhance access to jobs in the Northern Shenandoah Valley and increase the efficiency of the region's transportation network.
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4.3.4 Potential Partnerships

Implementing short-, medium-, and long-term strategies will involve strengthening relationships with existing stakeholders and service delivery partners, as well as establishing new relationships. Existing and potential new partnerships that will support VCAP's program enhancement strategies include:

- *NSVRC* – Over the period covered in this Plan, it is anticipated that NSVRC will continue to house the VCAP program. VCAP will continue to support the programs and planning initiatives undertaken by NSVRC and the Win-Fred MPO. In return, the program will continue to benefit from the shared overhead and services it receives as a program of NSVRC. NSVRC may be able to provide additional support to VCAP by funding professional development opportunities for staff, providing additional match funding, or by assisting VCAP to identify and apply for new state and/or Federal grants.
- *Winchester-Frederick County Metropolitan Planning Organization (Win-Fred MPO)* – After the 2010 and 2020 decennial censuses, the boundaries of the Win-Fred MPO are expected to expand, meaning the MPO will be an increasingly important partner for VCAP as it pursues the strategies outlined

in this Plan. Over the course of this Plan, VCAP will begin to establish itself as a resource for the MPO regarding TDM issues and incorporation of TDM into planning documents such as the Constrained Long-Range Plan, Transportation Improvements Program, and other regional planning studies. As the metropolitan area grows and changes, there may be opportunities for VCAP to partner with the MPO to obtain additional funding (e.g., Congestion Mitigation Air Quality grants) to implement projects that provide air quality and other benefits to the region.

- *Valley Connector* –VCAP was a key partner in the development of Valley Connector and will continue to partner with the agency to promote commuter services, identify new service needs, and support development and operation of new van/commuter bus routes. Valley Connector and VCAP will continue to act as champions for TDM in the region, co-market each others services, and partner to identify and obtain funding to enhance TDM services in the Northern Shenandoah Valley.
- *NSVRC Member Jurisdictions* – Elected officials and local governmental agencies serving the City of Winchester and the Counties of Clarke, Frederick, Page, Shenandoah and Warren will be key partners in implementing the strategies outlined in this Plan. Over the course of this Plan, VCAP will strive to initiate and develop relationships with local jurisdictions’ planning staff and to establish itself as a resource to support these jurisdictions in achieving their short- and long-term goals.
- *Metropolitan Washington Council of Governments and Commuter Connections* – Over the course of this Plan, VCAP may continue to partner with Commuter Connections to promote and provide regional TDM marketing, Guaranteed Ride Home, and on-line instant ridematching services. However, the Metropolitan Washington Council of Governments must partner with VCAP and other TDM agencies (particularly those serving rural and/or ex-urban regions) to explore means of improving marketing, Guaranteed Ride Home services, and the on-line ridematching database in order to increase the usability of these services and to make Commuter Connections membership a worthwhile continued investment.
- *Other Regional TDM agencies and TMAs* – VCAP also will partner with other regional TDM agencies in order to more efficiently provide services and to start up new programs (particularly those programs designed to suit the needs of nonurban areas). For example, Fairfax County, Loudoun County, and the Dulles Area Transportation Association will be key partners in developing and/or marketing services for commuters traveling on the I-66 corridor or to the congested Tysons Corner and Dulles Airport regions.
- *DRPT* – Over the timeframe addressed in this Plan, VCAP will continue to rely on DRPT as a major partner for TDM funding and service delivery. VCAP looks to DRPT to support, guide, and promote TDM at the state and regional level.

