Long-Range Transportation Demand Management (TDM) Plan

Roanoke RIDE Solutions

Working Draft

report

prepared for

Roanoke RIDE Solutions

prepared by

Cambridge Systematics, Inc.

with

Center for Urban Transportation Research LDA Consulting Southeastern Institute of Research

draft 4 report

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1.0 Purpose of the Plan



RIDE Solutions is the Roanoke region's designated Transportation Demand Management (TDM) agency. TDM, according to the U.S. Department of Transportation, is any program "designed to reduce demand Connecting the Region's Commuters for transportation through various

means, such as use of transit and of alternative work hours."

RIDE Solutions, like the other 14 TDM agencies throughout Virginia, promotes ridesharing and other transportation alternatives to single-occupancy vehicles (SOV) 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.

As the region's TDM agency, RIDE Solutions provides TDM-related services to residents, employers, and employees in its service area, including commuter information, carpool ridematching, guaranteed ride home, telework assistance, and information and support for bicyclists and pedestrians. It also promotes the use of transit service, but does not directly operate any transit.



RIDE Solutions delivers its services through various methods, including a Web site, telephone contact, in-person assistance at worksites, and through mailed and emailed information distribution. Relative to other transportation programs, RIDE Solutions has few large capital costs and operates using short-term (1-2 year) funding horizons.

Beginning in 2009, the Virginia Department of Rail and Public Transportation (DRPT) requires all agencies receiving TDM grant funds to prepare and submit a long-range TDM Plan. The purpose of this Plan is to identify and detail the TDM programs currently provided in the region, to outline potential improvements to be carried out in the Plan's timeframe, and to illustrate the financial resources necessary to implement these programs and improvements.

This document is RIDE Solutions' Long-Range TDM plan. It establishes the scope and benefits of RIDE Solutions' programs and provides information for DRPT to incorporate RIDE Solutions' TDM plans into the State's overall TDM plans, funding decisions, and programs.

More specifically, this document will:

- Serve as a management and policy document for RIDE Solutions.
- Provide DRPT with information necessary to fulfill related planning and programming requirements.
- Document current and proposed future operating budgets for RIDE Solutions.
- Provide all information necessary to include RIDE Solutions into Six-Year Improvement Program (SYIP), Statewide Transportation Improvements Program (STIP), Transportation Improvement Program (TIP), and Constrained Long-Range Plan (CLRP).

RIDE Solutions' Long-Range TDM Plan incorporates relevant information from existing transportation planning documents and available TDM-related research studies. It is consistent with long-range plans prepared by local and regional planning organizations (RRMPO), the Virginia Department of Transportation (VDOT), and the Department of Rail and Public Transportation (DRPT). Furthermore, the strategic programs and budget requirements detailed in this Plan will be included in DRPT's statewide, Six-Year Improvement Program (SYIP), Statewide Transportation Improvements Program (STIP), Transportation Improvement Program (TIP), and Constrained Long-Range Plan (CLRP).

While many documents and studies were utilized in preparing RIDE Solutions' Long-Range TDM Plan, the 2007 Virginia State of the Commute Survey (VSOC Survey) and the 2008 RIDE Solutions' Performance Review were two key information resources.

The VSOC Survey was the Commonwealth's first statewide assessment of work-related commuting. This statewide random digit dialing (RDD) telephone survey included over 7,000 Virginians who work outside of the home three or more days a week. Three hundred (300) residents of RIDE Solutions' service area were included in this survey.

The 2008 RIDE Solutions' Performance Review was performed to assess the effective of RIDE Solutions' program elements such as ridematching placements. This document, RIDE Solutions' Long-Range TDM Plan, includes a considerable amount of information from these two excellent resources.

2.0 Overview of RIDE Solutions

2.1 HISTORY OF TDM PROGRAM

This section comes from the RIDE Solutions February 20, 2009 Performance Review.

RIDE Solutions was founded in 2001 as a commute information and assistance service of the Roanoke Valley-Alleghany Regional Commission (RVARC), which serves as the Planning District Commission (PDC) for the Roanoke Valley metropolitan area. The service was initially launched to address impending air quality issues and the expectation that the Roanoke Valley region would fall into air quality non-compliance under the U.S. Environmental Protection Agency rules.

The program was expanded in 2008 to provide services in the New River Valley, which includes the Town of Blacksburg. The employer outreach portion of services in the New River Valley is operated through the New River Valley Planning District Commission (NRVPDC), to appeal to employers in the New River Valley.

RIDE Solutions' territory may be expanded again as the agency is currently discussing with Lynchburg regional planners the possibility of providing contracted TDM services – to provide rideshare support for the Lynchburg region.

2.2 GOVERNANCE AND ORGANIZATIONAL STRUCTURE

2.2.1 Governance

This section comes from the RIDE Solutions February 20, 2009 Performance Review.

RIDE Solutions is operated primarily as a program of the Roanoke Valley-Allegheny Regional Commission (RVARC) with cooperation from the New River Valley Planning District Commission (NRVPDC). These two agencies are the PDCs for the Roanoke and New River Valley areas, respectively. RIDE Solutions does not have a governing board separate from that of RVARC; the RVARC board governs RIDE Solutions as a part of RVARC. The New River Valley PDC also has an interest in RIDE Solutions, although their involvement is limited.

The RVARC board meets once each month at which time board members receive a staff report. The staff report includes a section describing RIDE Solutions' major activities and performance on various indicators. RIDE Solutions' Program Director presents an annual report to the board during the grant application authorization process. RIDE Solutions also occasionally reports to the metropolitan planning organization (MPO) policy board; this board could theoretically set direction for the program but has made no move to do so.

The RVARC board has the authority to define important RIDE Solutions concerns, including the budget and work program. But, in general, the board exercises little role in policy direction, program planning, or day-to-day operations, allowing the program to pursue its preferred course in most things. In this sense, within the parameters defined for the program by RVARC, RIDE Solutions maintains a substantially independent operation, albeit one with an integrated relationship to RVARC.

Board members have not been strong advocates for RIDE Solutions within their home jurisdictions, but have been supportive of RIDE Solutions as a regional service and have agreed to fund the local match to the DRPT grant.

2.2.2 Organizational Structure

This section comes from the RIDE Solutions February 20, 2009 Performance Review.

RIDE Solutions has two staff members - the Program Director and the NRV Coordinator.

The Program Director of RIDE Solutions is an RVARC staff member. About 80 percent of his time is allocated to RIDE Solutions' activities. The balance of his time is charged to RVARC projects related to alternative transportation mode planning. The Program Director is responsible for RIDE Solutions' day-to-day administration, as well as annual budget planning and work plan development. Day-to-day administration includes all program activities, including service delivery for ridematching, commuter information, and guaranteed ride home throughout the service area, employer outreach in the Roanoke Valley area, and administrative functions such as marketing, budgeting, and program planning.

The NRV Coordinator of RIDE Solutions is a staff member of the New River Valley PDC. This position devotes about 50 percent of her time to RIDE Solutions' activities. NRV Coordinator is responsible for employer outreach in the New River Valley area.

Several high-level RIDE Solutions' organizational/administrative functions are provided by RVARC, in its role as the parent organization. These include accounting and human resources. RVARC staff provides these services in the manner of outside consultants or vendors, with the RIDE Solutions Program Director having frequent and extensive coordination with other RVARC staff on the substantive aspects of these functions.

Figure 2.1 below details RIDE Solutions staff members' reporting relationships and the organizational hierarchy of RVARC and NVR.

Roanoke Valley-**New River Valley Alleghany Planning District Regional Commission** Commission **Executive Committee Executive Committee Executive Director Executive Director** Senior Planner Transportation Alternatives Coordinator As TDM Planner (20%) -Regional Planner As Program Director of Ride Solutions (80%) As Regional Planner (50%) As NRV Coordinator of Ride Solutions (50%)

Figure 2.1 Organizational Chart

Source: RIDE Solutions.

The job descriptions of RIDE Solutions' two staff positions depicted in Figure 2.1 are detailed in Table 2.1below.

Table 2.1 RIDE Solutions' Staff Descriptions

FTE	Position	Job Description
1	Program Director	Responsible for all program activities, including service delivery for ridematching, commuter information, and guaranteed ride home, employer outreach in the Roanoke Valley area, and administrative functions.
.5	New River Valley Coordinator	Responsible for employer outreach in the New River Valley area.
.75	Region 2000 Coordinator	(Proposed) Responsible for employer outreach in the Region 2000 (Greater Lynchburg) area. Will also serve as liaison to local government. Due to Lynchburg's distinct media market, Region 2000 Coordinator will bear additional responsibilities for media relations in line with the Program Director's marketing plan and brand image.

Source: RIDE Solutions.

The combined time of the Program Director and the NRV Coordinator is divided among several activities as shown in Table 2.2.

Table 2.2 Staff Time Allocation

Activity	Staff Time
Ridematching	30%
Employer Outreach	30%
Marketing/Advertising	20%
Management/Administration	10%
Service/Organizational Planning	5%
Community Outreach	5%

Source: RIDE Solutions.

Ridematching accounts for 30 percent of staff time, all of which is performed by the Program Director. Another 30 percent of staff time is devoted to Employer Outreach. Almost all of the NRV Coordinator's time is devoted to this activity for outreach in the NRV area. The Program Director also expends time for this function in the Roanoke Valley area.

Marketing and advertising account for about 20 percent of staff time. This is primarily the responsibility of the Program Director, although the NRV Coordinator also assists the Program Director to identify media and information distribution opportunities within the NRV area.

Management/administration and planning functions take about 15 percent of staff time. Although RIDE Solutions is a division of RVARC and is housed within the RVARC office, it operates independently in many day-to-day respects. Thus, daily administrative and office management tasks are handled by RIDE Solutions' staff and the staff engages in some administrative functions that are required for efficient operation of an office environment.

There is no formal planning group at RIDE Solutions, either for service or activity planning or for participation in regional planning activities. Internal planning is performed by the Program Director for development of the annual work program and new service planning. New service ideas are generated from market research studies, customer requests, review of best practices observed among peer agencies, and other methods. The work plan is limited, however, to a list of planned activities; it does not map to specific organizational goals or objectives. Thus, it is difficult to know if RIDE Solutions is satisfying local and regional needs and if the program is missing key opportunities.

Regarding involvement in external planning, the Program Director participates in PDC and MPO meetings, occasionally attends local government meetings, and participates on the Regional Bicycle Advisory Committee so RIDE Solutions has a voice in major Roanoke regional planning activities. This participation is weaker in the New River Valley, where the Coordinator has a smaller part in

regional planning. Additionally, both the Program Director and the NRV Coordinator perform formal planning roles, outside their RIDE Solutions' responsibilities, within the RVARC and NRVPDC, respectively. In these roles, they are involved in various regional planning activities, albeit not in the name of RIDE Solutions. The Program Director was actively involved in the 2008 update of the regional Long-Range Transportation Plan having authored the TDM chapter, a new section added in this update, as well as the Transit chapter.

To date, both participating PDCs have assigned formal planning and project roles to RIDE Solutions staff outside of, but related to, day-to-day RIDE Solutions activities. The Program Director's time has been assigned at 80 percent RIDE Solutions, 20 percent other duties, working under the title of *Transportation Alternatives Coordinator*, while the NRV Coordinator has been worked under an even 50/50 split. Additional planning duties have included, as mentioned above, contributing to the development of the Long Range Transportation Plan, air quality planning including the Ozone Early Action Plan and Particulate Matter research, transit planning, public relations, and green initiatives. Since the projects have overlapped with the RIDE Solutions mission, this has allowed work that supports RIDE Solutions to be completed under funding by VDOT, DEQ, and other sources. The addition planning projects are included in the formal MPO or Regional Commission Unified Planning Work Program.

RVARC offers RIDE Solutions' staff training and continuing education opportunities to develop enhanced skills. Through RVARC's employee benefits, RIDE Solutions' staff can receive reimbursement for some educational expenses and several employees have taken advantage of this benefit. Additionally, program staff attends conferences, workshops, and training classes that are appropriate to their positions.

RIDE Solutions' financial functions are performed jointly by RIDE Solutions' staff and by RVARC accounting staff. RIDE Solutions is responsible for tracking funding sources, developing budgets, preparing grant reimbursement invoices, and tracking daily revenues and expenses. The Program Director is primarily responsible for budgeting functions and has responsibility to review and approve direct expenses related to the program.

RVARC reviews and approves RIDE Solutions' budgets. RVARC handles monthly accounting and general ledger entries, monthly and annual financial reporting functions, accounts receivable, and payroll. RVARC provides these services to RIDE Solutions at no direct cost.

2.2.3 Key Stakeholders

RIDE Solutions' key stakeholders include:

- DRPT DRPT is RIDE Solutions' primary funding agency and a partner in service delivery. RIDE Solutions looks to DRPT to support, guide, and promote TDM at the state and regional level.
- Roanoke Area Metropolitan Planning Organization (MPO) RIDE Solutions operates within the geographic area of the Roanoke Valley Area Metropolitan Planning Organization (RVAMPO). In 2008, RVAMPO, with support from RVARC and other regional and local organizations, updated the 2025 Long-Range Transportation Plan to its current version the 2035 Plan. The Program Director wrote the TDM section of the plan.

The 2035 Plan focuses on the role of transportation in addressing three upcoming and critical needs: aging demographics, climate change and other environmental concerns, and energy sustainability. Several of the objectives and strategies that accompanied the broad goals of the 2035 Plan highlighted the role of TDM in the region's future. RIDE Solutions Program Director also serves as planning staff to the MPO.

- Blacksburg-Christiansburg-Montgomery County MPO: The Blacksburg-Christiansburg-Montgomery County MPO encompasses a portion of the New River Valley geographic area served by RIDE Solutions. The NRVPDC has a non-voting member on the MPO's policy board and representation on the Technical Advisory Committee.
- Roanoke Valley-Allegheny Regional Commission (RVARC) From a financial perspective, RIDE Solutions operates as a program within RVARC. RIDE Solutions receives substantial assistance from RVARC for accounting services, relieving RIDE Solutions' staff of many of the typical accounting tasks. RIDE Solutions Program Director also serves as planning staff to the PDC.
- New River Valley Planning District Commission (NRVPDC) The NRVPC provides funding for the RIDE Solutions' staff person who provides employer-based TDM support services in the New River Valley and local match for the DRPT Commuter Assistance grant. RIDE Solutions NRV Outreach Coordinator also serves as planning staff to the PDC.
- Region 2000 (Proposed) Region 2000 provides funding for the RIDE Solutions' staff person who provides employer-based TDM support services in the Lynchburg area, and local match for the DRPT Commuter Assistance grant. RIDE Solutions Region 2000 Outreach Coordinator also serves as planning staff to the PDC.
- Local Jurisdictions RIDE Solutions currently serves the nine counties and five independent cities that make up the Roanoke region. Each of these

jurisdictions is independent of one another. They all have their own governments. Through their membership on the regional MPO, each Roanoke area jurisdiction has a direct influence on RIDE Solutions.

- RIDE Solutions' Employer Clients RIDE Solutions currently has 30 direct working "partner" relationships with employers across the Roanoke-New River Valley region. These employers receive TDM support services from RIDE Solutions.
- Sharebike.org Sharebike.org is a community, grassroots program that
 provides free bicycles for community use. RIDE Solutions has partnered
 with Sharebike.org on its Bike Rack Donation Program in 2008, providing
 free bike racks and Sharebikes to qualifying organizations. RIDE Solutions
 also partners with Sharebike on a number of bike events and encouragement
 activities.
- Roanoke Valley Cool Cities Coalition Cool Cities is a grassroots organization focused on reducing energy use, saving taxpayer dollars, improving public health, and protecting the environment. RIDE Solutions and the Roanoke Valley Cool Cities Coalition work together to offers local solutions to minimizing Green House Gas (GHG) or carbon footprints, including the sponsorship of Compact Fluorescent Light bulb (CFL) distributions and the promotion of the October 24, 2009 Roanoke Valley Climate Rally. RIDE Solutions is featured as a "point" in the Cool Green Biz certification checklist developed by Cool Cities in partnership with the Roanoke Regional Chamber of Commerce.
- Greater Roanoke Valley Asthma and Air Quality Coalition The Greater Roanoke Valley Asthma and Air Quality Coalition is focused on improving air quality and respiratory health for the Greater Roanoke Valley through education and partnerships with other organizations with similar goals. Members ranging from Valley respiratory health professionals to interested individuals, including people with asthma, pulmonologists, nurse practitioners, respiratory care practitioners, registered nurses, allergists, representatives of the Virginia Department of Health, Virginia Society of Respiratory Care, American Lung Association, and environmental groups. RIDE Solutions and the Greater Roanoke Valley Asthma and Air Quality Coalition work together to offers local solutions to improve air quality.

RIDE Solutions Program Director serves as the President-Elect of the Coalition for the 2009-2010 term, and will move into the President position for the 2010-2011 term.

As a member of the coalition, RIDE Solutions reports monthly on transportation-related activities that effect air quality in the region, with a particular emphasis on events that overlap other health-related issues such as Bike Month.

- Sustainable Blacksburg: Sustainable Blacksburg is a non-profit community organization focused on facilitating effective environmental stewardship to enhance the region's livability and economic vitality by reducing its impact on the local and global environment. The organization organizes an annual Sustainability Week in partnership with the Town of Blacksburg and Virginia Tech, which includes the participation of numerous community organizations. The week includes events and workshops on topics ranging from transportation to water quality to housing. RIDE Solutions participates each year.
- BikeWalk Virginia and BikeWalk Virginia, Roanoke Chapter BikeWalk Virginia is a statewide non-profit organization that promotes biking and walking for health, environmental, and economic benefits. We work through education, partnerships and advocacy. Our programs are supported by donations, memberships, sponsorships, event registrations, and grant funding. The Roanoke Chapter of BikeWalk Virginia is a 501(c)(3) nonprofit that implements BikeWalk events and other bike activities in the Roanoke region. RIDE Solutions Program Director has served as the President of the Roanoke Chapter since 2008. RIDE Solutions partners with BikeWalk on its bicycle commuting and advocacy programs, such as the 2009 Ciclovia event in Downtown Roanoke.
- Roanoke City Bicycle-Friendly Community Committee The Bicycle-Friendly Community committee is tasked with supporting the City of Roanoke in a successful application to the League of American Cyclists "Bicycle-Friendly Community" designation. In particular, RIDE Solutions' Program Director serves on the *Encouragement* subcommittee to catalog and create programs that get cyclists on the road. Many events organized or co-sponsored by RIDE Solutions, including Ciclovia, Clean Commute Day and Bike Month, are key elements in this application. Programs and services RIDE Solutions makes available to cyclists such as the Guaranteed Ride Home and Interactive Bike Map are included.
- Roanoke City Citizens for Clean and Green Committee Citizens for Clean and Green provides citizen input and programs to aid the City in reaching its goal of a 10 percent reduction in its carbon footprint over 5 years. RIDE Solutions Program Director serves as a member of this committee providing assistance in addressing the transportation element of the City's carbon footprint. One of the Committee's first awareness campaigns was *The Greenest Loser* contest, where three families were challenged to see who could reduce the energy consumption the most. RIDE Solutions monitors their performance, including weekly vehicle-miles traveled (VMT) measurements.
- Valley Metro & Blacksburg Transit Valley Metro and Blacksburg Transit
 provide fixed-route transit service in the urban areas of Roanoke and
 Blacksburg, with connecting service via the Smart Way bus. Paratransit and
 other demand services are provided via contract with RADAR. RIDE

Solutions supports the use of transit as a transportation option, including route and schedule information as part of its ridematching process when applicable, and organizing transit-centric promotions such as "Google Your Ride" for World Carfree Day, an effort to promote Google Transit. RIDE Solutions does not currently provide significant amount of direct support to Valley Metro or Blacksburg transit, nor does RIDE Solutions have much influence on route or service changes to support choice riders.

