Roanoke Valley Transportation
PLANNING ORGANIZATION

Staffed by the
REGIONALcommission

Roanoke Valley
TRANSIT VISION PLAN

Approved September 22, 2016

PART 6: Implementation Strategies and Performance Measures

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1.0 OVERVIEW

This section describes various elements related to the implementation of the recommendations of the Transit Vision Plan including:

- **Timeline:** Discussion of next steps and future planning efforts to implement the Transit Vision Plan.
- **Implementation Strategies:** Provides ideas on how to accomplish the Plan's goals.
- **Roles and Responsibilities:** Describes guiding goals and strategies and the parties responsible for their implementation to realize the vision of the plan.
- **Strategy Outputs:** Identifies the tangible results of the strategies.
- **Community Outcomes:** Identifies the broader desired results for individuals and the community as a whole.
- **Performance Measures:** Identifies how the strategy outputs will be tracked as stakeholders work to produce the community outcomes that achieve regional goals.
- **Procedural Changes:** Provides guidance on several types of transit organizational structures that may be pursued to further the plan.
- **Marketing and Branding:** Describes elements of an easy-to-understand unified marketing and branding program to support the plan.
- **Additional Funding Sources:** Describes potential funding sources and partners.
- **Land Use:** Describes changes to land use policies that will need to be realized to increase both the mix and density of land uses to support the plan.

2.0 TIMELINE

Adoption of the Roanoke Valley Transit Vision Plan is a milestone in the region's transportation planning process and overall strategic planning as it strives to become a more Livable Roanoke Valley, accomplishing the region's first long-range 25-year transit plan. Development of the Plan involved many stakeholders and citizens and its implementation, though challenging, will be supported by even more. Most immediately, the Plan's recommendations will be evaluated by the Transportation Planning Organization Policy Board for incorporation into the region's next Constrained Long-Range Multimodal Transportation Plan, schedule for adoption in Fall 2016. Fortunately, the Virginia Department of Transportation (DRPT) has invested in a more robust travel demand model for the Roanoke Valley which now includes the details of the current transit system and will include in its forecasts, the short-, mid-, and long-term recommendations. With a more complete perspective of travel patterns in the region, decision-makers will have better information from which to steer transportation policies and investments. The CLRMTP is updated every five years and with each update, elements of the Transit Vision Plan will be reviewed to assess its achievements and the feasibility of remaining projects. The Vision Plan's recommendations are provided for the following timeframes:

▲ SHORT-TERM: 2016-2022

▲ MEDIUM-TERM: 2022-2030

▲ LONG-TERM: 2030-2040

The DRPT works with all transit agencies in the Commonwealth to create Transit Development Plans (TDPs) to assess transit

needs and plan system progress over the next six years. With great fortune, both Valley Metro and RADAR's TDPs are due for a complete update which is scheduled to begin in the Summer 2016. Both should be accomplished together in light of the grander regional transit vision described in this 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 the transit program of projects listed in the federally-required Roanoke Valley Transportation Improvement Program (TIP).

Applications for DRPT funding are due every year on February 1 after which the SYIP is drafted and published in April/May followed by the Commonwealth Transportation Board's approval in June. The TIP is newly created every three years with the next TIP scheduled for development and approval in 2017.

Several notable funding cycles aid capital projects that establish the necessary infrastructure to support public transportation. The Commonwealth's House Bill 2 (HB2) program will be open for new applications due September 30, 2016 with additional open application periods every other year. New transit facilities, transit-supportive active transportation projects, and expansion vehicles are all examples of projects eligible for HB2. The former Transportation Alternatives Program (TAP), now the set-aside for Surface Transportation Block Grant (STBG) program for transportation alternatives (TA), will also be open for applications due November 1, 2016 for similar capital projects as HB2 with the exception of transit vehicles. The Regional Surface Transportation Program (RSTP) will be open for new applications in the Fall 2017. The following list summarizes these critical reoccurring dates.

▲ 9/3-/16 – BIANNUAL HB2 CAPITAL PROJECT APPLICATIONS

▲ 11/1/16 - ANNUAL STBG-TA CAPITAL PROJECT APPLICATIONS

▲ 2/1/17 – ANNUAL DRPT OPERATING/CAPITAL PROJECT APPLICATIONS

▲ 9/30/17 – BIANNUAL RSTP CAPITAL PROJECT APPLICATIONS

Depending on the scale, capital projects take a year or many years to conceptualize, apply for funding, and receive funding approval. Depending on the funding program and funds availability, funding is provided for an immediate year or some future year. Much time is spent on establishing funding contracts, hiring design consultants, designing the facility, purchasing any needed right-of-way or establishing operating agreements, and ultimately hiring a contractor and constructing the project. Even the simplest project may take three years to complete, so capital projects should be planned in advance or pursued in light of a desired completion date for functional operations.

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.

Where possible, Valley Metro and local governments should work continuously to identify those 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.

3.0 IMPLEMENTATION STRATEGIES

As previously stated, there are five goals for transit in the Roanoke Valley and within each goal strategies have been identified for how to accomplish those goals.

GOAL #1: CAPITALIZE ON THE COMMUNITY'S INVESTMENT IN TRANSIT TO ENRICH THE ECONOMY OF THE ROANOKE VALLEY

▲ PROVIDE REGIONAL AND LOCAL FUNDING TO LEVERAGE AVAILABLE STATE AND FEDERAL FUNDS FOR TRANSIT.

▲ PROVIDE RELIABLE AND CONVENIENT TRANSIT SERVICES THAT CONNECT MAJOR EMPLOYMENT DESTINATIONS, SHOPPING CENTERS, ESSENTIAL SERVICES, COLLEGES, HIGH SCHOOLS, TECHNICAL SCHOOLS AND SPECIAL EVENTS.

▲ CREATE DESTINATIONS THAT SUPPORT PUBLIC TRANSPORTATION.

GOAL #2: UTILIZE TRANSIT TO SUPPORT PEOPLE'S ABILITY TO LIVE HEALTHY LIFESTYLES.

▲ USE TRANSIT WHENEVER POSSIBLE INSTEAD OF DRIVING.

▲ FUND TRANSIT SERVICES TO ENABLE ROANOKE VALLEY RESIDENTS TO ACCESS HEALTHCARE FACILITIES, HEALTHY FOOD, WELLNESS, EXERCISE, RECREATION, AND CULTURAL LOCATIONS.

▲ PROVIDE ROANOKE VALLEY RESIDENTS WITH TRANSIT SERVICES TO HEALTHCARE FACILITIES, HEALTHY FOOD, WELLNESS, EXERCISE, RECREATION, AND CULTURAL LOCATIONS.

▲ COORDINATE BICYCLE AND PEDESTRIAN INFRASTRUCTURE INVESTMENTS WITH TRANSIT.

▲ EDUCATE CITIZENS ABOUT AVAILABLE TRANSIT SERVICES.

▲ ENCOURAGE THE USE OF TRANSIT BY PEOPLE OF ALL AGES, CULTURES, ABILITIES, AND INCOME LEVELS.

GOAL #3: SUSTAIN THE ROANOKE VALLEY'S NATURAL ENVIRONMENT BY EMBRACING TRANSIT ON A PERSONAL AND COMMUNITY LEVEL

▲ FUND TRANSIT SERVICES ON AN INCREMENTAL BASIS UNTIL DESIRED SERVICE LEVELS ARE MET.

▲ USING TRANSIT TO ACCOMPLISH MORE TRIPS, REDUCE EMISSIONS IN THE ROANOKE VALLEY TPO URBANIZED AREA.

▲ REDUCE EMISSIONS BY TRANSIT VEHICLES IN THE ROANOKE VALLEY TPO URBANIZED AREA.

▲ SUPPORT LAND DEVELOPMENTS THAT MINIMIZE LAND CONSUMPTION, MAXIMIZE IN-FILL DEVELOPMENT AND REDEVELOPMENT, AND MAXIMIZE TRANSIT-ORIENTED DEVELOPMENT (TOD)

▲ REDUCE MINIMUM AND MAXIMUM PARKING REQUIREMENTS.

▲ MAXIMIZE AVAILABLE ON-STREET SPACE FOR PARKING WHILE LEAVING ADEQUATE SPACE AVAILABLE AT BUS STOPS FOR BUS PULL-OFFS.

▲ URBAN DEVELOPMENT AREAS (UDAS) ARE IDENTIFIED AND IMPLEMENTED WITH DENSITIES THAT SUPPORT TRANSIT USE.

GOAL #4: PROVIDE INFRASTRUCTURE TO SUPPORT PEOPLE'S ABILITY TO SAFELY USE TRANSIT

▲ INCORPORATE AND MAINTAIN SECURITY MEASURES AND TECHNOLOGY THROUGHOUT THE TRANSIT SYSTEM.

▲ ENSURE ALL TRANSIT STOPS AND TRANSFER FACILITIES AT A MINIMUM ARE ADA COMPLIANT AND, WHERE POSSIBLE, PROVIDE EXTRA ROOM FOR PASSENGER MOBILITY.

▲ PROVIDE PEDESTRIAN CONNECTIONS TO BUS STOPS INCLUDING BUT NOT LIMITED TO ALONG STREETS, ACROSS STREETS, AND WITHIN NEW DEVELOPMENTS TO ENABLE SAFE ACCESS TO TRANSIT.

▲ IMPROVE BUS STOP AMENITIES TO PROVIDE A SAFE AND COMFORTABLE ENVIRONMENT DURING WAITS AND INCLEMENT WEATHER.

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

▲ COORDINATE LOCAL TRANSIT SERVICES WITH THE AIRPORT, PASSENGER RAIL, AND INTERCITY BUS SERVICES TO ENABLE SEAMLESS TRANSITIONS BETWEEN THESE MODES.

▲ INCORPORATE PEDESTRIAN CONNECTIONS TO TRANSIT INTO NEW DEVELOPMENT STANDARDS AND SITE PLANS TO ENABLE THE CONNECTION WITH NEARBY OR FUTURE TRANSIT SERVICES.

▲ FUND PEDESTRIAN AND BIKING INFRASTRUCTURE TO SUPPORT TRANSIT.

▲ INVEST IN ATTRACTIVE, WELL-FUNCTIONING TRANSIT FACILITIES.

▲ PROVIDE PEDESTRIAN INFRASTRUCTURE TO PARCELS WITHIN ¼ MILE AND BIKING INFRASTRUCTURE WITHIN THREE MILES OF TRANSIT STOPS.

▲ PROVIDE PEDESTRIAN AMENITIES SUCH AS SHELTERS, BENCHES, LIGHTING, AND BUS ROUTE AND SCHEDULE INFORMATION AT TRANSIT STOPS.

▲ INCORPORATE TRANSIT AMENITIES, SUCH AS BUS SHELTERS, BENCHES, OR TRANSIT INFORMATION, INTO DEVELOPMENT STANDARDS FOR NEW DEVELOPMENTS THAT ABUT A TRANSIT ROUTE.

