

# Transportation Narrative and the City of Charlottesville Master Transportation Plan

## **Background**

The city is part of a regional transportation system that also includes Albemarle County and the University of Virginia, other adjacent counties that make up the Thomas Jefferson Planning District Commissions (TJPDC), as well as the neighboring Staunton/Augusta/Waynesboro region. The City plans improvements to the regional transportation system in cooperation with neighboring communities and agencies that participate in Charlottesville Albemarle Metropolitan Planning Organization (CAMPO).

The location of the City of Charlottesville within the region contributes significantly to some of the transportation challenges faced by the city. The city (encompassing approximately 10 square miles) is entirely surrounded by Albemarle County. As the seat of both the City of Charlottesville and Albemarle County governments, and home to the University of Virginia, Charlottesville serves as an economic, cultural, and educational destination in the region. Yet, as the region and its population grows, development is pushed out to the surrounding communities where housing and land is more affordable creating traffic congestion in the city and throughout the region as people travel to “downtown” and other destinations. Because of the built-out nature of the city, constructing new roadways or widening existing roadways are either not viable, palatable, or affordable.

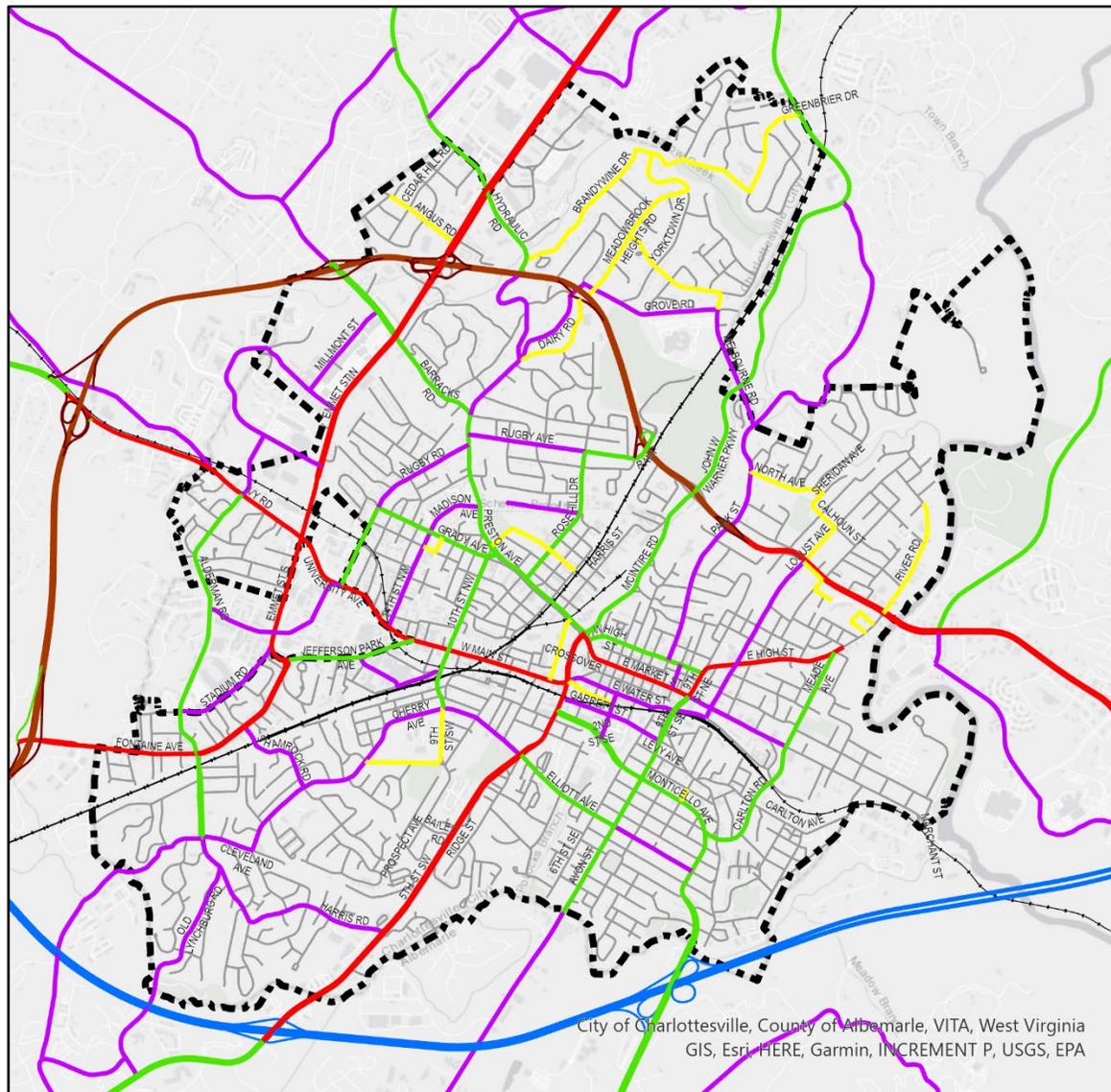
Similarly, the transportation network and land use beyond the city limits have a significant impact on travel through the city. The limited regional transportation facilities surrounding the city places a significant burden on the city’s transportation network to connect origins and destinations wholly outside of the city limits. The city is also located on two statewide corridors of significance, Route 29 as well as Interstate Route 64, which serves the city and the region while introducing additional traffic volume and challenges.

## **Existing Transportation System**

### ***Roadway Classification***

The functional classification of a road indicates the character of service which it is intended to provide. It takes traffic flow qualities and volume into account and also reflects the predominate use of the road. This creates a hierarchy of roads in a community that is a progression from low to more intensive uses. The functional roadway classification system for Charlottesville is shown in Figure 1.

Figure 1 - Charlottesville Road Classification Map



-  Interstate
-  Other Freeway or Expressway
-  Other Principal Arterial
-  Minor Arterial
-  Major Collector
-  Minor Collector
-  Interstate Ramp
-  Other Freeway or Expressway Ramp
-  Other Principal Arterial Ramp
-  Minor Arterial Ramp
-  Charlottesville City Boundary

0 0.25 0.5 1 1.5 2 Miles



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Within Charlottesville, four functional classification systems exist: principal arterials, minor arterials, collectors, and local streets. The principal arterial street system serves the major activity centers and carries the highest traffic volumes. This system carries most of the trips entering and leaving the city and those trips traveling through the city. Bus service currently operates on nearly the entire principal arterial network. This classification includes a controlled-access facility (US 250 Bypass) but is not limited to controlled-access routes. For principal arterials, service to abutting land should be subordinate to travel service.

The minor arterial street system connects and augments the principal arterial system. It accommodates trips of moderate length and distributes travel to smaller geographic areas than the principal arterial system. This system places more emphasis on land access and offers lower mobility. Bus service currently operates on most of the minor arterial network.