- Virginia Tech's Alternative Transportation Program: Through the Alternative Transportation program in the Department of Campus and Transportation Services, Virginia Tech promotes and encourages the use of alternative transportation modes for its faculty, staff, and students traveling to, from and on campus. They have provided support to RIDE Solutions since its expansion to the New River Valley. The partnership continues to grow as RIDE Solutions provides financial and promotional support for Virginia Tech's efforts to reduce VMT in the region.
- The program's primary objective is to reduce parking demand at the Virginia Tech campus, though sustainability issues figure strongly into its mission as well. It is funded by revenue generated from parking passes sold to SOV commuters. Participants in the alternative transportation program receive special discounted and one-time parking passes based on their level of participation.

It is important to recognize that all of these stakeholder groups have different levels of interactions with and expectations for RIDE Solutions. The local governments, through the regional MPO, provide consistent funding to RIDE Solutions. They view the agency as an extension of their work – a transportation service provider that helps address local and regional transportation needs. Employers work directly with RIDE Solutions as *customers*. These corporate clients expect and receive direct benefits from their relationship with RIDE Solutions.

2.3 SERVICE AREA PROFILE

2.3.1 Description of Service Area

Table 2.1 lists the counties and cities that make up RIDE Solutions' service area, the combined RVARC and NRVPDC regions.

Table 2.1 Jurisdictions in RIDE Solutions' Service Area

Roanoke Valley			New River Valley
1.	City of Roanoke	1.	Town of Blacksburg
2.	City of Radford	2.	Montgomery County (and two towns)
3.	City of Salem	3.	Pulaski County (and two towns)
4.	Town of Clifton Forge	4.	City of Christiansburg
5.	City of Covington	5.	Montgomery County
6.	Franklin County	6.	Giles County (and five towns)
7.	Botetourt County	7.	Floyd County and the Town of Floyd
8.	Alleghany County	8.	City of Radford
9.	Town of Rocky Mount		
10.	Town of Vinton		

Source: RIDE Solutions.

A map of the services area is shown in Figure 2.2.

Figure 2.2 Map of Service Area



Source: RIDE Solutions.

The major employment opportunities are more concentrated toward the urban cores of the Roanoke in the RVARC's region and Blacksburg in NRVPDC's region.

Within both regions, there are numerous activity centers where there are higher concentrations of population and employers, as is shown in Table 2.2.

Table 2.2 Major Activity Centers in RIDE Solutions' Service Area

Roai	Roanoke Valley		New River Valley
1.	City of Roanoke	1.	Town of Blacksburg
2.	419 Corridor (I-81 to Tanglewood)	2.	New River Valley Mall
3.	Hidden Valley	3.	Downtown Blacksburg (Kent Square)
4.	Bonsack	4.	Floyd
5.	Daleville Town Center	5.	Virginia Tech
6.	Rocky Mount	6.	New River Valley Community College
7.	Westlake	7.	Fairlawn
8.	West Salem	8.	Dublin
9.	Wonju	9.	City of Radford
10	Downtown Roanoke	10.	Christiansburg

Source: RIDE Solutions

When compared to other regions of Virginia, the RIDE Solutions service area is relatively sparsely populated, with an average of 128 persons per square mile versus 179 for the state average. Roanoke City and Blacksburg, and their respective counties of Roanoke and Montgomery, have densities above the statewide average. The City of Roanoke has the highest density in the region, with 2,260 persons per square mile within the city limits.

According to the 2000 US Census, approximately 12 percent of the region's population was living below the poverty line, and 14.5 percent was 65 years of age or older. Both of these statistics are higher than the statewide averages of nine and eleven percent, respectively. Minority populations, including African-Americans (ten percent) and Hispanics (two percent) are under-represented in the service area when compared with statewide averages.

Transportation Facilities

Roanoke's transportation system is a network of local and regional roads, freight rail (east-west, north-south), airport, transit, and an evolving system of greenways and bikeways.

The major interstate and regional routes are I-81, I-581, U.S. 220/Roy L. Webber Expressway, U.S. 460, U.S. 11, Virginia Route 11, and Virginia Route 114.

Norfolk Southern provides freight rail service.

Passenger and freight air service is provided through the Roanoke Regional Airport. Freight service and US Customs Service is provided at the New River Valley Airport.

Valley Metro provides bus transit and paratransit service.

BT provides bus transit for the Town of Blacksburg and surrounding areas. BT Access, part of BT, provides paratransit service for the Town of Blacksburg.

Pulaski Transit operates a fixed route in the Town of Pulaski. New River Valley Senior Services provides paratransit service for the New River Valley area.

A series of off-road Greenway segments connects areas within the Roanoke and New River Valley metro areas. Within Roanoke, the Roanoke River Greenway is the longest contiguous segment, running from Wasena Park in the center of the city to the Southeast Roanoke neighborhood, with on-road bike or pedestrian connections to Downtown. In Blacksburg, the Huckleberry Trail connects Virginia Tech to the Corporate Research Center and New River Valley Mall. Some existing Greenway segments provide off-road bike/pedestrian commuting options. The Roanoke region's Conceptual Greenway Plan envisions a 20-mile contiguous greenway connecting Salem to Explore Park and many activity centers and neighborhoods in between, providing an excellent bike commuting option.

2.3.2 Demographic Profile

Table 2.3 shows the historic and current population for the Roanoke Valley region. The 2010 estimated population for this region is approximately 320,000.

Table 2.3 Estimated Demographic Profile Roanoke Valley (1990-2010)

		1990	2000	2010
Population:				
	Total Pop.	288,565	307,538	320,040
	% Growth	-	6.6%	4.1%
Age Groups (%):				
	Under 20	72,964 (35%)	68,096 (23%)	77,703 (24%)
	30 to 64	172,336 (60%)	182,677 (60%)	189,883 (59%)
	65 and Over	43,265 (15%)	48,120 (17%)	52,454 (16%)

Sources: Virginia Employment Commission and US Census Bureau.

Note to planning team: Subsequent drafts of this document will include statistics on the New River Valley region. The most current population statistic totaled 165,000. We could not locate the 2010 estimate in order to report comparable data.

Figure 2.3 shows the population growth rate in the RIDE Solutions service area compared to the Commonwealth as a whole. The population of the RIDE Solutions' service area has grown at a slower rate than the growth rate for Commonwealth as a whole.

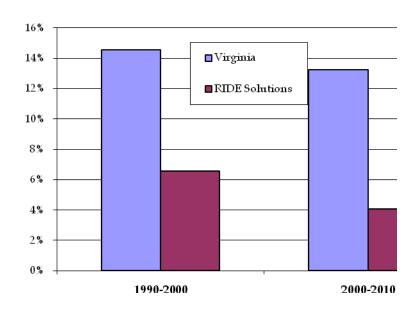


Figure 2.3 Population Growth in the Roanoke Valley and Virginia

Sources: Virginia Employment Commission and US Census Bureau.

According to the Virginia Employment Commission, employment in the Roanoke Valley and the New River Valley is estimated to exceed 165,000 and 82,000, respectively. Table 2.4 shows the ten largest employers in the RIDE Solutions service area for both the Roanoke Valley and the New River Valley.

Table 2.4 Top 10 Employers in RIDE Solutions' Service Area

Roanoke Valley	New River Valley		
Roanoke Memorial Community Hospital	1. Virginia Tech		
2. Roanoke City School Board	2. Montgomery County Schools		
3. Roanoke County School Board	3. Virginia Tech Corporate Research Center		
4. City of Roanoke	4. Volvo Heavy Truck Corporation		
5. Wal-Mart	5. Radford University		
6. First Union National Bank	6. Alliant TechSystems		
7. Kroger	7. Moog		
8. U.S. Veteran's Administration Hospital	8. Carilion NRV Medical Center		
9. Advance Auto Parts	9. Pulaski County Schools		

Sources: Virginia Employment Commission, 2008. Virginia's New River Valley Regional Data Book, 2008.

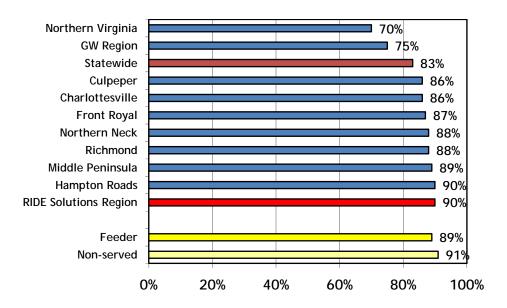
2.3.3 Existing Travel Patterns

Mode Split

Mode split is commonly used as a performance measure for TDM agencies. The region's work mode split is heavily weighted to drive alone commuting with 90 percent of the working residents using single occupancy vehicle (SOV) commute.

Figure 2.4 shows the region's work mode split is higher than the state-wide average of 83 percent, which is significantly influenced by the Northern Virginia market where the mode split is 70 percent drive alone.

Figure 2.4 2006 Mode Split

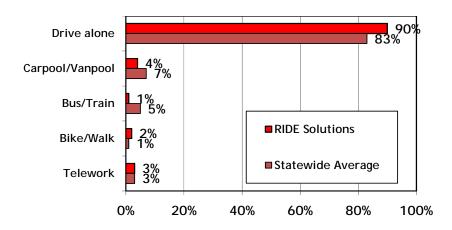


Source: 2007 Virginia State of the Commute Survey.

VASOC Q15. Now thinking about LAST week, how did you get to work each day?

Figure 2.5 shows the use of alternatives to the drive alone commute – 4 percent use car and vanpooling, 3 percent Telework, 2 percent use bus, and 1 percent bike/walk.

Figure 2.5 RIDE Solutions Region's Use of Alternatives to Drive Alone Commute



VASOC Q15. Primary Mode.

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 tend to emphasize employer services, while areas with a large percentage of outbound commuters tend to focus on residentially based programs with vanpool/commuters bus services.

The RIDE Solutions region's residents who work outside the home remain in the area for work. As Figure 2.6 shows, only 8 percent of the region's workforce commutes outside of the market. RIDE Solution's region has the second lowest level of outbound commuters in the State. As a result, RIDE Solutions must operates as both an origin- and destination-based TDM program, and therefore focuses on both employers and residents.

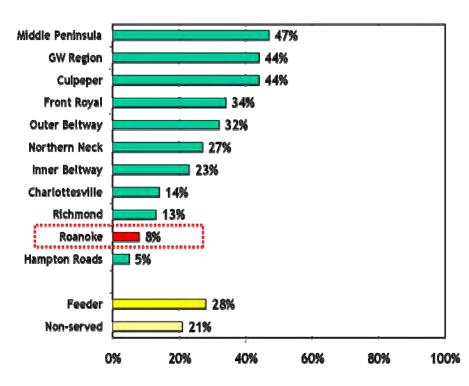


Figure 2.6 Percent Commute Outbound

VASOC – Question 2: In what county (or independent city) do you live?

VASOC – Question 3b: In what county (or independent city) do you work?

The highest commuter origin and destination areas are the City of Roanoke and Roanoke County, accounting for 60 percent of the commute destinations and generating over half of the commuters in the Roanoke Valley region.

Note to planning team: Information on commuter origin and destination for the New River Valley will be added in subsequent drafts of this document.

Table 2.5 Top 10 Areas Residents Commute To and Workers Commute From in Roanoke Valley Region

Residents		Workers	
Commuting To	Percent	Commuting From:	Percent
City of Roanoke	60,134 (40%)	City of Roanoke	42,189 (26%)
Roanoke County	29,982 (20%)	Roanoke County	41,658 (26%)
City of Salem	19,649 (13%)	Franklin County	19,502 (12%)
Franklin County	13,981 (9%)	Botetourt County	14,769 (9%)
Botetourt County	7,438 (5%)	City of Salem	11,651 (7%)
Alleghany County	5,541 (4%)	Bedford County	8,977 (6%)
City of Covington	1,700 (1%)	Alleghany County	4,914 (3%)
Montgomery County	1,661 (1%)	Montgomery County	3,463 (2%)
City of Clifton Forge	1,486 (1%)	City of Covington	2,435 (2%)
Henry County	1,336 (1%)	Craig County	1,963 (1%)
Total Resident Commuters:	149,373	Total Workers:	161,017

Source: Virginia Employment Commission.

Given the almost total absence of long-distance commuters, RIDE Solution's region, along with Hampton Roads and Richmond, enjoys one of the shortest commutes.

Figure 2.7 shows the average commute in both time (average 20 minutes) and distance traveled (average 14 miles) for RIDE Solution's region. As this is the average time and miles, there are some commuters in the region who do have longer and shorter commutes.

Figure 2.7 Average Length of Trip in Minutes and Miles in Virginia

Region	Avg. Trip Time Minutes	Rank
GW Region	47	1
Culpeper	40	2
Northern Virginia	35	3
Middle Peninsula	33	4
	33 32	5
Front Royal Northern Neck	32 29	6
Statewide	28	7
Non-served	26	8
Charlottesville	26	8
Feeder	24	10
Hampton Roads	23	11
Richmond	23	11
Roanoke	20	13

	Avg. Trip Length <u>Miles</u>	Rank
GW Region	30	1
Culpeper	29	2
Front Royal	25	3
Middle Peninsula	23	4
Northern Neck	22	5
Non-served	19	6
Charlottesville	18	7
Feeder	17	8
Statewide	17	8
Northern Virginia	16	10
Richmond	16	10
Hampton Roads	14	12
Roanoke	14	12

VASOC – Questions 16-17: How long is your typical daily commute one way? Please tell me both how many minutes and how many miles. First, how many minutes? And how many miles?

Planning Team Note: In future drafts of this document: Re-examine the above commute distances and times based on the 2007 Virginia State of the Commute Study. This study surveyed people who worked outside the home for three or more days a week. Students were not included. The NRV region may have a higher average commute distance/time, since so many more people live in the rural counties and commute to Virginia Tech. Perhaps many on a non-traditional 2 to 3 day work week. Also, explore the high travel rate between Roanoke and New River, which is an average commute of 35 miles one way (Roanokers going to VT/CRC, NRVans coming to Downtown Roanoke or Carilion). So, the average distance might be short, but there is a significant portion of commuters on the I-81 corridor with a minimum commute of 1.5 hours a day. Examine other sources of commute data.

Figure 2.8 shows the level of commuter satisfaction with their commute for RIDE Solution's region. Given the short commute distances and times, it is not surprising that Roanoke region commuters, when compared to commuters in other Virginia markets, have one of the highest levels of satisfaction with their commute.

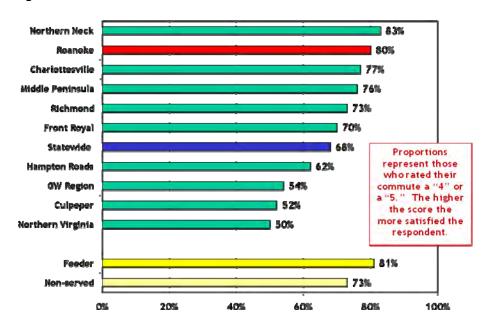


Figure 2.8 Commuter Satisfaction

VASOC Q56a. Overall, how satisfied are you with your trip to work?

2.4 CURRENT TDM SERVICES AND PROGRAMS

2.4.1 Customers

Today, RIDE Solutions focuses on the work-related commute and, in so doing, serves two primary customer groups: work-related commuters and their employers.

Commuters – RIDE Solutions primarily serves commuters that work in the downtown areas. This is consistent with TDM agency experience around the country. In survey after survey, people say they rideshare to save money and time. Time savings come in the form of qualifying for and using High-Occupancy Vehicle lanes (HOV) as part of a carpool, vanpool, or commuter bus.

As the RIDE Solution's region does not have HOV facilities, ridesharing does not offer a time savings benefit. Area commuters know this all too well. According to the Virginia State of the Commute Survey, "to save time" does not even make the list of reasons that the region's ridesharers report on why they use ridesharing modes.

In RIDE Solution's region, commuters who rideshare say they do so to save money. In fact, "saving money" was the top benefit. And, the intensity of this benefit, as denoted by almost all respondents giving "cost" a "5" or top box score reveals that saving money is by far the primary motivating benefit today.

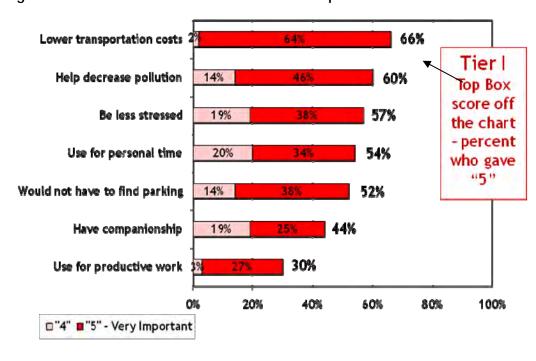


Figure 2.9 Reasons for Use of Alternate Transportation Modes

VASOC – Question 56e: How important were each of the following in your decision to use (carpool, vanpool, bus, train, ferry, bike, walk)? "1" means "not at all important" and "5" means "very important."

Since commute length is short, the impact on commuters' pocketbook is not that great. Furthermore, vanpools and other ridesharing modes, regardless of the number of people who participate, still require personal monthly outlays for participation in that arrangement (sharing gas expenses). Thus, the only significant cost savings that come from ridesharing arrangements in the RIDE Solutions' region are the elimination of monthly parking fees and minor savings in fuel expenses.

Across the region, parking fees are only charged in the high-density areas of downtown Roanoke and Blacksburg, ranging from \$20 to \$30 per month for public pay lots, to \$90 per semester for Virginia Tech students and staff. Thus, RIDE Solutions' primary rideshare customer and prospect, at least for the immediate future, are downtown commuters and their employers.

Employers - Recognizing that direct employer involvement in supporting ridesharing lifts employees' use of ridesharing modes, RIDE Solutions also targets area employers. RIDE Solutions' outreach program covers two distinct areas, Roanoke Valley and Blacksburg/New River Valley. Employers in the Roanoke Valley area are contacted by the Program Director at RVARC. Blacksburg area employers are contacted by the New River Valley Outreach Coordinator.

The number of employers that participate as RIDE Solutions partners has increased slowly but steadily over the past few years. Between December 2006 and October 2009, RIDE Solutions added an average of about 1 new employer partners per month, for a total of 25 employer partners today.

RIDE Solutions' employer partners participate at varying levels. The Program Director estimates that slightly less than half have a more aggressive level of involvement with RIDE Solutions, offering an array of alternative transportation to their employees. The level of involvement for most of the other employers is less substantial, such as dissemination of transportation information to employees. Carilion Clinic is the major employer partner in the Roanoke Valley area, and Virginia Tech is the major employer partner in the New River Valley area.

Employer participation is lower in New River Valley. The NRV Coordinator position started in 2006 but has gone through two staff members and seen increased hours. However, the "Commuter Alternatives Program" at Virginia Tech has been in existence longer than RIDE Solutions and offers a range of services (including vanpools and transit service) to its 29,000 students and 6,000 employees. This program can serve as a model for other employers in the area.

Based on RIDE Solutions' current base of employer partners and prospects, the profile of employers that embrace and promote TDM include:

- Large employers with a significant number of long-distance commuters
- Employers who have implemented a sustainability or "Green" initiative
- Employers with a large enough employee base that there is matching carpool matching potential among employees of the same worksite.
- Local governments or divisions of local government like school systems.

It should also be noted that there are subtle differences between Roanoke Valley and New River Valley employer partners and prospect base. New River Valley current employers who have signed up with RIDE Solutions tend to have employees that commute longer-distances, work non-traditional hours, or have more limited transportation options than those in the Roanoke Valley.

