



Roanoke Valley Transportation
PLANNING ORGANIZATION
Staffed by the
REGIONALcommission

Roanoke Valley Transportation Plan

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What is the Roanoke Valley Transportation Plan?

Plan Purpose

Federal law requires the formation of an “MPO” for any urbanized area with a population of more than 50,000. The Roanoke Valley Transportation Planning Organization (RVTPO), whose official name is the Roanoke Valley Area Metropolitan Planning Organization (MPO), was created in 1974 to plan and budget the use of federal transportation dollars in the Roanoke region. There are currently 14 MPOs in Virginia. The U.S. Department of Transportation recognizes the RVTPO as the entity responsible for transportation-related planning within the Roanoke urbanized area boundary.

Federal and State requirements

The population of the RVTPO Study Area is approximately 230,000, and covers the Cities of Roanoke and Salem, the Town of Vinton, and the urbanized portions of the Counties of Bedford, Botetourt, Roanoke and Montgomery. The RVTPO study area, also known as the metropolitan planning area, is required to include the Census Urbanized Area (currently based on the 2010 Census) and the area that is expected to be urbanized in the next 20 years (See Figure 1). Note, outcomes from the 2020 Census regarding possible changes to the current Urbanized Area is anticipated in December 2022 and will influence the next update of this plan for plan year 2050.

Federal requirements for metropolitan transportation planning and programming are detailed through the Code of Federal Regulations (CFR) across multiple sections. These requirements shape how RVTPO collaborates with its planning partners and works with the public to develop and implement the Roanoke Valley Transportation Plan (RVTP). They also identify the standards for content within the RVTP and the associated Transportation Improvement Program (TIP) and provide direction on the critical factors for inclusion. More details on these requirements and how the RVTP meets them is available in [Appendix A](#).

Organization Designation and Funding Support

A Metropolitan Planning Organization (MPO) with an urbanized area boundary population of 200,000 and above is also designated as a Transportation Management Area (TMA) by the Secretary of Transportation. After the 2010 Census, the Roanoke Valley became a TMA. Financial support comes primarily from federal transportation funding, with matching funds provided by the seven member localities and the Virginia Department of Transportation and the Virginia Department of Rail and Public Transportation.

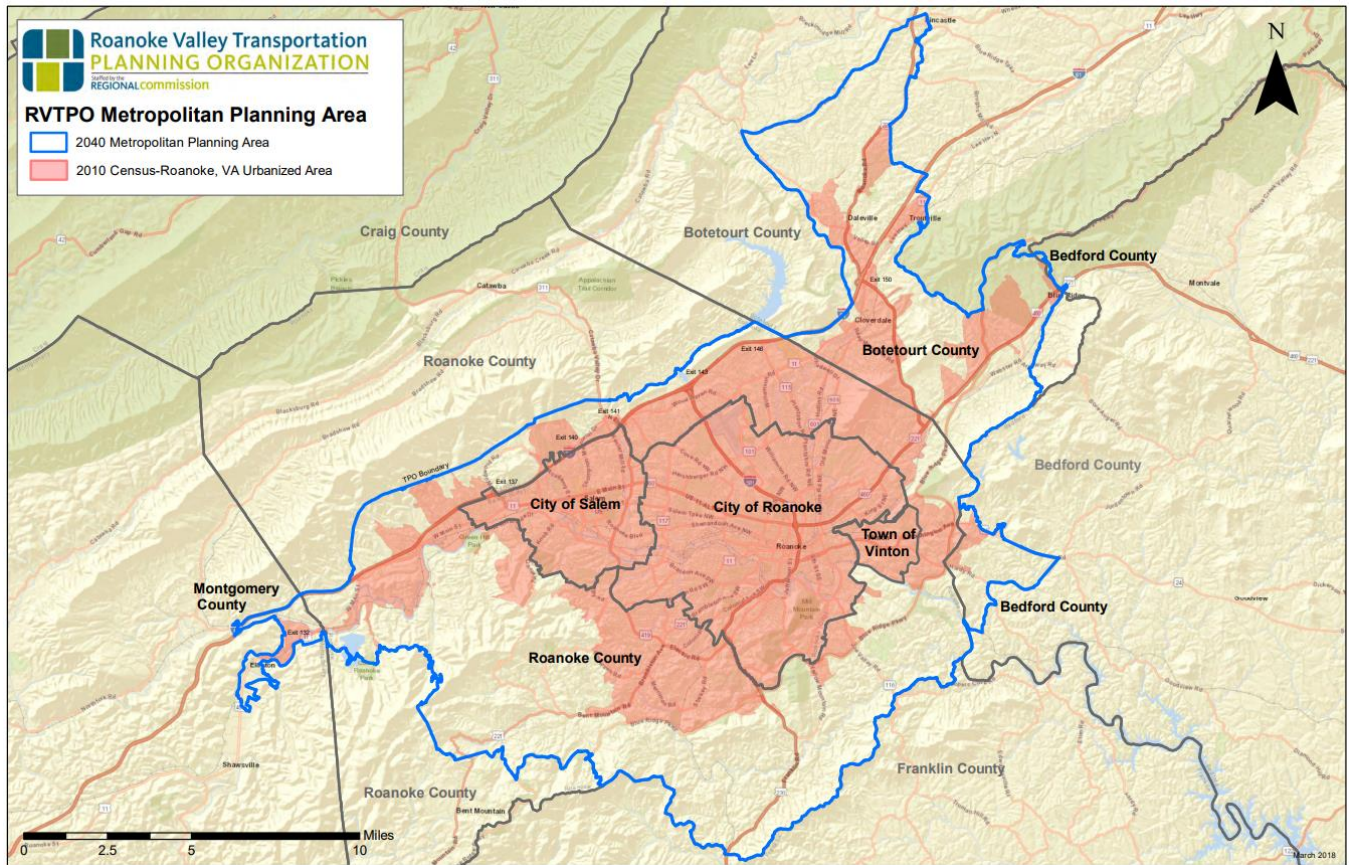
Performance based planning and programming process

The Roanoke Valley Area Transportation Planning Organization (RVTPO) develops four key documents that are the backbone of transportation planning and programming in the region — the Metropolitan Transportation Plan, the Transportation Improvement Program (TIP), the Congestion Management Process, and the Unified Planning Work Program. The RVTP includes both the transportation plan and the TIP, consistent with the process developed by RVTPO and its partners in 2021 and 2022 and described in more detail in the next section.

Planning partner, stakeholder, and public engagement

The Roanoke Valley Transportation Plan (RVTP) guides the region in creating a more efficient, responsive, and environmentally sensitive transportation system over the next 20+ years with a plan horizon of 2045. The plan examines transportation trends/issues and lists specific projects for addressing the region’s mobility needs. The RVTP is updated every five years with amendments as needed in the years between.

Figure 1 RVTPO Regional Map



Note: 2040 and 2045 study area boundaries are the same.

What is new in this Roanoke Valley Transportation Plan?

Performance based planning and programming process

The Federal Highway Administration (FHWA) defines performance-based planning and programming as “the application of performance management principles within the planning and programming processes of transportation agencies to achieve desired performance outcomes for the multimodal transportation system.” More simply stated, performance management is a strategic approach that uses system information to inform investment and policy decisions to achieve transportation system performance goals.

Commonwealth Transportation Board (CTB) established a performance management framework to assess performance of Virginia’s transportation system in December 2015, when it adopted goals, objectives, and guiding principles for VTrans. The Moving Ahead for Progress in the 21st Century Act (MAP-21), signed into law in 2012, included provisions that transformed the Federal surface transportation program to be focused on the achievement of performance outcomes related to goals for the national transportation system. The provisions are administered by agencies within the U.S. Department of Transportation (USDOT), including several under FHWA and FTA. In 2015, the Fixing America’s Surface Transportation (FAST) Act built on the MAP-21 changes and provided funding certainty for surface transportation infrastructure planning and investment.

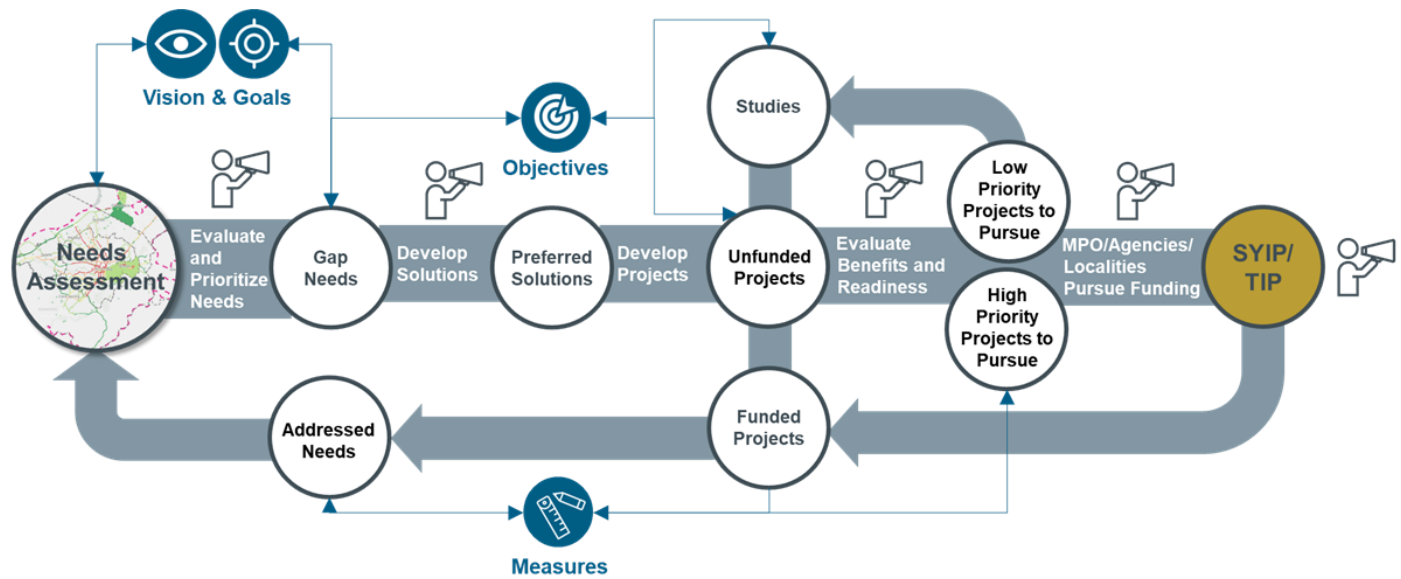
To implement the MAP-21 performance management provisions, U.S. DOT proposed and finalized several regulations that established performance measures that transportation agencies are required to use across three broad areas of responsibility – safety, asset management, and system performance.

- The safety performance measures track roadway, bicycle and pedestrian, and transit fatalities and serious injuries, as well as transit safety incidents such as collisions, derailments and evacuations.
- The asset management performance measures track the physical condition of roadway pavement and bridges, and transit equipment, vehicles, and facilities.
- The system performance measures track how reliable travel times are for people and freight over highways, as well as roadway congestion and emissions in certain areas that currently or recently have experienced poor air quality.

The Roanoke Valley is currently in attainment for air quality standards. RVTPO collaborates with Virginia planning and programming partners including Virginia Department of Transportation (VDOT), Department of Rail and Public Transportation (DRPT), the Office of Intermodal Planning and Investment (OIPI), as well as local transit providers like Valley Metro to implement the performance management requirements.

Performance management goes beyond just tracking performance. It is also intended to shape planning and programming activities. Given this recent evolution at both the Federal and State level, RVTPO secured support through OIPIs Growth and Accessibility Program Technical Assistance (GAP-TA) to develop a unique performance-based planning and programming process for the Roanoke Valley. The general performance-based planning and programming approach developed for the region by the GAP-TA grant is provided in Figure 2.

Figure 2 RVTPO Performance Based Planning and Programming Process



Federal Direction and the Bipartisan Infrastructure Law

There have been sweeping changes to Federal transportation policy and funding over the past few years that will impact how the region plans, prioritizes, and invests in transportation programs and projects over the next decade.

Bipartisan Infrastructure Law

The Infrastructure Investment and Jobs Act (IIJA), also known as the Bipartisan Infrastructure Law (BIL), was signed into law by President Biden on November 15, 2021. The BIL sets policy and budget authority for USDOT over the next five years, totaling approximately \$567 billion nationally for surface transportation. Overall, the BIL could total an annual 20 to 30 percent increase in annual formula funding for surface transportation from USDOT, in addition to an increase in opportunities to compete for discretionary federal grants.

The BIL is consistent with Virginia’s and the Roanoke Valley’s multimodal transportation priorities. It will help advance investments in critical infrastructure and promote policy and programming in emerging areas important to the region, like complete streets, safety, and connecting communities. The RVTP provides direction on how RVTPO will work with partners to optimize its approach to maximize Federal opportunities consistent with regional and statewide goals.

The BIL brings an infusion of surface transportation funding through USDOT, but it also highlights critical focus areas and new opportunities that the RVTP should help position the region to leverage. New formula programs like [PROTECT](#), [National Electric Vehicle Infrastructure \(NEVI\) Program](#), the [Carbon Reduction Program](#) and new discretionary grant programs including [Safe Streets and Roads for All](#) and [Reconnecting Communities](#) represent new opportunities to address needs in emerging topics like infrastructure resilience, EV charging, complete streets, and equitable accessibility. The BIL also enhances the funding amount and scope of existing grants that the Roanoke Valley have traditionally leveraged, like STBG (by adding resilience, natural infrastructure, and EV charging as eligible expenses) and significantly increasing funding for Transportation Alternatives Program (TAP).

Justice40 Initiative

The [Justice40 Initiative](#) has made it a priority of the federal government to commit at least 40% of all federal funds from federal investments to disadvantaged communities that are marginalized, underserved, and overburdened with pollution. The categories of investment are: climate change, clean energy and energy efficiency, clean transit, affordable and sustainable housing, training and workforce development, remediation and reduction of legacy pollution, and the development of critical clean water and wastewater infrastructure. Covered federal investments include any grant or procurement spending, financing, staffing costs, direct spending, or benefits to individuals for a covered program in a Justice40 program.

MPO Planning Requirements

The BIL also identified changes to MPO planning requirements that will impact future RVTPs (note, these requirements are not specifically applicable to this RVTP update, however they are important for RVTPO and its partners to prepare to implement). Some examples applicable to RVTPO include:

- Housing. MPOs must now consult with housing officials, and housing is added to the scope of factors that are to be considered in the metropolitan planning process.
- Transportation Management Area (TMA) MPOs (>200k) must have a housing coordination process that would address the integration of housing, transportation, and economic development strategies.
- Representatives of affordable housing organizations are added to the list of organizations that shall be provided opportunity to comment on plans and TIPs
- MPO financial plans. The outer years of a MTP are defined as “beyond the first 4 years” instead of 10 years). Provides more fiscal flexibility.
- Complete Streets. State DOTs and MPOs must develop a Complete Streets plan (and spend at least 2.5% of their planning funds on it).

Statewide initiatives

Statewide initiatives shape how RVTPO develops plans, identifies and prioritizes projects, and utilizes planning funds to support critical regional and local activities. Initiatives important to the region include:

[VTrans](#) – VTrans is Virginia's statewide transportation plan. It is prepared for the Commonwealth Transportation Board (CTB) by OIPI. VTrans lays out the overarching vision and goals for transportation in the Commonwealth and plans to achieve those goals.

[Project Pipeline](#) – Project Pipeline is a performance-based planning program to identify cost-effective solutions to multimodal transportation needs in Virginia. Through this planning process, projects and solutions may be considered for funding through programs, including SMART SCALE, revenue sharing, interstate funding and others. There are three ongoing projects in the Roanoke Valley region.

[Transforming Rail in Virginia](#) – Transforming Rail in Virginia is changing the future of rail transportation in Virginia by acquiring railroad right-of-way, increasing rail capacity, and reworking passenger and freight operations to improve reliability and increase rail service in Virginia. To better connect statewide Amtrak service to southwestern Virginia, the Virginia Passenger Rail Authority began a feasibility study in fall 2021 to examine station locations in the [New River Valley](#).

[Virginia Highway Safety Improvement Program](#) – The Virginia Highway Safety Improvement Program (VHSIP) is guided by our Strategic Highway Safety Plan and receives federal and state safety funding to implement safety improvements across the roadway network in Virginia.

Where is the Roanoke Valley today?

Accomplishments since 2017

State of transportation report summary.

What our model tells us about the region today.

See Appendix B.

Key funded projects, services, and programs being implemented

Reflection on Needs Addressed. See Appendix G.

How these accomplishments and key decisions impact the future

Transportation system performance trends

Highway Safety

Highway Asset Condition

Reliability and Congestion

Transit Asset Condition

Transit Safety

What are the Roanoke Valley's transportation needs?

In response to the federal requirement for performance-based planning and programming and to reflect the statewide trend of focusing on transportation needs, a transportation needs assessment was conducted for the first time as part of the planning process for the RVTP. As noted in Figure 3, the needs assessment was based on citizen input and characterized by how citizens identify the challenges they experience trying to get from one place to another. The assessment then balanced the input with the findings from other planning efforts since the adoption of the transportation plan in 2017.

Figure 3 Identifying Transportation Needs



Due to the likelihood that people participate in multiple public input opportunities and may voice the same concerns at various opportunities, the input received served as a repository of transportation needs and did not weigh any need or location above another simply because of the number of times it was identified. Rather, a number of regional planning factors, including the RVTP vision, goals, and objectives, and transportation data were used to prioritize needs of the same type. This approach also acknowledges that transportation needs far outweigh available resources, so strategic decisions must be made on where to focus limited resources. Prioritization of resources to address transportation needs is essential to meeting regional performance goals and providing clarity to the public on why some needs are being addressed ahead of others.

Since the assessment was completed, an independent review of the process to generate the Needs Assessment was conducted through an Office of Intermodal Planning and Investment technical assistance grant in 2021-2022. The OIPI consultant team offered suggestions on how to improve the needs assessment process over time.

Appendix C provides more information about the Transportation Needs Assessment. The consolidated needs by need type are displayed in the RVTP Needs Evaluation and Solutions Tool ([NEST](#)).

Nine need categories were identified: **Access (Non-Transit, Transit), Safety (Motor Vehicle, Pedestrian, Bicycle, and Transit), Traffic Congestion, and System Management (Non-Transit, Transit)**. There were no transit safety concerns identified by citizens.

Access – Non-transit

Virtually all existing destinations can be accessed by motor vehicle, walking, or bicycling using existing roads. However, a connected and redundant system with more direct or other route options may be desirable in some places to improve efficiency and provide greater flexibility when construction, traffic, or crashes occur. Access to destinations for people with disabilities may be limited if not traveling by motor vehicle or when obstacles are in the right-of-way.

Access – Transit

Transit access is defined by locations that may be reached by the bus and paratransit system. Buses serve the City of Roanoke, Salem, Vinton, and a small portion of Roanoke County. Transit access is lacking for important destinations such as government services, medical facilities, grocery stores, and

jobs. Paratransit services are inconsistent across the region and City residents have difficulty reaching critical destinations. Transit access may also refer to temporal issues such as limited frequency and short hours of service – if the hours of service for transit do not match an individual’s availability then that destination is functionally inaccessible.

Safety – Motor Vehicle

Safe travel for people in motor vehicles is the ability to travel on roads without crashes, near-misses, or other sources of injuries and fatalities. The places that have the most severe crashes may not be the places that have a lot of crashes, so the perception of locations as safe or unsafe may not match data.

Safety – Pedestrian

Safe travel for people walking is travelling without crashes, near-misses, or other situations that result in serious injuries or fatalities. Facilities which are high risk or feel risky for pedestrians include those which have high volume, high speed, and little or no pedestrian infrastructure. People with disabilities are particularly vulnerable when pedestrian accommodations are lacking or insufficient. For example, an able-bodied person can walk in the grass on the side of a busy road if there is no sidewalk, but a person in a wheelchair may have to be in the road.

Safety – Bicycle

Safe travel for people bicycling is travelling without crashes, near-misses, or other situations that result in serious injuries or fatalities. Roads which are high risk or feel risky for bicyclists include those which have high volume, high speed, and no bicycling infrastructure. Different types of bicycle riders have different perceptions of safety and tolerance for riding with vehicle traffic.

System Management – Non-transit

Non-transit system management needs are defined as maintenance and support of the existing roadway, bicycle, and pedestrian network. Examples of System Management needs on the road system include maintenance, wayfinding, and traffic signal coordination. System management needs are often not highly visible or difficult to perceive as needs to typical users.

System Management – Transit

Transit system management needs include maintenance, support, and accessories to the local transit system. Examples of systemic transit needs include amenities at bus stops, vehicle replacements, real time bus location information, interactive system maps, online or electronic fare collection, and, for paratransit, reservations. The general public may not be familiar with how systems operate and may under-identify system management needs.

Traffic Congestion

Traffic congestion refers to any significant delay in reaching destinations for road users. The Roanoke Valley doesn’t have much severe traffic congestion – and wants to keep it that way. Some focal points of traffic congestion have recently been addressed and may still have more traffic congestion than other places but are unlikely to receive further roadway improvements.

Where is the Roanoke Valley going?

The RVTP looks to the future to help understand how the region’s population, economy, travel preferences, and environment might change, and how these changes might impact transportation needs and overall management of the transportation system. Doing so ensures that the Plan creates opportunities for RVTPO and its partners to be resilient to change as it makes decisions impacting the region’s transportation future.

Regional trends and forecasts

Table 1 Regional Trends Summary

Factor	Anticipated Trend
<p>Population</p>	<p>The entire region is forecasted to grow by 14,500 people from 2019 to 2045, with a total population of 254,840 people. Growth is forecasted to occur proportionally across the region, with the most substantive growth occurring in Botetourt and Roanoke Counties.</p> <p>The region has an older population than the median age of the Commonwealth. This share of older residents is expected to continue to grow and lead to a shrinking workforce.</p>
<p>Economy</p>	<p>Median income is increasing in the region as are employment opportunities. The entire region is forecasted to add nearly 10,000 new jobs from 2019 to 2045, with a total of 152,000 jobs. Occupations requiring a bachelor’s or postgraduate degree are expected to grow at a slow pace, but the number of jobs requiring less education than this will decline. Prior to the pandemic, all localities in the Roanoke Valley saw their average annual unemployment rate decrease and their total number of businesses increase.</p>
<p>Industry Sectors</p>	<p>Two industries will grow due to regional drivers: general manufacturing (an existing strong industry for the region) and food and beverage manufacturing (an emerging industry for the region).</p> <p>The industry with the highest relative concentration in the Roanoke Valley is Wood/Paper. Employment in the Wood/Paper cluster is projected to contract in the region about 1.4 percent per year over the next 10 years.</p> <p>The fastest growing sector in the region is expected to be Professional, Scientific, and Technical Services, with a 0.6 percent year-over-year rate of growth. Over the next year, the fastest growing occupation group in the Roanoke Valley is expected to be Healthcare Support Occupations, with a 0.9 percent year-over-year rate of growth.</p>
<p>Transportation</p>	<p>In a test of the impact of connected and automated vehicles through the use of the regional travel demand model, vehicle miles traveled (VMT) could increase modestly, by about 0.4 percent, due to increased capacity and shorter travel times.</p> <p>The region continues to invest in infrastructure projects to improve connectivity between the Roanoke Valley and the New River Valley and Lynchburg regions. The Roanoke region can expect to see an increase in the capacity of several interstates/state routes and the development of new transit options or improvement of existing ones enabling more reliable inter-regional connections.</p>

Future factors

Research into Future Factors establishes perspective on how trends and uncertainty may impact transportation needs and solutions. The focus is on the primary technology, social, economic, sustainability, and funding/finance trends – most of which are outside of the sphere of transportation agency control, that could impact future travel demand and multimodal transportation needs. **Appendix D** provides additional insights on the Future Factors. The factors were grouped into five themes (4):

Figure 4 Future Factor Themes



The impacts of the COVID-19 pandemic on how we use transportation for everyday activities, how we commute to work, and how the entire regional economy functions may result in some permanent changes, like more people working from home. Other recent regional, national, and global events have increased our attention on the nexus between transportation policy and programs with issues like equity, climate change, and technology. The factors inform how the RVTP goals, objectives, and solutions can remain flexible over time as these future factors evolve and future needs change with them.



Technological “disruption” has reached the transportation industry in the past decade, and technology is expected to have an increasingly large impact on how residents of the Roanoke Valley travel in the coming decades.

- Automated vehicle (AV) and connected vehicle (CV) technologies will change how we travel and how goods travel.
- Vehicle ownership models are changing. This could lead to lower ownership rates and more use of shared mobility options.
- Mobility options such as ride-hailing and e-scooters are growing and can help complete first/last mile trips.
- Mobile and web platforms are becoming a part of daily travel decisions.
- Drones could make package delivery more efficient and can manage traffic and assets, and even move people.
- Since the COVID-19 pandemic, many people have experienced daily activities via virtual platforms and employers are making permanent changes to workforce operations.



The trend towards an older and increasingly diverse society, already well underway in the 21st century, are expected to continue in the coming decades. This will bring the need for expanded and equitable transportation services for older adults, persons with disabilities, and others with limited access to private vehicles.

- Older and more diverse population will require different transportation systems and mobility options.
- Continued shift to virtual daily activities, including working, healthcare, shopping, entertainment.
- Household vehicle ownership preferences changing, particularly as household size decreases.



Economic changes are being driven by the composition of the labor force, technology and the types of labor needed, entrepreneurial programs, and growth in the tourism industry. Slow population growth, an aging population and distant access to larger metropolitan areas, will constrain labor force availability in the region.

- While manufacturing employment in the region has declined, it is still an important sector for the region, with opportunities to attract advanced manufacturing employers to support emerging technologies, like batteries and autonomous technologies.
- Healthcare related services is the largest employment sector in the region and is anticipated to continue to grow particularly through development of the Virginia Tech Carilion School of Medicine and Research Institute.
- Technology start-up firm opportunities and businesses associated with a growing and diversifying tourism-based economy represent strong opportunities to attract new investment in the region.
- Developing and maintaining a skilled workforce within the region will be critical to meet the challenges of a growing high-tech and healthcare focused economy.



Environmental quality and climate change will impact the lives of residents in the Roanoke Valley in the coming decades. The Commonwealth is taking steps to advance the electrification of the transportation system and manage a more resilient system that can reduce emissions and keep the economy moving as events occur.

- More attention placed on electrifying the transportation system within agency fleets (including transit) and providing the infrastructure to ensure reliable use of electric vehicles.
- New design, construction, and maintenance strategies and materials to mitigate environmental impacts of transportation and better protect infrastructure from severe weather events.
- Enhanced priority on the protection of natural lands and farmlands and new technologies to better manage all infrastructure systems collaboratively, including utilities.



Fundamental changes to transportation revenue sources, costs to maintain and operate the system, and travel costs will impact how, and how often, people travel, and the services provided by transportation agencies. These changes, including those in the 2021 Bipartisan Infrastructure Law, will evolve how funding decisions are made.

- Transportation revenue sources will experience a period of significant change over the next few decades, at all levels, including from Federal sources.
- Emerging methods to offset the revenue impacts of EVs are including new ideas like mileage-based fees. These types of changing user fees may change travel behavior.
- Virginia continues to be a national leader in the successful use of public private partnerships. This is anticipated to continue, especially in high value, congested corridors.
- The benefits of regional and corridor-based funding programs, like I-81, will continue to help foster accelerated project development and implementation.
- New design, construction, materials, and project delivery approaches will continue to explore methods to reduce costs and extend asset lifecycles.

The development of population and employment forecasts and the transportation demand and performance outcomes through 2045 are based on past trends, current travel behavior, and projected changes based on what we know today. The future factors show that many of the trends could change in directions that substantially impact transportation needs and, ultimately, solutions.

For example, increases in availability of remote work could result in an increase in population, as workers are no longer tied to physical locations and can choose to live where they want. Attracting younger workers could in turn result in an increase in more dense, mixed-use housing development. The introduction of a network of shared, automated, and connected vehicles may lead to lower rates of car ownership and more multi-modal travel, and limit increases in vehicle miles traveled as predicted, or, conversely it could lead to increases in vehicle miles traveled if used as an opportunity to live further from work or take trips via car that they would not otherwise have taken.

As the need to mitigate and limit the impact of climate change becomes ever more urgent, the focus on expanding trips taken by means other than the car may lead to increased pricing to manage demand and ultimately lower vehicle miles traveled by car. Finally, if successful, efforts to create a new “entrepreneurial ecosystem” in Roanoke could attract new residents and young workers and shift employment in the region from the manufacturing sector to other sectors.

Continuing change

Development of the RVTP, initiated in summer 2020 with the needs assessment survey, and wrapping up with public comment in fall 2022, occurred during unprecedented events. The COVID-19 pandemic significantly changed social and economic patterns in the Roanoke Valley. Even as emergence from the pandemic occurred in 2021 and 2022, some outcomes have remained, such as more remote work and an acceleration toward a virtual economy.

In 2022, a combination of volatile and high energy costs and inflation across many sectors, including housing, food, labor, and construction materials, have led to concerns of a national recession. In the transportation sector, the combination of high energy costs and high construction costs have put pressure on transportation budgets and challenged project delivery.

Recent extreme weather events around the world, including catastrophic flooding in southwestern Virginia (Buchanan and Wise counties) in July 2022, continues to elevate attention on strategies to mitigate greenhouse gas emissions and develop more resilient economies and infrastructure.

How will the RVTPO direct the path forward?

The development of the vision and goals for the RVTP relied on combining the following insights:

- Goals and objectives referenced in relevant regional, state, and federal plans and policy,
- The region’s current vision and goals framework,
- The role of future factors in shaping our goals, and
- Planning partner insights on draft vision and goals framework.

The vision and goals is the starting point for the foundation of a performance based planning and programming process. The vision and goals also shape real objectives and performance measures. They can also be used as a consistent benchmark against which to evaluate the results of needs assessments, solution development, and project identification ensuring that the final outcomes of the planning process are true to the original values established for the region. The connections and key questions that goals, objectives, and measures are answering are presented in 5. More insight on the development of the vision, goals, objectives, and measures is available in [Appendix E](#).

Figure 5 Connection of Vision, Goals, Objectives, and Measures



Vision and goals

To develop a vision and goals framework, RVTPO conducted research at the federal, state, and regional levels. This framework helped to set better context for developing region-specific goals. Goals and objectives research focused on the following Federal, State, and regional sources:

Federal Planning Factors:

- [23 CFR §450.306](#) - Scope of the metropolitan transportation planning process
- [23 CFR §150](#) - National goals and performance management measures

State Planning Factors:

- [VTrans Goals](#)

Regional Planning Factors:

- Vision 2040: Roanoke Valley Transportation Plan
- RVAR: Comprehensive Economic Development Strategy
- 2020 RVTP Needs Survey
- Livable Roanoke Valley Plan

Vision statements and goals from these efforts were compared and then connected to current regional perspectives collected through public survey and outreach and discussions with RVTPO planning partners. The resulting vision and goals guides the development and implementation of the RVTP:

Vision:

The Roanoke Valley’s seamless regional multimodal transportation system is safe, cost-effective, environmentally conscious, well-maintained and reliable, accessible for all users, and promotes the economic vitality of the community.

The Vision describes the desired future state for the Roanoke Region’s multimodal transportation system

Goals:

Provide a safe and secure transportation system

Enable reliable mobility

Ensure convenient and affordable access to destinations

Foster environmental sustainability

Maintain and operate an efficient and resilient transportation system

Support economic vitality

Promote equitable transportation investments

Goals describe the priorities which will guide the region toward attaining the Vision

Objectives and performance measures

Objectives describe how the RVTPO will attain the RVTPO vision and goals. They represent specific desired RVTP outcomes. This also means that they inform how to develop solutions to respond to needs, how to prioritize projects within the RVTP, and how to track RVTP implementation and overall system performance.

Performance measures are the quantitative link to objectives. Performance measures assess the degree to which investments address transportation needs and meet acceptable thresholds. They enable the RVTPO to assess the degree to which the transportation system is achieving objectives.

Objectives and performance measures work best when they are specific, measurable, agreed-upon, relevant, and time-bound. In a number of topic areas, RVTPO is already working with VDOT and Valley Metro to track performance measures as required by the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA). In other topic areas, where data is not readily available, the RVTP identifies opportunities for RVTPO to enhance its performance management data and process in coming years. The RVTP objectives are presented in Table 2.

Table 2 RVTP Goals and Objectives

Goal	Objective
1. Provide a safe and secure transportation system	A. Eliminate fatalities and reduce injuries on the multimodal transportation system.
2. Enable reliable mobility	A. Maintain vehicle travel time reliability on priority corridors. B. Improve transit and passenger rail on-time performance.
3. Enable convenient and affordable access to destinations	A. Provide motorized access to inaccessible properties identified for future development. B. Increase accessibility to key destinations by transit. C. Increase transportation connections to markets outside the region, including across Virginia and the U.S. D. Increase transit, bicycle, and pedestrian connections for all users within multimodal centers and districts.
4. Foster environmental sustainability	A. Minimize emissions from motorized on-road transportation. B. Minimize / mitigate new impervious surfaces created by transportation infrastructure.
5. Maintain and operate an efficient and resilient transportation system	A. Maintain state and national standards for infrastructure and asset condition.
6. Support economic vitality	A. Ensure redevelopment and new developments in designated growth areas and multimodal centers/districts are supported by more than one mode of transportation infrastructure. B. Maintain truck travel time reliability. C. Maintain acceptable levels of congestion during peak travel periods on priority corridors.
7. Promote equitable transportation investments	A. Assess planning-level benefits or disproportionate adverse effects of transportation projects included in this plan on Equity Emphasis Areas and identify mitigation strategies. B. Ensure that non-drive alone mobility investments create opportunities in Equity Emphasis Areas. C. Eliminate fatalities and reduce serious injuries in Equity Emphasis Areas. D. Maintain state and national standards for infrastructure condition in Equity Emphasis Areas.

Each objective includes multiple performance measures including those already being tracked and candidate measures for further RVTPO development. The performance measures are highlighted in Table 3 and presented in more detail, along with information on how to access performance information, in [Appendix E](#). Performance trends and targets within the region across the Federally-required surface transportation measures through FHWA and FTA are presented in the required System Performance Report in [Appendix B](#).

Table 3 RVTP Performance Measures

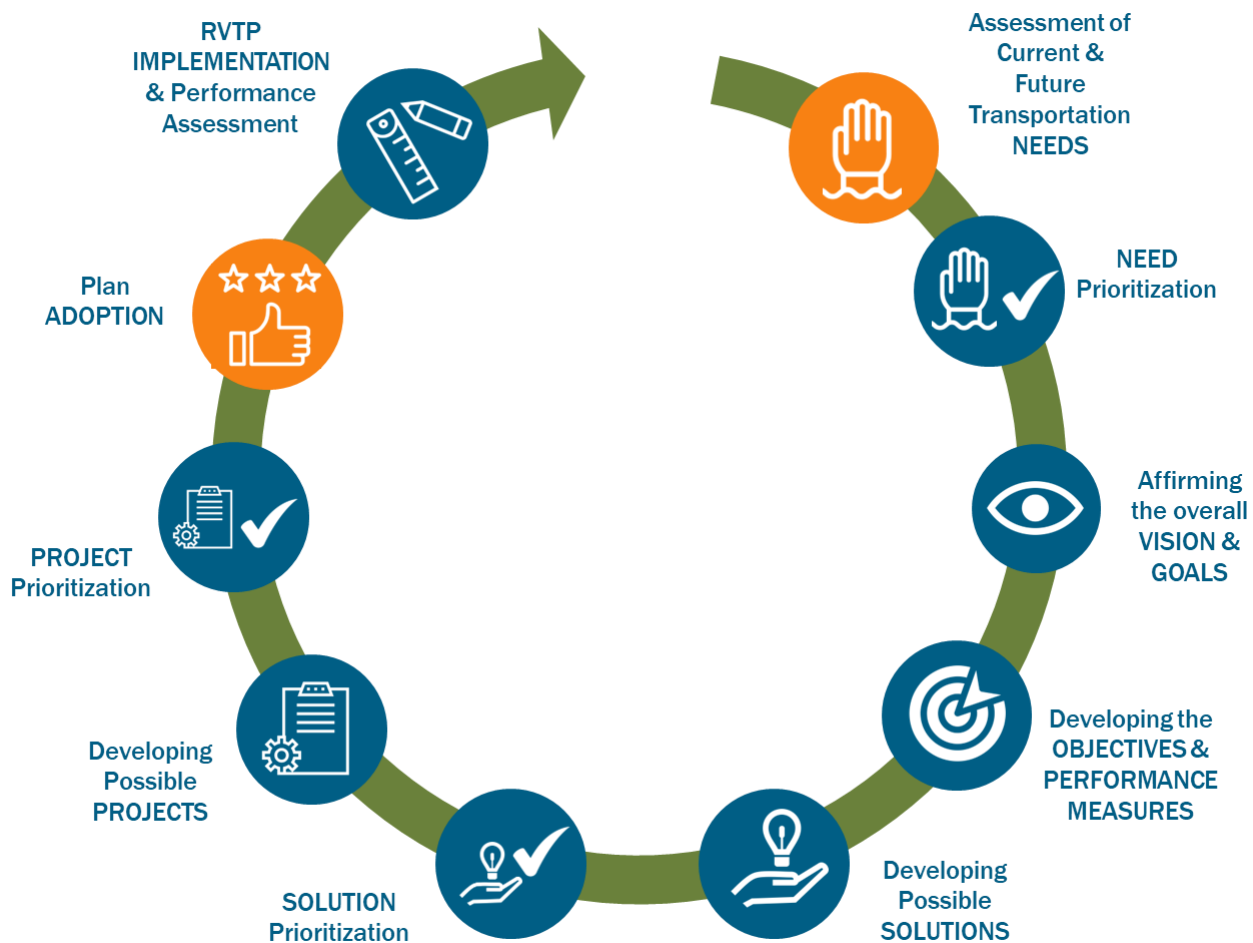
Goal	Performance Measure Summary
<p>1. Provide a safe and secure transportation system</p>	<p>There are five highway safety measures tracked by VDOT and three transit safety measures tracked by Valley Metro and DRPT consistent with Federal requirements.</p>
<p>2. Enable reliable mobility</p>	<p>There are two highway travel time reliability measures tracked by VDOT on the Interstate and National Highway System consistent with Federal requirements. Valley Metro also tracks one transit service reliability measure consistent with Federal requirements and maintains information for on-time performance. Amtrak also tracks and reports on-time performance.</p>
<p>3. Enable convenient and affordable access to destinations</p>	<p>Federal performance management rules have not yet addressed the topic of accessibility. VTrans and SMART SCALE incorporate accessibility into statewide planning and programming approaches. RVTPO identified seven candidate accessibility performance measures.</p>
<p>4. Foster environmental sustainability</p>	<p>Federal performance management rules track emissions within areas not meeting Clean Air Act standards. Since the RVTPO region meets air quality standards, RVTPO focused on one performance measure that tracks investments in low-emission vehicles and technologies and two performance measures related to stormwater management.</p>
<p>5. Maintain and operate an efficient and resilient transportation system</p>	<p>There are six total bridge and pavement asset condition measures tracked by VDOT and two transit asset condition measures tracked by Valley Metro that are consistent with Federal requirements. VDOT tracks additional bridge and pavement condition measures on the entire highway system, including locally maintained roads.</p>
<p>6. Support economic vitality</p>	<p>VDOT tracks a truck travel time reliability measure on Interstates consistent with Federal requirements. Through the Congestion Management Process, RVTPO tracks planning time index (another measure of reliability) on priority corridors.</p>
<p>7. Promote equitable transportation investments</p>	<p>Federal performance management rules have not yet addressed equity, however Federal policy has elevated the consideration of equity in all steps of the transportation planning and programming process, including through the Justice40 Initiative. RVTPO identified six candidate transportation equity measures consistent with the emerging Federal guidance and regional and local priorities.</p>

Informing the performance-based planning and programming process

According to FHWA, performance-based planning and programming (PBPP) refers to the application of performance management principles within the planning and programming processes of transportation agencies to achieve desired performance outcomes for the multimodal transportation system.¹ Within the context of the RVTP, the goals, objectives, and measures described above create the structure for identifying the most critical needs, potential solutions, and candidate projects for inclusion in the plan.

This entire process is intended to be continuous. Needs change, projects change, and plans change. A continuous and interconnected process, as presented in 6 helps RVTPO and its partners stay dynamic both as the future factors impact the region, but also as more immediate changes in needs, priorities, and opportunities shift the outcomes of the process.