The collector street system provides both land access and traffic circulation within residential neighborhoods, commercial and industrial areas. This system penetrates residential neighborhoods as well as collects traffic from local streets in residential neighborhoods. Bus service currently operates on many of the collector roadways.

The local street system makes up the majority of the roadway network within the city. Its primary purpose is direct access to property and, as a result, it offers the lowest level of mobility. Service to through-traffic is deliberately discouraged on these roadways. Bus service currently operates on some of the local roadways.

## ***Bridges***

The City of Charlottesville is responsible for bridges within its boundaries, and performs annual inspections on bridges and culverts. Every structure is inspected on at least a biannual basis. As a bridge condition deteriorates, inspections are performed on an annual basis with load ratings performed to ensure the safety for the traveling public.

Through the inspection program, repair and rehabilitation reports are generated to address deficiencies and maintain the integrity of the structures. Bridges are also identified through inspections for future full replacement and added to the LRTP.

## ***Public Transit***

### **Charlottesville Area Transit (CAT)**

Public transportation in Charlottesville and the urban areas of Albemarle County is provided by Charlottesville Area Transit (CAT). CAT operates seven days a week with limited service on Sundays. CAT provides public bus service to the greater Charlottesville area. CAT offers 14 daytime and four nighttime routes, serving an average of 7,500 riders daily during the workweek. The routes with the highest ridership are the Free Trolley, running from Downtown to UVA (33% of trips); Route 7, running

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from Downtown to Fashion Square Mall (25% of trips); and Route 5, running from Barracks Road to Wal-Mart (10% of trips). Additional ridership information can be found on the RTP webpage (Monthly Transit Ridership Reports section). CAT serves a variety of groups within the Charlottesville-Albemarle area and offers several fare types to meet riders' needs. Free ridership is offered to children age five and under; youth ages six to eighteen (summer only); and UVA students, faculty, and staff. Reduced fares are offered to senior citizens and persons with disabilities.

The following summarizes CAT's current transit assets:

- Seventeen (17) 35-foot heavy duty clean diesel Transit Coaches
- Four (4) 35-foot clean diesel replica Trolley buses
- Ten (10) 29-foot diesel electric hybrid heavy duty Transit Coaches
- One (1) 29-foot heavy duty clean diesel Transit Coach
- One (1) 26-foot body-on-chassis clean diesel transit buses
- Three (3) 26-foot body-on chassis gasoline transit bus

The average age of the transit fleet is 9.37 years. The average mileage of the fleet is 294,297 miles. The fleet is in good condition. All fleet buses are equipped with electronic fare collection equipment capable of accepting cash and smart media. All buses are equipped with voice annunciators, CAD/AVL technology, automatic passenger counter, and on board security video monitoring systems.

CAT is currently evaluating all electric (EV) technology and compressed natural gas (CNG) fuel alternatives for its future fleet purchases.

### University Transit Service

The University of Virginia operates their own bus service called the University Transit Service (UTS). UTS was established in 1972 and is dedicated to providing safe and reliable transportation and charter services to all students, employees, and visitors of the University of Virginia. Currently, UTS runs nine fixed routes and transports more than three million passengers annually. UTS routes circulate both on city streets and across the University's grounds during the school year. There are also numerous stops that function as transfer points to CAT routes. When school is out for holidays and during summer break, a reduced level of service is offered. University students and employees can ride the UTS buses for free. The general public can only board a UTS bus with a transfer from a CAT bus.

### Paratransit

JAUNT, Inc. is a regional public transportation system providing service to Charlottesville, Albemarle, Louisa, Nelson, Buckingham, and Fluvanna. The 85-vehicle fleet carries the general public, commuters, agency clients, the elderly, and people with disabilities throughout the five-county area. All of its vehicles are lift-equipped. JAUNT

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provides over 300,000 trips each year for people going to work, school, human service programs, medical visits, and shopping. JAUNT is owned by the local governments that it serves and uses federal, state, and local funding to supplement fares and agency payments.

In the City of Charlottesville, JAUNT provides several types of service including:

- Demand-response transportation for which passengers call to make a trip reservation at least one day before they want to travel. Anyone may ride this curb service, but people who are certified as having a disability by Charlottesville Area Transit (CAT) pay a much lower fare;
- Commuter routes from outlying areas into the city, including the Counties of Nelson, Fluvanna, Louisa, Buckingham, and Albemarle; and
- Transportation for social services agency-sponsored riders.

### Inter-Regional Bus Service

Greyhound Bus Lines offers inter-city bus service from a bus stop on Ridge Street to destinations including Richmond, Lynchburg, Roanoke, Fredericksburg, and Washington DC, with connections available to other major metropolitan areas. Megabus also offers inter-city bus service, with additional bus service expected to be added.

### Private Shuttle Service

Passengers with booked reservations at area hotels can take advantage of private shuttle services to and from the Charlottesville-Albemarle Airport. In addition, passengers can reserve a seat in one of Van-On-the-Go shuttles. A Goff Bus currently provides this door-to-door shuttle service to and from the airport. Door-to-door shuttle service is also available to all airports in Virginia, the District of Columbia, and the Baltimore-Washington Thurgood Marshall International Airport in Maryland. Other private shuttle services include van, mini-bus, motor coach, limousine, and executive sedan services for group tours around the area's major attractions and for private rental/use.

### Rail Transportation

Dating back to the 1800s, Charlottesville has been connected to the surrounding region by railroad. Currently, there are three rail service providers that have tracks through Charlottesville: the CSX Railroad System operated by the Buckingham Branch Railroad, AMTRAK and the Norfolk-Southern Corporation. AMTRAK, however, is the only carrier that offers passenger service, whereas CSX and Norfolk-Southern only move freight through Charlottesville.

AMTRAK presently offers 3 daily trains through Charlottesville. The Crescent line, operating between New York City's Penn Station and New Orleans, Louisiana, links Charlottesville to many destinations along the east coast, including Philadelphia, Baltimore, Washington, D.C., Atlanta, and Birmingham, Alabama. The Cardinal line

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provides service to destinations west of Washington, D.C. - such as Charleston, South Carolina, West Virginia, and Cincinnati, Ohio - ultimately terminating in Chicago.

In 2009, Amtrak began providing the third daily train on the Northeast Regional line connecting Charlottesville to Lynchburg and Boston along the I-81/Route 29 corridor. The Lynchburg train exceeded both its annual ridership and annual revenue goals in its first year of operations.

The Charlottesville Amtrak station is one of the top stations in the state in terms of total ridership, and the ridership has been increasing steadily since FY11 (Rail Passengers Association 2018). An evaluation by Amtrak indicated that the current station does not have the recommended space and capacity to handle the high passenger volumes using the station.

