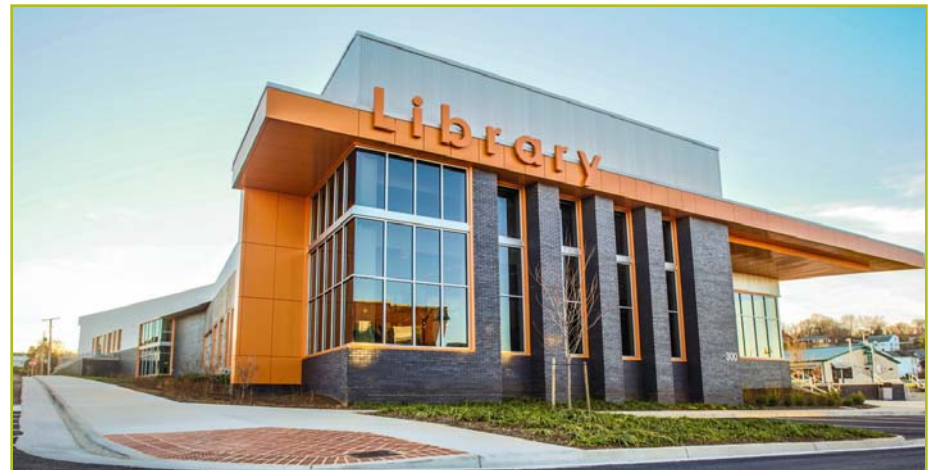




ROANOKE VALLEY TRANSIT VISION PLAN

EXECUTIVE SUMMARY | SEPTEMBER 2016



MESSAGE FROM THE CHAIR OF THE ROANOKE VALLEY TRANSPORTATION PLANNING ORGANIZATION POLICY BOARD

The Roanoke Valley is experiencing new growth as businesses and citizens discover how wonderful it is to live and work in a bustling region surrounded by beautiful mountains, clean rivers and streams. Our ability to move easily throughout the Roanoke Valley is paramount to the continued economic growth and livability of our region. As we continue to grow and seek to improve our quality of life, we need to act now to make transit a stronger part of our regional transportation system.

The Greater Roanoke Transit Company (GRTC) which operates the Valley Metro fixed-route service and by contract the specialized service for people with disabilities will continue to be the core provider from which the Roanoke Valley Transit Vision Plan will be realized. To move forward as a region, we must work with GRTC in order to assure equal representation for our regional partners; this need is imperative in order to move the regional transit system forward.



As local governments, we have a responsibility to guide land use and development that will positively add to our communities and help our citizens be more prosperous while minimizing harm to the environment. By growing with a transit-oriented mindset, our Roanoke Valley will sustain its treasured quality of life and offer new opportunities to citizens who share our values.

Thank you to the many citizens and stakeholders who have taken time to share your thoughts on how to make the Roanoke Valley a robust transit community. I look forward to helping our communities advance as we together implement the region's first Transit Vision Plan.

Jane Johnson, RVTPO Chair

MESSAGE FROM THE GENERAL MANAGER OF VALLEY METRO



We are at a pivotal moment in the development of transit in the Roanoke Valley. The adoption of a regional Transit Vision Plan provides our community with long-term guidance for an agreed upon framework on where and how we, together, need to proceed. I look forward to future conversations with regional leaders to identify the steps we can take to establish a transit system that is desired by our citizens.

The Roanoke Valley's transit system will lay the groundwork for sustainable future connections and support economic development initiatives while maintaining acceptable traffic congestion mitigation and ambient air quality standards.

Carl Palmer, General Manager

KEY ACTION ITEMS

- Establish a new regional transit organization governance model and identify sustainable transit funding streams.
- Adopt land use policies to create the development density and mix of land uses that result in walkable, transit-friendly environments.
- Review local ordinances to identify opportunities for transit development and to provide safe, accessible connections between buildings and transit.
- Construct pedestrian and bicycle infrastructure to support transit access.
- Provide attractive and inviting transit transfer facilities and transit stops that are accessible to Roanoke Valley residents, employees, and visitors of all ages and abilities.
- Prioritize and fund recommendations that will provide high quality and frequent transit service to activity centers throughout the Roanoke Valley.

TRANSIT VISION PLAN PURPOSE AND NEED

A few years ago, many people in the community participated in an initiative to envision a more Livable Roanoke Valley. Through that process the strongest elements of our community were identified as well as areas that needed more support.

LIVABLE ROANOKE VALLEY VISION FOR THE FUTURE

We are living the dream.

Beautiful mountains.

Clean rivers and streams.

People who care.

The Roanoke Valley is filled with promise.

To make the most of these opportunities, we will work to provide quality education, access to healthcare, work and career opportunities, responsible stewardship of the environment, and greater regional cooperation.

As we strive to fulfill our promises, we will be the destination for individuals, families and businesses who share our same dream.

It is with this Livable Roanoke Valley Vision in mind that this Transit Vision Plan is developed. Transit is a key element to helping many people “live the dream”. The Livable Roanoke Valley Plan outlines four regional goals:

- **ECONOMIC DEVELOPMENT:** CREATE JOBS, INCREASE INCOMES AND GROW BUSINESSES TO IMPROVE THE QUALITY OF LIFE FOR ALL RESIDENTS OF THE ROANOKE REGION.
- **WORKFORCE DEVELOPMENT:** PROVIDE ACCESS TO JOB TRAINING AND EDUCATIONAL ADVANCEMENT BY FOSTERING A CULTURE OF LIFELONG LEARNING FOR PEOPLE OF ALL AGES AND ABILITIES.
- **HEALTHY ROANOKE VALLEY:** MOBILIZE COMMUNITY RESOURCES TO IMPROVE ACCESS TO CARE, COORDINATION OF SERVICES, AND PROMOTE A CULTURE OF WELLNESS.
- **NATURAL ASSETS:** WORK COLLABORATIVELY TO PRESERVE THE HISTORIC, CULTURAL, AND NATURAL ASSETS OF THE REGION.

In considering how transit can help achieve these goals it became readily apparent to citizens, businesses, and local agency stakeholders alike that improvements to the existing transit system are needed. Since the initiation of the Transit Vision Plan, these Livable Roanoke Valley goals have played a key role in determining how transit can help the community achieve each one. The Transit Vision Plan began with an in-depth review of the existing transit services and additional needs by reaching out to citizens throughout the valley.

This initial review:

- Surveyed the general public, riders on buses, and transit employees
- Analyzed Valley Metro boardings and alightings
- Analyzed two years of RADAR customer and trip data
- Analyzed Botetourt’s Senior and Accessible Van usage

This detailed analysis and feedback has helped decision-makers understand both the current transit needs and the future desired state of transportation in the region.

The Roanoke region's transit services and public transportation network have largely remained unchanged for 25 years. Knowing that a comprehensive analysis of the existing transit network was overdue, the Roanoke Valley Transportation Planning Organization initiated a multi-year planning process in 2013. The planning process was designed for regional stakeholders to:

- REFLECT ON THE PAST
- EVALUATE CURRENT TRANSIT SERVICES
- IDENTIFY COMMON VALUES AND GOALS
- EXPLORE OPPORTUNITIES FOR THE IMPROVEMENT AND EXPANSION OF THE ROANOKE VALLEY'S TRANSIT SYSTEM

Over the next three years, citizens were provided a forum to voice their ideas about the transit system. Experts were also consulted to review the collected data and generate recommendations on the development of an improved regionalized transit system.