Figure 6 RVTP Performance Based Planning and Programming Process

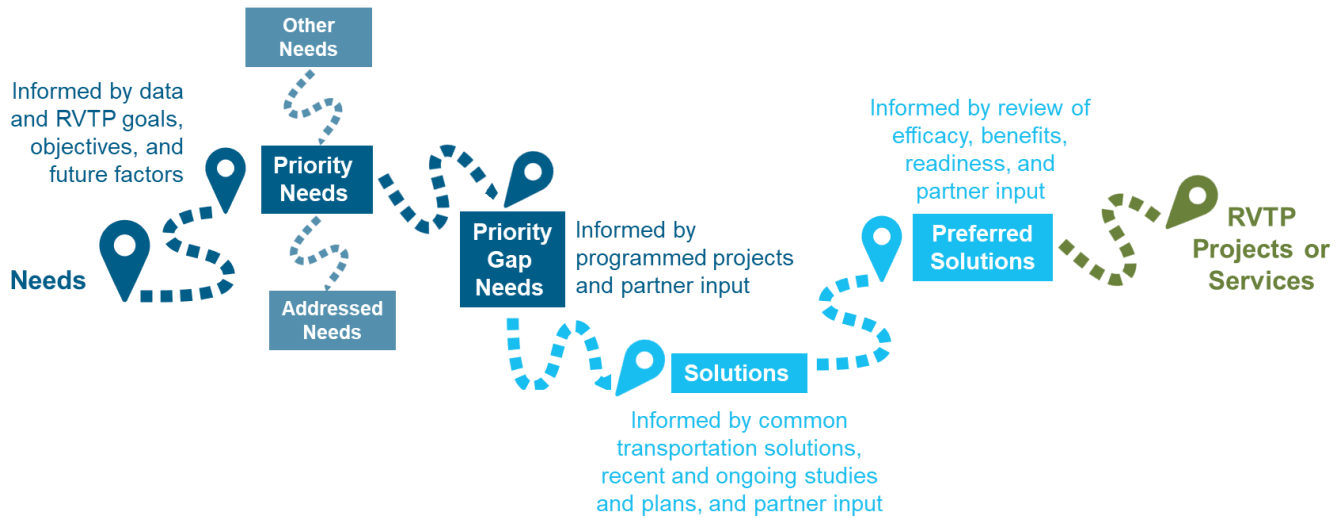


¹ <https://www.transit.dot.gov/regulations-and-guidance/transportation-planning/performance-based-planning-and-programming>

How do the goals and objectives shape needs into solutions?

The translation of needs to potential solutions to opportunities for investment through transportation projects or services is a critical step with the new RVTP performance based planning and programming process. The general process is presented in Figure 7.

Figure 7 Process from Needs to Projects, Services, and Studies



Priority gap needs identification

Citizens identified many transportation needs in the Roanoke Valley and, there are many investments already programmed to address some of them. The needs which are not going to be fully addressed by the programmed investment or not addressed at all were prioritized in order to better understand which needs may merit attention and investment before other needs. The criteria used to prioritize needs encompasses many elements that are important considerations for the region and its goals.

Needs prioritization criteria: (To be described and maps shown where relevant.)

Multimodal Centers and Districts

Activity Density: 2019 – 2045

Throughput: Priority Corridor and VMT Change

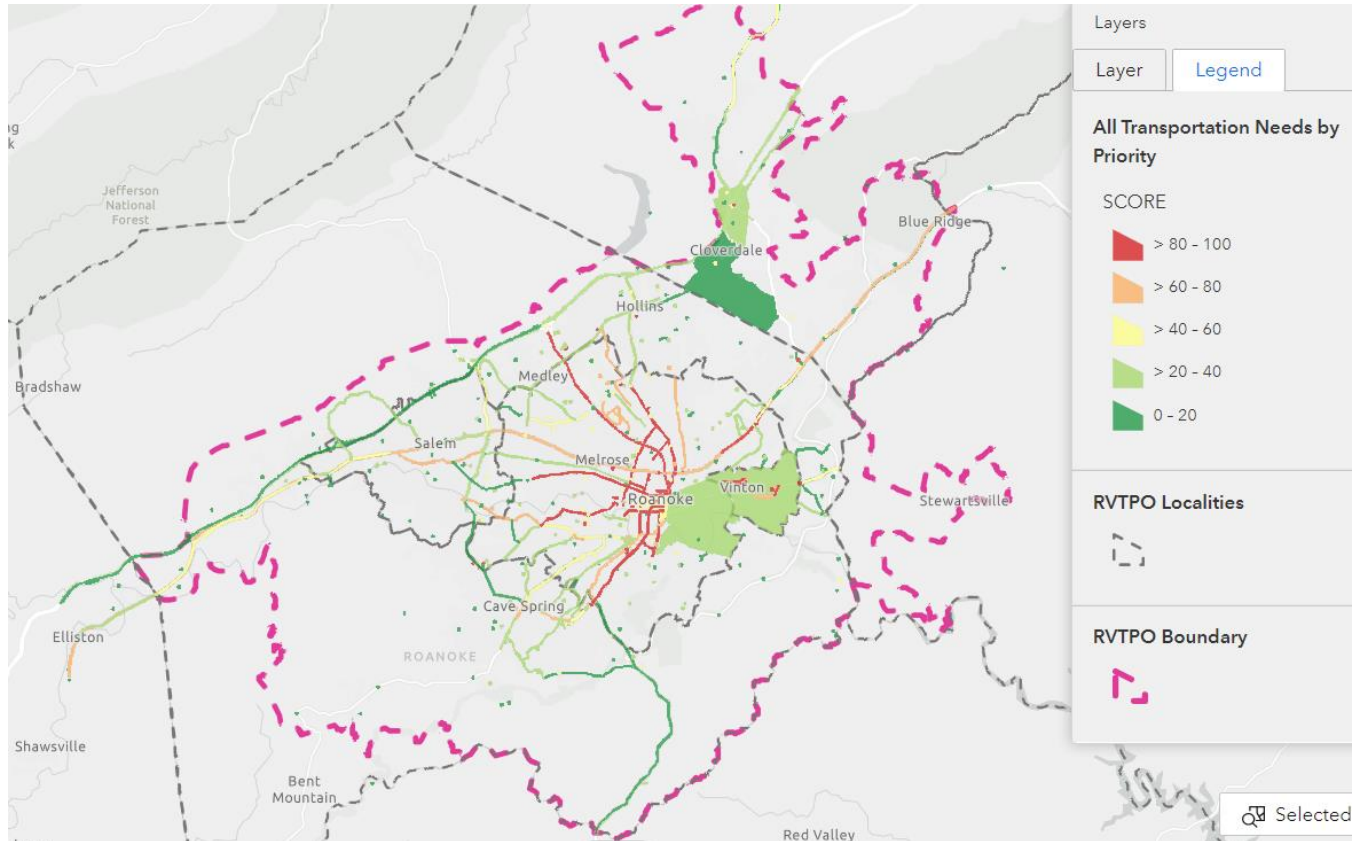
Safety: VTrans Needs (PSI) and PSAP

Environmental Justice: Equity Emphasis Areas

Economics: Development Priority Locations and Urban Development Areas

The technical details on the methodology for using these criteria to prioritize needs is included in Appendix F. Figure 8 presents a summary map of the priority transportation needs, with red needs the highest and green needs the lowest (based on the priority needs methodology in Appendix F).

Figure 8 Priority Transportation Needs



Three types of needs

Nearly 1,000 unique transportation needs were reviewed relative to existing programmed transportation projects and recent and ongoing studies, following the outcomes of the priority needs methodology.

Addressed needs

Needs that are addressed by existing funded projects and services. This includes projects and services that have recently been implemented and projects programmed for implementation within the next six years consistent with VDOT and DRPT projects within the six-year improvement program.

Priority gap needs

For needs that are not addressed by projects, approximately 160 needs were identified as priority gap needs consistent with the priority needs methodology and TTC input. These priority gap needs span every jurisdiction within the region and each of the nine need types.

Other gap needs to address in the future

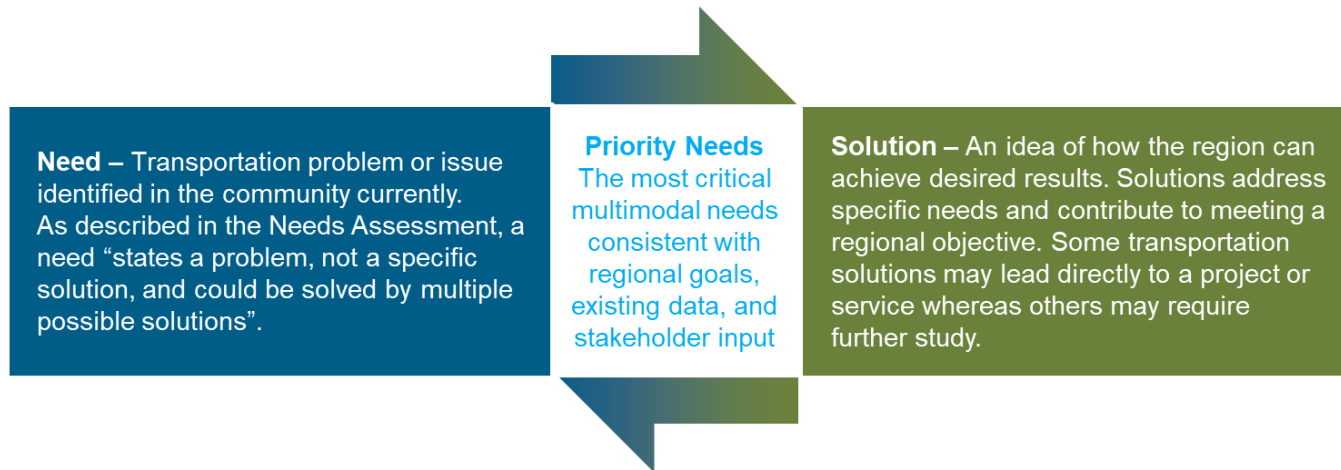
For the remaining needs determined to be lower priority, RTVPO will continue to track these needs and as opportunities occur and resources are available, position them to advance toward solutions.

Addressed needs, priority gap needs, and other gap needs are available for viewing in the NEST and review within Appendices G, H, and I.

Transportation solutions

A list of 50 common and unique transportation solutions were developed to help organize the approach to develop potential solutions to address the priority gap needs. These solutions are multimodal and feature common solutions and unique solutions that represent emerging best practices. Figure 9 presents the overarching definitions for how needs and priority needs are translated into solutions.

Figure 9 Needs Translation to Solutions



Possible solutions and preferred solutions for priority gap needs

The solutions process considered programmed projects/services, planned projects/services (from the prior RVTPO constrained and vision list projects and past plans/studies), and ongoing plans/studies such as VDOT STARS or Project Pipeline. Recommended projects and services from completed plans/studies are available in the NEST, enabling a comparison of priority gap needs to these efforts.

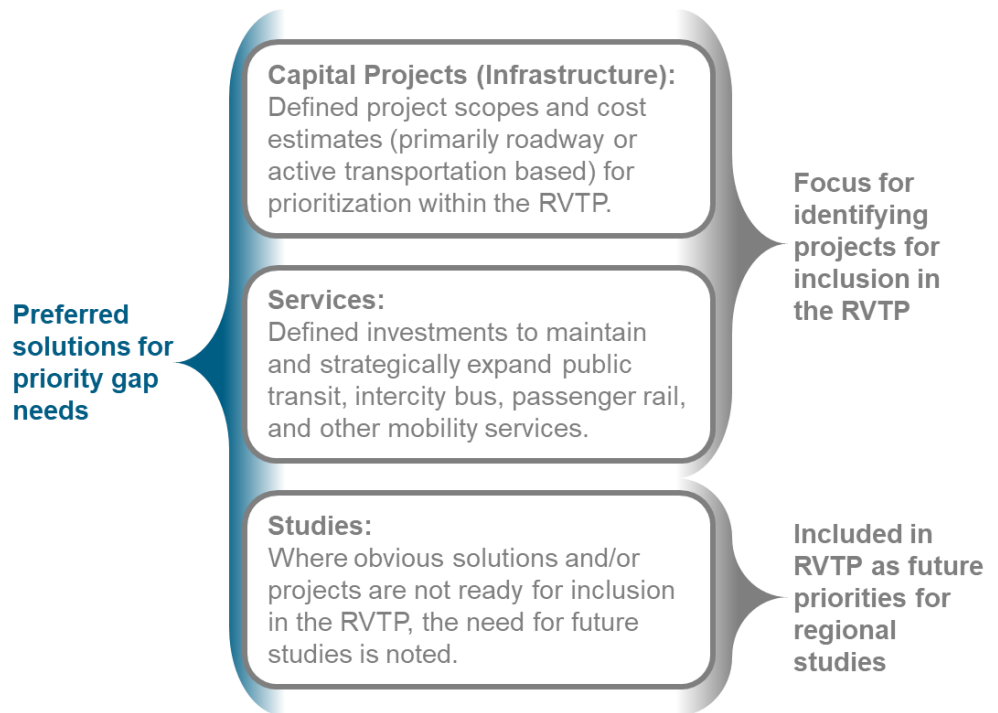
Where recent and ongoing efforts were determined to address the priority gap need, each effort was reviewed with the TTC to confirm status and validate if the solution would address the need. If there was no recent or ongoing planning effort addressing the priority gap need, common transportation solutions were assigned in order to develop a set of options to address the need. Where there is no obvious preferred solution, the RVTP identifies these needs as opportunities for future studies.

Optional and preferred solutions are presented for each priority gap need in Appendix H.

Creating projects, services, and studies

Optional and preferred solutions for the priority gap needs are developed into projects, services, and studies as described in Figure 10. Some of these projects and services will proceed into the RVTP as funded or unfunded projects, while others will remain as preferred solutions, targeted for future study.

Figure 10 Projects, Services, and Studies

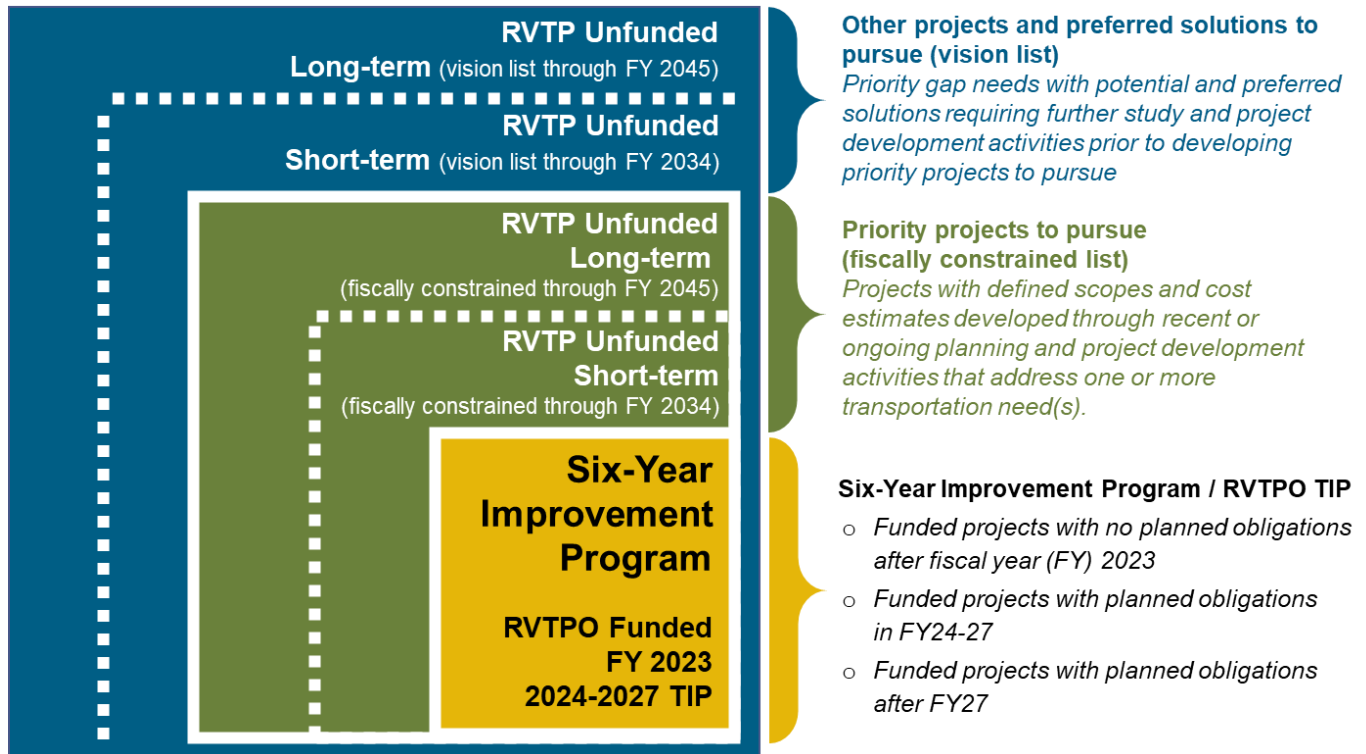


What projects, services, and studies will help meet the region’s needs?

The performance-based planning process supports development of a unified RVTP that includes funded projects over the next four years within the Transportation Improvement Program, fiscally constrained projects to pursue, and vision list projects and solutions.

Figure 21 presents the overall structure of projects and services within the RVTP, including their relationship to projects in VDOT and DRPTs Six-Year Improvement Program (SYIP).

Figure 21 RVTP Organization



Funded Projects include those projects and services within the RVTPO Transportation Improvement Program (TIP) which is inclusive of SYIP projects in FY 2023 and the next three fiscal years (FY 2024 – FY 2027). These funded projects are consistent with projects in the first four years of the current SYIP (FY 2023 – FY 2028), and include:

- Funded projects with no planned obligations after fiscal year (FY) 2023
- Funded projects with planned obligations in FY24-27
- Funded projects with planned obligations after FY27

RVTP Unfunded Projects include fiscally constrained projects outside of the TIP. These projects may be included in the outer years of the current SYIP (programmed in FY 2028 or beyond) or be current candidate projects for inclusion in the next SYIP (FY 2024 – FY 2029) which is inclusive of the results of SMART SCALE round 5. These projects are priorities for the region to pursue and include defined scopes and cost estimates developed through recent or ongoing planning and project development activities. These unfunded, fiscally constrained projects address one or more priority gap needs and fall into two buckets:

- Short Term – Desired project allocations through FY34 (priority projects meeting regional goals and objectives for future grant cycles)
- Long-Term – Desired project allocations FY35 to FY45 (projects for long-term funding cycles including higher-risk, higher-cost projects requiring further project development)

RVTP Unfunded Projects also include vision list projects featuring other projects and preferred solutions to pursue. The vision list projects include project concepts without complete scopes or cost estimates and potential and preferred solutions that will require further study and project development

activities prior to developing priority projects to pursue (the fiscally constrained list). These unfunded, vision list projects address one or multiple priority gap needs and fall into two buckets:

- Short-term – Studies and project development between now and 2028 (represents higher-priority studies and project development based on higher scored priority gap needs)
- Long-term – Studies and project development 2029 and beyond (represents lower-priority studies and project development based on lower scored priority gap needs)

Note that studies and project development activities identified in the RVTP will require further scoping and agreement among RVTPO, VDOT, DRPT, and local partners, and may be included in future Unified Planning Work Program (UPWP) update cycles. Long-term studies identified for 2029 and beyond will be revisited during the next update to the RVTP, planned for 2028.

An overarching purpose of this structure within both the unfunded fiscally constrained and vision lists is to position the region to be prepared and opportunistic in advance of grant cycles, such as SMART SCALE and STBG, but also new formula and discretionary grant opportunities through the Bipartisan Infrastructure Law.

What are the Funded Projects and Services in the Plan

How do we prioritize investments?

The RVTPO has the ability to prioritize at multiple levels including which needs to focus attention addressing, the preferred solution to address a need, and which projects funding is programmed. Each grant program has different criteria that determine whether or not a proposed project or investment may receive funding. The RVTPO does not have control over most of those decision; its main point of prioritization is in choosing which need to address and how that will be done.

Where does funding come from and what are the requirements?

Funding for projects may come from federal, state, or local resources. Many funding programs exist at the federal level and administered by the state. The RVTPO Policy Board has direct access to two funding pots: Surface Transportation Block Grant and Transportation Alternatives urban apportionment. The available amounts are mainly tied to the region’s population in proportion to other metropolitan areas. As such, most of the region’s transportation funding comes from grant programs administered by agencies outside of the region requiring eligible applicants (localities, transit agencies, or the regional body) to request funding through the many unique grant selection processes. Each one has requirements and eligibilities and developing a project proposal that can score well to achieve funding can often be challenging.

Which projects and services are funded and moving forward?

Projects and services that are funded, of regional significance, and are eligible for federal funding make up the Roanoke Valley’s Transportation Improvement Program for FY24-27. Several of these projects may have started in previous years or be complete but are not closed in the state’s financial reporting system so they are still listed. Other funded projects will constitute future Transportation Improvement Programs as their planned federal obligations will occur in FY28 or later.

See Appendix J to review regionally significant funded projects in the RVTPO area.

What are the anticipated benefits of these investments?

Future content - analysis of the alignment between these investments and the region’s goals/objectives/performance measures.

What are the Unfunded Projects and Services in the Plan

Which Project and Services are Ready to Seek Funding in the Next Ten Years?

Add list (unfunded priorities, SS Round 5 and limited others with cost)

Much time and effort is spent studying priority transportation needs and identifying the preferred solution.

Which Projects Are Priorities to Pursue Beyond Ten Years?

Add list

What studies are needed to help us develop new solutions?

The desire for additional study before settling on a preferred solution to address a need is common. Such studies are noted in the tables associated with each need within Appendices H and I.

How will the RVTPO Implement the RVTP?

What are our Performance Measures?

What tools will RVTP use to facilitate the PBPP process?

How will we track progress?

How will the plan change over time?

Appendix A: Federal Requirements Review

Appendix B: System Performance Report

Appendix C: Roanoke Valley Transportation Needs Assessment

As approved by the RVTPO Policy Board on April 22, 2021.

Appendix D: Future Factors

Appendix E: Goals, Objectives, and Performance Measures

Appendix F: Needs Prioritization Scoring Methodology

Appendix G: Regional Transportation Needs - Addressed

Addressed Transportation Needs

Roanoke Valley Transportation Planning Organization



Introduction	<p>This spreadsheet lists the transportation needs identified in the Roanoke Valley Transportation Plan along with available information for understanding how the need is being addressed. The noted investment may not yet be complete but due to its status as funded is considered to be addressed.</p> <p>See the NEST tool to map the projects: https://experience.arcgis.com/experience/7c2b2fb55b1b42c58954799c2156b922</p>
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Need Status	Addressed
Priority Need	Yes

Need ID	Need Type	Simple Location	Detailed Location	Need	Score	Investment to Date	Rationale
N_256_1_MV_S	Safety (auto)	Virginia Avenue	City Limit to Bypass Road	Improved visibility-Virginia/Pollard intersection; HighTraffic/slow flow;speed;signal timings;ped saf	93	Routes 35/36 Transit Service, Town of Vinton has purchased new signal equipment to upgrade signal timings.	New signal equipment will address traffic flow and signal concerns. Visibility is a function of topography.
N_59_2_MV_S	Safety (auto)	Route 419	U.S. 220 to Ogden Road		93	Meets need: #HB2.FY17 ROUTE 419 SAFETY IMPROVEMENTS AT TANGLEWOOD, Route 419/Route 220 Diverging Diamond Interchange Does not meet need: Route 51 & 52 Fixed-Route Transit Service	Addition of one lane in each direction, signal upgrades is intended to make this segment of Route 419 safer for driving.
N_1740_MV_S	Safety (auto)	U.S. 220	Route 419	Speeding traffic, Short ramp, Turning movements slow traffic	91	#SMART20 - ROUTE 419 & ROUTE 220 DIVERGING DIAMOND INTERCHANGE	Funded project aims to address needs identified.
N_740_B_S	Safety (bike)	9th St SE	9th St SE		90	Route 41 & 42, 35 fixed-route transit; UPC 117994-9th Street Multimodal Improvements	Funded project with repaving will likely add bike lanes for much of this segment addressing bicycle safety needs.
N_981_N_SM	System Management (operations, assets)	U.S. 460 - Orange	near King Street		88	#SMART22 - ROUTE 460 (ORANGE AVENUE) IMPROVEMENTS AT KING STREET - signal coordination/re-timing	Funded project aims to address this need.
N_142_P_S	Safety (ped)	Campbell Avenue	at 8th Street SW		88	Route 71 & 72 fixed-route transit	Sidewalks and ADA ramps exist at this intersection; no other accommodations planned.
N_127_P_S	Safety (ped)	Patterson Avenue SW	12th Street to 13th Street		88	Route 65 & 66, 71 & 72 fixed-route transit	Sidewalks and ADA ramps exist at this intersection; no other accommodations planned.
N_139_P_S	Safety (ped)	9th Street SE	Tazewell Avenue SE to Buena Vista Boulevard SE		88	9th St. Multimodal improvements on portion of corridor, Transit projects (Route 41, 42, 35 & 36 fixed-routes)	Corridor has pedestrian amenities.
N_673_B_S	Safety (bike)	Wiley Dr	Wiley Dr	Speeding traffic, distracted drivers	87	None	Adjacent greenway trail provides a safe space for bicyclists to be separate from motorists.
N_63_T	Congestion	U.S. 460 - Orange	24th St. NE to Blue Hills Drive NE		86	Addresses need: #SMART20 - ORANGE AVE (US 460) IMPROVEMENTS, #SMART22 - ROUTE 460 (ORANGE AVENUE) IMPROVEMENTS AT KING STREET and Route 31 & 32 Fixed-Route Transit Service	#SMART20 and #SMART22 projects address congestion (primary need)
N_215_P_S	Safety (ped)	Lee Avenue	Walnut Avenue to S. Pollard Street		86	None as of May 2022.	Sidewalks exist on Lee Avenue
N_163_P_S	Safety (ped)	Memorial Avenue	Edgewood Street to Campbell Avenue		85	Transit projects (Routes 71/72 and 65/66); ADA ramps installed at some intersections since the Pedestrian Plan approval.	Sidewalks, crosswalks, ADA ramps and pedestrian signals exist.
N_85_P_S	Safety (ped)	Pollard Street	north of Jefferson Avenue to W Jackson Avenue		84	Routes 35/36 Transit Service. Newer ADA ramps and sidewalks next to the library.	Sidewalks exist throughout the corridor.
N_185_P_S	Safety (ped)	Wells Avenue	Gainsboro Road to and along Commonwealth Avenue to Shenandoah Avenue		84		Sidewalks exist.
N_465_T_A	Access (Transit)	Airport	Airport		75	SMART WAY Base and Routes 25/26 - Fixed-Route Transit Service (serves airport)	Multiple routes serve the airport - SMART WAY and Routes 25/26.

Need ID	Need Type	Simple Location	Detailed Location	Need	Score	Investment to Date	Rationale
N_59_3_T	Congestion	Route 419	Starkey Road to Brambleton Avenue	Timing of lights on 419 often means hitting every single one- every single one. This is why people use shortcuts like Brandon, leading to other issues.	73	#SMART18 - ROUTE 419 & RTE 221 ADAPTIVE TRAFFIC CONTROL includes improvements to 7 existing traffic signals on Electric Rd. but does not go full length of corridor; Salem lights are on a different coordinating system.	All signals on Route 419 between the City of Salem and City of Roanoke are coordinated through two different systems.
N_248_T	Congestion	Downtown Vinton	Downtown Vinton	p54-delays, signal coord/timing, speed, trucks	72	Vinton will be replacing all of the traffic signal equipment in the town within the next three years (through 2025).	Monitor congestion via CMP.
N_7_T	Congestion	Pollard Street	Washington Avenue to Virginia Avenue	Projected to be LOS F by 2035; congestion/delays due to on-street parking	72	Routes 35 & 36 fixed-route transit.	Need is related to congestion/delays due to on-street parking which will continue in order to provide parking to support downtown businesses.
N_1748_N_SM	System Management (operations, assets)	U.S. 460 - E Main	Thompson Memorial Drive		68	Meets need: East Main Street - Widen to 3 Lanes w/ Bike Lane, Curb, Sidewalk, Downtown Salem Streetscape and Intersection Improvements Does not meet need: Route 71 & 72 Fixed-Route 91 & 92 Fixed-Route Transit Service	East Main Street - Widen to 3 Lanes w/ Bike Lane, Curb, Sidewalk project and Downtown Salem Streetscape and Intersection Improvements include new/improved assets and turn movements, etc.
N_1596_T_A	Access (Transit)	Melrose Avenue	near Food Giant		67	Route 91 & 92 fixed-routes	Need is addressed by investment.
N_613_N_A	Access (Non-Transit)	Route 419	Tanglewood		67	#HB2.FY17 ROUTE 419 SAFETY IMPROVEMENTS AT TANGLEWOOD, Route 52 Fixed-Route Transit Service, Fallowater Lane Extension	Route 419 improvements include additional pedestrian accomodation, new bike lane, roadway extension.
N_501_T_SM	System Management (transit)	Jefferson Street	The Bridges		62	Starline Trolley	The Starline Trolley as of February 2022 also connects with the fixed-routes at Third Street Station.
N_297_P_S	Safety (ped)	U.S. 460 - W Main	Enterprise Drive		62	None as of May 2022	It is unclear where pedestrians would be walking to/from in this area. There are wide shoulders on the road. For the few people that may be walking in this area, the shoulders are sufficient.
N_382_T	Congestion	Downtown Salem	Downtown Salem	Prime parking spots are congested - 50% of spaces are generally occupied	62	Creation of parking availability website , blue parking signs and public education. https://arcgispub.salemva.gov/portal/apps/webappviewer/index.html?id=fde312dc22ee47e5bab31ce525fbdff	Investment addresses parking need.
N_333_N_SM	System Management (operations, assets)	Route 419	Grandin Road		59	Project UPC T24550, Oak Grove Streetscape Improvements; #SMART18 - ROUTE 419 & RTE 221 ADAPTIVE TRAFFIC CONTROL & #PIPELINE22 - RTE. 419 study	Project UPC T24550, Oak Grove Streetscape Improvements will install pedestrian signals and crosswalks at the existing traffic signal; #SMART18 - ROUTE 419 & RTE 221 ADAPTIVE TRAFFIC CONTROL coordinated Route 419 traffic signals & #PIPELINE22 - RTE. 419 study is recommending safety improvements that will also reduce congestion
N_260_T_SM	System Management (transit)	Campbell Court		p1-Addl space (capacity) for transit ops	59	Downtown Multimodal Station	Station has moved to Third St.
N_1404_T_A	Access (Transit)	Downtown Salem	Downtown Salem		50	Routes 91 & 92 serve Downtown Salem.	Funded investment address transit access need.
N_1487_T_A	Access (Transit)	Roanoke Country Club	Roanoke Country Club		50	Routes 91 & 92 serve Melrose Ave. with a stop at Country Club Drive.	Funded investment addresses transit access need.
N_1598_T_A	Access (Transit)	Salem Village Mobile Home Park	Salem Village Mobile Home Park		50	Routes 91 & 92 serve Roanoke Blvd. Stop at entrance of mobile home park (but 1/3 mile from closest mobile home).	Funded investment addresses transit access need.
N_631_T_A	Access (Transit)	12th Street	Rugby Boulevard		50	Routes 11 & 12 with stops at 12th & Rugby.	Funded investment addresses transit access need.
N_864_T_A	Access (Transit)	Williamson Road	Crockett Avenue		50	Routes 21 & 22 go by this location.	Funded investment addresses transit access need.
N_2070_T	Congestion	Route 419	Brambleton Avenue		49	Meets need: #SMART18 - ROUTE 419 & RTE 221 ADAPTIVE TRAFFIC CONTROL	Signal coordination project improved traffic flow on Route 419
N_2069_T	Congestion	Buck Mountain Road	Starkey Road		42	Project UPC 113144, Starkey Road/Buck Mountain Road Intersection Improvements	Funded project will address this need with a roundabout construction in 2023.
N_2080_T	Congestion	Thompson Memorial Drive	Kessler Mill Road		42	Project UPC 108904, Route 311/Route 419 Intersection Safety & Congestion Improvements	Funded project will address this need by replacing the traffic signal with a roundabout in the vicinity of Kessler Mill Road which will relieve congestion.
N_634_T	Congestion	Exit 143	Exit 143	Left lane exit/entrance	42	Project UPC 111373. I-81 Widening from Exit 143 to 141 Southbound	Funded project extended the left turn lane to Exit 141.
N_1254_T_A	Access (Transit)	Franklin Road	Burger King, McDonalds, Plasma Resources, Carilion Clinic		42	Routes 51 & 52 fixed routes	Investment addresses transit access need.
N_214_N_A	Access (Non-Transit)	Walnut Avenue	Booker Avenue to W. Lee Avenue	Connect to greenway	42	Walnut Avenue Phase I Bike/Pedestrian Improvements	Investment will address this need with a paved surface trail connecting Booker Avenue to the existing pedestrian bridge over Tinker Creek.

Need ID	Need Type	Simple Location	Detailed Location	Need	Score	Investment to Date	Rationale
N_694_T_A	Access (Transit)	Elm Avenue	5th Street	Job access	42	Routes 61 & 62 serve Elm Avenue.	Investment addresses transit access need.
N_1608_MV_S	Safety (auto)	Route 419	Starkey Road		41	Project UPC 119462, Route 419 Streetscape Improvements, Phase 2	Funded project includes a Thru-Cut at Route 419 and Starkey Road to improve traffic flow and safety.
N_59_2_P_S	Safety (ped)	Route 419	U.S. 220 to Ogden Road	p32-Want sidewalks addressed and improved	40	Project UPC 107061, Route 419 Widening, Safety and Multimodal Improvements	Funded project installed sidewalk along Route 419 between U.S. 220 and Ogden Road.
N_2084_T	Congestion	Cloverdale Road	near U.S. 460		39	#SMART22 - Route 460 at Alternate Route 220 Intersection Improvements	#SMART22 - Route 460 at Alternate Route 220 Intersection Improvements will reduce congestion and improve traffic flow on both Cloverdale Road and Route 460
N_14_B_S	Safety (bike)	Walnut Avenue	Roanoke City Limit to 1st Street	p18-Bicycle LOS D, Access from Glade Creek Greenway to Vinyard Park	37	Glade Creek Greenway Phase 2B (construction phase starting in 2023) and Glade Creek Greenway Phase 3 (PE starting in 2022) will address this need.	Investment will address this need with a paved surface trail.
N_904_P_S	Safety (ped)	Route 419	Tanglewood Mall		37	Project UPC 107061, Route 419 Widening, Safety and Multimodal Improvements	Funded project installed sidewalk along Route 419 between U.S. 220 and Ogden Road.
N_444_B_S	Safety (bike)	U.S. 220	Route 419		34	Project UPC 115460, Route 419/Route 220 Diverging Diamond Interchange	Project UPC 115460, Route 419/Route 220 Diverging Diamond Interchange includes bicycle lanes through the interchange to connect with Route 419 bicycle lanes and U.S. 220 Business bicycle lanes.
N_1038_MV_S	Safety (auto)	I-81	Exit 137		34	Project UPC 116203, I-81 from MM 136 to MM 142, add lane in each direction	Project UPC 116203, I-81 from MM 136 to MM 142, add lane in each direction will relieve congestion and improve the Exit 137 interchange.
N_429_P_S	Safety (ped)	LewisGale Medical Center	LewisGale Medical Center		34	New and upgraded sidewalk west side of 419 with upgraded pedestrian signal improvements at Braeburn intersection. No further improvements planned beyond Rotary Park east.	Funded improvements address the need.
N_523_N_A	Access (Non-Transit)	Roanoke River Gwy	West end of Roanoke River Greenway segment near Peters Creek	Access from here to east end of next segment	33	Greenway under construction in 2022 for completion in August 2023.	
N_448_P_S	Safety (ped)	Walker Foundry/Norwich	Walker Foundry/Norwich		25	Greenway trail funded between Bridge St. and Aerial Way - complete by August 2023.	
N_521_P_S	Safety (ped)	Bridge Street	Norwich neighborhood	Nonmotorized access from here to Downtown Salem and east end of next segment	25	Greenway trail funded between Bridge St. and Aerial Way - complete by August 2023.	
N_540_B_S	Safety (bike)	Kessler Mill Road	South end of Hanging Rock Battlefield Trail	Access to north end of Mason Creek Greenway	25	Greenway from Southend of Hanging Rock Trail to E. Main St construction to start Summer 2022.	Investment addresses this bike safety need.
N_434_B_S	Safety (bike)	Northside High School	Northside High School		21	Bicycle accommodations are provided along Peters Creek Road to and from the Northside campus.	Funded investment addresses this need.
N_523_B_S	Safety (bike)	Blue Ridge Drive	West end of Roanoke River Greenway segment near Peters Creek	Access from here to east end of next segment	20	Roanoke River Greenway - Bridge St. to Aerial Way is funded, construction completion in August 2023.	
N_523_P_S	Safety (ped)	Blue Ridge Drive	West end of Roanoke River Greenway segment near Peters Creek	Access from here to east end of next segment	20	Roanoke River Greenway - Bridge St. to Aerial Way is funded, construction completion in August 2023.	
N_402_P_S	Safety (ped)	Explore Park	Explore Park		20	Project UPC 113567, Roanoke River Greenway Explore Park to Rutrough Point	Funded project addresses this need.
N_544_B_S	Safety (bike)	Explore Park	River trail	Access to Roanoke River Greewnay	17	Project UPC 113567, Roanoke River Greenway Explore Park to Rutrough Point	Funded project addresses this need.
N_544_P_S	Safety (ped)	Explore Park	River trail	Access to Roanoke River Greewnay	17	Project UPC 113567, Roanoke River Greenway Explore Park to Rutrough Point	Funded project addresses this need.
N_1511_MV_S	Safety (auto)	Cotton Hill Rd	Cotton Hill & Bent Mtn		11	Improvements to Cotton Hill Road and Bent Mountain Road were completed several years ago.	Funded projects addressed the need.
N_192_P_S	Safety (ped)	Thompson Memorial	Mountain Heights Drive to Penguin Lane		10	Sidewalk exists on this segment.	Investment addresses the need.
N_433_P_S	Safety (ped)	Montgomery County	Montgomery County		8	Montgomery County adds new sidewalks as development occurs.	Montgomery County adds new sidewalks as development occurs.

Appendix H: Regional Transportation Needs – Priorities to Address

Priority Regional Transportation Needs to Address

Roanoke Valley Transportation Planning Organization



Introduction

This spreadsheet lists the regional priority transportation needs identified in the Roanoke Valley Transportation Plan along with available information for understanding the nature of the need. Additional information will be added as the needs are further studied, matched with possible solutions, and in some cases, advance to the stage of projects.