### ***Air Transportation***

Air travel through the Charlottesville-Albemarle Airport (CHO) has witnessed steady passenger growth in recent years, prior to the COVID-19 pandemic. Opened for commercial traffic in 1955, the Charlottesville-Albemarle Airport's first commercial flight was offered by Piedmont Airlines. CHO is a non-hub, commercial service airport offering 60 daily non-stop flights to and from Charlotte, Philadelphia, New York/LaGuardia, Washington/Dulles, Cincinnati, Detroit, and Atlanta. CHO is served by Delta Connection, United Express, Northwest Airlines and US Airways Express. Since 1955, CHO has grown to include a 60,000-square foot terminal facility with modern customer amenities offering on-site rental cars, ground transportation and food service. General aviation facilities include an executive terminal offering a full-service fixed base operation, flight schools and aircraft charter firms.

The Charlottesville-Albemarle Airport's 2005 master plan anticipates 50% growth in passengers between 2003 and 2022, and recommended extending one runway 1200 feet to the north to accommodate the additional air traffic. Other plans discussed in the master plan include the reconstruction of ticketing areas and circulation areas allowing better mobility for travelers and airport employees. The master plan also discusses expanding baggage facilities and adding two departure gates to accommodate increased use.

### ***Pedestrian Network***

Nearly every trip includes some walking, whether walking to the bus, to a vehicle in a parking lot, or traveling to the destination on foot. The City of Charlottesville, a Gold-Level Walk Friendly Community, currently has more than 175 miles of sidewalk, 20+ miles of multi-use and soft surface trails and 825 marked crosswalks. There are pedestrian signals and crosswalks at the vast majority of the City's 74 signalized intersections, and marked crosswalks at many other stop-controlled and mid-block locations.

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The City assessed all of its curb ramps in the summer of 2012, and used the findings to inform the 2013 ADA Transition Plan. The ADA Transition Plan includes priority locations for the construction of new curb ramps where none currently exist as well as locations where reconstruction is required to redress existing curb ramps and adjacent sidewalks to meet ADA standards. The Transition Plan also addresses the need for additional accommodations at intersections including accessible push buttons, audible pedestrian signals and adequate crossing time.

Charlottesville's network of sidewalks is most robust in the center of the city. Here, the streets are laid out in a traditional grid pattern and the mix of land uses makes walking from home to work and other destinations not only possible, but often more convenient than driving. There are fewer sidewalks and mixed-use areas in the neighborhoods further from the center. The city's pedestrian network, while extensive, is missing links or extensions that would make the network more effective for everyday transportation. Many sidewalks in Charlottesville include obstructions such as utility poles, signposts, and parking meters. Many sidewalks lack buffers, which are particularly important for pedestrian comfort on streets with higher speed traffic.

### ***Bicycle Facilities***

The city is recognized as a Silver Level Bicycle Friendly Community by the League of American Bicyclists in part due to its network of bicycle facilities. The city has more than 30 miles of on-road bicycle facilities and more than 10 miles of paved trails. In addition, the city has a network of low-volume, low speed local streets that serve people bicycling. These facilities are an excellent step towards building a comprehensive bicycling network in the City; however, the existing facilities are not always connected and do not provide adequate separation from vehicle traffic to appeal to all skill levels. On higher volume roadways and/or higher speed roadways, protected bike lanes and shared use paths could dramatically increase safety and comfort for people riding bicycles.

### ***Micro-mobility Devices***

In 2018, the city established a permit program to allow electric scooters and bikes to operate in the City. Currently, the City has approved a permit for Veo to operate up to 250 shared electric bikes and scooters. The program allows multiple operators to apply for a permit with a cap of 350 devices allowed across all vendors.

### ***Transportation Network Companies***

The city is serviced by two Transportation Network companies (TNCs) / Mobility Service Providers (MSP), Uber and Lyft. These companies rely on online enabled platforms to connect users and drivers.

### **Parking**

## Municipal Parking

The City currently operates two parking garages serving the downtown area as well as several surface parking lots. The two garages (Market Street and Water Street) provide approximately 1,500 publicly available paid parking spaces. Currently the first hour is free for hourly parkers and the rate is \$2.00 per hour thereafter. Monthly parking is also available and starts at a rate of \$135 a month, per space. Currently there is a waiting list for monthly parking at the Market Street Garage.

The City also manages parking at several surface lots. Monthly paid parking is provided in a 63-space lot at 701 East Market Street and a 12-space lot at 411 East High Street. There are waiting lists for each of these lots. The City also operates a 100 space parking lot at 2<sup>nd</sup> Street, SW. All the spaces on this lot are available on a first-come, first-served basis at \$1.00 per hour. Additionally, the City operates a 45 space surface lot at 650 West Main Street. These are currently available at no charge.

There are approximately 1,000 on-street parking spaces (inclusive of loading zones and ADA spaces) in the downtown area. On-street parking is currently free but there are varying time restrictions with most limited to 2 hours.

On the University Corner and along West Main Street area there are approximately 250 on-street parking spaces. On-street parking is currently free but there are varying time restrictions with most limited to 2 hours.

In 2017, following the recommendation of the City's parking consultant, the City initiated a six month pilot program to install paid parking on 100 of the most in-demand time restricted on-street parking spaces closest to the Downtown Mall. The objective of the paid on-street parking pilot program was to reduce traffic congestion associated with vehicles circling to find the free parking, to improve turnover and thus ultimately improve the utility of the limited existing spaces, and to reduce on-street parking demand by charging on-street and offering the first hour of parking free in the nearby garages.

The pilot was terminated after only 60 days due to the impact of the civil unrest from Unite the Right Rally in August 2017 and the resulting economic downturn across the City. While the City Council recommended revisiting the issue after a year, that ultimately did not occur.

While the municipal parking system is currently functioning and operational, there are several parking related policy issues that need attention. These include:

- Reconsideration of metered on-street parking in high demand areas.
- Exploration of improved enforcement mechanisms for Downtown parking spaces.
- The role the City expects to play in the development of future off-street public parking.

The City's municipal parking program is managed by the Parking Division within the Office of Economic Development.

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## Permit Parking

By ordinance, the City has “zone parking” in designated areas, which reserves on-street parking exclusively for neighborhood property owners, tenants, and guests. To designate a street for zone parking, it must be studied and verified that 25 percent or more of cars parked on the street are nonresidents. Additionally, it is incumbent upon the residents to submit a petition of at least 50 percent of the residents to create a restricted parking zone. Both residential and guest permits cost \$25 each; certain households, upon survey by the city traffic engineer, may be eligible for up to 2 no-charge permits if they are determined to not have off-street parking spaces.

