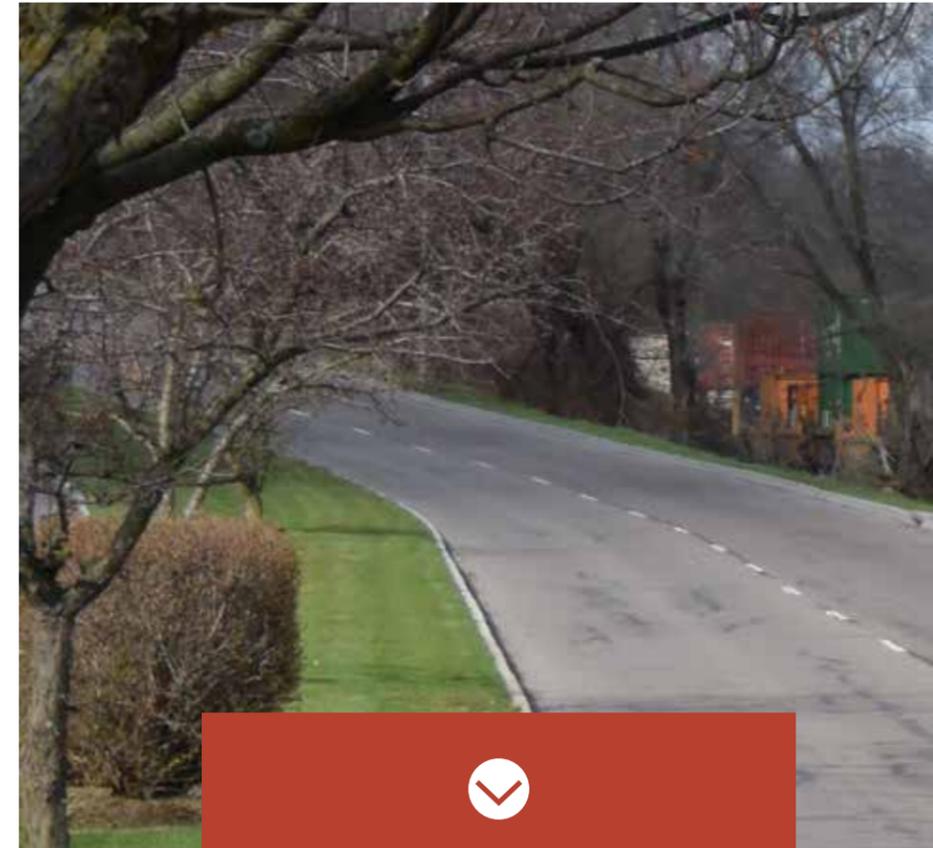


TRANSPORTATION & MOBILITY PLAN

Bristol contains a robust transportation network of roadways and public transit, but lacks many pedestrian infrastructure outside of the city's core. Safe and efficient access and mobility are critical in supporting land use and development, economic development, and quality of life. This chapter of the Comprehensive Plan presents recommendations intended to guide investment in a well-balanced, multi-modal transportation system that accommodates both the automobile as well as the walker, jogger, and cyclist.



The Transportation & Mobility Plan is organized into six sections.

General Trends Affecting
Transportation & Mobility

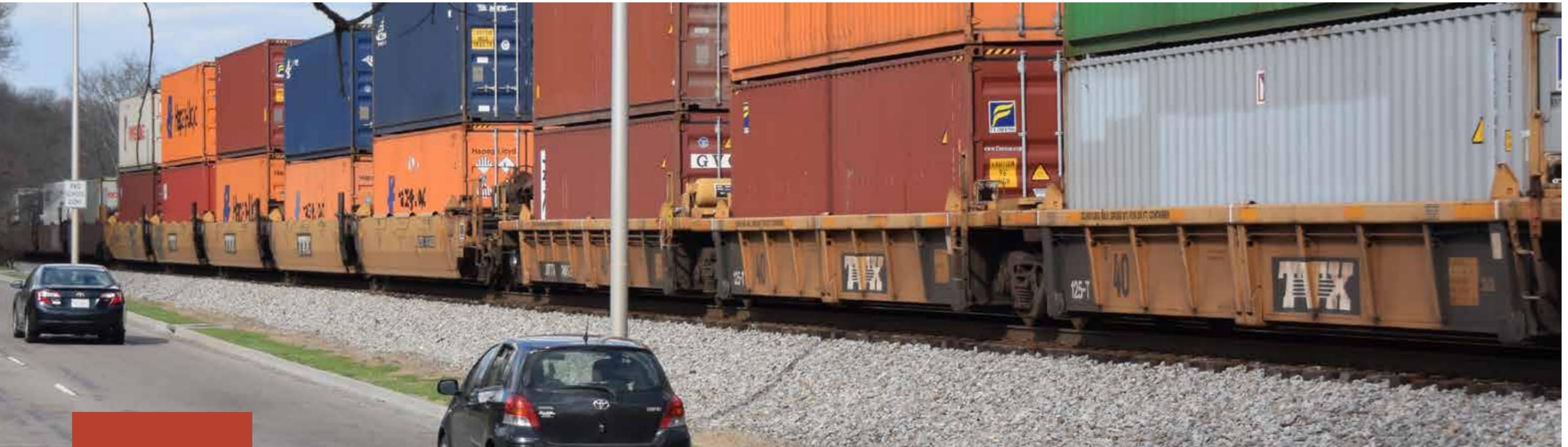
Motorized Mobility

Air

Public Transit

Freight & Passenger Rail

Bike & Pedestrian Connectivity



2035 Goal

In 2035, Bristol will have a safe, efficient, and economically competitive transportation network, with an intermodal system of roads, rail, trails, and paths that serve all residents and businesses.

Priority Objectives

Objective #1

Road Safety & Efficiency.

Ensure the safe and efficient navigation of the City's road network for all users.

- **1A.** Plan and work cooperatively with the Commonwealth of Virginia, Washington County, Bristol, TN, and Bristol MPO on improvements to Bristol's roadways, balancing regional priorities with local objectives.
- **1B.** Continue to identify and support roadway projects that enhance local circulation.
- **1C.** Identify and improve problematic intersections through realignment, enhanced signalization, and signage.
- **1D.** Budget for on-going maintenance and repairs of City owned streets and bridges as part of a Capital Improvement Plan.