Unveiled in the spring of 2016, the draft Roanoke Valley Transit Vision Plan provides a substantive conceptual framework for regional policymakers to consider as they prioritize resources to meet the evolving multimodal transportation needs of the region.

Home values perform 42 percent better on average if they are located near public transportation with high frequency service.



ROANOKE VALLEY CITIZENS VALUE TRANSIT

Through the outreach conducted during this study we have learned that most Roanoke Valley citizens value public transit, even if they do not use the service. Many people feel that transit contributes to a community's livability through economic growth by enabling businesses to access workers, shoppers, clients, and patients and likewise to enable employees to get to work, people to shop, and patients and clients to access medical and personal services.

Every \$10 million in capital investment in public transportation yields \$30 million in increased business sales.



The following statements indicate the community's values regarding transit. They reflect input from the general public, Transportation Technical Committee members, and the Roanoke Valley's Transportation Policy Board members.

TRANSIT IS IMPORTANT:

- FOR PEOPLE WHO HAVE NO OTHER WAY TO GET AROUND.
- FOR PEOPLE WHO PREFER TO RIDE RATHER THAN DRIVE; IT GIVES PEOPLE A CHOICE.
- TO PROMOTE ECONOMIC DEVELOPMENT AND URBAN GROWTH.
- FOR THE ENVIRONMENT:
 - ◆ *IT REDUCES THE NUMBER OF VEHICLES ON THE ROAD, THUS REDUCING VEHICLE EMISSIONS AND AIR POLLUTION.*
 - ◆ *IT REDUCES THE NEED FOR PARKING, AS SUCH, IMPERVIOUS SURFACES AND STORM WATER RUNOFF IS REDUCED.*
- TO GET PEOPLE FROM PARKING AREAS TO SPECIAL EVENTS.
- FOR PEOPLE TO SAVE MONEY.
- FOR THE COMMUNITY TO SAVE MONEY BECAUSE IT REDUCES THE NEED FOR ADDITIONAL ROAD CONSTRUCTION.
- BECAUSE IT REDUCES TRAFFIC ON ROADS AND THUS REDUCES ACCIDENTS AND THE NEED FOR ROADWAY MAINTENANCE.
- BECAUSE REGULAR BUS COMMUTERS BECOME ACQUAINTED AND HAVE THE OPPORTUNITY TO MAKE NEW FRIENDS.
- TO PROVIDE PEOPLE ACCESS TO JOBS, RETAIL, SERVICES, AND EDUCATION.
- BECAUSE IT ALLOWS PEOPLE TO BE SELF-RELIANT, INDEPENDENT, AND FREE.



People commonly acknowledge that not everyone drives, that all drivers do not want to drive for all trips, and that not all drivers should be driving, so providing other ways for people to travel is essential. Because walking, biking, carpooling, telecommuting, and ridesharing cannot collectively satisfy the travel options people need, public transit is therefore an integral part of this community's infrastructure.

Riding public transportation, along with driving, walking, and bicycling, constitutes the fundamental components that create a multimodal transportation system. This interconnected network enables people to move around the Valley between places where they live, work, learn, play, exercise, eat, socialize, and receive personal care without needing to rely solely on a personal vehicle. The ability for people to move around easily and freely contributes significantly to people's ability to live well in the Roanoke Valley. People desire or require options for traveling and public transportation helps people get to where they need to go in a timely and comfortable manner. Given that the provision of transit services is a community investment, it is very important for citizens and decision-makers alike to understand the goals of the investment, the desired outcomes, and the associated costs of the strategies to achieve those goals.

Like roads, electricity, water, and broadband, **public transportation is a key element of the Roanoke Valley's infrastructure**, providing a vital transit service needed for our region to function properly.

– Wayne Strickland, Roanoke Valley-Alleghany Regional Commission Executive Director



TRANSIT VISION PLAN DEVELOPMENT

The Roanoke Valley Transit Vision Plan was a three-year effort that began in July 2013 and sought to evaluate transit to a level of detail and public input that had never been undertaken before. In 2012, the Roanoke Valley urbanized area became classified by the federal government as a Transportation Management Area as its population in the urban area surpassed 200,000 residents. This population number is significant, particularly as federal funding is concerned, to distinguish smaller urban areas from larger ones. The change required Roanoke Valley decision-makers to begin thinking about transit, and specifically our investment in public transportation compared to the value that transit brings to our community. Ultimately, the need to plan and fund transit services collectively with a common vision will strengthen the community. The Transit Vision Plan becomes one element of the region's Constrained Long-Range Multimodal Transportation Plan (CLRMT). As one element of the CLRMT, the Transit Vision Plan accomplishes the following functions:

- RECORD THE REGION'S VISION, GOALS, AND STRATEGIES FOR IMPROVING THE TRANSIT MODE OF TRANSPORTATION IN THE ROANOKE VALLEY AS IDENTIFIED THROUGH INPUT FROM CITIZENS AND LOCAL LEADERS
- SERVE AS A RESOURCE GUIDE FOR TRANSIT SERVICE PLANNING IN THE ROANOKE VALLEY
- ENCOURAGE LOCAL GOVERNMENTS TO INCORPORATE TRANSIT SUPPORTIVE DEVELOPMENT AND INFRASTRUCTURE IN LOCAL ORDINANCES, POLICIES, PLANS, AND RELATED GUIDING DOCUMENTS
- IDENTIFY AND MAP ALL EXISTING AND PROPOSED TRANSIT SERVICES
- IDENTIFY AND MAP LOCATIONS WHERE TRANSIT SERVICES ARE NEEDED AND DESIRED
- PROVIDE STRATEGIES FOR ACCOMPLISHING THE NEEDED SERVICES IN A REASONABLE TIMEFRAME.

With this Plan as a foundation, regional transportation decision-makers, transit operators, engineers, designers, planners, development reviewers, inspectors, and infrastructure maintenance staff should work collaboratively to build and maintain a regional transit network which promotes the vision of a more livable Roanoke Valley.



ROANOKE VALLEY TRANSIT VISION

The Roanoke Valley possesses a growing economy and is recognized for its outstanding quality of life. As such, the residents and employees of the Roanoke Valley envision a community where transit provides an easy and timely way for people to get to their destination.