2.4.2 Programs and Services

Programs and services provided by TDM agencies are typically grouped into three categories:

- 1. Modal options, such as vanpools and transit, refer to services that expand the availability of non-single-occupant vehicle (non-SOV) modes of travel.
- 2. Financial incentives, such as free or discounted transit passes, include services that offer a financial benefit or advantage for use of non-SOV travel options.
- 3. Support services, such as Guaranteed Ride Home (GRH), are services that make use of non-SOV modes more convenient.

RIDE Solutions does not directly operate or fund any services in the modal options category, nor does it offer any financial incentives. All of RIDE Solutions' services fall into the category of support services. Information about RIDE Solutions' programs and services can be found on RIDE Solutions' Web site (www.ridesolutions.org).

Listed here is an overview of the major services provided by the agency, as well as performance indicators in each of these service areas. This section analyzes trends in usage of these key services. Although the program has been in operation since 2001, performance data were available only for the time period beginning in late 2006.

Carpool/Ridematching

Today, carpool ridematching is the core RIDE Solutions service. This service is administered through a database program that matches commuters who want to carpool or vanpool with other commuters who have similar origins and destinations, routes, and time-of-day travel preferences as do the applicant commuters. While the database is electronic, the Program Manager attempts to make most of the matches by hand. This is a very time-intensive process.

This database therefore contains records of commuters who have applied for a RIDE Solutions carpool or vanpool match and who have chosen to remain in the database for continued ridematching opportunities, either because they have yet to form a rideshare arrangement or because they are interested in increasing the number of commuters in an existing carpool or vanpool. This database also is used to register commuters in the region who use non-SOV modes (transit, bike, pedestrian, carpool, vanpool) who have registered for RIDE Solutions' Guaranteed Ride Home service.

As shown in Figure 2.10, RIDE Solutions' database had approximately 165 registrants in November 2006, a figure that had been consistent for several years. Database registrations increased significantly over the past two years; in November 2008, RIDE Solutions had approximately 725 registrations, more than three times the number compared to two years earlier. The summer of 2008 saw

an increase in registrations, likely due to the sharp increase in gas prices occurring at that time.

800
700
600
500
400
300
200
100
0
Mar-06 Oct-06 Apr-07 Nov-07 Jun-08 Dec-08

Figure 2.10 Ridematching Database Registrants

Source: RIDE Solutions.

As expected, given the growth of the database, the average number of monthly applications for the ridematching service has also been on the rise over the past few years. Between July 2007 and March 2008, RIDE Solutions received fewer than 20 applications per month on average. But since March 2008, new monthly registrations have risen substantially, to a monthly average of 35, with peak application periods of 100+ per month during new employer partnership launches.

As shown in Figure 2.11, this increase has not been steady, with several spikes in applications that may be related to gas price increases, specific events that generated higher numbers of registrations, and seasonal factors.

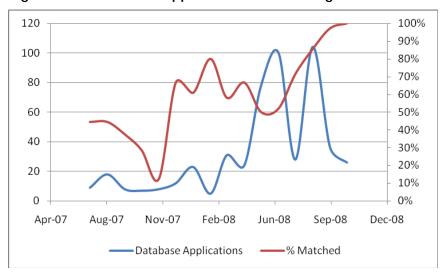


Figure 2.11 Database Applications & Percentage Matched

Source: RIDE Solutions.

Vanpool Matching/Leasing

Due to relatively short commutes and the lack of congestion in the RIDE Solutions service area, vanpool usage is not well-developed. In fact, RIDE Solutions does not provide vanpool leasing service. While a few potential vanpool users might be registered in the ride-matching database, vanpool matching is not part of the regular RIDE Solutions' service offering.

In the region, only Virginia Tech runs a vanpool service, operating three vans purchased through their fleet contract, with costs covered by the pre-tax Commuter Choice benefit, and limited to Virginia Tech employees.

Guaranteed Ride Home

RIDE Solutions offers the Guaranteed Ride Home (GRH) service to anyone who commutes at least two days each week via carpool, vanpool, transit or bicycle. This program is administered by the Program Director who is responsible for registering users and approving rides. Users are registered for GRH using the same database process as described in the ridematching section. At this time, there are 159 registrants.

Registered users receive a membership card and GRH vouchers that allow them to use a taxi to travel home in case of an unscheduled event. Each user is allowed four trips per year on the service. Users arrange their own trips and present a GRH voucher to the taxi driver before making the trip. RIDE Solutions provides the first voucher in the registration welcome package; vouchers for subsequent rides are sent to the user after RIDE Solutions receives the previous voucher from the taxi company. When a used voucher is received from a taxi company, the Program Director checks the expense for approval, including that

the trip was made from work to home, and not vice versa. Approximately 20-30 trips each year are made using this service.

Commuters who participate in GRH are registered in the same database process as described in the ridematching section, but registrants can request not to be matched; a field in the database indicates this preference. RIDE Solutions updates contact information for GRH periodically, through the ridematch database purge process. Maintaining both GRH-only commuters and carpoolers in the same database allows RIDE Solutions to easily switch commuters between modes as needed without a loss of personal information or the need to re-register them.

Employer Services

RIDE Solutions' employer services are designed to encourage major employers in the service area to implement TDM services at their worksites. This outreach offers RIDE Solutions an opportunity to reach commuters through worksite-based promotions. Employers can also offer some RIDE Solutions services as benefits to their employees. The main services that RIDE Solutions provides to employers include:

- On-site consultation, events, and presentations;
- Transit and ridematch materials for distribution to employees;
- Employee zip code density plots showing concentrations of residential locations of employees;
- Electronic surveys of employees to gauge interest in RIDE Solutions' services;
- Customized Web site portals to RIDE Solutions' Web site;
- Consultation services for the implementation of TDM-oriented incentives such as preferential parking and transit benefits; and
- Carbon-footprint calculation and calculation of other environmental impacts from trip-reduction programs.

Telework

RIDE Solutions provides limited telework assistance through the Telework!VA program funded by DRPT. This program offers grants of up to \$35,000 to companies for consultant services and equipment purchases to develop or expand employee telework programs.

The Program Director is responsible for this element of RIDE Solutions' services. However, the primary interest to date in this service has come from employers in the New River Valley, thus the NRV Coordinator has become more involved in providing and supporting telework activities. No Roanoke-area employer has enrolled in the Telework!VA program to date, though both the City of Roanoke and the Home Shopping Network have utilized consultation services. The City

of Roanoke integrated telework into a recruitment effort they undertook, partnering with Telework!VA to offer incentives to Northern Virginia residents who would consider teleworking to their existing jobs after relocating to Roanoke. This statistic is confirmed by the relatively low number of RIDE Solutions' service area commuters who claimed they telework. As Figure 2.12 shows, only 16 percent of the areas' workers say they have a telework program available at work. Furthermore, only 6 percent say they telework at least occasionally, the lowest level of any Virginia region.

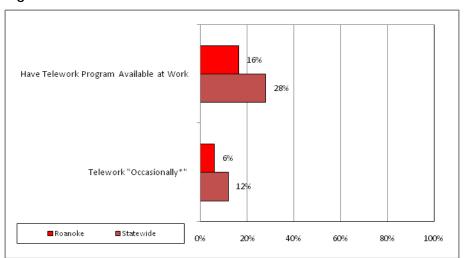


Figure 2.12 Telework

Source: 2007 Virginia State of the Commute.

VASOC Q13. Telecommuters are defined as "wage and salary employees who at least occasionally work at home or at a telework or satellite center during an entire work day instead of traveling to their regular workplace." Based on this definition, are you a telecommuter?

VASOC Q13a./Q14d. Does your employer have a formal telecommuting program at your workplace or (do you/permit employees to) telecommute under an informal arrangement between you and your supervisor?

Bicycling/Walking

RIDE Solutions, as an arm of RVARC, has a substantial interest in promoting biking and walking as modes of transportation. RVARC develops the regional bicycle plan and the Web site offers a range of tools and tips for pedestrians and bicyclists, including:

- Interactive bike map;
- Bike to Work routes;
- Guide to bicycle commuting;
- Construction and maintenance of the www.bikeroanoke.com Web site.

RIDE Solutions participates in several bicycle promotional activities, such as "Clean Commute Day" and "National Bike Month," and promotes cycling safety. Many of the bicycling activities are for social or recreational riding, but RIDE Solutions also works with employers to promote bicycle commuting and participated in the development of the bike element of the regional Long-Range Plan for Transportation. RIDE Solutions has seen an enormous growth in the interest in and use of bicycling in the Roanoke Valley and has tapped into/sponsored a number of events to build awareness of bicycle safety issues and the need for better accommodations. In particular, RIDE Solutions has formed a strong relationship with the Car Less Brit Experiment (carlessbrit.tumblr.com), a social media experiment documenting, via blogging, video, Facebook, and other methods, the experiences of a local man who went carless starting in November 2008. The Experiment has touched on a number of alternative modes but has largely settled on bicycling as transportation.

RIDE Solutions serves on both the Regional Bicycle Advisory Committee and the City of Roanoke's Bicycle-Friendly Community Committee.

Public Transportation

RIDE Solutions does not operate any transit service, but does promote transit services provided by other organizations in the region. For example, RIDE Solutions offers transit maps and schedules, provides links on its Web site to Valley Metro and other transit service operators, participates in "Try Transit" promotions, and includes a transit trip planning tool on its Web site.

The Program Director and NRV Coordinator advocate for employers that are interested in developing transit services to serve their worksites. Transit is limited, however, outside of the main urban centers of Roanoke City and Blacksburg.

Other TDM Services & Activities - Marketing

RIDE Solutions places a heavy emphasis on marketing as a tool for increasing interest in its services. As noted in the Finance sections, more than one-quarter of RIDE Solutions' total budget is allocated for marketing activities and promotional items. But RIDE Solutions' total annual budget is small for a TDM program that serves a region as large as the Roanoke/New River Valley area. So, the marketing allocation is a small absolute amount and quite a modest investment when measured on a per-commuter or per-resident basis.

RIDE Solutions has experimented with a number of different marketing messages and methods of communications over the past several years, including radio, television, online/Web site, and print media.

Marketing Messages

Given the absence of congestion and HOV lanes in RIDE Solutions' service area, attracting commuters to alternative modes with the classic ridesharing

benefit message of "save time" or faster or less frustrating commutes is not relevant or meaningful. Thus, RIDE Solutions' primary marketing message has focused on the potential monetary savings associated with ridesharing. This message resonated during the summer of 2008, when gas prices were high, but has had less impact in recent months now that gas prices are lower.

RIDE Solutions has also started to incorporate a green message into its communication outreach efforts. This is due, in part, to the green movement gaining traction as a national trend and the fact that, among the Roanoke region's ridesharers, "help decrease pollution" is the second most important perceived benefit of ridesharing.

Marketing Outreach Methods

RIDE Solutions advances its message using a range of communication methods to raise general program awareness and increase interest in specific program elements. While RIDE Solutions deploys traditional media using TV, radio ads, and newspaper, the TDM agency attempts to leverage scare marketing funds through the use of low cost "guerrilla marketing" communication methods. Examples include:

- Social Media RIDE Solutions makes extensive use of free online social networking sites (*Facebook* and *MySpace*), YouTube, and Twitter. These social media sites not only provide a means to help reach new prospects for ridesharing, they also link RIDE Solutions' growing network of commuter rideshare advocates and strategic partners.
- Partnership Marketing RIDE Solutions provides its logo to all third-party strategic business partners for cross-promotion purposes. On the commuter side, RIDE Solutions gives each new member a "welcome package" that includes a window or bumper sticker. While these stickers do not have a specific use for transit passengers or bicyclists, they do increase awareness of the RIDE Solutions name on the region's roads.
- Promotions RIDE Solutions sponsors regional events related to their services such as "Bike Month" and "Try Transit Week."
- Carpool Announcements RIDE Solutions posts announcements for all new carpool registrations in the Rideshare section of both the Roanoke and Blacksburg Craigslists, to its Twitter feed, on its blog, and via its Facebook fan page.
- Media Relations RIDE Solutions periodically utilizes earned media news stories to help sustain awareness of RIDE Solutions and rideshare options. RIDE Solutions also has formed strong partnerships with New Media outlets, such as the Star City Harbinger, an online "newspaper" covering issues in the Roanoke Valley.
- Blogging The RIDE Solutions program director offers occasional commentary on transportation- and energy-related issues on its blog at ridesolutions.wordpress.com.

- Special Partnerships and Programs RIDE Solutions regularly partners with media, local government, nonprofits, and private businesses to create special TDM-related programs. For example, RIDE Solutions worked with Star City Harbinger on a "Get out the Vote" effort to provide polling-place-specific bus and bike information for voters. RIDE Solutions has also worked with local Long and Foster realtor James Glass on the creation of a "Home by Bike" home tour, implementing TDM principles (proximity to work, proximity to transit or bikeshare programs, etc.) into the home-buying decision. In addition, RIDE Solutions will work with the local Realtors Association on the possibility of including house-specific TDM information in the Multiple Listing Service database that realtors use to market homes.
- RIDE Solutions' Web Sites www.ridesolutions.org and www.bikeroanoke.com - are the centers of the agency's marketing efforts. All communication outreach activities and promotions direct prospects, customers, and partners back to this online information resource center. The Web site includes:
 - » Ride Solver calculates how much money could be saved through carpooling;
 - » Map of current registrant locations;
 - » List of new carpools;
 - » Interactive Google map of park-and-ride locations;
 - » Links to ride boards for one-time/special event ridesharing;
 - » Information for employer partners;
 - » Google transit planner and other regional transit information;
 - » Information about regional air pollution;
 - » Links to other programs that support alternative transportation (Telework!VA and Valley Metro);
 - » Versions of all marketing and promotional material; and
 - » An events calendar for bicycling-related events.

Customer Contact/Information Dissemination

The majority of customer contact occurs through RIDE Solutions' Web site, as online channel is the preferred method of obtaining information for most of RIDE Solutions' constituents. However, when Internet access is an issue, or if a constituent simply prefers the use of mail or the telephone, interactions are conducted in this way as well.

RIDE Solutions strives to return communications as soon as possible, and tries to have all match lists sent out within 24 hours of receipt of a

registration. RIDE Solutions also disseminates information to commuters at employer sites.

• Program Evaluation

It is not totally clear how successful the past efforts have been. As Figure 2.13 shows, only 14 percent of residents/employees in RIDE Solutions' service area had heard of the program, one of the lowest levels of awareness in the State.

79% Richmond RideFinders **Hampton Roads TRAFFIX 53**% PRTC OmniMatch ■ 50% Charlottesville Rideshare 46% Northern Neck Rideshare 45% Culpeper (Rapp-Rap) 40% Fredericksburg (RADCO) 38% Arlington County Commuter Services.. 38% Alexandria Rideshare 33% Loudoun County Office of Trans. Svc. 32% Mid Peninsula Rideshare 32% 14% **Roanoke Ride Solutions** Front Royal (Valley) 12% 1% Fairfax County Ride Sources 20% 60% 0% 40% 80% 100%

Figure 2.13 Program Awareness

Source: 2007 Virginia State of the Commute Survey.

VASOC Q61. Have you heard, seen, or read any advertising about commuting in the past year?

The low institutional awareness correlates to the low advertising. As Figure 2.14 shows, RIDE Solutions' advertising awareness scores, relative to other markets, is low.

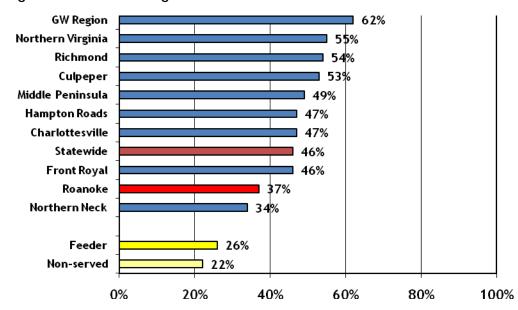


Figure 2.14 Advertising Awareness

Source: 2007 Virginia State of the Commute Survey.

VASOC Q61. Have you heard, seen, or read any advertising about commuting in the past year?

This may be due, in part, to RIDE Solutions' very limited marketing budget that simply cannot afford the high quality, sustained paid adverting campaigns that other TDM agencies fund. In addition, RIDE Solutions' service area, compared to other TDM agencies, is one of the largest regions. Program awareness may be higher in core downtown area where there is greater exposure opportunity to all of the media vehicles deployed.

It should be noted, however, that the State of the Commute survey was based on commuters in the database as of the latter part of 2006. Not only was this number 20 percent of the existing database size as of 2009, but the program had undergone three changes in management over the previous four years. It is possible that the lack of consistency in marketing and awareness campaigns combined with a low database number understates program awareness in 2009. It is also worth considering that the awareness number, even as low as indicated in 2006, could be considered above-expectations for a program with such a small marketing budget.

2.4.3 Related Mobility Programs

RIDE Solutions' current services are focused primarily on ridematching services to facilitate carpooling and telework among commuters. They target both commuters and employers. However, there are other transportation services programs in the Roanoke Valley and the New River Valley that provide related services to improve mobility and transportation options for other groups of the population.

Some of these groups include:

- New River Valley Mobility Management Program
- Human service transportation programs:
 - RADAR is a non-profit corporation that has provided rural public transit services and specialized transit primarily in the "Greater Roanoke Valley" for over 33 years. RADAR services are aimed at physically or mentally disabled, or transportation disadvantaged individuals. Drivers are trained in passenger assistance, defensive driving CPR, and wheelchair securement procedures to make trips safe and enjoyable.
 - BT Access provides paratransit services to qualifying residents in the Town of Blacksburg.
 - New River Valley Senior Services provides transportation services to seniors and the disabled in the New River Valley.
 - Community Transit, under the umbrella of new River Valley Community Services, provides transportation for clients as part of its behavioral health services programs.
- Taxi and bus service providers:
 - Blacksburg Transit, Blacksburg, VA;
 - Distinctive Services, Inc., Roanoke, VA;
 - Executive Town Care and Limousine Service, Roanoke, VA;
 - Ferrum Express, Roanoke, VA;
 - Greater Roanoke Transportation Company/Valley Metro, Roanoke, VA;
 - Hollins Express, Roanoke, VA;
 - Liberty Cab, Roanoke, VA;
 - Maroon Express, Roanoke, VA;
 - Mountain Express, Roanoke, VA;
 - Prestige Limousine Service, Roanoke, VA;
 - Quality Transportation Services, Roanoke, VA;
 - Roanoke Airport Transportation Service, Roanoke, VA;
 - The Smart Way Commuter Bus, New River Valley/Roanoke Valley, VA;
 and
 - Star Line Trolley, Roanoke, VA.

3.0 Future RIDE Solutions Service Area Profile

3.1 EXPECTED AREAS OF GROWTH

Much of this section comes from RIDE Solutions' Future Facts sourced by Roanoke Valley 2035 Constrained Long-Range Transportation Plan, Roanoke Valley 2025 Long-Range Transportation Plan, and the Blacksburg-Christianburg-Montgomery Area 2030 Transportation Plan.

Changes in the Roanoke-Blacksburg service area will impact how and where people choose to travel. Residential, commercial, and other developments will introduce new residents, employers, employees, and other potential TDM customers and partners. Similarly, changes such as highway improvements, or development of new transit services will impact where people travel (activity centers) and what types of transportation options are available.

The following are the major transportation-related infrastructure improvements identified in local planning documents that may affect TDM program needs in the Roanoke-Blacksburg area.

3.1.1 Future Transportation Facilities

- Development along U.S. 220 with the extension of Waterline service into Franklin County to Rocky Mount.
- Downtown streetcar connecting Downtown with the Biomedical Park on Reserve Ave.
- Bicycle facilities, including bike lanes, greenways, and paths throughout the region.
- Interchange improvements along I-581.
- Construct Blacksburg Multi-Modal Transportation Center to include a
 parking garage and a bus transfer facility that will connect the off campus
 route system to the on-campus circulation system.
- Expand Blacksburg Transit service into the Blacksburg/ Christiansburg/Montgomery MPO area and adjacent jurisdictions with service along main arterial streets, making stops at large commercial areas, at local and county facilities, and at high-density residential areas.
- Provide transit service from the Blacksburg/Christiansburg/Montgomery MPO area and adjacent jurisdictions to the Christiansburg train station to accommodate riders of the proposed TransDominion rail service.