- **1E.** Work with both state and local partners to improve directional and wayfinding signage to highways, interstates, and key destinations.
- **1F.** Designate, and reinforce with appropriate infrastructure, Martin Luther King, Jr. Boulevard as the connecting link to Downtown from Lee Highway and The Falls.
- **1G.** Upgrade Lee Highway with additional road infrastructure to provide additional traffic capacity associated with The Falls and adjacent redevelopment areas.
- **1H.** Continue to monitor and reduce traffic congestion along roadways identified as likely to experience high levels of congestion (LOS E and F) by 2035.
- **1I.** Identify and implement Intelligent Transportation Systems (ITS) improvements recommended in the 2008 Bristol Regional ITS Architecture and Deployment Plan.
- **1J.** Work with business owners along commercial corridors to reduce the number of curb cuts and improve cross-access.
- **1K.** Improve the ease and friendliness of parking within Downtown Bristol.

Objective #2

Public Transportation

Provide safe and reliable fixed-route and demand responsive transit services that meets the transportation needs of Bristol, Virginia residents. (**Note: some recommendations originate from the City's Transit Development Plan*).

- **2A.** Implement the recommendations within the City's Transit Development Plan.
- **2B.** Ensure that transit stops are well-served by pedestrian infrastructure, including crosswalks, sidewalks, benches, and shelters, when warranted.
- **2C.** Continue to update transit routes with significant alterations in land use and provide service to any major new developments or redevelopments.
- **2D.** Provide transit service connections between residential areas and commercial areas with jobs, education, shopping and medical services.
- **2E.** Provide easily identifiable stop locations along routes and passenger shelters when warranted.
- **2F.** Actively market transit services as a travel option within the City of

Bristol, VA.

- **2G.** Explore potential demand for expanding transit service to other cities in the region.
- **2H.** Maintain a systemwide fare box recovery ratio that meets or exceeds standards identified in the Transit Development Plan.
- **2I.** Achieve systemwide fixed-route ridership levels that meet or exceed standards identified in the Transit Development Plan.
- **2J.** Ensure that transit service operators maintain an accident rate of less than the standard identified in the Transit Development Plan.
- **2K.** Ensure that an adequate fleet of vehicles is maintained for the fixed-route and demand-responsive services.
- **2L.** Identify the need for replacement vehicles based on industry standards for defined useful life of vehicles.
- **2M.** Provide transit services that are accessible to all population groups within the City of Bristol, Virginia.

Objective #3

Rail

Support and enhance the City's rail network.

- **3A.** Proactively lobby for extension of Amtrak passenger rail service to Bristol.
- **3B.** Support the provision of adequate and necessary railroads and railroad infrastructure to support and attract industrial businesses to the City.
- **3C.** Continue to work with Norfolk Southern and VDOT to ensure rail crossings are safe, properly maintained, or improved whenever necessary.

Objective #4

Bike & Pedestrian Mobility

Establish a well-connected network of sidewalks, pathways, and trails that increase the safety and desirability of walking and biking. (**Note: some recommendations are cross-listed with Chapter 8: Parks, Open Spaces, & Environmental Features*).

- **4A.** Require sidewalks in all new developments along key corridors,

in Downtown, within large planned developments, and subdivisions.

- **4B.** Develop a continuous trail, sidewalk, and/or path network between Downtown and Sugar Hollow Park along or near Beaver Creek.
- **4C.** Establish a long-term connectivity program that identifies needed sidewalks and trails, and prioritizes projects based on prospective impacts such as safety, ease of completion, cost, and benefit to residents.
- **4D.** Establish dedicated pedestrian routes between park facilities, neighborhoods, and important destinations that are marked with wayfinding signage and improved pedestrian crossings.
- **4E.** Minimize the impact of physical barriers, such as Beaver Creek, railroad tracks, Interstate 81, and other high traffic roadways, through dedicated pathways, trails, intersection crossings, and larger projects such as pedestrian bridges or tunnels.
- **4F.** Utilize existing waterways or open space corridors to establish dedicated greenways connected with recreational trails.

Actions & Supporting Information

General Trends Affecting Transportation & Mobility

The utilization of Bristol's transportation network is shaped by a variety of factors, including the local and regional population, employment levels, tourism, and interstate traffic. Some of the key trends that shape the recommendations within this chapter include:

- **Bristol, Virginia's population is expected to remain relatively stable over the next decade.** ESRI Business Analyst predicts a slight population decline in the coming years (-0.2% annually) while the Bristol MPO's Long Range Transportation Plan and University of Virginia's Weldon Cooper Center both predict very slight growth (+0.1% and +0.5% annually, respectively).

- **The Tri Cities regional population is also expected to remain relatively stable over the next decade.** The Bristol MPO's Long Range Transportation Plan estimates very slight growth for the region (+0.2% annually), with an increase of only 5,049 between 2010 and 2035.

- **Bristol, Virginia's employment levels have declined.** Since 2008, the number of total primary jobs in the city has declined relatively steadily from 15,081 to 11,165. The Bristol MPO's Long Range Transportation Plan predicted an increase in local employment (18,359 by 2035), however, those calculations were predicated on pre-recession conditions. While the local economy is expected to rebound, the industry composition of jobs will continue to shift and the city may not reach pre-recession employment levels over the next decade. Virginia estimates that the New River/Mt. Rogers Workforce Investment Area (which includes Bristol, VA) will see a growth in total employment from 144,876 to 159,594 between 2012 and 2022. Applying Bristol's share of total regional employment (8.0%) in 2012 to 2022, the city could gain 1,179 jobs, which still is below pre-recession levels.

- **The regional economy is growing slowly.** Bristol's local economy is a component of a broader regional economy (Kingsport-Bristol-Bristol, TN-VA metropolitan area). Between 2013 and 2016, the U.S. Conference of Mayors estimates that the region's gross metropolitan product will increase from \$11.1 billion to \$12.1 billion. By 2021, it is estimated that the region's gross metropolitan product will grow to \$14.8 billion, with an average annual growth rate of 3.9%. However, increases in worker productivity and other factors may mean that this does not directly translate into significant employment growth for Bristol, Virginia, with only 15,000 jobs expected to be added to the entire New River/Mt. Rogers Workforce Investment Area by 2022.