## ***Travel Demand Management***

The City does not currently have a Travel Demand Management (TDM) program. However, two programs that are currently implemented for regional TDM in the MPO region include RideShare and Park & Ride Lots.

## RideShare

RideShare is a program housed within the TJPDC, in cooperation with the Central Shenandoah Planning District Commission (CSPDC), working to reduce traffic congestion and increase mobility throughout Central Virginia and the Central Shenandoah Valley. Services include free carpool matching, vanpool coordination, and a Guaranteed Ride Home program to provide free rides home in an emergency. RideShare also works with employers to develop and implement traffic reduction programs and advertises the region’s Park and Ride lots. There were 521 members in the RideShare carpool matching program and 183 registered users in the Guaranteed Ride Home program as of October 2018 (RideShare).

## Park & Ride Lots

There are twenty-six Park & Ride lots within the RideShare service area. Some of these lots are formal facilities managed by VDOT and others are informal lots made available to commuters by businesses or organizations that own the property. Quarterly inventories of the lots are conducted by RideShare. The most active lot is in Waynesboro, with an average of 65 cars each weekday (AUG2). Based on interviews conducted at the lot, and data collected from RideShare, the majority of members parking at this lot are commuting to Charlottesville. The second most active lot is at Zion Crossroads (LOU1), with an average of 40 cars each weekday. Data on commuting destinations was not available for this lot, but Charlottesville and Richmond are likely the primary destinations.

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## **City of Charlottesville Master Transportation Plan**

The current City of Charlottesville Master Transportation Plan is made up of several individual planning efforts that, together, identify a vision for the future of transportation in Charlottesville.

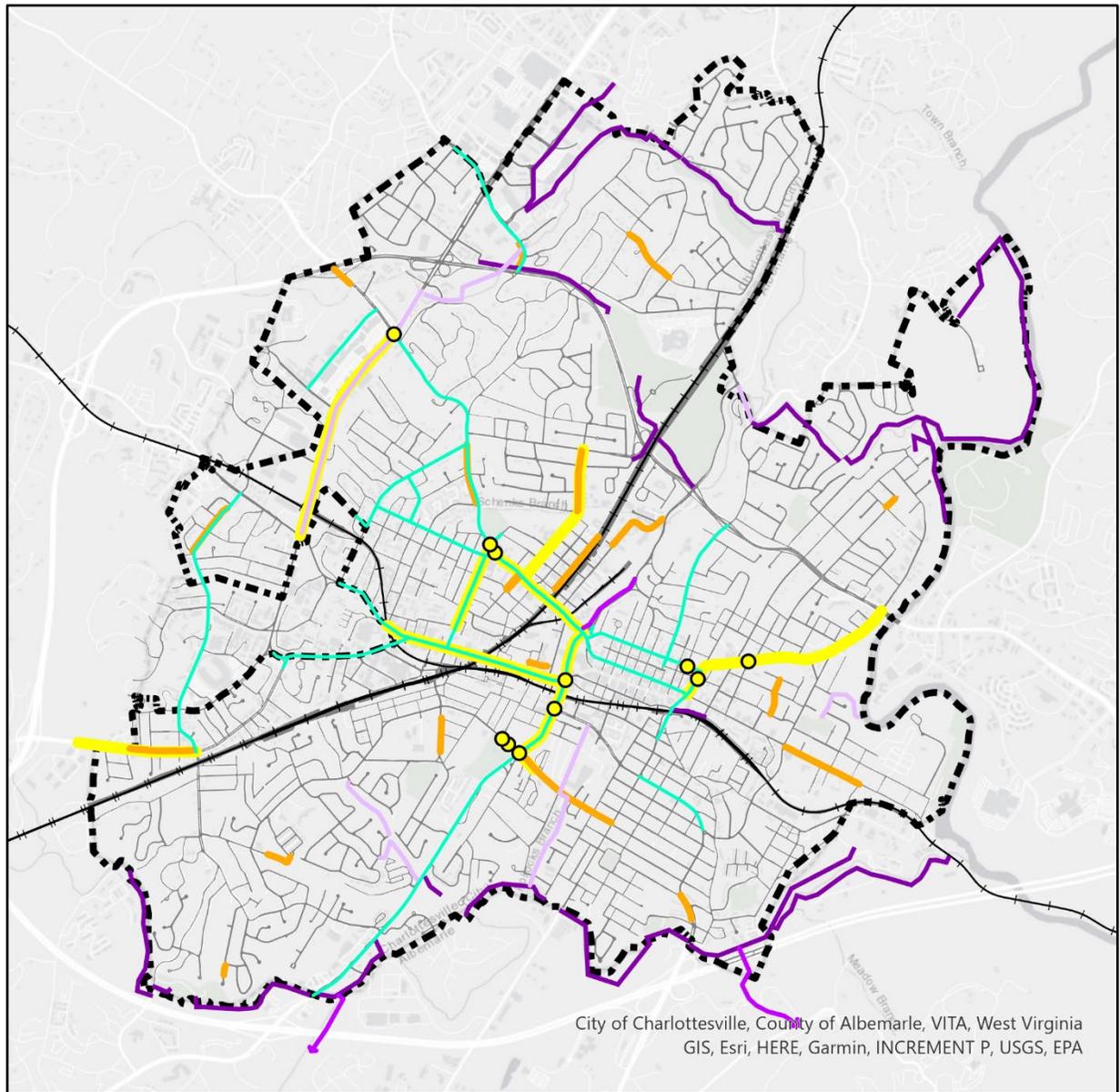
Plans that comprise the Master Transportation Plan include the 2016 [Streets that Work Plan](#), 2015 [Bicycle and Pedestrian Master Plan](#), and the [CAT Transit Development Plan](#), as well as the [ADA Transition Plan](#) and plans focused on smaller areas, such as [Safe Routes to School plans](#), the [5<sup>th</sup>/Ridge/McIntire Corridor Plan](#), [Cherry Avenue Small Area Plan](#), and the [Hydraulic Small Area Plan](#).

### ***Priority Projects***

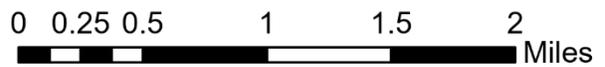
The following map (Figure 2) displays priority projects from the Streets that Work Plan and Bicycle and Pedestrian Master Plan. The subsequent pages contain a full list of these priority projects. More information about specific projects can be found in the documents linked above.

These projects should be prioritized for implementation in the next 10 years. In addition to implementing these priority projects, development and redevelopment projects that include new streets must comply with design concepts outlined in the Streets that Work Plan and relevant Small Area Plans. All improvements made to public streets must be compliant with and support the plans listed above.