[See the NEST tool to map the projects: https://experience.arcgis.com/experience/7c2b2fb55b1b42c58954799c2156b922](https://experience.arcgis.com/experience/7c2b2fb55b1b42c58954799c2156b922)

Priority Status

Yes

Need ID	Need Type	Simple Location	Detailed Location	Need	Score	Investment	Need Status	Rationale	Possible Common Transportation Solutions	Possible Unique or Non-Transportation Solutions	Relevant Recent or Ongoing Studies and/or Recommendations	Preferred Solutions or options	Project / Service/Study Associated PID(s)
N_2071_T_A	Access (Transit)	U.S. 11-Williamson	Peters Creek Road		100	Williamson Road Pedestrian Improvements Peters Creek Road to Plantation Road, ROUTE 11 & 117 ROANOKE CO. - PEDESTRIAN SAFETY IMPROVEMENTS; CORTAN and Botetourt County Van Service	Gap	Only accessible to older or disabled County/Vinton residents via CORTAN and Botetourt County Van Service.	New Transit Route (local, commuter, intercity); New Transit Service (ex. Elderly/disable on-demand transportation, flexible on-demand transit service, taxi vouchers, destination specific shuttle services, etc.); Get a ride from a friend/family/taxi/ride-hailing	Alternative/new mode infrastructure (drone docking, e-bike or scooter docking, etc...); Utilize similar destinations in more transit accessible places.	Long-Term, see recommendations in Transit Vision Plan.	None identified at this time.	Study potential for ebike/scooter docking to address this need as well as other possible solutions.
N_683_MV_S	Safety (auto)	I-581	U.S. 460	Short merge lanes; Too many lanes for pedestrians to cross; on street parking dangerous; Speeding traffic; reckless driving; Visibility; Short ramps; Dangerous for pedestrians to cross ramps; Drivers run red lights; Confusing lane markings; Distracted dri	94	STBG funding placed on unspecified project by RVTPO in March 2022.	Gap	Study ongoing; aim to submit a preferred solution for SMART SCALE Round 5 funding.	Interchange Reconfiguration; Safety Improvements for Motorists- Pavement Markings		Study to be completed in Summer of 2022 with possible solution(s) and preferred solution identified for submission to SMART SCALE Round 5.	Add a signal at the off-ramp from I-581N to Rt. 460 with dual right turns; Realign the I-581SB ramp.	I-581/U.S. 460/U.S. 11 Improvements - SS Round 5 application
N_749_MV_S	Safety (auto)	U.S. 460 - Orange	Williamson Road		94	STBG funding placed on unspecified project by RVTPO in March 2022.	Gap	Study ongoing	Intersection Reconfiguration; Access Management; ITS for Roadways		Study to be completed in Summer of 2022 with possible solution(s) identified.	Add a second left turn lane from Orange Ave. WB to Williamson Rd. NB. Add a turn lane on Williamson Rd. NB to Carver Ave. NE.	I-581/U.S. 460/U.S. 11 Improvements - SS Round 5 application
N_250_MV_S	Safety (auto)	Pollard Street	Downtown Vinton	Traffic speed too high; on street parking dangerous	92	Routes 35/36 Transit Service.	Gap	On-street parking exists where it can in Downtown Vinton. Traffic speeds being too high is a gap need to further investigate.	Traffic Calming; Safety Improvements for Motorists- Pavement Markings	Police Enforcement; Remove Selected On Street Parking	Vinton Area Corridors Plan	No preferred solution to address this need has been identified at this time.	None.
N_474_T_A	Access (Transit)	DMV	DMV	Acces to DMV	92	Botetourt Van Service, CORTAN	Gap	Only accessible to older or disabled Botetourt County residents via Botetourt Van Service, Roanoke County/Vinton residents via CORTAN. No other projects to provide service at this time.	New Transit Route; New Transit Service (ex. Elderly/disable on-demand transportation, flexible on-demand transit service, taxi vouchers, destination specific shuttle services, etc.); Get a ride from a friend/family/taxi/ride-hailing	Alternative/new mode infrastructure (drone docking, e-bike or scooter docking, etc...); Provide satellite DMV kiosks/stations where transit exists. Provide more online DMV services. Move the DMV to a transit-accessible location.	Transit Vision Plan. Check most recent TDP.	Provide satellite DMV kiosks/stations where transit exists. Get a ride from a friend/family/taxi/ride-hailing when DMV connect is insufficient. Study other possible solutions to address this need.	Study options to address this need.
N_63_P_S	Safety (ped)	U.S. 460 - Orange	24th St. NE to Blue Hills Drive NE		91	Route 41 & 42, 31 & 32 fixed-route transit, #SMART22 - ROUTE 460 (ORANGE AVENUE) IMPROVEMENTS AT KING STREET & NEAR BLUE HILLS DRIVE, SMART20 - ORANGE AVE (US 460) IMPROVEMENTS (includes new sidewalk and ped crossing improvement)	Partially	Funded sidewalk and pedestrian crossings do not span the whole length of this need.	New Sidewalk; New Bicycle/Pedestrian Crossing; Streetscape Improvements (lights, benches, landscaping, bike parking, etc...); New Shared-Use Path/ADA Accessible Greenway Trail		Pedestrian Vision Plan	No preferred solution to address this need has been identified at this time.	Study pedestrian safety needs in this corridor.

Need ID	Need Type	Simple Location	Detailed Location	Need	Score	Investment	Need Status	Rationale	Possible Common Transportation Solutions	Possible Unique or Non-Transportation Solutions	Relevant Recent or Ongoing Studies and/or Recommendations	Preferred Solutions or options	Project / Service/Study Associated PID(s)
N_440_B_S	Safety (bike)	Downtown Salem	Downtown Salem		91	Meets need: #SMART22 - MAIN ST / MARKET ST INTERSECTION IMPROVEMENTS, Downtown Salem Streetscape Improvements Does not meet need: Route 91 & 92 Fixed-Route Transit Service, #SMART18 - DOWNTOWN SALEM INT. & STREETScape IMPROVEMENTS	Partially addressed	#SMART22 - MAIN ST / MARKET ST INTERSECTION IMPROVEMENTS, Downtown Salem Streetscape Improvements meet need for half of Main St. and not rest of downtown; Transit service provides an alternative to biking as bike racks are available on buses. Bike safety is improved for getting to Downtown Salem via East Main Street, the Elizabeth Greenway to Route 311. Additional bike accommodations are not the priority for downtown - vehicle movements and pedestrian accommodations. Unsure if bicyclists are allowed to ride on sidewalks.	New Bike Lane; New Shared-Use Path/ADA Accessible Greenway Trail; Bicycle/Pedestrian Crossing Improvement; New Bicycle/Pedestrian Crossing; Streetscape Improvements (lights, benches, landscaping, bike parking, etc...)	Alternative/new mode infrastructure (drone docking, e-bike or scooter docking, etc...); Consider statutory limitations on bike movements on sidewalks. Low-traffic streets designated through signage or pavement markings as preferred bike corridors.	Bicycle Plan	Designate a parallel corridor such as Clay and/or Calhoun St. as bike corridors potentially using signage or pavement markings. On Main St. bicyclists may ride in the travel lane or walk their bike on the sidewalk.	Salem to study designation of Salem streets as preferred bike corridors.
N_440_P_S	Safety (ped)	Downtown Salem	Downtown Salem		91	Meets need: #SMART22 - MAIN ST / MARKET ST INTERSECTION IMPROVEMENTS, Downtown Salem Streetscape Improvements Does not meet need: Route 91 & 92 Fixed-Route Transit Service, #SMART18 - DOWNTOWN SALEM INT. & STREETScape IMPROVEMENTS	Partially addressed	#SMART22 - MAIN ST / MARKET ST INTERSECTION IMPROVEMENTS, Downtown Salem Streetscape Improvements meet need for half of Main St. and not rest of downtown; Transit service provides an alternative to walking to and through downtown.	Bicycle/Pedestrian Crossing Improvement; New Bicycle/Pedestrian Crossing; Streetscape Improvements (lights, benches, landscaping, bike parking, etc...)		Pedestrian Vision Plan	No preferred solution to address this need has been identified at this time.	None.
N_226_MV_S	Safety (auto)	Washington Avenue	Pollard Street to Roanoke County limit	p18-BLOS-E/F;p56-traffic volume/congestion	91	Routes 35/36 Transit Service.	Gap	High traffic volumes, 4-lane road, topography, make safety a concern when turning onto / off of Washington Ave.	Lane Reconfiguration - Road Diet; Access Management; New Turn Lane		Vinton Area Corridors Plan; Town of Vinton Route 24 Bike/Ped Plan	No preferred solution to address this need has been identified at this time.	Study options to improve auto safety along Washington Avenue.
N_256_2_MV_S	Safety (auto)	Bypass Road	Hardy Road to Washington Avenue	HighTraffic/slow flow;speed;signal timings;ped saf	91	Routes 35/36 Transit Service.	Gap	Motorists turning left onto Bypass Road from River park Shopping Center is a concern.	Access Management; New Turn Lane; Intersection Reconfiguration (install new signal or innovative intersection)		Vinton Area Corridors Plan; Hardy Road/Bypass Road roundabout being pursued; Reconfigure intersection at shopping center entrance to limit left turns onto Bypass Road.	Restrict left turns onto Bypass Road at River Park Shopping Center and build a roundabout at Hardy Road/Bypass Road.	Roundabout at Hardy Rd (Rte. 24/634) and Bypass Rd (Rte. 24) - SS Round 5 application
N_1751_MV_S	Safety (auto)	U.S. 460 - Orange	Hollins Road to Gus Nicks Boulevard	Short turn lane	90	Route 31 & 32 fixed-route transit	Gap	Funding being pursued in SMART SCALE Round 5 to address this need.	New Turn Lane; Intersection Reconfiguration (install new signal or innovative intersection)		Eliminate center left turn lane for 24th St	Modify intersections to minimize possible turning movements.	460/Orange Ave - 11th to 24th Improvements - SS Round 5 Application
N_749_B_S	Safety (bike)	U.S. 460 - Orange	Williamson Road		90	Route 21 & 22 fixed-route transit and PEDESTRIAN SIGNAL UPGRADES - CITY OF ROANOKE	Gap	Need not addressed by investments.	Bicycle/Pedestrian Crossing Improvement; New Bicycle/Pedestrian Crossing; Streetscape Improvements (lights, benches, landscaping, bike parking, etc...)		Several studies taking place on Route 460 and Williamson Road including STARS, Project Pipeline.	No preferred solution to address this need has been identified at this time.	Review studies upon completion for bike safety recommendations. Conduct additional study, if needed.
N_749_P_S	Safety (ped)	U.S. 460 - Orange	Williamson Road		90	PEDESTRIAN SIGNAL UPGRADES - CITY OF ROANOKE	Gap	Does this investment include this intersection? Intersection has sidewalks, crosswalks, pedestrian signals, and islands. Long crossing distances make it less comfortable for people to walk.	Bicycle/Pedestrian Crossing Improvement	Consider a grade-separated bicycle and pedestrian facility.		Refuge islands and sidewalks exist. Add high visibility crosswalks, upgraded ped signals, and pedestrian phasing.	I-581/U.S. 460/U.S. 11 Improvements - SS Round 5 application
N_590_B_S	Safety (bike)	Jefferson Street	Walnut Avenue to Reserve Avenue		90	SMART WAY Express & Base fixed-route transit, Trolley fixed-route transit service, Route 51 & 52 fixed-route transit PEDESTRIAN SIGNAL UPGRADES - CITY OF ROANOKE	Partially Addressed	Bicyclists not comfortable riding in the travel lanes may utilize the bike racks on the buses to travel through this area.	New Bike Lane; Bicycle/Pedestrian Crossing Improvement; New Bicycle/Pedestrian Crossing; Streetscape Improvements (lights, benches, landscaping, bike parking, etc...); Lane Reconfiguration - Road Diet			Lane Reconfiguration - Road Diet	None.
N_912_MV_S	Safety (auto)	I-81	Exit 150		89		Still have safety needs at Exit 150 - particularly at US220/11 - submitted a SS application for improvements at this intersection.	Projects didn't fully address the safety needs for motorists.	Intersection Reconfiguration			How is auto safety proposed to be improved as part of this project?	SMART SCALE Round 5 ApplicationRoute 220 Access Management - Route 11 to Appalachian Trail

Need ID	Need Type	Simple Location	Detailed Location	Need	Score	Investment	Need Status	Rationale	Possible Common Transportation Solutions	Possible Unique or Non-Transportation Solutions	Relevant Recent or Ongoing Studies and/or Recommendations	Preferred Solutions or options	Project / Service/Study	Associated PID(s)
N_219_B_S	Safety (bike)	Gus Nicks Boulevard	Pollard Street to Gearhart Park		88	Gus Nicks Blvd. Pedestrian/Bicycle Crossing, Construction of Glade Creek Greenway Phase 2A; PE for Phase 3	Partially Addressed	Less experienced bicyclists may feel unsafe biking on Gus Nicks Blvd. trying to travel between Pollard St. and Gearhart Park	New Bike Lane; New Shared-Use Path/ADA Accessible Greenway Trail; New Bridge (Bicycle/Pedestrian); Bicycle/Pedestrian Crossing Improvement; New Bicycle/Pedestrian Crossing		Route 24 Bike/Pedestrian Plan	Clarify - what is being done as part of Glade Creek Greenway Phase 2B and how that will address the bike safety need in this corridor? Note says that it will create an alternate low-stress route to utilize instead of Gus Nicks Blvd. - where/how?	Glade Creek Greenway Phase 2B. Construction in 2023.	
N_125_P_S	Safety (ped)	Jefferson Street	McClanahan Street SW to Campbell Avenue	Pedestrian safety with permanent green right turn	88	Transit projects (SMART WAY Base fixed-route transit, Trolley fixed-route, Route 51 & 52 fixed-route)	Gap	Pedestrians concerned about turning vehicles due to continuous green right turns.	New Sidewalk; Bicycle/Pedestrian Crossing Improvement; Streetscape Improvements (lights, benches, landscaping, bike parking, etc...)		Pedestrian Vision Plan	None identified at this time.	Study how to improve pedestrian safety when crossing side streets along Jefferson Avenue when continuous green allows vehicles to turn right potentially conflicting with pedestrians.	
N_119_P_S	Safety (ped)	Grandin Road SW	Ashley Lane SW to Hackney Lane		88	Oak Grove Pedestrian Crossing	Partially addressed	Investment addresses the intersection crossing but not pedestrian safety along the rest of the corridor.	New Sidewalk; Bicycle/Pedestrian Crossing Improvement; New Bicycle/Pedestrian Crossing; Streetscape Improvements (lights, benches, landscaping, bike parking, etc...)		Pedestrian Vision Plan; Oak Grove Center Plan	None identified at this time.	None.	
N_71_P_S	Safety (ped)	Belleview Avenue SE	Carillon area from Crystal Spring Ave. SW along Weller Lane SE to Belleview Avenue SE garage		88	Transit projects (Trolley fixed-route, Route 51 & 52 fixed-route)	Gap	Appears ADA ramps are lacking on some streets. Validate rationale to not have sidewalks on both sides of Weller and Crystal Spring or if additional infrastructure would improve pedestrian safety.	New Sidewalk; Bicycle/Pedestrian Crossing Improvement; New Bicycle/Pedestrian Crossing		Pedestrian Vision Plan	None identified at this time.	Conduct additional study of pedestrian safety and ADA needs on Weller Lane (both sides of Jefferson) and Crystal Spring Ave.	
N_1269_MV_S	Safety (auto)	Peters Creek Road	Airport Road		87	None as of May 2022	Gap	No investments planned.	Intersection Reconfiguration (install new signal or innovative intersection); Safety Improvements for Motorists - Pavement Markings		Corridor length, multiple intersections, current and future development requires a more comprehensive study to identify needs and develop comprehensive safety solutions.	None identified at this time.	Study - Peters Creek Road Multimodal Safety Study	
N_167_P_S	Safety (ped)	Dale Avenue	Bullitt/Dale/Virginia Avenue from 4th St. SE to Pollard Street	Pedestrians don't use crosswalks,	87	Transit projects (Route 41 & 42 fixed-route, Route 35 & 36 fixed-route)	Gap	Appears there may be long distances between some pedestrian crossings and lack of infrastructure that could help people cross at appropriate locations.	Bicycle/Pedestrian Crossing Improvement; New Bicycle/Pedestrian Crossing		Pedestrian Vision Plan	None identified at this time.	Study pedestrian crossing locations, barriers to using them, and the potential to locate crosswalks closer to bus stops and pedestrian destinations.	
N_1250_B_S	Safety (bike)	Route 419	Brambleton Ave		87	FY 21 PEDESTRIAN CROSSING IMPROVEMENTS	Gap	No funded projects address this need.	New Bike Lane; New Bicycle/Pedestrian Crossing		Most bicycle users are not looking to travel the length of 419, but rather are trying to access destinations on 419. Study opportunities to improve connections to destinations from existing infrastructure and neighborhood streets.	None identified at this time.	Conduct additional study/analysis in RVTPO Bikeway Plan update.	
N_124_P_S	Safety (ped)	Williamson Road	Elm Avenue to Orange Avenue		87	Pedestrian Signal Upgrades on Williamson Rd.; Existing sidewalks and crosswalks.	Gap	Unsure of locations for ped signal upgrades. Unsure of the reasons for noted pedestrian safety concerns.	Bicycle/Pedestrian Crossing Improvement		Pedestrian Vision Plan; Pedestrian Signal Upgrades on Williamson Rd	Upgrade pedestrian signal at Williamson / Kimball / Wells intersection. Williamson Rd SS Round 5 includes ped signal upgrades at all intersections from Wells Ave to Orange Ave.	Williamson Road Corridor - Safety Improvements - SMART SCALE Round 5 application	

Need ID	Need Type	Simple Location	Detailed Location	Need	Score	Investment	Need Status	Rationale	Possible Common Transportation Solutions	Possible Unique or Non-Transportation Solutions	Relevant Recent or Ongoing Studies and/or Recommendations	Preferred Solutions or options	Project / Service/Study Associated PID(s)
N_1652_T	Congestion	U.S. 460 - Orange	I-581 to Roanoke city limit	Hard to judge oncoming traffic when turning; Speeding, hard to merge; Short turn lanes	86	Transit projects (Route 26 & 25, 21 & 22 fixed-routes), #SMART18 - HOLLINS RD & ORANGE AVE INTERSECTION IMPROVEMENTS (address congestion on small portion)	Partially	Various investments along this corridor funded to address these concerns. Additional project to address congestion planned for SMART SCALE Round 5.	Access management; New Turn Lane; New General Travel Lanes; Signal Coordination/Re-timing; ITS for Roadways	Offset left turn lanes from travel lanes.	#SMART18 - HOLLINS RD & ORANGE AVE INTERSECTION IMPROVEMENTS (address congestion on small portion)	Install a signal at 581NB off-ramp at Orange Ave., additional left-turn lane to Williamson Road.; alternative intersections constructed at multiple locations between 11th St. and 24th St.	I-581/U.S. 460/U.S. 11 Improvements - SMART SCALE Round 5 application; 460/Orange Ave - 11th to 24th Improvements - SMART SCALE Round 5 application
N_1104_B_S	Safety (bike)	Campbell Ave	Campbell Ave		85	Transit projects (Route 65, 92, 71, 85, 61, 72 & 62 fixed-routes)	Gap	This is a long road from SE Roanoke to SW Roanoke (Hurt Park). There are no designated bicycle facilities and bicyclists riding on this corridor ride in the travel lane and may not feel safe doing so.	New Bike Lane; New Shared-Use Path/ADA Accessible Greenway Trail; Bicycle/Pedestrian Crossing Improvement; Streetscape Improvements (lights, benches, landscaping, bike parking, etc...)	Cycletrack between 7th and 13th SW; Eliminate right-turn lanes in downtown, wayfinding, utilize a parallel corridor (Patterson Ave.)	Assess the use of space for parked cars vs. bike accommodations.	Shared-use path from 3rd St. SE to Tinker Creek.	Campbell Avenue Corridor Bicycle and Pedestrian Improvements; Study the modal preference for use of limited street pavement (parking, bikes, cars, transit stops, etc.)
N_1103_B_S	Safety (bike)	Grandin Road	Memorial Ave		85	Transit projects (Route 65 & 66, 71 & 72 fixed-routes); Roanoke River Greenway Phase 2 Bridge the Gap	Partially addressed	Bicyclists travel in the travel lanes here. A bike lane ends on Memorial Ave. at Winborne Street and bicyclists turning left onto Grandin Road must use travel lanes and may feel uncomfortable doing so. This is also a common way for cyclist to get to the sections of greenway near Peters Creek Road and in Salem. This might be partially addressed by RRG Bridge the Gap Phase 2 where cyclists will be able to connect to Peters Creek and Salem via greenway in August 2023.	New Bike Lane; New Shared-Use Path/ADA Accessible Greenway Trail; Bicycle/Pedestrian Crossing Improvement; Streetscape Improvements (lights, benches, landscaping, bike parking, etc...)	Bike box at the intersection, sharrows, green painted bike lanes on Memorial Avenue	Roanoke River Greenway Phase 2 Bridge the Gap	Bike box, sharrows for left turn from Memorial WB to Grandin.	None.
N_864_P_S	Safety (ped)	Williamson Road	Williamson Rd		85	Transit projects (Routes 21/22 fixed-routes); Pedestrian Signal Upgrades	Gap	Sidewalks exist along majority of both sides of Williamson Road. Signalized pedestrian crossings at multiple intersections exist.	New Sidewalk; Bicycle/Pedestrian Crossing Improvement; New Bicycle/Pedestrian Crossing		Williamson Road Study from Orange Avenue to Hershberger Road (2022 Project Pipeline study)	Sidewalk and crosswalk improvements.	Williamson Road Corridor - Safety Improvements SMART SCALE Round 5 application
N_61_P_S	Safety (ped)	Fleming Avenue	Williamson Road		85	Transit projects (Routes 21/22 fixed-routes); Pedestrian Signal Upgrades	Gap	Pedestrian may feel unsafe crossing Williamson Road at Fleming Avenue because it is a five lane section of roadway here. There is nothing to stop traffic at this location, nor a clear place where pedestrians should cross. However, there is a crosswalk/pedestrian signal at Broad Street, one block north. Pedestrians should cross one block north rather than at Fleming Avenue. How should pedestrians be notified of this?	Bicycle/Pedestrian Crossing Improvement		Pedestrian Vision Plan	Williamson Road Corridor - Safety Improvements - SMART SCALE Round 5 application	
N_228_P_S	Safety (ped)	Virginia Avenue	City Limit to Pollard Street		83	None as of May 2022.	Gap	Sidewalks exist throught the corridor, but ADA ramps are lacking making it impassable for people with disabilities. Pedestrians may feel unsafe crossing Virginia Avenue.	Bicycle/Pedestrian Crossing Improvement; New Bicycle/Pedestrian Crossing			Install ADA compliant ramps.	Vinton is installing ADA ramps.
N_2082_T	Congestion	I-581	Elm Avenue to I-81		83	Route 16 Fixed-Route Transit Service, SMART WAY Base Fixed-Route Transit Service, I-581 Exit 2 Interchange Study	Partially Addressed	Congestion at interchanges makes merging difficult.	Interchange Reconfiguration; New Turn Lane		Studies taking place at Peters Creek Road, Orange Avenue, and Williamson Road to identify interchange improvements.	Additional 581 NB exit ramp to Orange Ave. plus a new signal at this ramp and Orange Ave., reconfigure NB exit ramp to Peters Creek Rd.	SMART SCALE Round 5 applications: I-581 at Exit 2 Interchange Improvements and I-581/U.S. 460/U.S. 11 Improvements

Need ID	Need Type	Simple Location	Detailed Location	Need	Score	Investment	Need Status	Rationale	Possible Common Transportation Solutions	Possible Unique or Non-Transportation Solutions	Relevant Recent or Ongoing Studies and/or Recommendations	Preferred Solutions or options	Project / Service/Study Associated PID(s)
N_732_B_S	Safety (bike)	U.S. 460 - Orange	Gainsboro Rd		82	Bus routes funded and pedestrian signal project.	Gap	Signal improvement doesn't change the perception of safety crossing the road.	Bicycle/Pedestrian Crossing Improvement; New Bridge (Bicycle/Pedestrian)	Another option would be a mid-block crossing away from the interchange and away from where many vehicles are turning. Direct bicyclists to use the left travel lane on Gainsboro Road to continue southbound on Lick Run greenway - same option for northbound on Gainsboro, use the left turn lane to continue NB on the greenway. Direct bicyclists to use 10th Street if they are uncomfortable crossing at Orange and Gainsboro.		None identified at this time.	Study possible solutions during RVTPB Bikeway Plan Update.
N_484_T_SM	System Management (transit)	Williamson Road	Elmwood Park		81	Fixed route and trolley service during the day.	Gap	Service is insufficient to accommodate visitors at evening events.	Transit/Rail Service Frequency Change; Transit/Rail Service Hours of Service Change; New Micromobility Service (scooters, bike share, etc...)		Transit Vision Plan. Check most recent TDP.	Provide a demand response service for late night service.	City of Roanoke / Valley Metro studying the feasibility of a late night service.
N_435_B_S	Safety (bike)	Route 419	Oak Grove Elementary School		81	None as of May 2022	Gap	No funded projects address this need	New Shared-Use Path/ADA Accessible Greenway Trail; New Bike Lane; New Bicycle/Pedestrian Crossing; Streetscape Improvements (lights, benches, landscaping, bike parking, etc...)		2018 Greenway Plan	None identified at this time.	Study the need to improve bike safety at Oak Grove Elementary on Route 419.
N_435_P_S	Safety (ped)	Oak Grove Elementary School	Oak Grove Elementary School		81	Project UPC 117212 Pedestrian Crossing Improvements on 419	Partially addressed	Funded project partially addresses the need to improve pedestrian safety to the school.	New Sidewalk; New Bicycle/Pedestrian Crossing; Streetscape Improvements (lights, benches, landscaping, bike parking, etc...)		2018 Greenway Plan; Project UPC 117212 Pedestrian Crossing Improvements on 419	Sidewalk along Rt. 419 next to Oak Grove Elementary School.	SMART SCALE Round 5 application: Route 419/Electric Road Safety Improvements
N_249_N_SM	System Management (operations, assets)	Lee Avenue	Pollard Street	p54-delays, signal coord/timing, speed, trucks; Poor downtown traffic flow esp in pm	80	Vinton will be replacing all of the traffic signal equipment in the town within the next three years (through 2025).	Gap	Unclear if traffic signal equipment upgrades will improve signal timing at this intersection for PM traffic.	Signal Coordination/Re-timing; Lane Reconfiguration	Restrict thru-traffic on Lee Ave.; Close some lanes.		None identified at this time.	None.
N_69_3_P_S	Safety (ped)	Brambleton Avenue	Garst Mill Road to Old Cave Spring Road	Student access to schools, Bike/ped connection between Roanoke City and Cave Spring, Speeding traffic, visibility	80	Project UPC 117212 Pedestrian Crossing Improvements on 419	Partially addressed	Pedestrian Crossing Improvements on 419 and at Plantation/Hershberger Intersections on from 419 to Brambleton Ave. intersection	New Sidewalk; New Bicycle/Pedestrian Crossing; Streetscape Improvements (lights, benches, landscaping, bike parking, etc...)		Pedestrian Vision Plan; 2018 Greenway Plan; 2017 Brambleton Avenue Study	None identified at this time.	Study pedestrian safety needs as part of a Route 221/Brambleton Avenue Multimodal Safety Study.
N_229_P_S	Safety (ped)	Virginia Avenue	Pollard Street to Niagara Road	p23-Worn pedestrian path	79	None as of May 2022.	Gap	No funded project addresses this need.	New Sidewalk; New Bicycle/Pedestrian Crossing; Streetscape Improvements (lights, benches, landscaping, bike parking, etc...)		Vinton Area Corridors Plan; Route 24 Bike/Pedestrian Plan	Construct sidewalks to replace dirt paths.	None.
N_103_4_P_S	Safety (ped)	Brandon Avenue	Grandin Road to Mud Lick Road	Students going to/from school, Unsafe to cross the road, Many pedestrians and bicyclists.	79	Existing sidewalks along most of both sides of the street in this corridor as well as crosswalks at Brandon Ave., Carter Rd., and Mud Lick Rd.; Route 71 & 72 Fixed-Route Transit Service, Route 91 & 72 Fixed-Route Transit Service.	Gap	No funded projects address this need.	Bicycle/Pedestrian Crossing Improvement; Streetscape Improvements (lights, benches, landscaping, bike parking, etc...)		Pedestrian Vision Plan	None identified at this time.	Study how to make crossing Brandon Ave. safer for pedestrians.
N_422_B_S	Safety (bike)	Plantation Road	Hershberger Food Lion/Walmart		76	Route 25 & 26 Fixed-Route Transit Service, Pedestrian Crossing Improvements on 419 and at Plantation/Hershberger Intersections	Gap	No funded projects address this need	New Shared-Use Path/ADA Accessible Greenway Trail; New Bike Lane; New Bicycle/Pedestrian Crossing; Streetscape Improvements (lights, benches, landscaping, bike parking, etc...)	Encourage bicyclists to use John Richardson Rd. to access this area rather than Hershberger Road. Consider replacing the bridge at the end of John Richardson Rd as a bike/ped only bridge.	2018 Greenway Plan; Bikeway Plan	Multi-use path to serve bicyclists traveling through the intersection.	None.
N_422_P_S	Safety (ped)	Hershberger Road	Food Lion/Walmart		76	Route 25 & 26 Fixed-Route Transit Service, Pedestrian Crossing Improvements on 419 and at Plantation/Hershberger Intersections	Partially Addressed	Pedestrian Crossing Improvements on 419 and at Plantation/Hershberger Intersections	New Sidewalk; New Bicycle/Pedestrian Crossing; Streetscape Improvements (lights, benches, landscaping, bike parking, etc...)	Consider replacing the bridge at the end of John Richardson Rd as a bike/ped only bridge to provide an alternate pedestrian route to Hershberger Road and improve pedestrian safety from Oakland Blvd. to Plantation Road.	2018 Greenway Plan; VDOT identified project - Pedestrian Crossing Improvements on 419 and at Plantation/Hershberger Intersections; Consider constructing sidewalk to connect proposed pedestrian signals at Plantation/Hershberger with the Food Lion and Walmart shopping centers and bus stops.	Sidewalk at Plantation/Hollins Road to connect transit stops and stores on both sides of Plantation Road.	Check w/VDOT about a possible pedestrian crossing project. Study multimodal needs along Plantation Road between Hershberger Road and Hollins Road.

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N_2082_N_SM	System Management (operations, assets)	I-581	Elm Avenue to I-81		73	Meets need: I-581 Exit 2 Interchange Study, Route 460 /Hollins Road Traffic Signal Upgrade, 10th Street Improvements Phase 2, PEDESTRIAN SIGNAL UPGRADES - CITY OF ROANOKE Does not meet need: SMART WAY Express & Base Fixed-Route Transit Service, Route 15/16 11, 41/42, 22, 25/26, 31/32, 35/36 Fixed-Route Transit Service	Partially addressed	I-581 Exit 2 Interchange Study, Route 460 /Hollins Road Traffic Signal Upgrade, 10th Street Improvements Phase 2, PEDESTRIAN SIGNAL UPGRADES - CITY OF ROANOKE cover portions of corridor	Interchange Reconfiguration; New Turn Lane		Studies taking place at Peters Creek Road, Orange Avenue, and Williamson Road to identify interchange improvements.	Additional 581 NB exit ramp to Orange Ave. plus a new signal at this ramp and Orange Ave., reconfigure NB exit ramp to Peters Creek Rd.	SMART SCALE Round 5 applications: I-581 at Exit 2 Interchange Improvements and I-581/U.S. 460/U.S 11 Improvements
N_15_T	Congestion	Bypass Road	Hardy Road	HighTraffic/slow flow;speed;signal timings;ped safety	72	Fixed-Route Transit Service, Routes 35 & 36.	Partially addressed	Investment partially addresses the need.	Access Management: Signal Coordination/Re-timing; Intersection Reconfiguration (install new signal or innovative intersection)		Vinton applying for a SMART SCALE Round 5 grant to address this congestion need with a roundabout.	Alternative intersection - roundabout	SS Round 5 application for a two-lane roundabout with sidewalk in the immediate area of the roundabout.
N_989_MV_S	Safety (auto)	U.S. 460 - E Main	U.S. 460 - E Main		72	Route 91 Fixed-Route Transit Service; Funded project on East Main Street west of Brand Avenue.	Gap	No funded projects address this need	Access Management; New Turn Lane			Add turn lanes from Brand Ave. to Kessler Mill Rd.; Access management with added curbs.	East Main Street Phase II (Previous UPC 106710)
N_460_T_SM	System Management (transit)	Brandon Avenue	Towers		68	Route 61/62 and 55/56 fixed-routes.	Gap	Service is insufficient to accommodate shoppers or employees in the evening.	Transit/Rail Service Frequency Change; Transit/Rail Service Hours of Service Change; New Transit Route (local, commuter, intercity)	Alternative/new mode infrastructure (drone docking, e-bike or scooter docking, etc...	Transit Vision Plan. Comprehensive Operations Analysis	Brandon Avenue Connector from Lewis Gale to Roanoke Memorial.	Study the opportunities for a regional funding mechanism to support transportation improvements. Study an on-demand transit service option for late weekday and Sunday services. Study feasibility of a new Brandon Avenue Connector route.
N_380_MV_S	Safety (auto)	Peters Creek Road	Williamson Road		68	Williamson Road Pedestrian Improvements Peters Creek Road to Plantation Road, ROUTE 11 & 117 ROANOKE CO. - PEDESTRIAN SAFETY IMPROVEMENTS	Gap	No funded projects address this need. County notes crash data indicates the need for analysis to improve auto safety.	Access Management; Traffic Calming; New Sidewalk; Intersection Reconfiguration (install new signal or innovative intersection)	Examine the land uses in this corridor. This suburban strip development likely influences safety for motorists and other travelers. Explore new alternative intersection designs.	Hollins Center Plan	None identified at this time.	Study the auto safety need at this intersection. Include as part of proposed future Williamson Road Multimodal Safety Study from Botetourt to the City of Roanoke.
N_2003_T_A	Access (Transit)	Valley Metro Administrative Office	Valley Metro Administrative Office	Stops & facilities that are accessible to people with disabilities	67	Route 31 & 32 fixed-routes, purchase shop equipment	Partially Addressed	System-wide need.	Transit Stop/Rail Station Amenities; New Sidewalk		Transit Vision Plan.	Locate new stops in ADA accessible places. Provide transit stop amenities to make all stops ADA accessible.	Projects that include bus stop improvements: East Main Street Phase II from Brand Ave. to Kessler Mill Rd.
N_2004_T_A	Access (Transit)	Valley Metro Administrative Office	Valley Metro Administrative Office	Maintain equipment	67	Purchase supplies/ equipment used to maintain vehicles and facilities.	Partially Addressed	Ongoing need to provide transit service.	ITS for Transit (AVL, signal prioritization, etc...)		Transit Vision Plan.	Maintain vehicles and facilities needed for maintaining transit services.	Preventative Maintenance,
N_2005_1_T_A	Access (Transit)	Valley Metro Administrative Office	Valley Metro Administrative Office	Paratransit coordination	67		Gap	City of Roanoke, Salem disabled or senior citizens have requested the ability to get to destinations outside the Valley Metro service area.	New Transit Service (ex. Elderly/disable on-demand transportation, flexible on-demand transit service, taxi vouchers, destination specific shuttle services, etc.); Transit Route Realignment/Expansion/Modification	Regional paratransit service. Volunteer Driver programs or a mobility manager.	Transit Vision Plan	On-demand service for City of Roanoke and Salem residents with disabilities to travel within the RVTPO region, beyond the Valley Metro STAR service area.	Regional discussions and study for how to improve regional transportation services for people with disabilities.
N_2005_2_T_A	Access (Transit)	Roanoke County Administration Center	Roanoke County Administration Center	Paratransit coordination	67	None as of May 2022.	Gap	No projects funded to enable non-County disabled or senior citizens to access destinations in the County.	New Transit Route (local, commuter, intercity); New Transit Service (ex. Elderly/disable on-demand transportation, flexible on-demand transit service, taxi vouchers, destination specific shuttle services, etc.); Transit Route Realignment/Expansion/Modification		Transit Vision Plan.	On-demand service for City of Roanoke and Salem residents with disabilities to travel within the RVTPO region, beyond the Valley Metro STAR service area.	Regional discussions and study for how to improve regional transportation services for people with disabilities.

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N_2005_4_T_A	Access (Transit)	RADAR		Paratransit coordination	67	CORTRAN Operating Assistance Operating assistance for RADAR under contract to Roanoke County to provide on-demand transit services for Roanoke County residents 70+ or of any age with a disability.	Partially Addressed	In Salem and Roanoke City, residents with disabilities or seniors are unable to travel beyond the Valley Metro service area.	New Transit Route (local, commuter, intercity); New Transit Service (ex. Elderly/disable on-demand transportation, flexible on-demand transit service, taxi vouchers, destination specific shuttle services, etc.); Transit Route Realignment/Expansion/Modification		Transit Vision Plan.	On-demand service for City of Roanoke and Salem residents with disabilities to travel within the RVTPO region, beyond the Valley Metro STAR service area.	Regional discussions and study for how to improve regional transportation services for people with disabilities.	
N_456_T_A	Access (Transit)	Hollins	Hollins		67	Williamson Road/Peters Creek Road Pedestrian Safety Improvements; CORTRAN and Botetourt Van Services.	Partially addressed	People without disabilities are unable to take transit to/from Hollins as are people with disabilities in the City of Roanoke and Salem unable to access Hollins.	New Transit Route (local, commuter, intercity); New Transit Service (ex. Elderly/disable on-demand transportation, flexible on-demand transit service, taxi vouchers, destination specific shuttle services, etc.); Transit Route Realignment/Expansion/Modification		Transit Vision Plan. Hollins Center Plan	None identified at this time.	None.	
N_48_1_N_A	Access (Non-Transit)	Williamson Road	Peters Creek Road to Orange Ave		67	Meets need: Pedestrian Improvements on Route 11 - North Roanoke Assisted Living to Clubhouse Drive, Williamson Road/Peters Creek Road Pedestrian Safety Improvements, PEDESTRIAN SIGNAL UPGRADES - CITY OF ROANOKE Does not meet need: Route 25 & 26, 21 & 22 Fixed-Route Transit Service	Partially addressed	Pedestrian access improvements along portions of corridor.	New Sidewalk; Intersection Reconfiguration (install new signal or innovative intersection)		Route 11-Williamson Road Project Pipeline Study (2022) from Orange Avenue to Hershberger Road	Reallocate travel lanes from two lanes in each direction to one lane in each direction with a two-way center left-turn lane. Add bicycle lanes where none exist and improve sidewalks and crosswalks. Remove some traffic signals and optimize the remaining signals.	SMART SCALE Round 5 application: Williamson Road Corridor - Safety Improvements	
N_52_MV_S	Safety (auto)	U.S. 11	Humbert Road to Railroad		66	UPC 75910 - I-81 Exit 150 Improvements Project	Partially Addressed	Some parts of the need are not covered by this project. Access into business off of Route 11 is still a motorist safety concern. Route 11/220 intersection due to crash rates is still a concern.	Access management; New Turn Lane; New Bicycle/Pedestrian Crossing; New Sidewalk; New Bicycle Lane; Streetscape Improvements			None identified at this time.	None.	
N_483_T_SM	System Management (transit)	Downtown Salem	Downtown Salem		65	Routes 91/92 serve Downtown Salem.	Gap	Additional frequency and hours of service are desired to improve transit service in Salem.	Transit/Rail Service Frequency Change; Transit/Rail Service Hours of Service Change; New Transit Route (local, commuter, intercity); New Transit Service (ex. Elderly/disable on-demand transportation, flexible on-demand transit service, taxi vouchers, destination specific shuttle services, etc.)		Transit Vision Plan.	Short-term - increase hours of service. Long-term - Provide two separate transit routes - the 91/92 to serve the Main St. corridor and a new route to serve Downtown Salem and the hospitals improve travel time and increase frequency.	None.	
N_1063_N_SM	System Management (operations, assets)	4th Street	Colorado Street		63	None as of May 2022	Gap	No funded projects address this need. This location is used as a truck route and alternate route for I-81 motorists when the interstate is shut down and getting vehicles through this intersection can be difficult.	Signal Coordination/Re-timing; ITS for Roadways; New Through Travel Lane		Consider 4-lane section from Broad Street to Roanoke Boulevard.	None identified at this time.	Study options to improve vehicle throughput on 4th St. from Broad Street to Roanoke Blvd.	
N_331_N_SM	System Management (operations, assets)	Route 419	Grandin Road Ext		62	Signals on 419 are coordinated; PIPELINE22 - RTE. 419 study	Gap	Funded study is looking into this need.	New Sidewalk; Intersection Reconfiguration (install new signal or innovative intersection)			RCUT alternative intersection at 419/Grandin Rd. Ext.	SMART SCALE Round 5 application - Rt. 419 Safety Improvements	
N_216_T	Congestion	Washington Avenue	Pollard Street to Blue Ridge Parkway	Not enough turning lanes for cars leaving the two lanes. Slows down traffic in both lanes, traffic volume/congestion; Projected to be LOS F by 2035; Congestion	59	Route 35 & 36 fixed-routes. Route 24 Bike/Pedestrian Plan completed in 2022.	Partially addressed	County notes significant crash data at several intersections - may contribute to congestion. Transit service investment only partially addresses the need.	Access Management; New Turn Lane; Intersection Reconfiguration (install new signal or innovative intersection); Lane Reconfiguration - Road Diet		Included in Congestion Management Plan and Transit Vision Plan. Most recent Route 24 Bike/Pedestrian Plan indicates a road diet with one travel lane in each direction, a center turn lane, and bike lanes. Continue to study the congestion need to determine a preferred solution.	No preferred solution to address this need has been identified at this time.	Study of Washington Avenue congestion needs.	

