



Source: Albemarle County Community Development 2011

TRANSPORTATION

GOAL:

Albemarle's transportation network will be increasingly multimodal, environmentally sound, well maintained, safe, and reliable.

Page intentionally left blank.

VISION:

Albemarle County envisions a community with abundant natural, rural, historic, and scenic resources • healthy ecosystems • active and vibrant development areas • a physical environment that supports healthy lifestyles • a thriving economy • and exceptional educational opportunity for present and future residents.

Relationship to the Vision

A strong economy and attractive and vibrant communities require good transportation systems. Investment in roads in the Development Areas enhances opportunities for moving goods and people. Constructing sidewalks allows people to walk to work and home again. Bike paths and bike lanes make bicycling an easy alternative to driving. These transportation elements also improve opportunities for children and teachers to walk and bike to school. By investing in sidewalks, bikeways, transit, and interconnected streets in the Development Areas, true mixed-use development can occur, making the Development Areas vibrant and attractive. Maintaining rural roads as rural travelways helps retain the County's rural heritage and scenic beauty and enhance farm to market opportunities.

Transportation

Introduction

Transportation is one of the most important services provided by government. Not only does the transportation system provide for the mobility of people and goods, it also influences growth patterns by providing access to land. Transportation links people to their jobs, schools, shopping, community activities, and entertainment. The County strives to create an efficient and affordable transportation system offering travel choices that are functional and that will minimize harm to the community and natural environment.

The purpose of the Transportation Chapter is to provide a plan that ensures the County's transportation system and infrastructure needs are accommodated and coordinated with the Development Areas and Rural Area throughout the County. This Chapter describes Albemarle's existing transportation network, presents the results of past transportation planning efforts, and sets forth the County's transportation goals, needs, and priorities for the next 20 years. The Transportation Chapter also helps inform residents and employers of Albemarle County's approach to addressing mobility needs, and how the future transportation system can affect the community.

Transportation's Relationship to Land Use and Other Localities

There is a distinct and mutually dependent relationship between transportation and land use. Land use decisions, such as development density and location influence regional travel patterns. The degree of access provided by the transportation system can, in turn, influence land use and development trends. For example, a connected system of streets with higher residential densities and a mix of land uses can help facilitate travel by foot, bicycle, and public transit, in addition to the automobile. More dispersed land development means that access is limited to cars and trucks, which can reduce the viability of other travel modes. In addition, transportation policy determines how people get from home to work, the amount of time spent commuting, and the types and degrees of choices available for getting from one place to another. The choices made about land use, including building design and orientation, all have an effect on transportation use and the quality of life.

There is a regional context to transportation issues that extends beyond local interest. While land use plans and decisions are made in the context of governmental boundaries, transportation needs and networks cross

those jurisdictional boundaries. Careful coordination of transportation planning with land use planning at the State, regional, and local level is essential, and is why the County participates in regional transportation planning.

Streets and Roads in Albemarle County

Public streets and private streets are present in both the County's Rural Area and Development Areas. Private streets are typically maintained by owners associations or by the owners of the property in which the right-of-way exists. The Virginia Department of Transportation (VDOT) maintains all public streets and roads that have been accepted into their system for maintenance. Figure 1 shows public streets and roads in the County by functional classification. Functional classification is discussed in Objective 5.

Transportation Plans and Acronyms

In Virginia, local transportation planning has a strong relationship with regional, State and federal transportation planning. At each of these levels, there is a transportation plan and planning organization, as well as different service providers who use acronyms. A list of acronyms and their meanings is provided in the Reference Documents. Specific plans adopted by Albemarle County are found in the [Appendix](#) to this Chapter.

Transportation System Challenges and Opportunities

Albemarle County's transportation network is an important economic driver for the regional economy. Dispersed development patterns have helped promote a transportation network that is focused primarily on the automobile. In the past, a more abundant supply of cheap land and fuel encouraged development patterns that have become hard to sustain. Today and in the future, the local transportation system faces the challenges of finding adequate revenue, dealing with higher energy prices, accommodating future population and employment growth, and maintaining an aging system of transportation infrastructure.