As the region's citizens work together to develop a more livable community, they want transit in the Roanoke Valley to:

- SERVE A GREATER PART OF THE REGION THAN IT DOES NOW
- SERVE PEOPLE WHO DO NOT DRIVE AS WELL AS PEOPLE WHO DRIVE BUT PREFER TRANSIT FOR SOME TRIPS
- BE PART OF AN INTEGRATED MULTIMODAL TRANSPORTATION SYSTEM AND COMPLEMENT OTHER MODES OF TRANSPORTATION
- BE SAFE, CONVENIENT, AND DEPENDABLE
- BE COMPLIANT WITH THE AMERICANS WITH DISABILITIES ACT OF 1990
- BE AFFORDABLE, AND FREQUENT WHERE IT MAKES SENSE
- BE COST-EFFECTIVE AND COMPETITIVE WITH OTHER MODES IN TRAVEL TIME
- BENEFIT EMPLOYEES AND USE NEW TECHNOLOGY TO MAKE RIDING TRANSIT EASIER
- BE ENVIRONMENTALLY-FRIENDLY AND HELP VISITORS BECOME BETTER ACQUAINTED WITH THE REGION
- SHARE THE COST OF PROVIDING SERVICES AND AMENITIES BY ESTABLISHING PUBLIC-PRIVATE PARTNERSHIPS WITH BUSINESSES

ROANOKE VALLEY TRANSIT GOALS

The above vision will take regional cooperation and investment to accomplish. From this vision, five goals for transit have been established.

- **GOAL #1:** CAPITALIZE ON THE COMMUNITY'S INVESTMENT IN TRANSIT TO ENRICH THE ECONOMY OF THE ROANOKE VALLEY.
- **GOAL #2:** UTILIZE TRANSIT TO SUPPORT PEOPLE'S ABILITY TO LIVE HEALTHY LIFESTYLES.
- **GOAL #3:** SUSTAIN THE ROANOKE VALLEY'S NATURAL ENVIRONMENT BY EMBRACING TRANSIT ON A PERSONAL AND COMMUNITY LEVEL.
- **GOAL #4:** PROVIDE INFRASTRUCTURE TO SUPPORT PEOPLE'S ABILITY TO SAFELY USE TRANSIT.
- **GOAL #5:** IMPROVE THE MOBILITY OF RESIDENTS, EMPLOYEES, AND VISITORS THROUGHOUT THE ROANOKE VALLEY BY PROVIDING SEAMLESS CONNECTIONS WITH OTHER TRANSPORTATION MODES AND ENABLING PEOPLE TO GET AROUND WITHOUT THE NEED FOR A PERSONAL VEHICLE.

The Roanoke Valley Transit Vision Plan has been developed within the context of this vision and these goals.

**Every \$1 invested in public transportation
generates approximately
\$4 in economic returns.**

TRANSIT VISION PLAN RECOMMENDATIONS

The recommendations of the Transit Vision Plan are designed to help the region realize the goals of the Livable Roanoke Valley plan while addressing the challenges that are hampering the Roanoke Valley from achieving these goals. The investments described in this plan were developed to promote economic opportunity and a greater quality of life for all Roanoke Valley residents by creating a system that better meets the needs of the entire Roanoke Valley.

The Roanoke Valley Transit Vision Plan recommendations focus on improving existing and creating new enhanced bus services that will provide a more robust network across the region. The recommendations would vastly increase the number and variety of destinations that are accessible via transit, enhance the frequency of service, and incorporate express services. The Plan would also provide people new options for getting to jobs, education, shopping, restaurants, services, recreation, and social and cultural destinations. Enhancing local and commuter bus services would support the region's workforce, and help attract and retain businesses that are focused on providing a high quality of life for their employees. In short, the recommendations of the Transit Vision Plan would help make the Roanoke Valley more livable, bringing together the elements that make it such a desirable place to live, work, and play. Regional cooperation is the first step to realizing this Vision Plan. Partners should first consider the governance structure of the Greater Roanoke Transit Company as the basis for a true regional partnership.



TRANSIT TRANSFER FACILITIES

Livable Roanoke Valley calls for a future transit system with world-class transit facilities, and particularly, transit transfer facilities (TTFs). TTFs should be the pride of the transit system. TTFs improve system connectivity by bringing transit routes together in logical locations. TTFs provide opportunities for users to transfer between transit routes, transportation modes, or even different transit providers expanding access via transit throughout the region. As visible hubs of a thriving transit network, they are a reflection of community values; providing customers with an inviting, safe and comfortable user experience.

The scale of TTFs in the region are broken into three categories: Small, Medium, and Large. At a minimum, TTFs will provide a number of key passenger amenities such as up to the minute real-time information, trash cans, shelters, and lighting. All TTFs should be easily accessible by pedestrians, connect to nearby destinations, and provide bicycle racks. Centers that serve a large number of cyclists can include secure bicycle parking as well. The extent of infrastructure at transit centers will depend on the level of service and importance of each facility. Each of the phases for recommendations (short, medium, and long) include TTFs that are depicted on the maps on the following pages.



SHORT-TERM RECOMMENDATIONS

The short-term recommendations address the transit service needs that should be addressed within the next six years (2016-2022). The majority of these recommendations will feed into the 2017 Transit Development Plan, where a phasing and implementation plan will be further developed.

The short-term recommendations propose a significant expansion to the existing transit service area. In this phase, service is recommended for many places where new critical connections to employment and residential areas are needed, including:

- The Hollins area;
- Electric Road Corridor;
- Glenvar;
- Exit 140;
- Bonsack; and,
- The Roanoke Centre for Industry and Technology.

The short-term recommendations also make improvements to the existing services. These improvements include: increasing frequency, extending service to later in the evenings, adding Sunday service and adding additional routes within the existing service area. The following routes have recommended improvements in this phase: 15/16, 21/22, 31/32, 35/36, 55/56, 51/52, 81/82, and 91/92.

Additional recommendations include:

- Coordinate Smart Way and Amtrak schedules to increase regional connectivity and the convenience of longer trips
- Further study of additional commuter service and consolidating stops to improve efficiency
- Develop partnerships with employers to increase jobs access and funding
- Update route schedule publications and maps and provide real-time passenger information
- Pursue partnerships among local governments for public bus service to increase and improve transit service and funding
- Reduce costs and significantly improve connectivity by regionalizing services for persons with disabilities and for seniors across jurisdictional boundaries