- Additional details on transit service expansion will be included in Blacksburg Transit's detailed Transit Development Plan (TDP), which is currently being prepared.
- Construct extension of Huckleberry Trail from Prices Fork Road to Glade Road (Six-Year Program project).
- Extend the Huckleberry Trail to the downtowns of both Blacksburg and Christiansburg, as well as to the Blacksburg Recreation Center.
- Implement other elements of the bicycle plans for each jurisdiction.
- Widen sidewalks in downtown Christiansburg and continue with the Downtown Improvement project.
- Construct sidewalks with new commercial development in villages and towns within the region.
- Construct bikeways and walkways in the communities of Prices Fork, Riner, Plum Creek, and Belview.
- Construct sidewalks and/or bicycle trails with most planned roadway projects.
- Widening of Route 114 to four lanes from the Radford arsenal to Town of Christiansburg corporate limits.

3.1.2 Future Activity Centers

The transportation facilities described above serve and will continue to serve current activity centers around the region, especially the downtown areas. Over next 25 years, however, the Roanoke-Blacksburg region will see significant growth in several of its activity centers that will have implications for the region's transportation system, as well as significant opportunities for the region's TDM services. The major activity centers of the future are expected to include the following:

• The new Riverside Research Park (location of the new Carilion Clinic building as well as the Virginia Tech School of Medicine), a Brownfield redevelopment site, will create a new destination hub around the existing Roanoke Memorial Hospital area. Recent demolition of an old mill site paves the way for additional development in this area. The important of this area as a destination is suggested by the construction of a 1,500 space parking garage on the redevelopment site. The Riverside Research Park serves as a connection between the existing South Roanoke neighborhood, Crystal Spring village center, and downtown, and is connected to downtown by the Star Line Trolley and Valley Metro fixed-route service, as well as the Roanoke River and Mill Mountain Greenways. Plans to improve the old Virginia Railway Station as the intersection of Jefferson and Walnut suggest general improvements in the Jefferson St. corridor that demand particular attention for TDM strategies.

- The Corporate Research Center in Blacksburg, associated with Virginia Tech, is slated for additional growth in high-tech startups. The CRC is connected to Virginia Tech by the Greenway system and the region in general via the Smart Way Bus. The profile of the companies in this park would suggest the growth in young professional or Creative Class workers who will value TDM services.
- Downtown Roanoke's growing residential population indicates potential conflict between commuters and residents who will be competing for parking space. Over 170 new residential units were added in 2008 and 2009 when the Hancock and Cotton Mill buildings were completed, and on October 28, 2009, developer Ed Walker (the force behind each of these redevelopment projects) announced his purchase of the Patrick Henry hotel on Jefferson St. in downtown with plans to create an additional 100 apartments in the space. A partnership or collaborative relationship with Ed Walker would be an effective way to implement TDM principles into the new developments.
- The Roanoke Valley-Alleghany Regional Commission, in partnership with VDOT and their on-call consultants, are undertaking a Route 419 Corridor Study. As of November 2009, the draft plan calls for the creation of a public transit connection between Tanglewood Mall and the Exit 140 Park and Ride in Salem, along with five new park-and-ride lots along the route. The park-and-ride lots would likely involve public-private partnerships with private landowners to use existing parking capacity. The new transit service is also suggested to connect with the "spokes" of existing Valley Metro service on the west side of the City. Though only a plan, the draft recommendations have been well received by Roanoke County, and RIDE Solutions would be a primary promotional partner if the plan is implemented.
- The town of Daleville is undertaking a development project to create a town center on Route 220 just south of Fincastle. Though in the early stages of development, the project envisions the wholesale creation of a "downtown" in this largely rural area. This has the possibility of being a major trip generator in the growing Botetourt County region, largely for retail and restaurant jobs. Excess parking capacity at related strip-mall development could also service as park-and-ride service for Alleghany County and Botetourt County commuters traveling south into Roanoke.

The best way to appreciate these expected developments – projected or future activity centers – is to appreciate the forces that are shaping them. Based on the collective work of countless city and county leaders, the Chamber and Economic Development Partnership, entrepreneurs, civic and business leaders, and many others, the future of the Roanoke-Blacksburg region seems certain to be grounded on three core, interconnected industries: health care, education, and research. An overview of each follows.

 Healthcare Industry - The region already has an established health care industry. Major employers include: Salem VA Medical Center: The Greater Roanoke Valley is home to the Salem VA Medical Center focusing on care for veterans. Dedicated by President Franklin D. Roosevelt 75 years ago, it is now designated as a Level 1 Clinical Referral center providing psychiatric, medical and surgical treatment for veterans. The facility also has outpatient centers in Tazewell, Danville, Hillsville, Lynchburg, Wytheville, and Staunton.

The Salem VA Medical Center has created close relationships with many universities and other medical centers throughout the State, including the University of Virginia, School of Medicine, in Charlottesville; Edward via Virginia College of Osteopathic Medicine in Blacksburg; and the Carilion Clinic. Their nursing departments also have close ties with UVA, VCU, VA Western Community College, Radford, and Duke, among others.

HCA Virginia Health System: HCA has four regional hospitals with diagnostic and surgical outpatient centers. The facilities include Lewis-Gale Medical Center, Alleghany Regional Hospital, Montgomery Regional Hospital (magnet-designated), and Pulaski Community Hospital. All of these hospitals rank in the top 10 percent of the country in four core Centers for Medicare and Medicaid Services measures on a consistent basis. They also rank top 10 in Virginia in Anthem's Quality Insights Hospital Incentive Program for patient safety, satisfaction, and health outcomes.

HCA Virginia Health System also has a number of outpatient centers, including Lewis-Gale Imaging at Brambleton (opened in 2009), a new imaging center near Daleville, Blue Ridge Surgery Center, the Imaging Center at Montgomery Regional Hospital, the Women's Center at Alleghany Regional, and the Lewis-Gale Breast Center.

- The Carilion Clinic: Carilion is a large network of 500 plus physicians in a multi-specialty group along with several not-for-profit hospitals. These include Carilion Roanoke Memorial Hospital (CRMN - only Level 1 Trauma Center), Carilion Roanoke Community Hospital, Carilion New River Valley Medical Center, Carilion Franklin Memorial Hospital, Carilion Stonewall Jackson Hospital, Carilion Giles Memorial Hospital, and Carilion Tazwell Community Hospital.

The large numbers of Carilion's physicians are spread out over 80 practices throughout the region. The Carilion Clinic also boasts successful residency and fellowship programs.

The Jefferson College: The Jefferson College is a medical school located in downtown Roanoke. The school focuses on small class sizes, just 15 to 1 student-teacher ratio. They offer baccalaureate degrees, associate degrees, as well as master degrees in occupational therapy, nursing, and physician assistant. The school also allows Carilion Clinic employees to participate in scholarship programs.

- Virginia Tech Carilion School of Medicine: On top of all of these healthcare resources, Carilion and Virginia Tech will open the Commonwealth's next medical school in 2010 - the Virginia Tech Carilion School of Medicine (VTC).
- **Virginia College of Osteopathic Medicine:** four-year osteopathic medical school located at the CRC in Blacksburg. Opened in 2002.

According to most sources, 30 percent to 40 percent of all new jobs created in the past ten years have been in healthcare, and this trend is predicted to continue for the next 25 years. From the base of institutions that the Roanoke region has in place, it looks like healthcare will be a solid base industry.

Source: Care in the Valley from Valley Life, May 2009.

- **Higher Education Industry** There are already over 100,000 college and graduate students in the Roanoke-Blacksburg region, attending 21 institutions of higher education. The major institutions that account for most of the undergraduate- and graduate-level students include:
 - Virginia Tech was founded in 1872 as a land-grant college named Virginia Agricultural and Mechanical College. Virginia Tech is now a comprehensive, innovative research university located in Blacksburg. With a current enrollment of 28,259, it has the largest full-time student population in Virginia.
 - Radford University is located in the New River Valley of the Blue Ridge Mountains. It is known for its strong faculty/student bonds, innovative use of technology in the learning environment, and vibrant student life on a beautiful campus. With an enrollment of 9,122, Radford was selected as one of the Southeast's best universities by The Princeton Review in 2009.
 - Virginia Western Community College is a two-year public institution of higher education operating under a statewide system of community colleges. The service region of the College includes Roanoke, Salem, Roanoke County, Craig County, southern Botetourt County, and northern Franklin County. Day, evening, and weekend classes are provided on a 70-acre campus located in Southwest Roanoke. Classes also are offered at off-campus locations in the area. The College was established in 1966 and has grown from an initial enrollment of 1,352 to its current enrollment of over 9,000.
 - New River Community College is a two-year public institution of the Virginia Community College System. The school serves the New River Valley at two campuses: a main campus in Dublin and a satellite campus in Christiansburg.
 - Roanoke University is an independent, coeducational, four-year liberal arts college with approximately 2,000 students. It offers 34 majors with bachelor's degrees in arts, science, and business, as well as preprofessional majors in law, medicine, dentistry, engineering, and

- ministry. The college is listed in U.S. News & World Report's Best Colleges Guide as a national liberal arts college.
- Hollins University, founded in 1842, is a liberal arts university for women. Hollins is a private university located on a 475-acre campus in Roanoke, Virginia. The university draws some 800 undergraduates from 43 states and 11 countries, more than 85 percent of whom live on campus.
- Liberty University is the largest and fastest growing Christian evangelical university in the world. Founded in 1971, it now has 60 accredited programs of study. Liberty now has a residential enrollment of 11,300. Liberty University is located in Lynchburg, Virginia.
- Research and Development Industry The academic institutions around the Roanoke-Blacksburg region not only teach students, the facility and students generate millions of dollars in research. This industry will grow even faster with the arrival of Virginia Tech Carilion School of Medicine (VTC). VTC is slated to be a major bio-tech research center that is expected to attract millions of dollars in healthcare-related research funding. VTC's growth will ultimately create a biotech research industry, attracting more jobs and people to the region. The Corporate Research Center, adjacent to but not part of Virginia Tech, already serves as an incubator for technology and research businesses and has seen steady growth in both physical size as well as tenant businesses since its inception.

As health care, education, and research industries and their spins offs develop, labs, buildings, and mini-campuses, will shape the region's future activity centers. Moreover, they will have a major influence on the region's projected demographic makeup.

3.2 Projected Demographics

Given the confluence and ultimate influence of the three growth engines – healthcare, education, and research – it is no surprise that the region is slated to grow in the future.

In 2000, the population of the region was 307,538 and increased to nearly 320,040 in 2009. The area has a projected 2030 population of 346,584, representing an increase of 20.1percent.

Given the region's bright future with the three major economic drivers, this population projection may be conservative. This number will be updated in future versions of this document.

The age composition of the population will also change over the next 20 years. Between 2000 and 2030, the percentage of residents 65 and over will increase from 16 percent of the population to 23 percent, as presented in Table 3.1.

Table 3.1 Demographic Changes (2010-2030)

	2010	2020	2030
Total Pop.	320,040	331,911	346,584
% Growth	4.1%	3.7%	4.4%
Age Groups (%):			
Under 20	77,703 (24%)	81,517 (25%)	86,964 (25%)
30 to 64	189,883 (59%)	183,807 (59%)	180,457 (52%)
65 and Over	52,454 (16%)	66,587 (20%)	79,163 (23%)

Sources: Virginia Employment Commission and US Census Bureau.

Planning Team: Future version of this document will include ethnicity changes that are expected over the medium- and long-term.

Employment is expected to increase in RIDE Solutions" service area in the future. Table 3.2 shows that employment is expected to increase by 12.5 percent between 2006 and 2016, adding over 20,000 new jobs.

Table 3.2 Estimated Employment Levels

	Estimated				
	2006	2016	Change	% Change	Annual Growth
Total Employment	163,257	183,64	20,407	12.5%	1.2%

Source: Virginia Employment Commission.

3.3 PROJECTED TRAVEL PATTERNS

Based on the aforementioned population and employment projections, projected travel patterns will change in a number of ways:

• Congestion in downtown areas and in several high-density activity centers: The resident and employer-based population growth in the RIDE Solutions service area over the next 20-25 years, while significant from a percentage growth perspective, is not too dramatic from a total numbers perspective – 25,000 more people spread out over what is relatively low-density region. Stated another way, there is plenty of room to absorb this growth with little overall disruption or crowding. This stated, the impact of this growth is more likely to be felt, over the long term, in pockets of growth – in the downtown areas and in several high-density activity centers.

The most definitive example of expected changes in travel patterns is related to the opening of Virginia Tech Carilion School of Medicine in 2010. Located

just off U.S. Route 220 in Roanoke, students, faculty, staff, patients, and visitors will be accessing the campus regularly. A significant increase in traffic volume in that area is anticipated.

- More longer distance commuters: Job growth may actually outpace population growth, suggesting that some workers will commute from outside the region to work in the RIDE Solutions service area.
- Aging population: A growing aging population will result in an increase in non-work related travel.
- Increase in freight traffic: Growth in shipping is expected along I-81 and with the completion of the intermodal freight center in Elliston, freight traffic will increase commercial travel through and around the region.
- Increase in Biking-Walking: Current interest in bicycling and pedestrian walkways will continue, particularly due to concern about energy and commitment to sustainable lifestyle. The region's Greenways should attract greater usage.

3.4 FUTURE EXTERNAL FORCES

In addition to the certainty of projected demographic trends in population and employment, there are a number of external market forces that may influence and shape RIDE Solutions' future. These forces include:

• New Generation of Workers - The Millennials

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 generationally inspired factors that will fuel this change.

First and foremost, the sheer size of the Millennials as an age cohort suggests that they will influence society, just as the large Baby Boomer generation did and still does today. Figure 3.1 shows that when compared to the other generations, Millennials represent the largest generation alive today – 80 million strong (8 to 28-year olds today).

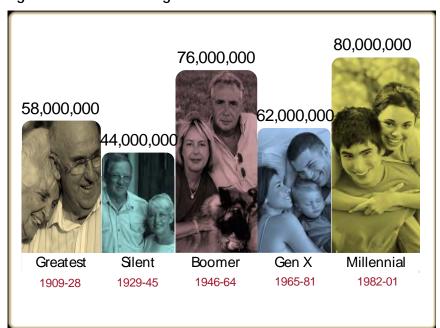


Figure 3.1 Size and Age Profile of U.S. Generations

Source: SIR Boomer Project.

The second factor is related to Millennials' innate generational traits that were influenced by their shared "coming of age" experiences as an age cohort. When Millennials were coming of age, their daily life was immersed in technology. Many received their first personal cell phone at age 10, but they spent more time text messaging than talking. Unlike older generations, Millennials are a digital native nation. Their neural pathways are actually different from Baby Boomers. When Boomers came of age, their minds were shaped by print and standard broadcast media, and they consumed one medium at a time. Millennials hyper-exposure to technology has resulted in hyper-connectivity – they are always seeking personal connections and linkages.

Another important generational trait that Millennials have over older generations is their support for and active involvement in social causes. Millennials are taught at an early age and through school to volunteer, and this "whole person" approach is the path to human development. Older generations had to figure this out on their own time. Consequently, Millennials are redefining social engagement and social movements. The campaign of President Obama is a case in point.

Given the technological savvy and cause-oriented generational values, coupled with their sheer size, Millennials will have a big impact on ridesharing and may represent a tremendous opportunity to shift America's modal split significantly. There are already signs of this today. Over the past two years, Millennials, at a greater rate than any older generation, have shifted to and remained in non-SOV work commute modes.

Even the recent fall in gas prices has not reversed this promising trend among Millennials.

Millennials are also 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 a social network – 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 (20% to 30%), they will make up the majority of the work force in years to come, surpassing the smaller Gen X and Baby Boomers – the older generations just ahead of them. 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.

Changing Nature of Work - Distributed Workforce

Technology in the workplace has helped more and more employers recognize that work is not some place you go, but rather something you do. Enlightened employers are now measuring employee productivity not by time clocks but rather by outcomes, helping America evolve 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.

• Going Green and Sustainability

One of the most recent social movements that is being fueled by Millennials, as well as older generations, is the green or sustainability movement. According to a Boomer Project national study, over 80 percent of Americans consider themselves "green." Being green, from a consumer movement perspective, has gone mainstream. When it comes to influencing the future of RIDE Solutions' TDM program, there are both consumer-driven and business-driven green forces at work.

As Figure 3.2 shows, that while commuters in RIDE Solutions' region believe that money savings is the most important benefit that motivates today's ridesharers to switch from drive alone to alternative modes, lowering one's personal impact on the environment – *helping to decrease pollution* – has a strong motivational impact, too. Almost half (46%) of the respondents gave this benefit a "5" or top box rating.

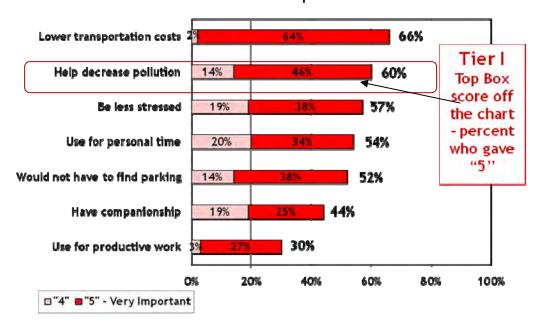


Figure 3.2 Reasons for Use of Alternate Transportation Modes

Source: 2007 Virginia State of the Commute.

VASOC – Question 56e: How important were each of the following in your decision to use (carpool, vanpool, bus, train, ferry, bike, walk)? "1" means "not at all important" and "5" means "very important."

The environmental benefit of ridesharing may continue to increase in importance in the years ahead as the green movement is expected to grow in importance and manifest in greater personal or individual actions.

Another related green trend that may shape the future of RIDE Solutions' TDM program is the change in corporate mindset. More and more companies want to be perceived as being green. In a recent SIR study for the Older Dominion Partnership, 50 percent of the CEO's in Virginia want their companies to be perceived as "being green."

Many companies and their business associations are taking action. This is particularly true in the Roanoke region. There are a number of business organizations that have formed to advance the green cause. Leading the way are Cool Green Biz, an initiative launched by the Roanoke Regional Chamber of Commerce in partnership with Roanoke Valley Cool Cities Coalition and the new CNR 2030, part of the Creative Community Leadership Project (CCLP). Both of these initiatives are discussed later in this document.

3.5 FUTURE TRANSPORTATION AND TDM-RELATED TRENDS

There are also many transportation and TDM-related trends that may have a profound impact on RIDE Solutions' future. While too many to detail, this section presents a broad overview these forces.

• Stricter Clean Air Standards on the Horizon?

The Obama administration is also proposing new clean air and fuel economy (CAFE) standards for cars and trucks, including Federal limits for tailpipe emissions. Could any new standard impact the region's clean air attainment status over the long term?

Higher Gas Prices on the Distant Horizon?

RIDE Solutions, as all rideshare agencies across the country, saw a dramatic increase in inquiries and ridematching activities when gas prices hit \$4 per gallon. While prices have fallen way off this mark, most predictions on the long-term price of gas call for much higher prices.

• Growth of the I-81 Corridor.

Increased traffic volume and development are projected for the I-81 corridor.

• Growing Involvement of Employers in TDM - Offering TDM Services.

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 enlightened 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 is true for many of the companies in RIDE Solutions' market.

• The Growth of Telework.

The potential growth of telework in the Roanoke region is promising. One seventh of non-teleworkers "could and would" telework if offered the opportunity. In Roanoke, this equals about 31,400 potential new teleworkers.