The continued coordination of land use and transportation affords opportunities to accommodate job and population growth more effectively. Concentrating growth in the Development Areas can increase the efficiency and affordability of public infrastructure, including the transportation system. Focused growth should decrease the need for new and improved transportation facilities and infrastructure outside of Development Areas, thereby making more funding available to maintain the existing system. Development Areas with a multimodal transportation system should improve the quality of life for County residents and the County's economic competitiveness within the region and the State.

Page intentionally left blank.

Objective 1: Continue to participate fully in State, regional, and local transportation planning efforts.

The County's transportation plan is made up of several key documents. The longer range planning documents are the regional Long Range Transportation Plan (LRTP), the regional Rural Long Range Plan (RLRP), and the Development Area Master Plans. More immediate plans, tasks, and projects, are contained in the State Secondary Six-Year Plan, the Transportation Improvement Program, and the County's Six Year Improvements Program. Information on these plans and programs is found in the Appendix. The Appendix also contains a list of transportation projects, and costs estimates for improvements shown in the plans.

All of the County's transportation planning activities have a relationship to the larger community, the region and State because no locality's transportation system operates in a vacuum. Transportation is part of an overall interconnected network, and changes in one part of the network affect the operation of other parts of the network. In addition, most transportation improvements in Albemarle County are dependent on state and federal funds. Therefore, regional coordination and cooperation is essential when planning strategies and improvements for transportation.

Transportation planning and policy development occurs at the federal, State, regional, and local level. Federal transportation policy is implemented by the Virginia Department of Transportation (VDOT) and Metropolitan Planning Organizations (MPOs), among others. The U.S. Department of Transportation requires state DOTs, like VDOT, and regional MPOs to develop long-range transportation plans as well as short-range transportation improvement programs (TIPs) in order to qualify for the formula-allocated federal funds, that constitute a major portion of the Commonwealth's transportation budget. The plans must address a variety of policy factors such as environmental preservation, economic development, and community quality of life. Transportation also has an impact on air and water quality. Preservation and improvement of the region's air quality is addressed in the Natural Resources Chapter. A detailed table of applicable federal, State and local transportation planning documents can be found in the Transportation Reference Documents.

Livability Project

Charlottesville and Albemarle County will continue to promote regional multi-modal and accessible transportation options by coordinating transportation planning between Charlottesville, Albemarle County, and the University of Virginia through the Metropolitan Planning Organization by:

To do this, the County should:

- *Store transportation data in the same format.*
- *Coordinate collection of transportation data to facilitate sharing information among Charlottesville, Albemarle County, the University of Virginia, and the Metropolitan Planning Organization.*
- *Increase and expand transit network efficiency and use.*
- *Coordinate building the sidewalk network across City-County boundaries and addressing barriers to pedestrian connectivity.*
- *Provide community education regarding transportation options.*
- *Collaborate to strengthen intrastate and interstate rail and air transportation opportunities.*
- *Coordinate to provide and enhance multi-modal connections between employment centers and areas of high residential density.*
- *Create dedicated bike-pedestrian connections across physical barriers within the community for:*
 - *Rivanna River*
 - *Route 250 – East and West*
 - *Interstate 64*
 - *Railroad network*
 - *City and VDOT system connection*
 - *Route 29*

Strategy 1a: Continue to maintain compliance and ensure coordination of local transportation objectives and strategies with Statewide transportation plans, such as Virginia's Long-Range Multimodal Transportation Plan (VTrans2035) and the 2035 Virginia Surface Transportation Plan (2035 VSTP).

Virginia law requires that a multimodal long-range transportation plan be developed and regularly updated to assess transportation needs and assign priorities on a statewide basis. The County works closely with State transportation planning officials to ensure the County's compliance with State transportation plans. State law requires that the County provide VDOT a copy of the Transportation Chapter of the Comprehensive Plan in draft form before it is adopted and a final copy after the Plan is adopted. VDOT reviews the Transportation Chapter to ensure it is consistent with State transportation plans and priorities.