- *Citizens, Commuters, and Ridesharers* – The Northern Shenandoah Valley’s citizens, particularly commuters and current ridesharers, are key partners in developing the region’s multimodal transportation system. Citizens are not only customers, but they serve as partners in the financing, planning, and operation of the program. Carpooling is primarily citizen-driven. Transit and multimodal infrastructure improvements are generally only pursued when there is vocal citizen support. Through customer and resident surveys and focus groups VCAP can determine what services to plan and expand to meet citizens’ needs. VCAP also can partner with Valley Connector and others to develop a citizen advocacy network to advocate for funding and development of priority programs/projects.
- *Winchester Transit and Virginia Regional Transit Authority* – Winchester Transit provides public bus and trolley services to residents of the City of Winchester. Virginia Regional Transit Authority is the largest nonprofit provider of local transit services in the Northern Shenandoah Valley. VCAP will continue to promote Virginia Regional Transit Authority services to local residents and partner with Virginia Regional Transit Authority and local jurisdictions to identify and implement new services that meet residents and employers’ needs.
- *Local Employers and Other Private Entities* – Private businesses and independent entities (e.g., agencies, nonprofits) are key partners in supporting TDM. Through various partnerships they can act as champions for TDM, implement and fund employer- or agency-based TDM programs, and lease or supply park-and-ride lots and other facilities. VCAP will increase its involvement with local employers over the course of this plan in order to achieve its objective of increasing the number of businesses that offer their employees TDM services.
- *Human Service Mobility Providers* – Multiple agencies provide transportation services for senior and disabled residents in the Northern Shenandoah Valley. These mobility providers will be a key partner for VCAP as it supports NSVRC in creating a coordinated regional Mobility dispatch center.
- *VDOT* – VDOT owns several of the park-and-ride lots in the Northern Shenandoah Valley and will be a key stakeholder in expanding these facilities in the future.
- *Local School Districts and Universities* – Schools and universities present a large untapped opportunity market for TDM, particularly in an era of rising transportation costs and shrinking education budgets. Over the course of this Plan, VCAP will begin to develop partnerships with area universities to identify service needs and opportunities. Public school districts also may present an opportunity to partner to develop “school pools”.
- *Developers* – The developer community is an important partner in TDM. They are able to, through the proffer system, donate land for or fund improvements such as sidewalk/trail connections and transit stops/shelters.

Developers also are essential in undertaking individual projects, such as building parking facilities.

- *Realtors* – Realtors are a first point of contact to new residents moving into an area and are an especially important partner for TDM agencies in growing bedroom communities such as the Northern Shenandoah Valley. VCAP can partner with local realtors to raise residents’ awareness of TDM and encourage them to try alternative transportation modes before they establish a drive alone commute routine from their new home.
- *Home Owners Associations* – More and more neighborhoods are controlled by Home Owners Associations. Home Owners Associations are both a key partner for marketing and are a potential advocate for TDM in the proffer and development processes, due to the fact that many Home Owners Associations have oversight and responsibility for amenities within the development.

4.4 PROGRAM MONITORING AND EVALUATION

This section outlines the criteria that will be used to monitor and evaluate the program goals, objectives, and strategies listed above. Wherever possible, these criteria will be quantitative in nature.

VCAP currently does not track any formal performance measures or conduct regular surveys or database audits to assess their performance. Implementing a structured follow-up and performance management program is one of the short-term strategies the program will pursue.

The program is, however, monitored through several state and regional studies conducted by the Metropolitan Washington Council of Governments and other outside agencies. These resources serve as a starting point for developing additional performance measures to evaluate the impact of the program and monitor VCAP’s progress towards its goals and objectives. Table 4.2 lists performance measures currently monitored triennially through the Virginia State of the Commute Survey.

Table 4.2 Potential VCAP Performance Measures

Performance Measure	Population
<i>Leading Indicators:</i>	
Average Commute Length (Minutes)	Residents/Employees
Desire To/Interest in Telecommuting (Percent)	Residents
Dissatisfied with Commute (Percent)	Residents
Distance to Work (Miles)	Residents/Employees
Vehicle Ownership (Percent)	Residents