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N_455_T_A	Access (Transit)	Cave Spring Corners	Cave Spring Corners		58	CORTRAN	Partially Addressed	CORTRAN only serves seniors and people with disabilities. Dirt path from Red Rock Rd. to Kroger Shopping center from people traveling to/from the nearest bus stop.	New Transit Route (local, commuter, intercity); New Transit Service (ex. Elderly/disable on-demand transportation, flexible on-demand transit service, taxi vouchers, destination specific shuttle services, etc.); Transit Route Realignment/Expansion/Modification		Transit Vision Plan.	Long-Term - Extension of fixed route transit service.	None.	
N_489_T_A	Access (Transit)	Glenvar	Glenvar		58	Botetourt Van and CORTRAN for seniors and people with disabilities.	Gap	Transit service is not available to all.	New Transit Route (local, commuter, intercity); New Transit Service (ex. Elderly/disable on-demand transportation, flexible on-demand transit service, taxi vouchers, destination specific shuttle services, etc.); Transit Route Realignment/Expansion/Modification		Transit Vision Plan.	Long-Term - Extension of fixed route transit service.	None.	
N_492_T_SM	System Management (transit)	U.S. 460 - E Main St	Lakeside Plaza		58	Hourly service 5:45am-8:45pm, Routes 91 & 92.	Gap	Limited hours, frequency of service.	Transit/Rail Service Frequency Change; Transit/Rail Service Hours of Service Change		Transit Vision Plan. Check most recent TDP.	Short-Term - Expand hours of service. Long-Term - Increase service frequency.	None.	
N_498_T_SM	System Management (transit)	Williamson Road	Berglund Center		58	Hourly service 5:45am-8:45pm, Routes 21 & 22.	Gap	Limited hours, frequency of service.	Transit/Rail Service Frequency Change; Transit/Rail Service Hours of Service Change		Transit Vision Plan. Check most recent TDP.	Short-Term - Expand hours of service. Long-Term - Increase service frequency.	None.	
N_48_T	Congestion	Williamson Road	Peters Creek Road to Orange Ave		58	County: Sidewalk project UPC 107055 recently completed between Peters Creek and North Roanoke Assisted Living begins to address congestion. UPC 113947 continues sidewalk to Plymouth Drive. Project Pipeline 2022 Study: Williamson Road from Orange Ave. to Hershberger Rd.	Partially Addressed	Hollins Center Plan outreach and crash data indicates the need for analysis of this corridor to determine appropriate projects to reduce congestion.	New Sidewalk; Intersection Reconfiguration (install new signal or innovative intersection)	Examine the land uses in this corridor. This suburban strip development likely influences safety for motorists and other travelers. Explore new alternative intersection designs.	Transit Vision Plan. Check most recent TDP.	Reallocate lanes to provide one lane in each direction with a two-way left turn lane in the middle and bicycle lanes, sidewalks where none exist along with removal of some traffic signals and optimization of the remaining signals.	Study congestion on Williamson Road from Hershberger Road to Botetourt County. SMART SCALE Round 5 application: Williamson Road Corridor - Safety Improvements	
N_463_T_SM	System Management (transit)	Downtown Roanoke	Downtown Roanoke		58	Hourly service 5:45am-8:45pm, Routes 21 & 22.	Gap	Limited hours, frequency of service.	Transit/Rail Service Frequency Change; Transit/Rail Service Hours of Service Change		Transit Vision Plan. Check most recent TDP.	Short-Term - expand service to Sundays and later in the evenings via a demand response service. Long-Term - Revisit frequency at the next RVTP update or earlier if conditions change.	Study regional funding opportunities to support transit service improvements.	
N_469_T_SM	System Management (transit)	Campbell Avenue	RAM House		55	Hourly service 5:45am-8:45pm, Routes 71 & 72.	Gap	Limited hours, frequency of service.	Transit/Rail Service Frequency Change; Transit/Rail Service Hours of Service Change		Transit Vision Plan. Check most recent TDP.	Short-Term - expand service to Sundays and later in the evenings via a demand response service. Long-Term - Revisit frequency at the next RVTP update or earlier if conditions change.	Study regional funding opportunities to support transit service improvements.	
N_330_N_SM	System Management (operations, assets)	Route 419	Keagy Road (south)		53	PIPELINE22 - RTE. 419 study	Gap	PIPELINE22 - RTE. 419 study study is recommending safety improvements that will also reduce congestion	New Sidewalk; Intersection Reconfiguration (install new signal or innovative intersection)		PIPELINE22 - RTE. 419 study - see recommendations for improved system management operations.	Construct sidewalks and crosswalks at the intersection.	SMART SCALE Round 5 application: Rt. 419 Safety Improvements	

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N_55_T	Congestion	U.S. 460 - W Main	Salem city limit to Montgomery Co. line	p7-1 Issue1- Traffic/congestion and appearance; Issue3- Safe options for alt modes of transp.; Speeding traffic	52	Project UPC 108882 recently completed sidewalk between Alleghany Drive and Technology Drive	Gap	Funded project does not address the congestion need.	Access Management; New Sidewalk; Streetscape Improvements (lights, benches, landscaping, bike parking, etc...)	The Glenvar Community Plan recommends reviewing the future land use designations.	Transit Vision Plan.	None identified at this time.	None.	
N_490_T_SM	System Management (transit)	Grandin Road	Grandin Village		52	Hourly service 5:45am-8:45pm, Routes 71 & 72 and 65 & 66.	Gap	Limited hours, frequency of service.	Transit/Rail Service Frequency Change; Transit/Rail Service Hours of Service Change		Transit Vision Plan.	Short-Term - expand service to Sundays and later in the evenings via a demand response service. Long-Term - Revisit frequency at the next RVTP update or earlier if conditions change.	Study regional funding opportunities to support transit service improvements.	
N_493_T_SM	System Management (transit)	Route 419	Lewis Gale Hospital		51	Hourly service 5:45am-8:45pm, Routes 71 & 72 and 92.	Gap	Limited hours, frequency of service.	Transit/Rail Service Frequency Change; Transit/Rail Service Hours of Service Change		Transit Vision Plan. Check most recent TDP.	Short-Term - expand service to Sundays and later in the evenings via a demand response service. Long-Term - Revisit frequency at the next RVTP update or earlier if conditions change.	Study regional funding opportunities to support transit service improvements.	
N_458_T_SM	System Management (transit)	Valley View Boulevard	Valley View		51	Hourly service 5:45am-8:45pm, Routes 11, 12, 15, 16.	Gap	Limited hours, frequency of service.	Transit/Rail Service Frequency Change; Transit/Rail Service Hours of Service Change		Transit Vision Plan.	Short-Term - expand service to Sundays and later in the evenings via a demand response service. Long-Term - Revisit frequency at the next RVTP update or earlier if conditions change.	Study regional funding opportunities to support transit service improvements.	
N_264_N_SM	System Management (operations, assets)	I-81	Exit 150	Confusing lane markings, Extend on ramps and off ramps at I581 and exit 150. Improve signage for exit 150 and I581 so drivers are better prepared for turn off or merging traffic. Improve police presence in these areas to reduce speeding and other dange	50	I-81 widening from 2-3 lanes in each direction from MM 144 to Exit 150.	Gap	Uncertain if funded project will address signage or other means of helping drivers be better prepared for turn off or merging traffic.	Safety Improvements for Motorists - Pavement Markings; Safety Improvements for Motorists - Signage; Interchange Reconfiguration		Transit Vision Plan.	Coordinate with design team of existing project to see if improvements will be made to help drivers prepare for turn-off and merging traffic. WHAT IS BEING DONE AS PART OF SS RND 5 APPLICATION - ROUTE 11 to AT TO ADDRESS THIS NEED?	SMART SCALE Round 5 application: Route 220 Access Management - Route 11 to Appalachian Trail	
N_499_T_SM	System Management (transit)	U.S. 460 - W Main St	Spartan Square		47	Route 91 & 92 fixed-routes	Gap	Limited hours, frequency of service.	Transit/Rail Service Frequency Change; Transit/Rail Service Hours of Service Change		Transit Vision Plan.	Short-Term - expand service to Sundays and later in the evenings via a demand response service. Long-Term - Revisit frequency at the next RVTP update or earlier if conditions change.	Study regional funding opportunities to support transit service improvements.	

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N_507_T_SM	System Management (transit)	Colonial Avenue	VWCC		42	Routes 55 & 56 fixed routes	Gap	Limited hours, frequency of service.	Transit/Rail Service Frequency Change; Transit/Rail Service Hours of Service Change		Transit Vision Plan.	Short-Term - expand service to Sundays and later in the evenings via a demand response service. Long-Term - Revisit frequency at the next RVTP update or earlier if conditions change.	Study regional funding opportunities to support transit service improvements.	
N_1542_T_A	Access (Transit)	Brambleton Avenue	Red Rock Road to Garst Mill Road	Pedestrian access to transit; businesses on Brambleton	42	Botetourt Van and CORTRAN	Partially Addressed	Transit service is not available to all.			Transit Vision Plan.	Short-Term - walk from nearest stop at Red Rock Road or get a ride; Long-Term - extend transit route 61/62.	None.	
N_1765_N_A	Access (Non-Transit)	U.S. 11 - Lee	Cloverdale Road	Access to Troutville	42		Gap	Difficult intersection - Botetourt is applying for SMART SCALE Round 5 to correct it.	Intersection Reconfiguration (install new signal or innovative intersection); Safety Improvements for Motorists - Pavement Markings; Safety Improvements for Motorists - Signage			WHAT IS INCLUDED IN THE SS APPLICATION TO IMPROVE ACCESS TO TROUTVILLE?	SMART SCALE Round 5 application: Route 220 Access Management - Route 11 to Appalachian Trail	
N_1626_N_SM	System Management (operations, assets)	I-81	RVTP boundary to RVTP boundary	Short ramps, Left merge on/off I-81; Future LOS forecasted to deteriorate, Speeding traffic; Left merge on/off I-81	41	Meets need: I - 81 Auxilliary Lane from Exit 143 to 141 Does not meet need: I-81 widening - MM 144 to Exit 150, I-81 widening - MM136 to MM141, I-81 NB widening - Exit 128 to Exit 137, SMART WAY Express & Base Fixed-Route Transit Service	Partially addressed	Funded projects do not address the challenge of the left exit from I-81SB to I-581 and entering I-81SB on the left side from I-581.				None identified at this time.	Study the I-581/I-81 interchange to identify how vehicle movements can be improved.	
N_1180_MV_S	Safety (auto)	I-581	Peters Creek Rd		41	UPC 113570 - I-581 Exit 2 Interchange Study; Project UPC T26754, I-581 Exit 2 (Peters Creek Rd) Interchange Improvements, Phase 1	Partially Addressed	Project T26754, I-581 Exit 2 (Peters Creek Rd) Interchange Improvements, Phase 1, will reconfigure the I-581 NB ramp onto Peters Creek Road EB and will be used as match funding for a larger intersection improvement project.	Safety Improvements for Motorists - Pavement Markings; Safety Improvements for Motorists - Signage; Interchange Reconfiguration		I-581 Exit 2 Interchange Study (STBG funded)	Close two I-581 off-ramps with substandard weave movements. Signalize remaining I-581 off ramps, restrict left turns from SB Thirlane Road to minimize conflict points near interchange ramps. Add a downstream U-turn along Peters Creek Rd. for re-directed left turns.	SMART SCALE Round 5 application: I-581 at Exit 2 Interchange Improvements	
N_676_B_S	Safety (bike)	Garst Mill Rd	Grandin Rd to Brambleton Ave	Speeding traffic, distracted drivers, Access to Murray Run Greenway	36		Gap		New Bike Lane; New Shared-Use Path/ADA Accessible Greenway Trail; New Bicycle/Pedestrian Crossing; Streetscape Improvements (lights, benches, landscaping, bike parking, etc...)		2012 Bikeway Plan	Refer speeding traffic and distracted drivers to Roanoke County Police.	None.	
N_259_T_SM	System Management (transit)	Vinton	Vinton	p76Increase in CORTRAN use-unanticipated expenses	36	CORTRAN, STAR, Routes 35 & 36 fixed-routes.	Partially addressed	Funded services do not provide transit for residents that are not seniors and don't have disabilities living in the Southhampton Townhomes, Northampton Apartments, A Porter's Haven Senior Community, and Vinton Industrial Park.	New Transit Route (local, commuter, intercity); New Transit Service (ex. Elderly/disable on-demand transportation, flexible on-demand transit service, taxi vouchers, destination specific shuttle services, etc.); New Micromobility Service (scooters, bike share, etc...)		Vinton Area Corridors Plan, Transit Vision Plan.	None identified at this time.	Study regional funding opportunities to support transit service improvements and increasing costs of demand response services.	
N_118_P_S	Safety (ped)	Starkey Road	Ogden Road to shopping center south of Electric Road		36		Gap	No funded projects address this need.	New Sidewalk; New Bicycle/Pedestrian Crossing; Streetscape Improvements (lights, benches, landscaping, bike parking, etc...)		Pedestrian Vision Plan; 419 Town Center Plan	Construct sidewalk to improve pedestrian safety.	None.	

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N_2081_T	Congestion	Plantation Road	Walrond Park		35		Gap	No funded projects address congestion at Plantation Road and Walrond Park.				Address congestion by constructing a sidewalk between Plantation Rd and Walrond Park.	None.	
N_431_B_S	Safety (bike)	U.S. 460 - E Main	Electric Road to Thompson Memorial Drive		35	East Main Street Phase I project.	Partially addressed	Bike safety need is being addressed by the East Main Street Phase I project.	New Bike Lane		2018 Greenway Plan; Bikeway Plan	Construct bike lanes to improve bike safety.	East Main Street Phase II from Brand Ave. to Kessler Mill Rd.	
N_387_N_SM	System Management (operations, assets)	Commons Parkway			35		Gap	Botetourt is submitting a SMART SCALE Round 5 application for improvements near here. They are working on relocating a park and ride to this site.	New Park and Ride Lot; New TDM Incentive Program (vanpool, carpool, trip reduction/telework programs and incentives)			Relocate Park-and-Ride to Commons Parkway site	SMART SCALE Round 5 application: Route 220 Access Management-Park-and-Ride-AT to Commons Parkway project	
N_48_B_S	Safety (bike)	Williamson Road	Peters Creek Road to Orange Ave	Many pedestrians, Local small businesses could benefit from better access for bicyclists and pedestrians	33	Project Pipeline 2022 Study - Williamson Rd. from Orange Ave. to Hershberger Rd.	Gap	No funded projects address this need. County notes crash data indicates the need for analysis of this corridor to improve bike safety.	New Bike Lane; New Shared-Use Path/ADA Accessible Greenway Trail; New Bicycle/Pedestrian Crossing; Streetscape Improvements (lights, benches, landscaping, bike parking, etc...)		Hollins Center Plan - noted additional study needed; Initiate a Williamson Road Multimodal Safety Study from Botetourt to the City of Roanoke; Bike lanes between Hershberger and Orange Ave.	Install bike lanes where none exist between Hershberger and Orange Ave. to improve bike safety.	SMART SCALE Round 5 application: Williamson Road Corridor - Safety Improvements. Initiate Williamson Rd Multimodal Safety Study for section north of Hershberger Rd.	
N_59_3_P_S	Safety (ped)	Route 419	Starkey Road to Brambleton Avenue	p32-Want sidewalks addressed and improved	33		Gap	No funded projects address this need.	New Sidewalk; New Bicycle/Pedestrian Crossing; Streetscape Improvements (lights, benches, landscaping, bike parking, etc...)		Pedestrian Vision Plan; Route 419 Corridor Study; 419 Town Center Plan; 2018 Greenway Plan	None at this time	Study possible multimodal accommodations	
N_83_P_S	Safety (ped)	Williamson Road	Airport Road to Peters Creek Road		33	Project UPC 107055, Williamson Road/Peters Creek Road Pedestrian Improvements and UPC 113947, Williamson Road Pedestrian Improvements	Partially Addressed	Investments partially address the need with funded pedestrian improvements between Peters Creek Road and Plymouth Drive.	New Sidewalk; New Bicycle/Pedestrian Crossing; Streetscape Improvements (lights, benches, landscaping, bike parking, etc...)		Initiate a Williamson Road Multimodal Safety Study from Botetourt to the City of Roanoke; Project UPC 107055, Williamson Road/Peters Creek Road Pedestrian Improvements and UPC 113947, Williamson Road Pedestrian Improvements	None at this time	Initiate Williamson Rd Multimodal Safety Study	
N_21_P_S	Safety (ped)	Exit 150	Area around the AT and Exit 150	p1-9 for AT users to access businesses	33	None as of May 2022.	Gap	A couple people killed walking on US 220. Hikers trying to get across US 220.	New Sidewalk; New Bicycle/Pedestrian Crossing; Streetscape Improvements (lights, benches, landscaping, bike parking, etc...)		Exit 150 Market Study; Project Pipeline Study SA05: US 220/220 Alt. - Roanoke Road/Cloverdale Road from Route 11 (Lee Highway) to Commons Parkway	Construct multi-use path along both sides of Route 220, plus crosswalk.	SMART SCALE Round 5 application: Route 220 Access Management/Park & Ride - AT to Commons Parkway	
N_99_B_S	Safety (bike)	Garst Mill Road	Brambleton Avenue to Grandin Road SW		33	None as of May 2022.	Gap	No funded projects address this need.	New Bike Lane; New Shared-Use Path/ADA Accessible Greenway Trail; New Bicycle/Pedestrian Crossing; Streetscape Improvements (lights, benches, landscaping, bike parking, etc...)		2012 Bikeway Plan	None at this time.	Initiate Garst Mill Rd Study to improve bike safety.	
N_207_MV_S	Safety (auto)	U.S. 220 - Roanoke	I-81 to S Church Street (Fincastle)	Number of access creates conflict points and delays, 779 and Catawba aren't aligned	32	Some money has been allocated.	Gap	Botetourt is submitting a SMART SCALE Round 5 application for a Superstreet concept.	Access Management		RVTPSO Safety Study; Project Pipeline Study SA05: US 220/220 Alt. - Roanoke Road/Cloverdale Road from Route 11 (Lee Highway) to Commons Parkway	Convert some intersections to RCUTs along Route 220.	Route 220 Superstreet Improvement	
N_206_P_S	Safety (ped)	Ogden Road	Colonial Avenue to Electric Road	Speeding traffic, distracted drivers	32	None as of May 2022.	Gap	No funded projects address this need.	New Sidewalk; New Bicycle/Pedestrian Crossing; Streetscape Improvements (lights, benches, landscaping, bike parking, etc...)		Pedestrian Vision Plan; Initiate an Ogden Road Multimodal Safety Study. Refer speeding and distracted driving complaint to City and County Police Depts.	Study and refer speeding complaints to City & County police depts.	Ogden Rd Multimodal Safety Study	
N_99_P_S	Safety (ped)	Garst Mill Road	Brambleton Avenue to Grandin Road SW		31	None as of May 2022.	Gap	No funded projects address this need.	New Sidewalk; New Bicycle/Pedestrian Crossing; Streetscape Improvements (lights, benches, landscaping, bike parking, etc...)		Initiate a Gars Mill Road Study to identify projects to address needs.	None at this time	Initial Garst Mill Rd study to improve pedestrian safety.	

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N_1626_T	Congestion	I-81	RVTP0 boundary to RVTP0 boundary	Short ramps, Left merge on/off I-81; Future LOS forecasted to deteriorate, Speeding traffic; Left merge on/off I-81	31	I-81 widening (Project UPCs 108906, 111373, 116203, 116201, 116197) - MM 144 to Exit 150 one more lane in both directions, I-81 NB widening to add one more lane - Exit 128 to Exit 137, I-81 SB widening to add one more lane - MM141 to MM136; I-81 Auxilliary Lane from Exit 143 to 141; SMART WAY Express & Base Fixed-Route Transit Service; AMTRAK extension from Roanoke to the New River Valley	Partially Addressed	Investments meet most congestion needs. Exit 137-128 SB is not scheduled to be widened currently, and there are concerns about reliability in this section.	New Turn Lane; Interchange Reconfiguration; Safety Improvements for Motorists - Pavement Markings; Safety Improvements for Motorists - Signage		Congestion Management Process	Additional study for Exit 137-128 SB - Look at crash statistics in this section. Clarify the need in this section. Montgomery County supports the SmartWay service as an additional way to reduce traffic on I 81. Focus on off-of I-81 improvements to support I-81 including signal improvements in towns parallel to I-81.	Virginian Line railroad 8.5 miles of track improvements to Additional study of exit 137-128 SB and general I-81 congestion trends, utilizing Smart Way to reduce I-81 congestion and improvements needed on parallel routes to relieve I-81 congestion.
N_1359_B_S	Safety (bike)	Route 419	Starkey Rd		31	Project UPC 119462, Route 419 Streetscape Improvements, Phase 2	Partially Addressed	Investment continues bicycle lanes on Route 419 between Starkey Road and Ogden Road. Consider the need on the other three legs of the intersection.	New Bike Lane; New Shared-Use Path/ADA Accessible Greenway Trail; New Bicycle/Pedestrian Crossing; Streetscape Improvements (lights, benches, landscaping, bike parking, etc...)	Bike box at intersection	419 Town Center Plan; Project UPC 119462, Route 419 Streetscape Improvements, Phase 2	Install bike lanes.	None.
N_189_P_S	Safety (ped)	U.S. 220 - Roanoke	U.S. 11 to Catawba Road	AT users access to hotels/restaurants, Hikers, high school students, apartment dwellers	30	None as of May 2022.	Gap	No funded projects address this need.	New Sidewalk; New Bicycle/Pedestrian Crossing; Streetscape Improvements (lights, benches, landscaping, bike parking, etc...); New Shared-Use Path/ADA Accessible Greenway Trail		Pedestrian Vision Plan; Exit 150 Market Study; Gateway Crossing Area Plan; Project Pipeline Study SA05: US 220/220 Alt. - Roanoke Road/Cloverdale Road from Route 11 (Lee Highway) to Commons Parkway	Shared-use path on both sides of 220 from AT to Commons Parkway, CLARIFY THE CROSSING IMPROVEMENT FOR PEDS ACROSS 220 - HOW AND WHERE?	Route 220 Access Management/Park & Ride - AT to Commons Pkwy. (unknown cost)
N_57_P_S	Safety (ped)	Peters Creek Road	Longwood Avenue to Williamson Road		30	Project UPC T26754, I-581 Exit 2 (Peters Creek Rd) Interchange Improvements, Phase 1	Partially Addressed	Noted investment would partially address the need. County notes crash data indicates the need for analysis to improve pedestrian safety.	New Sidewalk; New Bicycle/Pedestrian Crossing; Streetscape Improvements (lights, benches, landscaping, bike parking, etc...)		Project UPC T26754, I-581 Exit 2 (Peters Creek Rd) Interchange Improvements, Phase 1; Initiate a Peters Creek Road Multimodal Safety Study; Hollins Center Plan; Pedestrian Vision Plan	None identified at this time.	Study pedestrian safety need in this corridor.
N_69_2_P_S	Safety (ped)	Brambleton Avenue	Fishburn Park to Garst Mill Road	Student access to schools, Bike/ped connection between Roanoke City and Cave Spring, Speeding traffic, visibility	30	None as of May 2022.	Gap	No funded projects address the need.	New Sidewalk; New Bicycle/Pedestrian Crossing; Streetscape Improvements (lights, benches, landscaping, bike parking, etc...)		Initiate a Route 221/Brambleton Avenue Multimodal Safety Study; Pedestrian Vision Plan; 2018 Greenway Plan	None identified at this time.	Study pedestrian safety need in this corridor.
N_6_B_S	Safety (bike)	Route 419	Various locations include along railroad		29	Project UPC 119462, Route 419 Streetscape Improvements, Phase 2	Partially Addressed	Need is partially addressed by project UPC 119462, Route 419 Streetscape Improvements, Phase 2 which continues bicycle lanes between Starkey Road and Ogden Road.	New Bike Lane; New Shared-Use Path/ADA Accessible Greenway Trail; New Bicycle/Pedestrian Crossing; Streetscape Improvements (lights, benches, landscaping, bike parking, etc...)		419 Town Center Plan; 2018 Greenway Plan, 2012 Bikeway Plan	None identified at this time.	As part of Regional Bikeway Plan update, study options to improve bike safety between destinations on Route 419.
N_380_B_S	Safety (bike)	Peters Creek Road	Williamson Road		28	None as of May 2022.	Gap	No funded projects address this need. County notes crash data indicates the need for analysis of this corridor to improve bike safety.	New Bike Lane; New Shared-Use Path/ADA Accessible Greenway Trail; New Bicycle/Pedestrian Crossing; Streetscape Improvements (lights, benches, landscaping, bike parking, etc...)		Initiate a Peters Creek Road Multimodal Safety Study; Hollins Center Plan	None identified at this time.	Initiate Peters Creek Rd Multimodal Safety Study
N_194_P_S	Safety (ped)	Penn Forest Blvd	Chaparral Drive to Starkey Road		26		Gap	No funded projects address this need.	New Sidewalk; New Bicycle/Pedestrian Crossing; Streetscape Improvements (lights, benches, landscaping, bike parking, etc...)		419 Town Center Plan	None identified at this time.	Additional study of 419 segments needed to determine recommendations
N_408_B_S	Safety (bike)	Green Valley Elementary School	Green Valley Elementary School		26		Gap	No funded projects address this need. County feels schools should be connected with multimodal infrastructure to other community facilities.	New Bike Lane; New Shared-Use Path/ADA Accessible Greenway Trail; New Bicycle/Pedestrian Crossing; Streetscape Improvements (lights, benches, landscaping, bike parking, etc...)		2012 Bikeway Plan, 2018 Greenway Plan	Work with Green Valley Elementary School to determine bike safety improvements for students/staff biking to school.	Study bike safety need.

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N_408_P_S	Safety (ped)	Green Valley Elementary School	Green Valley Elementary School		26		Gap	No funded projects address this need. County feels schools should be connected with multimodal infrastructure to other community facilities.	New Sidewalk; New Bicycle/Pedestrian Crossing; Streetscape Improvements (lights, benches, landscaping, bike parking, etc...)		2015 Pedestrian Plan, 2018 Greenway Plan	Work with Green Valley Elementary School to determine pedestrian safety improvements for students/staff walking to school.	Study pedestrian safety need.
N_399_B_S	Safety (bike)	Daleville	Daleville Town Center		26		Gap		New Bike Lane; New Shared-Use Path/ADA Accessible Greenway Trail; New Bicycle/Pedestrian Crossing; Streetscape Improvements (lights, benches, landscaping, bike parking, etc...)		2012 Bikeway Plan, 2018 Greenway Plan	Greenway connecting Route 220 access project and Daleville Town Center	None.
N_1251_B_S	Safety (bike)	Route 419	Colonial Ave		26		Gap	No funded projects address this need.	New Bike Lane; New Shared-Use Path/ADA Accessible Greenway Trail; New Bicycle/Pedestrian Crossing; Streetscape Improvements (lights, benches, landscaping, bike parking, etc...)		2010 Route 419 Study	None identified at this time.	Additional study of 419 segments needed to determine recommendations
N_1431_P_S	Safety (ped)	U.S. 460 - E Main	U.S. 460 - E Main		25	East Main Street Phase I project.	Partially addressed	Phase I project addresses part of this need via a multiuse trail.	New Sidewalk; New Bicycle/Pedestrian Crossing; Streetscape Improvements (lights, benches, landscaping, bike parking, etc...); New Shared-Use Path/ADA Accessible Greenway Trail		East Main Street Phase II to continue sidewalk/shared-use path to Kessler Mill Road.	Continued sidewalk and shared-use path from Brand Ave. to Kessler Mill Rd.	East Main Street Phase II from Brand Ave. to Kessler Mill Rd.
N_47_P_S	Safety (ped)	Williamson Road	Hollins University to Barrens Road		25	Project UPC 111317, Williamson Road Pedestrian Improvements, Peters Creek to Plantation	Partially Addressed	This need is partially address by project UPC 111317, Williamson Road Pedestrian Improvements, Peters Creek to Plantation will install sidewalk on the north side of Williamson Road.	New Sidewalk; New Bicycle/Pedestrian Crossing; Streetscape Improvements (lights, benches, landscaping, bike parking, etc...)		Project UPC 111317, Williamson Road Pedestrian Improvements, Peters Creek to Plantation; Initiate a Williamson Road Multimodal Safety Study; Hollins Center Plan	None identified at this time.	Initiate Williamson Rd Multimodal Safety Study
N_541_N_A	Access (Non-Transit)	Lynchburg Turnpike	North end of Mason Creek Greenway	Access to south end of Hanging Rock Battlefield Trail	25	None as of May 2022.	Gap		New Shared-Use Path/ADA Accessible Greenway Trail		Preliminary cost estimate and concepts as part of a truck bypass for the City.	None identified at this time.	None.
N_538_B_S	Safety (bike)	Hollins University	Hollins University	Access between Fallon Park, East Gate Park, Old Monterey Golf Club, Hollins Uni, Carvins Cove	24		Gap	No funded projects address this need.	New Bike Lane; New Shared-Use Path/ADA Accessible Greenway Trail; New Bicycle/Pedestrian Crossing; Streetscape Improvements (lights, benches, landscaping, bike parking, etc...)		2012 Bikeway Plan; 2018 Greenway Plan; Implement the Hollins Area Plan and the Hollins Center Plan. Initiate a Williamson Road Multimodal Safety Study	None identified at this time.	Initiate Williamson Rd Multimodal Safety Study
N_538_P_S	Safety (ped)	Hollins University	Hollins University	Access between Fallon Park, East Gate Park, Old Monterey Golf Club, Hollins Uni, Carvins Cove	24		Gap	No funded projects address this need.	New Sidewalk; New Bicycle/Pedestrian Crossing; Streetscape Improvements (lights, benches, landscaping, bike parking, etc...)		2015 Pedestrian Plan; 2018 Greenway Plan; Implement the Hollins Area Plan and the Hollins Center Plan. Initiate a Williamson Road Multimodal Safety Study	None identified at this time.	Initiate Williamson Rd Multimodal Safety Study
N_69_1_P_S	Safety (ped)	Brambleton Avenue	Brandon Avenue to Fishburn Park	Student access to schools, Bike/ped connection between Roanoke City and Cave Spring, Speeding traffic, visibility	23		Gap	No funded projects address this need.	New Sidewalk; New Bicycle/Pedestrian Crossing; Streetscape Improvements (lights, benches, landscaping, bike parking, etc...)		2015 Pedestrian Plan; 2018 Greenway Plan	None identified at this time.	Initiate a Route 221/Brambleton Avenue Multimodal Safety Study
N_79_P_S	Safety (ped)	Plantation Road	I-81 to Williamson Road and on Williamson from Plantation to Hollins University		23	UPC 111366 - Plantation Rd. Bike/Ped/Streetscape Phase II from Walrond Drive to Gander Way. Shared-use path on Plantation Road from Walrond Drive to Williamson Road recently completed.	Partially Addressed	Funded projects add pedestrian accommodations to Plantation Road between Williamson Road and Gander Way. Additional work is needed on Plantation Road and on Williamson Road.	New Sidewalk; New Bicycle/Pedestrian Crossing; Streetscape Improvements (lights, benches, landscaping, bike parking, etc...)		2015 Pedestrian Plan; Multiple projects have been constructed over the past five years to add pedestrian accommodations to Plantation Road between Williamson Road and Gander Way; implement the Hollins Area Plan, Hollins Center Plan and initiate a Williamson Road Multimodal Safety Study	Construct Sidewalks along unaddressed portions of need	
N_77_P_S	Safety (ped)	Chapparral Drive	Merriman Road to Electric Road		23		Gap	No funded projects address this need.	New Sidewalk; New Bicycle/Pedestrian Crossing; Streetscape Improvements (lights, benches, landscaping, bike parking, etc...)		2015 Pedestrian Plan	Construct Sidewalks along Chaparral Drive	None.

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N_47_B_S	Safety (bike)	Williamson Road	Hollins University to Barrens Road		23		Gap	No funded projects address this need.	New Bike Lane; New Shared-Use Path/ADA Accessible Greenway Trail; New Bicycle/Pedestrian Crossing; Streetscape Improvements (lights, benches, landscaping, bike parking, etc...)		Implement the Hollins Area Plan and the Hollins Center Plan. Initiate a Williamson Road Multimodal Safety Study, Initiate a Peters Creek Road Multimodal Safety Study	None identified at this time.	Initiate Williamson Rd/Peters Creek Rd Multimodal Safety Study	
N_69_4_P_S	Safety (ped)	Brambleton Avenue	Old Cave Spring Road to Cotton Hill Road	Student access to schools, Bike/ped connection between Roanoke City and Cave Spring, Speeding traffic, visibility	21		Gap	No funded projects address this need. The area in front of Cave Spring MS is particularly concerning as people park at the church and cross Brambleton Ave. for events. Currently, police are used to guide pedestrians.	New Bike Lane; New Shared-Use Path/ADA Accessible Greenway Trail; New Bicycle/Pedestrian Crossing; Streetscape Improvements (lights, benches, landscaping, bike parking, etc...)		2015 Pedestrian Plan; 2018 Greenway Plan; Initiate a Route 221/Brambleton Avenue Multimodal Safety Study	None identified at this time.	Initiate Route 221 Multimodal Safety Study	
N_453_B_S	Safety (bike)	Wood Haven Industrial Park	Wood Haven Industrial Park		21		Gap	No funded projects address this need.	New Bike Lane; New Shared-Use Path/ADA Accessible Greenway Trail; New Bicycle/Pedestrian Crossing; Streetscape Improvements (lights, benches, landscaping, bike parking, etc...)		2018 Greenway Plan	Extend Lick Run Greenway to Wood Haven Technology Park	None.	
N_453_P_S	Safety (ped)	Wood Haven Industrial Park	Wood Haven Industrial Park		21		Gap	No funded projects address this need.	New Sidewalk; New Bicycle/Pedestrian Crossing; Streetscape Improvements (lights, benches, landscaping, bike parking, etc...)		2018 Greenway Plan	Extend Lick Run Greenway to Wood Haven Technology Park	None.	
N_395_B_S	Safety (bike)	Cave Spring Elementary/Middle School	Cave Spring Elementary/Middle School		21	Police assistance during events to help pedestrians cross Bambleton Avenue to Cave Spring MS.	Gap	No funded investment helps improve bike safety at this location.	New Bike Lane; New Shared-Use Path/ADA Accessible Greenway Trail; New Bicycle/Pedestrian Crossing; Streetscape Improvements (lights, benches, landscaping, bike parking, etc...)		2012 Bikeway Plan; 2018 Greenway Plan	None identified at this time.	Route 221/Bent Mountain multimodal safety study	
N_395_P_S	Safety (ped)	Cave Spring Elementary/Middle School	Cave Spring Elementary/Middle School		21	Police assistance during events to help pedestrians cross Bambleton Avenue to Cave Spring MS.	Gap	People park at the church and cross Brambleton Ave. for events. Currently, police are used to guide pedestrians, but would like to explore other ways to address pedestrian safety.	New Sidewalk; New Bicycle/Pedestrian Crossing; Streetscape Improvements (lights, benches, landscaping, bike parking, etc...)		2015 Pedestrian Plan; 2018 Greenway Plan	None identified at this time.	Route 221/Bent Mountain multimodal safety study	
N_413_B_S		DMV	DMV		21		Gap	No funded projects address this need.	New Bike Lane; New Shared-Use Path/ADA Accessible Greenway Trail; New Bicycle/Pedestrian Crossing; Streetscape Improvements (lights, benches, landscaping, bike parking, etc...)		2018 Greenway Plan	None identified at this time.	None.	
N_413_P_S		DMV	DMV		21		Gap	No funded projects address this need.	New Sidewalk; New Bicycle/Pedestrian Crossing; Streetscape Improvements (lights, benches, landscaping, bike parking, etc...)		2018 Greenway Plan	None identified at this time.	None.	
N_396_B_S		Cave Spring High School	Cave Spring High School		21		Gap	No funded projects address this need.	New Bike Lane; New Shared-Use Path/ADA Accessible Greenway Trail; New Bicycle/Pedestrian Crossing; Streetscape Improvements (lights, benches, landscaping, bike parking, etc...)		2018 Greenway Plan	None identified at this time.	None.	
N_396_P_S		Cave Spring High School	Cave Spring High School		21		Gap	No funded projects address this need.	New Sidewalk; New Bicycle/Pedestrian Crossing; Streetscape Improvements (lights, benches, landscaping, bike parking, etc...)		2018 Greenway Plan	Sidewalk, crosswalks, ADA ramps in front of Cave Spring High School, south side of Chaparral Drive.	Chaparral Drive Pedestrian Improvements from Purple Finch Road to Woodthrush Drive	
N_434_P_S		Northside High School	Northside High School		21		Gap	No funded projects address this need. Roanoke County feels schools should be connected with multimodal infrastructure to other community facilities.	New Sidewalk; New Bicycle/Pedestrian Crossing; Streetscape Improvements (lights, benches, landscaping, bike parking, etc...)		2015 Pedestrian Plan; Initiate a Peters Creek Road Multimodal Safety Study	None identified at this time.	Initiate Peters Creek Multimodal Safety Study	
N_180_P_S		U.S. 460 - W Main	Alleghany Drive to Green Hill Park		20	Sidewalk is in place between Alleghany Drive and the City of Salem	Partially addressed	Need is addressed in Roanoke County.	New Sidewalk		2015 Pedestrian Plan; Recommendation to extend sidewalk in City of Salem to City line	Construct sidewalk on Diuguids Ln to connect Green Hill Park/Roanoke River Greenway to Route 460.	None.	

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N_55_P_S		U.S. 460 - W Main	Salem to Montgomery Co. lines	p7-1 Issue1-Traffic/congestion and appearance; Issue3-Safe options for alt modes of transp.	19	Sidewalk is in place along West Main Street from the City of Salem to Technology Drive.	Partially addressed	Funded project partially addresses the need to improve pedestrian safety.	New Sidewalk; New Bicycle/Pedestrian Crossing		2015 Pedestrian Plan; Glenvar Community Plan; Recommendation to extend pedestrian accommodations (sidewalk)	Construct sidewalk on south side of West Main Street between City of Salem and Daugherty Road and north side between Daugherty Road and Technology Drive. Construct sidewalk for remaining unaddressed portion of need.	SMART SCALE Round 5 application: West Main Street Pedestrian Improvements, Phase 3	
N_1403_B_S		Route 419	near Exit 141		19		Gap	No funded projects address this need.	New Bike Lane; New Shared-Use Path/ADA Accessible Greenway Trail; New Bicycle/Pedestrian Crossing; Streetscape Improvements (lights, benches, landscaping, bike parking, etc...)		2012 Bikeway Plan; Additional Route 419 studies	None identified at this time.	Additional study/completion of ongoing Route 419 study.	
N_57_MV_S		Peters Creek Road	Longwood Avenue to Williamson Road		19	Project UPC T26754, I-581 Exit 2 (Peters Creek Rd) Interchange Improvements, Phase 1	Partially Addressed	Funded project partially addresses auto safety needs on Peters Creek Road. County notes crash data indicates need for analysis to improve safety.	New Sidewalk; Intersection Reconfiguration (install new signal or innovative intersection)	Examine the land uses in this corridor. This suburban strip development likely influences safety for motorists and other travelers. Explore new alternative intersection designs.	ReImagine Hollins Plan: Phase 1: Add pedestrian crosswalks and signals at the intersection of Peters Creek Road and Williamson Road; construct sidewalk along the west side of Williamson Road between Peters Creek Road and North Roanoke Assisted Living. Design is underway and construction is anticipated in 2022. Phase 2: Sidewalk will be constructed along the north side of Williamson Road to connect the Plantation Road Bicycle, Pedestrian and Streetscape Improvement Project to the Williamson Road sidewalk and intersection improvements at Peters Creek Road. Phase 3: Continue sidewalk along the west side of Williamson Road between North Roanoke Assisted Living and Clubhouse Drive/Dent Road. Design is anticipated to begin in 2023.	Signalize I-581/Peters Creek Road off-ramps. Restrict left turns from SB Thirlane Road onto Peters Creek Road. Add a U-turn on Peters Creek Road downstream from Thirlane Road for re-directed left turns. Add a second EB Peters Creek left turn lane onto Valleypointe Pkwy.	SMART SCALE Round 5 application: I-581 at Exit 2 Interchange Improvements. Initiate Peters Creek Multimodal Safety Study for section east/west of I-581.	
N_65_P_S		U.S. 220	south of Pheasant Ridge Road SW to north of Valley Avenue		18	Project UPC 110887, Route 220 Signal Improvements	Partially addressed	Project UPC 110887, Route 220 Signal Improvements partially addresses the need with pedestrian crosswalks and signals between Valley Ave./Southern Hills Dr. SW and Indian Grave Dr./Clearbrook Village Ln.	New Sidewalk		Pedestrian Vision Plan; Project UPC 110887, Route 220 Signal Improvements	Construct sidewalk on U.S. 220 between Pheasant Ridge Rd. and Valley Avenue.	None.	
N_449_B_S		Walrond Park	Walrond Park		18		Gap	No funded projects address this need.	New Shared-Use Path/ADA Accessible Greenway Trail; New Bicycle/Pedestrian Crossing; Streetscape Improvements (lights, benches, landscaping, bike parking, etc...)		2018 Greenway Plan	None identified at this time.	None.	
N_449_P_S		Walrond Park	Walrond Park		18		Gap	No funded projects address this need.	New Sidewalk; New Bicycle/Pedestrian Crossing; Streetscape Improvements (lights, benches, landscaping, bike parking, etc...)		2018 Greenway Plan	Construct a sidewalk, ADA ramps, and crosswalks on Walrond Drive from Plantation Road to Walrond Park.	SMART SCALE Round 5 application: Walrond Drive Pedestrian Improvements	
N_423_B_S		Hidden Valley High School	Hidden Valley High School		18		Gap	No funded projects address this need.	New Bike Lane; New Shared-Use Path/ADA Accessible Greenway Trail; New Bicycle/Pedestrian Crossing; Streetscape Improvements (lights, benches, landscaping, bike parking, etc...)		2012 Bikeway Plan; 2018 Greenway Plan; Initiate a Route 221/Bent Mountain Road Multimodal Safety Study	None identified at this time.	Route 221/Bent Mountain multimodal safety study to include analysis of bike safety needs related to students/staff biking to Hidden Valley HS.	
N_423_P_S		Hidden Valley High School	Hidden Valley High School		18		Gap	No funded projects address this need.	New Sidewalk; New Bicycle/Pedestrian Crossing; Streetscape Improvements (lights, benches, landscaping, bike parking, etc...)		2015 Pedestrian Plan; 2018 Greenway Plan; Initiate a Route 221/Bent Mountain Road Multimodal Safety Study	None identified at this time.	Route 221/Bent Mountain multimodal safety study to include analysis of pedestrian safety needs related to students/staff walking to Hidden Valley HS.	