Figure 2 - Master Transportation Plan – Priority Projects



-  Charlottesville City Boundary
-  Streets That Work - Priority Corridors
-  Streets That Work - Priority Intersections
-  Bicycle Pedestrian Master Plan - Priority Bikeways
-  Bicycle Pedestrian Master Plan - Priority Sidewalk Projects
-  Bicycle Pedestrian Master Plan - High Priority Shared Paths
-  Bicycle Pedestrian Master Plan - Medium Priority Shared Paths
-  Bicycle Pedestrian Master Plan - Lower Priority Shared Paths



<b>Bicycle and Pedestrian Master Plan – Priority Sidewalk Projects by Neighborhood</b>						
<b>N'hood</b>	<b>Street</b>	<b>Sidewalk Location</b>	<b>Start</b>	<b>End</b>	<b>Cost Estimate</b>	<b>Status Update</b>
Barracks Road	Barracks Road	SW	Existing	250/29 Bypass	\$116,600	Delayed due to COVID.
Venable	Preston Ave	South	Rugby Rd	Madison Ave	\$176,000	Topographic survey completed 2021.
Lewis Mountain	Alderman Road	NW	Kent Rd	Morris Rd	\$277,200	Topographic survey completed.
The Meadows	Hydraulic Road	West	Dominion Power	250 Bypass	\$115,500	Small Area Plan completed. Smart Scale grant submitted. Not awarded.
Barracks/Rugby	Rose Hill Drive	West	Rugby Ave	Madison Ave	\$323,400	Delayed due to COVID. Design 95%. ROW acquisition near complete. Anticipate advertisement for construction in 2021.
Greenbrier	Kenwood Lane	South	Yorktown Dr	M'brook Hgts	\$203,500	Field review completed. Need survey.
Locust Grove	St. Clair Avenue	NW	Peartree Ln	Smith St	\$61,600	Delayed due to COVID.
Rose Hill	Albemarle Street	Both	Dale Ave	Rivanna Ave	\$286,000	Field review completed. Need survey.
10th & Page	9th Street NW	Both	West St	Preston Ave	\$99,000	Field review completed. Need survey.
Starr Hill	Commerce St	South	6th St	Existing	\$92,400	Field Review completed. Need survey.
North Downtown	Harris Street	Both	Rivanna Ave	McIntire Rd	\$338,800	Delayed due to COVID. Advertised for construction 2021-22.
Martha Jefferson	12th Street NE	West	E Jefferson St	Meriwether St	\$189,200	Field review completed. Need survey.
Woolen Mills	Market Street	Both	Franklin Ave	Meade Ave	\$308,000	Field review completed. Need survey.
Belmont-Carlton	Monticello Avenue	West	Quarry Rd	Druid Ave	\$176,000	Delayed due to COVID.

<b>Bicycle and Pedestrian Master Plan – Priority Sidewalk Projects by Neighborhood</b>						
<b>N'hood</b>	<b>Street</b>	<b>Sidewalk Location</b>	<b>Start</b>	<b>End</b>	<b>Cost Estimate</b>	<b>Status Update</b>
Ridge Street	Elliott Avenue	North	Ridge St	Avon St	\$1,300,000	Delayed due to COVID. 95% Design completed. Entering ROW phase.
Fifeville	9th Street SW	East	Elm St	Existing	\$167,200	Field review completed. Need survey.
Johnson Village	Cleveland Avenue	North	Existing	Ranier Rd	\$148,500	Desktop review complete. Need field review.
Fry's Spring	Azalea Drive	Both	Existing	Harris Rd	\$59,400	Field review completed. Need survey.
Jefferson Park Avenue	Fontaine Avenue	North	Summit St	JPA	\$195,800	Design underway. Funded by Smart Scale. Anticipate construction in FY23.

<b>Bicycle and Pedestrian Master Plan – Priority Bikeway Projects</b>			
<b>Project Name and Location</b>	<b>Facility Type</b>	<b>Cost Estimate (planning level, from Bike-Ped Plan)</b>	<b>Status Update</b>
Jefferson Park Avenue – At Emmet St	Bicycle Lanes	\$1,040	Completed (2015)
West Main Street	Separated Bicycle Lanes*	\$1,172,570	Status pending.
University Avenue	Shared Roadway	\$8,620	Pavement Marking Plan completed (2019). Installation to be coordinated with repaving.
Ridge McIntire Road	Bicycle Lanes	\$20,010	Ridge St. Corridor Study (Feb. 2019). SmartScale funding awarded.
East/West High Street	Climbing Bicycle Lane	\$17,510	Pavement Marking Plan completed (2019). Installation to be coordinated with repaving.
Grady Avenue	Shared Roadway	\$11,830	Pavement Marking Plan completed (2019). Installation to be coordinated with repaving.
Jefferson Park Avenue – W Main St to Emmet St	Bicycle Lanes	\$30,220	UVA Completed Planning Study (2017). Pavement Marking Plan Completed (2018). Installation to be coordinated with repaving.

<b>Bicycle and Pedestrian Master Plan – Priority Bikeway Projects</b>			
<b>Project Name and Location</b>	<b>Facility Type</b>	<b>Cost Estimate (planning level, from Bike-Ped Plan)</b>	<b>Status Update</b>
Preston Avenue / Barracks Road	Climbing Bicycle Lane	\$47,120	Pavement Marking Plan completed. Repaving Scheduled for 2022.
Park Street	Shared Roadway	\$14,360	Completed (2016)
West Market Street	Climbing Bicycle Lane	\$18,740	Completed (2018)
Alderman Road	Shared Roadway	\$33,630	Climbing lanes installed (2015)
Preston Avenue	Separated Bicycle Lanes	\$1,168,500	Design needed.
Monticello Avenue – Avon St to Carlton Rd	Climbing Bicycle Lane	\$12,760	100% Design. Completed with repaving (2020). Gap between 6th and Avon remains.
Millmont Street	Bicycle Lanes	\$25,260	Completed (2018)
10th Street NW	Climbing Bicycle Lane	\$26,600	Limited R/W and parking removal needed. Consider signing alternate route.
Hydraulic Road	Separated Bicycle Lanes	\$1,214,250	Small Area Plan completed (2018). Smart Scale application submitted. Not funded.
9th Street NE/SE	Separated Bicycle Lanes	\$91,410	Design for Belmont Bridge/Smart Scale projects in process. Construction underway 2021.
5th Street SW	Separated Bicycle Lanes	\$478,290	Ridge St. Corridor Study (Feb. 2019) explored feasibility of separated facilities.
Rugby Road	Bicycle Lanes	\$35,370	Survey/Design Needed
Ridge Street	Bicycle Lanes	\$14,080	Ridge St. Corridor Study (Feb. 2019). Awarded in Round 4 SmartScale.