Performance Measure	Population
<i>Mode Split:</i>	
Single-Occupancy Vehicle – Commute (Percent)	Residents
Transit – Commute (Percent)	Residents
Carpool/Vanpool – Commute (Percent)	Residents
Commute by Train (Percent)	Residents
Commute by Bus (Percent)	Residents
Commute by Bike (Percent)	Residents
Commute by Walking (Percent)	Residents
<i>Transportation Use:</i>	
Daily Vehicle Miles Traveled (Thousands)	VCAP area
Annual Unlinked Trips (Thousands)	VCAP area
Use High-Occupancy Vehicle Lanes (Percent)	Residents/Employees
<i>Infrastructure:</i>	
Employer Offers Free On-Site Parking (Percent)	Residents/Employees
High-Occupancy Vehicle Lanes Available (Percent)	Residents/Employees
Less than Half a Mile to Nearest Bus Stop from Home (Percent)	Residents/Employees
Less than Half a Mile to Nearest Train Station from Home (Percent)	Residents/Employees
Park-and-Ride Lot Use (Percent)	Residents
<i>VCAP Program Impacts:</i>	
Contacted VCAP (Percent)	Residents/Employees
Receive Ride Match Lists (Percent)	Residents
Using Workplace-Based TDM Programs (Percent)	Residents/Employees
Commute Difficulty versus Last Year – Percent Easier	Residents/Employees
Commute Difficulty versus Last Year – Percent More Difficult	Residents/Employees
Employer Offers Commute Incentives/Support Services (Percent)	Residents/Employees
Offered Workplace-Based TDM Programs (Percent)	Residents/Employees
VCAP After Ride Matching Services are Offered (Percent)	Employees
<i>Service Awareness and Use:</i>	
Aware/Use Commuter Connections (Percent)	Residents/Employees
Aware of VCAP (Percent)	Residents/Employees
Knew of a Commute Info Resource Organization (Percent)	Residents/Employees
Aware of Guaranteed Ride Home (Percent)	Residents/Employees
Use Washington Metropolitan Area Transit Authority Web Site (Percent)	Residents/Employees

Performance Measure	Population
Used Commute Info Resource Organization (Percent)	Residents/Employees
<i>Employer Conditions</i>	
Compressed Work Schedule (Percent)	Residents/Employees
Flextime (Percent)	Residents/Employees
Job Responsibilities Do Not Allow Telecommuting (Percent)	Residents/Employees
Standard Work Schedule (Percent)	Residents/Employees
Telework More than One Day (Percent)	Residents/Employees
Telework Offered by Employer (Percent)	Residents
Teleworking (Percent)	Residents/Employees

Source: VCAP, MWCOC and Virginia State of the Commute Surveys

5.0 Financial Plan

5.1 CURRENT BUDGET AND FINANCIAL RESOURCES

This section presents the current and historic budget and funding sources for the VCAP program. In FY 2010, VCAP's annual budget is \$159,500. As a result of being housed within NSVRC, VCAP benefits from some shared overhead costs and staff. Since the formation of the program, VCAP's primary funding source has been an annual state TDM grant awarded by DRPT, supplemented by a required 20 percent local match. VCAP staff coordinates with NSVRC staff to incorporate these funds into the larger NSVRC budgeting process.

Table 5.1 shows the breakdown of VCAP's operating budgets over the last five years. The majority of funds currently are dedicated to program administration and marketing of non-single-occupancy vehicle transportation options. In FY 2009 and 2010, VCAP leased 10 park-and-ride spaces from local businesses for a total of \$3,000. In addition to its regular operating budget, VCAP received a \$264,000 Demonstration Project Assistance grant from DRPT in FY 2009 in order to implement a new Valley Connector commuter bus line serving Winchester, Frederick County, Clarke County, Northern Virginia, and the District of Columbia.

Table 5.1 VCAP FY 2006-2010 Operating Budgets

Expenses	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010
Program Staff and Administration	\$53,000	\$85,500	\$85,500	\$103,000	\$105,000
Marketing and Promotion	\$15,000	\$20,000	\$20,000	\$23,000	\$30,000
Travel and Training	\$2,000	\$5,500	\$7,500	\$7,500	\$7,500
Subsidies	\$5,000	\$10,000	\$10,000	\$14,000	\$14,000
Other	-	\$	\$2,500	\$267,000	\$3,000
Total Expenditures	\$75,000	\$100,000	\$125,500	\$414,500	\$159,500

Source: VCAP.

Revenues for VCAP's operations are obtained from state and local sources. Currently, all state funds for the TDM program come from DRPT TDM grants, which are not a completely reliable funding source. Local match funding for the grant is provided by member jurisdictions of NSVRC. The amounts VCAP has received from each of these funding sources over the past five years are shown in Table 5.2.