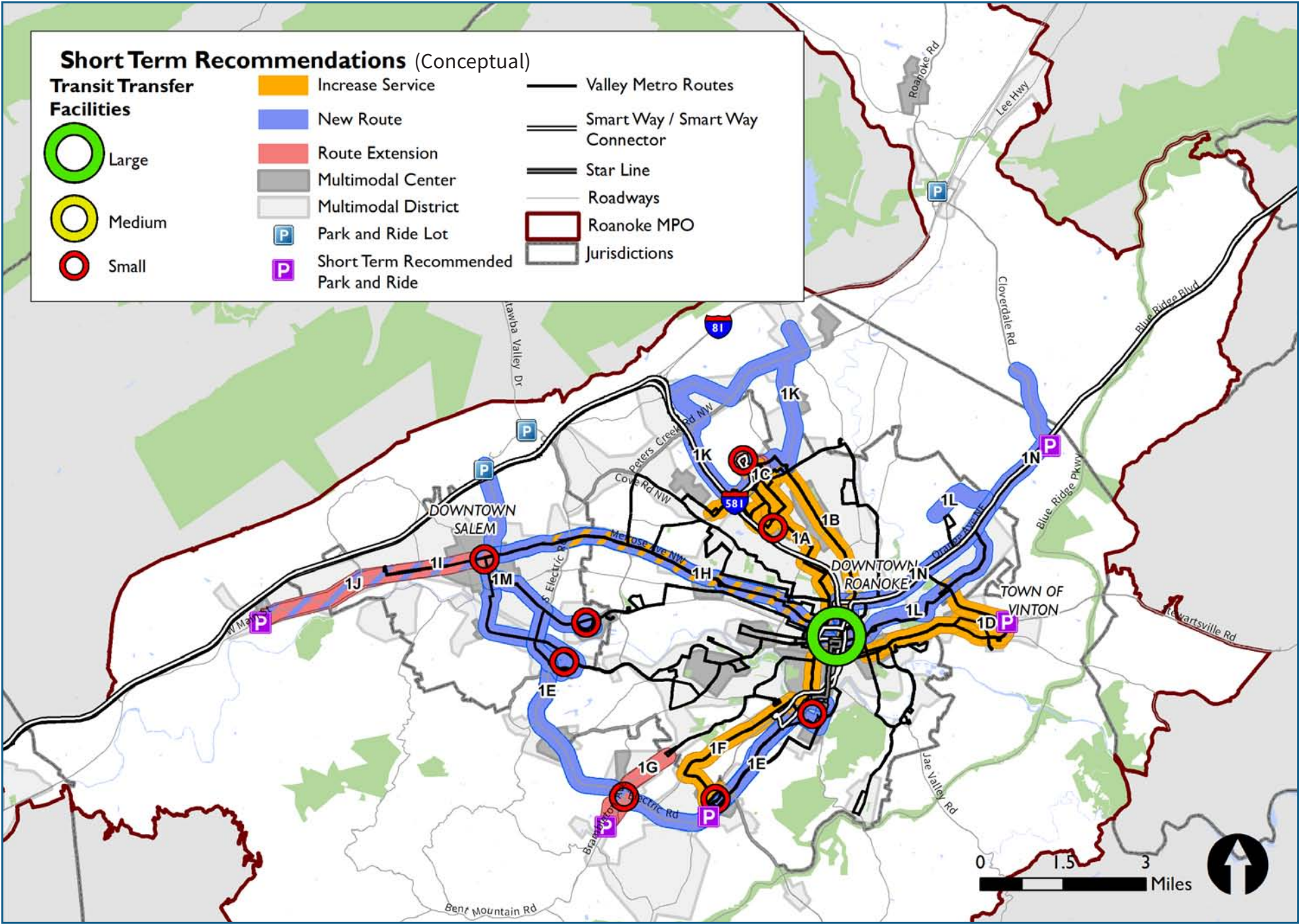
These recommendations collectively improve the access and quality of service for the residents and employers of the Roanoke Valley region. As shown in the table below, the short-term recommendations provide new service to over 16,000 residents and 14,000 jobs while improving the quality of service for over 50,000 residents and jobs.

POPULATIONS SERVED (SHORT-TERM)

METRIC	EXISTING SERVICE AREA	SHORT-TERM SERVICE AREA	IMPROVED SERVICE*	PERCENT GROWTH IN POPULATION SERVED	PERCENT IMPROVED SERVICE**
POPULATION	90,254	106,561	58,414	118%	65%
JOBS	65,224	80,012	54,301	123%	83%
HOUSEHOLDS	39,315	46,375	25,784	118%	66%

* Includes areas being served by existing routes that have recommendations for span or frequency, or a new route overlaid.

** Percent of existing service area population receiving improved service.



MEDIUM-TERM RECOMMENDATIONS

The medium-term recommendations identify the transit service needs that should be addressed within the eight-year period between 2022 and 2030. The majority of these recommendations will feed into the Long Range Transportation Planning process.

The medium-term recommendations focus on improving the quality of transit service in the Roanoke Valley region by increasing frequencies between key activity centers and making new connections within the existing and short-term service area. These changes provide additional transit options and would improve service along large portions of existing routes. The medium-term also recommends new connections to areas in Daleville, Clearbrook, Vinton, and South and East Roanoke County.

Additional recommendations include:

- Creating new crosstown connections
- Creating new cross-regional express services
- Extending the Star Line Trolley
- Improving convenience and access to medical services



POPULATIONS SERVED (MEDIUM-TERM)

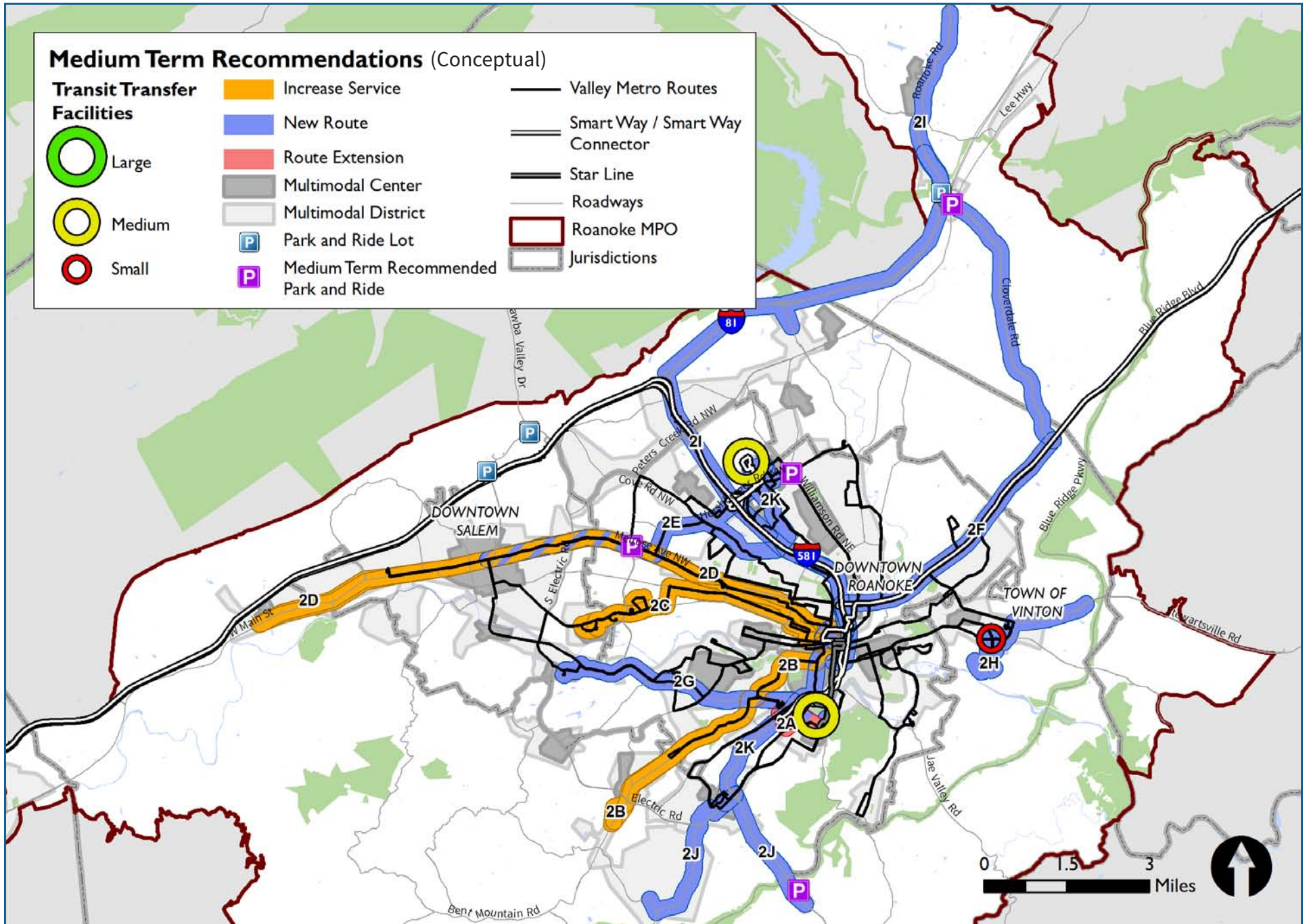
METRIC	SHORT-TERM SERVICE AREA	MEDIUM-TERM SERVICE AREA	IMPROVED SERVICE*	PERCENT GROWTH IN POPULATION SERVED	PERCENT IMPROVED SERVICE**
POPULATION	106,561	114,512	52,528	7%	49%
JOBS	80,012	85,087	49,275	6%	62%
HOUSEHOLDS	46,375	49,900	22,891	8%	49%