VTrans2035 is Virginia's long-range multimodal transportation plan. VTrans2035 establishes the policy framework for the recommendations found in the 2035 Virginia Surface Transportation Plan (VSTP). The latest update of VTrans2035 is the VTrans2035 Update completed in 2013. The 2035 VSTP builds on the priorities of VTrans2035 with specific recommendations for surface transportation modes such as highway, transit, rail, and freight. Broader, policy-level recommendations are provided for bicycle and pedestrian modes. Albemarle County is in the Blue Ridge Region, as defined in the VSTP Plan.

Corridors of Statewide Significance (CoSS) are multimodal connections between main activity centers in the State. VTrans2035 has identified twelve Corridors of Statewide Significance throughout the State. CoSS provide a statewide multimodal perspective to guide localities in land use and transportation planning. Local governments are required to include these corridors in their Comprehensive Plans. The extent to which a locality protects the functionality of the corridor is considered as part of the State transportation funding process. The State desires to protect the transportation facilities in these corridors because they ensure mobility and long distance travel. These corridors are important because they:

- Involve multiple modes (highway, rail, inter-regional transit, airport, water port) or represent a freight corridor that extends beyond an individual region;
- Connect regions, states, and major activity centers; and
- Provide a unique statewide function or address statewide goals.

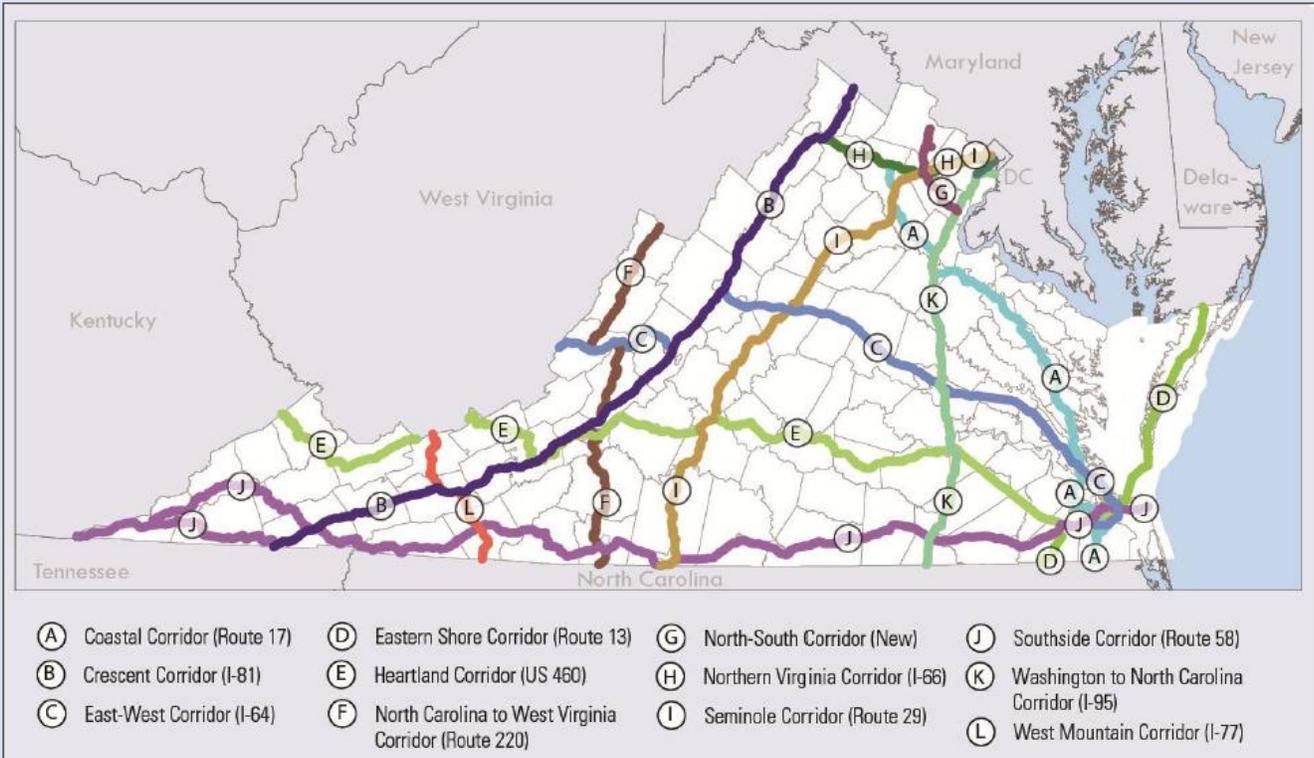
The VTrans2035 Update provides three classifications for CoSS:

- National Corridors (e.g., the I-95 Corridor);
- Commerce and Mobility Corridors (e.g. I-64, the East-West Corridor); and
- Statewide Corridors (e.g., Route 29, the Seminole Corridor).

The first tier, National Corridors, includes routes that support mobility for nationwide travel and freight movement, connecting to states along Virginia's borders: Tennessee, North Carolina, West Virginia, Maryland, and Washington, D.C. The second tier, Commerce and Mobility Corridors, provides essential connections within the State between the economic drivers of Dulles International Airport and the coastal and inland ports. The remaining statewide Corridors support mobility within the Commonwealth.

Two statewide CoSS have been identified in Albemarle County:

Figure 2: Virginia Corridors of Statewide Significance (CoSS)



Source: Adapted from VTRANS 2035 Update, February 2013

East-West Corridor- I-64 (Circle C in Figure 2): This corridor runs east to west throughout the State, connecting Hampton Roads to Richmond, Charlottesville, I-81, and West Virginia. Parallel highway facilities to Interstate 64 include U.S. Highway 250 and U.S. Highway 60. Auxiliary facilities include I-664, I-564, I-264, and I-464, all located in the Hampton Roads region. There are multiple transit options, mostly in the Richmond and Hampton Roads regions, and there are CSX rail lines along much of the corridor. The East-West Corridor provides the only interstate access to the Port of Virginia, and it provides access to multiple airports with commercial service in the Hampton Roads, Richmond, and Charlottesville regions. The East-West Corridor is identified as a Commerce and Mobility Corridor in the VTrans 2035 Update.

Seminole Corridor – Rt. 29 (Circle I in Figure 2): This corridor connects the Northern Virginia region to Charlottesville, Lynchburg, and Danville, operating as a parallel option between I-95 and I-81. It runs parallel to the Bull Run Corridor within Northern Virginia, and there are multiple transit options in the Northern Virginia region. In addition, there are Norfolk Southern Crescent Corridor rail lines along the entire corridor, which also provide passenger rail service. There are multiple general aviation and reliever airport facilities along the corridor, too. The Seminole Corridor is identified as a Statewide Corridor in the VTrans 2035 Update.

Passenger and freight rail improvements are planned for the south to north rail corridor, as are improvements to existing roadways and transit improvements with the East-West CoSS. The State is expected to complete Corridor Master Plans (CMPs) for each CoSS over the next several years. In

2010 and 2011 a draft CMP was prepared for the Seminole Corridor. The CoSS master plans are planned to focus on the VTrans goals in each corridor, with differences in emphasis depending on the type of corridor. For example, a CoSS that does not include limited access highways should have a particular emphasis on balancing statewide mobility with multimodal accessibility to regional economic centers.

Strategy 1b: Continue to recognize the Charlottesville-Albemarle Metropolitan Planning Organization (CA-MPO) as the transportation planning body for the region's MPO Area.