Need ID	Need Type	Simple Location	Detailed Location	Need	Score	Investment	Need Status	Rationale	Possible Common Transportation Solutions	Possible Unique or Non-Transportation Solutions	Relevant Recent or Ongoing Studies and/or Recommendations	Preferred Solutions or options	Project / Service/Study	Associated PID(s)
N_1624_T		U.S. 11	Plantation Road to Cloverdale Road (U.S. 220 Alt.)		16	Widening of I-81 may help alleviate congestion on U.S. 11 in Botetourt and Roanoke Counties if motorists use I-81 instead of U.S. 11. UPC 107055, 111317, 107055, 113947 (Rt 11/117/Williamson Rd. pedestrian safety improvements in Hollins)	Partially Addressed	Funded projects partially address the need.	Access Management; Intersection Reconfiguration (install new signal or innovative intersection)	Examine the land uses in this corridor. This suburban strip development likely influences safety for motorists and other travelers. Explore new alternative intersection designs.	As a parallel route and part of the CoSS - I-81 Corridor Improvement Plan.	None identified at this time.	Study: Williamson Rd/Rt 11 multimodal safety, land use and access management study from Hershberger Rd. to RT 221 Alt/I-81. Length of corridor and complexity of needs requires a comprehensive review of multimodal safety, access management, and traffic needs from Hershberger to US 221 Alt/I81, incorporating solutions and connecting to existing programmed pedestrian safety projects in Hollins area and access management on Rt. 11 in Botetourt (also to understand long-term impact of I-81 widening on traffic flow within this corridor).	
N_246_P_S		William Byrd Schools	William Byrd Schools		15		Gap	Roanoke County feels it is a priority that schools should be connected with multimodal infrastructure to other community facilities.	New Sidewalk; New Bicycle/Pedestrian Crossing; Streetscape Improvements (lights, benches, landscaping, bike parking, etc...)		2015 Pedestrian Plan; 2018 Greenway Plan	None identified at this time.	Study options to improve pedestrian safety for students/staff walking to William Byrd Schools as part of Washington Avenue Corridor Study.	
N_424_B_S		Hollins Park	Hollins Park		15		Gap	Roanoke County feels it is a priority that parks should be connected with multimodal infrastructure to other community facilities.	New Bike Lane; New Shared-Use Path/ADA Accessible Greenway Trail		2012 Bikeway Plan	None identified at this time.	None.	
N_424_P_S		Hollins Park	Hollins Park		15		Gap	Roanoke County feels it is a priority that parks should be connected with multimodal infrastructure to other community facilities.	New Sidewalk; New Bicycle/Pedestrian Crossing; Streetscape Improvements (lights, benches, landscaping, bike parking, etc...); New Shared-Use Path/ADA Accessible Greenway Trail; New Bicycle/Pedestrian Crossing; Streetscape Improvements (lights, benches, landscaping, bike parking, etc...)		2018 Greenway Plan - proposed Tinker Creek Greenway about 1/4 mile away from park.	None identified at this time.	None.	
N_406_B_S		Glenvar Public Schools	Glenvar Public Schools		14		Gap	Roanoke County feels it is a priority that schools should be connected with multimodal infrastructure to other community facilities.	New Bike Lane; New Shared-Use Path/ADA Accessible Greenway Trail; New Bicycle/Pedestrian Crossing; Streetscape Improvements (lights, benches, landscaping, bike parking, etc...)		2018 Greenway Plan; Glenvar Community Plan	When Daugherty Rd. bridge over I-81 is replaced, include bicycle accommodations.	None.	
N_406_P_S		Glenvar Public Schools	Glenvar Public Schools		14		Gap	Roanoke County feels it is a priority that schools should be connected with multimodal infrastructure to other community facilities.	New Sidewalk; New Bicycle/Pedestrian Crossing; Streetscape Improvements (lights, benches, landscaping, bike parking, etc...)		2018 Greenway Plan; Glenvar Community Plan	When Daugherty Rd. bridge over I-81 is replaced, include pedestrian accommodations.	None.	
N_246_B_S		William Byrd Schools	William Byrd Schools		12		Gap	Roanoke County feels it is a priority that schools should be connected with multimodal infrastructure to other community facilities	New Bike Lane; New Shared-Use Path/ADA Accessible Greenway Trail; New Bicycle/Pedestrian Crossing; Streetscape Improvements (lights, benches, landscaping, bike parking, etc...)		2012 Bikeway Plan; 2018 Greenway Plan Vinton Area Corridors Plan	None identified at this time.	Study bike safety need of students/staff biking to William Byrd schools as part of a Washington Avenue Corridor Study.	
N_451_B_S		William Byrd Schools	William Byrd Schools		12		Gap	Roanoke County feels it is a priority that schools should be connected with multimodal infrastructure to other community facilities	New Bike Lane; New Shared-Use Path/ADA Accessible Greenway Trail; New Bicycle/Pedestrian Crossing; Streetscape Improvements (lights, benches, landscaping, bike parking, etc...)		2012 Bikeway Plan; 2018 Greenway Plan Vinton Area Corridors Plan	None identified at this time.	Study bike safety need of students/staff biking to William Byrd schools as part of a Washington Avenue Corridor Study.	
N_92_P_S		U.S. 460 - Challenger	east of W Ruritan Road to west of Carson Road		12	Route 460 Land Use and Connectivity Study taking place in 2022.	Gap	No funded projects address this need. Study is ongoing in 2022.	New Sidewalk; New Bicycle/Pedestrian Crossing; Streetscape Improvements (lights, benches, landscaping, bike parking, etc...)		Pedestrian Vision Plan; Implement the Route 460 Land Use and Connectivity Study	None identified at this time.	None.	
N_253_MV_S		Washington Avenue		Traffic congestion and speeding created by schools	10	OIPI Gap Study 2021 - Route 24 Bike/Ped Plan (covered Washington Ave. from Pollard to Bypass Rd.)	Gap	No funded projects address this need. Roanoke County noted significant crash data at several intersections.	Access Management; Intersection Reconfiguration (install new signal or innovative intersection); Safety Improvements for Motorists - Pavement Markings; Safety Improvements for Motorists - Signage	The Vinton Area Corridors Plan examines various land use recommendations.	The Vinton Area Corridors Plan presents various general recommendations but does not offer detailed transportation projects.	None identified at this time.	Study auto safety need as part of a Washington Avenue Corridor Study.	

Need ID	Need Type	Simple Location	Detailed Location	Need	Score	Investment	Need Status	Rationale	Possible Common Transportation Solutions	Possible Unique or Non-Transportation Solutions	Relevant Recent or Ongoing Studies and/or Recommendations	Preferred Solutions or options	Project / Service/Study	Associated PID(s)
N_539_B_S		Plantation Road	Tinker Creek Greenway at Plantation Road	Access between Fallon Park, East Gate Park, Old Monterey Golf Club, Hollins Uni, Carvins Cove	10		Gap	No funded projects address this need.	New Bike Lane; New Shared-Use Path/ADA Accessible Greenway Trail; New Bicycle/Pedestrian Crossing		2012 Bikeway Plan; Hollins Area Plan; the Hollins Center Plan; 2018 Greenway Plan	None identified at this time.	Multimodal Corridor Study of Plantation Rd	
N_539_P_S		Plantation Road	Tinker Creek Greenway at Plantation Road	Access between Fallon Park, East Gate Park, Old Monterey Golf Club, Hollins Uni, Carvins Cove	10		Gap	No funded projects address this need.	New Sidewalk; New Shared-Use Path/ADA Accessible Greenway Trail; New Bicycle/Pedestrian Crossing; Streetscape Improvements (lights, benches, landscaping, bike parking, etc...)		2015 Pedestrian Plan; Hollins Area Plan; Hollins Center Plan; 2018 Greenway Plan	None identified at this time.	Multimodal Corridor Study of Plantation Rd	
N_543_B_S		Green Hill Park	Green Hill Park	Access to New River Valley	10		Gap	Funded projects do not address the need.	New Bike Lane; New Shared-Use Path/ADA Accessible Greenway Trail		2012 Bikeway Plan; 2018 Greenway Plan; the RTCA Study; the Valley to Valley Trail Plan.	None identified at this time.	None.	
N_543_P_S		Green Hill Park	Green Hill Park	Access to New River Valley	10		Gap	Funded projects do not address the need.	New Sidewalk; Streetscape Improvements (lights, benches, landscaping, bike parking, etc...); New Shared-Use Path/ADA Accessible Greenway Trail		2018 Greenway Plan; the RTCA Study; the Valley to Valley Trail Plan.	None identified at this time.	None.	
N_629_2_B_S		Roanoke County	Roanoke County		10	Various investments that vary by location.	Gap	This need is very broad. Improving bicycle safety is important in Roanoke County. Refer to more specific need locations identified in this document for more details on how bike safety is being improved.	New Bike Lane; New Shared-Use Path/ADA Accessible Greenway Trail; New Bicycle/Pedestrian Crossing; Streetscape Improvements (lights, benches, landscaping, bike parking, etc...);		2012 Bikeway Plan; 2018 Greenway Plan	Varies by location.	See other more specific need locations.	
N_889_B_S		Exit 140	Exit 140	Greenway access to the Park & Ride	10		Gap		New Bike Lane; New Shared-Use Path/ADA Accessible Greenway Trail; New Bicycle/Pedestrian Crossing; Streetscape Improvements (lights, benches, landscaping, bike parking, etc...)		2012 Bikeway Plan; 2018 Greenway Plan	None identified at this time.	None.	
N_889_P_S		Exit 140	Exit 140	Greenway access to the Park & Ride	10	Sidewalks exist in front of the P&R and south along Route 311 to Downtown Salem.	Gap	Additional multimodal access would be beneficial.	New Sidewalk; New Bicycle/Pedestrian Crossing; Streetscape Improvements (lights, benches, landscaping, bike parking, etc...); New Shared-Use		2015 Pedestrian Plan; 2018 Greenway Plan	None identified at this time.	None.	
N_1579_MV_S		U.S. 460 - Blue Rid*	Villamont	Turning traffic mixed with high traffic speeds	7		Gap	A common concern along the corridor. The turning lanes are short or non-existent.	Intersection Reconfiguration; New Turn Lane			Install turn lane at high-traffic cross streets.	None	
N_1728_MV_S		Route 311	Route 311	Hidden turn lanes, fast traffic speed	7	UPC 108904 - roundabout at Rt. 311/419.	Gap	Funded project does not address the need. Public input through the 200 Plan outreach and crash data indicates need for a study along this corridor	Access Management; Intersection Reconfiguration (install new signal or innovative intersection); Safety Improvements for Motorists - Pavement Markings; Safety			None identified at this time.	Initiate Route 311/Catawba study to determine specific solution to address this need.	
N_437_B_S		Read Mountain Preserve	Read Mountain Preserve		3		Gap	No funded projects address this need. Roanoke County feels parks should be connected with multimodal infrastructure.	New Bike Lane; New Shared-Use Path/ADA Accessible Greenway Trail; New Bicycle/Pedestrian Crossing; Streetscape Improvements (lights, benches, landscaping, bike parking, etc...)		2012 Bikeway Plan; 2018 Greenway Plan	None identified at this time.	None.	
N_437_P_S		Read Mountain Preserve	Read Mountain Preserve		3		Gap	Roanoke County feels parks should be connected with multimodal infrastructure.	New Sidewalk; New Bicycle/Pedestrian Crossing; Streetscape Improvements (lights, benches, landscaping, bike parking, etc...)		2015 Pedestrian Plan; 2018 Greenway Plan	None identified at this time.	None.	
N_1022_MV_S		Brambleton Ave	Route 221	Visibility	2		Gap	Public input through the 200 Plan outreach and crash data indicates need for a study along this corridor.	Access Management; Intersection Reconfiguration (install new signal or innovative intersection); Safety Improvements for Motorists - Pavement Markings; Safety			None identified at this time.	Study the motor vehicle safety need at Brambleton Avenue from Autumn Park Dr. and Old Plantation Rd.	
N_1512_MV_S		Brambleton Ave	Route 221		2		Gap	Public input through the 200 Plan outreach and crash data indicates need for a study along this corridor	Access Management; Intersection Reconfiguration (install new signal or innovative intersection); Safety Improvements for Motorists - Pavement Markings; Safety Improvements for Motorists -			None identified at this time.	Initiate a Route 221/Bent Mountain Road Multimodal Safety Study to determine specific projects to address the need.	

Need ID	Need Type	Simple Location	Detailed Location	Need	Score	Investment	Need Status	Rationale	Possible Common Transportation Solutions	Possible Unique or Non-Transportation Solutions	Relevant Recent or Ongoing Studies and/or Recommendations	Preferred Solutions or options	Project / Service/Study	Associated PID(s)
N_861_MV_S		Brambleton Ave	Route 221		2		Gap	Public input through the 200 Plan outreach and crash data indicates need for a study along this corridor	Access Management; Intersection Reconfiguration (install new signal or innovative intersection); Safety Improvements for Motorists - Pavement Markings; Safety Improvements for Motorists -			None identified at this time.	Initiate a Route 221/Bent Mountain Road Multimodal Safety Study to determine specific projects to address the need.	
N_1372_N_A		Franklin Street	Phillips Brook Ln		0	Revenue Sharing improvements to pay to straighten a curve on Franklin Street and put curb/gutter.	Gap	Mainly a safety concern for automobiles. Additionally, new development taking place increasing traffic and adding to the unsafe concerns.	Roadway Reconstruction; New Sidewalk			None identified at this time.	None.	

Appendix I: Regional Transportation Needs – Others to Address Long-Term

Other Regional Transportation Needs to Address

Roanoke Valley Transportation Planning Organization



Introduction

This spreadsheet lists the other regional transportation needs identified in the Roanoke Valley Transportation Plan along with available information for understanding the nature of the need. Additional information will be added as the needs are further studied, matched with possible solutions, and in some cases, advance to the stage of projects. Note: Needs within the City of Roanoke below a score of 80 may not have been assessed for priority consideration by staff and are listed here solely based on their prioritization score.

[See the NEST tool to map the projects: https://experience.arcgis.com/experience/7c2b2fb55b1b42c58954799c2156b922](https://experience.arcgis.com/experience/7c2b2fb55b1b42c58954799c2156b922)

Priority Status

No

Need ID	Need Type	Simple Location	Detailed Location	Need	Score	Investment	Need Status	Rationale	Possible Common Transportation Solutions	Possible Unique or Non-Transportation Solutions	Relevant Recent or Ongoing Studies and/or Recommendations	Preferred Solutions or options	Project / Service/Study	Associated PID(s)
N_2092_N_A	Access (Non-Transit)	I-581	U.S. 460	I-581 cuts off neighborhoods	100	None as of May 2022.	Gap	Not a lot of ways to get across the interstate when walking, biking, driving or even transit. Original construction of the interstate's negative impact on community still merits consideration on how to improve community connectivity.	Interchange Reconfiguration; Bicycle/Pedestrian Crossing Improvement; New Bike Lane; New Sidewalk; Safety Improvements for Motorists- Pavement Markings; New Bridge (Bicycle/Pedestrian)		Consider bike/ped bridges from Evans Spring to Walmart and another to Lewis Gale/TGI Fridays. Bike/Pedestrian accommodations on Wood Haven Road, Peters Creek Road, Campbell Ave. SE.; Bike accommodations on Orange Ave.	Add or improve pedestrian/bicycle accommodations in new right-of-way and on existing roads across I-581.	None.	
N_1652_T_A	Access (Transit)	U.S. 460 - Orange	I-581 to Roanoke city limit	0	100	Route 25/26 and 31/32 span a portion of Orange Avenue.	Gap	Existing services don't address full need identified.	New Transit Route (local, commuter, intercity)		Transit Vision Plan			
N_1156_MV_S	Safety (auto)	Elm Avenue	4th Street SE	Crime	95	None as of May 2022.	Gap	Motorist's concern may be a perception due to number of homeless in the area going to/from Rescue Mission. Police would need to validate crime concern.		Refer to City Police or other agencies that help homeless, loitering.		Refer to City Police.		
N_704_MV_S	Safety (auto)	U.S. 220	Wonju Street	Short merge lanes	94	None as of May 2022. The City of Roanoke exploring possibility of using ARPA funds to expand hours of service in the City of Roanoke.	Gap	Is there an accident problem? City staff are not aware of a crash issue here.						
N_1_T	Congestion	Route 419	U.S. 220 to Chaparral	Speeding traffic	94	Addresses need: #HB2.FY17 ROUTE 419 SAFETY IMPROVEMENTS AT TANGLEWOOD, Route 419/Route 220 Diverging Diamond Interchange Does not address need: #SMART22 - ROUTE 419 STREETScape IMPROVEMENT Phase 2, Route 51 & 52 Fixed-Route Transit Service	Partially addressed	Route 419 Safety improvement project (congestion is primary need) ends at Route 867, about half way, Diverging Diamond interchange only at 419/220 interchange						
N_256_5_MV_S	Safety (auto)	Gus Nicks Boulevard	Vinton town limit to Washington Avenue		93	Gus Nicks Blvd. Pedestrian/Bike Crossing	Gap	Unclear auto safety concerns on this section of Gus Nicks Blvd.						
N_256_1_MV_S	Safety (auto)	Virginia Avenue	City Limit to Bypass Road	Improved visibility-Virginia/Pollard intersection; HighTraffic/slow flow;speed;signal timings;ped saf	93	Routes 35/36 Transit Service, Town of Vinton has purchased new signal equipment to upgrade signal timings.	Addressed	New signal equipment will address traffic flow and signal concerns. Visibility is a function of topography.						
N_703_MV_S	Safety (auto)	Route 419	Tanglewood Mall	Speed traffic, reckless driving	93	Meets need: #HB2.FY17 ROUTE 419 SAFETY IMPROVEMENTS AT TANGLEWOOD Does not meet need: Route 51 & 52 Fixed-Route Transit Service	Gap	Safety project doesn't address the reckless driving or speeding issues.						
N_256_4_MV_S	Safety (auto)	Pollard Street	Washington Avenue to Virginia Avenue		92	Routes 35/36 Transit Service.	Gap	No investments planned to address automobile safety on this road.						
N_144_P_S	Safety (ped)	Marshall Avenue SW	at 7th Street SW		91	None as of May 2022. The City of Roanoke exploring possibility of using ARPA funds to expand hours of service in the City of Roanoke.	Gap	Location has infrastructure for pedestrians. Safety concern may related to other things such as lighting or potentially crime.						
N_176_P_S	Safety (ped)	13th Street SE	north of Dale Avenue SE to south of Jamison Avenue SE		90	Route 41 & 42, 35 fixed-route transit	Gap	Section identified has sidewalks, crosswalks, ADA ramps, and pedestrian signals.						
N_161_P_S	Safety (ped)	Wiley Drive	Franklin Road to Crystal Spring Avenue	Speeding traffic, distracted drivers	89	None as of May 2022.	Gap	No improvements planned to address speeding traffic or distracted drivers in this section of Wiley Drive.		Repurpose the automobile lane on Wiley Drive for additional pedestrian and bicycle use.				
N_177_P_S	Safety (ped)	Jamison Avenue SE	Bullit Avenue SE to 13th Street SE		89	None as of May 2022.	Gap	Sidewalks and ADA ramps exist along this road. Pedestrians may feel unsafe (not sure why) though not for lack of this infrastructure.						

Need ID	Need Type	Simple Location	Detailed Location	Need	Score	Investment	Need Status	Rationale	Possible Common Transportation Solutions	Possible Unique or Non-Transportation Solutions	Relevant Recent or Ongoing Studies and/or Recommendations	Preferred Solutions or options	Project / Service/Study	Associated PID(s)
N_151_P_S	Safety (ped)	Elm Avenue	Ferdinand Avenue SW to 4th St SE	Drivers don't recognize identity cane of blind pedestrian	88	Transit projects (SMART WAY Base fixed-route, Route 41 & 42 fixed-route, Route 61 & 62 fixed-route)	Gap	Blind pedestrians have a hard time walking this corridor despite the crosswalks, sidewalks.						
N_439_P_S	Safety (ped)	River Park Shopping Center	River Park Shopping Center		87	None as of May 2022.	Gap	No pedestrian safety improvements funded at this time.	New Sidewalk; New Shared-Use Path/ADA Accessible Greenway Trail		Route 24 Bike/Pedestrian Plan			
N_154_P_S	Safety (ped)	3rd St. SW	Day Avenue		86	Transit projects (Route 55 & 62 fixed-routes)	Partially	Local street with pedestrian accommodations. Consider pedestrian safety concerns unrelated to infrastructure.						
N_186_P_S	Safety (ped)	Jefferson Street	Shenandoah Avenue NW to Wells Avenue NW		86	None	Partially	Local street with pedestrian accommodations. Consider pedestrian safety concerns unrelated to infrastructure.						
N_201_P_S	Safety (ped)	2nd Street SW	Campbell Ave. SW to Church Ave. SW		85	City of Roanoke Curb, Gutter & Sidewalk Program, Transit projects (Route 65, 92, 71, 85, 61, 72 & 62 fixed-routes)	Gap	Crossing 4 travel lanes though there are crosswalks, pedestrian signals, and sidewalks, may be uncomfortable for some pedestrians.						
N_670_B_S	Safety (bike)	Memorial Ave	Memorial Ave	Speeding traffic, distracted drivers	85	Transit projects (Route 71 & 72 fixed-routes); Roanoke River Greenway Phase 2 Bridge the Gap	Gap	Few bicyclists ride on Memorial Ave. west of Grandin Rd. Many ride east of Grandin Rd. in bike lanes and may not feel safe doing so due to motorist behavior in adjacent travel lanes. This is also a common way for cyclist to get to the sections of greenway near Peters Creek Road and in Salem. This might be partially addressed by RRG Bridge the Gap Phase 2 where cyclists will be able to connect to Peters Creek and Salem via greenway in August 2023.		Green painted bike lanes on Memorial Avenue; The blocks between Wasena and Black Dog Salvage offer an opportunity for parking and separated bike lanes.				
N_1365_P_S	Safety (ped)	Tazewell Ave	Tazewell Ave		85	Transit projects (Route 35 & 36 fixed-routes)	Partially	Local street with pedestrian accommodations. Consider pedestrian safety concerns unrelated to infrastructure.						
N_221_B_S	Safety (bike)	Pollard Street	Virginia Avenue to Gus Nicks Boulevard		85	Routes 35/36 Transit Service.	Gap	Bicycles travel in the travel lanes on Pollard Street as available space is given to on-street parking, vehicle lanes, and sidewalks.			Route 24 Bike/Pedestrian Plan			
N_400_B_S	Safety (bike)	Downtown Roanoke	Downtown Roanoke		85	All transit routes.	Partially addressed	People note not feeling safe biking in downtown. They may put their bicycle on a bus to travel through downtown.		Reduce speed limit to make biking in the travel lane more comfortable.				
N_400_P_S	Safety (ped)	Downtown Roanoke	Downtown Roanoke		85	All transit routes.	Partially addressed	Sidewalks, crosswalks and pedestrian signals are present in Downtown Roanoke. It is unclear what else may help pedestrian feel safe walking downtown.						
N_182_P_S	Safety (ped)	Salem Avenue SE	S Jefferson Street to Williamson Road		85	Various transit routes operate here.	Partially addressed	Sidewalks and crosswalks exist. It may be hard for pedestrians at crosswalks to see oncoming cars where parked cars are present.						
N_169_P_S	Safety (ped)	Campbell Avenue	3st Street SW to Railroad crossing		85	Transit projects (Routes 31/32)	Partially addressed	Some sidewalks exist here though the interaction with the railroad may make pedestrians feel unsafe walking here.						
N_549_B_S	Safety (bike)	Wise Avenue	Indian Village	Access to downtown Vinton	84	Walnut Avenue Bike/Pedestrian Improvements	Gap	Alternatives for improvements to low water bridge at Tinker Creek are very limited.						
N_85_P_S	Safety (ped)	Pollard Street	north of Jefferson Avenue to W Jackson Avenue		84	Routes 35/36 Transit Service. Newer ADA ramps and sidewalks next to the library.	Addressed	Sidewalks exist throughout the corridor.						
N_162_P_S	Safety (ped)	5th Street	Orange Avenue to Janette Avenue SW		84									
N_153_P_S	Safety (ped)	2nd Street SW	Franklin Road to 3rd Street		84									
N_1018_MV_S	Safety (auto)	I-81	Exit 137		84	SMART WAY Express Fixed-Route Transit Service, SMART WAY Base Fixed-Route Transit Service, I-81 NB widening - Exit 128 to Exit 137	Gap	Auto safety need here is unclear. Transit service provides an alternative to driving but doesn't address safety concerns for drivers.						
N_1772_N_SM	System Management (operations, assets)	I-581	U.S. 460		84									
N_195_P_S	Safety (ped)	Main Street	Winona Avenue SW to Ferdinand Avenue SW		83									

Need ID	Need Type	Simple Location	Detailed Location	Need	Score	Investment	Need Status	Rationale	Possible Common Transportation Solutions	Possible Unique or Non-Transportation Solutions	Relevant Recent or Ongoing Studies and/or Recommendations	Preferred Solutions or options	Project / Service/Study	Associated PID(s)
N_160_B_S	Safety (bike)	Wonju Street	Franklin Road to Colonial Avenue	Speeding traffic, distracted drivers	83									
N_160_P_S	Safety (ped)	Wonju Street	Franklin Road to Colonial Avenue	Speeding traffic, distracted drivers	83									
N_111_P_S	Safety (ped)	Brandon Avenue	Franklin Road		83									
N_591_B_S	Safety (bike)	Franklin Road	Reserve Avenue to Babies & Children	Pedestrian & bicycle safety with permanent green right turn	83									
N_1017_T_A	Access (Transit)	Amtrak	Amtrak	More train destinations, Amtrak passengers connect with MM transp	83	Amtrak extension to Christiansburg, second train to Roanoke funded.	Partially addressed	Funded Amtrak extension to Christiansburg. Connector bus currently serves Christiansburg. No local bus connection due to service times.						
N_188_P_S	Safety (ped)	Kimball Avenue NE	Commonwealth Avenue NE to Williamson Road NE		83									
N_200_P_S	Safety (ped)	Church Avenue	2nd Street SW to 3rd Street SW		83									
N_733_B_S	Safety (bike)	1st St	1st St		83									
N_757_B_S	Safety (bike)	Kirk Ave	Kirk Ave		83									
N_75_P_S	Safety (ped)	Franklin Road	Williamson Road to Avenham Avenue SW	Slip lanes do not belong in downtowns, Pedestrian & bicycle safety with permanent green right turn	83									
N_202_P_S	Safety (ped)	3rd St. SW	Campbell Ave. SW to Church Ave. SW		83									
N_672_B_S	Safety (bike)	Wonju St	Wonju St	Speeding traffic, distracted drivers	83									
N_157_P_S	Safety (ped)	Market Street SE	Norfolk Avenue to Elmwood Park		83									
N_1261_B_S	Safety (bike)	Crossroads	Crossroads		83									
N_1261_P_S	Safety (ped)	Hershberger Road	Crossroads		83									
N_100_P_S	Safety (ped)	10th Street NW	Ferdinand Avenue SW to Williamson Road		83									
N_143_P_S	Safety (ped)	12th Street SW	Riverside Boulevard SW to Campbell Avenue SW		82									
N_13_B_S	Safety (bike)	Virginia Avenue	Roanoke City Limit to Bypass Road	p18-Bicycle LOS E/F, Bicycle access to Tinker Creek Greenway	82	Routes 35/36 Transit Service, Town of Vinton has purchased new signal equipment to upgrade signal timings.	Gap	Bicycles travel in the travel lanes on Virginia Avenue. Priority of space has been given to travel lanes, turn lanes, and sidewalks.						
N_96_P_S	Safety (ped)	Shenandoah Avenue	Westside Boulevard NW to Williamson Road		82									
N_164_P_S	Safety (ped)	U.S. 460 - Orange	Melrose Avenue to Gainsboro Road		82									
N_198_P_S	Safety (ped)	Liberty Road NW	Gainsboro Road to Williamson Road		82									
N_652_P_S	Safety (ped)	12th St NW	near Hanover Avenue		82									
N_1494_P_S	Safety (ped)	U.S. 460 - Orange	10th Street NW	Long wait to cross the road	82									
N_667_B_S	Safety (bike)	Edgewood St	Edgewood St	Speeding traffic, distracted drivers	82									
N_739_B_S	Safety (bike)	Melrose Ave	Melrose Ave		82									
N_652_B_S	Safety (bike)	12th St NW	near Hanover Avenue		82									
N_150_P_S	Safety (ped)	Loudon Avenue	10th Street to 5th Street NW		82									

Need ID	Need Type	Simple Location	Detailed Location	Need	Score	Investment	Need Status	Rationale	Possible Common Transportation Solutions	Possible Unique or Non-Transportation Solutions	Relevant Recent or Ongoing Studies and/or Recommendations	Preferred Solutions or options	Project / Service/Study	Associated PID(s)
N_88_P_S	Safety (ped)	Bypass Road	Hardy Road to Washington Avenue		82	Routes 35/36 Transit Service.	Gap	No pedestrian safety improvements funded at this time.	New Sidewalk; New Shared-Use Path/ADA Accessible Greenway Trail		Route 24 Bike/Pedestrian Plan			
N_86_P_S	Safety (ped)	Cleveland Street	3rd Street to S. Pollard Street		82	None as of May 2022.	Gap	No pedestrian safety improvements funded at this time. Local street, not a regional priority.						
N_222_B_S	Safety (bike)	Bypass Road	Hardy Road to Washington Avenue		82	None as of May 2022.	Gap	Bicyclists travel in the travel lanes on Bypass Road and less experienced cyclists may not feel comfortable.						
N_141_B_S	Safety (bike)	Williamson Road	Orange Avenue to Airport Road NW		82									
N_141_P_S	Safety (ped)	Williamson Road	Orange Avenue to Airport Road NW	Many pedestrians	82									
N_89_P_S	Safety (ped)	Edgewood Street	Brandon Avenue to Memorial Avenue	Speeding traffic, distracted drivers	81									
N_710_N_SM	System Management (operations, assets)	U.S. 460 - Orange	Plantation Road	Illegal U-turns	81									
N_414_B_S	Safety (bike)	Grandin Village	Grandin Village		80									
N_414_P_S	Safety (ped)	Grandin Village	Grandin Village		80									
N_1361_P_S	Safety (ped)	Hershberger Road	Williamson Road	Dangerous crossing for pedestrians	80									
N_1506_B_S	Safety (bike)	Shenandoah Ave	Shenandoah Ave	Visibility, slow bicycling	80									
N_172_P_S	Safety (ped)	Rutgers Street	Towne Square Boulevard to Hershberger Road		80									
N_165_P_S	Safety (ped)	U.S. 460 - Melrose	and Main Street from Salem Turnpike to Thompson Memorial Drive		80									
N_2052_T	Congestion	I-581	Elm Avenue		79									
N_115_P_S	Safety (ped)	Towne Square Blvd	Aviation Drive to Airport Road		79									
N_2086_T	Congestion	U.S. 460	Williamson Road		79									
N_598_B_S	Safety (bike)	U.S. 11 - Apperson	Route 419		79	Route 91 Fixed-Route Transit Service, Route 419 Study - Bower Road to U.S. 11/Apperson Road, #SGR18LB - APPERSON DRIVE BRIDGE REPLACEMENT	Gap	Transit service provides an alternative to biking on this corridor as bike racks are provided on buses. Further addressing this need is not in Salem's six-year plan.						
N_173_P_S	Safety (ped)	Valley View Blvd	I-581 to Valley View Avenue		79									
N_95_P_S	Safety (ped)	U.S. 460 - Orange	Kimball Avenue NE		79									
N_168_P_S	Safety (ped)	Plantation Road	Orange Avenue to Hollins Road	Lots of pedestrians	79									
N_548_B_S	Safety (bike)	Dale Avenue	Tinker Creek Greenway at Dale Avenue	Bicycle access to Glade Creek Greenway	79	Walnut Avenue Bike/Pedestrian Improvements	Partially Addressed	Bike lanes will exist on Walnut Avenue but bicyclists will still need to use the travel lanes to cross Tinker Creek.						
N_1755_N_SM	System Management (operations, assets)	U.S. 460 - Orange	Lynn Brae Drive		78									
N_632_P_S	Safety (ped)	Bedford Rd	Bedford Rd		77	OIPI GAP study funded in 2021, completed in 2022.	Gap	Issues exist - see the study.						
N_669_B_S	Safety (bike)	Brandon Ave	Main Street	Speeding traffic, distracted drivers	77									
N_1415_B_S	Safety (bike)	Wise Avenue	Norfolk Ave		76									
N_103_1_P_S	Safety (ped)	Brandon Avenue	Mud Lick Road to Electric Road	Students going to/from school, Unsafe to cross the road, Many pedestrians and bicyclists,	76	Does not meet need: Route 71 & 72 Fixed-Route Transit Service, Route 91 & 72 Fixed-Route Transit Service,	Partially addressed	Need doesn't seem appropriate for this location - is more appropriate for Roanoke Boulevard. No other funded projects address this need; not in Salem's plan to address in next six years.						
N_103_2_B_S	Safety (bike)	Brandon Avenue	Mud Lick Road to Electric Road	Extend bike lane	76	Does not meet need: Route 71 & 72 Fixed-Route Transit Service, Route 91 & 72 Fixed-Route Transit Service	Partially addressed	No other funded projects address this need; not in Salem's plan to address in next six years.						
N_1153_T	Congestion	13th Street SE	Dale Avenue		76									
N_683_T	Congestion	I-581	U.S. 460		76									

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N_1255_T_S	Safety (ped)	Franklin Rd	Duke of Gloucester		75									
N_181_P_S	Safety (ped)	Airport Road NW	Towne Square Boulevard to Peters Creek Road		75	Route 25 & 26 Fixed-Route Transit Service	Gap	No funded projects address this need				None identified at this time.	Multimodal Corridor Study: Airport Road from Towne Square Blvd. to Airport Rd.	
N_103_3_P_S	Safety (ped)	Brandon Avenue	Brambleton Avenue to Grandin Road	Students going to/from school. Unsafe to cross the road. Many pedestrians and bicyclists.	74	Route 61 & 62 Fixed-Route Transit Service, Route 65 & 66 Fixed-Route Transit Service	Gap	No funded projects address this need						
N_158_P_S	Safety (ped)	Persinger Road SW	Grandin Road to Blenheim Road SW		74									
N_104_P_S	Safety (ped)	Hershberger Road	Peters Creek Road to I-581		74									
N_2064_B_S	Safety (bike)		Shenandoah Ave	Visibility, slow bicycling	73									
N_473_T_SM	System Management (transit)	Hardy Road	Shoe Show in Vinton, Kroger (N_503)		73	Fixed-Route Transit Service, Route 35 & 36 fixed-routes	Gap	Service is insufficient to accommodate shoppers or employees in the evening.						
N_1254_P_S	Safety (ped)	Franklin Road	Franklin Rd		72									
N_8_T	Congestion	Hardy Road	Chestnut Street to Bypass Road	p9-Projected to be LOS F by 2035	72	Hardy Road/Dillon Woods Crosswalk	Gap	Funded project does not address congestion on Hardy Road.			Route 24 Bike/Pedestrian Plan			
N_1570_MV_S	Safety (auto)	I-581	Williamson Road		72									
N_890_MV_S	Safety (auto)	Brandon Ave	Towers	Visibility, speeding traffic, turning movements	72									
N_668_B_S	Safety (bike)	Brandon Ave	Grandin Rd	Speeding traffic, distracted drivers, Student safety	72									
N_1137_N_SM	System Management (operations, assets)	Riverland Road	near Ivy Street		72									
N_778_T	Congestion	U.S. 460 - Challenger	Roanoke city limit to Cloverdale Road	Distracted driving	70	#SMART22 - ROUTE 460 INTERSECTIONS-CARSON ROAD. TO HUNTRIDGE ROAD, Route 460 at Alternate Route 220 Intersection Improvements, #SMART22 - ROUTE 460/WEST RURITAN ROAD INTERSECTION IMPROVEMENTS	Partially addressed	#SMART22 - ROUTE 460 INTERSECTIONS-CARSON ROAD. TO HUNTRIDGE ROAD, Route 460 at Alternate Route 220 Intersection Improvements, #SMART22 - ROUTE 460/WEST RURITAN ROAD INTERSECTION IMPROVEMENTS all primary need is congestion, does not cover full length of need corridor			Enforcement issue - refer to County Police	Enforcement issue - refer to County Police		
N_497_T_SM	System Management (transit)	ByPass Road	River Park Shopping Center		70	Route 35 & 36 fixed-routes.	Gap	Service is insufficient to accommodate shoppers or employees in the evening.						
N_1070_MV_S	Safety (auto)	Route 419	Brambleton Ave	Distracted driving	70	None as of May 2022	Gap	No funded projects address this need			Enforcement issue - refer to County Police	Enforcement issue - refer to County Police		
N_1740_T	Congestion	U.S. 220	Route 419		69									
N_797_MV_S	Safety (auto)	Towne Square Blvd	Towne Square Blvd		69									
N_864_MV_S	Safety (auto)	Williamson Rd	Williamson Rd		69									
N_1254_MV_S	Safety (auto)	Franklin Rd	Franklin Rd		69									
N_1153_N_SM	System Management (operations, assets)	13th Street SE	Dale Avenue		69									
N_1559_N_SM	System Management (operations, assets)	Apperson Drive	Riverside Drive	Flooding	69	Route 91 Fixed-Route Transit Service, #SGR18LB - APPERSON DRIVE BRIDGE REPLACEMENT, Route 419 Study - Bower Road to U.S. 11/Apperson Road	Gap	No funded projects address this need. No projects planned - not much can be done. The benefit/cost would not justify the expense.						
N_1763_N_SM	System Management (operations, assets)	13th Street SE	Tazewell Avenue	Unattractive	69									
N_2052_N_SM	System Management (operations, assets)	I-581	Elm Avenue	Confusing lane markings	68									