* Includes areas being served by existing routes that have recommendations for span or frequency, or a new route overlaid.

** Percent of existing service area population receiving improved service.

Medium Term Recommendations (Conceptual)

- | | | |
|------------------------------------|---------------------------------------|---------------------------------|
| Transit Transfer Facilities | Increase Service | Valley Metro Routes |
| Large | New Route | Smart Way / Smart Way Connector |
| Medium | Route Extension | Star Line |
| Small | Multimodal Center | Roadways |
| | Park and Ride Lot | Roanoke MPO |
| | Medium Term Recommended Park and Ride | Jurisdictions |



LONG-TERM RECOMMENDATIONS

The long-term recommendations identify the transit service needs that should be addressed within the ten-year period between 2030 and 2040. These recommendations will also feed into the Long-Range Transportation Planning process.

The long-term recommendations enhance further the level of transit service throughout the region by increasing frequency, increasing the hours of service, adding weekend service and adding new routes within the existing service area. This term also recommended routes outside the existing service area that would connect to new areas in Troutville and North Roanoke County.

Frequent transit service is transformative.

It supports and encourages dense mixed-use development that increases property values and quality of life.

Additional changes include creating a high-frequency and highly connected corridors between the following key activity centers:

- Crossroads Shopping Area and Downtown Roanoke
- Downtown Salem and Downtown Roanoke
- Glenvar and Salem
- Tanglewood Mall and Downtown Roanoke

The long-term recommendations improve the quality of service for 66% of the population (75,000) and 80% of the jobs (67,000) in the short-term service area.

These types of improvements are vital to ensure that the Roanoke Valley improve upon the quality of life for its residents. Increasing the frequency makes routes more convenient for existing riders, and it makes transit attractive to new riders by making it a viable alternative to the automobile for a wider variety of trips. New connections with new transit service means that a wider variety of locations will be accessible to a larger portion of the population. With the realization of the recommendations of this plan citizens will be able to travel to all of the major destinations in the Valley via transit.

LONG-TERM RECOMMENDATION BENEFITS

METRIC	MEDIUM-TERM SERVICE AREA	LONG-TERM SERVICE AREA	IMPROVED SERVICE*	PERCENT GROWTH IN POPULATION SERVED	PERCENT IMPROVED SERVICE**
POPULATION	114,512	116,722	75,168	2%	66%
JOBS	85,087	87,647	67,806	3%	80%
HOUSEHOLDS	49,900	50,670	33,051	2%	66%

* Includes areas being served by existing routes that have recommendations for span or frequency, or a new route overlaid.

** Percent of existing service area population receiving improved service.

Long Term Recommendations (Conceptual)