It is interesting to stop and think about this number – 30,000. This is about the same number of people that is projected to make up the region's increase in population over the next 20 years.

While the potential for additional teleworkers is below the state average (9% of regional commuters "could and would" telework versus 15% of all commuters statewide), the potential to remove thousands of people from the road altogether should not be overlooked.

Figure 3.3 Potential New Teleworkers

	Statewide	<u>Roanoke</u>
Non-teleworkers who		
Have TW-appropriate	31%	1 9 %
job responsibilities		
Are interested in TW	24%	14%
- Occasional	15%	9%
- Regular	9%	5%
Potential New Teleworkers (Not discounted)	751,000	31,400

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

• More Tolls and/or Congestion Pricing

Planning for the future of transportation often leads to some discussion on user fees – tolls, increased gas taxes, or VMT tax. VMT tax involves charging road users a user fee based on their usage level. If the reaction to the 2008 spike in gasoline prices was any indicator, a dramatic increase in user fees, in any form, could have an impact on work commute mode choice.

4.0 RIDE Solutions Strategic Plan

4.1 STRENGTHS, WEAKNESSES, OPPORTUNITIES, AND THREATS (SWOT)

This section outlines the strategic framework that will guide the growth and development of RIDE Solutions 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 changes in the future was conducted to produce goals and objectives the program will work towards and performance standards to monitor the program's progress.

Existing performance measures used to track the program's success are discussed briefly in this section. A plan for expanding performance monitoring and developing additional performance measures that will be used to track RIDE Solutions' progress towards the plan's goals and objectives is outlined in Section 7.0 – Plan Monitoring and Evaluation.

SWOT is an acronym for Strengths, Weaknesses, Opportunities, and Threats. A SWOT analysis fosters recognition of strengths, or areas in which RIDE Solutions excels and will want to continue those trends to help further its mission; and weaknesses, those areas in which RIDE Solutions should strive to improve to reduce or eliminate their negative impact on the agency. Opportunities are factors or events that offer a strategic opportunity for RIDE Solutions to take advantage and convert to strengths. Threats are areas that could have a negative impact unless addressed proactively.

Strengths

- Well qualified, dedicated, and enthusiastic staff. In particular, the Program Director has expertise in numerous functional areas that are needed for a TDM program with a small staff.
- Substantial administrative support from RVARC frees RIDE Solutions' staff for service delivery.
- Willingness to be creative and explore innovative methods to reach potential customers.
- Generally viewed as an effective organization, with moderate support among local jurisdictions.
- Expanded regional boundaries New River Valley and potentially the Lynchburg region.

Weaknesses

- RIDE Solutions' very limited staff resources is a weakness on several fronts. First, this limits RIDE Solutions' ability to undertake new initiatives that could expand awareness, program participation, and overall impact of the agency on the Roanoke area. Second, limited staff resources place a burden on existing staff to manage and mine the expanded regional boundaries New River Valley and potentially the Lynchburg region. Third, small staff resources is a weakness when it comes to one of the core practice areas employer-based transportation programming. This is the reason for the gradual accumulation of new employer partnerships over the last few years. It takes significant time to identify and close a prospective client and then to develop a highly customized program to meet the specific needs of their employees at each worksite.
- Some stakeholders' limited view of TDM and RIDE Solutions' role in the region as a ridematching and carpool support organization.
- Modest name recognition and identity for RIDE Solutions, as defined by the 2007 Virginia State of the Commute (VASOC) Survey. Consequently, awareness of specific services might be limited.
 - For example, in the interviews related to the 2008 Performance Review conducted by DRPT, all of the stakeholders who were interviewed knew of RIDE Solutions' ridematching service, but many were unable to name any other services offered by the program. This contributes to stakeholders' limited view of RIDE Solutions' role in the region as a ridematching and carpool support organization.
- Funding is heavily drawn from a single source (80% DRPT grant), making RIDE Solutions vulnerable to financial crisis if this source of funding is disrupted.
- RIDE Solutions' position as a program within RVARC might suggest it does
 not have authority over its decision-making and budget, potentially
 restricting the roles it could adopt and the partnerships it could form.
- Lack of established goals makes it difficult to prioritize resource allocation, document progress, and make the case for the agency's value to the region.

Opportunities

• The region is slated to grow in both population and employment. This means greater VMT. Increased freight traffic along I-81 and the completion of the intermodal freight center in Elliston will increase commercial VMT in the region. The overall increase in VMT will, in turn, fuel the overall need for TDM and RIDE Solutions to play an increasingly important role in maintaining and enhancing the efficiency of the region's transportation system.

- Some stakeholders see value in RIDE Solutions expanding its services beyond ridematching and rideshare support to non-traditional services that complement the CNR 2030 initiative, part of the Creative Community Leadership Project (CCLP). Additionally, RVARC supports greater integration of TDM in community and economic development planning.
- Growing suburban population concentrated due to topographical restrictions. Thus, as the region's population continues to grow in the suburban counties, it is expected that more commuters will be traveling longer distances to reach the major activity centers.
- Future growth of activity centers will place increasing demands on employer-based services. For example, what will be a rapidly growing VTC medical school complex will benefit from TDM program support and a wider range of transportation options (i.e. car-sharing, transit, bike-pedestrian, etc.) The regions' new employment centers will also increase the demand for intraregion access and mobility movement.
- Growing awareness and concern by local jurisdictions, employers, and residents of the problem of climate change, the benefits of "going green," and the links between transportation/SOV use and a sustainable environment. Relative to other regions and cities across Virginia, the Roanoke region's establishment sets the bar in being green.
- In terms of savings money, parking costs are the primary consideration in the high-density downtown areas. These areas will have the most pressure on them as the region grows, reducing the availability and increasing the cost of parking. This, in turn will make the employers and workers in these areas the prime candidates for RIDE Solutions' services.
- The effect of increased fuel costs on residents of the region will increase interest in and demand for TDM alternatives.
- A growing, older population is expected, one that will be much healthier and more mobile than today's seniors. This will result in an increase in non-work related VMTs. In addition, trip support for continuous access to healthcare providers and/or or coordinating human services and patient delivery will increase in importance and demand.
- The telework-related interest and subsequent demand trends among employers and workers will require RIDE Solutions to develop and deliver greater telework-related expertise and portfolio of telework services.
- Bike and walking growth in popularity offers additional potential for RIDE Solutions. The region already boasts significant bicycling opportunities along the greenway network, but additional bike lanes would support the growing popularity of bicycling as a commute mode.
- The RIDE Solutions service area is becoming a center for higher education. With the anticipated growth of individual institutions, this concentrated

- education presence is expected to become more pronounced in the future and present TDM service opportunities.
- The healthcare industry- both in terms of service providers such as Carilion Clinic and, Montgomery County Hospital, and other businesses, as well as education and research such as the Virginia Tech-Carilion School of Medicine, Jefferson College of Health Science, and the Virginia College of Osteopathic Medicine is spread all over the RIDE Solutions service region, and as such, incorporates numerous types of people from doctors to nurses, to staff, to students, to patients. There is a great opportunity especially in the employer services area to provide TDM solutions. Guaranteed Ride Home and ridematching may prove helpful. In more densely populated employment activity areas of the future, even bicycle and walking programs may be of interest, especially in the university and healthcare campus setting.
- Rising gas prices and enhanced employer awareness of environmental issues/sustainability, and appreciation of the business benefits of TDM (such as retention, recruitment, and productivity enhancements) have raised employers' interest in employee transportation programs.

Threats

- The current economic climate is affecting state budgets. Cuts in Virginia's budget could cause financial distress for RIDE Solutions' current operations and future growth.
- Compared to other areas of the State, residents of the RIDE Solutions service
 area have a relatively short commute, both in terms of distance and time.
 Additionally, the area has one of the lower congestion levels in Virginia.
 Most (80%) are satisfied with their commute. Thus, commuters may be
 reluctant to consider, much less adopt alternate modes as a way of relieving
 stress and saving time. This direction may not produce the ROI to justify
 traditional ridematching.
- The number of new employer partners that can be recruited is limited by the amount of time RIDE Solutions' staff has available after all of the other mandatory activities (such as ridematching, special events, grant reporting, etc.) have been completed. Thus, at a time of rising awareness and expectation of stakeholders, RIDE Solutions' effectiveness and impact will be gated by the fact its services are extremely customized and labor-intensive.

4.2 RIDE SOLUTIONS' MISSION AND VISION

Unlike Virginia's other major metropolitan markets, there is little pre-existing commuter demand for transportation alternatives to the SOV commute in RIDE Solutions' service area. Traffic congestion is just not a concern. The average commute time and distance is relatively short. Time savings are simply not needed to make a stressful or long commute better. In addition, there's ample

parking and minimal parking cost in the areas' highest density employment centers. Consequently, there are no significant cost savings that come with ridesharing over the SOV commute. To put it bluntly, the Roanoke-Blacksburg market offers the best market conditions for SOV commuting in the Commonwealth. And, it shows. The region enjoys the highest SOV mode split in the State – 9 out 10 commuters commute alone to work.

So what is RIDE Solutions' reason d'être? The answer centers around the community's long-term vision for itself and the role RIDE Solutions can play in helping the community achieve its vision.

Roanoke Valley's Growth Engines

The future of Roanoke region is tied to the success of three economic engines: health care, education and research, and the alchemy of integrating all three:

- Education The Roanoke Region is already home to 21 institutions of higher education with over 100,000 undergraduate and graduate students being educated for the future. The talent (Ph.D.s) and infrastructure in place (facilities) makes the Roanoke region one of the Mid-Atlantic region's center of higher education.
- Healthcare The Carilion Health System and the new Virginia Tech Carilion School of Medicine & Research Institute will reinforce Roanoke's position as the center of healthcare for Western Virginia.
- Research The Roanoke Region's 21 institutions of higher education and the new VTC will make the region, de factor, a major national medical and biotech research zone.

The direct activity generated by these three industries will fuel the growth and prosperity of the Roanoke region over the next 25 years and beyond. The success of these three industries, in turn, will spin off and attract other service support industries and provide a growing business tax base to fund state-of-art community infrastructure, services, and quality of life amenities.

One of the primary ways to support and nurture these core industries is to help attract and retain the kind of professionals that will ensure their success – *the Creative Class* – highly educated, energetic, professionals.

Region's Economic Development Approach - A New Model

To attract and retain the research teams and other professionals with average annual salaries of \$100,000 and more, the Roanoke region is now following a new formula for economic development – to build and protect a place that people want to call home.

Beth Doughty, Executive Director of the Valley Economic Development Partnership, eloquently sums up this approach in a recent *Virginia Business Magazine* article:

"The old model was you just attracted jobs and that was how you grew your population; the new model is you build a place that people want to be and that attracts the talent and the jobs follow the talent."

The workforce needed for leading edge education, healthcare, and research jobs is what Richard Florida, an author and economic development guru, coined *the Creative Class*. These highly educated, energetic, young professionals are more and more motivated by their pro-environment/sustainability sensibilities. The great outdoors, and easy access to it, is now more important than ever.

In order to attract educated, energetic, young professionals that can support the region's economic development, the local Chamber and economic development marketing efforts are advancing the region as:

The best place in America to live, work and have fun outdoors.

Support for this vision is everywhere. The Roanoke region has an abundance of natural, scenic surroundings, ever present iconic symbols of the environment and the importance of protecting it. Residents have easy access to the outdoors and first-class opportunities for recreation – hunting, fishing, camping, walking, running, and biking. Examples include:

- The Appalachian Trail it literally comes through the City;
- Six greenways that link the city's rivers, mountains, and scenic areas to a vibrant, walkable downtown;
- Roanoke's Carvins Cove Natural Reserve, the second-largest municipal park in the U.S., offering more than 12,000 acres of hiking, biking, and horseback riding. Its 800-acre lake caters to boaters and anglers;
- Immediate access to the Blue Ridge Parkway, also known as "America's Favorite Drive;" and
- An unparalleled collection of lakes and rivers the Upper James River, Smith Mountain Lake, Philpott Lake, the New River, and the Upper Pigg River Blueway.

Ms. Doughty sees this economic development perspective validated in the initial impressions of business prospects when they visit the Roanoke area. As quoted in *Virginia Business Magazine*:

"After hello, the first thing prospects say is 'It's beautiful here'."

Region's Collective Focus: The Environment and Sustainability:

More and more people now appreciate this new economic development perspective. Among the region's civic, community, and business leaders, there is now a growing appreciation that the region's natural resources are indeed the region's key to long-term economic prosperity. The region's natural amenities make it the desired place to live and play – a preferred choice for the most talented 21st century worker who can literally chose to work anywhere and

everywhere. The more these desirable "Creative Class" workers chose Roanoke, the more desirable the region will be for Creative Class-dependent employers – healthcare companies, universities, and research industries.

The task now, and for the foreseeable future, is to ensure that the region's community assets are nurtured, protected, and sustained. This requires the cultivation of community values that place a premium on the environmental-sustainability movement and the active involvement of residents, organizations, institutions, and businesses in proactively supporting this cause. The good news is that across the Roanoke Valley region, the green and sustainable lifestyle movement has already gained significant traction.

Unlike other communities across Virginia, the Roanoke Valley, as a community, seems to have reached a consensus on the importance of Roanoke's outdoor assets, environmental stewardship, and green and sustainable lifestyle. A number of public and private sector initiatives have been launch, each taking on different parts of the overall task of sustaining Roanoke's environmental assets. Below is a partial listing of these groups; a more detailed overview of each organization and their green and sustainable focus is presented in the Appendix of this document.

Table 4.1 Profile of Roanoke Area Environmental-Sustainability Organizations

City of Roanoke:

The City of Roanoke was one of the early adopters of the green-sustainability movement. The City has implemented a number of projects aimed at reducing its carbon footprint and creating a new foundation of best practices. Roanoke was the first city in Virginia to join Local Governments for Sustainability (formerly known as ICLEI). The City developed plans for a new Williamson Road fire station that will be its first LEED-certified (Leadership in Energy and Environmental Design) building. Roanoke became the first local government in Southwest Virginia to make biodiesel fuels mandatory in many of its fleet vehicles and installed LED lights in traffic signals at 60 major intersections. The City also has a highly successful curbside recycling program.

One of the more visible green initiatives advanced by the City has been the Clean and Green Campaign designed to accelerate efforts to make Roanoke attractive and environmentally sound. In September 2008, city council passed a resolution setting a goal of communitywide reduction of carbon emissions by 2 percent per year, for a 10 percent reduction by 2014.

Citizens for Clean and Green Committee:

Citizens for Clean and Green Committee is a diverse community group promoting energy conservation, efficiency, and other green initiatives. It was initially formed to support Roanoke's Clean and Green Campaign. As such, the Citizens for Clean and Green Committee's goal is to work with the City to meet its goal of a 10 percent reduction in greenhouse gas emissions by 2014.

Roanoke Business Environmental Leadership Coalition (aka Roanoke's Clean and Green Business Coalition):

14 of Roanoke's top employers and businesses, led by Breakell, Inc. General Contractors, have joined efforts to support the Clean and Green Campaign. The Coalition's mission is to identify and implement environmentally sound business practices, including the development of sustainable business plans, the tracking of carbon emissions, and recycling.

Individual Companies:

There are numerous examples of corporate environmental leadership in Roanoke's business community. One is Breakell Inc., who is pioneering new ways of working, communicating, and building through its commitment to sustainable business practices and technology. Breakell Inc. has integrated a company-wide environmental policy, which includes recycling, adding biodiesel to heavy equipment, and using a fleet of the hybrid Prius cars.

Educational Institutions:

Roanoke's educational institutions are raising the bar on environmental stewardship. A great example is Hollins College. Hollins has embarked on a program to make their entire campus "carbon neutral." Hollins hosted a film festival "Putting a Chill on Global Warming" (2007) that served as the kickoff for the local campaign for responsible energy use, and they have brought outstanding expert speakers on the subject of global climate change and sustainability to Roanoke Valley. Ferrum College in Franklin County, along with Hollins, has signed onto the American College and University Presidents' Climate Commitment (http://www.presidentsclimatecommitment.org/about/commitment). Roanoke College and Virginia Tech have active student-led sustainability efforts, and the region's three community colleges – Virginia Western, Dabney Lancaster, and New River – are leaders in green job training.

Roanoke Valley Cool Cities Coalition: www.rvccc.org:

Roanoke Valley Cool Cities Coalition is the local organization in the Roanoke Valley that is tackling energy policy and the difficult problem of global warming through education, outreach, and community actions. The organization's goal is to encourage the citizens, businesses, organizations, and governments in the community to understand what they can do to reduce greenhouse gas emissions, and to get started with the challenge ahead. This coalition suggests ways for people and businesses to reduce their carbon footprint.

COOL GREEN BIZ Program: www.roanokechamber.org/issues_actions/CoolGreenBiz:

Cool Green Biz is an initiative launched by the Roanoke Regional Chamber of Commerce in partnership with Roanoke Valley Cool Cities Coalition. The program is designed to recognize member businesses that have made a commitment to sustainable business practices. The program will be based on an evaluation of member's implementation of "green" practices that reduce waste, promote clean air and water, conserve natural resources, enhance the quality of life for employees, customers, and neighbors, and reduce greenhouse gas emissions.

US Green Building Council Southwest Virginia Chapter (http://usgbcswva.org/):

The USGBC Southwest Virginia Chapter is a catalyst in moving green building to the forefront of the valley's building industry and communities. USGBCSWVA provides and supports educational opportunities to members and the general public through workshops and participation in community forums and expos.

CNR 2030: Growing a Carbon-Neutral Region:

CNR 2030, named after its goal – for the region to be carbon neutral by 2030, is the latest sustainability group to form in Roanoke. CNR 2030 is part of the Creative Community Leadership Project (CCLP) that was recently launched in Roanoke and is designed to spur greater economic prosperity in the region. Using the CCLP approach, a comprehensive strategy for communities who wish to compete and prosper in the creative age, Roanoke successfully competed for one of the two designated CCLP sites in 2009.

Sustainable Blacksburg:

From the Web site: Sustainable Blacksburg is a non-profit community organization, which facilitates effective environmental stewardship in the Blacksburg area to enhance the region's livability and economic vitality by reducing its impact on the local and global environment.

Sustainable Blacksburg is a collaborative community partnership formed as part of a \$95,000 U.S. EPA Resource Conservation Challenge grant received by the Town of Blacksburg to address toxic chemical risks facing the community. Numerous community members have come together to form Sustainable Blacksburg, including representatives from the local government, Virginia Tech, university student organizations, local businesses, architectural and engineering firms, and non-profit organizations.

Go green NRV Program: http://www.gogreennrv.com/index.html

GGNRV promotes a Green Business Program for businesses in the New River Valley, including modified programs addressing industry specific green initiatives for the various businesses in the Valley. In 2008, a group of local businesses formed a committee to research and develop a local "green business development program." Serving on committee are associates of local professional firms, retail and industrial businesses, and municipal employees.

The group identifies green business as a sustainable business is any organization that participates in environmentally-friendly (or "green") activities to ensure that all operations, products, and manufacturing activities adequately address current environmental concerns while maintaining a profit.

RIDE Solutions' Mission and Vision Statements:

So what is RIDE Solutions' reason d'être? Simply put – to be a central force in helping the region realize its long-term vision: *The best place in America to live and have fun outdoors.*

This focus is articulated in RIDE Solution's vision statement:

RIDE Solutions is an integral community resource that enables Roanoke residents to have a green and sustainable lifestyle that makes the region the best place to live and have fun outdoors.

To achieve this vision, RIDE Solutions sees its mission focused on smarter transportation-related choices. RIDE Solutions' mission statement reads:

RIDE Solutions' mission is to move commuters out of single-occupant commute modes by promoting the financial savings and environmental benefits that alternative mode travels affords commuters and employers.