- **The automobile is overwhelmingly the preferred mode of transportation within Bristol, Virginia.** According to the U.S. Census Bureau's American Community Survey, 89.9% of residents use the automobile to commute to work, with an average travel time of 17.5 minutes each way.
- **A spatial mismatch exists – workers do not live in the communities in which they work.** Most jobs within Bristol are held by individuals outside of the City. Equally, most Bristol residents travel to other locations for work. This dynamic is relatively typical across the nation, but can lead to roadway congestion as distance often translates into automobile utilization. This can be helped by increased Transportation Demand Management (TDM) efforts such as vanpooling.

- **Recreational and shopping tourism is expected to increase.** With a resurgence of Downtown Bristol, the opening of the Birthplace of Country Music Museum, heightened marketing, and the continued development of The Falls, the number of visitors to Bristol is expected to increase. For example, the City estimates that The Falls will draw approximately 2 million annual visitors.
- **Little pedestrian transportation infrastructure exists outside of the city core.** Trails, sidewalks, and paths are vital components of any community, utilized both by residents, employees, and visitors. Throughout the outreach process, residents expressed a desire for better ways to get around the community on foot and on bike.

With these factors in mind, it is expected that over the lifespan of the Comprehensive Plan:

- Surges in local/regional population and employment levels are not expected. Increases in demand on the city's transportation infrastructure will likely be a result of tourism and interstate traffic.
- The City's existing road and rail network is built out, and routine maintenance is the policy directive. However, major road improvements should occur along the Lee Highway area, between Exits 5 and 7, to accommodate the influx in traffic that is likely to occur associated with The Falls development and spin-off projects along Lee Highway.

- Pedestrian infrastructure – both for functional mobility as well as recreational purposes – is needed outside of the core of the community, particularly in growing commercial areas such as The Falls area. While sidewalks may not be feasible or even desirable in all locations, trail connections can help connect different neighborhoods and commercial areas, as well reduce commute times if cycling or walking to work becomes feasible.
- The expansion of passenger rail to Bristol will increase its attractiveness as a business and tourist destination.

Motorized Transportation Plan

ROAD CLASSIFICATIONS

-  **Interstates** are high-speed roadways that provide a high level of mobility but no land access. I-81 and I-381 are examples. Bristol, VA has four exits: 1, 3, 5, and 7.
-  **Principal Arterials** are busy roadways that link interstates with less busy roads and serve as the main spine(s) of the community. Lee Highway and Gate City Highway are examples.
-  **Minor Arterials** support principal arterials and often intersect with them. An example is King Mill Pike or Old Airport Road.
-  **Collectors** provide access to both arterials and neighborhoods, parks, schools, and small commercial areas. They balance land access with mobility and collect traffic and disburse it onto the busier traffic grid.
-  **Locals** are the most common road classification in Bristol. They are mostly residential roadways and provide direct access to homes through driveways and curb cuts.