In order to ensure that current and future federal transportation expenditures are based on the continuing, cooperative and comprehensive (3-C) planning process, in use since the early 1970s, federal legislation has required the formation of a Metropolitan Planning Organization (MPO) for any urbanized area with a population greater than 50,000. An MPO is a transportation policy-making body made up of representatives from local government and transportation agencies with authority and responsibility in metropolitan planning areas. A Metropolitan Planning Area can include the areas expected to become urbanized within the next 20 years. Federal funding for transportation projects comes from the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) and is channeled through the MPO.

For regional transportation planning purposes, the Charlottesville-Albemarle region consists of two geographic areas: urbanized and non-urbanized. In order to meet federal requirements regarding urbanized areas with a population exceeding 50,000, Albemarle County and the City of Charlottesville established the Charlottesville-Albemarle (CA- MPO) in 1982 through a Memorandum of Understanding (MOU) signed by the Thomas Jefferson Planning District Commission (TJPDC), JAUNT (formerly the **J**efferson **A**rea **U**nited **T**ransportation; now a public corporation owned by the local governments as JAUNT, Inc.), VDOT, and the two localities. The MOU was last updated in 2009. The CA MPO is the primary regional planning body responsible for transportation planning in the area it covers. The CA-MPO provides a forum for transportation decision-making among the City, County, UVA, JAUNT, CAT, DRPT, and VDOT officials.

The CA-MPO area includes the City of Charlottesville and the portion of Albemarle County that is either urban or anticipated to increase to urban density during the next 20-year period. In 2013, the CA-MPO boundaries were updated and expanded to be more consistent with 2010 census data. These new boundaries were approved in early 2013. The CA-MPO boundary does not have a direct impact on development of County regulations. As a federal requirement, the CA-MPO area is tied to federal transportation funding, and projects in the MPO's Long Range Transportation Plan are expected to be built in the next 20 years.

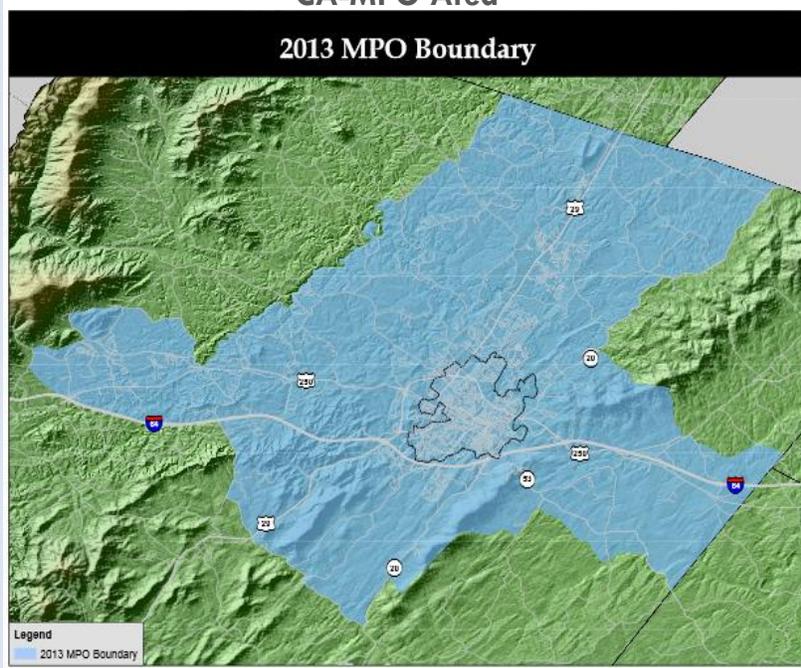
The CA-MPO, with the assistance of designated staff, is responsible to:

- Plan for the coordinated delivery of transportation services by public and private providers.
- Identify and recommend to the City of Charlottesville, Albemarle County, and UVA those administrative and operational activities that can be appropriately coordinated or centralized among service providers.
- Review all service proposals and develop a procedure for identifying public transportation service demand and identify appropriate service providers.