▲ ESTABLISH POLICIES, PRACTICES, AND INCENTIVES THAT ENCOURAGE EMPLOYEES TO USE TRANSIT.

▲ ADOPT LAND USE POLICIES AND LAND DEVELOPMENT CODES THAT SUPPORT MIXED-USE DEVELOPMENT WITH MULTIMODAL CHOICES, INFILL DEVELOPMENT, AND CORRIDOR ACCESS MANAGEMENT POLICIES.

▲ PRIORITIZE TRANSIT MOVEMENTS ON THE ROADWAY NETWORK BY INSTALLING PRIORITY SIGNALIZATION ON TRANSIT CORRIDORS.

▲ DEVELOP PARKING POLICIES AND DEVELOPMENT STANDARDS THAT SUPPORT TRANSIT.

While these strategies all indicate what needs to be done, the question is often who is responsible for doing that? The following section addresses roles and responsibilities.

4.0 ROLES AND RESPONSIBILITIES

The responsibility to make the Roanoke Valley transit system robust falls on everyone as displayed below.

Figure 4.0-1 | Stakeholders to Create a Robust Transit Community
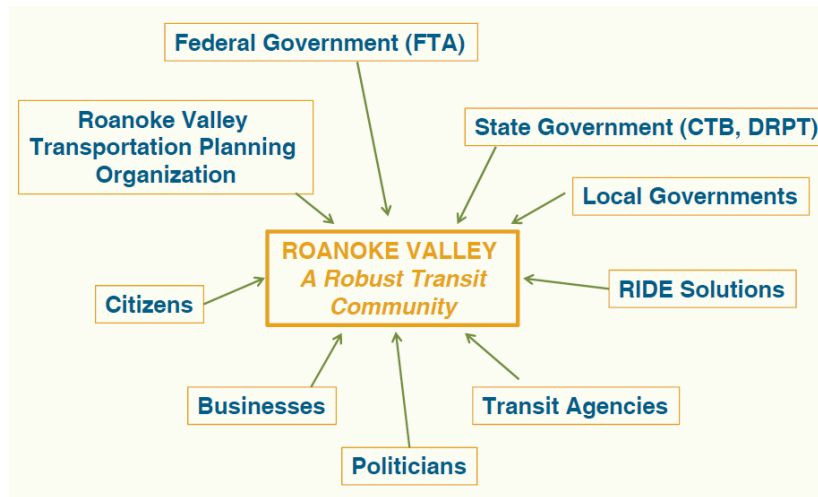
Steering Committee members reflected on the community-wide effort needed to make transit a common element in more people's day and identified the following general roles and responsibilities.

Federal Government (Federal Transit Administration)

▲ PROVIDE FUNDING FOR TRANSIT SERVICES

▲ GUIDE TRANSPORTATION IN THE RIGHT DIRECTION THROUGH FUNDING PROGRAMS

▲ COMMUNICATE, COLLABORATE, COORDINATE INTERCONNECTIVITY BETWEEN MODES AT A NATIONAL LEVEL

▲ ENCOURAGE USE

State Government (Commonwealth Transportation Board)

▲ PROVIDE FUNDING FOR TRANSIT SERVICES

▲ COORDINATE INTERCONNECTING MODES AT A STATE LEVEL

▲ MORE COLLABORATION BETWEEN THE VIRGINIA DEPARTMENT OF TRANSPORTATION AND LOCAL OFFICES TO PROMOTE USE OF CORRECT DESIGN STANDARDS

Local Governments

▲ WORK TOGETHER TO PLAN TRANSIT SERVICES

▲ PROVIDE ZONING CODES THAT ESTABLISH DEVELOPMENT DENSITY TO SUPPORT TRANSIT

▲ CREATE WALKABLE DEVELOPMENTS

▲ WORK WITH THE VIRGINIA DEPARTMENT OF TRANSPORTATION AND DEVELOPERS TO BUILD NECESSARY INFRASTRUCTURE TO SUPPORT TRANSIT

▲ EXPAND TRANSIT SERVICES TO MEET CITIZEN NEEDS

▲ FOR TOURISM, PROMOTE TRANSIT USE TO ACCESS DESTINATIONS

▲ PROVIDE FUNDING

Politicians

▲ BECOME MORE INFORMED REGARDING TRANSIT ISSUES

▲ BE AN ADVOCATE FOR TRANSIT IMPROVEMENTS

▲ PROMOTE AND SUPPORT TRANSIT IN LOCALITIES

▲ EXPRESS TRANSIT'S SIGNIFICANCE TO CITIZENS

▲ PARTICIPATE IN TRANSIT DISCUSSIONS

▲ WORK TOGETHER AND WITH OTHER STAKEHOLDERS TO IDENTIFY FUNDING FOR TRANSIT

Roanoke Valley Transportation Planning Organization

▲ COORDINATE REGIONAL TRANSIT PLANNING

▲ PROMOTE AND COORDINATE INTERCONNECTING MODES AT A REGIONAL LEVEL

▲ PROMOTE REGIONAL COOPERATION AMONG LOCALITIES

▲ PROGRAM AND APPROVE THE USE OF FEDERAL FUNDS FOR TRANSIT PURPOSES

▲ WORK WITH LOCAL GOVERNMENTS TO PROVIDE GUIDELINES FOR DENSITY TO SUPPORT TRANSIT AND HOW TO ZONE TO CREATE A WALKABLE ENVIRONMENT

▲ PROVIDE FUNDING FOR TRANSIT SERVICES

Transit Agencies

▲ PROVIDE TRANSIT SERVICES APPROPRIATE TO THE LOCATIONS AND TIMES DESIRED; LOCATE WHERE PEOPLE ARE LOCATED

▲ CONNECT RURAL AREAS AND URBAN AREAS BETTER

▲ EXPAND SCHEDULE, INCREASE STOPS

▲ PROVIDE BUS STOP AMENITIES SUCH AS AN INVITING TRANSIT HUB, BENCHES AND SHELTERS, A PLACE TO WAIT

▲ COMMUNICATE TRAVEL INFORMATION TO CITIZENS

▲ TEACH PEOPLE HOW TO USE TRANSIT

▲ PROMOTE TRANSIT USE

RideSolutions

▲ COMMUNICATE TRANSIT AND OTHER ALTERNATIVE OPTIONS TO CITIZENS

▲ ASSIST WITH PROMOTING TRANSIT IN THE VALLEY

▲ SHARE/RIDE STOPS AT PLACES WHERE TRANSIT TAKES OFF

▲ INCREASED EDUCATION AND OUTREACH.

Citizens

▲ RIDE TRANSIT, IT IS FOR EVERYONE

▲ WALK/ROLL TO DESTINATIONS, BUS STOPS

▲ VIEW TRANSIT LIKE OTHER BASIC COMMUNITY INFRASTRUCTURE OR UTILITY

▲ ENCOURAGE MORE MONEY FOR TRANSIT FROM FEDERAL, STATE AND LOCAL GOVERNMENTS

▲ NEIGHBORHOOD GROUPS AND BUSINESS ASSOCIATIONS NEED TO SUPPORT/FUND/COMMUNICATE TRANSIT

▲ PRESSURE OFFICIALS TO SEE THE VIRTUE IN TRANSIT

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Businesses

▲ ESTABLISH POLICIES THAT ENCOURAGE EMPLOYEES TO USE TRANSIT

▲ PROMOTE EXISTING AND CREATE NEW TRANSIT INCENTIVES AMONG EMPLOYEES;

▲ PROVIDE STIPENDS FOR EMPLOYEES

▲ SCHEDULING AROUND LIFESTYLES, BUS SCHEDULES

▲ LOCATE WHERE TRANSIT IS PROVIDED OR PLANNED

▲ PARTICIPATE IN PLANNING HOW TO GET EMPLOYEES TO WORK

▲ PARTICIPATE IN PLANNING HOW TO GET EMPLOYEES FROM THE NEAREST BUS STOP TO WORK

▲ PROVIDE A SAFE WAY TO GET FROM BUS STOPS TO THE BUSINESS'S FRONT DOOR

▲ ADOPT A BUS STOP

▲ PROVIDE FUNDING FOR TRANSIT SERVICES

In addition to these roles and responsibilities, the Summary Matrix of Strategies, Roles, and Performance Measures in Section 8.0 identifies responsible parties for accomplishing particular strategies.

5.0 STRATEGY OUTPUTS

By working on the implementation strategies, the responsible parties aim to generate the following outputs:

Economic Outputs:

▲ NECESSARY FUNDING IS SECURED TO ACCOMPLISH DESIRED INVESTMENTS IN TRANSIT SERVICES, FACILITIES, AND AMENITIES.

▲ TRANSIT SERVICES ARE WELL COORDINATED AND CONNECT PEOPLE TO THEIR JOBS, SHOPPING CENTERS, AND ESSENTIAL SERVICES.

▲ TRANSIT SERVICES PROVIDE ACCESS TO COLLEGES, HIGH SCHOOLS, TECHNICAL SCHOOLS AND SPECIAL EVENTS.

▲ AN INEXPENSIVE WAY TO EASILY MOVE AROUND THE ROANOKE VALLEY IS AVAILABLE TO CITIZENS.

▲ ALL NEW DEVELOPMENTS IN THE REGION ARE REVIEWED FOR TRANSIT ACCESSIBILITY AND WHERE TRANSIT IS NEEDED, DEVELOPMENT PLANS ARE DESIGNED WITH PEDESTRIAN AND TRANSIT INFRASTRUCTURE TO SUPPORT TRANSIT USE.

Health Outputs:

▲ MORE TRIPS ARE TAKEN ON TRANSIT.

▲ VEHICLE EMISSIONS ARE REDUCED.

▲ MORE PEOPLE ARE EXERCISING AS A NATURAL PART OF THEIR DAY BY WALKING, BIKING AND USING TRANSIT.

▲ SUFFICIENT FUNDING IS PROVIDED TO SUPPORT DESIRED TRANSIT SERVICES.

▲ TRANSIT SERVICES ARE PLANNED AND IMPLEMENTED THAT CONNECT CITIZENS WITH DESTINATIONS THAT PROMOTE GOOD HEALTH.

▲ PROJECTS FOR NEW BIKING AND WALKING INFRASTRUCTURE INCORPORATE ACCESS TO TRANSIT AND RELATED INFRASTRUCTURE.

▲ CITIZENS ARE KNOWLEDGEABLE ABOUT HOW TO USE TRANSIT SERVICES AVAILABLE TO THEM.

▲ PEOPLE OF ALL AGES, CULTURES, ABILITIES, AND INCOME LEVELS USE TRANSIT.

Environmental Outputs:

▲ TRANSIT SERVICES ARE AVAILABLE.

▲ TRANSIT SERVICES ARE INCREASING WHERE NEEDED.

▲ POLICIES AND INVESTMENT PRACTICES THAT FAVOR PEOPLE MOVEMENT (THROUGH TRANSIT, WALKING, AND BIKING) OVER CAR MOVEMENT.