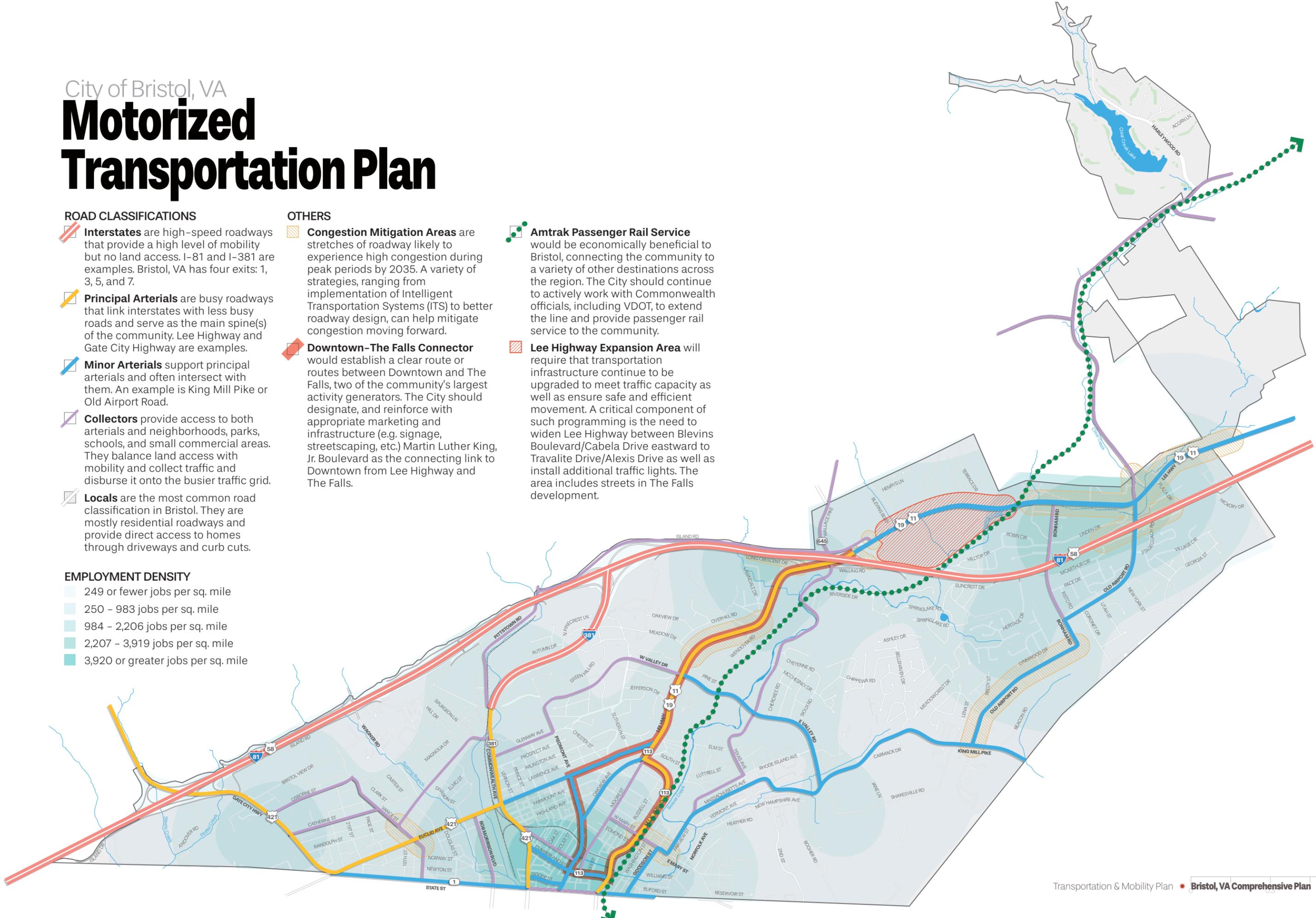
OTHERS

-  **Congestion Mitigation Areas** are stretches of roadway likely to experience high congestion during peak periods by 2035. A variety of strategies, ranging from implementation of Intelligent Transportation Systems (ITS) to better roadway design, can help mitigate congestion moving forward.
-  **Downtown-The Falls Connector** would establish a clear route or routes between Downtown and The Falls, two of the community's largest activity generators. The City should designate, and reinforce with appropriate marketing and infrastructure (e.g. signage, streetscaping, etc.) Martin Luther King, Jr. Boulevard as the connecting link to Downtown from Lee Highway and The Falls.

-  **Amtrak Passenger Rail Service** would be economically beneficial to Bristol, connecting the community to a variety of other destinations across the region. The City should continue to actively work with Commonwealth officials, including VDOT, to extend the line and provide passenger rail service to the community.
-  **Lee Highway Expansion Area** will require that transportation infrastructure continue to be upgraded to meet traffic capacity as well as ensure safe and efficient movement. A critical component of such programming is the need to widen Lee Highway between Blevins Boulevard/Cabela Drive eastward to Travalite Drive/Alexis Drive as well as install additional traffic lights. The area includes streets in The Falls development.

EMPLOYMENT DENSITY

-  249 or fewer jobs per sq. mile
-  250 - 983 jobs per sq. mile
-  984 - 2,206 jobs per sq. mile
-  2,207 - 3,919 jobs per sq. mile
-  3,920 or greater jobs per sq. mile





Motorized Mobility

Road Classifications

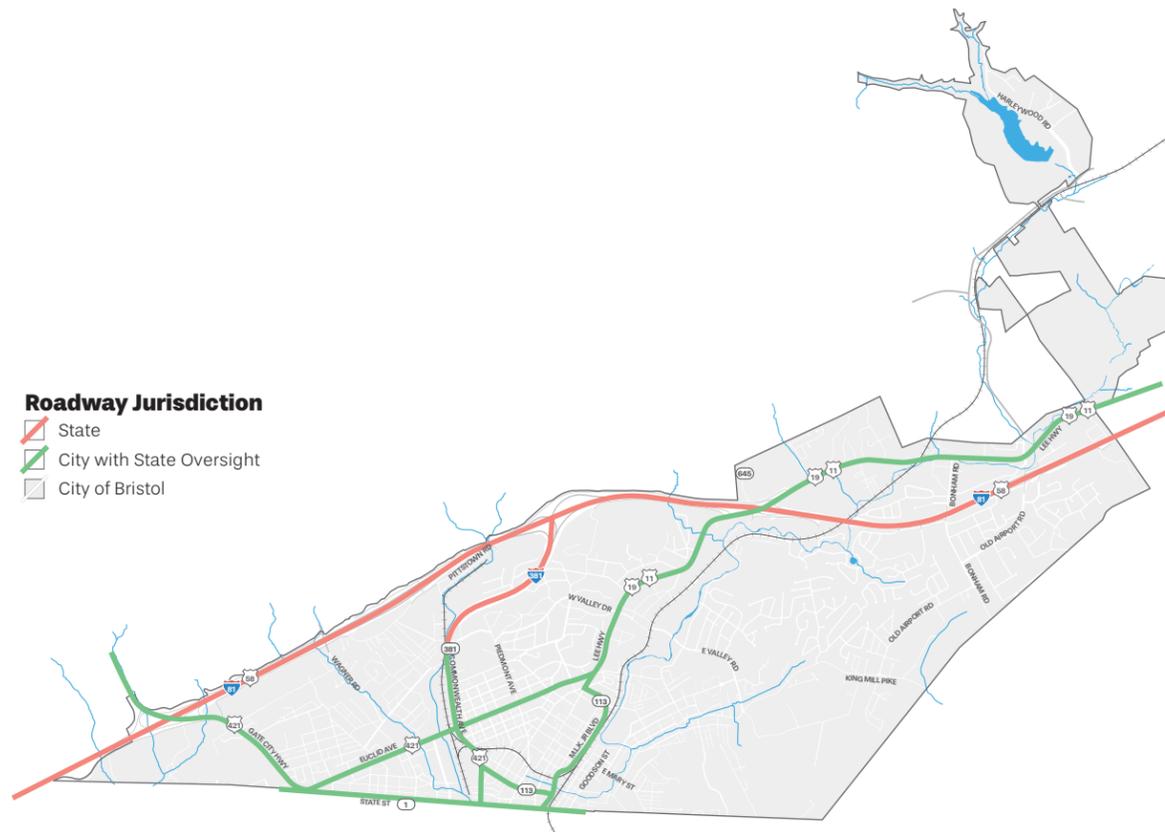
Bristol's roads are classified into different categories by the Virginia's Department of Transportation (VDOT) based on the level of service and access they provide. These classifications, depicted and explained on the accompanying map, assist planners and government officials in understanding the role and responsibility of different roadways, as well as what levels of investment are required.

One classification that may warrant a change is along Lee Highway (US Route 11 & 19) between Exits 5 and 7. It is currently designated as a Minor Arterial. Given the increased traffic expected, as well as planned road widenings and additional signing, that segment of roadway needs to be upgraded to a Principal Arterial.

Interjurisdictional Cooperation

Jurisdiction over Bristol's roads are split between the City of Bristol and VDOT. I-81 and I-381 are maintained by VDOT, while all other roads are maintained by the City. City streets that are also state and federal routes (e.g. US Route 11, US Route 19, US Route 421, and State Route 113) are regulated by the State but the City is responsible for day-to-day operation. Road improvements on these roads can be either self-administered by the City or administered by VDOT.