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N_2059_N_SM	System Management (operations, assets)	McDaniel Drive	U.S. 460 - W Main		68	None as of May 2022	Gap	No funded projects address this need						
N_1255_MV_S	Safety (auto)	U.S. 220	Route 419		68									
N_1764_N_A	Access (Non-Transit)	U.S. 460 - Orange	Plantation Rd.	Connect Preston Park and Monterrey	67									
N_794_N_A	Access (Non-Transit)	U.S. 460 - E Main	near Market Street		67		Gap	Route 91 Fixed-Route Transit Service, #SMART22 - MAIN ST / MARKET ST INTERSECTION IMPROVEMENTS, Downtown Salem Streetscape Improvements			No funded projects address this need. Need is unclear and requires additional study.			
N_525_B_S		Cook Drive	West end of Roanoke River Greenway segment near Cook Dr	Access from here to east end of next segment and to Mason Creek Greenway	66	Roanoke River Greenway - Rotary Park to Bridge St.	Partially Addressed	Partially Addressed						
N_525_P_S		Cook Drive	West end of Roanoke River Greenway segment near Cook Dr	Access from here to east end of next segment and to Mason Creek Greenway	66	Roanoke River Greenway - Rotary Park to Bridge St.	Partially Addressed	Partially Addressed						
N_863_N_SM		U.S. 460 - Orange	near Hollins Road		66									
N_213_T		Virginia Avenue	Roanoke City Limit to 1st Street		65									
N_914_N_SM		McVitty Rd	Old Cave Spring Road		65	None as of May 2022.	Gap	Gap						
N_1746_N_SM		U.S. 460 - W Main	near Turner Road		64									
N_1715_T		U.S. 220 - Franklin	I-581 to RVTPO boundary	Turning movements back up traffic, U.S. 220 backs up both directions	62	UPC 115460, Route 419/Route 220 Diverging Diamond Interchange; UPC 110887, Route 220 Signal Improvements	Partially Addressed	Partially Addressed				Route 220 Arterial Preservation Program Study. Continue to monitor 220 South congestion via the CMP post-implementation of DDI and signal improvements.		
N_75_2_T		Franklin Road	Williamson Road to Avenham Avenue SW		62									
N_2062_T		Jefferson Street	Reserve Avenue		62									
N_2091_T		Brandon Avenue	near Franklin Road		62									
N_542_B_S		Roanoke Boulevard	South end of Mason Creek Greenway	Access to Roanoke River Greenway	61	None as of May 2022.	Gap	Gap						
N_306_N_SM		Route 419	Apperson Drive		59									
N_333_N_SM		Route 419	Grandin Road		59	Project UPC T24550, Oak Grove Streetscape Improvements; #SMART18 - ROUTE 419 & RTE 221 ADAPTIVE TRAFFIC CONTROL & #PIPELINE22 - RTE. 419 study	Addressed	Addressed						
N_1659_2_T		U.S. 460 - E Main	4th St to Electric Road		58									
N_2066_T		Williamson Road	Laconia Avenue		58									
N_2067_T		U.S. 460 - Melrose	Peters Creek Road		58									
N_1740_N_A		U.S. 220 - Franklin	Route 419		58									
N_204_N_A		Market Square	Market area	Sidewalks are too narrow for wheelchairs	58									
N_470_T_A		Mill Mountain	Mill Mountain		58	STAR, CORTAN, Botetourt Van Service provide service for seniors and people with disabilities.	Partially Addressed	Partially Addressed						
N_508_T_A		Roanoke County Admin	Roanoke County Admin		58	CORTAN for seniors and people with disabilities.	Gap	Gap						
N_558_N_A		U.S. 460 - Challenge*	Cloverdale Road	Additional routes in/out of Vinton	58									
N_2051_T		Westside Boulevard	near Hershberger Road		58									
N_324_N_SM		Route 419	Braeburn Drive		58									

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N_327_N_SM		Route 419	Keagy Road (north)		58									
N_1747_N_SM		U.S. 460 - W Main	Wildwood Road		58									
N_2093_N_SM		Hershberger Road	I-581 ramp	Right lane exit-only not marked	57									
N_314_N_SM		U.S. 460 - E Main	Route 419		57									
N_1198_N_SM		10th Street	Campbell Avenue	Bumps damage low vehicles, N_1513 Poor pavement damages vehicles; Poor pavement damages vehicles	56									
N_1350_N_SM		Franklin Road	Reserve Ave		56									
N_169_2_T		Campbell Avenue	3st Street SW to Railroad crossing	Left turning vehicles block traffic	56									
N_895_T		Williamson Road	Franklin Road to Salem Avenue	Difficult left turn	56									
N_264_T		I-81	Exit 150	Exit 150 is still a mess from a long term standpoint. Still a choke point. Another crossing of the interstate is needed for this area to continue to grow	55		UPC 75910 - I-81 Exit 150 Improvements Project	Gap	Gap					
N_2078_T		Hershberger Road	Florist Road		55									
N_2087_T		Walnut Avenue	8th St		55									
N_1155_N_SM		Brandon Avenue	23rd Street		53									
N_1558_N_SM		Halevan Road	near Garst Mill Road	Flooding	53									
N_596_N_SM		Grandin Road	Memorial Ave	Signal fails to respond	53									
N_634_N_SM		Exit 143	Exit 143	Left lane exit/entrance	53									
N_827_N_SM		Reserve Avenue	Riverside Circle		53									
N_2053_T		Luck Avenue	3rd Street		53									
N_103_4_T		Brandon Avenue	Grandin Road to Mud Lick Road		51									
N_103_2_T		Brandon Avenue	23rd Street to Brambleton Avenue		51									
N_2073_T		U.S. 460 - Orange	Seibel Drive		51									
N_2077_T		Hershberger Rd	Valley View Boulevard		51									
N_531_N_SM		Bennington St	Roanoke River Greenway parking area at Bennington Street	Access from here to the greenway at the Water Pollution Control Plant, address flooding under bridge	51									
N_557_N_SM		Bennington St	Pike Lane	Flooding	51									
N_1209_2_N_A		Southeast Roanoke	Southeast Roanoke		50									
N_1248_N_A		McVitty Rd	McVitty Forest Drive		50									
N_1257_N_A		Towers Shopping Cen*	Towers Shopping Center		50									
N_1272_N_A		Murray Run Greenway	Grandin Road	Access to Garst Mill Park, Cave Spring Corners shopping center	50									

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N_1626_N_A		I-81	RVTPO boundary to RVTPO boundary	Short ramps, Left merge on/off I-81; Future LOS forecasted to deteriorate, Speeding traffic; Left merge on/off I-81	50	I - 81 Auxiliary Lane from Exit 143 to 141, I-81 widening - MM 144 to Exit 150, I-81 NB widening - Exit 128 to Exit 137, I-81 widening - MM136 to MM141 SMART WAY Express & Base Fixed-Route Transit Service	Gap	Gap						
N_2_T_A		U.S. 220 - Franklin	Route 419	p23-Improve public transportation	50		Gap							
N_2063_N_SM		Plantation Road	Milk a Way Drive		50									
N_454_T_A		Bonsack	Bonsack		50									
N_482_T_A		East Park	East Park		50		Gap	Dynax provides a shuttle for its employees in East Park. Botetourt Van Service provides service for seniors and people with disabilities.	Gap	Gap				
N_495_T_A		Oak Grove Plaza	Oak Grove Plaza		50		Gap	CORTRAN / STAR service for people with disabilities and seniors.	Gap	Gap				
N_522_N_A		Roanoke River Gwy	East end of Roanoke River Greenway segment near Peters Creek	Access from here to Bridge Street	50									
N_527_N_A		Roanoke River Gwy	West end of Roanoke River Greenway segment near Riverside Dr	Access from here to east end of next segment	50									
N_528_N_A		Roanoke River Gwy	East end of Roanoke River Greenway segment near Mill Lane	Access from here to west end of next segment	50									
N_529_N_A		Roanoke River Gwy	West end of Roanoke River Greenway segment near Mill Lane	Access from here to east end of next segment	50									
N_799_N_A		Shaffer's Crossing	Boulevard Street		50									
N_896_T_A		U.S. 460 - Orange	Blue Hills Drive to Cloverdale Road	Access to services beyond current bus routes	50		Gap	CORTRAN service for people with disabilities and seniors.	Gap	Gap				
N_1235_N_SM		Brambleton Avenue	near Pinevale Road		50									
N_546_N_SM		Roanoke River Gwy	Roanoke River Greenway bridge near Smith Park	Address frequent flooding on bridge	50	None as of May 2022.	Gap	Gap					Wiley Drive over Roanoke River near Franklin Road Bridge Replacement	
N_627_N_SM		U.S. 460 - E Main	College Avenue		50									
N_617_T		U.S. 460 - W Main	Goodwin Avenue to Diuguids Lane	I-81 causes congestion on Main St	48									
N_892_T		Brambleton Avenue	Brandon Avenue to Electric Road	Speeding traffic, visibility	48									
N_104_T		Hershberger Road	Peters Creek Road to I-581		48									
N_1732_N_SM		Cloverdale Road	Alt Route 220	Tall grass, visibility	48		Gap	Gap						
N_2089_T		Hollins Road	Plantation Road		48									
N_1033_N_SM		Brunswick Street	near Berkley Ave		47									
N_1291_N_SM		Main St SW	Hamilton Avenue	Bike lanes covered in debris and glass	47									
N_1376_N_SM		Main St SW	Elm Avenue to Winona Road	Bridge closes with no detour signs	47									
N_987_N_SM		10th Street	Fairfax Avenue		47									

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N_312_N_SM		Route 419	I-81 NB exit ramp		47									
N_612_N_SM		Greenwood St	Residential streets		47									
N_920_N_SM		Eddy Avenue	Union St		46									
N_323_N_SM		Route 419	Indiana Street		46									
N_2057_T			Brandon & Grandin		45									
N_2094_N_SM		U.S. 220 - Franklin	Old Rocky Mount Road		44									
N_2055_T		Grandin Road	Garst Mill Road		44									
N_594_N_SM		Brambleton Avenue	Ranchcrest Lane	Signal fails to detect vehicles	44									
N_937_N_SM		Plantation Rd	Lila Drive		44									
N_938_N_SM		Plantation Rd	near Milk A Way Drive		44									
N_1049_N_SM		Highland Ave	Highland Ave		44									
N_1144_N_SM		Exit 141	Exit 141		44									
N_311_N_SM		Route 419	I-81 SB exit ramp		44									
N_313_N_SM		Route 419	Green Ridge Road		43									
N_1569_MV_S		U.S. 220 - Elm	U.S. 220 - Elm		42									
N_2050_MV_S		Tazewell Avenue	13th St SE to Williamson Road	No traffic stops from 13th to Williamson. Used as a speedway during rush hours.	42									
N_1200_N_A		13th Street SE	Hollins Road		42									
N_1250_N_A		Route 419	Brambleton Ave		42									
N_1251_N_A		Route 419	Colonial Avenue		42									
N_1259_N_A		Williamson Road	Huntington Boulevard		42									
N_1260_N_A		Breckenridge Middle School	Williamson Rd		42									
N_1261_N_A		Crossroads	Crossroads		42									
N_1652_N_A		U.S. 460 - Orange	Purcell Avenue		42									
N_1786_N_A		Tinker Creek Gwy	northern terminus		42									
N_2082_N_A		I-581	Elm Avenue to I-81		42									
N_262_N_A		U.S. 220 - Roanoke	AT Trailhead	Increased AT and commuter demand for parking	42									
N_376_T_A		Plantation Road	Lila Drive		42	Botetourt Van and CORTAN	Partially Addressed							
N_378_T_A		Hollins University	Hollins University		42	Botetourt Van and CORTAN	Partially Addressed							
N_478_T_A		U.S. 220 - Franklin	Clearbrook		42	Botetourt Van and CORTAN	Partially Addressed							
N_479_T_A		Cloverdale	Cloverdale		42	Botetourt Van Service provides transit access for people with disabilities and seniors.	Gap	Gap						
N_486_T_A		Explore Park	Explore Park		42	Botetourt Van and CORTAN	Gap	Gap						
N_488_T_A		Fincastle	Fincastle	Access to school and jobs	42	Botetourt Van Service provides transit access for people with disabilities and seniors.	Gap	Gap						
N_525_N_A		Roanoke River Gwy	West end of Roanoke River Greenway segment near Cook Dr	Access from here to east end of next segment and to Mason Creek Greenway	42									
N_526_N_A		Roanoke River Gwy	East end of Roanoke River Greenway segment near Riverside Dr	Access from here to west end of next segment and to Mason Creek Greenway	42									
N_533_N_A		Lick Run Greenway	Countryside Golf Course	Access from here to the Lick Run Greenway near I-581	42									

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N_535_N_A		Wise Avenue	Tinker Creek Greenway at Wise Avenue	Access between Fallon Park, East Gate Park, Old Monterey Golf Club, Hollins Uni, Carvins Cove	42									
N_630_N_A		Roanoke River Gwy	near Hamilton Terrace		42									
N_635_N_A		U.S. 11 - Lee	Railroad tracks	Need an alternative to I-81 to go to Botetourt	42									
N_864_N_A		Williamson Road	near Crockett Avenue		42									
N_878_T_A		Webster	Webster		42		Gap	Botetourt Van Service provides transit access for people with disabilities and seniors.						
N_103_3_T		Brandon Avenue	Brambleton Avenue to Grandin Road		41									
N_2083_T		Brandon Avenue	Grandin Road		41									
N_1586_N_SM		Cove Road	Aspen Street		41									
N_1594_N_SM		Shenandoah Ave	near Juniper St		41									
N_1602_MV_S		Bullitt Ave	Bullitt Ave	Bumpouts cause damage to vehicles that hit them	41									
N_1792_N_SM		Brandon Avenue	Main Street		41									
N_2092_N_SM		11th Street SW	Jackson Avenue		41									
N_231_MV_S		Walnut Avenue	W. Lee St. to Booker Ave./City Limit	Slow traffic down as it enters downtown, Confusing intersection at 8th	41									
N_555_MV_S		Tazewell Ave	Tazewell Ave	Speeding traffic	41									
N_760_N_SM		Colonial Avenue	Persinger Rd		41									
N_2068_T		Hershberger Road	Peters Creek Road		41									
N_59_4_T		Route 419	U.S. 460 to I-81		41		Gap							
N_1289_N_SM		Brandon Avenue	near Mount Vernon Road		41									
N_380_N_SM		Peters Creek Road	Williamson Road		41									
N_381_N_SM		Williamson Road	Plantation Road		41									
N_2072_T		I-581	10th Street		41									
N_2090_T		Fishburn Park			41									
N_1357_MV_S		Colonial Ave	Colonial Ave		40									
N_1603_MV_S		Dale Avenue	13th Street	Drivers run red lights	40									
N_599_MV_S		I-581	I-581	Reckless driving, Speeding traffic, slow traffic	39									
N_726_MV_S		Brandon Ave	Peters Creek Rd		39									
N_452_B_S		William Fleming High School	William Fleming High School		39									
N_452_P_S		William Fleming High School	William Fleming High School		39									
N_97_2_T		Roanoke Boulevard	Electric Road to Texas Street		38									
N_317_N_SM		Route 419	Springfield Avenue		38									
N_786_N_SM		Monet Dr	Monet Dr		38									
N_64_P_S		Blue Hills Drive	Orange Avenue to the last business at the end of Blue Hills Drive	Roanoke Centre for Industry and Technology	37									
N_2079_T		13th Street SE	Hollins Road		37									
N_682_MV_S		I-581	Hershberger Road	Short ramps; Visibility; Water; Right lane exit-only not marked; Get cut off in traffic	37									

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N_318_N_SM		Roanoke Boulevard	RR xing near Route 419		37									
N_666_B_S		Glen Heather Dr	Glen Heather Dr	Speeding traffic, distracted drivers	37									
N_666_P_S		Glen Heather Dr	Glen Heather Dr	Speeding traffic, distracted drivers	37									
N_472_T_SM		Exit 140	Exit 140		36	SMART WAY buses, CORTRAN, Botetourt Van Service	Gap	Gap						
N_808_N_SM		Fishburn Pkwy	Fishburn Pkwy		36									
N_1726_3_N_SM		U.S. 220 - Franklin	U.S. 220 - Franklin		36									
N_533_B_S		Routt Road	Lick Run Greenway in Countryside Golf Course	Access from here to the Lick Run Greenway near I-581	36						Lick Run Greenway will be extended through the Evan's Spring project whenever that is developed.			
N_533_P_S		Routt Road	Lick Run Greenway in Countryside Golf Course	Access from here to the Lick Run Greenway near I-581	36						Lick Run Greenway will be extended through the Evan's Spring project whenever that is developed.			
N_984_MV_S		Sharon Rd	Sharon Rd		36									
N_1597_P_S		I-81	I-81		36									
N_227_MV_S		Hardy Road	Bypass Road to Roanoke County limit		35									
N_145_P_S		King Street	Orange Avenue to west of Clyde Street NE (city limit)		35									
N_1421_N_SM		Hollins Rd	Riley Road		35									
N_975_N_SM		Grandin Road	Grandin Rd		35									
N_1464_N_SM		Windsor Ave	near Chesterfield Street		35									
N_212_MV_S		Cloverdale Road	Autumnwood Lane to Amsterdam Road	13 severe crashes	34						RVTPO Safety Study; Project Pipeline Study SA05: US 220/220 Alt. - Roanoke Road/Cloverdale Road from Route 11 (Lee Highway) to Commons Parkway	Convert some intersections to RCUTs along Route 220.	Route 220 Superstreet Improvement	
N_91_T		Wildwood Road	Loop from West Main Street near Exit 137 to Academy Street at West Main Street in Downtown Salem		34									
N_1076_N_SM		U.S. 11 - Lee	near Appalachian Trail		34									
N_211_T		U.S. 11	Cloverdale Road to RVTPO boundary	Future LOS forecasted to deteriorate	34									
N_429_B_S		LewisGale Medical Center	LewisGale Medical Center		34									
N_66_B_S		Towers Shopping Center	Towers Shopping Center	Speeding traffic, distracted drivers, Visibility, Many pedestrians and bicyclists	33									
N_66_P_S		Towers Shopping Center	Towers Shopping Center	Speeding traffic, distracted drivers, Visibility, Many pedestrians and bicyclists	33									
N_535_B_S		Wise Avenue	Tinker Creek Greenway at Wise Avenue	Access between Fallon Park, East Gate Park, Old Monterey Golf Club, Hollins Uni, Carvins Cove	33						This will be addressed by the City with Tinker Creek Greenway Phase 2 to Mason Mill Park under construction in 2022. There are 3 more phases after that to get to the County line near Hollins Road. No timeline, no funding on those.			
N_445_B_S		Towers Shopping Center	Towers Shopping Center		33									
N_1141_N_A		Fincastle	Fincastle		33									

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N_1145_T_A		U.S. 460 - W Main	Diuguids Lane		33									
N_1209_1_N_A		Downtown Roanoke	Downtown Roanoke		33									
N_1401_N_A		Hidden Valley High School	Hidden Valley High School		33									
N_1484_T_A		Clubhouse Drive	near Bunker Lane		33									
N_18_T_A		Washington Avenue	Bypass Road to Baker Drive	p76-Access to businesses; alt transp for elderly	33									
N_2093_N_A		Route 419	Roanoke Boulevard		33									
N_251_N_A		Downtown Vinton	Downtown Vinton	p55-Parking in downtown is inadequate; Lack of business/foot traffic are pressing issues	33									
N_380_N_A		Williamson Road	Peters Creek Road		33									
N_390_T_A		Exit 150	I-81	Alt. way to access to this area.	33									
N_468_T_A		South County Library	South County Library		33									
N_480_T_A		Daleville	Daleville		33									
N_481_T_A		Crossroads	Crossroads		33									
N_500_T_A		Statesman Industrial Park	Statesman Industrial Park		33									
N_504_T_A		William Byrd HS	William Byrd HS		33									
N_524_N_A		Roanoke River Gwy	East end of Roanoke River Greenway segment near Cook Dr	Access from here to west end of next segment	33									
N_531_N_A		Roanoke River Gwy	Bennington Road	Access from here to the greenway at the Water Pollution Control Plant, address flooding under bridge	33	Engineering and ROW funded for a greenway.	Partially addressed	Partially addressed						
N_532_N_A		Water Plant	South end of the bridge of the Roanoke River Greenway at the Water Pollution Control Plant	Access from here to Bennington St greenway parking area and to Explore Park	33	Engineering and ROW funded for a greenway.	Partially addressed	Partially addressed						
N_534_N_A		Lick Run Greenway	10th Street	Access from here to the Lick Run Greenway at Countryside Golf Course	33							Nothing to be done until Evan's Springs development. Greenway to be built as part of that development.		
N_538_N_A		Hollins University	Hollins University	Access between Fallon Park, East Gate Park, Old Monterey Golf Club, Hollins Uni, Carvins Cove	33									
N_539_N_A		Tinker Creek Gwy	Plantation Rd.	Access between Fallon Park, East Gate Park, Old Monterey Golf Club, Hollins Uni, Carvins Cove	33									
N_542_N_A		Mason Creek Greenway	South end of Mason Creek Greenway	Access to Roanoke River Greenway	33									
N_544_N_A		Explore Park	River trail	Access to Roanoke River Greenway	33									
N_652_T_A		12th Street	near Hanover Avenue		33									
N_768_N_A		Roanoke Mountain Campground	Mill Mountain		33									
N_869_T_A		Shenandoah Avenue	near 1st Street		33									

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N_193_P_S		Wasena Avenue	Westover Avenue SW to Wasena Avenue SW		32									
N_179_P_S		Wise Avenue	Norfolk Avenue SE to 8th Street		32									
N_147_P_S		Granby/Siebel Drive	Orange Avenue to Nicholas Avenue NE		32									
N_593_P_S		U.S. 220	Route 419		32									
N_746_B_S		Route 419	Tanglewood Mall		32									
N_438_P_S		U.S. 460 - W Main	Richfield Assisted Living Center		32									
N_2056_P_S		Grandin Road	near Electric Road	Speeding traffic, distracted drivers	32									
N_665_P_S		Grandin Road	near Electric Road	Speeding traffic, distracted drivers	32									
N_1541_N_SM		Ross Ln	Brandon Avenue to Brambleton Avenue	Ross Ln. is used as a detour when Brambleton is closed	32									
N_190_P_S		Washington Avenue	Maple Street to Bypass Road		31									
N_741_B_S		Southeast Roanoke	Southeast Roanoke		31									
N_607_MV_S		I-81	Exit 143	Speeding traffic, hard to merge	31									
N_138_P_S		Wasena Avenue	12th Street to 8th Street		31									
N_852_N_SM		Mill Lane	Riverside		31									
N_417_B_S		U.S. 460 - Orange	Roanoke Center for Industry and Technology		30									
N_550_B_S		Blue Hills Drive	Read Mountain Greenway	Access to Tinker Creek Greenway	30						Re-evaluate when there is development on the Deshutes parcel.			
N_550_P_S		Blue Hills Drive	Read Mountain Greenway	Access to Tinker Creek Greenway	30						Re-evaluate when there is development on the Deshutes parcel.			
N_551_B_S		Blue Hills Drive	East end of Read Mountain Greenway	Access to Read Mountain Preserve	30						Re-evaluate when there is development on the Deshutes parcel.			
N_769_B_S		Airport	Airport	Connect to airport for bicycles	30									
N_868_MV_S		I-81	Exit 137	Short ramp	30									
N_603_B_S		Brandon Avenue	Brandon Ave	Speeding traffic, distracted drivers, Visibility, Many pedestrians and bicyclists	30									
N_98_2_P_S		Colonial Avenue	23rd Street to Persinger Road		30									
N_467_T_SM		Roanoke Boulevard	Salem VA		29									
N_2056_B_S		Grandin Road	near Electric Road	Speeding traffic, distracted drivers	29									
N_665_B_S		Grandin Road	near Electric Road	Speeding traffic, distracted drivers	29									
N_103_2_P_S		Brandon Avenue	23rd Street to Brambleton Avenue	Students going to/from school, Unsafe to cross the road, Many pedestrians and bicyclists,	29									
N_1369_N_SM		Yellow Mountain Rd	Robin Hood Road		29									
N_1012_N_SM		Keffield St	Keffield St		29									
N_573_N_SM		Avenham Avenue	Audubon Road		29									
N_380_P_S		Peters Creek Road	Williamson Road		28									
N_1538_P_S		Carlton Rd	Carlton Rd	Speeding traffic	28									

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N_534_B_S		10th Street NW	Lick Run Greenway near 10th Street	Access from here to the Lick Run Greenway at Countryside Golf Course	28									
N_534_P_S		10th Street NW	Lick Run Greenway near 10th Street	Access from here to the Lick Run Greenway at Countryside Golf Course	28									
N_2088_T		Route 419	Route 311		28									
N_674_B_S		Ogden Rd	Ogden Rd	Speeding traffic, distracted drivers	28									
N_2054_MV_S			U.S. 220 - Roanoke	Blacksburg Road	28		Gap	Gap						
N_20_P_S		Old Tinker Mtn Road	U.S. 220 to Railroad		28									
N_892_B_S		Brambleton Avenue	Brandon Avenue to Electric Road	Bike/ped connection between Roanoke City and Cave Spring; Student access to schools	28									
N_1248_B_S		McVitty Rd	McVitty Rd		28									
N_461_T_SM		Garden City Boulevard	Garden City		27									
N_2076_T		Riverside Drive	Mill Lane		27	None as of May 2022.	Gap	Gap						
N_171_P_S		Grandview Avenue NW	Hershberger Road to Oakland Boulevard NW		26									
N_399_P_S		Daleville	Daleville Town Center		26									
N_1718_B_S		Colonial Avenue	Ogden Rd	Connect Colonial Ave. and Ogden Rd.	26									
N_2095_N_SM		Washington Avenue	near Blue Ridge Parkway	Turning movements slow traffic	26									
N_52_P_S		U.S. 11	Humbert Road to Railroad		25									
N_149_P_S		Salem Turnpike	Electric Road to 10th Street NE		25									
N_447_B_S		Colonial Ave	Virginia Western Community College		25									
N_448_P_S		Walker Foundry/Norwich	Walker Foundry/Norwich		25		Greenway trail funded between Bridge St. and Aerial Way - complete by August 2023.	Addressed						
N_521_P_S		Bridge Street	Norwich neighborhood	Nonmotorized access from here to Downtown Salem and east end of next segment	25		Greenway trail funded between Bridge St. and Aerial Way - complete by August 2023.	Addressed						
N_108_P_S		Cove Road	Hershberger Road to Electric Road		25									
N_1091_N_A		Church Avenue	near 2nd Street	Lack of free parking	25									
N_1249_N_A		Brambleton Ave	near View Avenue		25									
N_1375_T_A		Main Street	Kerns Avenue	Infrequent bus service	25									
N_1462_T_A		Edgewood St	Windsor Avenue		25									
N_1486_T_A		Jefferson Street	near Walnut Avenue		25									
N_1542_N_A		Brambleton Ave	Spring Road	Pedestrian access to transit	25									
N_2063_N_A		U.S. 460 - W Main	W. River Road		25									
N_457_T_A		Happys Flea Market	Happys Flea Market		25									
N_471_T_A		Splash Valley Green Ridge	Splash Valley Green Ridge		25									
N_475_T_A		Blue Ridge	Blue Ridge		25									
N_476_T_A		Brammer Village	Brammer Village		25									
N_496_T_A		Mountain View Elementary	Mountain View Elementary		25									
N_502_T_A		Vinton Senior Center	Vinton Senior Center		25									

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N_505_T_A		Vinyard Park	Vinyard Park		25									
N_506_T_A		Vinton Burial Park	Vinton Burial Park		25									
N_515_T_A		Virginia Avenue	2nd Street		25									
N_537_N_A		Old Monterey Golf Cl	Old Monterey Golf Club on the Tinker Creek	Access between Fallon Park, East Gate Park, Old Monterey Golf Club, Hollins Uni, Carvins Cove	25		Partially Addressed	Tinker Creek Greenway funded up to Mason Mill Park.						
N_540_N_A		Hanging Rock Battlefield Trail	South end of Hanging Rock Battlefield Trail	Access to north end of Mason Creek Greenway	25									
N_552_N_A		Mud Lick Greenway	Garst Mill Park Road	Access to Murray Run Greenway	25									
N_1248_P_S		McVitty Rd	McVitty Rd		25									
N_98_3_P_S		Colonial Avenue	Persinger Road to Roanoke city limit		25									
N_540_P_S		Kestler Mill Road	South end of Hanging Rock Battlefield Trail	Access to north end of Mason Creek Greenway	25									
N_661_B_S		Grandin Road	Mud Lick Road	Speeding traffic, distracted drivers	25									
N_2085_T		Garden City Boulevard	near Yellow Mountain Road		25									
N_310_N_SM		Route 419	Thompson Memorial Drive		25									
N_644_N_SM		U.S. 220 - Roanoke	Scarlet Drive		25									
N_888_B_S		Roanoke River Green*	Roanoke River Greenway	Nonmotorized access from here to Downtown Salem and east end of next segment	24									
N_888_P_S		Roanoke River Green*	Roanoke River Greenway		24									
N_227_B_S		Hardy Road	Bypass Road to Roanoke County limit		24									
N_691_N_SM		Pexton Ave	Near end		24									
N_1726_B_S		U.S. 220 - Franklin	U.S. 220 (Route 419-Franklin)		24									
N_527_B_S		Riverside Drive	West end of Roanoke River Greenway segment near Riverside Dr	Access from here to east end of next segment	24									
N_527_P_S		Riverside Drive	West end of Roanoke River Greenway segment near Riverside Dr	Access from here to east end of next segment	24									
N_640_MV_S		U.S. 220 - Franklin	Blue Ridge Parkway	Speeding traffic	24		Gap	Gap						
N_654_MV_S		I-81	Exit 150	Confusing	24									
N_1520_P_S		U.S. 460 - W Main	U.S. 460 - W Main		24									
N_59_5_T		Route 419	U.S. 460 to Apperson Drive		24									
N_98_1_P_S		Colonial Avenue	Electric Road to Roanoke city limit		23									
N_216_B_S		Washington Avenue	Pollard Street to Blue Ridge Parkway	p18-BLOS-E/F;p56-traffic volume/congestion	23									
N_113_P_S		Hardy Road	Chestnut Street to Roanoke County Line	HighTraffic/slow flow;speed;signal timings;ped saf	23									
N_137_B_S		Mudlick Road	Brandon Avenue to Grandin Road	Speeding traffic, distracted drivers	23									
N_137_P_S		Mudlick Road	Brandon Avenue to Grandin Road	Speeding traffic, distracted drivers	23									
N_605_P_S		U.S. 460 - Orange	U.S. 460 - Orange		23									

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N_553_B_S		Grandin Road	Murray Run Greenway at Grandin Road	Access to Garst Mill Park, Cave Spring Corners shopping center	22									
N_1110_B_S		U.S. 460 - Orange	13th St NE		22									
N_526_B_S		Riverside Drive	East end of Roanoke River Greenway segment near Riverside Dr	Access from here to west end of next segment and to Mason Creek Greenway	22									
N_526_P_S		Riverside Drive	East end of Roanoke River Greenway segment near Riverside Dr	Access from here to west end of next segment and to Mason Creek Greenway	22									
N_102_P_S		Merriman Road	Brambleton Avenue to Starkey Road		22									
N_528_B_S		Mill Lane	East end of Roanoke River Greenway segment near Mill Lane	Access from here to west end of next segment	21									
N_528_P_S		Mill Lane	East end of Roanoke River Greenway segment near Mill Lane	Access from here to west end of next segment	21									
N_62_P_S		Valleypark Drive	N. Concourse Dr. to Valleypointe Pkwy.		21									
N_434_B_S		Northside High School	Northside High School		21		Addressed	Addressed	Bicycle accommodations are provided along Peters Creek Road to and from the Northside campus.					
N_126_P_S		Grandin Road SW	Garst Mill Road to Brandon Avenue	Access to Garst Mill Park, Cave Spring Corners shopping center	21									
N_509_P_S		Jefferson Street	24th Street	Safe access to school bus stop	20									
N_1178_MV_S		U.S. 220	U.S. 220	Speeding traffic	20									
N_2065_MV_S		10th Street	Campbell Avenue		20									
N_662_B_S		Deyerle Road	Mud Lick Road to Brandon Ave	Speeding traffic, distracted drivers	20									
N_136_P_S		Deyerle Road	Brandon Avenue to Mudlick Road	Speeding traffic, distracted drivers	20									
N_933_P_S		Old Mountain Rd	Old Mountain Rd	People walking and waiting for the bus lack sidewalks, there is litter	20									
N_431_P_S		Longwood Park	Longwood Park		20									
N_91_P_S		Wildwood Road	Loop from West Main Street near Exit 137 to Academy Street at West Main Street in Downtown Salem		20		Gap	Gap						
N_532_B_S		Water Plant	South end of the bridge of the Roanoke River Greenway at the Water Pollution Control Plant	Access from here to Bennington St greenway parking area and to Explore Park	20									
N_532_P_S		Water Plant	South end of the bridge of the Roanoke River Greenway at the Water Pollution Control Plant	Access from here to Bennington St greenway parking area and to Explore Park	20									

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N_536_B_S		East Gate Park	East Gate Park on the Tinker Creek	Access between Fallon Pk, East Gate Pk, Old Monterey Golf Cl, Hollins Uni, Carvins Cv, Read Mtn Gwy	20									
N_536_P_S		East Gate Park	East Gate Park on the Tinker Creek	Access between Fallon Pk, East Gate Pk, Old Monterey Golf Cl, Hollins Uni, Carvins Cv, Read Mtn Gwy	20									
N_537_B_S		Old Monterey Golf Cl	Old Monterey Golf Club on the Tinker Creek	Access between Fallon Park, East Gate Park, Old Monterey Golf Club, Hollins Uni, Carvins Cove	20									
N_537_P_S		Old Monterey Golf Cl	Old Monterey Golf Club on the Tinker Creek	Access between Fallon Park, East Gate Park, Old Monterey Golf Club, Hollins Uni, Carvins Cove	20									
N_494_T_SM		Roanoke Boulevard	Salem Civic Center		20									
N_859_N_SM		Old Rocky Mount Rd	Narrow Lane	Flooding, visibility	20									
N_110_P_S		Riverland Road	Dollar General at Garden City Blvd to Bennington south of Pike Lane SE		19									
N_121_P_S		Washington Avenue	Bypass Road to William Byrd Schools	Sidewalks, lighting, signage for safety only	19									
N_1233_MV_S		Garst Mill Rd	Garst Mill Rd		19									
N_1483_MV_S		U.S. 220 - Franklin	Franklin Rd	Short merge lane	19									
N_1014_N_SM		Palmetto Bluff Rd	Pitzer Road	Flooding	19									
N_1284_N_SM		Blue Ridge Pkwy	Blue Ridge Pkwy	Visitors discouraged by confusing detours	19									
N_645_N_SM		Blue Ridge Turnpike	Blue Ridge Turnpike		19									
N_296_P_S		U.S. 460 - W Main	between Calloway Street and Brake Road		18	None as of May 2022	Gap	Gap						
N_432_B_S		Mill Mountain Park	Mill Mountain Park		18									
N_432_P_S		Mill Mountain Park	Mill Mountain Park		18									
N_218_B_S		New development	Between Chestnut Street and Niagara Road		18									
N_522_B_S		Material Yard	East end of Roanoke River Greenway segment near Peters Creek	Access from here to Bridge Street	18									
N_522_P_S		Material Yard	East end of Roanoke River Greenway segment near Peters Creek	Access from here to Bridge Street	18									
N_1518_MV_S		McClanahan Street	Broadway Avenue	Confusing intersections	18									
N_114_P_S		Mountain View Road	Washington Avenue to Blue Ridge Parkway		18									
N_225_B_S		Mountain View Road	Washington Avenue to Blue Ridge Parkway		18									

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N_93_1_P_S		Cloverdale Road	U.S. 460 to Crumpacker Drive		17									
N_140_P_S		Plantation Circle NE	Plantation Road to Hollins University		17									
N_450_B_S		Wildwood Neighborhood	Wildwood Neighborhood		17									
N_450_P_S		Wildwood Neighborhood	Wildwood Neighborhood		17									
N_1136_MV_S		10th Street	Shenandoah Ave	Speeding traffic	17									
N_1536_MV_S		5th St NW	5th St NW		17									
N_696_MV_S		Edgewood Road	Maiden Lane	Visibility	17									
N_1718_MV_S		Colonial Avenue	Ogden Rd	Connect Colonial Ave. and Ogden Rd.	17									
N_1485_T_A		Hidden Valley Country Club	Hidden Valley Country Club		17									
N_1505_T_A		East Montgomery High School	East Montgomery High School		17	None as of May 2022	Gap	Gap						
N_1679_T_A		I-81	from Exit 128 to Exit 143		17		Partially addressed	Partially addressed	SMART WAY Base and Connector Services travel along I-81 and stop at Exit 140 Park & Ride.					
N_46_N_A		U.S. 220 - Franklin	Route 419 to TPO study area boundary		17									
N_477_T_A		Carvins Cove	Carvins Cove		17									
N_530_N_A		Green Hill Park	East end of Roanoke River Greenway segment in Green Hill Park	Access from here to west end of next segment, New River Valley	17									
N_536_N_A		East Gate Park	East Gate Park on the Tinker Creek	Access between Fallon Pk, East Gate Pk, Old Monterey Golf Cl, Hollins Uni, Carvins Cv, Read Mtn Gwy	17									
N_550_N_A		Read Mountain Greenway	Blue Hills Drive	Access to Tinker Creek Greenway & Read Mountain Preserve	17									
N_217_B_S		Berkley Road NE	RR tracks at Vinyard Park to N. Blair Street		17									
N_524_P_S		Cook Drive	East end of Roanoke River Greenway segment near Cook Dr	Access from here to west end of next segment	16									
N_442_P_S		Salem High School	Salem High School		16									
N_887_B_S		U.S. 11 - Colorado	U.S. 11 Colorado	Bicycle access between Salem and Roanoke	16									
N_614_MV_S		Shenandoah Ave	Shenandoah Ave	Crime	16									
N_1522_MV_S		Salem Turnpike	Salem Turnpike	Pedestrians walk in the road	16									
N_205_P_S		Showalter Road NW	Barnett Road NW to Peachtree Drive NW		16									
N_1230_MV_S		U.S. 220 - Franklin	Franklin Rd	Short merge	15									
N_1113_MV_S		Jefferson St	Jefferson St		15									
N_1499_MV_S		Colonial	Virginia Western Community College	Confusing roundabout markings	15									
N_725_MV_S		Route 419	Route 419		15									
N_814_MV_S		Brandon Ave	Main Street		15									
N_529_B_S		Mill Lane	West end of Roanoke River Greenway segment near Mill Lane	Access from here to east end of next segment	15									

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N_529_P_S		Mill Lane	West end of Roanoke River Greenway segment near Mill Lane	Access from here to east end of next segment	15									
N_59_4_P_S		Route 419	U.S. 460 to I-81	p32-Want sidewalks addressed and improved	15		Gap							
N_101_P_S		Buck Mountain Road	Railroad tracks to US 220S		14									
N_97_P_S		Roanoke Boulevard	Electric Road to Texas Street		14									
N_1726_2_MV_S		U.S. 220 - Franklin	U.S. 220 - Franklin		14	Project UPC 110887, Route 220 Signal Improvements	Partially addressed	Partially addressed						
N_1581_MV_S		I-81	Exit 143		14									
N_511_MV_S		Deyerle Road SW	Deyerle Road SW	Fast traffic is dangerous	14									
N_708_MV_S		Airport Dr	Airport Dr	Get cut off in traffic	14									
N_930_MV_S		Industry Ave	Industry Ave		14									
N_524_B_S		Cook Drive	East end of Roanoke River Greenway segment near Cook Dr	Access from here to west end of next segment	14									
N_441_B_S		Salem Civic Center	Salem Civic Center		14									
N_441_P_S		Salem Civic Center	Salem Civic Center		14									
N_442_B_S		Salem High School	Salem High School		14									
N_1010_MV_S		Peters Creek Road	Cove Road		14									
N_81_P_S		U.S. 11	AT Crossing		14		Gap							
N_80_P_S		U.S. 220 - Roanoke	Tinker Mill Road (Lord Botetourt High School) to Ikenberry Orchards		13									
N_146_P_S		Garden City Blvd	Rose Avenue SE to Riverland Road SE		13									
N_409_B_S		Greenfield Elementary School	Greenfield Elementary School		13									
N_409_P_S		Greenfield Elementary School	Greenfield Elementary School		13									
N_1083_MV_S		Roselawn	Landview	Visibility	13									
N_298_P_S		U.S. 460 - W Main	south of Barnett Road		13	None as of May 2022	Gap	Gap						
N_404_P_S		Ferrum/Ferrum Folk Life Festival	Ferrum/Ferrum Folk Life Festival		13									
N_420_B_S		Happy Hollow Gardens	Happy Hollow Gardens		13		Gap	Gap						
N_420_P_S		Happy Hollow Gardens	Happy Hollow Gardens		13		Gap	Gap						
N_427_P_S		Cloverdale	Cloverdale		13									
N_59_5_P_S		Route 419	U.S. 460 to Apperson Drive	p32-Want sidewalks addressed and improved	12									
N_112_P_S		Feather Road	Washington Avenue to Hardy Road		12									
N_1526_N_SM		Fincastle	Fincastle	Maintain secondary roads	12									
N_430_B_S		Lindenwood Neighborhood, Vinton	Lindenwood Neighborhood, Vinton		12									
N_430_P_S		Lindenwood Neighborhood, Vinton	Lindenwood Neighborhood, Vinton		12									
N_795_P_S		Hardy Road	Route 24		12									