▲ ADAPT LAND USE AND ZONING CODES TO SPUR DENSE LAND DEVELOPMENTS AND REDEVELOPMENTS WHICH ARE DESIGNED PRIMARILY FOR WALKING, BIKING, AND TRANSIT MOBILITY AND SECONDLY FOR PERSONAL VEHICLES.

▲ MORE FUNDS ARE APPLIED TO IMPROVE NON-FOSSIL FUEL MOBILITY.

▲ POLICIES AND INVESTMENT PRACTICES THAT SUPPORT AND PROMOTE NON FOSSIL FUEL-POWERED MOBILITY.

▲ INVEST IN NON FOSSIL FUEL-POWERED TRANSIT VEHICLES.

▲ ADAPT ZONING CODES TO ENABLE ALL TYPES OF DEVELOPMENTS ON SMALLER LAND PARCELS, FACILITATE MORE BUILDINGS, HOMES, AND UNITS IN CLOSE PROXIMITY,

ENCOURAGE TALLER BUILDINGS, AND REDUCE MINIMUM AND MAXIMUM PARKING REQUIREMENTS.

▲ LOCATE IN EXISTING AVAILABLE SPACES RATHER THAN SEEKING NEW SPACE ON UNDEVELOPED RURAL LAND.

▲ ZONING ORDINANCES ARE MODIFIED TO REFLECT LESS NEED FOR PARKING.

▲ BUS PULL-OFF SPACE AT BUS STOPS IS RESERVED FOR BUSES TO PULL UP TO THE STOP AND ENABLE ADA ACCESSIBLE RIDER PICK-UP/DROP-OFF.

▲ DEVELOPMENTS ARE STEERED TOWARDS URBAN LOCATIONS THAT ARE EASILY ACCESSIBLE BY TRANSIT.

▲ DEVELOPMENT DENSITY INCREASES IN THE URBAN AREA.

Safety Outputs:

▲ SECURITY MEASURES ARE IMPLEMENTED THAT CONTRIBUTE TO THE SAFETY OF THE SYSTEM.

▲ ADDITIONAL SECURITY CAPITAL IMPROVEMENTS ARE MADE.

▲ TRANSIT STOPS AND TRANSFER FACILITIES ARE ADA COMPLIANT AND PROVIDE THE SPACE NEEDED TO MOVE AROUND COMFORTABLY.

▲ PEDESTRIAN INFRASTRUCTURE EXISTS WITHIN ½ MILE OF BUS STOPS TO ENABLE SAFE ACCESS.

▲ MORE BUS STOPS FEATURE BUS SHELTERS, BENCHES, LIGHTING, BUS ROUTE AND SCHEDULE INFORMATION, ETC.

Mobility Outputs:

▲ CONNECTIONS EXIST FOR PEOPLE TO TRANSFER EASILY FROM ONE MODE OF TRAVEL TO ANOTHER.

▲ PEDESTRIAN ACCOMMODATIONS ARE ROUTINELY BUILT AS PART OF NEW DEVELOPMENTS.

▲ TRANSIT-SUPPORTIVE PEDESTRIAN AND BIKING INFRASTRUCTURE IS FUNDED.

▲ TRANSIT FACILITIES ARE ATTRACTIVE, INVITING AND EASY TO USE FOR RESIDENTS AND VISITORS.

▲ PEDESTRIAN AND BIKING INFRASTRUCTURE EXISTS FOR PEOPLE TO WALK OR BIKE SAFELY FROM TRANSIT TO NEARBY DESTINATIONS.

▲ PROJECTS ARE CONTINUOUSLY PURSUED TO IMPROVE THE WAITING AREA AT BUS STOPS.

▲ BUSINESSES "ADOPT A STOP" PROVIDING NECESSARY INFRASTRUCTURE.

▲ NEW DEVELOPMENTS ARE BUILT WITH TRANSIT SUPPORTIVE-INFRASTRUCTURE SUCH AS SIDEWALKS, BUS STOP WAITING AREAS, SHELTERS, AND BENCHES.

▲ MORE LOCAL BUSINESSES AND GOVERNMENTS REGULARLY PROMOTE TRANSIT USE AMONG THEIR EMPLOYEES.

▲ ACTIVITY DENSITY INCREASES IN MULTIMODAL CENTERS AND DISTRICTS.

▲ MORE ROANOKE VALLEY CITIZENS LIVE AND WORK IN MULTIMODAL ENVIRONMENTS WITH CHOICES FOR MOBILITY.

▲ TRANSIT SIGNAL PRIORITIZATION IS INSTALLED ALONG TRANSIT CORRIDORS, PARTICULARLY THOSE WITH TRAFFIC CONGESTION.

▲ PARKING IS NOT LOCATED NEXT TO BUS STOPS ENABLING BUSES TO PULL UP TO THE STOP FOR ACCESSIBLE PASSENGER LOADING.

▲ MINIMUM AND MAXIMUM PARKING REQUIREMENTS ARE MINIMIZED IN DEVELOPMENT STANDARDS WHERE TRANSIT ACCESS IS AVAILABLE.

▲ BUILDINGS, RATHER THAN PARKING LOTS, ARE LOCATED NEAR THE STREET TO FACILITATE EASY TRANSIT ACCESS.

From these outputs, the ultimate desired results are accomplished and are listed in the following section regarding outcomes.

6.0 COMMUNITY OUTCOMES

By embracing transit as a tool for accomplishing the previously-mentioned goals and the greater goals of Livable Roanoke Valley, the community aims to realize the following outcomes.

Economic Outcomes:

▲ ROANOKE VALLEY RESIDENTS HAVE THE TRANSIT SERVICES NEEDED TO ACCESS WORK, SHOPPING, SERVICES, EDUCATION, AND SPECIAL EVENTS THUS CONTRIBUTING TO THE ECONOMIC VITALITY OF THE REGION.

▲ CONVENIENT TRANSIT SERVICES ARE VIEWED BY PROSPECTIVE BUSINESSES AS AN ASSET AND HELP ATTRACT NEW JOBS TO THE REGION.

▲ LIMITED TRANSPORTATION FUNDS ARE USED TO MOVE MORE PEOPLE EFFICIENTLY AND COST-EFFECTIVELY.

▲ PEOPLE ARE ABLE TO AVOID THE NEED TO OWN A PERSONAL VEHICLE AND TO SAVE MONEY ON TRANSPORTATION EXPENSES BY TAKING TRANSIT.

▲ ECONOMIC DEVELOPMENT INCREASES AS PEOPLE ARE ABLE TO ACCESS DESTINATIONS.

▲ MORE DESTINATIONS IN THE REGION ARE EASILY ACCESSIBLE BY PUBLIC TRANSPORTATION.

Health Outcomes:

▲ HEALTHIER ROANOKE VALLEY RESIDENTS AND EMPLOYEES.

▲ CITIZENS ARE ABLE TO USE TRANSIT TO ACCESS FACILITIES THAT IMPROVE THEIR HEALTH.

▲ TRANSIT ENABLES EASY MOBILITY AND REDUCED STRESS.

▲ MORE PEOPLE ARE ABLE TO LIVE HEALTHY ACTIVE LIFESTYLES USING TRANSIT AND NON-MOTORIZED TRANSPORTATION.

▲ MORE PEOPLE FEEL COMFORTABLE RIDING TRANSIT AND FIXED-ROUTE TRANSIT IN PARTICULAR.

▲ PEOPLE OF ALL AGES, CULTURES, ABILITIES, AND INCOME LEVELS HAVE A GREATER APPRECIATION FOR OTHER PEOPLE PROMOTING FEELINGS OF UNDERSTANDING AND ACCEPTANCE.

Environmental Outcomes:

▲ DUE TO ITS CONVENIENCE, MORE PEOPLE CHOOSE TRANSIT FOR TRAVELING RATHER THAN DRIVING.

▲ AIR REMAINS CLEAN AND IN ATTAINMENT OF FEDERAL AIR QUALITY STANDARDS.

▲ TRANSIT IS A PRACTICAL OPTION FOR TRIP-MAKING THUS EMISSIONS ARE REDUCED BECAUSE MORE PEOPLE CHOOSE TO TRAVEL WITHOUT A PERSONAL CAR.

▲ TRANSIT VEHICLES IN THE ROANOKE VALLEY OPERATE ON NON FOSSIL-FUEL ENERGY SOURCES.

▲ LAND USES ARE CLOSELY INTEGRATED SO THAT ACCOMPLISHING DAILY TASKS ARE NOT DEPENDENT ON PERSONAL VEHICLE MOBILITY.

▲ EXISTING DISTURBED LAND IS BETTER UTILIZED TO ACCOMMODATE FUTURE RESIDENTIAL AND BUSINESS NEEDS.

▲ MORE BUSINESSES AND RESIDENTIAL AREAS ARE IN CLOSE PROXIMITY ALLOWING MORE PEOPLE TO EFFICIENTLY ACCOMPLISH THEIR DAILY ACTIVITIES.

▲ THE NATURAL ENVIRONMENT REMAINS UNDISTURBED.

▲ THE NEED FOR IMPERVIOUS SURFACES CREATED BY PARKING LOTS AND ROADS IS MINIMIZED.

▲ MORE TRIPS ARE ACCOMPLISHED VIA TRANSIT, CARPOOL, WALK, BIKE, ETC.

▲ RIDING TRANSIT IS ADA ACCESSIBLE AND CONVENIENT BECAUSE RIDERS ARE ABLE TO EASILY GET ON AND OFF OF THE BUS.

▲ LAND CONSUMPTION BY INDIVIDUAL BUSINESSES IS MINIMIZED.

▲ NATURAL RESOURCES AND TREES ARE PRESERVED AS DEVELOPMENTS OCCUR IN PREVIOUSLY DISTURBED OR INTENTIONALLY PLANNED NEW DEVELOPMENT AREAS.

▲ BUILDINGS ARE LOCATED CLOSE TO EACH OTHER AND CLOSE TO THE STREET.

▲ MORE BUSINESSES AND RESIDENCES ARE EASILY ACCESSED BY TRANSIT.

Safety Outcomes:

▲ CITIZENS FEEL COMFORTABLE AND SAFE RIDING TRANSIT THROUGHOUT THE ROANOKE VALLEY.

▲ FIXED-ROUTE RIDERSHIP INCREASES.

▲ CITIZENS WITH DISABILITIES ARE ABLE TO ACCESS AND USE FIXED-ROUTE TRANSIT.

▲ DECREASE IN PARATRANSIT COST AND USE.

▲ BUS STOPS ARE DIGNIFIED AND COMFORTABLE PLACES TO WAIT.

▲ BUS STOPS PROVIDE THE ROUTE INFORMATION NEEDED TO EASILY USE TRANSIT.

Mobility Outcomes:

▲ CITIZENS ARE ABLE TO ACCESS THE AIRPORT, PASSENGER RAIL, AND INTERCITY BUS SERVICES EASILY VIA LOCAL TRANSIT.