Table 5.2 VCAP FY 2006-2010 Operating Revenue Sources

Income	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010
State TDM Grant	\$60,000	\$80,000	\$100,400	\$109,800	\$120,400
Local Funds	\$15,000	\$20,000	\$25,100	\$40,200	\$39,100
Total	\$75,000	\$100,000	\$125,500	\$150,500	\$159,500

Source: DRPT FY 2006-FY 2010 Rail and Public Transportation Improvement Programs.

5.2 FUTURE FINANCIAL RESOURCES

The following section discusses potential funding sources for the short-, medium-, and long-term financial needs identified in the implementation plan. It should be noted that prediction of future revenues is difficult given the current condition of state and local economies and the uncertainty of future Federal funds that will be made available in the next Federal transportation authorization bill. Federal transportation funding bills also tend to be for six-year periods of time, which means that there will likely be five Federal transportation funding bills over the life of this long-range plan.

For the purpose of this plan, constrained and unconstrained funding scenarios are considered. The constrained scenario assumes that DRPT funding for the program will remain constant over the first six-year period covered by this plan. This funding scenario will allow VCAP to continue its current programs, but will not enable VCAP to increase staff salary and benefits or to expand programs. The unconstrained scenario considers funding requirements to enhance existing services and initiate the programs outlined in the implementation plan if grants and additional funding are identified.

5.2.1 Short-Term

In the constrained scenario, VCAP's annual budget will remain constant at \$159,500 per year over the short term. No expansion of existing programs or implementation of new programs will occur unless additional local funds are made available or new state and Federal funding sources are identified.

Unconstrained Program Description

Table 5.3 shows the estimated annual budget for services and programs that would be added to the baseline program over the short-term timeframe (one to six years) if additional grants and funding become available. Specific programs and their costs are described below. New programs are distributed over the six-year time period based upon priority and readiness for implementation. Improvements also are distributed to maintain a relatively stable increase in funding requirements.

Table 5.3 Unconstrained Short-Term Program Expenses

	Year 1 (FY 2011)	Year 2 (FY 2012)	Year 3 (FY 2013)	Year 4 (FY 2014)	Year 5 (FY 2015)	Year 6 (FY 2016)
Program Staff and Administration	\$120,000	\$132,000	\$146,200	\$160,800	\$179,000	\$200,000
Marketing and Promotion	\$40,000	\$45,000	\$49,000	\$55,000	\$60,100	\$65,000
Travel and Training	\$5,000	\$5,000	\$5,500	\$6,000	\$6,500	\$7,000
Subsidies	\$50,000	\$55,000	\$60,000	\$65,000	\$70,000	\$75,000
Other	\$5,000	\$5,000	\$5,500	\$6,000	\$6,500	\$7,000
Total	\$220,000	\$242,000	\$266,200	\$292,800	\$322,100	\$354,000

Source: Cambridge Systematics, based on information from VCAP.

The unconstrained program includes an increase of approximately five percent in VCAP’s total budget each year to account for inflation, increases in staff wages and benefits, and natural growth of VCAP’s existing programs and services. The included program components and their estimated costs are discussed in more detail below:

- *Program Staff and Administration* – This program element includes the cost of wages and benefits for VCAP employees to administer and operate TDM programs, including: ridematching, employer outreach, transit promotion, planning activities, and other commuter assistance programs. Budget estimates included in Table 5.3 account for cost of living adjustments, increases in wages and benefits, and growth of administrative staff as VCAP’s program grows. As VCAP develops its Employer Outreach Program and begins to expand its partnerships with a wider variety of stakeholders, the program will require additional staff support.
- *Marketing and Promotion* – Over the short term, VCAP will continue its marketing efforts to promote TDM and transit in the Northern Shenandoah Valley and will begin to increase targeted marketing efforts in order to maximize awareness and utilization of its services. The Metropolitan Washington Council of Governments also will continue to conduct regional TDM marketing in portions of the region that are included in the Washington Metropolitan Area. It is assumed that in the short term, VCAP will require significant annual budget increases in this category in order to launch a new marketing campaign and pursue marketing efforts targeted at specific audiences and/or programs (e.g., AdvANTage vanpool liability self-insurance).
- *Travel and Training* – In order to encourage professional development among VCAP staff so that they may continue to provide a high-quality service, budget estimates include funding for events such as the Annual ACT Conference, trainings conducted through the Center for Urban Transportation Research, etc. As VCAP expands its outreach to and

coordination with employers, other TDM agencies, and other stakeholders the program's travel budget also must increase somewhat.