Need ID	Need Type	Simple Location	Detailed Location	Need	Score	Investment	Need Status	Rationale	Possible Common Transportation Solutions	Possible Unique or Non-Transportation Solutions	Relevant Recent or Ongoing Studies and/or Recommendations	Preferred Solutions or options	Project / Service/Study	Associated PID(s)
N_1651_P_S		U.S. 460 - Blue Rid*	Roanoke city limit to RVTPO boundary	Access for people not in a car	12	Route 460 Land Use and Connectivity Study taking place in 2022.	Gap	Gap						
N_1658_B_S		U.S. 460 - Blue Rid*	Roanoke city limit to RVTPO boundary	Access for people not in a car	12	Route 460 Land Use and Connectivity Study taking place in 2022.	Gap	Gap						
N_1047_MV_S		Riverdale Rd	Riverdale Rd		12									
N_1142_MV_S		Randall Dr	Randall Dr		12									
N_1533_MV_S		Brambleton Ave	Brambleton Ave		12									
N_443_P_S		Shrine Hill Park	Shrine Hill Park		12									
N_1037_MV_S		I-81	Exit 141		12									
N_783_MV_S		Peters Creek Road	Shenandoah Ave	Failure to signal	11									
N_196_P_S		U.S. 220 - Roanoke	Ikenberry Orchards to International Parkway		10	UPC 115457: Route 220 at International Parkway Improvements	Partially addressed	Partially addressed						
N_541_B_S		Lynchburg Turnpike	North end of Mason Creek Greenway	Access to south end of Hanging Rock Battlefield Trail	10									
N_541_P_S		Lynchburg Turnpike	North end of Mason Creek Greenway	Access to south end of Hanging Rock Battlefield Trail	10									
N_1090_MV_S		Yellow Mountain Rd	Yellow Mountain Rd		10									
N_1625_MV_S		I-81	RVTPO boundary to RVTPO boundary	Speeding traffic, slow trucks	10	Meets need: I - 81 Auxiliary Lane from Exit 143 to 141, I-81 widening - MM 144 to Exit 150, I-81 NB widening - Exit 128 to Exit 137, I-81 widening - MM136 to MM141 Does not meet need: SMART WAY Express & Base Fixed-Route Transit Service	Partially addressed	Partially addressed						
N_109_P_S		U.S. 11	Mountain Pass Road to Maple Avenue		10									
N_1001_MV_S		U.S. 11 - Lee	U.S. 11 - Lee	Hard to see pavement lines in the rain	10									
N_1082_MV_S		Canter Dr	Canter Dr	Speeding traffic	10		Gap	Gap						
N_1168_MV_S		Route 419	Route 419		10									
N_629_P_S		Roanoke County	Roanoke County		10									
N_446_B_S		Troutville	Troutville		9									
N_446_P_S		Troutville	Troutville		9									
N_1158_MV_S		Gates Ln	Gates Ln		8									
N_597_B_S		U.S. 11 - Apperson	Apperson Dr		8									
N_411_P_S		Flying Mouse Brewery	Flying Mouse Brewery		8									
N_427_B_S		Cloverdale	Cloverdale		8									
N_433_B_S		Montgomery County	Montgomery County		8	None as of May 2022	Gap	Gap						
N_426_B_S		U.S. 460	Lafayette		7	None as of May 2022	Gap	Gap						
N_426_P_S		Lafayette (place)	Lafayette		7	None as of May 2022	Gap	Gap						
N_559_MV_S		U.S. 220 - Franklin	U.S. 220 - Franklin		7									
N_978_MV_S		Palmetto Bluff Rd	Palmetto Bluff Rd		7									
N_1352_N_SM		Blue Ridge Pkwy	Blue Ridge Pkwy		6									
N_2074_N_SM		U.S. 460 - W Main	Northfork Road	Pavement repair	6	None as of May 2022	Gap	Gap						
N_647_N_SM		U.S. 460 - Blue Ridge	Laymantown Road		6									
N_197_P_S		U.S. 220 - Roanoke	International Parkway to Main Street in Fincastle		5									

Need ID	Need Type	Simple Location	Detailed Location	Need	Score	Investment	Need Status	Rationale	Possible Common Transportation Solutions	Possible Unique or Non-Transportation Solutions	Relevant Recent or Ongoing Studies and/or Recommendations	Preferred Solutions or options	Project / Service/Study	Associated PID(s)
N_410_B_S		Greenfield Industrial Park/Ashley Plantation	Greenfield Industrial Park/Ashley Plantation		5									
N_410_P_S		Greenfield Industrial Park/Ashley Plantation	Greenfield Industrial Park/Ashley Plantation		5									
N_411_B_S		Flying Mouse Brewery	Flying Mouse Brewery		5									
N_1576_MV_S		U.S. 460 - Blue Rid*			4									
N_1008_MV_S		Twelve O'Clock Knob	Twelve O'Clock Knob		3									
N_428_B_S		Read Mountain Road	Read Mountain Road		3									
N_428_P_S		Read Mountain Road	Read Mountain Road		3									
N_735_B_S		Thompson Memorial Dr	Route 311	Speeding traffic, many bicyclists	3									
N_1015_MV_S		Cotton Hill Rd	Cotton Hill Rd		2									
N_1771_MV_S		U.S. 460 - Blue Rid*	U.S. 460 - Blue Ridge		2									
N_779_MV_S		Mountain Pass Rd	Mountain Pass Rd	Visibility	2									
N_1052_N_A		Williamson Road	near Franklin Road		0									
N_1079_N_A		Blue Ridge Pkwy	near Washington Avenue	ADA accessibility	0									
N_1114_N_A		U.S. 460 - W Main	near Vintage Lane	Access to jobs during all shifts	0									
N_1147_N_A		I-581	Peters Creek Road		0									
N_1169_N_A		Mountain Avenue	near Franklin Road		0									
N_1175_N_A		Exit 137	Exit 137		0									
N_1182_N_A		Exit 146	Exit 146		0									
N_1199_N_A		Bullitt Avenue	Jamison Avenue		0									
N_1216_N_A		U.S. 460 - W Main	near Peaceful Drive		0									
N_1218_N_A		Coopers Cove Road	Palmetto Bluff Rd		0									
N_1256_N_A		Franklin Rd	Earth Fare		0									
N_1274_N_A		near Mountain View Church Road	Mountain View Church		0		Gap	Gap						
N_1287_N_A		Williamson Road	Campbell Avenue		0									
N_1371_N_A		Blue Ridge Pkwy	Blue Ridge Pkwy		0									
N_1392_N_A		near Mountain Top Lane	Mountain Top Ln		0		Gap	Gap						
N_1434_N_A		Union St	Eddy Avenue		0									
N_1436_N_A		Cotton Hill Rd	near Mason Knob Trail		0									
N_1439_N_A		Trevilian Rd	near Quail Place		0									
N_1450_N_A		Exit 143	Exit 143		0									
N_1487_N_A		Roanoke Country Club	Roanoke Country Club		0									
N_1574_N_A		U.S. 460 - W Main	near Hawley Drive		0									
N_1583_N_A		Academy Street	near Corbett Street		0									
N_1651_N_A		U.S. 460 - Blue Rid*	Roanoke city limit to Blue Ridge		0	0								
N_1753_N_A		Webster	Webster		0									
N_1759_N_A		U.S. 460 - Challeng*	Carson Road	Long wait for a break in traffic to turn	0									
N_1772_N_A		I-581	U.S. 460	I-581 cuts off neighborhoods; Parking	0									
N_18_N_A		Washington Avenue	Bypass Road to Baker Drive	p76-Access to businesses; alt transp for elderly	0									

Need ID	Need Type	Simple Location	Detailed Location	Need	Score	Investment	Need Status	Rationale	Possible Common Transportation Solutions	Possible Unique or Non-Transportation Solutions	Relevant Recent or Ongoing Studies and/or Recommendations	Preferred Solutions or options	Project / Service/Study	Associated PID(s)
N_2058_N_A		Hunt Avenue	8th Street		0									
N_2094_N_A		Castle View Lane	near Route 419		0									
N_50_N_A		U.S. 11 - Lee	near Cloverdale Road	Access to future development	0									
N_51_N_A		Commons Pkwy	Vacant land between I-81, U.S. 220, Commons Pkwy.	Access to future development	0									
N_59_T_A		Route 419	Brambleton Avenue to Apperson Drive	Extend bus routes to Electric Ave. SW.	0									
N_652_N_A		12th Street	near Hanover Avenue		0									
N_693_N_A		U.S. 460 - W Main	McDaniel Drive	Emergency vehicle access	0									
N_709_N_A		Towne Square	Towne Square Blvd	Long wait for a break in traffic to turn	0									
N_717_N_A		U.S. 220 - Roanoke	Valley Road		0									
N_718_N_A		I-581	Hershberger Road		0									
N_719_N_A		Airport Drive	Hershberger Road		0									
N_729_N_A		U.S. 460 - W Main	near Harwick Drive		0									
N_838_N_A		U.S. 460 - Orange	Purcell Avenue		0									
N_881_N_A		Colorado Street	2nd Street		0									
N_916_N_A		I-81	near exit 146		0									
N_939_N_A		Freight Car America			0									
N_942_N_A		Blue Ridge Pkwy	near Dundee		0									
N_945_N_A		Cove Rd	near Green Ridge Road		0									
N_948_N_A		I-581	Valley View Boulevard		0									
N_974_N_A		Kimball Avenue	near McDowell Avenue		0									
N_976_N_A		I-81	near exit 132		0									
N_991_N_A		I-81	Exit 141		0									

Appendix J: Funded Projects/Services/Studies

MPO / Locality	UPC	VDOT Scope	STIP Grouping (draft RVTP)	VDOT Project Title	Description	Total Cost Estimate
Roanoke : Bedford County	118230	Traffic Management/Engineering	Construction : Safety/ITS/Operational Improvements	#ITTF22 SIGNAL COMMUNICATIONS - SALEM DISTRICT	ITS Various	
Roanoke : Bedford County	117017	Bridge Rehab w/o Added Capacity	Maintenance : Preventive Maintenance for Bridges	#SGR21VB - RTE 666 OVER ELK CREEK (STR. 2781) - TOTAL REHAB	Rehabilitation of bridge on Route 666 over Elk Creek (structure #2781).	
Roanoke : Bedford County	117018	Bridge Rehab w/o Added Capacity	Maintenance : Preventive Maintenance for Bridges	#SGR21VB - RTE. 1460 OVER BR BVR DAM CR (STR. 24893) - REHAB	Bridge Rehabilitation without added capacity over Bever Dam Creek	
Roanoke : Botetourt County	-24740	Safety	Construction : Safety/ITS/Operational Improvements	Route 220 Superstreet Improvement	Safety	\$15,461,000
Roanoke : Botetourt County	115457	Safety	Construction : Safety/ITS/Operational Improvements	#SMART20 - Rte 220 and International Parkway Intersection	Intersection Reconfiguration for International Parkway	
Roanoke : Botetourt County	119452	Reconstruction w/ Added Capacity	Construction : Safety/ITS/Operational Improvements	#SMART22 - US460/Laymantown Road Intersection Improvement	Reconstruction with added capacity.	\$7,623,000
Roanoke : Botetourt County	120996	Bridge Rehab w/o Added Capacity	Maintenance : Preventive Maintenance for Bridges	#BF - SALEM YEAR 3 - BRIDGE REHAB CONTRACT (B)	Bridge Rehabilitation without added capacity.	\$6,156,000
Roanoke : Montgomery County	110624	Bridge Rehab w/o Added Capacity	Maintenance : Preventive Maintenance for Bridges	#SGR18VB - RT 11 OVER NSRR (STR. 12118) - DECK REPLACE	Bridge replacement on Rte. 11 over the Norfolk Southern Bridge Deck	
Roanoke : Multi-jurisdictional: Roanoke	-26754	Reconstruction w/ Added Capacity	Construction : Safety/ITS/Operational Improvements	I-581-Exit 2 (PETERS CREEK RD) INTERCHANGE IMPROVEMENTS PH 1		#####
Roanoke : Roanoke City	-26165	Reconstruction w/ Added Capacity	Construction : Safety/ITS/Operational Improvements	#SMART22 – Route 460 Corridor Intersection Improvements		

MPO / Locality	UPC	VDOT Scope	STIP Grouping (draft RVTP)	VDOT Project Title	Description	Total Cost Estimate
Roanoke : Roanoke City	688	Reconstruction w/o Added Capacity	Construction : Safety/ITS/Operational Improvements	13TH STREET IMPROVEMENTS	Reconstruction w/o added capacity; pedestrian and bicycle improvements.	#####
Roanoke : Roanoke City	108896	Facilities for Pedestrians and Bicycles	Construction : Safety/ITS/Operational Improvements	#HB2.FY17 Colonial Avenue Improvements	Streetscape, vehicle, multimodal improvements near Murray Run Greenway, Fishburn Park Elem School and VWCC. Installation of bike lanes, sidewalk to both sides of the street, improved transit stops, pedestrian crossings, and roundabouts at Overland Rd, McNeil Rd, and Winding Way Rd.	\$7,000,000
Roanoke : Roanoke City	109570	Safety	Construction : Safety/ITS/Operational Improvements	Orange Avenue/ Hollins Road Signal Upgrade - City of Roanoke	Traffic signal upgrade.	\$562,000
Roanoke : Roanoke City	111135	Safety	Construction : Safety/ITS/Operational Improvements	Flashing Yellow Arrow - Various locations - Roanoke City	Install flashing yellow arrows at traffic signals in various locations in the City of Roanoke.	\$277,000
Roanoke : Roanoke City	111137	Safety	Construction : Safety/ITS/Operational Improvements	Rectangular Rapid Flashing Beacons - Roanoke City	Install rectangular rapid flashing beacons in various locations to assist with pedestrian crossings.	\$108,000
Roanoke : Roanoke City	111370	Reconstruction w/ Added Capacity	Construction : Safety/ITS/Operational Improvements	#SMART18 - Hollins Rd & Orange Ave Intersection Improvements	Addition of an EB right turn lane on Orange Ave. at Hollins Rd. and additional left turn lanes in both directions on Orange Ave., widen / add capacity to Hollins Rd. in both directions in the immediate vicinity of the intersection.	\$5,117,000

MPO / Locality	UPC	VDOT Scope	STIP Grouping (draft RVTP)	VDOT Project Title	Description	Total Cost Estimate
Roanoke : Roanoke City	115454	Safety	Construction : Safety/ITS/Operational Improvements	#SMART20 - Orange Ave (US 460) Improvements	Extend the westbound turn lane at the intersection of Orange Avenue and King Street to reduce congestion resulting from left-turn vehicles spilling back into adjacent through movement. Implement safety countermeasures aimed at addressing crash trends at and between the King and Blue Hills/Mexico Way intersections. Improve the pedestrian and transit facilities along the corridor by adding a sidewalk on the west side of King Street to the southbound bus stop and along Orange Avenue in the westbound/eastbound direction from the bus stops to the pedestrian signal at the intersection; upgrade the pedestrian signal and crosswalks, add a refuge island.	\$2,819,000
Roanoke : Roanoke City	119450	Reconstruction w/ Added Capacity	Construction : Safety/ITS/Operational Improvements	#SMART22 - Rte 460/West Ruritan Rd Intersection Improvements	Improve traffic flow and safety by installing a through-cut intersection with pedestrian signals and crosswalks.	\$7,537,497
Roanoke : Roanoke City	119459	Reconstruction w/ Added Capacity	Construction : Safety/ITS/Operational Improvements	#SMART22 - Rte 460/Orange Ave at Seibel Dr/ Hickory Woods	Reconstruction w/added capacity.	\$437,000
Roanoke : Roanoke City	119461	Reconstruction w/ Added Capacity	Construction : Safety/ITS/Operational Improvements	#SMART22 - Rte 460 (Orange Ave) Improvements at King Street	Reconstruction w/added capacity.	\$5,006,000
Roanoke : Roanoke City	119464	Reconstruction w/ Added Capacity	Construction : Safety/ITS/Operational Improvements	#SMART22 - Rte 460/Orange Ave Improvement near Blue Hills Dr	Reconstruction w/added capacity.	\$5,580,000
Roanoke : Roanoke City	-26782	Facilities for Pedestrians and Bicycles	Construction : Transportation Enhancement/Byway/Non-Traditional	WILLIAMSON RD PEDESTRIAN SAFETY - ROANOKE	Bike/Pedestrian facilities	\$575,000

MPO / Locality	UPC	VDOT Scope	STIP Grouping (draft RVTP)	VDOT Project Title	Description	Total Cost Estimate
Roanoke : Roanoke City	106265	Facilities for Pedestrians and Bicycles	Construction : Transportation Enhancement/Byway/Non-Traditional	GARDEN CITY BLVD BIKE/PED - TRANSPORTATION ALTERNATIVES	8' wide multi-use trail. VDOT Project Pool Description: Design and construction of bicycle and pedestrian facilities on Garden City Boulevard.	\$1,000,000
Roanoke : Roanoke City	110101	Facilities for Pedestrians and Bicycles	Construction : Transportation Enhancement/Byway/Non-Traditional	Tinker Creek Trail Extension Phase 2A	Multi-use urban bike/ped recreational trail following the Tinker Creek stream and connecting Fallon Park, Masons Mill Park, and Roanoke's Center for Industry and Technology. The proposed extension to the existing Tinker Creek Trail would provide for a 10' wide asphalt bicycle and pedestrian shared use trail from Fallon Park, located near Wise Avenue, to Masons Mill Park. Project includes two bridges over Tinker Creek near Masons Mill Park.	\$9,100,000
Roanoke : Roanoke City	111360	Facilities for Pedestrians and Bicycles	Construction : Transportation Enhancement/Byway/Non-Traditional	Franklin Road Sidewalk Improvements- Rt. 220 B- Roanoke City	The project scope includes construction of new sidewalk along the west side of business 220, Franklin Road, from the 3100 block to the 3700 block adjacent to the 220 bypass. Improvements include sidewalk	\$764,000
Roanoke : Roanoke City	113324	Safety	Construction : Transportation Enhancement/Byway/Non-Traditional	Installation of Pedestrian Countdown Signal	Installation of Pedestrian Countdown Signal on Orange Avenue	\$108,000
Roanoke : Roanoke City	114767	Safety	Construction : Transportation Enhancement/Byway/Non-Traditional	PEDESTRIAN SIGNAL UPGRADES - CITY OF ROANOKE	N/A	
Roanoke : Roanoke City	117221	Facilities for Pedestrians and Bicycles	Construction : Transportation Enhancement/Byway/Non-Traditional	Franklin Road Sidewalk Improvements - Rt. 220 B- Phase 2	New Sidewalk - phase 2 of UPC 111360.	\$2,241,000
Roanoke : Roanoke City	117994	Facilities for Pedestrians and Bicycles	Construction : Transportation Enhancement/Byway/Non-Traditional	9th Street Multimodal Improvements	Add bus shelters, pedestrian signals, upgraded ADA curb ramps.	\$889,000

MPO / Locality	UPC	VDOT Scope	STIP Grouping (draft RVTP)	VDOT Project Title	Description	Total Cost Estimate
Roanoke : Roanoke City	119555	Facilities for Pedestrians and Bicycles	Construction : Transportation Enhancement/Byway/Non-Traditional	#SMART22 - Aviation Dr / Valley View Blvd Ped Improvements	Construct a sidewalk from existing sidewalk end at Chick-fil-A on Valley View Boulevard to the Roanoke-Blacksburg Regional Airport	\$7,178,000
Roanoke : Roanoke City	119586	Facilities for Pedestrians and Bicycles	Construction : Transportation Enhancement/Byway/Non-Traditional	Greenway Connection – Riverland Road	Greenway to connect Garden City Greenway to Mill Mountain park and trails.	\$1,313,000
Roanoke : Roanoke City	119666	Facilities for Pedestrians and Bicycles	Construction : Transportation Enhancement/Byway/Non-Traditional	Roanoke River Greenway - East - City of Roanoke - PE RW Only	Study preferred route for 10' greenway trail for pedestrians and bicyclists traveling to/from the trailhead at the Water Treatment Sewage Plant to the Tinker Creek Greenway. Initiate preliminary engineering on the preferred route.	\$6,400,000
Roanoke : Roanoke City	119666	Facilities for Pedestrians and Bicycles	Construction : Transportation Enhancement/Byway/Non-Traditional	Roanoke River Greenway - East - Roanoke City - PE Only	Study preferred route for 10' greenway trail for pedestrians and bicyclists traveling to/from the trailhead at the Water Treatment Sewage Plant to the Tinker Creek Greenway. Initiate preliminary engineering on the preferred route.	\$6,400,000
Roanoke : Roanoke City	121971	Resurfacing	Maintenance : Preventive Maintenance and System Preservation	#SGR23LP - ROANOKE FKEY 1556 CAMPBELL AVE SW		\$381,000
Roanoke : Roanoke City	121977	Resurfacing	Maintenance : Preventive Maintenance and System Preservation	#SGR23LP - ROANOKE - CAMPBELL AVE SW - PRIMARY EXTENSION		\$451,000
Roanoke : Roanoke City	-27104	Bridge Replacement w/o Added Capacity	Maintenance : Preventive Maintenance for Bridges	#BF - CITY OF ROANOKE - BRIDGE REPLACE PERSINGER RD - YEAR 4		\$3,905,000
Roanoke : Roanoke City	113570	Preliminary Engineering	May be removed if completed.	I-581 Exit 2 Interchange Study	Reconstruct the I-581/Peters Creek Road interchange to improve turning movements and access to Valleypointe Pkwy. and Thirlane Rd.	\$190,000

MPO / Locality	UPC	VDOT Scope	STIP Grouping (draft RVTP)	VDOT Project Title	Description	Total Cost Estimate
Roanoke : Roanoke City	118294	Bridge Replacement w/ Added Capacity	NOT SUBJECT TO PUBLIC INVOLVEMENT, FYI ONLY - Construction : Bridge Rehabilitation/Replacement/Reconstruction	Wasena Bridge (Main Street - SR 221) Bridge Replacement	Replacement of Main Street Wasena bridge with multimodal accommodations like existing bridge, and construction of a roundabout at Fedinand Avenue SW.	\$22,000,000
Roanoke : Roanoke City	118162	Mitigation of Water Pollution Due to Highway Runof	NOT SUBJECT TO PUBLIC INVOLVEMENT, FYI ONLY - Construction : Safety/ITS/Operational Improvements	Campbell Avenue 2 Drainage Improvement	Mitigation of Water Pollution Due to Highway Run-off	
Roanoke : Roanoke City	118167	Mitigation of Water Pollution Due to Highway Runof	NOT SUBJECT TO PUBLIC INVOLVEMENT, FYI ONLY - Construction : Safety/ITS/Operational Improvements	FPS - Melrose Avenue Crossing - Drainage Improvements	Mitigation of Water Pollution Due to Highway Run-off	
Roanoke : Roanoke City	122004	Mitigation of Water Pollution Due to Highway Runof	NOT SUBJECT TO PUBLIC INVOLVEMENT, FYI ONLY - Construction : Safety/ITS/Operational Improvements	1400-1500 BLOCK MAIN ST DRAINAGE IMPROVEMENTS - ROANOKE		\$1,969,000
Roanoke : Roanoke City	117174	Facilities for Pedestrians and Bicycles	NOT SUBJECT TO PUBLIC INVOLVEMENT, FYI ONLY - Construction : Transportation Enhancement/Byway/Non-Traditional	Patterson Avenue Pedestrian Improvements	Sidewalk on Patterson Avenue	\$1,800,000
Roanoke : Roanoke City	122008	Mitigation of Water Pollution Due to Highway Runof	Unsure the location of this project. If not on a major collector or above, remove.	WEST END DRAINAGE PROJECT - PHASE 1 - ROANOKE		
Roanoke : Roanoke County	77305	Bridge Replacement w/o Added Capacity	Construction : Bridge Rehabilitation/Replacement/Reconstruction	RTE. 116 OVER BACK CREEK (STR. 14928) - BRIDGE REPLACEMENT	VDOT Project Pool Description: Bridge Replacement - Rte. 116 over Back Creek (Ext. Str. ID 14928 - VA Str. No. 1087)	\$7,171,589
Roanoke : Roanoke County	82193	Bridge Replacement w/o Added Capacity	Construction : Bridge Rehabilitation/Replacement/Reconstruction	RTE. 220 OVER BACK CREEK (STR. 14935) - BRIDGE REPLACEMENT	Replace bridge over Back Creek	\$19,208,000

MPO / Locality	UPC	VDOT Scope	STIP Grouping (draft RVTP)	VDOT Project Title	Description	Total Cost Estimate
Roanoke : Roanoke County	94726	Bridge Replacement w/o Added Capacity	Construction : Bridge Rehabilitation/Replacement/Reconstruction	RTE. 221 OVER MARTINS CREEK (STR. 14945) - BRIDGE REPLACEMENT	Replace bridge over Martin's Creek	\$3,648,000
Roanoke : Roanoke County	110155	Facilities for Pedestrians and Bicycles	Construction : Bridge Rehabilitation/Replacement/Reconstruction	Roanoke River Greenway - Blue Ridge Pkwy to Explore Park	Shared use Bike/Pedestrian path from the Blue Ridge Parkway to Explore Park	\$1,700,000
Roanoke : Roanoke County	110620	Bridge Rehab w/o Added Capacity	Construction : Bridge Rehabilitation/Replacement/Reconstruction	#SGR18VB - RT 760 OVER ROA.RVR. (STR 15105) - SUPER REPLACE	Replace bridge over the Roanoke River	\$2,281,000
Roanoke : Roanoke County	115473	Bridge Rehab w/o Added Capacity	Construction : Bridge Rehabilitation/Replacement/Reconstruction	#SGR17VB - RT 813 OVER ROANOKE RIVER (STR12363) SUB REPAIRS		
Roanoke : Roanoke County	-27348	Reconstruction w/ Added Capacity	Construction : Safety/ITS/Operational Improvements	#SMART22 RTE 460 INTERSECTIONS-W. RURITAN RD TO HUNTRIDGE RD		
Roanoke : Roanoke County	-26163	Reconstruction w/ Added Capacity	Construction : Safety/ITS/Operational Improvements	Rte 460 & Alt Route 220 Intersection Improvements		
Roanoke : Roanoke County	113144	Reconstruction w/o Added Capacity	Construction : Safety/ITS/Operational Improvements	#SMART22 - Starkey Road/Buck Mtn Rd Int Improvements	Convert the unsignalized intersection to a single lane roundabout with bicycle and pedestrian accommodations.	\$5,841,480
Roanoke : Roanoke County	115460	Other	Construction : Safety/ITS/Operational Improvements	#SMART20 - Rte 419 & Rte 220 Diverging Diamond Interchange	Route 419 and Route 220: Construct Diverging Diamond Interchange (DDI) and modify signals along the Route 419 corridor to improve operations by eliminating movements/phases, per the corridor operations analysis.	#####

MPO / Locality	UPC	VDOT Scope	STIP Grouping (draft RVTP)	VDOT Project Title	Description	Total Cost Estimate
Roanoke : Roanoke County	116328	Safety	Construction : Safety/ITS/Operational Improvements	#I81CIP SWRO MGMT FEE FOR NEW CMS & CAMERAS O&M FY20-27		
Roanoke : Roanoke County	118034	Traffic Management/Engin eering	Construction : Safety/ITS/Operational Improvements	#I81CIP DETOUR IMPROVEMENTS - SIGNAL COMMS SALEM DIST.		
Roanoke : Roanoke County	119449	Reconstruction w/ Added Capacity	Construction : Safety/ITS/Operational Improvements	#SMART22 - Rte 460 Intersections-Carson Rd. to Huntridge Rd	Improve traffic flow and safety by installing R-CUT intersections.	\$2,766,831
Roanoke : Roanoke County	120611	Reconstruction w/ Added Capacity	Construction : Safety/ITS/Operational Improvements	Rte 460 & Alt Route 220 Intersection Improvements		
Roanoke : Roanoke County	-24579	Facilities for Pedestrians and Bicycles	Construction : Transportation Enhancement/Byway/No n-Traditional	Orange Market Park and Ride/Parking Lot Improvements	Curb and pave Orange Market Park and Ride Lot, construct ADA ramps and crosswalks to cross Route 311 to the BP station, add landscaping, bike racks, and signage for Hanging Rock Battlefield Trail. Similar treatments for adjacent creekside parking lot. Repave the Hanging Roack Battlefield Trail, construct ADA ramps and crosswalks across Kessler Mill Road and the Orange Market entrance, relocate/add bollards and signage.	\$1,250,000
Roanoke : Roanoke County	-24550	Facilities for Pedestrians and Bicycles	Construction : Transportation Enhancement/Byway/No n-Traditional	ROUTE 419 - OAK GROVE STREETSCAPE IMPROVEMENTS	Install pedestrian signals and crosswalks at the traffic signal	\$218,748

MPO / Locality	UPC	VDOT Scope	STIP Grouping (draft RVTP)	VDOT Project Title	Description	Total Cost Estimate
Roanoke : Roanoke County	91191	Facilities for Pedestrians and Bicycles	Construction : Transportation Enhancement/Byway/Non-Traditional	Rnke River Grnwy - City of Roanoke to Route 618	Construction of a 0.5 mile section of the greenway from Roanoke city across properties owned by the WVWA and AEP. Construction of a separate 0.5 mile section across Explore Park property owned by the VA Recreational Facilities Authority adjacent to the Blue Ridge Parkway. A trailhead/parking lot is proposed on Highland Road.	\$3,067,000
Roanoke : Roanoke County	97171	Landscaping/Beautification	Construction : Transportation Enhancement/Byway/Non-Traditional	#HB2.FY17 Roanoke Co, RRG, Green Hill Pk to Riverside Pk	Construction of a section of the Roanoke River Greenway connecting the trail from Green Hill Park in Roanoke County to the existing greenway along West Riverside Drive.	\$12,697,000
Roanoke : Roanoke County	107055	Safety	Construction : Transportation Enhancement/Byway/Non-Traditional	Route 11 & 117 Roanoke Co. - Pedestrian Safety Improvements	Project will upgrade signals, add pedestrian push buttons and crosswalks to existing signalized intersections on Routes 11 & 117 in Roanoke County.	\$1,503,000
Roanoke : Roanoke County	111317	Facilities for Pedestrians and Bicycles	Construction : Transportation Enhancement/Byway/Non-Traditional	#SMART20 - Williamson Road Sidewalk Improvements	Construct a 5' sidewalk behind the curb on the north side of Williamson Road.	\$1,934,000
Roanoke : Roanoke County	111366	Facilities for Pedestrians and Bicycles	Construction : Transportation Enhancement/Byway/Non-Traditional	#SMART18 - Plantation Rd Bike/Ped/Streetscape Phase II	Continue the Plantation Road Project by constructing sidewalk, curb, gutter, drainage systems and landscaping between Walrond Drive and Gander Way, on the west side of Plantation Road. Add pedestrian signals and crosswalks at the Gander Way signal.	\$2,129,859
Roanoke : Roanoke County	113356	Facilities for Pedestrians and Bicycles	Construction : Transportation Enhancement/Byway/Non-Traditional	Roanoke River Greenway, Parkway Crossing		

MPO / Locality	UPC	VDOT Scope	STIP Grouping (draft RVTP)	VDOT Project Title	Description	Total Cost Estimate
Roanoke : Roanoke County	113567	Facilities for Pedestrians and Bicycles	Construction : Transportation Enhancement/Byway/Non-Traditional	Roanoke River Greenway through Explore Park	Construct 1.8 miles of a paved, 10-foot-wide, shared use path for bicyclists and pedestrians through Explore Park to Rutrough Rd.	\$4,222,000
Roanoke : Roanoke County	113947	Safety	Construction : Transportation Enhancement/Byway/Non-Traditional	Pedestrian Improvements on Route 11 (Williamson Road)	Pedestrian improvements along Williamson Road.	\$2,573,000
Roanoke : Roanoke County	-26802	Facilities for Pedestrians and Bicycles	Construction : Transportation Enhancement/Byway/Non-Traditional	GLADE CREEK GRNWY VINYARD PARK WEST - ROANOKE CO		
Roanoke : Roanoke County	116326	Safety	Maintenance: Traffic and Safety Operations	#181CIP SWRO MAINTENANCE FOR NEW CMS & CAMERAS O&M FY20-27		
Roanoke : Roanoke County	108904	Reconstruction w/o Added Capacity	NOT SUBJECT TO PUBLIC INVOLVEMENT, FYI ONLY - Construction : Safety/ITS/Operational Improvements	#HB2.FY17 Route 311 / Route 419 Int. Safety & Congestion Imp	Convert an existing signalized intersection to a roundabout. Access management for the adjacent businesses, paved shoulders for bicycle access, as well as pedestrian crosswalks within refuge islands to connect to businesses and to the Hanging Rock Battlefield Trail.	\$3,775,000
Roanoke : Roanoke County	110395		This looks like a bank account, not a project. Consider removing.	#HB2.FY17 I-81 AUX LN FR EXIT 141 -143 GARVEE DEBT SERVICE		
Roanoke : Roanoke County	111983		This looks like a bank account, not a project. Consider removing.	#SMART18 - 81 SB Aux Ln frm Exit 143-141 GARVEE Debt Service		
Roanoke : Roanoke County	121433		This looks like a bank account, not a project. Consider removing.	#SMART20 RTE 419&220 DIVERGING DIAMOND GARVEE DEBT SERVICE		

MPO / Locality	UPC	VDOT Scope	STIP Grouping (draft RVTP)	VDOT Project Title	Description	Total Cost Estimate
Roanoke : Roanoke County	116197	Safety	This project should be in the TIP as Ungrouped - Grouping definition doesn't apply. Public input, yes, even if no federal obligations at this time.	#I81CIP ADD NB LANE EXITS 128 &137 (ID #32)	Add one lane northbound on I-81.	#####
Roanoke : Roanoke County	107061	Safety	Ungroup	#HB2.FY17 Rte 419 Safety Improvements at Tanglewood	VDOT Project Pool Description: Improve safety and congestion by upgrading signals, adding pedestrian accommodation, bike lanes, and a third lane along Rte. 419 South, toward Rte 220.	\$7,048,000
Roanoke : Roanoke County	108906	Reconstruction w/ Added Capacity	Ungroup	#HB2.FY17 I-81 Auxiliary Lanes from Exit 141 to 143	Provide additional capacity between I-81 NB Exit 141 & Exit 143 and provide for safer merge movements between exits. Include 12-ft auxiliary lane & 12-ft outside shoulder. Auxiliary lane will be an extension of the entrance ramp @ Exit 141 to extend to Exit 143 onto I-581. Mill & overlay existing travel lanes.	#####
Roanoke : Roanoke County	111373	Reconstruction w/ Added Capacity	Ungroup	#SMART18 - I-81 SB Auxiliary Lane from Exit 143 to 141	Construct auxiliary lane on I-81 SB from Exit 143 to Exit 141.	\$13,829,000
Roanoke : Roanoke County	116201	Reconstruction w/ Added Capacity	Ungroup	#I81CIP MM 144 TO EXIT 150 ADDING NB AND SB LANES (ID #40)	Add NB/SB lanes.	
Roanoke : Roanoke County	116203	Reconstruction w/ Added Capacity	Ungroup	#I81CIP MM136 TO MM142 ADD LANE IN EACH DIRECTION (ID #39)	Add lane in each direction.	#####
Roanoke : Roanoke County	119462	Reconstruction w/ Added Capacity	Ungroup	#SMART22 - Route 419 Streetscape Improvements, Phase 2	Continue Pedestrian accommodations, bicycle facilities and streetscape improvements from Phase 1.	\$18,469,482

MPO / Locality	UPC	VDOT Scope	STIP Grouping (draft RVTP)	VDOT Project Title	Description	Total Cost Estimate
Roanoke : Roanoke County	119468	Reconstruction w/ Added Capacity	Ungroup	#SMART22 - Valleypointe Parkway Realignment	Widen Valleypointe Parkway from two to four lanes from North Concourse Drive to Wood Haven Road; realign to intersect with the Green Ridge Recreation Center entrance road.	\$9,837,072
Roanoke : Salem	-24986	Facilities for Pedestrians and Bicycles	Already listed previously - include in TE group.	#SMART22 - Roanoke River Greenway Golden Spike		
Roanoke : Salem	110574	Bridge Rehab w/ Added Capacity	Construction : Bridge Rehabilitation/Replacement/Reconstruction	#SGR18LB - APPERSON DRIVE BRIDGE REPLACEMENT	Bridge replacement with added capacity.	\$8,438,000
Roanoke : Salem	8753	Reconstruction w/o Added Capacity	Construction : Safety/ITS/Operational Improvements	#HB2.FY17 Rte460 - Add'n of CTL w/ Bike Ln, Curb, Sidewalk	Widening to 3 lanes. Improve drainage, capacity, and non-motorized transportation facilities on E. Main St. from Rt. 311 to Brand Ave. by adding storm sewer, curbing, sidewalks, bike lanes, and turn lanes. A traffic signal will be added at Lynchburg Turnpike.	\$15,223,263
Roanoke : Salem	8753	Reconstruction w/o Added Capacity	Construction : Safety/ITS/Operational Improvements	#HB2.FY17 Rte460 - Add'n of CTL w/ Bike Ln, Curb, Sidewalk		
Roanoke : Salem	117972	Traffic Management/Engineering	Construction : Safety/ITS/Operational Improvements	#181CIP DETOUR IMPROVEMENTS - CITY OF SALEM & CITY OF RNKE		
Roanoke : Salem	119474	Reconstruction w/ Added Capacity	Construction : Safety/ITS/Operational Improvements	#SMART22 - Apperson Dr (Rte 11)/Orchard Intersection Improv	Reconstruction with added capacity.	\$2,388,000
Roanoke : Salem	106268	Facilities for Pedestrians and Bicycles	Construction : Transportation Enhancement/Byway/Non-Traditional	HANGING ROCK BATTLEFIELD TRAIL - TRANSPORTATION ALTERNATIVES	Shared Use Path from the Hanging Rock Battle Field Trail Head to allow Bike/Pedestrians to walk from the Trail Head to East Main Street	

MPO / Locality	UPC	VDOT Scope	STIP Grouping (draft RVTP)	VDOT Project Title	Description	Total Cost Estimate
Roanoke : Salem	109612	Facilities for Pedestrians and Bicycles	Construction : Transportation Enhancement/Byway/Non-Traditional	DOWNTOWN STREETSCAPE IMPROVEMENTS	Facilities for pedestrians and bicycles.	\$1,130,000
Roanoke : Salem	111367	Facilities for Pedestrians and Bicycles	Construction : Transportation Enhancement/Byway/Non-Traditional	#SMART18 - Mason Creek Greenway Ph3 - 419 Multimodal Imprv		
Roanoke : Salem	111371	Landscaping/Beautification	Construction : Transportation Enhancement/Byway/Non-Traditional	#SMART18 - Downtown Salem Int. & Streetscape Improvements	Improvements to intersections, transit stop, turn movements, and streetscape in Downtown Salem.	\$3,629,869
Roanoke : Salem	113566	Facilities for Pedestrians and Bicycles	Construction : Transportation Enhancement/Byway/Non-Traditional	Elizabeth Greenway	Construct approximately 1.5 miles of multiuse trail and sidewalk within the Elizabeth Campus property and the Salem Commerce Park. Complete missing links between East Main Street and Mason Creek Greenways. Connect various land uses within the area and enable transit access.	\$1,832,000
Roanoke : Salem	119473	Reconstruction w/ Added Capacity	Construction : Transportation Enhancement/Byway/Non-Traditional	#SMART22 - Main St / Market St Intersection Improvements	Shorten pedestrian crossings, provide bike/pedestrian amenities, add bump-outs, landscaping and improved lighting.	\$2,312,000
Roanoke : Salem	119475	Reconstruction w/ Added Capacity	Construction : Transportation Enhancement/Byway/Non-Traditional	#SMART22 - Downtown Salem - College Avenue Improvements	Streetscape Improvements downtown Salem	
Roanoke : Salem	119562	Facilities for Pedestrians and Bicycles	Construction : Transportation Enhancement/Byway/Non-Traditional	#SMART22 - Roanoke River Greenway Golden Spike	10' wide greenway trail. "Golden Spike"	\$4,521,000
Roanoke : Salem	110689	Bridge Replacement w/o Added Capacity	NOT SUBJECT TO PUBLIC INVOLVEMENT, FYI ONLY Construction : Bridge Rehabilitation/Replacement/Reconstruction	#SGR18LB - Colorado St Bridge Replacement	Colorado Street Bridge Replacement	