▲ UPON ARRIVING IN THE ROANOKE VALLEY BY PLANE, TRAIN, OR INTERCITY BUS CITIZENS ARE ABLE TO ACCESS LOCAL AND REGIONAL DESTINATIONS EASILY VIA TRANSIT.

▲ ROANOKE VALLEY CITIZENS ARE ABLE TO SAFELY WALK TO ACCESS NEARBY TRANSIT.

▲ RESIDENTS AND VISITORS HAVE A PLEASANT EXPERIENCE USING REGIONAL TRANSIT FACILITIES.

▲ MORE CITIZENS FEEL COMFORTABLE USING TRANSIT BECAUSE OF THE EASE OF ACCESS TO/FROM THEIR DESTINATIONS.

▲ FIXED-ROUTE RIDERSHIP INCREASES.

▲ DIGNIFIED AND COMFORTABLE WAITING PLACES ARE AVAILABLE FOR CITIZENS TO ACCESS TRANSIT MAKING TRANSIT A MORE APPEALING OPTION FOR MORE PEOPLE.

▲ USERS OF NEW DEVELOPMENTS FEEL COMFORTABLE USING TRANSIT.

▲ MORE PEOPLE USE TRANSIT TO ACCESS WORK.

▲ LESS PERSONAL VEHICLES ON ROADWAYS CREATES MORE OPPORTUNITY FOR MOBILITY AND GROWTH WITHIN THE EXISTING TRANSPORTATION SYSTEM.

▲ ROANOKE VALLEY CITIZENS CHOOSE TRANSIT, WALKING, AND BIKING FOR MORE TRIPS.

▲ TRANSIT IS ABLE TO MOVE MANY PEOPLE EFFICIENTLY FROM ONE PLACE TO ANOTHER WHILE MINIMIZING DELAY DUE TO TRAFFIC SIGNALS AND TRAFFIC CONGESTION.

▲ PASSENGERS ARE ABLE TO BOARD BUSES FROM BUS STOPS.

▲ LAND CONSUMPTION DUE TO THE NEED FOR PARKING IS REDUCED BECAUSE OF THE AVAILABILITY OF TRANSIT.

▲ USING TRANSIT TO REACH DESTINATIONS ALONG TRANSIT ROUTES IS MORE ATTRACTIVE BECAUSE BUILDINGS ARE CLOSER TO TRANSIT.

7.0 PERFORMANCE MEASURES

Increased emphasis is being placed on tracking progress, identifying work being done to accomplish goals, and evaluating how well those goals are being met. This desire to better understand how well the region is progressing towards its vision plays itself out in the form of performance measures, which are tied directly to individual strategies and outputs. The following performance measures are recommended to assess how well the region is accomplishing its transit vision.

Economic Performance Measures:

▲ PERCENT OF FUNDED VS. UNFUNDED TRANSIT SERVICES OUTLINED IN THE TRANSIT DEVELOPMENT PLANS.

▲ AMOUNT OF STATE AND FEDERAL DOLLARS LEVERAGED THROUGH LOCAL FUNDS.

▲ ANNUAL VEHICLE REVENUE MILES.

▲ NUMBER OF NEW DEVELOPMENTS WITH PEDESTRIAN INFRASTRUCTURE.

Health Performance Measures:

▲ ANNUAL UNLINKED PASSENGER TRANSIT TRIPS.

▲ ANNUAL PASSENGER MILES TRAVELED.

▲ PERCENT OF FUNDED VS. UNFUNDED TRANSIT SERVICES OUTLINED IN THE TRANSIT DEVELOPMENT PLANS.

▲ PERCENT OF SUPERMARKETS, HEALTHCARE FACILITIES, CULTURAL INSTITUTIONS, AND PUBLIC RECREATION FACILITIES IN THE ROANOKE VALLEY TPO URBANIZED AREA WITHIN ¼ MILE OF TRANSIT.

▲ NUMBER OF PUBLIC TRANSIT STOPS CONNECTED TO A PUBLIC WALKWAY.

▲ RIDER SATISFACTION AND PUBLIC PERCEPTION SURVEYS CONDUCTED EVERY THREE YEARS.

Environmental Performance Measures:

▲ PERCENT OF RECOMMENDED TRANSIT SERVICES IN THE TRANSIT DEVELOPMENT PLANS THAT HAVE BEEN SATISFIED.

▲ ANNUAL NUMBER OF DAYS WHEN OZONE LEVELS WERE ABOVE THE 8-HOUR STANDARD.

▲ ANNUAL PASSENGER MILES TRAVELED.

▲ ANNUAL UNLINKED PASSENGER TRANSIT TRIPS.

▲ PERCENT OF VEHICLES IN THE TRANSIT FLEET THAT DO NOT RELY ON FOSSIL FUELS FOR PROPULSION.

▲ PERCENT CHANGE IN ACTIVITY DENSITY IN THE URBANIZED AREA.

▲ NUMBER OF ADA ACCESSIBLE PUBLIC TRANSIT STOPS.

▲ PERCENT OF THE ROANOKE VALLEY URBANIZED AREA THAT IS INCLUDED IN AN URBAN DEVELOPMENT AREA (UDA).

Safety Performance Measures:

▲ RIDER SATISFACTION AND PUBLIC PERCEPTION SURVEYS CONDUCTED EVERY THREE YEARS.

▲ ANNUAL UNLINKED PASSENGER TRANSIT TRIPS.

▲ NUMBER OF ADA ACCESSIBLE PUBLIC TRANSIT STOPS.

▲ NUMBER OF PUBLIC TRANSIT STOPS WITH NEARBY LIGHTING.

▲ PERCENT OF POPULATION AND EMPLOYMENT IN MULTIMODAL CENTERS AND DISTRICTS WITHIN 1/8 MILE OF SIDEWALKS.

▲ NUMBER OF BUS STOPS WITH SHELTERS, BENCHES, LIGHTING, AND TRAVEL INFORMATION.

Mobility Performance Measures:

▲ NUMBER OF REGIONAL AND LOCAL TRANSIT CONNECTIONS TO THE ROANOKE-BLACKSBURG REGIONAL AIRPORT AND INTERCITY BUS SERVICES.

▲ NUMBER OF REGIONAL AND LOCAL TRANSIT CONNECTIONS AVAILABLE WITHIN 1/8 MILE AND 30 MINUTES OF DEPARTING/ ARRIVING AMTRAK TRAINS.

▲ NUMBER OF MUNICIPALITIES IN THE ROANOKE VALLEY TPO URBANIZED AREA THAT REQUIRE NEW DEVELOPMENTS TO PROVIDE PEDESTRIAN CONNECTIONS TO CURRENT OR PLANNED TRANSIT STOPS WITHIN ¼ MILE.

▲ PERCENT OF PROJECTS IN THE TRANSPORTATION IMPROVEMENT PROGRAM THAT INCLUDE TRANSIT-SUPPORTIVE INFRASTRUCTURE.

▲ PERCENT OF NEW PEDESTRIAN INFRASTRUCTURE BUILT WITHIN ¼ MILE OF A TRANSIT STOP.

▲ PERCENT OF NEW BIKING INFRASTRUCTURE BUILT TO CONNECT TRANSIT STOPS WITH DESTINATIONS WITHIN THREE MILES.

▲ RIDER SATISFACTION AND PUBLIC PARTICIPATION SURVEYS CONDUCTED EVERY THREE YEARS.

▲ PERCENT OF PARCELS WITHIN ¼ MILE OF TRANSIT STOPS CONNECTED TO THE STOP BY A PEDESTRIAN ACCOMMODATION.

▲ PERCENT OF PARCELS WITHIN THREE MILES OF TRANSIT STOPS CONNECTED TO THE STOP BY A BIKING ACCOMMODATION.

▲ NUMBER OF BUS STOPS WITH SHELTERS, BENCHES, LIGHTING, AND TRAVEL INFORMATION.

▲ NUMBER OF MUNICIPALITIES IN ROANOKE VALLEY TPO URBANIZED AREA THAT REQUIRE OR INCENTIVIZE NEW DEVELOPMENTS THAT ABUT A TRANSIT STOP TO INCORPORATE TRANSIT STOP AMENITIES INTO THE SITE PLAN.

▲ RIDERSHIP / ACTIVITY INDEX AT TRANSIT STOPS BEFORE AND AFTER TRANSIT AMENITIES ARE INSTALLED.

▲ NUMBER OF EMPLOYERS IN THE ROANOKE VALLEY TPO URBANIZED AREA WHO PROVIDE A TRANSIT BENEFIT TO THEIR EMPLOYEES.

▲ PERCENT OF POPULATION AND OF EMPLOYMENT IN THE ROANOKE VALLEY TPO URBANIZED AREA WITHIN ¼ MILE OF TRANSIT.

▲ NUMBER OF VALLEY METRO / RIDESOLUTIONS OUTREACH EVENTS OR EMPLOYER VISITS TO PROMOTE AWARENESS OF TRANSIT OPTIONS.

▲ NUMBER OF MUNICIPALITIES IN THE ROANOKE VALLEY TPO URBANIZED AREA THAT REQUIRE OR INCENTIVIZE CRITICAL

GOVERNMENT SERVICES TO BE LOCATED WITHIN ¼ MILE OF TRANSIT.

▲ PERCENT OF ROANOKE VALLEY TPO URBANIZED AREA INCLUDED IN AN URBAN DEVELOPMENT AREA.

▲ PERCENT INCREASE IN ACTIVITY DENSITY IN THE ROANOKE VALLEY TPO URBANIZED AREA.

▲ NUMBER OF INTERSECTIONS THAT INCLUDE TRANSIT SIGNAL PRIORITY TECHNOLOGY.

▲ ON-TIME PERFORMANCE OF TRANSIT ROUTES.

▲ NUMBER OF LOCAL GOVERNMENTS WITH PARKING POLICIES AND DEVELOPMENT STANDARDS THAT SUPPORT TRANSIT.

8.0 SUMMARY MATRIX OF STRATEGIES, ROLES, AND PERFORMANCE MEASURES

The following matrices relate the previously-mentioned strategies, responsible parties, outputs, outcomes, and performance measures to clearly explain how one leads to another and how the strategy's impact will be tracked over time.

GOAL #1: CAPITALIZE ON THE COMMUNITY'S INVESTMENT IN TRANSIT TO ENRICH THE ECONOMY OF THE ROANOKE VALLEY

	Strategies	Responsible Parties	Strategy Outputs	Community Outcomes	Performance Measures
1	Provide regional and local funding to leverage available state and federal funds for transit.	• RVTPO • Local governments • Local business partners	• Necessary funding is secured to accomplish desired investments in transit services, facilities, and amenities.	• Roanoke Valley residents have the transit services needed to access work, shopping, services, education, and special events thus contributing to the economic vitality of the region. • Convenient transit services are viewed by prospective businesses as an asset and help attract new jobs to the region. • Limited transportation funds are used to move more people efficiently and cost-effectively.	• Percent of funded vs. unfunded transit services outlined in the Transit Development Plans. • Amount of State and Federal dollars leveraged through local funds.
2	Provide reliable and convenient transit services that connect major employment destinations, shopping centers, essential services, colleges, high schools, technical schools and	• Valley Metro • RADAR • Other transit providers • Public-private partnerships	• Transit services are well coordinated and connect people to their jobs, shopping centers, and essential services. • Transit services provide access to colleges, high schools, technical schools and special events. • An inexpensive way to	• People have the transit services needed to access work, shopping, services, education, and special events thus contributing to the economic vitality of the region. • People are able to avoid the need to own a personal vehicle and to save money on transportation expenses by taking transit.	• Percent of funded vs. unfunded transit services outlined in the Transit Development Plans. • Annual Vehicle Revenue Miles.