- *Subsidies* – Over the short term, VCAP will continue to administer several subsidy programs that it currently participates in and may begin to explore new subsidy/incentive programs to increase rideshare use. These programs include:
 - VanStart/VanSave subsidy – VanStart/VanSave are the primary subsidy programs currently administered by VCAP. Through these programs, VCAP can help to create a new vanpool or maintain an existing vanpool in need of a new passenger for approximately \$1,500 per van per year (\$12/day per van over six months).⁴
 - SmartBenefits – VCAP may consider contracting with the Washington Metropolitan Area Transit Authority to reimburse SmartBenefit transit/vanpool subsidies for area commuters. This will reinforce the relationship between VCAP and its customers, thus allowing the program to better evaluate the unmet needs of commuters and the impacts of TDM efforts in the region.
- *Other Program Elements* – In the past, this element of VCAP's budget has included projects such as improving park-and-ride facilities and providing operating support to Valley Connector commuter bus services. Over the short term, these activities will continue to be the focus of VCAP's efforts.
 - Valley Connector Support – Without support from VCAP or another partner, Valley Connector expects to have a \$300,000 budget shortfall in FY 2011. Over the short-term, VCAP will partner with Valley Connector to subsidize some existing Valley Connector services and to help develop new services in response to commuter demands (e.g., reverse commute van service between the District of Columbia and new Federal employment centers locating in the Northern Shenandoah Valley).
 - Park-and-Ride Development – VCAP will continue to partner with NSVRC, Win-Fred MPO, local jurisdictions and businesses, VDOT, and others to lease park-and-ride spaces and identify locations for development of new park-and-ride lots. VCAP currently leases 10 parking spaces from local businesses for \$3,000 annually.

Potential Funding Sources

State funds will likely continue to be a key funding source for VCAP over the next six years. Opportunities to finance TDM and transportation projects using local funds also are limited over the next six years due to the current and

⁴ I-95/I-395 Transit/TDM Study and I-66 Transit/TDM Study: TDM Program Benefit and Cost Estimates.

projected state of the region's economy. Demonstration grants or other grants with more flexible match requirements are the most likely source to fund any short-term expanded programming.

Several potential funding sources that VCAP could pursue in the short term include:

- DRPT Administered State Aid Grant Programs
 - *TDM/Commuter Assistance* - These grants support administration of VCAP and other regional TDM programs. TDM grants require a 20 percent local match. An annual DRPT TDM grant has historically been VCAP's primary source of funding. However, over the last several years the amount available through these grants has been slightly unstable. If additional funding is made available through this program, VCAP could request funds for additional staff, marketing, or administration of any of the programs listed in the unconstrained program description above.
 - *Transportation Efficiency Improvement Fund* - These grants support a variety of TDM projects and programs and could be used to support any of the programs listed in the unconstrained program description above. Transportation Efficiency Improvement Fund grants require a 20 percent local match. The total amount of funding available statewide through the Transportation Efficiency Improvement Fund program is projected to remain flat over the next six years, so competition for these funds will likely increase over time.
 - *Demonstration Project Assistance* - These grants assist communities to increase the efficiency or utilization of public or public-private transportation service by implementing innovative projects. Grants cover up to 95 percent of eligible expenses. In the past, VCAP has been successful in partnering with Valley Connector to obtain Demonstration Project Assistance funding to develop new Valley Connector commuter bus routes. This approach could be used again in the future to establish new commuter bus routes if funding is available and it is made clear that the grant is to create new service, not to subsidize empty seats in existing routes. VCAP and Valley Connector could coauthor a grant proposal for future service or VCAP could pursue the grant alone and contract Valley Connector to operate the service.
 - *Technical Assistance* - These grants support planning or technical assistance to help improve or initiate public transportation or commuter assistance services. Additional Valley Connector routes and other programs listed in the unconstrained program description could be funded through these grants, however, other DRPT administered state aid grants are preferable due to the fact that Technical Assistance grants require a 50 percent local match (which only Frederick County has agreed to in the past).