MPO / Locality	UPC	VDOT Scope	STIP Grouping (draft RVTP)	VDOT Project Title	Description	Total Cost Estimate
Roanoke : Salem	113141	Facilities for Pedestrians and Bicycles	NOT SUBJECT TO PUBLIC INVOLVEMENT, FYI ONLY - Construction : Transportation Enhancement/Byway/Non-Traditional	Downtown Salem - Main Street, Union Street to Broad Street	Facilities for pedestrians and bicycles.	\$1,000,000
Roanoke : Salem	113142	Facilities for Pedestrians and Bicycles	NOT SUBJECT TO PUBLIC INVOLVEMENT, FYI ONLY - Construction : Transportation Enhancement/Byway/Non-Traditional	Downtown Salem - Roanoke Boulevard	Facilities for pedestrians and bicycles.	\$1,841,000
Roanoke : Salem District-wide	-23432	Safety	Construction : Safety/ITS/Operational Improvements	FY 25 Edgeline Rumble Strips		
Roanoke : Salem District-wide	-23431	Safety	Construction : Safety/ITS/Operational Improvements	FY 24 Edgeline Rumble Strips		
Roanoke : Salem District-wide	-23428	Safety	Construction : Safety/ITS/Operational Improvements	FY 25 Centerline Rumble Strip Installation		
Roanoke : Salem District-wide	-23427	Safety	Construction : Safety/ITS/Operational Improvements	FY 24 Centerline Rumble Strips		
Roanoke : Salem District-wide	-21479	Safety	Construction : Safety/ITS/Operational Improvements	Districtwide Rumble Strip Installation-Primary Routes		
Roanoke : Salem District-wide	-21476	Safety	Construction : Safety/ITS/Operational Improvements	Interstate & Primary Cable Guardrail Install-Districtwide		
Roanoke : Salem District-wide	108991	Safety	Construction : Safety/ITS/Operational Improvements	Systemic Roadway Departure Treatments		

MPO / Locality	UPC	VDOT Scope	STIP Grouping (draft RVTP)	VDOT Project Title	Description	Total Cost Estimate
Roanoke : Salem District-wide	110887	Safety	Construction : Safety/ITS/Operational Improvements	Rte 220 Access Management Improvements Project	Improve traffic flow and safety on Route 220 by installing through-cut intersections with pedestrian signals and crosswalks	\$11,696,000
Roanoke : Salem District-wide	117211	Safety	Construction : Safety/ITS/Operational Improvements	FY 21 Curve Delineation		
Roanoke : Salem District-wide	117213	Safety	Construction : Safety/ITS/Operational Improvements	FY 21 Unsignalized Intersections		
Roanoke : Salem District-wide	117215	Safety	Construction : Safety/ITS/Operational Improvements	FY 21 Edgeline Rumblestrips		
Roanoke : Salem District-wide	119668	Safety	Construction : Safety/ITS/Operational Improvements	FY 22 Edgeline Rumblestrips		
Roanoke : Salem District-wide	119669	Safety	Construction : Safety/ITS/Operational Improvements	FY 23 Centerline Rumble Strips		
Roanoke : Salem District-wide	119671	Safety	Construction : Safety/ITS/Operational Improvements	FY 22 Centerline Rumble Strips		
Roanoke : Salem District-wide	120899	Safety	Construction : Safety/ITS/Operational Improvements	FY 23 Curve Delineation		
Roanoke : Salem District-wide	120900	Safety	Construction : Safety/ITS/Operational Improvements	FY 23 Unsignalized Intersections		
Roanoke : Salem District-wide	-23423	Safety	Construction : Transportation Enhancement/Byway/Non-Traditional	FY 24 Pedestrian Crossing Improvements		

MPO / Locality	UPC	VDOT Scope	STIP Grouping (draft RVTP)	VDOT Project Title	Description	Total Cost Estimate
Roanoke : Salem District-wide	117212	Safety	Construction : Transportation Enhancement/Byway/Non-Traditional	FY 21 Pedestrian Crossing Improvements	Install pedestrian signals and crosswalks at the traffic signals at multiple locations: Route 419 between Keagy Road (at City limit) and Brambleton Avenue; Plantation Road at Hersberger Road	\$615,000
Roanoke : Salem District-wide	-25902	Traffic Management/Engineering	Construction: Safety/ITS/Operational Improvements	#181CIP DETOUR IMPROVEMENTS - SALEM INTERSECTION IMPROVEMENT		
Roanoke : Salem District-wide	121708	Resurfacing	Maintenance : Preventive Maintenance and System Preservation	#SGR23VP FY23 Plant Mix Roanoke & Craig Primaries		
Roanoke : Salem District-wide	114331	Safety	Remove if completed.	INSTALL ADVANCED SIGNAL CONTROL TECHNOLOGY AND COMMUNICATION		
Roanoke : Vinton	109611	Facilities for Pedestrians and Bicycles	Construction : Transportation Enhancement/Byway/Non-Traditional	GLADE CREEK GREENWAY, PHASE 2	Paved 10' wide greenway from Gus Nicks Boulevard to Gearhart Park.	\$683,000
Roanoke : Vinton	111649	Facilities for Pedestrians and Bicycles	Construction : Transportation Enhancement/Byway/Non-Traditional	Walnut Ave Bike/Ped Accommodations (5th St to Town limit)	Construct a sidewalk and bike lanes on Walnut Avenue between 5th Street and the City of Roanoke - Town of Vinton limit.	\$2,068,000
Roanoke : Vinton	113322	Facilities for Pedestrians and Bicycles	Construction : Transportation Enhancement/Byway/Non-Traditional	Hardy Road/Dillon Woods Crosswalk	Install a pedestrian crosswalk on Hardy Road at Dillon Drive.	\$497,911
Roanoke : Vinton	113565	Facilities for Pedestrians and Bicycles	Construction : Transportation Enhancement/Byway/Non-Traditional	Walnut Avenue Bicycle and Pedestrian Accommodations	Design and construction of ADA access from the Farmers Market to 1st Street. Connecting existing sidewalks with new concrete sidewalk and curb ramps, adding bike lanes, crosswalks and cross street intersections, pedestrian lighting, utility adjustments to accommodate ADA requirements, and construction storm drain improvements as required.	\$881,360

MPO / Locality	UPC	VDOT Scope	STIP Grouping (draft RVTP)	VDOT Project Title	Description	Total Cost Estimate
Roanoke : Vinton	114766	Safety	Construction : Transportation Enhancement/Byway/Non-Traditional	PEDESTRIAN SIGNAL UPGRADES - TOWN OF VINTON		
Roanoke : Vinton	117995	Facilities for Pedestrians and Bicycles	Construction : Transportation Enhancement/Byway/Non-Traditional	Glade Creek Greenway Phase 2B	Paved 10' wide greenway from Gearhart Park to Walnut Avenue.	\$784,659
Roanoke : Vinton	119472	Reconstruction w/ Added Capacity	Construction : Transportation Enhancement/Byway/Non-Traditional	#SMART22 - Walnut Avenue Corridor Improvements Phase 3	New Sidewalk, Bike land and Pedestrian crossing improvements between 1st Street and 4th in Vinton	
Roanoke : Vinton	119911	Facilities for Pedestrians and Bicycles	Construction : Transportation Enhancement/Byway/Non-Traditional	Gus Nicks Boulevard Pedestrian/Bicycle Crossing	Bike/Pedestrian Crossing from Glade Creek Elementary to the Gish Mill Property	\$404,000
Roanoke : Vinton	-26750	Facilities for Pedestrians and Bicycles	Construction : Transportation Enhancement/Byway/Non-Traditional	GLADE CREEK GREENWAY PHASE 3 PE/STUDY		\$275,000

Funded Roadway, Bike, and Pedestrian Projects with Planned Federal Obligations in FY28 or Later

MPO / Locality	UPC	VDOT Scope	STIP Grouping (draft RVTPO)	VDOT Project Title	Description	Total Cost Estimate
Roanoke : Botetourt County	-24740	Safety	Construction : Safety/ITS/Operational Improvements	Route 220 Superstreet Improvement	Safety	\$15,461,000

Administrator	RVTP ID	Project Source	State ID	State Title	RVTPO Title	Description
Valley Metro	2040.0717.197	TIP	GRTC0002	Preventative Maintenance	Preventative Maintenance for Valley Metro Vehicles	Maintenance to keep vehicles/equipment running smoothly.
Valley Metro	2040.0717.198	TIP	GRTC0004_1	Replacement Bus (FTA 5339)	Replace paratransit vehicles	Paratransit service vehicles utilized by RADAR under contract to Valley Metro.
Valley Metro	2040.0717.199	TIP	GRTC0004_2	Replacement Bus (STBG)	Replacing VM fixed-route buses	Paratransit service vehicles utilized by RADAR under contract to Valley Metro.
Valley Metro	2040.0717.200	TIP	GRTC0005	Expansion Bus	Expansion Bus	Three Electric Buses. Will run fixed on 91/92 and other routes as well.
Valley Metro	2040.0717.201	TIP	GRTC0006	Support Vehicles	Valley Metro Support Vehicles	These are vehicles used by supervisors, dispatch, maintenance, admin, etc. Vehicles that support the service but don't carry passengers.
Valley Metro	2040.0717.202	TIP	GRTC0007	Bus Stop Enhancements	Bus Stop Enhancements	Other amenities include trashcans, lights, benches. The specific stops have not been identified but pipeline for those interested in shelters.
Valley Metro	2040.0717.203	TIP	GRTC0008	Rehab/ Renovations of Admin/ Maint Bldg	Renovation of Administration and Maintenance Building	Upgrades to the maintenance space and a break area in the maintenance shop.
Valley Metro	2040.0717.204	TIP	GRTC0009	Shop Equipment	Shop Equipment	Equipment used to maintain buses and non-bus support vehicles.
Valley Metro	2040.0717.205	TIP	GRTC0010	ADP Software	Purchasing of automatic data processing software	Purchase computer software needed to provide/manage/monitor transit services.
Valley Metro	2040.0717.206	TIP	GRTC0011	ADP Hardware	Purchasing of automatic data processing hardware	Purchase computer hardware needed to provide/manage/monitor transit services.
Valley Metro	2040.0717.207	TIP	GRTC0012	Security	Security Cameras and Screens	Purchase security cameras and monitor screens on the buses.
Valley Metro	2040.0717.208	TIP	GRTC0013	New Downtown Rke Multimodal Facility - Engineering, Construction, Equipment	Construction of the Third Street Station.	Construct a new large transit transfer facility to replace Campbell Court to accommodate Valley Metro and Greyhound services.
Valley Metro	2040.0717.209	TIP	GRTC0015	Fare Collection Equipmt	Fare Collection Equipment	Purchase and install new fare collection equipment on transit vehicles.

Administrator	RVTP ID	Project Source	State ID	State Title	RVTPO Title	Description
Valley Metro	2040.0717.210	TIP	GRTC0016	Automatic Vehicle Locator	Automatic Vehicle Locator technology	Purchase and implement automatic vehicle locator (AVL) technology on all fixed-route buses for use with the VMGO app enabling real-time identification of transit vehicle location and use with the Real Time Passenger Information System.
Valley Metro	2040.0717.211	TIP	GRTC0017	Miscellaneous Office	Miscellaneous Office	Supplies and equipment used in the administrative offices.
Valley Metro	2040.0717.212	TIP	GRTC0018	Radio Communication System	Radio Communication System	Purchase Radio Communication System to enable transit dispatcher to communicate with vehicle operators and dispatch.
Valley Metro	2040.0717.213	TIP	GRTC0019	Real Time Passenger Information System	Real Time Passenger Information System	Purchase equipment and software to install the real time passenger system within the new Third Street Station.
RADAR	2040.0717.214	TIP	RAD0001_1	Operating Assistance	CORTRAN Operating Assistance	Operating assistance for RADAR under contract to Roanoke County to provide on-demand transit services for Roanoke County residents 70+ or of any age with a disability.
RADAR	2040.0717.215	TIP	RAD0001_2	Operating Assistance	Local Office on Aging Taxi Vouchers	Taxi vouchers for people 60 and over medical transportation??
RADAR	2040.0717.216	TIP	RAD0002	Paratransit Vehicles	CORTRAN vehicles	Purchase of ADA-accessible passenger vehicles to support the CORTRAN program.
Encircle	2040.0717.217	TIP	LFS0001	Paratransit Vehicles	enCircle vehicles	Vehicles to transport people in enCircle's adult day support program at the Brandon Point Center to/from the Center and their homes, community engagement activities/sites in Salem and Roanoke.
ROA CO	2040.0717.218	TIP	ROA0001	Operating Assistance	CORTRAN Operating Assistance	Operating assistance for Via Transportation, Inc. under contract with Roanoke County to provide on-demand transit services for Roanoke County residents 70+ or of any age with a disability.

Basic Information	
RVTPO Project Title:	Valley Metro Operating Assistance
RVTPO ID:	2040.0717.163 - 2040.0717.192
State Project Title:	Operating Assistance
State ID:	GRT0001

Project Detail	
Project Description:	
Need Type(s) Addressed (Select all that apply.):	System Management - Transit
Transportation Solutions Utilized:	
Project Administrator:	Company

Financial Information	
Funding Status (Select one):	Fully Funded
RVTPO Funding:	No
Amendment/Adjustment(s)	Adjusted 6/2/21 Adjusted 7/27/22

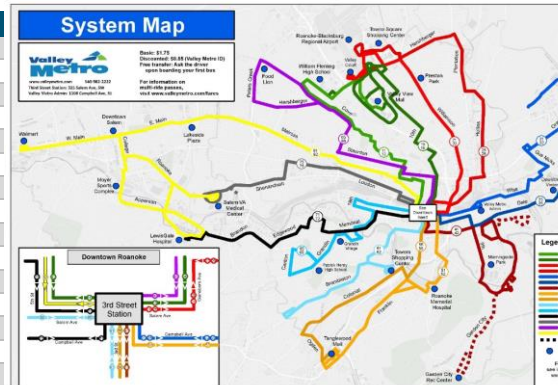


Funding Allocations						
Funding Source(s)	FY 2024	FY 2025	FY 2026	FY 2027	TOTAL	
FTA 5307	\$0	\$0	\$0	\$0	\$0	
FTA 5311	\$0	\$0	\$0	\$0	\$0	
TOTALS	\$0	\$0	\$0	\$0	\$0	

Planned Obligations						
Funding Source(s)	FFY 2024	FFY 2025	FFY 2026	FFY 2027	TOTAL	
FTA 5307	\$0	\$0	\$0	\$0	\$0	
FTA 5311	\$0	\$0	\$0	\$0	\$0	
TOTALS	\$0	\$0	\$0	\$0	\$0	

Actual Obligations						
Funding Source(s)	FFY2024	FFY 2025	FFY 2026	FFY 2027	TOTAL	
FTA 5307	\$0	\$0	\$0	\$0	\$0	
FTA 5311	\$0	\$0	\$0	\$0	\$0	
TOTALS	\$0	\$0	\$0	\$0	\$0	

Valley Metro Routes	Origin	Destination
Route 11	3rd Street Station	Valley View Mall
Route 16	Valley View Mall	3rd Street Station
Route 12	3rd Street Station	Valley View Mall
Route 15	Valley View Mall	3rd Street Station
Route 21	3rd Street Station	Valley Court
Route 22	Valley Court	3rd Street Station
Route 25	3rd Street Station	Roanoke Regional Airport
Route 26	Roanoke Regional Airport	3rd Street Station
Route 31	3rd Street Station	Blue Hills
Route 32	Blue Hills	3rd Street Station
Route 35	3rd Street Station	Vinton
Route 36	Vinton	3rd Street Station
Route 41	3rd Street Station	Southeast Roanoke
Route 42	Southeast Roanoke	3rd Street Station
Route 51	3rd Street Station	Tanglewood
Route 56	Tanglewood	3rd Street Station
Route 52	3rd Street Station	Tanglewood
Route 55	Tanglewood	3rd Street Station
Route 61	3rd Street Station	Brambleton & Red Rock
Route 62	Brambleton & Red Rock	3rd Street Station
Route 65	3rd Street Station	Carlton & Grandin
Route 66	Carlton & Grandin	3rd Street Station
Route 71	3rd Street Station	Lewis Gale
Route 72	Lewis Gale	3rd Street Station
Route 75	3rd Street Station	Veterans Hospital
Route 76	Veterans Hospital	3rd Street Station
Route 85	3rd Street Station	Peters Creek Road
Route 86	Peters Creek Road	3rd Street Station
Route 91	3rd Street Station	Salem
Route 92	Salem	3rd Street Station





Project Details

Basic Information	
RVTPO Project Title:	CORTRAN Capital Assistance
RVTPO ID:	2040.0717.257
State Project Title:	Capital Assistance
State ID:	ROA0002

Project Detail	
Project Description:	
Need Type(s) Addressed (Select all that apply):	System Management - Transit
Transportation Solutions Utilized:	
System (e.g. interstate, transit):	Transit



Financial Information	
Funding Status (Select one):	Fully Funded
RVTPO Funding:	No
Amendment/Adjustment(s)	5/26/22

Funding Allocations					
Funding Source(s)	FY 2024	FY 2025	FY 2026	FY 2027	TOTAL
FTA 5310	\$0	\$0	\$0	\$0	\$0
TOTALS	\$0	\$0	\$0	\$0	\$0

Planned Obligations					
Funding Source(s)	FFY 2024	FFY 2025	FFY 2026	FFY 2027	TOTAL
FTA 5310	\$0	\$0	\$0	\$0	\$0
TOTALS	\$0	\$0	\$0	\$0	\$0

Actual Obligations					
Funding Source(s)	FFY2021	FFY 2022	FFY 2023	FFY 2024	TOTAL
FTA 5310	\$0	\$0	\$0	\$0	\$0
TOTALS	\$0	\$0	\$0	\$0	\$0

Appendix K: Priority Projects/Services/Studies to Pursue for Funding

Priority Projects/Services to Pursue for Funding

Roanoke Valley Transportation Planning Organization



Introduction	This spreadsheet lists the region's priority projects to pursue for funding in the Roanoke Valley Transportation Plan along with the project's scope and estimated cost in the year of expenditure. Once funding is identified for the project, it will be considered for inclusion in the RVTP's Transportation Improvement Program funded projects list.
	See the NEST tool to map the projects: https://experience.arcgis.com/experience/7c2b2fb55b1b42c58954799c2156b922

Project Type	Constrained
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RVTPO Title	Street	Limit From	Limit To	Description	Total Cost
Brambleton Avenue (Rt. 221) Bicycle/ Pedestrian Improvements	Brambleton Avenue	2300 Block of Brambleton Avenue	Overland Road	Construct bike lanes and a sidewalk on both sides of Brambleton Avenue from Carillon Clinic traffic signal (former Shenandoah Building) to Overland Road.	\$ 15,000,000
Roundabout at Hardy Road and Bypass Road	Bypass Road	Hardy Road (Rt. 24/634)		Convert the intersection of Hardy Road/Bypass Road (Rt. 24) and Hardy Road (Rt. 634) from a signalized intersection to a two-lane roundabout. The project includes sidewalk in the immediate area of the roundabout.	\$ 16,590,837
Campbell Avenue Bicycle and Pedestrian Improvements	Campbell Avenue	Tinker Creek	Williamson Road (Downtown)	Streetscape improvements would consist of sidewalk, curb and gutter, street trees, and milling and resurfacing the existing roadway and any related stormwater improvements.	\$ 19,109,162
Chaparral Drive Pedestrian Improvements	Chaparral Drive	Purple Finch Road	Woodthrush Drive	Build a sidewalk in front of Cave Spring High School.	\$ 3,733,930
Church Ave	Church Avenue	Jefferson St.	5th St.	Streetscape improvements	\$ 9,000,000
Cove Road	Cove Road	Hershberger Road	Peters Creek Road	Add turn lanes, C&G, sidewalk, bike lanes, drainage	\$ 20,000,000
East Main Street Phase II (Previous UPC 106710)	East Main Street	Brand Avenue	Kessler Mill Road	Improve drainage, capacity, and non-motorized facilities by adding storm sewer, curbing, sidewalks, bike lanes, and turn lanes.	\$ 22,131,630
Route 419/Electric Road Pedestrian Signal Improvements	Electric Road	Brambleton Avenue	Postal Drive	Construct pedestrian signals and crosswalks at two adjacent Route 419/Electric Road intersections: Route 221/Brambleton Avenue and Postal Drive/Berry Lane.	\$ 3,944,955
Electric Road Safety Improvements - Grandin Road Ext. to Keagy Rd.	Electric Road	Grandin Rd Ext.	Keagy Rd.	Activities for this project include: an RCUT on Grandin Rd. Ext., Keagy Rd. South crosswalk, sidewalk from Grandin Rd. Ext. to Keagy Village on the County side, sidewalk from Starbucks to Keagy Rd. South on the City side, Keagy Rd. North crosswalks.	\$12,489,305 (does not include ROW)
Electric Rd. Safety Improvements, Stoneybrook Dr. - Grandin Rd. Ext.	Electric Road	Stoneybrook Dr.	Grandin Rd. Ext.	Route 419/Electric Road Safety Improvements, Stoneybrook Road to Grandin Road Extension. This project proposes to modify the Stoneybrook Drive and Glen Heather Drive intersections to Restricted Crossing U-Turn intersections. Sidewalk is also proposed along the western side of Route 419 between Glen Heather Drive and Grandin Road Extension.	\$5,893,004 (does not include ROW)
Hershberger Road	Hershberger Road	Cove Rd.	Peters Creek Road	Add turn lanes, C&G, sidewalk, bike lanes, drainage	\$ 20,000,000
Hollins Road	Hollins Road	Orange Ave.	Liberty Rd.	Widening to 4 lanes w/bicycle lanes	\$ 6,000,000

RVTPO Title	Street	Limit From	Limit To	Description	Total Cost
Jefferson Street	Jefferson Street	Elm Ave.	McClanahan Rd.	Multimodal improvements, Lane reconfigurations, & streetscape improvements	\$ 20,000,000
King Street	King Street	Gus Nicks Blvd.	Orange Ave.	Add turn lanes, C&G, sidewalk, bike lanes, drainage, reconstruct signal	\$ 22,000,000
Liberty Road	Liberty Road	Burrell St.	Hollins Rd.	Add turn lanes, C&G, sidewalk, bike lanes, drainage, reconstruct signal	\$ 20,000,000
Main Street Bridge Replacement and improvements Project	Main Street	Ferdinand/Elm	Winona Ave.	Replacement of Main Street bridge with bike lanes and construction of a roundabout at Ferdinand Ave. SW	\$ 25,000,000
Memorial Avenue	Memorial Avenue	Grandin Rd.	Denniston Ave.	Streetscape improvements	\$ 5,000,000
East Roanoke River Greenway Gap, Phase 2	Off-Road	Water Pollution Control Plant	VRFA property	Construction of the Roanoke River Greenway from the Water Pollution Control Plant to VRFA property	\$ 29,422,284
Lick Run Greenway Phase 4	Off-Road	Lewiston Road (Countryside Park)	Peters Creek Road	Multi-use bicycle & pedestrian trail	\$ 10,000,000
I-581/U.S. 460/U.S. 11 Improvements	Orange Avenue	I-581	U.S. 11/Williamson Road	The STARS Route 460 (Orange Avenue) study has identified operational and safety issues for the 460 corridor. The study's findings suggest improvements proposed for the Orange Ave and Williamson Rd intersection, including a signalized off-ramp from I-581, an additional eastbound left-turn lane, and additional lanes on Williamson Rd north of the intersection. These solutions mitigate the identified safety issues, improve traffic operations, and alleviate congestion. As noted in the STARS Route 460 (Orange Avenue) study, the I-581 interchange at Route 460 has vehicular, pedestrian, and bicycle-related safety and congestion issues. This project will provide solutions to mitigate the safety issues for all users, provide additional travel mode choices, improve traffic operations, and alleviate congestion.	\$ 23,217,568
Orange Avenue - 11th to 24th Operational Intersection Improvements	Orange Avenue	11th Street	24th Street	Traffic operational and safety improvements along Orange Avenue from 11th Street, N.E intersection to 24th Street, N.E.	\$ 22,744,208
Orange Avenue/Plantation Road Improvements	Orange Avenue	Plantation Road		The proposed improvements for this project include widening the northbound Kimball Avenue and southbound Plantation Road approaches to Route 460 to provide three approach lanes. The northbound approach would be widened within the median along Kimball Avenue to provide a left-turn lane, a through lane, and a right-turn lane. The southbound approach would be widened to provide a left-turn lane, a through lane, and a shared through/right-turn lane. In addition, the westbound Route 460 left turn lane is proposed to be extended to the railroad overpass to reduce the potential for left-turning vehicles extending out of the turn lane, which was observed under existing conditions.	\$ 7,581,383

RVTPO Title	Street	Limit From	Limit To	Description	Total Cost
Orange Avenue at I-581 Interchange Reconfiguration	Orange Avenue	Gainsboro Rd.	Williamson Rd.	Potential signalization of I-581 off-ramps (NB and SB) to eliminate weaving issues. More specific project recommendations to be developed during a study in FY22.	\$ 23,217,568
Orange Avenue & Kimball Avenue / Plantation Road Intersection Improvement	Orange Avenue	Kimball Avenue / Plantation Road		Widening side street approaches on Kimball Avenue and Plantation Road and lengthen WB left turn lane on Orange Avenue at Kimball Avenue.	\$ 7,581,383
Orange Avenue	Orange Avenue	0.006 mi. W Int. 11th St. NE	0.232 mi. E Int. Gus W. Nicks Blvd. NW	Alternative intersections to limit some turn movements and increase traffic flow on U.S. 460. See Route 460 Operational Improvements Study for detailed intersection recommendations.	\$ 22,744,208
Texas Street Widening from Roanoke Boulevard to Electric Road	Texas Street	Roanoke Boulevard	Electric Road	Improve I81 Bypass route, specifically along Texas St (Route 11, Alt US-460) from Electric Rd (Route 419) to Roanoke Blvd. Project to include new signal and intersection improvements at Texas St & Electric Rd, widening Texas St to have 4 vehicular travel lanes with bike/ped accommodations.	\$23,505,499 (does not include ROW)
Route 220 Access Management - Route 11 to Appalachian Trail	U.S. 220	Route 11	Appalachian Trail	Improvements to the Exit 150 I-81/220 interchange to address safety, traffic flow, and access concerns largely associated with weaving from tractor-trailers and other vehicles exiting the interstate.	\$10,484,027 (ROW not included in this draft cost)
Rt 220 Access Management/Park & Ride - AT to Commons Pkwy	U.S. 220	Appalachian Trail	Commons Parkway	Addition of multi-use path along 220 N and 220 S to Commons Parkway to provide Appalachian Trail users safe crossing of 220, including a traffic signal restricting cross-traffic from Wesley Rd to Commons Pkwy. Additionally, the construction of a new Park and Ride facility with greater capacity than the current site.	\$27,638,229 (does not include ROW)
U.S. 220 Superstreet Improvements	U.S. 220	Commons Parkway	Catawba Rd	Improve seven intersections by reducing vehicle conflict points in medians.	\$30 million
Virginia Tech Carilion Access Improvements	U.S. 220	U.S. 220	Jefferson St./Reserve Ave.	Construct additional access from U.S. 220 to VTCRI campus.	\$ 120,000,000
Route 220 in Daleville - Intersection Conversions to RCUTs	U.S. 220	??	??	Convert crossovers along the Route 220 Corridor in Daleville to RCUT's to provide a superstreet concept.	\$16,141,000 (does not include ROW)
Sidewalk under I-81 at Valley Road/Appalachian Trail	Valley Road (Rt. 779)	Appalachian Trail		Under I-81, construct a sidewalk for Appalachian Trail users.	\$1,159,501 (does not include ROW)
I-581 to Cove Rd.	Valley View Boulevard	I-581	Cove Rd.	Extend Valley View Boulevard to Andrews and then Cove Road	\$ 75,000,000
Virginian Line Track Improvements to facilitate AMTRAK Expansion	Virginian Line Railroad	MP251 in Salem	RVTPO Boundary	A distance of approximately 8.5 miles of Virginian Line railroad (including the bridges/culverts that support the track) will be improved to enable AMTRAK passenger service between Roanoke and the New River Valley.	Awaiting cost estimate.
Walrond Drive Pedestrian Improvements	Walrond Drive	Plantation Road	Walrond Park Road	Sidewalk, ADA ramps, crosswalks, curb, gutter, underground stormwater detention and street trees.	\$ 6,624,260

RVTPO Title	Street	Limit From	Limit To	Description	Total Cost
West Main Street Pedestrian Improvements, Phase 3	West Main Street	City of Salem limit	Technology Drive	This project will complete the missing sidewalk pieces that could not be constructed from UPC 108882, West Main Street Pedestrian Improvements, Phase 2, due to insufficient funds. Those segments include the south side of West Main Street between the City of Salem and Daugherty Road and the north side of West Main Street between Daugherty Road and Technology Drive. The sidewalk will be five feet wide concrete with pedestrian crosswalks at public roads.	\$ 7,059,184
Wiley Drive over Roanoke River near Franklin Road Bridge Replacement	Wiley Drive	Roanoke River (near Franklin Road)		Replace existing bridge with a higher one to minimize facility closures due to flooding. New bridge to include a shared-use path for bikes/pedestrians and one-lane for eastbound motor vehicles.	\$ 3,500,000
Williamson Road Sidewalk, Plymouth Dr. to Clubhouse Dr.	Williamson Road	Plymouth Dr.	Clubhouse Dr.	Extend sidewalk in design between North Roanoke Assisted Living and Plymouth Drive (UPC 113947) along the western side of Williamson Road from Plymouth Drive to Clubhouse Drive, with pedestrian signals and crosswalks at the Williamson/Clubhouse/Dent signalized intersection.	\$ 5,717,387
Williamson Road Multimodal Improvements	Williamson Road	Hershberger Road	Wells Avenue	This corridor-wide safety improvements project along Williamson Road from Hershberger Rd to Wells Ave includes lane reallocations, a two-way left-turn lane, the inclusion of bicycle lanes where none currently exist, pedestrian sidewalk, and crosswalk improvements, and traffic signal optimizations. The project's goals are to improve access and safety for the traveling public along the corridor.	\$21.6M Construction (2022\$); SS Rd 5 App Total = \$54,665,208 incl PE, ROW, Contingency, Inflation for 2030 construction

Appendix L: Other Projects and Preferred Solutions to Pursue

Other Projects/Services to Pursue for Funding

Roanoke Valley Transportation Planning Organization



Introduction	<p>This spreadsheet lists other transportation projects to pursue in the Roanoke Valley Transportation Plan along with available information for understanding the scope of the project. Additional information will be added as the scopes become more detailed to develop project costs.</p> <p style="text-align: center;">See the NEST tool to map the projects: https://experience.arcgis.com/experience/7c2b2fb55b1b42c58954799c2156b922</p>
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Project Type	Vision
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RVTPO Title	Street	Limit From	Limit To	Description	Total Cost
13th St./ Hollins Road	13th St./Hollins Rd.	Jamison Ave.	0.08 mi. N of Int. Orange Ave.	Bridge over RR tracks, streetscape, pedestrian and bicycle improvements, drainage	Unknown
West Main Street/Greenway Connection	Alignment Unknown	West Main Street	Roanoke River Greenway	Construct greenway connection for bicycles and pedestrians, from Roanoke River Greenway to West Main Street sidewalks (Unknown Alignment - TBD).	Unknown
U.S. 221/Brambleton Ave. pedestrian improvements	Brambleton Avenue	Roanoke City Limits	Electric Road	Construct sidewalk northbound and southbound along U.S. 221, from Roanoke City limits to Electric Road. Install crosswalks at Secondary street crossings, and pedestrian signals at signalized intersections.	Unknown
Rte. 679/Buck Mountain Rd. - urban 2-lane with turn lanes, bicycle and pedestrian improvements	Buck Mountain Road	Starkey Rd.	U.S. 220	Improve Rte. 679 to Urban 2-lane with turn lanes, and construct bicycle and pedestrian improvements, from Starkey Rd to U.S. 220.	Unknown
Challenger Avenue (Route 460) Corridor Safety Improvements	Challenger Avenue	Roanoke City Limits	Botetourt County Limits	Eliminate or limit some turning movements to improve traffic flow on U.S. 460.	Unknown
Colonial Avenue	Colonial Avenue	Brandon Ave.	Overland Rd.	Streetscape, C&G, sidewalk, widen 1-in., drainage	Unknown
Friendship Lane/Carvins Creek Bridge Replacement	Friendship Lane	Carvins Creek		Construct bicycle and pedestrian bridge over Carvins Creek at terminus of Friendship Lane.	Unknown
Rte. 682/Garst Mill Rd. - Bicycle and Pedestrian Improvements	Garst Mill Road	Brambleton Avenue	Grandin Road	Construct bicycle and pedestrian accommodations to Rte. 682, from Brambleton Av to Grandin Rd / Roanoke City limits.	Unknown
Rte. 634/Hardy Rd. - urban 4-lane or 2-lane with turn lanes, bicycle and pedestrian improvements	Hardy Road	Vinton Town Limits	Bedford County Limits	Improve Rte. 634 to Urban 4-lane or Urban 2-lane with turn lanes, and construct bicycle and pedestrian improvements, from Vinton to Bedford County.	Unknown
Explore Park Access - Hardy Rd./Blue Ridge Parkway Connection	Hardy Road	Blue Ridge Parkway		Construct interchange at Hardy Rd and Blue Ridge Parkway to make another more direct point of access to Explore Park.	Unknown
Rte. 625/Hershberger Rd. - Urban 2-lane with turn lanes, bicycle and pedestrian accommodations	Hershberger Road	Roanoke City Limits	Plantation Rd.	Improve Rte. 625 to Urban 2-lane with turn lanes, and construct bicycle and pedestrian accommodations, from Plantation Road to Roanoke City limits.	Unknown

RVTPO Title	Street	Limit From	Limit To	Description	Total Cost
I-581 at Exit 2 Interchange Improvements	I-581	Thirlane Road	Valleypoint Parkway	Close two I-581 off-ramps with substandard weave movements. Signalize remaining I-581 off-ramps, restrict left turns from SB Thirlane Road to minimize conflict points near interchange ramps. Add a downstream U-turn along Peters Creek Rd for re-directed left turns. Add a second EB Peters Creek left turn lane onto Valleypointe Pkwy to increase capacity. Add pedestrian and bicycle accommodations along Peters Creek Rd.	Unknown
I-581 & Peters Creek Rd. Interchange Improvements (enhancing access to Valleypointe Dr.)	I-581	Peters Creek Rd.		Reconstruct interstate interchange to improve turning movements and access to Valleypointe Blvd, Thirlane Rd (Roanoke City), and Thirlane Rd (Roanoke County).	Unknown
I-73 Partial PE Only	I-73	City of Roanoke	Franklin County	Partial Preliminary Engineering for I-73 in Roanoke County	Unknown
I-81 Corridor Improvements MM 116 to Exit 128	I-81	MM 116.2	MM 128.4	Capacity expansion to improve I-81 reliability, widen to three lanes NB direction only from MM 116 to Exit 128. (approx. 12.2 mi.)	Unknown
I-81 Corridor Improvements Exit 128 to Exit 137	I-81	MM 128.4	MM 137.1	Capacity expansion to improve I-81 reliability, widen to three lanes NB direction only from Exit 128 to Exit 137. (approx. 8.7 mi.)	Unknown
Route 116/Jae Valley Rd. Improvements	Jae Valley Road	Mt. Pleasant	Franklin County	Improve Rte. 116 to Rural 2-lane with shoulder improvements, from Mt Pleasant to Franklin County.	Unknown
Roanoke River Greenway	Off-Road			Construct Roanoke River Greenway from Green Hill Park to Montgomery County limits.	Unknown
Orange Avenue at Williamson Road Intersection Improvement	Orange Avenue	I-581	Williamson Rd.	Modify intersection to accommodate geometric and signal timing changes - dual EB left turn lanes, improvements on the north leg of Williamson Road. More specific project recommendations to be developed during a study in FY22.	Unknown
Rte. 687/Penn Forest Rd. - Bicycle and Pedestrian Improvements	Penn Forest Road	Colonial Ave. to Starkey Rd.		Construct bicycle and pedestrian accommodations to Rt 687, from Colonial Av to Starkey Rd.	Unknown
Route 115/Plantation Road urban 2 or 4-lane with turn lanes, bike/ped accommodations	Plantation Road	Williamson Rd.	Roanoke City Limits	Improve Rte. 115 to either Urban 4-lane, or Urban 2-lane with turn lanes, and construct bicycle and pedestrian accommodations from Williamson Rd to Roanoke City limits.	Unknown
Explore Park Access - Secondary Access Points from Rutrough Rd. and Road Circulation Improvements	Rutrough Road	Various locations at Explore Park		Improve secondary system access points from Rutrough Road.	Unknown
Rte. 904/Starkey Rd. Improvements	Starkey Road	Rte. 907/Starkey Rd.		Improve Rte. 904 to either Urban 4-lane or Urban 2-lane with turn lanes, and construct bicycle and pedestrian improvements, from existing 5-lane section of Starkey Rd to Merriman Rd.	Unknown

RVTPO Title	Street	Limit From	Limit To	Description	Total Cost
Bus Stop Accessibility Improvements	Transit System	Systemwide		Curb ramps, sidewalk connections, accessible landing pads, bus shelters, benches, pedestrian refuge medians, crosswalks, signage or other improvements will be provided as needed by the specific bus stop locations.	Unknown
Catawba Road/Rt. 220 intersection improvements	U.S. 220	Catawba Rd.		Add additional westbound lane on Catawba Road (Rt. 779) from the intersection with U.S. 220. If feasible, may also include bike accommodations.	Unknown
Glebe Road alignment improvements and bike/ped accommodations	U.S. 220	U.S. 220	Orchard Lakes Dr.	Improve curve alignments and allow for pedestrian/cyclist connection along the funded Daleville Greenway Phase I route.	Unknown
U.S. 220 Access Management and Intersection Project	U.S. 220	Exit 150	Commons Parkway	Project to improve access management and intersections along U.S. 220 between I-81 and Botetourt Commons in order to improve access to existing properties and to land for development opportunities (approx. length 0.5 mi.)	Unknown
Rt. 640/U.S. 220 Improvements	U.S. 220	Brughs Mill Road		Brughs Mill Road re-alignment and multiple intersection improvements along U.S. 220 to improve traffic flow and safety.	Unknown
U.S. 220 Pedestrian Crossing	U.S. 220	Daleville Town Center		Install a pedestrian crossing across U.S. 220 with ADA accommodations, push buttons, signals, and signal phasing.	Unknown
U.S. 220 Improvements	U.S. 220	Electric Road	Franklin County	Implement the recommendations of the VDOT Route 220 Arterial Preservation Plan.	Unknown
Preventative Maintenance	Valley Metro Administrative Office			Maintain vehicles and equipment in working order.	Unknown
West Center Drive	West Center Drive	International Parkway	End of proposed Rd (approx. 0.6mi)	Construct a new road/alignment to VDOT standards in order to access industrial and commercial sites.	Unknown
Williamson Road Pedestrian Improvements	Williamson Road	Hawthorne Rd. NW	Woodbury Rd. NW	Include sidewalk, ADA curb ramps at Hawthorne, Woodbury, and driveway access points, curb and gutter and reset a stormwater inlet reducing ponding and improve stormwater channelization on Williamson Rd.	Unknown
U.S. 11/Williamson Rd. Urban 2 or 4-lanes & Bike/Ped Improvements	Williamson Road	Peters Creek Road	Roanoke City Limits	Improve U.S. 11 to either Urban 4-lane, or Urban 2-lane with turn lanes, and construct bicycle and pedestrian improvements, from Peters Creek Road to Roanoke City limits.	Unknown