It is important the City plans and works cooperatively with the Commonwealth of Virginia and other partners on improvements to Bristol's roadways, balancing regional priorities with local objectives.



Congestion Mitigation

Based on traffic counts, I-81 is the busiest road within Bristol (53,000 vehicles daily), followed by Commonwealth Avenue (18,000), Lee Highway (17,000), State Street (14,000), and Euclid Avenue (12,000).

Road congestion is expected to stay relatively minimal based on traffic forecasting conducted by the Bristol Metropolitan Planning Organization (MPO), outside of additional traffic generated by "The Falls" development and any other new projects. The MPO identified several stretches of roadway within Bristol expected to experience moderate to high levels of congestion by 2035 (LOS E and F), and they are designated on the accompanying map as "congestion mitigation areas."

On the whole, however, the vast majority of Bristol's road segments were expected to experience low levels of congestion. The City should continue to monitor reduce traffic congestion along roadways identified as likely to experience high levels of congestion (LOS E and F) by 2035, and when possible, implement projects and policies that reduce congestion.



Key projects that the MPO has identified as mitigating future congestion levels include widening of Bonham Road, Kings Mill Pike, and Old Airport Road; modifying the narrow railroad underpass along Old Abingdon Highway; reconfiguring lanes along West State Street. Other strategies offered include (some of which are offered in the Long Range Transportation Plan):

- **Systems management and operations strategies.** The addition or modification of turn lanes, signals, and other infrastructure can improve traffic flow.

- **Access points coordination and design.** The quantity and engineering of access points (ingress and egress) can inhibit traffic flow. Access points should be spaced sufficiently apart in order for traffic control devices and turn lanes to operate effectively.
- **Incident management.** Efficiently clearing traffic incidents such as crashes and fender benders from the roadway can improve traffic flow.
- **Walking & biking.** The increased utilization of walking, biking, and carpooling to work can reduce traffic congestion.

Additionally, Intelligent Transportation Systems (ITS) can be used to improve the efficiency of a transportation network through investments in technology rather than or in conjunction with roadway infrastructure improvements. There are several forms of ITS that could be implemented in order to provide benefits to residents, businesses, and public service providers.

- **Synchronization.** Synchronization involves the coordination of signal phasing at multiple locations throughout a network. The intent is to allow for the "platooning" of vehicles, or the efficient movement of groups of vehicles along a corridor. Synchronization can be modified to provide priority to major arterials with higher traffic volumes, and can vary throughout the day or week to respond to peak volumes.

- **Emergency Signal Preemption.** Signal preemption allows emergency vehicles to "trip" a signal for a green light. This allows the vehicle to safely and quickly pass through the intersection while other traffic waits. Following the preemption, the signal reverts to its programmed phasing.

- **Transit Signal Priority.** Transit Signal Priority (TSP) provides a short extended green or shortened red as a transit vehicle approaches an intersection. It does not entirely preempt the signal phasing, but modifies to enable more efficient movement for buses. TSP improvements would require both signal upgrades and vehicle technology upgrades, and may only be applicable on primary region routes.

- **Vehicle Detection Systems.** Vehicle detection systems trigger modified signal phasing based on the current users of the intersection. At intersections with low traffic counts, this would minimize wait time for vehicles standing when there is no cross traffic. The result is less wait time and lower exhaust emissions.

In June 2008, a multi-jurisdictional task force authored a shared Bristol Regional ITS Architecture and Deployment Plan. The City should continue to identify and implement Intelligent Transportation Systems (ITS) improvements recommended in the 2008 Bristol Regional ITS Architecture and Deployment Plan.

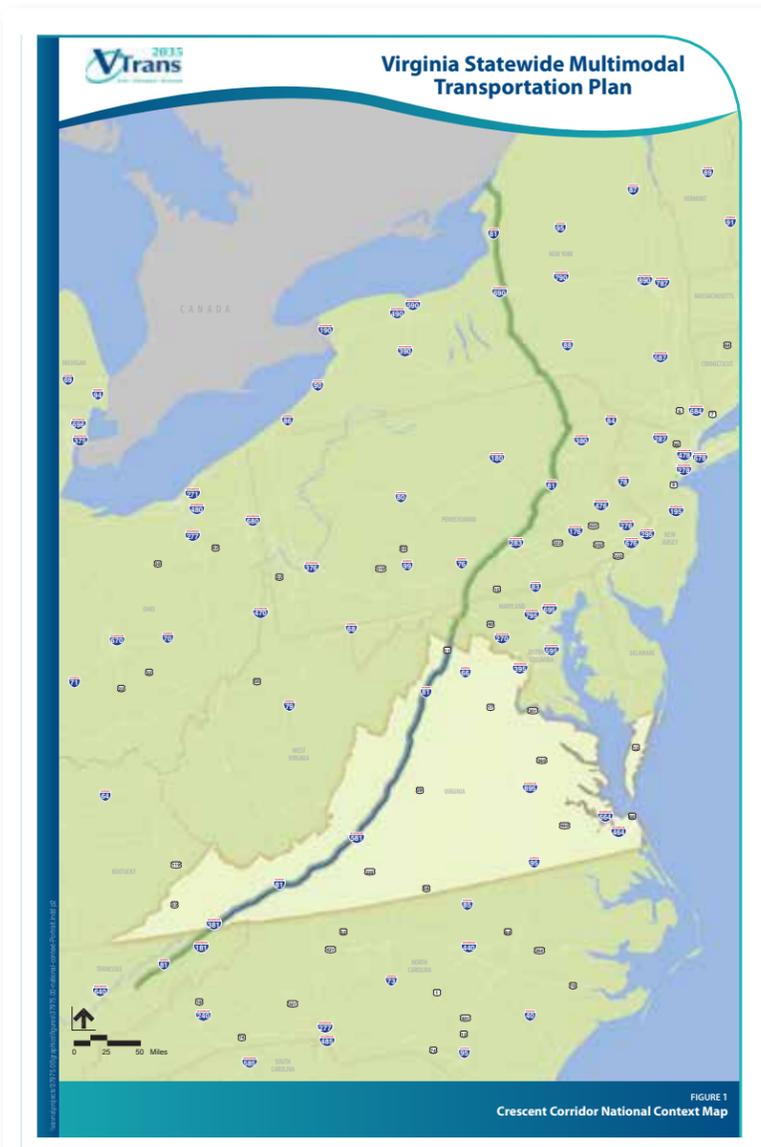
Corridors of Regional Significance: Bristol's Crescent Corridor

Several of Bristol's major roadways (I-81, I-381, and US Route 11/Lee Highway) are designated by the Commonwealth of Virginia as a part of the "Crescent Corridor" under the "Corridors of Regional Significance" program. These corridors are given elevated priority for federal and state funding as well as receiving heightened attention for planning purposes.