A map of the geography of the CA-MPO area appears in Figure 3. The non-urbanized area is not part of the CA-MPO: planning activities for the non-urbanized area mainly occur through the Rural

Transportation Planning Program of the TJPDC. The TJPDC prepares the Rural Long Range Plan (RLRP) which complements the Long-Range Transportation Plan (LRTP) of the CA-MPO.

Figure 3: Charlottesville-Albemarle Geography of the CA-MPO Area



Source: TJPDC 2014 Unified Planning Work Program (UPWP)

Citizen’s Transportation Advisory Committee (CTAC) formerly known as the Charlottesville-Albemarle Regional Transportation Citizen Advisory Committee (CHART).

The CA-MPO is staffed by the TJPDC. Working in conjunction with partner and professional agencies, the staff collects, analyzes, evaluates and prepares materials for use by the Board and Committee Members at their regularly scheduled meetings, as well as any sub-committee meetings deemed necessary.

The policy making body of the CA-MPO is its Board, which consists of five voting members. The voting membership of the Policy Board is made up of two representatives from the City of Charlottesville and two representatives from the County of Albemarle. The County’s two MPO members are from the County Board of Supervisors, who ensures that the projects and policies of the CA-MPO are reviewed by the County’s governing body. The fifth representative is from VDOT. Non-voting members include the Department of Rail and Public Transportation (DRPT), CAT, JAUNT, UVA, the Federal Highway Administration (FHWA), the Federal Aviation Administration (FAA), the Federal Transit Administration (FTA), and the

Strategy 1c: Continue to participate in development and adoption of the LRTP for the CA-MPO area.

The LRTP includes all desired transportation projects anticipated to receive federal funding through funding projections for the next 20 years as well as longer term vision projects. The LRTP must be fiscally-constrained, meaning the LRTP cannot propose projects that will require the expenditure of more funds than are reasonably expected to be received over the 20-year planning period.

The LRTP is the lead document particularly for projects at a “network” level. The LRTP, along with the Comprehensive Plan, Master Plans (See Strategy 2a, which also identifies more local neighborhood-level transportation improvements) establishes the transportation recommendations for the Development Areas. The LRTP addresses all modes of travel, including roadways, travel demand management and public transit, pedestrian and bicycle access and facilities, rail, and air travel. The LRTP contains inventories, data, and analyses of the transportation system and makes recommendations for providing and maintaining an adequate transportation system. It is important to coordinate transportation

planning, including the sharing of data among all those individuals and organizations involved in regional and local transportation planning.

Strategy 1d: Continue to support construction of projects adopted into the LRTP and the Transportation Improvement Program (TIP).

As the lead document for transportation planning in the CA-MPO area, the LRTP provides a comprehensive approach to addressing transportation issues in Charlottesville and urban Albemarle. Its implementation takes place through the TIP. The TIP lists road and transit improvements approved for federal funding. The TIP is a financially constrained, short-term plan for projects that can be funded with expected revenues in the next three to five years. Projects funded in the TIP are required to be in the LRTP.

Strategy 1e: Continue to recognize the TJPDC's rural planning function by taking formal action on rural transportation planning recommendations and reviewing the TJPDC's adopted studies and, where appropriate, consider adopting such studies into this Plan.

The County is also involved in a regional transportation planning effort covering the rural areas of the County (outside the CA-MPO area) together with Fluvanna, Greene, Louisa, and Nelson Counties. The Rural Area Transportation Long Range Plan process complements MPO-level planning efforts and establishes a regional transportation planning process to address broader regional and rural issues. This Plan identifies a larger transportation system framework within the Thomas Jefferson Planning District area. The Plan is generally reflective of and consistent with County goals for transportation planning for the Rural Area.