\* Physically separated bike lanes not feasible due to space constraints (per West Main Street Master Plan)

<b>Bicycle and Pedestrian Master Plan – Priority Trail/Shared Path Projects</b>			
<b>Project Location</b>	<b>Facility Type</b>	<b>Priority Level</b>	<b>Status Update</b>
250 Bypass Trail	Multi Use Path	Near-term	Phase 1 - Hydraulic to Dairy Bridge completed. McIntire railroad bridge and connection to McIntire interchange completed (2019).
Rivanna River	Multi Use Path	Near-term	Working on property acquisitions to extend further upstream. New easement and trail at VFW to improve connection to River Rd.
Moore's Creek (Upper)	Multi Use Path	Near-term	Working on property acquisitions and trail plan near Wegman's with TJPDC grant.
Meadow Creek (Pen Park)	Multi Use Path	Near-term	Developer constructed bridge in 2019, City working to build section from Pen Park to Rio Road.
Meadow Creek	Culvert Trail	Near-term	Culvert trail design under review. Working to finalize acquisition of land in 250/Hydraulic triangle.
Riverview to Pantops	Bridge over Rivanna River	Near-term	PDC working with VDOT to evaluate feasibility of connection.
Interstate 64 near Route 20	Tunnel	Midterm	Discussed possibility of planning grant with VDOT. Not funded.
Greenbrier Railroad	Tunnel	Midterm	Preliminary Engineering and exploration underway.
Emmet Street	Multi Use Path	Midterm	Design underway (Ivy to Arlington). Anticipate construction in FY22/23.
Moore's Creek (Lower)	Multi Use Path	Midterm	Update needed.
Schenk's Greenway	Multi Use Path	Midterm	Unfunded. Design needed. Coordination with RWSA project.
Melbourne Road	Multi Use Path	Midterm	Pavement Marking Plan completed (2019). Installation to be coordinated with repaving.
Darden Towe to Pen Park	Bridge over Rivanna River	Long term	Update needed.
Rock Creek	Trail	Long term	Update needed.
Lodge Creek	Trail	Long term	Update needed.
Pollock's Branch	Trail	Long term	Update needed.

<b>Streets That Work – Priority Corridors</b>			
<b>Street name</b>	<b>Extent</b>	<b>Cost Estimate (2021)</b>	<b>Status Update</b>
<b>Elliott Ave</b>	Ridge St to Burnet St	\$1.3 M	95% Design Complete. Entering Right of Way Phase in 2022.
<b>9<sup>th</sup> Street NE</b>	E Market St to E High St	\$9,574,000	Entering Right of Way Phase in 2021.
<b>Ridge McIntire Road</b>	W Main St to Preston Ave	\$1,650,800	Ridge Corridor Study (Feb 2019). Funding needed.
<b>Preston Avenue</b>	Harris St to McIntire Rd	\$5,777,800	Corridor Study to be completed once funding identified.
<b>Preston Avenue</b>	10 <sup>th</sup> St NW to Harris St	\$7,222,250	Corridor Study to be completed once funding identified.
<b>W Main St</b>	14 <sup>th</sup> St NW to Ridge McIntire Rd	\$54 M	Phase 1 funded with local CIP/Revenue Share. Phase 2 partially funded with local CIP/Revenue Share/SmartScale. Phase 3 funded with SmartScale. Phase 4 funding unidentified.
<b>E High St</b>	Lexington Ave to 9 <sup>th</sup> St NE	\$9,574,000	Entering Right of Way Phase in 2021.
<b>10<sup>th</sup> St NW</b>	Wertland St to Preston Ave	\$8,873,050	Funding needed.
<b>Ridge Street</b>	W Main St to Cherry Ave/Elliott St	\$8,738,020	Awarded in Round 4 SmartScale. Design to begin in 2025.
<b>E High St</b>	Lexington to Locust Ave	\$5.6 M	Funding needed.
<b>Emmet Streetscape Phase 1</b>	Ivy Road/ University Avenue to Arlington Boulevard	\$8,641,000	In Design Phase. Entering Right of Way in 2022.
<b>Emmet Street Multimodal Phase 2</b>	Extent: Arlington Boulevard to Barracks Road	\$20,465,490	Awarded in Round 4 SmartScale. Design to begin in 2025.
<b>Fontaine Avenue Streetscape</b>	Jefferson Park Ave/Maury Ave to City County Line	\$12,645,000	In Design Phase. Entering Right of Way in 2022.
<b>East High Streetscape Phase 2</b>	Lexington Avenue to Route 250 Bypass	\$TBD	Funding needed
<b>Rose Hill Drive Streetscape</b>	Preston Avenue to Rugby Avenue.	\$TBD	Funding needed

<b>Streets That Work – Priority Intersections</b>			
<b>Intersection</b>	<b>Issue</b>	<b>Cost Estimate (2021)</b>	<b>Status Update</b>
<b>Grady Ave &amp; Preston Ave</b>	Intersection	Major Improvements: \$7,743,498; \$187,000 (BPSP*)	Awarded in Round 4 SmartScale. Design to begin in 2025.
<b>5th St SW &amp; Elliott Ave</b>	Intersection	Major Improvements: \$6,103,034; \$220,000 (BPSP)	Awarded in Round 3 SmartScale. Design to begin in 2024.
<b>Ridge St &amp; Monticello Ave</b>	Intersection	\$176,000 (BPSP)	In Design Phase.
<b>10th St NW &amp; Preston Ave</b>	Bike/Ped Hot Spot	\$187,000 (BPSP)	Will be incorporated in Grady & Preston Ave intersection project. Design to begin in 2025.
<b>E Jefferson St and 9th St NE</b>	Bike/Ped Hot Spot	Major Improvements: \$9,574,000.	Incorporated in E High St Corridor Improvement.
<b>Cherry Ave (Mid-Block between 5th St SW and Ridge St)</b>	Intersection	Major Improvements: \$6,103,034; \$220,000 (BPSP).	Will be incorporated in 5th St. SW & Elliott intersection project. Design to begin in 2024.
<b>Ridge St &amp; W Main St</b>	Bike/Ped Hot Spot	Included as part of W. Main Streetscape (listed previously)	In Design Phase.
<b>11th St NE &amp; E High St</b>	Bike/Ped Hot Spot	\$65,000	Funding needed.
<b>Cherry Ave &amp; 5th St SW</b>	Intersection	Major Improvements: \$6,103,034; \$220,000 (BPSP).	Will be incorporated in 5th St. SW & Elliott intersection project. Design to begin in 2024.
<b>E High St &amp; 8th St NE</b>	Bike/Ped Hot Spot	\$65,000	Funding needed.
<b>Barracks Rd &amp; Emmet St</b>	Intersection	\$8,641,000	In design phase. Entering Right of Way in 2022.