The Crescent Corridor is a multi-lane interstate network that stretches from Tennessee to New York, running along the Appalachian Mountains within southwest Virginia. I-81 is a major trucking and freight corridor (one of the top eight truck routes in the U.S.) both regionally and nationally. It is also an important passenger link between the urban centers of Winchester, Harrisonburg, Staunton, Roanoke, Blacksburg, and Bristol.

No existing portion of the Crescent Corridor within Bristol is deemed "over-capacity" by the Virginia Department of Transportation (VDOT). However, VDOT estimates that heightened congestion during peak usage may increase travel times along the corridor. For example, in 2035, a road trip from Bristol to Blacksburg may increase by 36% over the current timing. VDOT has issued several strategies that can help keep the Crescent Corridor competitive for personal, freight, and tourist travel, including:

- Expand freight rail service and add capacity to allow for passenger rail service;
- Support expanded freight capacity by expanding intermodal facilities;
- Increase the highway capacity of I-81 in strategic locations by improving interchanges, construction of new interchanges at strategic locations, and/or by road widening;
- Improve transit in rural areas by expanding fixed-route services and offering increased demand response services for the elderly and disabled;
- Improve air passenger service by increasing commercial air service where market forces allow; and
- Implement ITS to increase system efficiency and safety.



Highway/Interstate Directional Signage

Many federal highways and state routes converge within Bristol, including Route 11, Route 19, Route 421, and I-81. Signage for these routes, however, can be extremely confusing for motorists, often listing several different routes. The City should work with VDOT to simplify existing directional signage to ensure efficient and convenient traffic movement throughout the city.



Wayfinding Signage

Wayfinding signs effectively direct motorists, cyclists, and pedestrians to points of interest throughout a given area. The City already has some wayfinding signage within the core of the city, however, it is not of a consistent design or scheme, and appears uncoordinated as some signs only contain one destination. The City should install wayfinding signage throughout Bristol that can direct visitors to destinations such as The Falls, Downtown Bristol, Clear Creek Golf Course, Birthplace of Country Music Museum, Bristol Pirates, and more. The size and scale of the signs will vary depending on the scale of the environment and the speed of travel, with smaller pedestrian-oriented signage in Downtown and larger auto-oriented signage in corridor areas.



Downtown-The Falls Connector

The Falls and Downtown Bristol are arguably the community's two most significant destinations. However, at present there is no clearly marked route or "straight shot" between the two activity hubs. The two areas feel "disconnected" from one another when they should be mutually reinforcing.

From The Falls to Downtown, most logical connection would be Lee Highway linked to Martin Luther King, Jr. Boulevard. The City should designate, and reinforce with appropriate marketing and infrastructure (e.g. signage, streetscaping, etc.), Martin Luther King, Jr. Boulevard as the connecting link to Downtown from Lee Highway and The Falls. Efforts should be made to beautify the corridor to ensure an attractive gateway into Downtown Bristol from I-81.

Capital Projects – Roadways

Many capital projects have been identified by the Commonwealth of Virginia, Bristol Metropolitan Planning Organization (MPO), and the City of Bristol. They are detailed in the accompanying table with cost estimates provided by each aforementioned source. The City should continue to identify and support roadway projects that enhance local circulation as well as budget for on-going maintenance and repairs of City owned streets and bridges as part of a Capital Improvement Plan

Desired Roadway Capital Projects

Location	Project	Cost	Project & Cost Source
Short Range Projects.			
a	Lee Highway from Alexis Drive to Old Dominion Road; Clear Creek Road at shopping center signal; Old Airport Road from Lee Highway to Interstate 81 Exit 7 interchange	Interconnect Lee Highway traffic signals with those on Clear Creek Road and Old Airport Road	\$864,000 Bristol Urban Area Long-Range Transportation Plan Year 2035
b	Lee Highway from Kerin Drive (north end of existing five-lane section) to northern corporate limits	Replace existing three-lane and four-lane undivided with four-lane with turn lanes as needed; replace Lee Highway bridge over Goose Creek; replace Bonham Road bridge over Beaver Creek with wide bridge (six lanes or more); extend Bonham Road and/Travelite Drive to shopping center; adjust traffic signals accordingly	\$11,146,000 Bristol Urban Area Long-Range Transportation Plan Year 2035
c	Bonham Road from Lee Highway to Old Airport Road, northern intersection	Extend to five-lane north of Interstate 81 and four-lane south of Interstate 81; replace Bonham Road bridge over Beaver Creek with wider bridge (six lanes or more)	\$5,443,000 Bristol Urban Area Long-Range Transportation Plan Year 2035
Long Range Projects.			
d	E Valley Drive from Lee Highway to Kings Mill Pike	Replace two-lane roadway to four-lane; replace railroad overpass and widen Beaver Creek bridge; adjust traffic signals accordingly	\$8,700,000 Bristol Urban Area Long-Range Transportation Plan Year 2035
e	Kings Mill Pike from E Valley Drive to East corporate limits	Replace two-lane roadway with four- or five-lane roadway with improved alignment; adjust traffic signals accordingly	\$20,229,000 Bristol Urban Area Long-Range Transportation Plan Year 2035
f	Lee Highway from Euclid Ave/Euclid Ave Ext to Overhill Road/Wendover Drive (south end of existing 5-lane section)	Replace three-lane roadway with five-lane roadway	\$6,179,000 Bristol Urban Area Long-Range Transportation Plan Year 2035
g	Lee Highway intersection west of Old Airport Road/Clear Creek Road; Old Airport Road from Lee Highway to Exit 7 ramps (southbound); Linden Drive at Old Airport Road and at new connector to Lee Highway	Install median on Old Airport Road to prevent all left turns; connect Linden Drive to Lee Highway west of Clear Creek Road/Old Airport Road; Modify commercial access points along Old Airport Road accordingly	\$5,720,000 Bristol Urban Area Long-Range Transportation Plan Year 2035
h	Old Abingdon Highway at railroad overpass	Replace narrow passage under railroad with new passage	\$1,281,000 Bristol Urban Area Long-Range Transportation Plan Year 2035
i	Old Airport Road from Kings Mill Pike to Bonham Road, southern intersection	Replace two-lane roadway with either four- or five-lane roadway	\$20,554,000 Bristol Urban Area Long-Range Transportation Plan Year 2035
j	Intersection of Moore Street and MLK Boulevard	Construct a five-point roundabout including pedestrian amenities and landscaping	\$500,000 VDOT Six-Year Improvement Program