As RIDE Solutions delivers on this mission, it will improve regional air quality and help maintain the quality of life in the Roanoke region by reducing vehicle emissions and vehicle miles traveled by managing the demand on the region's transportation infrastructure. The organization will also provide a valuable public service in offering cost-saving measures to commuters looking for ways to cut their costs.

4.3 RIDE SOLUTIONS PROGRAM STRATEGY

This Long-Range TDM Plan will help RIDE Solutions achieve its mission and vision. The Plan is based on ten key strategic actions:

This long-term strategy has ten components:

• Position RIDE Solutions as the Green Mobility Expert - A number of credible green/environmental organizations and associations have already emerged as early sustainability leaders in the region. No matter what is motivating these different organizations - global warming, air quality, sustainability or financial savings, they are all advancing the conversation of environmental sustainability - raising awareness of green issues and spreading the word on how to take action. The fact that they are offering a myriad of general advice and solutions presents an opportunity for Ride Solutions.

National emissions experts report that transportation accounts for up to 40 percent of the country's Green House Gas (GHG) emissions. Mode choice and mode use play a huge role in the health of the local environment.

This presents the opportunity to position RIDE Solutions as the green mobility expert, the one organization that specializes in transportationrelated GHG issues and impacts and offers informed solutions. The winning strategy is to make RIDE Solutions the de facto "go to" community resource on employees' commutes and the GHG benefits that come with specific transportation choices and behaviors. In emphasizing transportation behavior rather than technology (mode choice vs. hybrids or electric vehicles), RIDE Solutions will distinguish itself as having a broad vision and understanding of the energy involved in the regional transportation network. An emphasis will be placed on eliminating trips through traditional TDM activities as the optimal green travel option, since trip reduction effects urban density, parking capacity, the heat island effect of roads and parking lots, stormwater management, urban tree canopy, and other issues of sustainability. This will put RIDE Solutions in the position of forming partnerships and alliances with advocacy groups, government programs, and other organizations whose interests would not necessarily align with a traditionally-viewed TDM program.

The strength of this position is three-fold. It is important consideration – it meets a need now and it will grow in importance over time, it is believable, and it differentiates the organization from others. Furthermore, it is the optimal way to get the most attention with the limited resources that RIDE Solutions controls.

This stated, it is understood that this positioning does not preclude RIDE Solutions from promoting the other benefits of employer-based TDM programs or working with employers on transportation solutions and programs that have little connection with or impact on environmental issues.

 Aggressively Bring RIDE Solutions' Green Mobility Expert Positioning to Life - This new green mobility positioning must be brought to life in a deliberate and demonstrated way. This includes re-examining RIDE Solutions' organizational name. Would a name with an environmental expert association and broader mobility focus have more value and appeal? This issue will be studied. In addition, RIDE Solutions' marketing outreach materials, as well as its core services, will be aligned and packaged in a manner that plays off this core green mobility positioning.

- Focus on the Greatest Point of Leverage The Business Market, Not Residential Given RIDE Solutions' existing and anticipated future financial resources, or lack thereof, there is simply no way the organization can launch and sustain a professional-level consumer marketing campaign. Over the long term, the agency will shift resources, staff and budget, to a business-to-business strategy. Emphasize carbon-footprint models that put the onus for trip reduction programs on the employer.
- Cultivate Third-Party Business Development Partnerships RIDE
 Solutions currently employs cold calling and worksite drop-in visits to
 introduce services to employers. Program staff has particularly targeted the
 areas' largest employers and employers that are located in geographic areas
 with some employment density. While this targeting may be efficient, this
 approach is still too labor-intensive, especially given RIDE Solutions' limited
 staff resources.

In the future, RIDE Solutions will let other green-sustainability organizations lead in prospect identification and cultivation process – identifying and initially contacting potential prospects – new employer clients. This will enable RIDE Solutions to service adequately the companies most interested in the impact of their employees' commutes and possible programs that could lower their corporate GHG footprint.

RIDE Solutions is already part of the Cool Green Biz program (see item 95 on the checklist – www.roanokechamber.org/issues_actions/CoolGreenBiz.html. While this third-party development process is envisioned for most of RIDE Solutions' prospects, the very largest employer prospects in the region would still be called on by RIDE Solutions' staff.

• **Promote RIDE Solutions' Business Focus -** Focusing on business-to-business marketing and using third-party relationships to identify and cultivate prospects does not mean keep a low business profile. To be credible, just the opposite has to happen.

RIDE Solutions will invest in its business image and reputation. This includes maintaining a high profile in CNR 2030 and other green business initiatives and green-oriented promotions with business tie-ins. For example, RIDE Solutions will be one of the underwriters of the annual October 11-17 Sustainability Week and the inaugural Blue Ridge Marathon on the Parkway, April 24, 2010, that will begin and end in downtown Roanoke, with a tour of the region's highest peaks in-between. The event is being held in conjunction with the Parkway's 75th anniversary. Organizers have designated Friends of the Blue Ridge Parkway to receive proceeds. Use the occasion to promote the GHG impact of employees/employers who bike to work the week or day of the BRM.

- Secure Alternative Funding RIDE Solutions' reliance on DRPT grants as a dominant source of funding could present a problem in the future if that funding stream were reduced or eliminated. This TDM Plan calls for RIDE Solutions to research opportunities for new sources of funding that could be used for operating purposes and/or for special projects. This includes working with RVARC and NRVPDC staff to develop a contingency plan, in the event that the DRPT funding drops substantially. RIDE Solutions also could explore the potential for contributions from employer clients and non-governmental grant sources.
- Continue to Build Advocacy Support Group Advancing the region's environmental-sustainability culture is critical to the success of this overall strategy. As good as the other green organizations are, it will take the entire village to realize the region's long-term vision. To this end, RIDE Solutions will continue to build its database of 1,000+ commuters and other residents that support the use of transportation alternatives, such as carpooling and biking, as a core component of a green and sustainable lifestyle.

It will look for ways to make support for and use of transportation alternatives – such as carpooling and biking – the preferred badge of a green and sustainable lifestyle.

- Measure and Package GHG Impacts and TDM Results This overall strategy requires RIDE Solutions to become expert in assessing transportation-related impacts of individual and corporate-wide mode choices and behaviors. This will require training and use of appropriate technologies such as the new GHG Calculators and NuRide software that will made available in 2010 through DRPT.
- Study the Optimal Long-Term Organizational Structure of RIDE Solutions RIDE Solutions' position as a program within the RVARC appears to offer both advantages and disadvantages. On the potentially negative side, RIDE Solutions does not have complete authority in programmatic or budgetary decisions, with these organizational components subject to RVARC Board approval. The RVARC Board has not disapproved of any RIDE Solutions' initiatives to date but RIDE Solutions has not proposed any services that are outside the traditional commuter and employer-service box so this actually is untested. On the plus side, RIDE Solutions is relieved of administrative duties related to human resources and accounting, which are not part of its service mission. On net, the relationship to RVARC seems to benefit RIDE Solutions administratively.
- Explore New Services and Products with Appropriate Mobility Partners In servicing companies and organizations across the region, opportunities to provide new mobility-oriented services will continue to emerge. To the extent funding partners are at the table, develop more formal plans and initiatives to serve New River Valley and Lynchburg regions, as well as the bike/walk community and new wave of seniors.

- Build on the region's Bicycle Plan. Create and support bicycle sharing/renting systems that could serve high-density areas such as downtown and the new medical campus or as a transit feeder system.
- Develop new transportation services for the aging population. This could include taxi and paratransit feeder system that targets concentrations of "future carless households" to the current fixed route transit system. Integrate the most promising TDM concepts into regional transit development planning.

Collectively, these ten core strategy components will enable RIDE Solutions to help advance the region's green and sustainable lifestyle movement, a cause that is already gaining traction. In doing so, RIDE Solutions will become an increasingly important community leader and resource, one of the lead organizations that will help make the Roanoke region one of the best place in America to live, work, and have fun outdoors.

4.4 GOALS, OBJECTIVES AND STRATEGIES

4.4.1 Planning Horizons

To help organize the phasing in of these ten strategy components, RIDE Solutions has organized planning efforts across three planning horizons: near-term, medium-term, and long-term planning horizons:

Table 4.2 Planning Efforts Across Three Planning Horizons

Term	Timeframe	Years
Short Term:	The next six years	2010-2015
Medium Term:	7-15 years	2016-2025
Long-Term	16-25 years	2025-2035

Source: RIDE Solutions.

The remainder of this document presents plans – goals, objectives, strategies, and related program elements for each planning horizon.

4.4.2 Coordination with Other Plans and Programs

It is the intent of RIDE Solutions to incorporate this TDM Plan into the region's Long-Range Transportation Plan (LRTP) when the LRTP is next updated. However, this coordination and integration into the LRTP will take time given two important considerations.

First, RIDE Solutions does not have a formal planning role in regional planning activities. This function is handled by other RVARC and RVAMPO staff. The integration of this TDM must go through the formal MPO planning process where RIDE Solutions is coming in from an outside perspective.

This stated, RIDE Solutions' Program Director participates in PDC and MPO meetings, occasionally attends local government meetings, and participates on the Regional Bicycle Advisory Committee and CNR2030 Initiative. So RIDE Solutions has a voice in major regional planning activities. Additionally, both the Program Director and the NRV Coordinator perform formal planning roles, outside their RIDE Solutions' responsibilities, within the RVARC and NRVPDC, respectively. In these roles, they are involved in various regional planning activities, albeit not in the name of RIDE Solutions.

The Program Director was actively involved in the 2008 update of the regional Long-Range Transportation Plan and was a major contributor to the elements of the TDM chapter, a new section added in this update. The TDM chapter prominently features RIDE Solutions as the primary regional TDM organization and includes "pragmatic" TDM strategies, such as Park & Ride and transit service expansion and car sharing, in both the vision and constrained project lists.

Second, and more important, reason the incorporation of this TDM Plan into the region's Long-Range Transportation Plan (LRTP) will take time is that RIDE Solutions plans to share this document with and ask for input from the PDC and MPO leadership, sister organizations such as the chamber, as well as with other key regional stakeholders. This process will take place through 2010.

4.4.3 Process for Developing Goals and Objectives

Prior to this planning effort, RIDE Solutions has not developed a formal strategic plan or organizational goals. However, the RIDE Solutions program description included in the RVARC work program offers some indication of the PDC's expectations for RIDE Solutions, as indicated by the underlined sections below:

"Continue to operate the region's RIDE Solutions Program. Continue to seek opportunities to create a greater public awareness of commuting options. Work with individual citizens, employers, and local governments to promote alternative transportation. Work with large employers to encourage their employees to use alternative modes of transportation, such as carpooling, bus, telecommuting, and vanpooling. Work with employers to offer alternative transportation benefits to employees. Use employers as communication channels to educate employees about ridesharing and its benefits. Manage the RIDE Solutions database, Web pages, member's needs, grant writing, bookkeeping, advertising, public outreach, and information requests. RIDE Solutions also provides survey and statistical analysis for the region's public transportation and park-and-ride systems."

Building on these expectations, the goals and objectives contained in this plan were developed through a collaborative process involving RIDE Solutions' staff with assistance and input from Cambridge Systematics, LDA Consulting, Southeastern Institute of Research (SIR), and Center for Urban Transportation Research (CUTR). The process to identify and refine programmatic goals, objectives, and performance measures included:

- Review of existing RIDE Solutions' documents to understand the role and services of the program;
- Interviews with RIDE Solutions' staff to identify existing and future program needs;
- Review of all comprehensive plans and other documents created by RIDE Solutions and its member jurisdictions;
- Development of a SWOT 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;
 - Interviews and SWOT analysis; and
 - Review and revision of goals and objectives by RIDE Solutions' 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.

4.3.2 Agency Goals

Following the process described in Section 4.4.3, RIDE Solutions has identified the following long-term goals.

- **Goal 1 –** TDM is recognized and deployed as an essential component of the region's ability and success in building a green and sustainable community.
- Goal 2 RIDE Solutions is THE regional expert and authority on TDM and transportation-related green house gas footprint (GHG) assessments and mobility solution planning.
- Goal 3 RIDE Solutions is an integral part of the region's business community's enlightened focus on regional sustainability and corporate-related green actions to protect and enhance the area's quality of life/outdoors living opportunities for the region's highly skilled and educated workforce.

- **Goal 4** Meet new and emerging market needs in the region by expanding and strengthening RIDE Solutions' service and program offerings.
- **Goal 5 -** Continually improve the operation, funding resources, and services provided by RIDE Solutions.

4.3.2 Agency Objectives and Strategies

Table 4.3 outlines the specific objectives and strategies that RIDE Solutions will pursue over the short-, medium-, and long-term planning horizons to meet these five broad goals.

In the short term (1-6 years), RIDE Solutions will continue to increase its capability, experience, and success with the employer market through the deployment of partnership business-to-business sales team and DRPT's new GHG Footprint Calculator. These initiatives will help RIDE Solutions dramatically increase the overall impact it can have on the Roanoke Valley region and begin to position the organization as THE go to resources for all environmental issues and impacts related to transportation/travel. Over the short term, RIDE Solutions will also concentrate on maximizing the opportunities in the New River Valley.

In the medium term (7 to 15 years), RIDE Solutions will continue to provide a solid base of TDM support services to area employers and their employees. The program will expand in scope in terms of the organization's ability to plan, service, and grow highly customized employer-based transportation programs.

More substantial changes to the region will take place over the long-range timeframe (16 to 25 years). As RIDE Solution's area population continues to grow and change over the long term, the service needs of RIDE Solutions' core customer groups will change as well. Over the long term, the key to RIDE Solutions' sustained growth and relevancy will be directly related to the organization's ability to serve non-employer segments, including the region's aging population.

Table 4.3 Agency Objectives and Strategies

- 1. Goal: TDM is recognized and deployed as an essential component of the region's ability and success in building a green and sustainable community.
 - 1.1. Objective: Build awareness of and support for TDM as a core component of the region's sustainability model.

Short-Term Strategies:

- 1.1.1. Position TDM as a core component of the region's sustainability model. Showcase linkage between TDM and smart and sustainable growth and quality of life/unprecedented natural resources.
- 1.1.2. Pursue internal and on-site education for RIDE Solutions' personnel on sustainability and link to TDM.

- 1.1.3. Create a comprehensive advocacy education program that can "speak to" a range of target audiences, including college students, business leaders/employers, and retirees.
- 1.1.4. Actively pursue opportunities in the community to provide sustainability-TDM relationship "education" through public speaking, serving as sustainability/TDM expert member of community/civic/professional organizations and consulting.
- 1.1.5. Implement Advocacy Plan on community-specific level, e.g., Roanoke and New River and expanding to Lynchburg (starting in 2010).
- 1.1.6. Further mine the New River Valley and Lynchburg regions. Create and implement mircomarketing plans for each area.

Medium-Term Strategies:

- 1.1.7. Continue to showcase linkages between TDM and smart and sustainable growth and quality of life/unprecedented natural resources. Use earned media and business partnership's owned media to profile linkages.
- 1.1.8. Continue to pursue actively opportunities in the community to provide sustainability "education" through public speaking, serving as sustainability/TDM expert member of community/civic/professional organizations and consulting.

Long-Term Strategy:

- 1.1.9. Work with partners to showcase Roanoke as national model on TDM-inspired sustainability. Provide national earned media to local TDM advocates to spread the word and validate TDM's role and impact in the community.
- 1.2. Objective: Build the number of active TDM advocates or ambassadors across the community.

Short-Term Strategies:

- 1.2.1. Continue to use RIDE Solutions' Ridematching database as a growing social network of TDM advocates.
- 1.2.2. Establish strong call to action "join the cause" request and related collateral material to sign people up or obtain "green behavior pledge" as part of advocacy education program. Tailor call to action to a range of target audiences, including college students, business leaders/employers, and retirees.
- 1.2.3. Drive people to register on RIDE Solutions' Web site to stay connected and involved. Over time, exposing them to rideshare and other transportation-related ways to support community sustainability.

Medium-Term Strategies:

- 1.2.4. Formerly brand RIDE Solutions' growing number of TDM advocates as a popular social movement.
- 1.2.5. Create a speakers bureau and provide training for members of this group to advance TDM-sustainability practices throughout the region within their personal spheres of influence.

Long-Term Strategy:

1.2.6. Potentially, turn the growing advocate movement into a formal 501(C)(3) association with mission, events, memberships, etc.

- 2. Goal: RIDE Solutions is THE regional expert and authority on TDM and transportation-related green house gas footprint (GHG) assessments and mobility solution planning.
 - 2.1. Objective: Build awareness of and support for RIDE Solutions as THE green mobility expert the regional authority on GHG footprints – impacts and solutions related to transportation choices and behaviors.

Short-Term Strategies:

- 2.1.1. Position and develop RIDE Solutions' position as THE green mobility expert the regional authority on GHG footprints impacts and solutions related to commuters transportation choices and behaviors.
- 2.1.2. Move to a Smart Trips model of ridematching product RIDE Solutions will grow on its reputation for individual customer service with the move to a Smart Trips model of ridematching product. Until the region is aware of the array of options available, and local governments invest more into expanding those options, the role of RIDE Solutions will be to use its ridematching product as both a service (providing answers to specific commute services requests; i.e..carpool match lists) and educational tool (providing information on commute options not requested by the customer but still applicable; i.e. transit routes and stops). The effect will be to meet the customer's needs and then "up-sell" them on options they might not have considered and the associated benefits. Because this is labor intensive, RIDE Solutions will move to increase staff by a part-time administrative assistance in 2010.
- 2.1.3. Expand Web site with neighborhood-to-neighborhood generalized trip planning product modeled after Arlington County's Carfree Diet marketing campaign.

Medium-Term Strategies:

- 2.1.4. Hold public symposiums with business partners showcasing the relative roles and impacts.
- 2.1.5. Create and conduct annual impact presentation and annual reports to all elected bodies and major associations in the region.
- 2.1.6. Produce and deliver annual impact report to all RIDE Solution stakeholders.
- 2.1.7. Implement automation of Smart Trips-type commuting product.
- 2.1.8. Develop a vanpool framework and provide consulting services to businesses and organizations wanting to start vanpools for commuters

Long-Term Strategy:

- 2.1.9. Subscribe to latest technology software that will be available in 10-15 years that make Smart Trips planning a ubiquitous self-service "application." Integrate Smart Trips service model into strategic partners' domains businesses, business associations, news media, civic groups, etc. Ensure that everywhere residents turn, they are accorded the tools and resources to make smarter trip decisions.
- 2.2. Objective: Secure the in-house expertise, resources, and tools for RIDE Solutions to accurately measure and report individual commuters' and organization-level GHG footprints.

Short-Term Strategies:

2.2.1. Work with DRPT to utilize the new GHG Calculator to conduct corporate GHG footprint audits. Once in the door, use GHG footprint audits as the introduction to the power of employer-based TDM programs. Show impact scenarios. Based on response, deliver appropriate TDM plans and assist with corporate-wide implementation.

2.2.2. Train staff to become more informed and knowledgeable on GHG footprint related to transportation to ensure proper use of the new GHG Calculator and other resources and tools for RIDE Solutions to accurately measure and report individual commuters' and organization-level GHG footprints.

Medium-Term Strategy:

2.2.3. Include sustainability/GHG expertise as required skill of RIDE Solutions new hire.

Long-Term Strategy:

- 2.2.4. Work with local Chamber and economic development officials to quantify Roanoke's community's overall GHG Footprint. Showcase role of employers' individual GHG Footprints and actions to reduce footprints through influence over employees' commute decisions.
- 3. Goal: RIDE Solutions is an integral part of the region's business community's enlightened focus on regional sustainability and corporate-related green actions to protect and enhance the area's quality of life/outdoors living opportunities for the region's highly skilled and educated workforce.
 - 3.1. Objective: Increase awareness and familiarity of corporate GHG footprints related to employee commutes and the relatively easy steps that can be taken to reduce corporate footprints and realize indirect corporate business practice benefits (retention, recruitment, productivity gains, etc.).