\* *Bicycle and Pedestrian Safety Project (BPSP) is funded through the Highway Safety Improvement Program*

<b>Other Local and Regional Priority Projects (May not be shown in Figure 2)</b>			
<b>Name</b>	<b>Extent</b>	<b>Cost Estimate</b>	<b>Status</b>
<b>Route 29/Hydraulic Road Intersection Improvements</b>	Intersection Improvements, Pedestrian Bridge at Zan Road, Rte 29/Angus Road Intersection Improvements and Hydraulic Road/Hillsdale Drive Roundabout.	\$24,030,488.	Status – Entering Design Phase.
<b>Fifth Street Hub and Trails</b>	East side of 5 <sup>th</sup> St SW, south of Fifth St Station Pkwy.	\$9,841,290.	Awarded in Round 4 SmartScale.
<b>US 29 and Fontaine Avenue Interchange Improvements</b>	Rte 29 Ramps and Ray C. Hunt.	\$12,374,620	Entering Design Phase.
<b>District Avenue/Hydraulic Road Roundabout</b>	Hydraulic Rd. at District Ave	\$8.4 million	Seeking funding in Round 5 SmartScale.
<b>Rivanna River Bike &amp; Pedestrian Crossing</b>	Between Market Street and County.	\$11.3-15.3 million.	Seeking funding in Round 5 SmartScale.
<b>Avon Street Corridor Multi-Modal Improvements</b>	Druid Avenue to Avon Court Park and Ride	\$TBD	Seeking funding in Round 5 SmartScale.
<b>5th Street Corridor Intersection and Multi-Modal Improvements</b>	Intersection improvements at 5th Street and 5th Street Station Parkway and extension of bike/pedestrian infrastructure to Fifth Street Hubs and Trail project.	\$TBD	Seeking funding in Round 5 SmartScale.

## ***Funding and Implementation***

The needs identified within the City's Master Transportation Plan, the region's Long Range Transportation Plan, and the Commonwealth's VTrans Plan far exceed current funding levels. The City has and continues to identify grant opportunities to leverage or fully fund its highest priority projects within its Master Transportation Plan. Some of the available funding programs include:

### **SmartScale**

Virginia's SMART SCALE program (§33.2-214.1) is about picking the right transportation projects for funding and ensuring the best use of limited federal and state tax dollars. The program's funding is divided into two main pathways—the construction District Grants Program (DGP) and the High-Priority Projects Program (HPPP). Projects applying for the DGP funds compete with other projects from the same construction district. Projects applying for HPPP funds compete with projects from across the Commonwealth. The City's projects are most competitive under the DGP fund though some can compete within the HPPP.

Eligible project types are limited to capacity and operational improvements such as widening, access management, intelligent transportation systems, technology operational improvements, transit and rail capacity expansion, bicycle and pedestrian improvements and transportation demand management. Eligible projects must also address a need identified within VTrans's under one or more of the following categories:

- Corridors of Statewide Significance (CoSS) – Key multimodal corridors, serving primarily long-distance /inter-regional travel markets
- Regional Networks (RN) – Multimodal networks that facilitate travel within urbanized areas/intraregional travel markets
- Urban Development Areas (UDA) – Areas where jurisdictions intend to concentrate growth and development
- Transportation Safety Needs – Statewide safety needs identified in VTrans2040

Each application throughout the state is then scored based on an objective, outcome-based process that is transparent to the public and allows decision-makers to be held accountable to taxpayers. The city is located within the Culpeper District which selected the following weighting of the six categories projects are scored by:

- Safety – 20% of Overall Score
- Equivalent property damage only (EPDO) of Fatal and Injury Crashes
- EPDO Rate of Fatal and Injury Crashes
- Congestion Mitigation – 15% of Overall Score
- Person Throughput

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- Person Hours of Delay
- Accessibility – 25% of Overall Score
- Access to Jobs
- Access to Jobs for Disadvantaged Persons
- Access to Multimodal Choices
- Environmental Quality – 10% of Overall Score
- Air Quality and Environmental Effect
- Impact to Natural and Cultural Resources
- Economic Development – 20% of Overall Score
- Project Support for Economic Development
- Intermodal Access and Efficiency
- Travel Time Reliability
- Land Use – 10% of Overall Score
- Transportation-Efficient Land Use
- Increase in Transportation Efficient Land Use

Once a project is scored, that score is divided by its submitted budget/estimate to create its final ranking/funding priority. Even if a project has many benefits, if the cost of implementation is too high it will receive a low final ranking/ funding priority. One method of improving a project's score is to commit local or other grant funding to lower the amount of funding being sought, or cost of the project within the SmartScale application.

Once all projects are scored and prioritized, the Commonwealth Transportation Board (CTB) has final determination to select projects for funding.

Based on VTrans, the City's most successful projects are located along or serve roadways with higher classifications, higher volumes and higher speeds surrounded by higher density of land use. As a result, the City has been using SmartScale to complete streetscape projects along arterial roadways to expand and improve its multimodal transportation network to better serve future capacity needs, improve the built environment and redress existing safety concerns. The MPO and the County of Albemarle has also used this program to fund their localities' and the district's priority projects. Please see the below map of funded SmartScale projects as well as prospective future project applications.

### Transportation Alternatives (TA) Set-Aside

The Transportation Alternatives (TA) Set-Aside grant program was created by the Fixing America's Surface Transportation (FAST) Act which was signed into law December 4, 2015. It was the first long-term transportation bill passed since SAFETEA-LU, running five (5) years through September 30, 2020. This legislation was significant in that it

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continued the former Transportation Enhancement program's long history of improving non-motorized transportation that began in 1991 with passage of ISTEA. A continuing resolution was signed October 1, 2020, extending the FAST Act for one (1) additional year.

This program is intended to help local sponsors, such as the City of Charlottesville, fund community-based projects that expand non-motorized travel choices and enhance the transportation experience by improving the cultural, historical, and environmental aspects of the transportation infrastructure. It focuses on providing pedestrian and bicycle facilities, community improvements and mitigating the negative impacts of the highway system. Popular projects across the Commonwealth include bicycle and pedestrian trails, preservation of historic transportation structures including train depots and lighthouses, as well as roadway pull-offs and overlooks. The City of Charlottesville has used these federal and state funds to construct trail expansions, new pedestrian bridges and Safe Routes to School projects.

The program allows a maximum 80% federal reimbursement of eligible project costs and requires a minimum 20% local match contribution. Applications are limited to a maximum request of \$1,000,000 per project, per application fiscal year. With a 2-year cycle, this would allow for a maximum request of \$2 million per application. In accordance with program policy, TA funding is distributed amongst the CTB members and the Secretary of Transportation for award, with each District CTB member receiving \$1 million to allocate per fiscal year. Note that if a CTB member elects to fund a project, they must award (over two years) a minimum 50% of the federal amount requested per this policy. Historically the average federal award is \$250,000 to \$300,000 per project per year.