	Strategies	Responsible Parties	Strategy Outputs	Community Outcomes	Performance Measures
	special events.		easily move around the Roanoke Valley is available to citizens.	• Economic development increases as people are able to access destinations. • Convenient transit services are viewed by prospective businesses as an asset and help attract new jobs to the region.	
3	Create destinations that support public transportation.	• Local governments	• All new developments in the region are reviewed for transit accessibility and where transit is needed, development plans are designed with pedestrian and transit infrastructure to support transit use.	• More destinations in the region are easily accessible by public transportation.	• Number of new developments with pedestrian infrastructure.

GOAL #2: UTILIZE TRANSIT TO SUPPORT PEOPLE'S ABILITY TO LIVE HEALTHY LIFESTYLES

	Strategies	Responsible Parties	Outputs	Outcomes	Performance Measures
1	Use transit whenever possible instead of driving.	Roanoke Valley residents and employees	• More trips are taken on transit. • Vehicle emissions are reduced. • More people are exercising as a natural part of their day by walking and using transit.	• Healthier Roanoke Valley residents and employees	• Annual Unlinked Passenger Transit Trips. • Annual Passenger Miles Traveled.
2	Fund transit services to enable Roanoke Valley residents to access healthcare facilities, healthy food, wellness, exercise, recreation, and cultural locations.	• FTA • CTB/DRPT • RVTPO • Local governments	• Sufficient funding is provided to support desired transit services.	• Citizens are able to use transit to access facilities that improve their health.	• Percent of funded vs. unfunded transit services outlined in the Transit Development Plans.
3	Provide Roanoke Valley residents with transit services to healthcare facilities, healthy food, wellness, exercise, recreation, and cultural locations.	• Valley Metro • RADAR • Other transit providers	• Transit services are planned and implemented that connect citizens with destinations that promote good health.	• Citizens are able to use transit to access facilities that improve their health. • Transit enables easy mobility which reduces stress.	• Percent of supermarkets, healthcare facilities, cultural institutions, and public recreation facilities in the Roanoke Valley TPO urbanized area within ¼ mile of transit.
4	Coordinate bicycle and pedestrian infrastructure	• Local governments (Transportation and	• Projects for new biking and walking infrastructure	• More people are able to live healthy active lifestyles using transit and non-motorized transportation.	• Number of public transit stops connected to a public

	Strategies	Responsible Parties	Outputs	Outcomes	Performance Measures
	investments with transit.	Planning staff) • Valley Metro • RVTPO staff	incorporate access to transit and related infrastructure.		walkway.
5	Educate citizens about available transit services.	• Valley Metro • RideSolutions	• Citizens are knowledgeable about how to use transit services available to them.	• More people feel comfortable riding transit and fixed-route transit in particular.	• Rider satisfaction and public perception surveys conducted every three years.
6	Encourage the use of transit by people of all ages, cultures, abilities, and income levels.	• Local governments • RVTPO • RideSolutions • Valley Metro • RADAR • Roanoke Valley residents	• People of all ages, cultures, abilities, and income levels use transit.	• People of all ages, cultures, abilities, and income levels have a greater appreciation for other people promoting feelings of understanding and acceptance.	• Rider satisfaction and public perception surveys conducted every three years.

GOAL #3: SUSTAIN THE ROANOKE VALLEY'S NATURAL ENVIRONMENT BY EMBRACING TRANSIT ON A PERSONAL AND COMMUNITY LEVEL

	Strategies	Responsible Parties	Outputs	Outcomes	Performance Measures
1	Fund transit services on an incremental basis until desired service levels are met.	• Funding Partners (RVTPO, local governments, CTB/DRPT, FTA, others)	• Transit services are available. • Transit services are increasing where needed.	• Due to its convenience, more people choose transit for traveling rather than driving. • Air remains clean and in attainment of federal air quality standards.	• Percent of recommended transit services in the Transit Development Plans that have been satisfied.
2	Using transit to accomplish more trips, reduce emissions in the Roanoke Valley TPO urbanized area.	• Citizens • Local Governments • RVTPO	• Policies and investment practices that favor people movement (through transit, walking, and biking) over car movement. • Adapt land use and zoning codes to spur dense land developments and redevelopments which are designed primarily for walking, biking, and transit mobility and secondly for personal vehicles. • More funds are applied to improve non-fossil fuel mobility.	• Transit is a practical option for trip-making thus emissions are reduced because more people choose to travel without a personal car.	• Annual Number of Days when Ozone Levels Were Above the 8-Hour Standard. • Annual Passenger Miles Traveled. • Annual Unlinked Passenger Transit Trips.
3	Reduce emissions by transit vehicles in the Roanoke Valley TPO urbanized area.	• RVTPO • Local governments	• Policies and investment practices that support and promote non fossil fuel-powered mobility. • Invest in non fossil fuel-powered transit vehicles.	• Transit vehicles in the Roanoke Valley operate on non fossil-fuel energy sources. • Land uses are closely integrated so that accomplishing daily tasks are not dependent on personal vehicle mobility.	• Percent of vehicles in the transit fleet that do not rely on fossil fuels for propulsion.

	Strategies	Responsible Parties	Outputs	Outcomes	Performance Measures
4	Support land developments that minimize land consumption, maximize in-fill development and redevelopment, and maximize Transit-Oriented Development (TOD)	• Local governments (Planning, Zoning, and Development Review) • Businesses • Citizens	• Adapt zoning codes to enable all types of developments on smaller land parcels, facilitate more buildings, homes, and units in close proximity, encourage taller buildings, and reduce minimum and maximum parking requirements. • Locate in existing available spaces rather than seeking new space on undeveloped rural land.	• Existing disturbed land is better utilized to accommodate future residential and business needs. • More businesses and residential areas are in close proximity allowing more people to efficiently accomplish their daily activities. • The natural environment remains undisturbed.	• Percent change in activity density in the urbanized area.
5	Reduce minimum and maximum parking requirements.	• Local governments (Traffic engineering, Zoning and Development Review, VDOT, developers)	• Zoning ordinances are modified to reflect less need for parking.	• The need for impervious surfaces created by parking lots and roads is minimized. • More trips are accomplished via transit, carpool, walk, bike, etc.	• Annual Unlinked Passenger Transit Trips
6	Maximize available on-street space for parking while leaving adequate space available at bus stops for bus pull-offs.	• Local governments (Traffic engineering)	• Bus pull-off space at bus stops is reserved for buses to pull up to the stop and enable ADA accessible rider pick-up/drop-off.	• Riding transit is ADA accessible and convenient because riders are able to easily get on and off of the bus.	• Number of ADA accessible public transit stops.
7	Urban development areas (UDAs) are identified and implemented with	• Local Governments • Businesses • Developers	• Developments are steered towards urban locations that are easily accessible by transit.	• Land consumption by individual businesses is minimized. • Natural resources and trees are preserved as developments occur in	• Percent of the Roanoke Valley urbanized area that is included in an Urban

Strategies	Responsible Parties	Outputs	Outcomes	Performance Measures
densities that support transit use.		• Development density increases in the urban area.	previously disturbed or intentionally planned new development areas. • Buildings are located close to each other and close to the street. • More businesses and residences are easily accessed by transit.	Development Area (UDA).

GOAL #4: PROVIDE INFRASTRUCTURE TO SUPPORT PEOPLE'S ABILITY TO SAFELY USE TRANSIT

	Strategies	Responsible Parties	Outputs	Outcomes	Performance Measures
1	Incorporate and maintain security measures and technology throughout the transit system.	• Valley Metro • RADAR	• Security measures are implemented that contribute to the safety of the system. • Additional security capital improvements are made.	• Citizens feel comfortable and safe riding transit throughout the Roanoke Valley. • Fixed-route ridership increases.	• Rider satisfaction and public perception surveys conducted every three years. • Annual unlinked passenger transit trips.
2	Ensure all transit stops and transfer facilities at a minimum are ADA compliant and, where possible, provide extra room for passenger mobility.	• Valley Metro • RADAR • Local governments	• Transit stops and transfer facilities are ADA compliant and provide the space needed to move around comfortably.	• Citizens with disabilities are able to access and use fixed-route transit. • Citizens feel comfortable and safe riding transit throughout the Roanoke Valley. • Decrease in paratransit cost and use.	• Number of ADA accessible public transit stops. • Number of public transit stops with nearby lighting. • Rider and public perception survey conducted every three years.
3	Provide pedestrian connections to bus stops including but not limited to along streets, across streets, and within new developments to enable safe access to transit.	• Local governments (Transportation, Planning, Zoning, Development Review)	• Pedestrian infrastructure exists within ½ mile of bus stops to enable safe access.	• Citizens feel comfortable and safe riding transit throughout the Roanoke Valley. • Fixed-route ridership increases. • Decrease in paratransit cost and use.	• Rider and public perception survey conducted every three years. • Percent of population and employment in Multimodal Centers and Districts within 1/8 mile of sidewalks.
4	Improve bus stop amenities to provide a safe and comfortable environment during waits and inclement weather.	• Valley Metro • Public-private partnerships	• More bus stops feature bus shelters, benches, lighting, bus route and schedule information, etc.	• Bus stops are dignified and comfortable places to wait. • Bus stops provide the route information needed to easily use transit.	• Number of bus stops with shelters, benches, lighting, and travel information.