Lee Highway – The Falls

As subsequent phasing of The Falls completes and spin-off development occurs over the next ten years, it is critical that transportation infrastructure continue to be upgraded to meet traffic capacity as well as ensure safe and efficient movement. A critical component of such programming is the need to widen Lee Highway between Blevins Boulevard/Cabela Drive eastward to Travalite Drive/Alexis Drive as well as install additional traffic lights.

Air

The City, in conjunction with Bristol, TN; Johnson City, TN; Washington County, VA; and Sullivan County, TN, jointly govern the Tri-Cities Regional Airport (TRI) located in Sullivan County, TN. It is located roughly 15 miles southwest of Bristol, VA and supports commercial, charter, and cargo flights. Carriers include Allegiant, Delta, and U.S. Airways. It is also a federal customs port, allowing an international point of entry and departure for goods and merchandise. The City should continue to support airport operations, leverage its proximity for tourism purposes, and actively market it to new industrial businesses

Public Transit

The greater Bristol area is served by the Bristol Tennessee Transit (BTT) and Bristol Virginia Transit Systems (BVT). Collectively, these two systems currently offer seven fixed-route bus lines, which operate during weekdays. All buses originate from the Downtown Transfer Center, the 800 block of State Street next to the farmers' market on the Tennessee side, as a base of arrival and departure.

As of March 2016, three of the routes provide service within Bristol, VA, covering more than 400 miles a day:

- **East Bristol/East Ridge Route**, with service to Kingtown and industrial users along Bonham Road, among others.
- **Exit 7/Wal-Mart Route**, with service to Super-WalMart and the I-81 exits 5 and 7 commercial areas, among others.

- **Mall Route**, with service to Food City and the Bristol Mall, among others.

During the Comprehensive Plan planning process, the City also developed a new Transit Development Plan (TDP). The new TDP aims to update the City's public transit and align its services with both present and future conditions, taking into account growth along the Lee Highway corridor between I-18 Exits 5 and 7. Specifically, it recommends renaming and streamlining the three existing routes to reduce the number of stops and distance traveled, as well as add an additional route that can better service commercial areas in the north and northeastern part of the community. Both existing and proposed public transportation routes are depicted on the accompanying map. Additionally, the TDP also evaluates the addition of Saturday service, which is currently not offered.

The Comprehensive Plan fully supports the Transit Development Plan, and the City should begin to implement its recommendations. Specifically, the City should:

- Provide transit service connections between residential areas and commercial areas with jobs, education, shopping and medical services.
- Provide easily identifiable stop locations along routes and passenger shelters when warranted.
- Actively market transit services as a travel option within the City of Bristol, VA.
- Explore potential demand for expanding transit service to other cities in the region.

- Maintain a systemwide fare box recovery ratio that meets or exceeds standards identified in the Transit Development Plan.
- Achieve systemwide fixed-route ridership levels that meet or exceed standards identified in the Transit Development Plan.
- Ensure that transit service operators maintain an accident rate of less than the standard identified in the Transit Development Plan.
- Ensure that an adequate fleet of vehicles is maintained for the fixed-route and demand-responsive services.
- Identify the need for replacement vehicles based on industry standards for defined useful life of vehicles.

- Provide transit services that are accessible to all population groups within the City of Bristol, Virginia.
- Ensure that transit stops are well-served by pedestrian infrastructure, including crosswalks, sidewalks, benches, and shelters, when warranted.
- Continue to update transit routes with significant alterations in land use and provide service to any major new developments or redevelopments.



Long-Term Transit Considerations

Over the long-term, possible expansion opportunities for the BVT and BTT include:

- Adding a transit stop at Sugar Hollow Park.
- Establishing inter-community service throughout the Tri Cities region.
- Developing tourism related transit shuttles between hotels near I-81 Exits 5 & 7 and Downtown Bristol, or between Bristol, VA and the Bristol Motor Speedway.

Freight & Passenger Rail

A Norfolk Southern rail line threads through the City allowing for the interstate movement of goods and raw materials. The main line enters Bristol through the northeastern part of the city from Roanoke, crossing Lee Highway, I-81, Columbia Road, Mary Street, Old Abingdon Highway, Valley Drive, and State Street. All are at separate grades from the roadway except for State Street. A branch line extends to the west and northwest, crossing several roadways at grade, including through the northern part of Downtown along Scott Street, as well as Commonwealth Ave. and Euclid Ave. Spurs provide direct access for industrial employers, although only two are in use.

While rail is a benefit to the City's economy and economic development efforts, at-grade rail crossings can impact efficient flow of traffic throughout the City and where no crossings exist, the railroads can create barriers, sectioning off areas of the City. At present, the volume of train traffic on the at-grade rail crossings (along the branch line) does not merit the significant engineering, construction, and maintenance cost of grade separation. The City should continue to monitor traffic conditions within the City should conditions change, and work with Norfolk Southern to ensure rail crossings are safe, properly maintained, or improved whenever necessary.

Amtrak Extension

Bristol is not currently serviced by passenger rail. The Commonwealth of Virginia has proposed to extend existing Amtrak service westward through Roanoke and Lynchburg to link directly to Bristol. The City should continue to actively work with Commonwealth officials, including VDOT, to extend the line and provide passenger rail service to the community. The recently-renovated historic Bristol Train Station would be a fantastic "first impression" for visitors to Bristol via Amtrak.