Transit Transfer Facilities



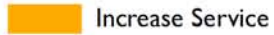
Large




Medium

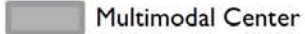


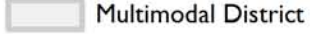
Small

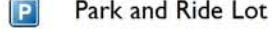
 Increase Service

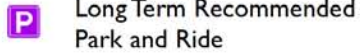
 New Route

 Route Extension

 Multimodal Center

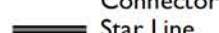
 Multimodal District

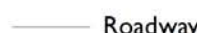
 Park and Ride Lot

 Long Term Recommended Park and Ride

 Valley Metro Routes

 Smart Way / Smart Way

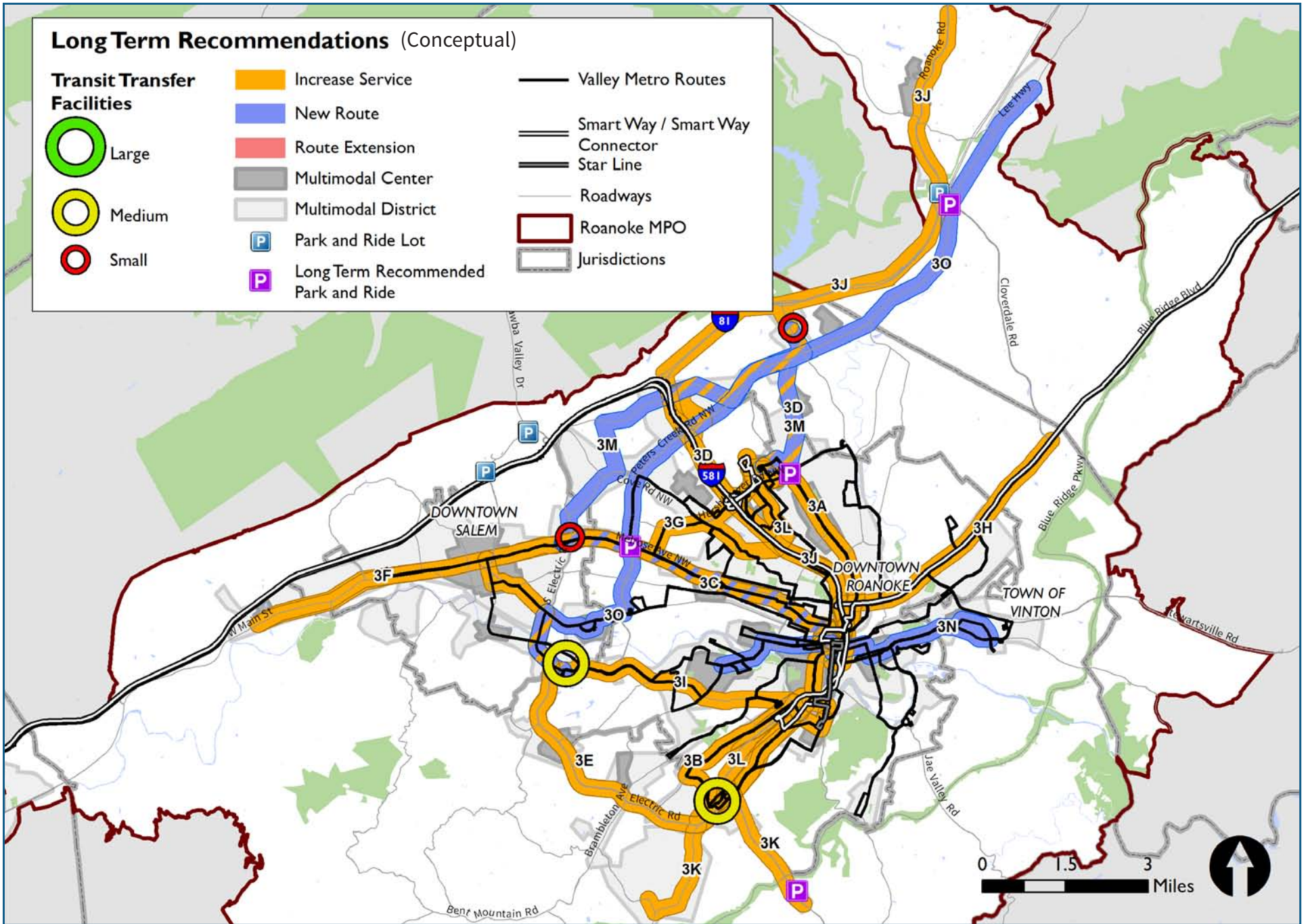
 Connector

 Star Line

 Roadways

 Roanoke MPO

 Jurisdictions



CAPITAL AND OPERATING COST SUMMARY

The following section details the operational and capital costs by short-, medium-, and long-term.

SHORT-TERM COSTS (2016-2022)

Capital Costs

The service recommendations in the Short-Term will require six extra vehicles, or will result in a 13 percent increase in the fleet size. This will result in a fleet size of 51 vehicles, including 10 spares, and cost a total of \$2,790,000.

Operating Costs

In the Short-Term it is being recommended to increase the level of services on five existing routes, reduce levels of service on three routes, add six new routes, add Sunday service on select routes and increase the overall length of service across the system to 18 hours a day. This results in \$3,905,000 of total additional annual operational costs, an increase of 46 percent.

MEDIUM-TERM COSTS (2022-2030)

Capital Costs

The service recommendations in the Medium-Term will require nine extra vehicles, or will result in a 18 percent increase in the Short Term fleet size. This will result in a fleet size of 60 vehicles, including 10 spares, and cost a total of \$5,274,000.

Operating Costs

In the Medium-Term it is being recommended to increase the level of services on three existing routes, reduce levels of service on one route and add seven new routes. This results in \$4,042,000 of total additional annual operational costs, an increase of 33 percent.

LONG-TERM COSTS (2030-2040)

Capital Costs

The service recommendations in the Long-Term will require 22 extra vehicles, or will result in a 37 percent increase in the Medium-Term fleet size. This will result in a fleet size of 82 vehicles, including 14 spares, and cost a total of \$14,740,000.

Operating Costs

In the Long-Term it is being recommended to increase the level of services on 14 existing routes, and add three new routes. This results in \$7,488,000 of total additional annual operational costs, an increase of 46 percent. Individual annual costs within the Long-Term timeframe will depend upon implementation.

VISION PLAN COST SUMMARY TABLE

DESCRIPTION	COST
SHORT-TERM COSTS	
<i>Capital</i>	\$2,790,000
<i>Additional Operating</i>	\$3,905,000
Total Short-Term Costs	\$6,695,000
MEDIUM-TERM COSTS	
<i>Capital</i>	\$5,274,000
<i>Additional Operating</i>	\$4,042,000
Total Medium-Term Costs	\$9,316,000
LONG-TERM COSTS	
<i>Capital</i>	\$14,740,000
<i>Additional Operating</i>	\$7,488,000
Total Long-Term Costs	\$22,228,000
TOTAL CAPITAL COST	\$22,804,000
TOTAL ADDITIONAL OPERATING COST	\$15,435,000
TOTAL VISION PLAN COST	\$38,239,000

DEVELOPING RECOMMENDATIONS

Recommendations were based upon four different inputs:

- Service Gap Analysis
- Service Connection Analysis
- Frequent Corridor Analysis
- Public Input

These inputs were analyzed individually and compared against the existing service to determine where the need and demand for transit service exists throughout the Roanoke Valley. Once compiled they were prioritized, based upon another round of public input, and placed into priority timeframes of short-, medium-, and long-term recommendations. The initial timeframe of six years was intended to correspond with the next phase of this planning process which is creating the six-year transit development plan.

All of the recommendations were then translated into potential realistic network scenarios including route additions, reallocation of services, and route extensions. With each change, service for people with disabilities would follow given that paratransit service is required within ¾ mile of any fixed-route transit service. These short-, medium-, and long-term network scenarios serve as input to the 2040 regional travel demand model, currently under development.

PUBLIC OUTREACH AND ENGAGEMENT

The public outreach and engagement effort was wide-reaching, extensive, and successful in acquiring significant input and feedback throughout the process. Public workshops, an online forum, on-board and online surveys, in-person interviews, and focus groups, engaged people throughout the Roanoke Valley. Media coverage, via radio, television, newspaper, social media, and an email list, communicated to citizens public input opportunities and notified citizens of the planning process.

SUMMARY OF PUBLIC OUTREACH AND ENGAGEMENT EFFORTS

EFFORT	RESULTS	TIMEFRAME
INITIAL OUTREACH	1,895 Valley Metro riders 27 Valley Metro employees 471 General Public Citizens	2013
PUBLIC WORKSHOPS	74 attendees	11/5/2015
	28 attendees	1/21/2016
TRANSIT PREFERENCES SURVEY	889 total responses	
<i>Public Workshop</i>	<i>59 responses</i>	<i>1/5/2016</i>
<i>On-Board</i>	<i>650 responses</i>	<i>November - December 2015</i>
<i>Web Survey</i>	<i>180 responses</i>	<i>November - December 2015</i>
SOCIAL MEDIA PLATFORM IdeaScale.com	71 visitors 23 comments 440 votes	January - February 2016
VALLEY METRO DRAFT RECOMMENDATIONS SURVEY	501 responses	January - February 2016
RADAR SURVEY	120 total responses	
<i>STAR and CORTAN Riders</i>	<i>112 responses</i>	<i>February - March 2016</i>
<i>Botetourt Senior/Access Van Riders</i>	<i>8 responses</i>	<i>February - March 2016</i>
FOCUS GROUPS	85 attendees at 5 events	Fall 2015 - Winter 2016
TOTAL	4,161	

ELEMENTS CRITICAL TO SUCCESS

REGIONAL TRANSIT AGENCY

Through this Vision Plan process, it has become clear that the way forward to realize the recommendations of this plan will require significant change in the approach of how transit service is both funded and delivered. Valley Metro currently operates as a subset of the City of Roanoke. As such it is controlled and funded primarily by the City and, as a result, provides very little service beyond the city limits. Some service and funding outside the City of Roanoke is accomplished through Memorandum of Understanding (MOUs) with partnering localities, such as the City of Salem and the Town of Vinton.