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

	Strategies	Responsible Parties	Outputs	Outcomes	Performance Measures
1	Coordinate local transit services with the airport, passenger rail, and intercity bus services to enable seamless transitions between these modes.	• Valley Metro • RADAR • City of Roanoke • AMTRAK • Greyhound • Megabus • Roanoke-Blacksburg Regional Airport • Other transit providers	• Connections exist for people to transfer easily from one mode of travel to another.	• Citizens are able to access the airport, passenger rail, and intercity bus services easily via local transit. • Upon arriving in the Roanoke Valley by plane, train, or intercity bus citizens are able to access local and regional destinations easily via transit.	• Number of regional and local transit connections to the Roanoke-Blacksburg Regional Airport and intercity bus services. • Number of regional and local transit connections available within 1/8 mile and 30 minutes of departing/ arriving AMTRAK trains.
2	Incorporate pedestrian connections to transit into new development standards and site plans to enable the connection with nearby or future transit services.	• Local governments (Zoning and Development Review)	• Pedestrian accommodations are routinely built as part of new developments.	• Roanoke Valley citizens are able to safely walk to access nearby transit.	• Number of municipalities in the Roanoke Valley TPO urbanized area that require new developments to provide pedestrian connections to current or planned transit stops within ¼ mile.
3	Fund pedestrian and biking infrastructure to support transit.	• Local governments • RVTPO • Valley Metro • CTB/DRPT	• Transit-supportive pedestrian and biking infrastructure is funded.	• Roanoke Valley citizens are able to safely walk and bike to access nearby transit.	• Percent of projects in the Transportation Improvement Program that include transit-supportive pedestrian or biking infrastructure. • Percent of new pedestrian infrastructure built

	Strategies	Responsible Parties	Outputs	Outcomes	Performance Measures
					within ¼ mile of a transit stop. • Percent of new biking infrastructure built to connect transit stops with destinations within three miles.
4	Invest in attractive, well-functioning transit facilities.	• FTA • CTB/DRPT • RVTPO • Local governments • Valley Metro • RADAR	• Transit facilities are attractive, inviting and easy to use for residents and visitors.	• Residents and visitors have a pleasant experience using regional transit facilities.	• Rider satisfaction and public perception surveys conducted every three years.
5	Provide pedestrian infrastructure to parcels within ¼ mile and biking infrastructure within three miles of transit stops.	• Local governments • VDOT	• Pedestrian and biking infrastructure exists for people to walk and bike safely from transit to nearby destinations.	• More citizens feel comfortable using transit because of the ease of access to/from their destinations. • Fixed-route ridership increases.	• Percent of parcels within ¼ mile of transit stops connected to the stop by a pedestrian accommodation. • Percent of parcels within three miles of transit stops connected to the stop by a biking accommodation.
6	Provide pedestrian amenities such as shelters, benches, lighting, and bus route and schedule information at transit stops.	• Valley Metro • Local businesses • Local governments	• Projects are continuously pursued to improve the waiting area at bus stops. • Businesses "adopt a stop" providing necessary infrastructure.	• Dignified and comfortable waiting places are available for citizens to access transit making transit a more appealing option for more people.	• Number of bus stops with shelters, benches, lighting, and travel information.
7	Incorporate transit amenities, such as bus shelters, benches, or transit information, into development	• Local governments (Planning and Zoning, Economic Development)	• New developments are built with transit supportive-infrastructure such as sidewalks, bus stop	• Users of new developments feel comfortable using transit.	• Number of municipalities in Roanoke Valley TPO urbanized area that require or incentivize

	Strategies	Responsible Parties	Outputs	Outcomes	Performance Measures
	standards for new developments that abut a transit route.	• Development community	waiting areas, shelters, and benches.		new developments that abut a transit stop to incorporate transit stop amenities into the site plan. • Ridership / Activity Index at transit stops before and after transit amenities are installed.
8	Establish policies, practices, and incentives that encourage employees to use transit.	• Local businesses • Local governments • RideSolutions • Valley Metro	• More local businesses and governments regularly promote transit use among their employees.	• More people use transit to access work. • Less personal vehicles on roadways creates more opportunity for mobility and growth within the existing transportation system.	• Number of employers in the Roanoke Valley TPO urbanized area who provide a transit benefit to their employees. • Percent of population and of employment in the Roanoke Valley TPO urbanized area within ¼ mile of transit. • Number of Valley Metro / RideSolutions outreach events or employer visits to promote awareness of transit options.
9	Adopt land use policies and land development codes that support mixed-use development with multimodal choices, infill development, and corridor access management policies.	• Local governments (Planning and Zoning)	• Activity density increases in Multimodal Centers and Districts. • More Roanoke Valley citizens live and work in multimodal environments with choices for mobility.	• Roanoke Valley citizens choose transit, walking, and biking for more trips.	• Number of municipalities in the Roanoke Valley TPO urbanized area that require or incentivize critical government services to be located within ¼ mile of transit. • Percent of Roanoke Valley TPO urbanized area included in an

	Strategies	Responsible Parties	Outputs	Outcomes	Performance Measures
					Urban Development Area. • Percent increase in activity density in the Roanoke Valley TPO urbanized area.
10	Prioritize transit movements on the roadway network by installing priority signalization on transit corridors.	• Local Governments • Virginia Department of Transportation	• Transit signal prioritization is installed along transit corridors, particularly those with traffic congestion.	• Transit is able to move many people efficiently from one place to another while minimizing delay due to traffic signals and traffic congestion.	• Number of intersections that include transit signal priority technology. • On-time performance of transit routes.
11	Develop parking policies and development standards that support transit.	• Local Governments	• Parking is not located next to bus stops enabling buses to pull up to the stop for accessible passenger loading. • Minimum and maximum parking requirements are minimized in development standards where transit access is available. • Buildings, rather than parking lots, are located near the street to facilitate easy transit access.	• Passengers are able to board buses from bus stops. • Land consumption due to the need for parking is reduced because of the availability of transit. • Using transit to reach destinations along transit routes is more attractive because buildings are closer to transit.	• Number of local governments with parking policies and development standards that support transit.

9.0 PROCEDURAL CHANGES

Valley Metro is a private, non-profit, public service organization wholly owned by the City of Roanoke. Primary funding sources include operating and capital grants from federal, state, and local governments including the Federal Transit Administration (FTA), the Virginia Department of Rail and Public Transportation, the City of Roanoke, the City of Salem, and the Town of Vinton. Additional sources of funding include fare box revenues, advertising revenues, and the sale of passes.[1]

In the future, if the Roanoke Valley's local governments decide to evaluate alternative organizational structures, a 2012 regional transit organization study by the New River Valley Planning District Commission and Blacksburg-Christiansburg-Montgomery Area Metropolitan Planning Organization provides guidance on several types of transit organizational structure (**Figure 9.0-1**).[2]

▲ **LOCAL GOVERNMENT JURISDICTION**:

VALLEY METRO IS CURRENTLY A LOCAL GOVERNMENT JURISDICTION OPERATION, WHICH IS AUTHORIZED TO ENTER INTO CONTRACTS AND AGREEMENTS TO PROVIDE PUBLIC TRANSPORTATION. HOWEVER, THIS DOES NOT PRECLUDE THE CITY OF ROANOKE AND VALLEY METRO FROM ENTERING INTO MEMORANDUMS OF UNDERSTANDING (MOUS) WITH ADDITIONAL FUNDING PARTNERS, SUCH AS SURROUNDING JURISDICTIONS.

▲ **TRANSPORTATION DISTRICT:**

VIRGINIA STATE CODE GIVES CITIES AND COUNTIES THE AUTHORITY TO CREATE A TRANSPORTATION DISTRICT,[3] WHICH IS MANAGED BY A COMMISSION APPOINTED BY THE GOVERNING BODY OF EACH CITY OR COUNTY IN THE DISTRICT. THE COMMISSION IS RESPONSIBLE FOR PREPARING THE TRANSPORTATION PLAN FOR THE DISTRICT, AND CAN PURCHASE OR LEASE TRANSPORTATION FACILITIES SPECIFIED IN THE PLAN. COSTS ARE ALLOCATED AMONG MEMBER GOVERNMENTS BASED ON A NUMBER OF FACTORS, INCLUDING FACILITIES LOCATION AND POPULATION. THE COMMISSION MAY ACCEPT LOANS AND GRANTS FROM BOTH THE FEDERAL GOVERNMENT AND THE COMMONWEALTH OF VIRGINIA, AND MAY ALSO ISSUES BONDS.

▲ **SERVICE DISTRICT:**

VIRGINIA STATE CODE ALSO GIVES LOCAL GOVERNMENTS THE AUTHORITY TO CREATE SERVICE DISTRICTS, 4 WHICH ARE GOVERNED BY A BOARD WITH RESPONSIBILITIES AGREED UPON BY PARTICIPATING JURISDICTIONS. UNLIKE TRANSPORTATION DISTRICT, SERVICE DISTRICTS CAN LEVY TAXES TO GENERATE REVENUES FOR SERVICES WITHIN THE DISTRICT.

▲ **REGIONAL TRANSIT AUTHORITY:**

A NEW REGIONAL TRANSIT AUTHORITY WOULD REQUIRE ENABLING LEGISLATION FROM THE COMMONWEALTH OF VIRGINIA. A RTA WOULD ACT AS A REGIONAL ENTITY, WITH PARTNERS FROM GOVERNMENT, UNIVERSITIES, AND OTHER STAKEHOLDERS. THE SIZE AND SCOPE OF THE

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[1] Valley Metro, Accessed at http://valleymetro.com/about.html

[2] "Regional Transit Organization Study," New River Valley Planning District Commission and Blacksburg-Christiansburg-Montgomery Area Metropolitan Planning Organization. April, 2012.

[3] The Transportation District Act of 1964 and the Virginia Code Chapters 15.2-4504-4526

[4] Virginia Code Chapters 15.2-2400-2403

AUTHORITY COULD BE MODELED AFTER THE CHARLOTTESVILLE-ALBEMARLE REGINOAL TRANSIT AUTHORITY AS OUTLINED IN §33.2-2801 OF THE CODE OF VIRGINIA.

THE NEW RIVER VALLEY PLANNING DISTRICT COMMISSION STUDY INCLUDED A GRID (**FIGURE 9.0-1**) TO HELP TRANSIT PROVIDERS COMPARE THE FOUR TYPES OF MODELS.

Figure 9.0-1 | Regional Transit Organization Models[5]

2011 Regional Transit Organization Analysis		Method of Operation			
Details Checklist		Local Operation	Transportation District	Service District	Regional Authority
Authority	Prepare a transportation plan	Yes	Yes	Yes	Yes
	Construct, acquire, maintain, or operate facilities	Yes	Yes	Yes	Yes
	Enter into agreements or leases	Yes	Yes	Yes	Yes
	Acquire land by Purchase, lease, gift, or condemnation	Yes	Yes	Yes	Yes
	Levy and collect transportation service tax	No	No	Yes	Yes
	Limited to Public Transportation	No	Yes	No	No
Composition	Local Government	Yes	Yes	Yes	Yes
	Any Two or More Localities	Yes	Yes	Yes	Yes
	University or College	Yes	No	No	Yes
	Community Organizations or Private Entities	Yes	No	No	Yes
Considerations	Enabling Legislation Required?	No	No	No	Yes
	Multijurisdictional Perspective?	No	Yes	Yes	Yes
	Require establishing a Commission (voting body)?	No	Yes	Yes	Yes

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[5] "Regional Transit Organization Study," New River Valley Planning District Commission and Blacksburg-Christiansburg-Montgomery Area Metropolitan Planning Organization. April, 2012.

10.0 MARKETING AND BRANDING STRATEGIES

An easy-to-understand unified marketing and branding program is a vital part of a transit agency's public face. Not only does it raise awareness and promote the use of services, it also provides a consistent pathway through which transit users and the community can learn about - and learn to trust – the agency. This program should be developed in cooperation with regional transportation demand management (TDM) programs, and should include all agency staff – but especially operators, who are the daily public face of the transit system.