- *Capital Assistance* - These grants support costs borne by eligible recipients for public transportation capital projects. Grants can cover up to 95 percent of eligible expenses, but actual match amounts vary annually. Although VCAP has not historically funded capital expenses through its own budget, these funds could be pursued to complete priority park-and-ride lots or other capital improvements in the future. Due to the large number of capital needs and limited state budget, competition for these funds is strong.
- *Senior Transportation Program* - These grants support projects and programs that improve mobility for senior citizens. Grants cover up to 95 percent of eligible expenses. VCAP could pursue funding through this program for future implementation phases of the Human Mobility Transportation Center project.
- DRPT Administered Federal Aid Grant Programs
 - *Job Access Reverse Commute Program (Federal Transit Administration Section 5316)* - These grants support the operating and capital costs of special programs designed to connect unemployed and low-income individuals to jobs. Grants cover up to 50 percent of eligible expenses and up to 80 percent of eligible capital expenditures. Any of the programs listed in the unconstrained program description that also are contained in the regional Coordinated Public Transit - Human Services Transportation Plan (e.g., expenses related to developing the Human Mobility Transportation Center) are eligible for Job Access Reverse Commute funding.
 - *New Freedom Program (Federal Transit Administration Section 5317)* - These grants support capital and operating costs of new public transportation services and alternatives beyond those required by the Americans with Disabilities Act of 1990. designed to assist individuals with disabilities with accessing transportation services, including transportation to and from jobs and employment support services. For the purpose of the New Freedom Program, “new” service is any service or activity that was not operational before August 10, 2005 and did not have an identified funding source as of August 10, 2005, as evidenced by inclusion in the Statewide Transportation Improvement Plan. Grants cover up to 50 percent of eligible expenses and up to 80 percent of eligible capital expenditures. Any of the programs listed in the unconstrained program description that also are contained in the regional Coordinated Public Transit - Human Services Transportation Plan (e.g., expenses related to developing the Human Mobility Transportation Center) are eligible for New Freedom funding.
- Other Federal Funds
 - *Congestion Management Air Quality Program* - The Congestion Mitigation Air Quality program, jointly administered by the Federal Highway

Administration and the Federal Transit Administration, was reauthorized in 2005 under the Safe, Accountable, Flexible, and Efficient Transportation Equity Act: A Legacy for Users. The Congestion Mitigation Air Quality program provides over \$8.6 billion dollars in funds to state departments of transportation, MPOs, and transit agencies to invest in projects that reduce air pollution and congestion. Funding is available for areas that do not meet the National Ambient Air Quality Standards (nonattainment areas) as well as former nonattainment areas that are now in compliance (maintenance areas). Winchester currently is classified as a nonattainment area. As a result, VCAP may be able to partner with the Win-Fred MPO to access Congestion Mitigation Air Quality funding for projects listed in the unconstrained program description that contribute to improving air quality and reducing congestion in the metropolitan area.

- Other State Funds
 - *Energy Efficiency and Conservation Block Grants* - On October 6, 2009, Governor Timothy M. Kaine announced that Virginia will begin to accept competitive applications for a \$9.7 million program to offer Energy-Efficiency and Conservation Block Grants to help localities reduce fossil fuel emissions, stimulate the economy and lower total energy use and costs by improving energy efficiency in the building, transportation and other sectors. The grant program is funded through the American Recovery and Reinvestment Act of 2009 and administered by the Virginia Department of Mines, Minerals, and Energy. The first round of applications for these grants closed in November, but funds made available through this or similar programs in the future could be used to fund projects listed in the unconstrained program description. Valley Connector has applied for an Energy Efficiency and Conservation Block Grant to buy additional transit equipment for commuter buses and vans.
 - *Public/Private Partnerships* - Public/private partnerships offer another potential source of funding to implement select projects outlined in the unconstrained program description. A successful example of a TDM-related public/private partnership already in operation in the Northern Shenandoah Valley is the “Family Dollar” transit route in Page County. This route, operated by Virginia Regional Transit Authority, acts as a workforce shuttle for employees of the Family Dollar distribution center in Page County and is subsidized by the local jurisdiction and the Family Dollar company. Financial contributions from local jurisdictions and employers could be used to initiate similar new services in the future.