The major transportation goals for Albemarle County's Rural Area are to preserve rural character while improving safety and multimodal transportation choices. The County's policy is to retain rural roads in their current condition, focusing on road safety improvements, such as shoulders and guardrails, straightening curves, and increased regular maintenance, rather than paving and widening rural roads. Road improvements in the Rural Area should not encourage growth outside of the Development Areas, but they should provide access from farms to markets along strategic routes. Rural roads have multiple purposes and benefit from design that keeps drivers alert and encourage them to move at the appropriate speeds to accommodate slower moving farm equipment, bicyclists, people checking the mail, or children walking to a bus stop. The County has adopted a policy to address private citizens who wish to use their own resources to pave public roads. A copy of this policy may be found in the [Transportation Appendix](#).

Objective 2: Continue to plan transportation improvements in accordance with the County's Growth Management Policy.

The County's [Growth Management Policy](#) provides that growth should be concentrated in the Development Areas where the County provides the highest level of investment in infrastructure and services. Together with the Neighborhood Model design principles, the Growth Management Policy lays the groundwork for a multimodal transportation network. These strategies help to preserve farms, forests, and fields in the Rural Area and improve quality of life in the Development Areas. In addition, a multimodal transportation system provides an efficient use of public dollars, helps conserve energy, provides more transportation choice, reduces congestion and improves quality of life for residents among other benefits.

Strategy 2a: Continue to implement the transportation planning recommendations in the County's adopted Master Plans.

The County's Growth Management Policy is strongly reflected in the Development Area Master Plans which show where growth is expected and recommend land use and infrastructure necessary to support that growth. The Master Plans include recommended improvements for streets, greenways, trails, sidewalks, streetscape, bicycle lanes, bikeways, and streetscape in each Development Area. As further explained in the discussion on County travel modes, roadways in the Development Areas are expected to be "complete streets" which are streets built to accommodate other modes of travel in addition to vehicles. Transportation goals, objectives, and strategies in the Master Plans are consistent with the LRTP. In addition, they include specific recommendations for improvements serving a more local function, such as interconnections between neighborhoods or interconnections from neighborhoods to employment areas. Although locally important road improvements may not be eligible for State or federal funding, they should be constructed through other ways, such as the County's Capital Improvements Program (CIP) or as proffered improvements that support new developments.

Strategy 2b: Continue to work closely with State, regional and local partners to ensure that transportation improvements meet Albemarle County Comprehensive Plan goals and priorities as annually reflected in VDOT's Six Year Improvement Program (SYIP) and Secondary Six Year Plan (SSYP).

Funding for rail, public transit and highways (generally primary roadways and interstates) is allocated through VDOT's annual Six Year Improvement Program (SYIP). The SYIP requests that the Commonwealth Transportation Board (CTB), the political body that works with VDOT, approve funding for prioritized projects proposed for construction, development, or funding over the next six fiscal years. The total list of projects exceeds that which can be completed during the six year time horizon of the plan. All individual interstate and primary road projects in Albemarle County compete for funding with other localities in VDOT's Culpeper District with funding being allocated to each VDOT construction district rather than individual localities. The County has significantly more control over project priorities on the Secondary System than it does on the Primary System. In Albemarle County, transportation projects are selected to be included in the SYIP if they are included in the Charlottesville-Albemarle MPO's regional TIP.

State law requires the development and publication of a separate program for each locality's secondary road system. Funding for secondary roadways, bridges, and culverts is planned through VDOT's annual Secondary Six-Year Plan (SSYP). The County provides VDOT with a priority list of Secondary Road improvements that establishes priorities for road improvements in the State's Secondary Road system. VDOT's SSYP is based on the County's priority list and reflects available State road funding allocated to the County. The County's priority list is reviewed annually by the Board of Supervisors and based on the direction provided by the Board regarding projects to be funded, VDOT revises the SSYP.

As development occurs, local roadways are built by private developers under the direction of local governments, like Albemarle County, and later turned over to VDOT for long-term maintenance. In other cases, private development projects approved by the County can generate traffic levels that trigger a need for VDOT to program improvements to State-owned roadways.

Strategy 2c: Continue to work closely with State, regional and local partners to ensure that roadway structures (bridges and culverts) with low sufficiency ratings are annually prioritized in the SSYP for funding, repair and/or replacement.