Short-Term Strategy:

3.1.1. Help orchestrate through partners a sustained business-to-business communications campaign showcasing leading companies and CEOs embracing TDM/sustainability – and demonstrating the role and impact of RIDE Solutions in bringing about business GHG reductions.

Medium-Term Strategy:

3.1.2. Evolve business communications campaign into "success campaign" – difference made to date…why 100 companies have contributed.

Long-Term Strategy:

- 3.1.3. Unified all of the players around a community-wide seamless approach. Create a region-wide emissions reduction "United Way-Like" campaign. Create community-wide reporting mechanism to fuel momentum and celebrate the number of program participants.
- 3.2. Objective: Increase the number of business partnerships with other leading business associations and organizations advancing the sustainability cause where RIDE Solutions is THE "go to" resource for GHG transportation-related footprint assessment and mobility-related solutions.

Short-Term Strategy:

3.2.1. Make strategic business arrangements with the leading business associations and organizations advancing the sustainability cause in the region where RIDE Solutions is THE "go to" resource for GHG transportation-related footprint assessment and mobility-related solutions.

Medium- and Long-Term Strategy:

3.2.2. Continue to cultivate existing and make new strategic business partnerships.

3.3. Objective: Directly serve a growing number of the area's largest employers – VTC medical school, Va. Tech, Carilion Health System, etc. to make TDM-related sustainability a major corporate focus and action.

Short-Term Strategy:

3.3.1. Create RIDE Solutions' targeted business development sales plan for the largest employers such as VTC medical school, Va. Tech, Carilion Health System, etc. – to make TDM-related sustainability a major corporate focus and action.

Medium- and Long-Term Strategies:

- 3.3.2. Continue to directly target and approach largest businesses. Where appropriate, create targeted business development plans for optimal prospects.
- 3.3.3. Continue to work with largest companies and organizations (VTC medical school, Va. Tech, Carilion Health) to help serve as testimonials and corporate ambassadors to recruit other business.
- 3.4. Objective: Increase the total number of RIDE Solution partners with GHG footprint reduction mobility plans in place.

Short-Term Strategy:

3.4.1. Finalize corporate green certification partnership with local Cool Cities, CN2020, and local Chamber. Provide service support. Finalize corporate green certification partnership with local Cool Cities, CN2020, and local Chamber. Provide service support as the Chamber provides highly efficient sales program to open doors for RIDE Solutions as part of green/sustainability audit team. RIDE Solutions will focus on GHG footprint related to employees commute decisions and behavior.

Medium- and Long-Term Strategy:

- 3.4.2. Continue to work with Cool Cities, CN2020, and local Chamber in targeting and servicing businesses. Focus efforts on business categories most receptive to participation in GHG audit program and most effective in changing employees' commute behavior.
- 3.5. Objective: Increase the overall demand for additional business-related sustainability services from the success of RIDE Solutions' involvement.

Short-Term Strategies:

- 3.5.1. Document and merchandise the reduction in corporate GHG footprints and the corporate business practice benefits (retention, recruitment, productivity gains, etc.) realized by partners.
- 3.5.2. Work with partners and media to showcase impact of participating businesses.

Medium- and Long-Term Strategy:

- 3.5.3. Continue to assess opportunities
- Goal: Meet new and emerging market needs in the region by expanding and strengthening RIDE Solutions' service and program offerings.
 - 4.1. Objective: Expand RIDE Solutions' customer base by serving emerging market needs.

Short-Term Strategies:

- 4.1.1. Work closely with VTC health care complex as it opens and expands.
- 4.1.2. Work with PDCs and rural counties to support human services program needs. Start by studying with the PDC the most appropriate roles in serving the underserved today and the future with shifting demographics.

Medium- and Long-Term Strategy:

- 4.1.3. Identify and explore new opportunities through annual planning process.
- 4.2. Objective: Build RIDE Solutions' product and service offerings.

Short-Term Strategies:

- 4.2.1. Conduct annual customer and business partner feedback surveys to assess RIDE Solutions' ability to meet current customer and partner needs and identify any unmet needs.
- 4.2.2. Use customer and partner feedback to inform the creation of annual service development plan that explores and prioritizes needs.
- 4.2.3. Through annual service plans, plan for vanpool service startup framework and customized one-to-one trip planning service.

Medium-Term Strategies:

- 4.2.4. Continue to hone customer feedback loops.
- 4.2.5. Launch and sustain vanpool service and customized one-to-one trip planning service.
- 4.2.6. Offer event ridematching services

Long-Term Strategy:

- 4.2.7. Continue to hone customer feedback loops to direct new service development efforts.
- 4.3. Objective: Increase the number of Telework!VA corporate clients across the region.

Short-Term Strategy:

4.3.1. Work with Telework!VA to launch, and support a major telework initiative across the region.

Medium- and Long-Term Strategy:

4.3.2. Continue to support Telework!VA's success across the region.

Goal: Continually improve the operation, funding resources and services provided by RIDE Solutions' Strategies:

5.1. Objective: Measure and report RIDE Solutions' outcomes and customer satisfaction of RIDE Solutions' programs and services.

Short-Term Strategy:

5.1.1. If resources are available, evaluate RIDE Solutions' customer satisfaction levels, and programs and service outcomes.

Medium-Term Strategies:

- 5.1.2. Continue to monitor success and customer satisfaction of RIDE Solutions' programs and services.
- 5.1.3. Continue to conduct appropriate regular surveys for measuring customer satisfaction with all services.
- 5.2. Objective: Obtain additional funding sources.

Short-Term Strategy:

5.2.1. Formulate a plan to identify and seek additional funding sources. Include potential sources such as the Carilion Foundation and the Foundation for Roanoke Valley, as well as fees from GHG audits.

Medium- and Long-Term Strategy:

- 5.2.2. Implement funding development plan seek to cultivate new and diverse sources.
- 5.3. Objective: Evolve RIDE Solutions into the optimal long-term organizational structure as it serves a growing clientele across an expanded territory.

Short-Term Strategy:

5.3.1. Formulate a plan to explore the optional long-term organizational structure for RIDE Solutions as it serves a growing clientele across an expanded territory.

Medium- and Long-Term Strategy:

5.3.2. Continue to periodically review and update RIDE Solutions' Long-Term TDM Plan based on market experience, new opportunities, and feedback from customers and stakeholders.

4.3.3 Potential Partnerships

RIDE Solutions' short-, medium-, and long-term program enhancements will require sustaining relationships with existing transportation partners and building new relationships with a diverse network of partners. These include:

- Virginia Department of Rail and Public Transportation: DRPT will continue to be an important partner and major funding source for RIDE Solutions.
- Telework!VA: As telework grows in the RIDE Solutions' service area, Telework!VA will become a more important partner for RIDE Solutions.
- Roanoke Valley Allegheny Regional Commission and New River Valley Planning District Commission – As funding and governing agencies for RIDE Solutions, these organizations will continue to be important partners.
- Business and Related Associations: Partnerships should be continued and pursued with business and professional organizations in the community (e.g., Chamber of Commerce) to advance TDM and employee commute behaviors as a green and sustainable best business practice.
- Virginia Tech This major educational institutional will continue to partner with RIDE Solutions through (minimal) funding.
- Virginia Tech Carilion Medical School This new major medical center will become an important partner advocating and supporting TDM, sustainability, and a healthy lifestyle.
- Valley Metro & Blacksburg Transit.
- Partnerships should be aggressively pursued with organizations focused on sustainability like Chamber's Cool Green BIZ Program, Cool Cities, CNR2030, etc. – as opportunities for RIDE Solutions to contribute as experts in the area of sustainability and green mobility-oriented solutions related to corporate GHG footprints. See complete list of potential sustainability partners in the Appendix of this document.

4.5 Program Monitoring and Evaluation

4.5.1 Overview of Past Evaluation

Program evaluation is a function that is often short-changed by TDM agencies simply due to insufficient funding required to conduct the research and data collection required for comprehensive evaluations. This is the case with RIDE Solutions relative to many of the Commonwealth's 15 TDM agencies. Annual efforts to assess the performance of RIDE Solutions' services, using commonly accepted TDM industry "best practices," would have required half of RIDE Solutions' budgetary resources.

Despite this funding resource challenge, RIDE Solutions has consistently deployed low cost, program performance tracking, as well as periodically solicited feedback from ride-match and emergency ride home participants through surveys designed to assess the extent to which these services have influenced or assisted participants to start or increase their use of non-SOV modes.

4.5.2 Current Performance Monitoring

Despite the lack of available funding program assessment, RIDE Solutions recognizes the value of periodic assessment and currently practices several activities to assess the performance of its services and to understand customers' needs better. Two examples include marketing effectiveness and program participation.

- Marketing Effectiveness RIDE Solutions measures the effectiveness of programs that drive new registrations. The online registration form asks registrants how they heard about RIDE Solutions. In addition, by tracking both the advertising activities and the number of new registrations, RIDE Solutions is able to determine if registration levels are higher during months when specific advertising campaigns or events are in effect. This type of analysis cannot accurately account for all regional factors, but does provide an initial opportunity to study the effectiveness of different advertising campaigns.
 - In addition, awareness of RIDE Solution's name and advertising efforts are periodically tracked by the Virginia State of the Commute Survey.
- Program Participation RIDE Solutions also tracks monthly participation in several services and solicits feedback from ridematch and GRH participants through post-matching follow-ups designed to assess the extent to which these services have influenced or assisted participants to start or increase their use of non-SOV modes. These tracking data are compiled in an end-ofyear summary that is delivered to the RVARC Board at the time RIDE Solutions is preparing its work program for the following year.

Again, RIDE Solutions has not had budget available to conduct reliable marketing assessment surveys to test awareness and behavior change in a methodologically strict way.

These base performance measures serve as a starting point for developing a more comprehensive performance measurement system.

Table 4.4 lists the current output-related performance measures that RIDE Solutions monitors and evaluates to assess the performance of the agency. These performance measures are primarily driven by DRPT's performance measure requirements as reported through OLGA.

Table 4.4 Current Performance Measures

Commuter Customers

- Total Calls
- Follow-up efforts/verifications
- Total Unique Visitors to Web Site
- Total Database Matching Registrants
- Total GRH Registrants
- Total program inquiries
- Clean Commute Day registrations
- RIDE Solver online calculator submissions

Employer Customers

- Total Employer Clients
- Presentations/outreach efforts

Events

- Participants/Visitors
- Registrations

Overall Impact

NA

Source: RIDE Solutions.

4.5.3 Future Evaluation Criteria

It is envisioned that the number of vehicle miles traveled (VMT) reduced and air quality impacts avoided will be added to the list of RIDE Solutions' future performance measures. For now, the DRPT performance measures provide estimated PMT reductions as a good starting point. In the future, RIDE Solutions will start to capture self-reported VMT reduction from program participants, in addition to commute miles and time-related information that are already being

collected. Table 4.5 lists the future evaluation criteria that RIDE Solutions' evaluation program will work towards.

Table 4.5 Future Evaluation Criteria

Awareness and Attitudes

- Awareness of Options
- Awareness of RIDE Solutions and Its Services
- Ratings of Transportation Options and GRTC/RideFinders Services on Specific Attributes
- Factors Influencing Mode Choice
- Consideration of Alternative Modes

Participation/Use of Services

- Sources of Information
- Inquiries
- Contact with RIDE Solutions
- Usage of Specific Services
- Frequency of Use
- Length of Time Using
- Barriers to Trial
- Consideration of Future Use
- Current Services
- New Programs

Satisfaction

- Overall Satisfaction Ratings for Transportation System and Support
- Overall Satisfaction Ratings for RIDE Solutions
- Reasons Behind Ratings
- Areas for Improvement
- Unmet Needs

Overall Impact

- Mode Split
- Shifts to Non-SOV Modes Motivated by Use of Services Trail and Continued
- Perceived Benefits of Mode Change Personal, Business, Societal
- SOV Trips Eliminated Cars Taken Off Road
- VMT Reduction
- Environmental Consequences

Source: RIDE Solutions.

5.0 Financial Plan

5.1 CURRENT AND HISTORIC FINANCIAL RESOURCES

This section presents the current and historic budget and funding sources for the RIDE Solutions program. In FY 2010, RIDE Solutions' annual budget is \$150,000.

5.1.1 RIDE Solutions' Current and Historic Operating Budget

As a result of being housed within RVARC and NRVPDC, RIDE Solutions has benefited greatly from the shared resources such as overhead costs, human resources, and financial services support.

RIDE Solutions' annual budget is small. The program, it finds, has an impact on commuter transportation in the region. Going forward, RIDE Solutions has the potential to expand the role of TDM within the Roanoke Valley, both as a cost-effective means of reducing single occupancy vehicle use and as a program to support the region's economic development program.

Table 5.1 shows the breakdown of RIDE Solutions' operating budgets over the last five years. The majority of funds have been and are currently dedicated to program administration and marketing of non-SOV transportation options.

Table 5.1 RIDE Solutions FY 2006-2010 Operating Budgets

Expenses	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010
Program Staff/Admin	\$60,585	\$78,205	\$100,044	\$100,791	\$109,675
Marketing	\$42,714	\$53,594	\$48,681	\$39,473	\$41,125
Incentives/Subsidies	\$1,000	\$1,500	\$500	\$750	\$1,250
Other	\$5,700	\$6,700	\$4,395	\$3,600	\$6,000
Total	\$110,000	\$140,000	\$153,620	\$144,615	\$158,050

Source: RIDE Solutions.

5.1.2 RIDE Solutions' Current and Historic Source of Funding

Since the formation of the program, RIDE Solutions' primary funding source has been an annual state TDM grant awarded by DRPT, which the program uses to leverage a local 20 percent match generated from Regional Commission local dues.

The funds RIDE Solutions has received from every funding source over the past five years are shown in Table 5.2.

Table 5.2 RIDE Solutions and RIDE Solutions FY 2006-2010 Operating Revenue Sources

Income	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010
RIDE Solutions					
State TDM Grant	\$88,000	\$112,000	\$122,895	\$115,692	\$126,440
Local Funds	\$22,000	\$28,000	\$30,724	\$28,923	\$31,610
Total	\$110,000	\$140,000	\$153,620	\$144,615	\$158,050

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

Each year, RVARC establishes a project account for RIDE Solutions for all expense and income categories. The accounting system documents the fiscal year (FY) budget allocated for each account. RIDE Solutions' staff reviews all bills received from vendors, approves those that are acceptable for payment, and sends the approved bills to RVARC's finance staff. RVARC pays approved invoices from funds deposited in RIDE Solutions accounts and posts both expenses and payments to the general ledger accounts. RIDE Solutions' staff maintains records of account transactions in a grants management software system operated by the Program Director.

5.2 FUTURE FINANCIAL RESOURCES

The following section discusses potential short-term financial needs as identified in the implementation plan. For the purpose of this plan, constrained and unconstrained funding scenarios are considered.

The constrained scenario assumes that DRPT funding, and the local match, for RIDE Solutions' program will remain constant over the first six-year covered by this plan. This funding scenario will allow RIDE Solutions to continue its current programs, but will not enable RIDE Solutions to increase staff salary, staff positions, or expand programs.

The unconstrained scenario considers funding requirements to enhance existing services and initiate new programs assuming additional funding sources can be identified and funds are secured.

5.2.1 Short-term

Table 5.3 shows RIDE Solutions' expenses by functional area over the next one to six years given a constrained funding scenario – constant, but level DRPT funding and level local match with no new funding sources added.

Constrained Future Funding Scenario

Table 5.3 Constrained Short-Term Program Expenses In Thousands Dollars

Program or Service	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Enhancement	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
Program Staff/Administration Marketing	\$110	\$110	\$110	\$110	\$110	\$110
	\$41	\$41	\$41	\$41	\$41	\$41
Incentives/Subsidies	\$2	\$2	\$2	\$2	\$2	\$2
Operations Total	\$5	\$5	\$5	\$5	\$5	\$5
	\$158	\$158	\$158	\$158	\$158	\$158

Source: RIDE Solutions.

Under this constrained funding scenario, RIDE Solutions will try to leverage existing resources by working closer with strategic business partners and local transportation service providers.

Unconstrained Program Description

Table 5.4 shows the services that would be expanded and programs that would be added to RIDE Solutions' baseline program over the short-term timeframe (one to six years), if additional grants and funding became available. Programs are distributed over the six-year time period based upon priority and readiness for implementation. Improvements are also distributed to maintain a relatively stable increase in funding requirements.

Table 5.4 Unconstrained Short-Term Program Plan and Expenses In Thousands Dollars

Program or Service Enhancement	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/Administration (FTE)	\$110	\$155	\$188	\$212	\$237	\$242
Marketing	\$41	\$51	\$55	\$60	\$60	\$60
Incentives/Subsidies	\$2	\$2	\$2	\$2	\$2	\$2
Operations	\$5	\$5	\$5	\$10	\$7	\$7
Total	\$158	\$213	\$250	\$284	\$306	\$311

Source: RIDE Solutions.

The unconstrained budget calls for significant increases in operations, administration, and marketing resources. Major funding increases will be directed in the following manner.

Administration/staff - Additional staff resources will be added as the program grows and becomes even more focused on green and sustainability solutions related to employer-based transportation programs. It is anticipated that three new positions will be created over the six year period.

The first position will be added in 2012. This position will be part-time administrative support. This position will take on some day-to-day operational duties such as database maintenance, customer support and retention, office management duties, and some smart trips package development. The goal is twofold. First, to free up the Program Director to concentrate on employer outreach and services, partnerships with and support for environmental advocacy groups, and program planning and development. Second, with its concentration on highly individualized customer service and support, the extra customer service and follow-up time will allow RIDE Solutions to better gauge its effectiveness, including follow-up and verification with customers who request smart trips information.

In 2013,.5 FTE will be added. This new position will include sustainability expertise.

A third .5 FTE position will be added in 2014 to help RIDE Solutions formalize its bike related activities in a Bike Roanoke subprogram. This person will take on the coordination of bike events, incentives, planning and safety training.

Operations - Optimally, RIDE Solutions will partner with the Lynchburg region by the end of 2011 to provide ridematching and marketing support. To accommodate this expansion.

In the short term RIDE Solutions sees no need to move operations out of the RVARC. The current RVARC building has an underutilized ground floor that RIDE Solutions would like to transform into a commuter storefront to serve walk-in customers and to formalize a meeting place to accept business clients and other partners.

As the RVARC itself grows its green programs, it is likely that staff and operations for those programs will also move to the underused space and will allow for synergy between RIDE Solutions and other green programs. In the short term, this move can take place with no additional funding. In FY 2014, with the addition of a bicycle coordinator, minor renovations and improvements should be made to the area to better serve customers and give the program a professional storefront. The budget increase reflects a higher first year cost for items like signs, furniture, and other improvements to the space, and lower cost for subsequent years for maintenance.

Marketing - The unconstrained funding scenario will also afford increases in overall business-to-business outreach and service marketing programs. This includes the implementation of transportation-related GHG emissions expertise and strategic joint-marketing partnerships.

5.3 FUTURE FUNDING SOURCES

The unrestrained budget represents a significant increase in RIDE Solutions' financial resources. Where could these additional resources come from? The likely answer will be multiple sources; and the potential for this to develop will only happen if RIDE Solutions maps a course to make it happen.