6.2.2 Medium- and Long-Term

Unconstrained Program Description

It is difficult to estimate annual budgetary needs over the medium and long term, but it is assumed that the unconstrained program will continue to include at least a five percent annual increase in each budget category in order to account for inflation, increases in staff wages and benefits, and growth of VCAP's existing programs and services. Several major program components that will require additional funding in the medium and long term include:

- *Program Staff and Administration* –As VCAP continues to grow and develops its programs, it may need to add additional staff. These staff will manage the growing workload of the program and also may be selected from candidates with particular backgrounds (e.g., planning, advocacy, employer outreach) in order to broaden the expertise and knowledge base of the program. Some specific administrative needs may include:
 - Technology enhancements to maintain and improve TDM databases and ensure that VCAP's services are made conveniently available through the most current outlets (e.g., social media, "iPhone" applications).
 - Staff to maintain and expand outreach and collaboration with employers, jurisdictions, agencies, and other stakeholders.
 - Staff to manage new programs.
- *Marketing and Promotion* – In the medium and long term, VCAP will continue marketing efforts to promote TDM and transit in the Northern Shenandoah Valley. In order to target and maximize the effectiveness of these efforts, the agency may choose to pursue additional funding to develop a formal marketing plan with assistance from a marketing firm. Additional funding also may be needed to implement the recommendations of the marketing plan.
- *Travel and Training* – It is assumed that the VCAP travel and training program component budgets will continue to increase at a five percent annual rate.
- *Subsidies* – VCAP will continue to support ridesharing in the Northern Shenandoah Valley by providing subsidies to maintain and form new vanpools and carpools. Funding requirements for existing programs such as VanStart/VanSave are not expected to change from the short term. Estimated costs for new incentive/subsidy program are:
 - Vanpool Driver Incentive – This program would provide incentives to encourage new individuals to become vanpool drivers and to help retain existing vanpool drivers. Estimated cost is \$250 per driver per year (about \$1/day).⁵

⁵ Source: I-95/I-395 Transit/TDM Study.

- Carpool Start-Up Incentive - This program would provide a three- to six-month carpool incentive for commuters to start-up and maintain a new carpool. Estimated cost is \$100 per person (\$3/day for 90 days) plus administration.⁶
- *Other Program Elements* -Transit services, park-and-ride facilities, and human mobility will likely be the focus of VCAP's "other" programming efforts. Funding needs for these projects will depend upon the specific services and facilities that are identified in future updates of local comprehensive plans and planning studies.

Potential Funding Sources

As previously mentioned, prediction of future revenues is difficult given the uncertainty of Federal, state, and local funds that will be made available in the next Federal transportation authorization bill and subsequent state and local legislation. Most potential short-term funding sources will continue to be the sources of funding for VCAP in the medium and long term. However, the program may be able to supplement state funding with additional local public/private investments as the region grows and VCAP develops stronger relationships with local employers and jurisdictions. For example, as VCAP continues to develop relationships with local planning departments, there may be opportunities to fund site-specific TDM improvements through the Proffer system. Through the Proffer system developers agree to contribute funds or to construct certain infrastructure as part of the zoning process to obtain approval for a particular development application.

The gradual growth of the Win-Fred Metropolitan Area to include larger portions of the Northern Shenandoah Valley also may make additional funding options available to VCAP over the medium and long term. For example, if the region decides to develop a regional transit authority, VCAP may be able to partner with the MPO and authority to access Federal Transit Administration Section 5307 Large Urban Area Formula Grants. Other regional transportation/planning organizations that the region may decide to develop as it grows would provide access to other funds (e.g., transportation commissions such as the Potomac and Rappahannock Transportation Commission have access to dedicated gas tax revenues).

⁶ Ibid.