The FAST Act – like MAP 21 – identifies four (4) categories of eligibility for the TA Program:

- Transportation Alternatives
- Safe Routes to School
- Boulevards in former Interstate System Routes
- Recreational Trails

The ten (10) qualifying TA activities are:

1. Construction of on-road and off-road facilities for pedestrians, bicycles and other nonmotorized transportation users
2. Construction of infrastructure-related projects and systems that will provide safe routes for non-drivers to access daily needs
3. Conversion and use of abandoned railroad corridors for pedestrians, bicycles, and other non-motorized transportation users
4. Construction of turnouts, overlooks and viewing areas
5. Inventory, control, or removal of outdoor advertising
6. Historic preservation and rehabilitation of historic transportation facilities
7. Vegetation management practices in transportation rights-of-way

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8. Archeological activities relating to impacts from implementation of a transportation project
9. Environmental mitigation activities to decrease the negative impacts of roads on the natural environment due to highway run-off and water pollution
10. Wildlife mortality mitigation activities to decrease the negative impacts of roads on wildlife and habitat connectivity

### Safe Routes to School Eligibilities

The SRTS activities include both infrastructure and non-infrastructure improvements intended to enable and encourage children K – 8th grade to safely walk and bicycle to school. To qualify as a SRTS project, the improvements must fall within a 2-mile radius of a K-8 school.

These activities include:

1. Infrastructure related projects including their planning, design, and construction
  - Sidewalk improvements
  - Traffic calming and speed reduction improvements
  - Pedestrian and bicycle crossing improvements
  - On-street bicycle facilities
  - Off-street bicycle and pedestrian facilities
  - Secure bicycle parking facilities
  - Traffic diversion improvements in the vicinity of schools
2. Non-infrastructure related projects including promotion and safety education
  - Public awareness campaigns and outreach
  - Traffic education and enforcement in the vicinity of schools
  - Student sessions on bicycle and pedestrian safety, health, and environment
  - Funding for training, volunteers, and managers of safe routes to school program

### Boulevard Eligibilities

These activities are defined as: planning, designing, or constructing boulevards and other roadways largely in the right of way of former interstate system routes or other divided highways. Eligible activities focus on improving the connectivity of neighborhoods divided by now “abandoned” or obsolete interstate highways. The proposed improvements should reestablish bicycle and pedestrian connections within previously divided communities.

### Recreational Trails Eligibilities

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The Recreational Trails Program is an independent program managed by the Department of Conservation and Recreation, with its own call for applications and selection process. Note that there are flexibilities in the RTP eligibility and design standards for these funds including allowing for motorized vehicles, trailhead improvements and less stringent ADA design criteria due to the recreational nature of the trails.

### State of Good Repair

In 2015, House Bill 1887 was passed and incorporated into the Code of Virginia (§ 33.2-369) to create the State of Good Repair (SGR) Program consisting of federal and state funding. The program provides funding for deteriorated pavements and Poor Condition - structurally deficient (SD) -- bridges owned or maintained by the Virginia Department of Transportation (VDOT) and or localities, as approved by the Commonwealth Transportation Board (CTB). Legislation requires the program to be transparent and based on objectively obtained and developed data.

SGR allocations are for rehabilitating or replacing bridges deemed in Poor Condition (SD) on the National Bridge Inventory (NBI) and deteriorated pavement on interstate, primary highways, and Locally Maintained Primary Extensions. SGR funds are required to be distributed proportionately between VDOT and localities, based on assessed needs. Each district will receive between 5.5 percent and 17.5 percent of the total available SGR funds in any given year based on its SGR needs as described above. Furthermore, the CTB has the ability to approve two exceptions or waivers to this funding distribution requirement – 1) if it involves a Key Project - extraordinary circumstances only - cap can be waived and 2) if the VDOT secondary target is not met then 20% may be taken off the top for Secondary Pavements.

The Culpeper District notifies the City of Charlottesville and other impacted localities of roadways and bridges that meet the condition ratings on an annual basis. Localities then submit grant applications, for up to 100% project cost.

### Revenue Sharing

The Virginia Department of Transportation (VDOT) administers the Revenue Sharing (RS) Program to provide additional state funding for localities to improve their transportation network. Under the current program, for each local dollar that the City commits to an eligible project, the state is offering to match it 1:1. A locality may apply for a maximum of \$5 million in matching allocations per fiscal year (\$10 million per biennial cycle) and the maximum lifetime matching allocation per project is limited to \$10 million in matching allocations.

The total amount allocated each fiscal year by the Commonwealth Transportation Board for the RS Program has been approximately \$100 million dollars for the last few years. In accordance with Virginia Code requirements, funding is awarded based on a priority/tiered system.

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- Priority 1 – Construction Projects that have previously received RS funding as part of the Program application process.
- Priority 2 – Construction Projects that meet a transportation need identified in the Statewide Transportation Plan (VTRANS) or when funding will accelerate advertisement of a project in a locality's capital improvement plan (CIP).
- Priority 3 – Projects that address deficient pavement resurfacing and bridge Rehabilitation.
- Priority 4 – All other eligible projects (projects not meeting priority criteria described above) which include: Construction Projects that provide a new or significantly modified transportation facility; Reconstruction Projects that completely replace an existing facility or significantly improve the functionality of an existing facility; Improvement Projects that facilitate or enhance traffic flow or safety; and Maintenance Projects.

Based on previous demand from around the state, funding very rarely extends past Priority 2 and is often prorated within Priority 2 (which can increase the local share above 50%). The City of Charlottesville has previously used this program to add scope to larger, fully funded projects such as signal replacement for the East High Streetscape project, to fully fund smaller projects such as the Elliott Streetscape and to advance the City's priority sidewalk projects.

### Capital Improvement Program

The Capital Improvement Program (CIP) provides local funding for streets, public buildings (both governmental and school facilities), land, and other capital assets. Capital improvement projects are projects, which generally have a life of 5 years, or more, cost more than \$50,000, and are non-operational in nature. City Council adopted budget guidelines and established a policy to allocate an amount no less than 3% of the General Fund budget for capital improvements.

The annual capital budget is part of the City's multi-year Capital Improvement Program, which is designed to coordinate the planning, financing, and construction of capital projects. Separate funding is adopted in the General Fund budget for the smaller maintenance projects, which are handled in the Facilities Repair Fund.

Many factors are taken into consideration during the development of the capital budget. For instance, the aging of public facilities and infrastructure, the need to accommodate a growing population, and enhancement of quality of life within the city. For these reasons, the City must respond to the capital needs of the community with investments aimed at improving, revitalizing, and maintaining the existing facilities and infrastructure of the City of Charlottesville.