To this end, RIDE Solutions' TDM Plan calls for a formal planning process to identify alternative future funding sources. As noted earlier in this document, RIDE Solutions will convene and participate in a planning process that will include all stakeholders. Examples of the kinds of potential funding sources that may be explored during this planning process include:

- Fees from RIDE Solutions' Employer Services Expanded employer services such as the GHG emissions footprint assessments could afford RIDE Solutions a share in the fee charged by Chamber to conduct green audits and green certification.
- Corporate Sponsorships The potential of dramatically building RIDE Solutions' value proposition for several of the largest employers in the region may present an opportunity to apply for grant funding from the employers' foundations.
- Funding for the bike program administrator and activities could be sought through health-related grants from the Carilion Foundation, community sources such as the Foundation for Roanoke Valley, and other sources, as the program activities would not be based solely on mode change but could include recreational riding and other aspects. Because commuter assistance would be a component, but not the focus, of the bicycle activities, RIDE Solutions does not expect to seek funding through DRPT for this position.

These are just three examples. The designated study team will formerly explore these and many other possibilities. This process will culminate in a recommended future funding action plan that will be incorporated into updates of this overall document – RIDE Solutions' *Long-Term TDM Plan*.

6.0 Summary

6.1 THE PLANNING PROCESS

It is worth reemphasizing that the small staff size and modest funding of the RIDE Solutions program has made any kind of planning effort difficult. Since the program's inception in 2001, this Long-Range Transportation Demand Management plan represents the first-ever attempt at a comprehensive review of the program, its role in the region, and vision for growth. The direction and focus this plans provides will be critical in helping the program improve its performance, service delivery, and awareness in the community.

At the same time, those qualities have allowed – one might say, "forced" - RIDE Solutions to be nimble and innovative in finding new avenues for promotion and locating partnerships. In particular, the program's early adoption of social media as an advertising and awareness tool has been widely recognized by TDM and planning programs elsewhere in the country and by sustainability organizations within Virginia.

This plan, and subsequent revisions, will continue to refine and balance the need for a strong long-term vision as well as provide dexterity for the program to take advantage of new opportunities. With a renewed focused on transportation as a key component of sustainability, RIDE Solutions will need to remain abreast of developments in science and technology to be able to offer cutting-edge mobility solutions in the context of these new discoveries. Recognizing that sustainability and climate change also have political components, this and future plans will be sensitive to those realities and plan for messaging and programming accordingly.

A. Profile of Area Green Organizations

The growing awareness and appreciation of Roanoke region's outdoor assets and the importance of environmental stewardship has already taken root in the community. A number of public and private sector initiatives have been launch, each taking on different parts of the overall task of sustaining Roanoke's environmental assets. Below is a partial listing of these groups and their primary focus.

(Please note that all of the information presented below was directly taken from each of the respective organization's Web site).

• City of Roanoke:

The City of Roanoke was one of the early adopters of the green-sustainability movement. The City has implemented a number of projects aimed at reducing its carbon footprint and creating a new foundation of best practices. Among these:

- In 2006, Roanoke was the first city in Virginia to join Local Governments for Sustainability (formerly known as ICLEI), an international organization dedicated to improving the environment by encouraging local government initiatives. ICLEI is an international organization dedicated to improving the global environment through local government initiatives. As part of this process, Roanoke is partnering with the Shenandoah Valley Air Quality Initiative (SHENAIR) at James Madison University and Virginia Tech's Green Engineering Program to evaluate the City's options for climate improvement.
- The City developed plans for a new Williamson Road fire station that will be its first LEED-certified (Leadership in Energy and Environmental Design) building.
- Roanoke became the first local government in Southwest Virginia to make biodiesel fuels mandatory in many of its fleet vehicles and installed LED lights in traffic signals at 60 major intersections, which will result in up to 90 percent less energy consumption.
- The City has a highly successful curbside recycling program that has diverted thousands of tons of waste from the landfill and saved the city thousands of dollars in the process.
- One of the more visible green initiatives advanced by the City has been the Clean and Green Campaign designed to accelerate efforts to make Roanoke attractive and environmentally sound. The Clean and Green

Campaign challenges businesses, civic organizations, neighborhoods, and citizens to get involved in cleaning up their properties and protecting the environment. It includes specific expectations and goals for the appearance of the community that are intended to be officially adopted as community standards. The Clean and Green Campaign inspired creation of the Roanoke Business Environmental Leadership Coalition (see next green group).

- In 2007, Roanoke began considering the issue of carbon emissions. A detailed inventory of the amounts and sources of carbon dioxide emissions was compiled as part of a baseline analysis, or carbon footprint. In September 2008, city council passed a resolution setting a goal of communitywide reduction of carbon emissions by 2 percent per year, for a 10 percent reduction by 2014.

A lot of credit should be given to the City of Roanoke, in general, and Ken Cronin, the Director of Sustainability, City of Roanoke, in particular, for leading the City's first steps towards sustainability.

• Town of Blacksburg

A Cool Cities Member (coolcities.us/cityProfiles.php?city=70&state=VA)

• Citizens for Clean and Green Committee:



Citizens for Clean and Green Committee is a diverse community group promoting energy conservation, efficiency, and other green initiatives. It was initially formed to support Roanoke's Clean and Green Campaign. As such, the Citizens for Clean and Green Committee's goal is to work with the City to meet its goal of a 10 percent reduction in greenhouse gas emissions by 2014.

The residential and businesses sectors are by far the largest contributors to greenhouse gasses in the City, and therefore provide the best opportunity to make the City Cleaner and Greener. The Committee's mandate is to work with both residents and businesses of the City of Roanoke to reduce energy consumption, improve recycling rates, and undertake other efforts to reduce the City's carbon footprint.

In the spring 2009, the Citizens Clean and Green Committee began to consider communitywide reductions in the residential sector, which accounts for about 25 percent of city carbon emissions. Committee members developed and implemented programs to help meet the city's goals, and participation from all citizens and organizations is now being encouraged.

The Citizens Committee has kicked off several programs to increase awareness and action. First, the Citizens Clean and Green Pledge was developed to provide a list of residential items that citizens can act on to reduce carbon emissions. Second, the "Fill Your Bin and Win" contest was

recently launched to encourage recycling in the city. By signing up your bin and recycling, citizens can win \$100. Participation in the city's recycling program is only 40 percent, resulting in tons of recyclable material going to the landfill daily. This hurts the environment in several ways: More natural resources are required to make new products, more landfill space is occupied, and more energy use results in additional carbon emissions to manufacture products from virgin rather than recycled materials. Finally, the "Greenest Loser" contest was staged this summer featuring local families competing to reduce energy use and carbon emissions.

The Citizens for Clean and Green Committee uses the City's Clean and Green Web site, www.roanokeva.gov., as well as their own *Facebook* account, to communicate several core messages – individual actions do make a difference, commit to the carbon reduction pledge, recycle as much as possible, and encourage neighbors and friends to reduce carbon emissions.

• Roanoke Business Environmental Leadership Coalition (aka Roanoke's Clean and Green Business Coalition):

Similar to the Citizens for Clean and Green Committee initiative, a number of Roanoke's top employers and businesses have joined efforts to support the Clean and Green Campaign. The Roanoke Business Environmental Leadership Coalition (aka Roanoke's Clean and Green Business Coalition) is co-chaired by City Council Member, Gwen Mason, and Stan Breakell, Chief Executive Officer of Breakell, Inc.

The Coalition's mission is to identify and implement environmentally sound business practices, including the development of sustainable business plans, the tracking of carbon emissions, and recycling. By joining the city in monitoring greenhouse gas emissions, encouraging green planning, and practicing conservation responsibly in business routines and processes, the private sector is now demonstrating its leadership in environmental stewardship.

Each participating business has been asked to take the following actions: conduct a carbon inventory, encourage conservation through business practices, purchase environmentally sound products and supplies, and designate a staff member to serve as a champion for the environment on behalf of the business.

Sustainable Blacksburg

From the Web site: Sustainable Blacksburg is a non-profit community organization, which facilitates effective environmental stewardship in the Blacksburg area to enhance the region's livability and economic vitality by reducing its impact on the local and global environment.

Sustainable Blacksburg is a collaborative community partnership formed as part of a \$95,000 U.S. EPA Resource Conservation Challenge grant received by the Town of Blacksburg to address toxic chemical risks facing the

community. Numerous community members have come together to form Sustainable Blacksburg , including representatives from the local government, Virginia Tech, university student organizations, local businesses, architectural and engineering firms, and non-profit organizations.

• Individual Companies:

There are numerous examples of corporate environmental leadership in Roanoke's business community. One is Breakell Inc., a trusted general contractor in the Roanoke and New River Valleys. Breakell Inc. is pioneering new ways of working, communicating, and building through its commitment to sustainable business practices and technology. Breakell Inc. has integrated a company-wide environmental policy, which includes recycling, adding biodiesel to heavy equipment, and using a fleet of the hybrid Prius cars.

• Educational Institutions:

In keeping with the private and public sector, Roanoke's educational institutions are raising the bar on environmental stewardship. A great example is Hollins College. Hollins has embarked on a program to make their entire campus "carbon neutral." They measured their carbon footprint, the first establishment of this magnitude to do so in the Roanoke Valley. Hollins hosted a film festival "Putting a Chill on Global Warming" (2007) that served as the kickoff for the local campaign for responsible energy use, and they have brought outstanding expert speakers on the subject of global climate change and sustainability to Roanoke Valley. Ferrum College in Franklin County, along with Hollins, has signed onto the American College University Presidents' Climate (http://www.presidentsclimatecommitment.org/about/commitment). Roanoke College and Virginia Tech have active student-led sustainability efforts, and the region's three community colleges - Virginia Western, Dabney Lancaster, and New River - are leaders in green job training.

Roanoke Valley Cool Cities Coalition: www.rvccc.org:

Roanoke Valley Cool Cities Coalition is the local organization in the Roanoke Valley that is tackling energy policy and the difficult problem of global warming through education, outreach, and community actions. The organization's goal is to encourage the citizens, businesses, organizations, and governments in the community to understand what they can do to reduce greenhouse gas emissions, and to get started with the challenge ahead. This coalition suggests ways for people and businesses to reduce their carbon footprint.

There are two carbon footprint calculators offered for free on the Coalition's Web site: one for businesses and one for individuals. The individual calculator includes vehicle transportation inputs, while the business GHG footprint does not. It includes fleet or business car impact – gasoline or diesel fuel and airline travel, but does not afford calculation of GHG footprint of

The program is

employees' commutes. Both GHG calculators, residents and business, as the wwwrvccc.org site denotes, are very simplistic.

Cool Green Biz is an initiative launched by the Roanoke

COOL GREEN BIZ Program $www.roanokechamber.org/issues_actions/CoolGreenBiz$

Regional Chamber of Commerce in partnership with Roanoke Valley Cool Cities Coalition. designed to recognize member businesses that have made a commitment to sustainable business practices. The program will be based on an evaluation of member's implementation of "green" practices that reduce waste, promote clean air and water, conserve natural resources, enhance the quality of life for employees, customers, and neighbors, and reduce

greenhouse gas emissions.

Candidate companies fill out an application and pay a \$100 application fee, payable to Roanoke Regional Chamber of Commerce, for an evaluation of their green practices. Applications are reviewed by Roanoke Valley Cool Cities Coalition. This review may include a scheduled visit to an applicant's corporate site to confirm or inquire about their pro-green activities. Applicants receive a written evaluation explaining their score, award of extra points, and recommendations for future actions.

The scores required for certification are:

- Level 1 is awarded to all applicants who answer affirmatively to at least 17 of the critical items, and score a total of 45 to 54 points, including all numbered items, and possible extra points for documentation of additional or extraordinary information.
- Level 2 At least 17 of the Critical items and a total score of 55 to 69.
- Level 3 All of the Critical items and a total score of 70 or higher.

Applicants who attain fewer than the required number of critical items are downgraded one or more levels commensurate with the number of missing critical items. Applicants who qualify receive a window sticker for their place of business. Qualified applicants are also recognized in Chamber publications, directories, and other venues.

Certification will be for a term of three years from the date of approval. At the end of that period, members may apply for re-certification. If, during that three-year period certified members believe they may qualify for a higher level of recognition, they may submit a request for upgrade directly to Roanoke Valley Cool Cities Coalition and an updated checklist. There is a \$50 application fee for an upgrade request, payable to Roanoke Valley Cool Cities Coalition.

Since best practices and technologies are constantly changing, the checklist and scoring rules will be adjusted from time to time. Applications for upgrade or re-certification will be subject to the standards in place at the time they are submitted. Applicants who do not qualify for certification may resubmit their application and checklist for reconsideration up to one year from the original application date at no additional cost.

Go Green NRV

GGNRV promotes a Green Business Program for businesses in the New River Valley, including modified programs addressing industry specific green initiatives for the various businesses in the Valley. In 2008, a group of local businesses formed a committee to research and develop a local "green business development program." Serving on committee are associates of local professional firms, retail and industrial businesses, and municipal employees.

The group identifies green business as a sustainable business is any organization that participates in environmentally-friendly (or "green") activities to ensure that all operations, products, and manufacturing activities adequately address current environmental concerns while maintaining a profit.

• U.S. Green Building Council Southwest Virginia Chapter (http://usgbcswva.org/):

The USGBC Southwest Virginia Chapter is a catalyst in moving green building to the forefront of the valley's building industry and communities. USGBCSWVA provides and supports educational opportunities to members and the general public through workshops and participation in community forums and expos. Hosting meetings from Lynchburg in the east, Abingdon in the west, Lexington in the north, and Danville in south, the chapter focuses on the strengths and resources existing within local industry and expertise. This organization has become the leading regional resource for sustainable building practices. Members include architects, builders, real estate specialists, and professionals in related fields.

• CNR 2030: Growing a Carbon-Neutral Region:



CNR 2030, named after its goal – for the region to be carbon neutral by 2030, is the latest sustainability group to form in Roanoke.

Check out thecreativeconnectors.com.

CNR 2030 is part of the Creative Community Leadership Project (CCLP) that was recently launched in Roanoke.

Designed to spur greater economic prosperity in the region, CCLP's methods and goals are developed around the creative class theory pioneered by Richard Florida, one of the world's leading public intellectuals on economic competitiveness and author of the bestselling books *The Rise of the Creative Class and Who's Your City*.

Through the CCLP approach, selected civic leaders called Creative Connectors learned more about the four T's of economic development (Talent, Technology, Tolerance and Territorial Assets) and how Roanoke compares to other benchmark communities on these dimensions. The four T's approach represents a comprehensive strategy for communities who wish to compete and prosper in the creative age. Roanoke successfully competed for one of the two designated CCLP sites in 2009.

CNR 2030: Growing a Carbon-Neutral Region is one of the four work groups of the CCLP. The CNR 2030 group's plan is to partner with others in the region to educate and engage the community toward the achievement of sustainable living. The initiative will position the region as a proving ground for sustainable technologies. CNR 2030 secured a commitment from Virginia Tech to bring its award-winning Solar House to Roanoke for an exhibit.

As progression toward the 2030 goal occurs, the region will attract new businesses, generate new jobs and become a model community for sustainable living. RIDE Solutions is part of the CNR 2030 group.

The City of Roanoke paid \$25,000 out of general fund contingency money to support the CCLP process. A community fund established by developer Ed Walker and his wife, Katherine, of Roanoke also contributed \$25,000. CCLP has solicited applications regionally to attract 30 people to serve as Creative Connectors (www.thecreativeconnectors.com). City officials reviewed more than 90 applications before selecting 30. The funds will be used to keep the Creative Class Group engaged – to work with the Creative Connectors for a year to draft a business plan for each of the four areas in refining related goals and keeping the process rolling.

• Association of Energy Conservation Professionals (AECP):

The Association of Energy Conservation Professionals (AECP) is a nonprofit energy education and advocacy organization. AECP is actually two organizations:



- 1. AECP is a 501©6 non-profit corporation that advocates for low-income energy users, energy conservation programs, renewable energy programs, and the advancement of green building principles. AECP is a membership-based organization. AECP has a long history of effective legislative advocacy.
- 2. The Association of Energy Conservation Professionals/Educational Service (AECP/ES) is a 501©3 non-profit energy education organization. Our educational service conducts an annual Green Living and Energy Expo, manages a Sustainable Living Education Center (SLEC), and conducts

trainings, seminars, and presentations on the importance of energy conservation and efficiency.

RIDE Solutions has participated in the last three Green Living Expos, including support as a sponsor; the RIDE Solutions Program Director also services as a board member to AECP/ES.

Roanoke County Community Leaders Environmental Action Roundtable (RC-CLEAR)

This citizen-led committee is an analog to the Citizens for Clean and Green Committee organized by the City of Roanoke and works under a similar mission. Though the group has not yet created a Web presence, it is described in the following press release sent out by the Roanoke Valley Cool Cities Coalition in February of 2009:

Roanoke County Sets Aggressive Goals for GHG Reduction

February 24, 2009 – Culminating nearly two years of planning and analysis, the Roanoke County Board of Supervisors approved three resolutions yesterday, paving the way for a multi-year campaign to reduce greenhouse gas emissions. These emissions are widely acknowledged to be a principal cause of global climate change. Prior to introducing the resolutions, Cave Spring District Supervisor Charlotte Moore acknowledged the work of county staff, local scientists who provided technical expertise, Roanoke Valley Cool Cities Coalition and several of its affiliates, and Roanoke Cement, a Titan America Company that provided funding for expert assistance to the County in this project. All three resolutions passed by unanimous vote of the five members of the Board of Supervisors.

Following the Board action, Roanoke Valley Cool Cities Coalition's Diana Christopulos commented, "We're so grateful to Charlotte Moore, without whose efforts this great achievement might not have been possible. We are very excited to be a part of this landmark decision, and we look forward to working with the new citizens' committee, the Board of Supervisors, and county staff, as they sustain their quest to reduce our dependence on fossil fuels and strive toward a smart, clean energy future for our community."

The first resolution was to accept the report of the ICLEI Planning Group, a task force of county officials and staff, academic consultants, and volunteers. This report detailed the measurement of the carbon footprint of the entire Roanoke County Community, with separate statistics for county government operations. The carbon footprint is a calculation of the total amount of carbon dioxide emitted into the atmosphere as a result of fossil fuel combustion and other activities. Funding for expert assistance with this project was provided by Roanoke Valley Cool Cities Coalition through a special grant from Roanoke Cement, an affiliate of the coalition.

The second resolution was to set a goal for reduction of the community's carbon footprint by 3 percent each year for the years 2010 to 2020. The goal

for the county government operation is to stabilize the level of emissions by 2012, then reduce it 3 percent per year for the years 2013 to 2020. Roanoke County is the second municipality in the Roanoke Valley to pass such a resolution. Last September, the City of Roanoke announced a goal of annual emissions reductions over a five-year period of 2.5 percent for city government operations and 2 percent for the community as a whole.

The third resolution was to authorize the establishment of and approve the bylaws for an action-oriented citizen's committee to identify ways to reduce emissions and energy costs by developing strategies for improved energy efficiency and conservation in the community. This committee will be known as Roanoke County Community Leaders Environmental Action Roundtable (RC-CLEAR) and will consist of two citizens from each of the five magisterial districts, to be appointed by their respective Supervisor, plus one senior county staff member. The Board pledged quick action on appointment of members of the new committee.

In her comments, Ms. Moore recognized the following individuals and organizations who helped make these actions possible:

- County Staff Dan O'Donnell, Assistant Administrator; Anne Marie Green, Director of General Services; Jim Vodnik, Assistant Director of General Services; Lindsey Hudson, Intern
- Consultants Dr. Sean McGinnis, Senior Research Scientist, Green Engineering Program, Virginia Tech; Dr. Renee Godard, Professor of Biology, Director of Environmental Education, and Environmental Advisory Board Chair, Hollins University
- Roanoke Valley Cool Cities Coalition Diana Christopulos, Board Chair and Coordinator; Mark McClain, Director.
- Roanoke Cement Don Ingerson, Vice President Sales and Marketing;
 Robert Marek, Sales Representative
- **Breakell Inc. General Contractors -** Nell Boyle, Director of Sustainable Business Practices

Again, all of the information presented above has been directly lifted from each organization's Web site.