While this construct may meet the basic needs of many residents, it does not meet the needs of the region and it cannot produce a transit system that helps achieve the goals of a Livable Roanoke Valley. Efforts to improve the region's transit system will require a truly regional approach with multiple jurisdictions serving on a regional transit agency.

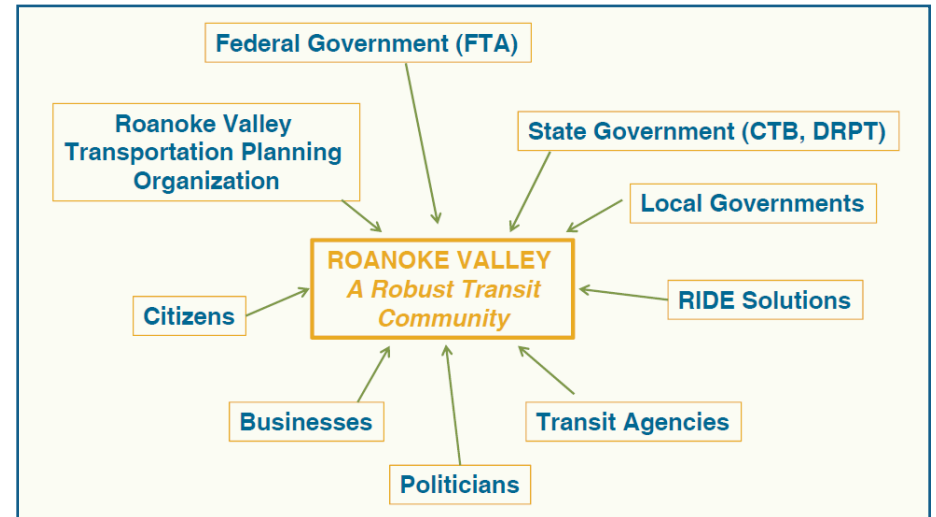
As a result, a critical next step will be to work collaboratively with local partners to develop a path forward that will enable a true regional organization with participation from many stakeholders and equitable regional decision-making. This process will inherently require the involvement of a wider variety of stakeholders to ensure that consensus can be first built around the path forward and then maintained as changes are implemented.

Broad Community Support

The responsibility to make the Roanoke Valley transit system more robust falls not only on a regionally-structured transit agency but also on many parties as displayed in the following figure.

During the TVP process, Steering Committee members reflected on the community-wide effort needed to make transit a common element in more people's day and identified a detailed list of roles and responsibilities that are listed in Part 6 of the TVP full document.

STAKEHOLDERS TO CREATE A ROBUST TRANSIT COMMUNITY



STAKEHOLDERS AND THEIR TRADITIONAL INVOLVEMENT IN TRANSIT INVESTMENT AND LAND USE DECISION-MAKING

	TRANSIT INVESTMENTS	LAND DEVELOPMENTS
DEVELOPERS (PRIVATE; NOT-FOR PROFIT)	Little/None	Significant
LOCAL (MUNICIPAL AND COUNTY) GOVERNMENTS	Some	Significant/Some
TRANSIT AUTHORITIES	Significant	Some/Little/None
METROPOLITAN PLANNING ORGANIZATIONS	Significant	Some/Little/None
STATE GOVERNMENT	Some	Some
FEDERAL TRANSIT ADMINISTRATION	Significant	None

SUPPORTING LAND USE AND POLICY

To facilitate the recommendations of the TVP, local jurisdictions should evaluate land use policies to identify opportunities for mixing land uses, increasing density of developments, and improving multimodal access to destinations.

Land Use Planning and Transit Planning

Public policy is generally developed at the federal, state, and regional levels, while land-use implementation is driven by local governments and developers. To ensure that these two types of planning connect, planning issues need “champions” at state, regional, and local levels to advocate for the intersection of transit planning and land use policy.



TRANSIT SUPPORTIVE LAND USE POLICY TOOLS

TOOL	OVERVIEW
TRANSIT-SUPPORTIVE DISTRICTS	Creation of a specific plan or overlay district encourage people to live and/or work near the transit station/stop and to use public transit.
PLANNED UNIT DEVELOPMENT (PUD)	Increased flexibility for localities and developers to develop large tracts of land using transit-supportive methods.
DESIGN STANDARDS AND GUIDELINES	Regulations that encourage pedestrian-friendly amenities, especially in and around transit stops and stations.

Policy Tools for Transit-Supportive Development

After developing a Vision Plan and identifying possible transit corridors, it is critical to develop a legal framework to support and guide transit-supportive development. Possible tools for doing so, include the creation of transit-supportive districts, Planned Unit Developments, and pedestrian-friendly design standards around transit stations and stops.

Policy Tools for Transit-Supportive Active Transportation

Active transportation is an important factor in the success of transit service. Every transit trip begins and ends either on foot or by bike and that experience before and after transit can have wide ranging implications on the attractiveness and utility of transit. Similar to land use it is critical to develop a robust set of policies that support and guide active transportation facilities that are transit-supportive. Part 6 of the TVP full document details possible tools for doing so, including the creation of new zoning requirements, new funding, new standards, and additional inventories and planning studies.



CONCLUSION

Adoption of the Roanoke Valley Transit Vision Plan is a milestone in the region's transportation planning process and overall strategic planning as we strive to become a more Livable Roanoke Valley. Development of the Plan involved many stakeholders and citizens and its implementation, though challenging, will be supported by even more. Concurrent with the goals of Livable Roanoke Valley, implementing this Transit Vision Plan will:

- Build a solid foundation for targeted economic growth and new development;
- Build community with the natural interaction among people of all ages, income levels, and cultural backgrounds as we move around the Valley in our daily activities;
- Connect the Roanoke Valley with an environmentally sustainable transportation option;
- Provide people with new options for accessing jobs, goods, services, educational and recreational opportunities;
- Improve personal health through walking and biking to access transit and access to healthcare.



Developing a robust transit system will benefit people who ultimately choose to use transit services or not. Some people may choose to use transit every day; others may choose to use transit once in a while as part of a broader mix of transportation modes used.

Some people may elect to not use transit at all, choosing instead to fund their own personal transportation. For people who choose other transportation modes for all their trips, transit availability for and use by others benefits them because there are fewer vehicles on roads thus minimizing traffic congestion, maintaining good air quality, and increasing parking availability.

As people in our Roanoke Valley community age, transit services may become more of a regular need than a choice.

Though some people may not see the value now, at some point in their lives, they may find it useful and grateful for its existence.

There is a common benefit when people are able to live independently and self-sufficiently, and for these reasons, transit plays a huge role in society.

Understanding the greater societal value of transit as an economic investment in the community may be a hard concept for some people to grasp. Therefore, educating citizens about the value that transit brings to the community as well as the various transit services available in the region will be an ongoing need.