A unified marketing and branding program begins with the development of a comprehensive marketing and communications plan, which could address the following elements:

▲ INTERNAL COMMUNICATIONS

  o Staff responsibilities, including outreach materials development and communications with stakeholder groups and community-based organizations

  o Communications "chain of command" – how do staff and the public learn about new transit services?

▲ EXTERNAL COMMUNICATIONS

  o Unified brand for all Valley Metro products as well as other transit services

  o Standardized printed and online marketing materials

  o Geographic focus areas

  o A "one stop shop" for the public to learn about all of the region's transit services

  o Valley Metro's Public Participation Plan (part of the agency's FTA Title VI Program), which should include a list of community based organizations which Valley Metro regularly communicates

▲ INDIVIDUAL CAMPAIGNS/OUTREACH EFFORTS

  o Outreach plans for specific upcoming events or new services, such as a new route or transit transfer facility.

While the comprehensive marketing and communications plan provides an overall communications structure for the agency, some events – like the introduction of a new service, or the construction of a new transit transfer facility – will require a shorter, more intense outreach campaign.

Valley Metro may want to contract with a marketing and communications consultant, either on an on-call basis to develop marketing materials, advertisements, and campaigns, or on a specific contract to develop and periodically update the agency's comprehensive marketing and communications plan.

11.0 ADDITIONAL FUNDING SOURCES

The funding concepts presented in this section offer ideas for raising additional money to support transit services. The composition of future funding will be determined by the regional stakeholder group charged with carrying forward the recommendations of this plan.

11.1 Local Funding

If a substantive organizational structure change is pursued for the Greater Roanoke Transit Company (Valley Metro) – such as becoming a transportation district, a service district, or develops funding memorandums of understanding with additional neighboring jurisdictions – it will have increased local funding options, whether through MOUs, issuing bonds, or levying taxes in a service district. Additionally, neighboring jurisdictions can increase their contribution to Valley Metro to fund specific service recommendations that serve their constituents.

Both at the Steering Committee and the Transportation Technical Committee the discussion of transit services for public school students was discussed at length. As mentioned previously, Valley Metro at one time had a student ride program where students could ride for free but it was altered to require half-fare after the behavior of some students affected operations.

Many stakeholders reflected on using public transportation in their youth and lamented that so many public funds are being used for the sole purpose of transporting students to school.

Others noted that initiatives have been attempted to encourage students who live near schools to walk or bike to school as opposed to publicly funding a bus to drive them a short distance. The initiatives have seen limited success due to challenges working with the schools and the presence of bus transportation as an easier and perceived safer alternative among school officials and parents.

With approximately 29% of the City of Roanoke's budget and 28% of the City of Salem's budget being dedicated for public schools, and similar large proportions in other localities, a notable amount of the funding is dedicated to student transit services. Studying the potential to shift student transit trips to walking/biking for some schools based on available infrastructure, crossing guard presence, and residential proximity to the school could lead to less transit services being needed for this purpose and greater emphasis on student health, environmental, and community interaction benefits of walking and biking. The savings in school transit services could then be applied to implement the general public recommendations noted in this plan.

11.2 Partnerships

A strong network of public and private sector partners can help Valley Metro establish the potential for financial and community resources beyond standard public transit funding options. Already, a partnership exists between Valley Metro, Carilion Clinic, and Downtown Roanoke Inc. to help fund the trolley service in addition to federal, state, and local government resources. Similarly, Valley Metro has worked with local businesses to improve bus stop amenities and provide

pedestrian connections such as Towers Shopping Center and New Horizons on Melrose Avenue. Additional partnerships should be pursued and can be initiated by local businesses or Valley Metro.

Another example comes from the Rochester Genesee Regional Transportation Authority (RGRTA) in Rochester, NY, was faced with declining state support in the early 2000s. In response, it began a series of major structural reforms to make the system less dependent on public subsidies, modeled on private sector approaches such as new customer- and revenue-driven policies. As part of this approach, RGRTA engaged with a diverse network of partners; its single largest funding partner is Rochester School District, which funds student passes and additional school-tripper service within the City of Rochester. Other major partners include universities, hospitals, major employers, social services organizations, nursing homes, and property owners. Today partnership revenue accounts for 20 percent of all operating revenue, a greater share than direct fares.

RGRTA has shown a willingness to customize partnership agreements. For some organizations, partnerships provide free transit passes, while for others partnerships are in place simply to preserve or expand service. RGRTA is responsive to the needs of its partners and tries to implement service requests such as timetables that match employee shifts. The agency has staff dedicated to its partnership program and continues to actively recruit new partners, including a "Let us take you out to lunch" program for interested perspective partners.

Finally, emerging trends in transit and public transportation are likely to radically alter the Roanoke region's mobility landscape.

A March 2016 study[6] conducted for the American Public Transportation Association points out that technology is fundamentally transforming transportation as consumers increasingly seek a broad range of mobility options, including bikeshareing, carsharing, and ridesourcing services by companies like Uber and Lyft. New microtransit companies and other experimental commuting shuttle options like Bridj, Split, Chariot, and Kutsuplus have emerged in denser cities to offer riders additional transportation options that may not make sense for larger buses. [7] Ride-hailing services with flexible hours of operations have also emerged as a complement or an alternative to more traditional paratransit services. [8] The ability of existing

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[6] Shared-Use Mobility Center, "Shared Mobility and the Transformation of Public Transit," March 2016. Available https://www.apta.com/resources/reportsandpublications/Documents/APTA-Shared-Mobility.pdf

[7] For an overview of these services, see Joseph Stromberg, "These Startups Want to do for Buses What Uber Did for Taxi Rides," Vox, July 7, 2015. Available http://www.vox.com/2015/7/7/8906027/microtransit-uber-buses

[8] See Nicole Dunga,"MBTA Pilot Taxi Partnership Could Include Uber," Boston Globe, November 14, 2015. Available https://www.bostonglobe.com/metro/2015/11/14/mbta-launches-pilot-taxi-partnership-that-could-include-uber/6gTeEe8aJm5e6HEv9sdqNK/story.html; Linda Poon, "How an Uber Copycat Can Fill the Transit Gap in Rural Nebraska," City Lab, July 13, 2016. Available http://www.citylab.com/navigator/2016/07/how-an-uber-copycat-can-fill-the-transportation-gap-in-rural-nebraska/490769/; Luz Lazo, "Metro moving forward with plan to use Uber, Lyft for paratransit services," The Washington Post, July 20, 2016. Available https://www.washingtonpost.com/news/dr-gridlock/wp/2016/07/20/metro-moving-forward-with-plan-to-use-uber-lyft-for-paratransit-services/

transit providers to interface with these emerging services and adapt to shifting consumer preferences will be crucial in the development of a robust mobility ecosystem.

11.3 Advertising and Sponsorships

To capture advertising and sponsorship revenue, Valley Metro should ensure that its bus display ad rates and sponsorship options are competitive with the regional market. An advertiser in Roanoke can currently buy a King Size Display[9] exterior ad on a Valley Metro bus – for an entire month – for approximately 1/10th the cost of a one-day, half-page ad in the Roanoke Times.[10]

11.4 Competitive Federal Grants

Valley Metro, in coordination with regional TDM and paratransit service providers, should watch for opportunities in the Federal Register to apply for federal transportation and mobility grants. The Federal Transit Administration (FTA) recently issued a Notice of Funding Opportunity for a "Rides to Wellness" initiative that emphasizes public transportation as a strategy for people to access health services, resulting in greater preventive care, fewer

[9] Valley Metro Transit Advertising Rates, Accessed at http://adsonbuses.com/pdf/RoanokeRateCardNEW.pdf
[10] The Roanoke Times, Retail advertising rates. Based on 60 inches of ad space, approx. $2,750. Accessed at http://roanoke.com/app/advertise/rates/rateCards/RETAIL%20_Rates.pdf

unnecessary hospital readmissions, and lower cost (application deadline: May 31, 2016).[11] Other similar grants periodically become available.

11.5 Fare Changes

Changing the fare for services is always a consideration though the concern is always that a fare increase may lead some people to take trips using other modes. Fare increases may generate more revenue if it does not deter people from riding altogether due to the expense. Consideration should be made for the expense of a daily roundtrip compared to the daily expense of parking or similarly, the expense of a monthly pass compared to the monthly expense for parking and gas.

Fare structures should incorporate incentives for families with children through high school age to ride easily together. For a family or group traveling together, the cost to use transit may seem more expensive than carpooling and paying for parking. Currently, children under 10 ride free and children between 11-17 ride at half-price. Consideration of a family pass may incentivize families to ride together for special events or other trips taken together.

In the RADAR and Botetourt County surveys, some current riders expressed a willingness to explore zone charges for paratransit services based on distance. This zone fare structure should be

[11] "U.S. Department of Transportation Announces $5.3 Million Funding Opportunity to Improve Mobility Focused on Healthcare." Federal Transit Administration, accessed at https://transit.dot.gov/about/news/us-department-transportation-announces-53-million-funding-opportunity-improve-mobility

discussed when regional paratransit services are further explored.

Currently Valley Metro provides an unlimited 31-day paratransit trip pass at twice the cost of a 31-day fixed-route pass. The purpose of the fixed-route pass is to encourage more trips on local buses for which greater person-trips does not result in greater expense to operate. On paratransit, however, the 31-day unlimited pass also encourages taking more specialized transit trips, for which each trip requires a significant subsidy. Providing this unlimited 31-day paratransit pass is not required by the federal government, and local governments and Valley Metro should consider an alternative that better reflects sharing each paratransit trip expense with the passenger.

11.6 Other Potential Dedicated Revenue Streams

In other regions, dedicating funding to transit is often applied from other revenue streams. Such examples may include dedicating a portion of parking, stormwater, or broadband revenues to transit.

Currently, fees for parking are only present in Downtown Roanoke though many parking decks also exist in the Carilion area for free. The broad availability of parking and low cost of parking are reasons why many people choose to drive instead of use public transportation. When finding parking becomes a bit challenging or the cost of parking outweighs transit fare and the added time to use transit, then people begin to consider taking transit as a preferred option over driving. A substantial amount of space is dedicated to storing vehicles during the day on weekdays, particularly in both the Downtown Roanoke and

Carilion areas via many parking garages and surface lots. If a partnership can be established between parking and transit to dedicate a portion of the parking revenue to transit, transit services can be expanded and provide an attractive alternative for people to reach destinations in these areas. Likewise, a single card should be explored to give people the option to pay for parking or pay for transit using the same electronic Smart Card.

12.0 LAND USE

Before many of the recommendations for the creation of high frequency corridors in **Part 5** can be implemented, changes to land use policies will need to be realized to increase both the mix and density of land uses along these corridors.

The Federal Transit Administration (FTA) has developed a toolkit of transit-supportive development measures to help planners, elected officials and local governments integrate transit planning with local land use planning.[12] Unless otherwise noted, the contents of this section can be sourced through that toolkit.