Bike & Pedestrian Connectivity

(Note: Some information in this section is also included in **Chapter 9: Parks, Open Spaces, & Environmental Features Plan**).

Existing Infrastructure Sidewalks

The quantity and quality of the sidewalk network varies widely within Bristol, with pedestrian infrastructure mostly clustered in pockets found within Downtown, core residential areas, and neighborhoods around schools. Most roads within Downtown and nearby neighborhoods contain sidewalks and some level of pedestrian crossings. Downtown is compact and walkable, with zebra striping at major intersections and pedestrian amenities such as benches and trash receptacles.

The sidewalk network along major corridors is often spotty, with gaps in the network, narrow sidewalks, or a lack of signaling and striping at intersections. For example, while Gate City Highway and Euclid Avenue have a pretty consistent sidewalk network, stretches of Lee Highway do not have any sidewalks.

Areas of the City that were developed in a suburban fashion typically lack sidewalks and basic pedestrian amenities. This includes both along local streets within neighborhoods as well as along minor arterials and collectors such as Old Airport Road and King Mill Pike.

The City has recently used federal grants to invest in pedestrian improvements, such as adding curb cuts and sidewalks along Commonwealth Avenue, State Street, Hillside Avenue, and Euclid Avenue. New commercial developments often include sidewalks; however, when developed in the midst of older areas without sidewalks, they can be "sidewalks to nowhere."

Existing Trails

Bristol contains two multi-purpose trails: (1) a small two-block trail along Beaver Creek between Moore Street and Martin Luther King, Jr. Boulevard and (2) the Sugar Hollow Park trail, comprised of several small nature trails ranging from 950 feet to 4,300 feet in length.

Bristol, VA also sits within the midst of several existing regional trails spanning Southwest Virginia and Northeast Tennessee. These include:

- **Virginia Creeper Trail**, a 34 mile trail running from Abingdon, VA through Damascus, VA and ending at the VA/NC state line in Whitetop, VA. It is open year round to hiking, mountain biking, and horseback riding.





- **US Bicycle Route 76 Trail**, a cross-country multi-purpose trail that originates in Kansas and ends in Virginia.
- **Cherokee National Forest**, which includes over 600 miles of trails throughout several states including nearly 150 miles of the scenic Appalachian Trail which extends almost 2,200 miles from Maine to Georgia.
- **Wes Davis Greenway**, a 2800-foot trail built along a former rail bed in Bristol, TN.
- **Steele Creek Park** includes several trails in Bristol, TN.

Connectivity Program

The City should review the pedestrian system to establish a phased Connectivity Plan & Program that identifies improvements needed to connect disparate elements of the existing network. A comprehensive network could be comprised of multiple types of pedestrian infrastructure, including sidewalks, dedicated off-road trails, on-road shared roadway trails, on-road shoulder trails, informal pathways, and more. The program should aim to comprehensively connect residents to park and recreational facilities, community facilities, and important destinations within Bristol. This program should be long-term, providing an action plan with projects and improvements prioritized based on ease of completion, costs, benefits to residents, and other prospective impacts. Opportunities to plug into the regional trail network should also continue to be evaluated.

One of the greater challenges for improved connectivity will be significant physical barriers that challenge mobility within the community. Examples of barriers include grade changes, Beaver Creek, local railroad tracks, and high traffic roadways. I-81 is a key example which blocks pedestrian and bicycle access to Sugar Hollow Park for residents who live south of the interstate. As part of the connectivity program, the City should look to minimize the impact of these barriers through pathways, trails, intersection crossings, and other projects. As a longer-term solution, the City should analyze the feasibility of larger projects, such as pedestrian and bicycle bridges and tunnels, which can transcend physical barriers.

Connecting Downtown to Sugar Hollow Park

Downtown Bristol and Sugar Hollow Park are two of Bristol's most important assets, but are not currently linked together with pedestrian infrastructure. It is recommended that the City develop a Beaver Creek Trail that would connect Downtown Bristol with Sugar Hollow Park.

The signed trail would likely be comprised of integrated sidewalks, greenways, off-street trails, and pathways, depending on the development program. Along some stretches, the trail would likely follow the flow of Beaver Creek; where this is not possible, the trail may route along nearby sidewalks, paths, or streets.

More detailed information is provided in **Chapter 9: Parks, Open Spaces, and Environmental Features**.

Lee Highway Shared Use Path

The City is in the process of developing a network of shared use paths and sidewalks along Lee Highway, Bonham Road, and Suncrest Drive (terminating at Van Pelt School). It is recommended that the City construct sidewalk along Lee Highway from Martin Luther King, Jr. Boulevard to just south of Exit 5 (at Tru-Point Bank).

New Developments

The City should require sidewalks in all new developments in areas that generate foot traffic, such as along key corridors, in Downtown, within large planned developments, and subdivisions.

MPO Proposed Trail Network

The Bristol MPO proposed a comprehensive trail network for the City. As part of the Connectivity Program, the City should continue to assess its implementable feasibility depending on available capital and grant funding. Additionally, the proposed Mendota Trail may be another trail development opportunity.

Blueways/Greenways

The City should review existing open space corridors, rail, and utility easements, and establish plans for dedicated greenways within the community. This can be accomplished either within the connectivity program or through a separate effort. The Beaver Creek and Little Creek waterways show strong potential for development as greenways, with ample room and opportunity for trails and related amenities. Development of greenways can help to protect open space and environmentally sensitive areas within the City and create safe, extended routes through the community.

An initial project could be development of the Corvette Trail & Greenway, described within **Chapter 6: Bob Morrison Boulevard Sub-Area Plan**. While small in scale, it could provide a starting point for a much larger greenway and trail network.

City of Bristol, VA

Alternative Transportation Plan

EXISTING BUS ROUTES

- Mall Route
- E Bristol / E Ridge
- Exit 7 / Walmart

PROPOSED BUS ROUTES

- Old Airport Rd
- Moore St / Highway 11
- Euclid Avenue Circulator
- Old Abingdon Highway

- Existing Trails
- Proposed Trails
- Conceptual Beaver Creek Greenway