TIMELINE AND NEXT STEPS

Adoption of the Roanoke Valley Transit Vision Plan accomplishes the region's first long-range 25-year transit plan and is the first step to creating a robust transit community. The following milestones are anticipated in the near term to continue the progress realized thus far:

- Incorporate the Vision Plan into in the region's next Constrained Long-Range Multimodal Transportation Plan (CLRMTP), scheduled for adoption in the Summer of 2016.
 - ♦ *The CLRMTP is updated every five years and with each update, the Transit Vision Plan will be reviewed to assess its achievements and the remaining projects to accomplish.*
- Update the Transit Development Plans (TDPs) of both Valley Metro and RADAR in cooperation with the Virginia Department of Rail and Public Transportation (DRPT) in the Summer of 2016.
 - ♦ *The TDPs will assess transit needs and plan system progress over the next six years and work to incorporate and achieve the short-term recommendations of the Vision Plan.*
- These TDPs provide guidance and input to yearly funding applications and support investments identified in the Commonwealth's Six-Year Improvement Program (SYIP) and transit program of projects listed in the federally-required Roanoke Valley Transportation Improvement Program.



Opportunities for additional funding are available for a wide variety of sources including:

- DRPT funding (applications due every year on February 1)
- The Commonwealth's HB2 program for capital projects will be open for new applications due September 30, 2016 with additional open application periods every other year.
- The Transportation Alternatives Program will also be open for applications due November 1, 2016 for similar capital projects as HB2 with the exception of transit vehicles.
- The RSTP program will be open for new applications in the Fall 2017.

In addition to the TDPs and seeking funding through the sources listed above the region should immediately begin working in parallel on the following elements:

- Studying the best organizational structure to move the region forward in a collaborative manner;
- Developing new partnerships to increase participation and funding sources; and,
- Developing a well-defined path forward with assigned action items and a detailed timeline.

It is recommended that this be accomplished by establishing a Regional Transit Committee that will meet regularly to make steady progress on these elements. The committee could be made up of several sub-committees such as organization, finance, partnerships, and capital investments.

FUTURE TECHNOLOGIES

As the recommendations of this plan are accomplished, in coordination with regional planning policies that result in more density and mixed-use land development, opportunities to connect regional activity centers along dense corridors through new types of transit may emerge. Agencies typically take an incremental approach to increasing service; first increasing frequency to 15-minutes or greater all-day, then introducing special branded limited-stop service that has additional amenities. Once these types of services have proven successful, agencies often move towards Bus Rapid Transit (BRT), again often in incremental steps. BRT provides true high-capacity rapid transit service, but at a fraction of the cost of a streetcar or light-rail.

The first step is sometimes referred to as “BRT-Light” and employs the use of off-board fare collection, enhanced stops with additional customer amenities, and transit priority roadway treatments. These types of services are relatively inexpensive as they do not require additional right-of-way, heavy construction, nor specialized vehicles. Buses are often given priority only in the peak travel periods through painted bus-only lanes and with priority at intersections. Coupled with off-board fare collection, multi-door boarding, and enhanced passenger amenities they become competitive with the automobile for trip times and attractive to a wide variety of users.

Several cities in the U.S. have deployed such systems, including the sbX Rapid Transit in San Bernardino, CA. sbX Rapid Transit currently includes one limited-stop bus route with bus rapid transit features including enhanced stations, off-board fare collection, and platform-level boarding. It utilizes both bus only lanes and traffic signal priority and runs every 10 minutes in the peak periods and every 15 minutes off-peak.



Other examples include the Metroway service in Alexandria and Arlington, Virginia, the Pulse opening in Richmond, Virginia, in 2017, and many others. Once established these corridors are often developed further to implement full BRT with fully dedicated lanes separated from passenger vehicle traffic and raised platforms. These systems have seen great success across the U.S. (Cleveland, Eugene, Hartford, Pittsburgh, Las Vegas, and Los Angeles).

More and more cities across the U.S., faced with limited resources and increasing congestion, are turning to Bus Rapid Transit to improve mobility, spur economic development, and reduce congestion. More than 30 U.S. regions in at least 24 states are either building or actively considering building new BRT lines in 2016 and beyond. Several studies have illustrated that true BRT can have the same economic development impacts as rail projects, but at a fraction of the cost.¹

CLOSING STATEMENT

The members of the Steering Committee have been exceptionally helpful in guiding the Plan’s development. The group will cease to function once the Plan is complete; however, new collaborations and partnerships should begin to form immediately upon completion of the Plan to keep the Plan’s implementation active. Most critically, a new structure for a truly regional transit agency is paramount to transit’s success in the Roanoke Valley.

Where possible, transit providers and local governments should work continuously to identify those service recommendations which may be simpler to complete than others and pursue them first to indicate to the public and stakeholders that the Plan is important and people’s needs are being addressed as quickly as possible.



CITATION

1. <http://t4america.org/wp-content/uploads/2016/01/NATIONAL-STUDY-OF-BRT-DEVELOPMENT-OUTCOMES-11-30-15.pdf>

IMAGES

Cover Page/Page 23: Farmers market, downtownroanoke.org; Vinton Library, <http://hbmarchitects.com>; Roanoke University, roanokerising.com; City of Roanoke, Wikipedia

Page 2: Jane Johnson, Roanoke Valley-Alleghany Regional Commission (RVARC); Carl Palmer, RVARC

Page 4: Farmers market, downtownroanoke.org

Page 5: Roanoke Star, Wikipedia

Page 6: Wayne Strickland, RVARC; Valley Metro bus, RVARC

Page 7: City of Roanoke, Wikipedia; Downtown Salem, <https://walkoverstates.wordpress.com>

Page 9: Steering Committee Meeting, RVARC; Metroway, Wikipedia

Page 12: Star Line Trolley, RVARC

Page 19: RapidRide, Oran Virlyincy; Metrô, Mariana Gil

Page 20: Fruitvale Village, Eric Fredericks; VA DPRT Multi-Modal System Design Guidelines

Page 21: Steering Committee, RVARC

Page 22: <http://omnitrans.org>; RADAR bus, RVARC

Inside Back Cover: Downtown Roanoke, roanokeva.gov

Back Cover: Kay Gaensler, flickr.com





STRENGTHENING OUR LIVABLE ROANOKE VALLEY WITH TRANSIT

by Cristina Finch

Buses, transit, public transportation;
Connecting parts but not enough of our region.

*Imagine the future where service abounds
My ride is coming, not a long wait.
See a friend, how have you been?
See another, a new connection,
Nice to meet you, let's talk again.
Time on my hands to read, text, and relax.
Drop me off, no need to park.
A breath of fresh air,
A short walk,
A smile and hello,
A refreshing energy to my day.*

The opportunity has been there for 2 ½ years to provide input;
Citizens young, citizens old, Citizens employed by transit,
Citizens who take transit a lot, some or not.
Thank you to more than 4,000 who have contributed.

*Guided by stakeholders who value transit as a means to support:
Businesses, Neighborhoods, Economic growth, Opportunities,
Personal development, Health, Independence,
Clean air and water, Intentional land development.
A care for others,
and an option for oneself.*

*Transit stands instrumental to a livable future in the Roanoke Valley.
The time is now to invest in our future;
The time is now to grow strongly not stiflingly;
The time is now to be unlike any other place to live.
We are the heart of Virginia's Blue Ridge.*

ACKNOWLEDGEMENTS

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