12.1 Land Use Planning and Transit Planning

The traditional roles of community stakeholders in transit investment and land use decision-making are often one or the other with some overlap in state and local governments as seen

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[12] "Planning for Transit-Supporting Development: A Practitioner's Guide." Federal Transit Administration, Prepared by the New Jersey Institute of Technology. June 2014. Accessed at https://www.fta.dot.gov/funding/funding-finance-resources/transit-oriented-development/planning-transit-supportive

in **Table** 12.1-1. Public policy is generally developed at the federal, state, and regional levels, while land-use implementation is driven by local governments and developers.

Table 12.1-1 | Stakeholders and Their Traditional Involvement in Transit Investment and Land Use Decision-making

	Transit Investments	Land Development
Federal Transit Administration	Significant	None
State government	Some	Some
Metropolitan Planning Organizations	Significant	Some/Little/None
Transit authorities	Significant	Some/Little/None
Local (municipal and county) governments	Some	Some/Significant
Developers (private; not-for-profit)	Little/None	Significant

To ensure that these two types of planning connect, planning issues need "champions" at state, regional, and local levels (**Table 12.1-2**) to advocate for the intersection of transit planning and land use policy.

Table 12.1-2 | Major Issues and Appropriate Champions

	Major Planning Issues Affecting Transit-Supportive Development	Levels at Which Champions Are Needed		
		State	Regional	Local
Regional Issues	A region needs a Vision Plan to provide a blueprint for the future, factoring in several goals which include transit-supportive development aligned with the transit system.	✓	✓	✓
Corridor Issues	Priority should be given to transit corridors that connect the strongest regional centers.	✓	✓	✓
	Stations should be sited with easy access to the local street network.	✓	✓	✓
Local Issues	Transit-supportive development regulations should be enacted that make public/private partnerships, financing options and land use controls possible.	✓		✓
	The character of transit-supportive developments should match the community vision and goal.			✓

12.2 Policy Tools for Transit-Supportive Land Use 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 land use development. Table 12.2-1 details possible tools for doing so, including the creation of transit-supportive districts, Planned Unit Developments, and pedestrian-friendly design standards around transit stations and stops.
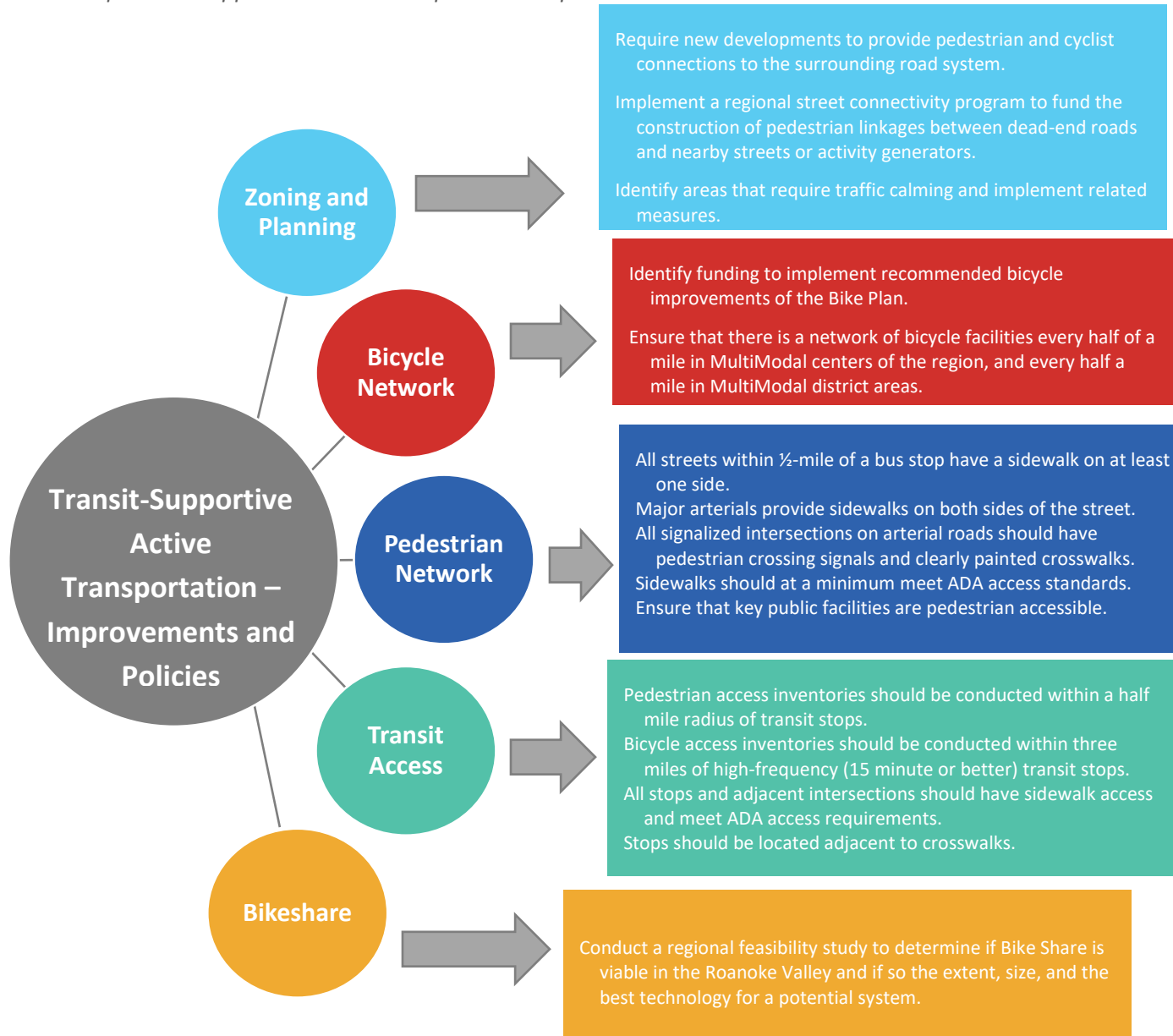
12.3 Policy Tools for Transit-Supportive Active Transportation

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. **Figure 12.3-1** details possible tools for doing so, including the creation of new zoning requirements, new funding, new standards, and additional inventories and planning studies.

Table 12.2-1 | Transit-Supportive Land Use Policy Tools

Tool	Overview	Description
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.	Create a specific plan or overlay district for a transit-supportive district (generally within ½ mile of transit stops) that refines and targets the general plan's goals for a particular area by regulating the land use activities within that community. Rules, policies, and ordinances for the area are focused on a desired development outcome—higher densities, mixed land uses, pedestrian amenities, and access to public transit.
Planned Unit Development (PUD)	Increased flexibility for localities and developers to develop large tracts of land using transit-supportive methods.	A Planned Unit Development (PUD) is both a regulatory process and a type of development that allows flexibility of site design beyond the bounds of the existing zoning designation. It is generally used to develop a large tract of land in a way that meets the goals of the community without the hindrances of the established lot by lot zoning ordinance. This method is often used for an undeveloped suburban area, large urban undeveloped lots, and urban redevelopment areas. The creation of a PUD must be in accordance with a comprehensive plan.
Design Standards and Guidelines	Regulations that encourage pedestrian-friendly amenities, especially in and around transit stations.	Design standards or guidelines allow a community to control its appearance and function by governing such elements as site planning, densities, building heights, and pedestrian amenities. Within a transit station area, design standards and guidelines can serve to promote transit-supportive development.

Figure 12.3-1 | Transit-Supportive Active Transportation Improvements

Transit-Supportive Active Transportation – Improvements and Policies

Zoning and Planning

Require new developments to provide pedestrian and cyclist connections to the surrounding road system.

Implement a regional street connectivity program to fund the construction of pedestrian linkages between dead-end roads and nearby streets or activity generators.

Identify areas that require traffic calming and implement related measures.

Bicycle Network

Identify funding to implement recommended bicycle improvements of the Bike Plan.

Ensure that there is a network of bicycle facilities every half of a mile in MultiModal centers of the region, and every half a mile in MultiModal district areas.

Pedestrian Network

All streets within ½-mile of a bus stop have a sidewalk on at least one side.
Major arterials provide sidewalks on both sides of the street.
All signalized intersections on arterial roads should have pedestrian crossing signals and clearly painted crosswalks.
Sidewalks should at a minimum meet ADA access standards.
Ensure that key public facilities are pedestrian accessible.

Transit Access

Pedestrian access inventories should be conducted within a half mile radius of transit stops.
Bicycle access inventories should be conducted within three miles of high-frequency (15 minute or better) transit stops.
All stops and adjacent intersections should have sidewalk access and meet ADA access requirements.
Stops should be located adjacent to crosswalks.

Bikeshare

Conduct a regional feasibility study to determine if Bike Share is viable in the Roanoke Valley and if so the extent, size, and the best technology for a potential system.

13.0 FUTURE MODE AND TECHNOLOGY CONSIDERATIONS

Although the assumption in this plan has been that all of the recommendations would be fulfilled with motorbuses or commuter buses operating in mixed traffic, the recommendations do not preclude the potential to consider other modes and technologies. Utilizing the buses as a gauge on the ridership and success of a service can guide the need to invest in permanent capital infrastructure and equipment.

Figure 13.0-1 | Example of Bus Rapid Transit

Photo Credit: Jarrett Walker + Associates, Kimley Horn, "Recommended Wake County Transit Plan." (December 2015)

A reflection on Roanoke's past, the following pictures show examples of modern streetcars in Portland, Oregon. Streetcars are often used similar to local buses for local-stop service.

Figure 13.0-2 | Example of a Streetcars

Similar to the streetcar, but often used for longer distances and more rapid transit is light rail shown in the following photos.

Figure 13.0-3 | Example of Light Rail

Portland, OR

The greatest technology advancement currently anticipated is driverless vehicles. As this technology evolves over time, their impact on transportation and travel within cities will become known, and it will be interesting to see what effect the technology will have on transit.

Norfolk, VA

14.0 CONCLUSION

The Roanoke Valley is not like it was 25 years ago, nor will it be like it is today in 25 years and neither should its transit system. As we grow and simultaneously strive to become a more *Livable Roanoke Valley*, utilizing our investments in transit will help our community be a better place to live, work, learn, and play.

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 for greater quality of life. Development of the Plan involved many stakeholders and citizens and its implementation, though challenging, will be supported by even more. Paramount to implementation of this plan will be the functional organizational restructuring of the Greater Roanoke Transit Company to establish it as an agency with full regional representation.

Concurrent with the goals of Livable Roanoke Valley, implementing this Transit Vision Plan will:

- 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;
- 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.

Transit is for everyone! As an integral part of our community, it is each person's choice to take advantage of the service it provides. Implementation of this Plan 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. The choice to use transit will depend on any number of factors such as trip purpose, origin/destination transit accessibility, personal vehicle availability, weather, distance, parking cost, and parking availability.

Others 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 be something that becomes 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.

Thank you to all the citizens, stakeholders, and decision-makers who have contributed to this plan. Your voices have been heard, your ideas have been recorded, and the future of transit as you have envisioned it will guide our community for years to come.