Roadways, bridges, and culverts with low sufficiency ratings are facilities that are in need or soon to be in need of replacement. VDOT is responsible for the inventory and inspection of over 20,000 bridges and culverts along the public road system across the State. While new bridges and culverts have a design lifespan of 75 years, the majority of these structures were designed for a service life of 50 years. Approximately 60% statewide are now 40 years or older. In the Culpeper VDOT Construction District, 450 of the 1,693 bridges and culverts are located in Albemarle County. Of these, approximately 164 bridges and culverts (36% of the total) are at the end of their design lifespan and have not been reconstructed in the last 50 years. Planning and funding are needed to ensure that replacement bridges and culverts are not left to deteriorate and cause safety issues.

Objective 3: Continue to improve, promote, and provide regional multimodal and accessible transportation options.

Multimodal transportation planning in Virginia has continued to gain in importance over the years. The State defines multimodal transportation planning as:

“A coordinated system of roads, rails, ports, transit, bicycle, pedestrian and aviation resources that provides integrated and efficient options that meet citizen, visitor and business transportation needs.”

In addition to being a State priority, multimodal transportation has been a hallmark of the Charlottesville-Albemarle long-range transportation plan, including traffic demand management techniques. It is also a key principle in the [Neighborhood Model](#), as discussed in the Land Use for Development Areas Chapter. Providing regional multimodal transportation options featured prominently in the joint City-County policy recommendations in the Livable Communities Planning Project.

Albemarle County strives to promote transit-friendly, walkable, mixed-use communities that are served by multiple transportation modes. A connected, mixed-used community can reduce the number of vehicle miles traveled (VMT) and, thereby, improve citizens' health by reducing vehicle emissions. A reduction in VMT improves air quality by reducing the amount of greenhouse gases emitted by vehicles. Interconnected streets and alternatives to vehicular travel, like mass transit, walking, or biking also have the potential to improve or mitigate air quality problems by reducing VMT.

Multimodalism provides for:

- **Cost-Efficient Use of Public Dollars** which benefits travelers by moving people (not cars) while expending the same amount of money and optimizing the use of existing facilities instead of building new ones.
- **Energy Conservation** by reducing **emissions** through fewer and shorter vehicle trips.
- **More Transportation Choices** by providing alternate modes, times, locations, and route choices for travel.

- **Mobility and Opportunity Equity** by meeting transportation needs of low income, disabled, and other minority populations and providing more opportunities for getting to work, making connections, and career advancement.
- **Public Health** by creating a safer environment for walkers and cyclists, with fewer crashes and lower fatality rates, supporting active lifestyles through more opportunities for walking, and providing more access to a wider range of goods and services.
- **Economic Vitality** by providing greater accessibility for existing and future workforces, attracting businesses through more multimodal transportation choices for employees, and increasing property values by making places more accessible. Reducing time in commutes time equals money.
- **Reduced Congestion** by giving more modal choices reducing overall congestion and providing greater redundancy in network choices through other modes.
- **Quality of Life** by designing streets as places to spur social interaction, promoting pride in neighborhoods, spurring more “eyes on the street” for crime reduction, and facilitating a greater sense of community through more accessible places and corridors.

In addition to the objectives and strategies found in each local travel mode, the County should use the following strategies to promote multimodal and accessible transportation options at a regional level. These strategies were developed and recommended by the City and County Planning Commissions in their joint policy recommendations from the One Community project.

Strategy 3a: Continue to coordinate multimodal transportation planning among the City of Charlottesville, Albemarle County, and UVA.

As mentioned earlier, for many years, the CA-MPO, TJPDC and County have engaged in planning activities through the LRTP Transportation Planning among the City, the County and UVA has also involved the [Planning and Coordination Council \(PACC\)](#). For example, the 1994 Ivy Road Design Study was funded by all three entities and recommended pedestrian, transit, bicycle, and streetscape improvements.

Strategy 3b: Increase and expand transit network efficiency and use throughout the region.

An efficient transit network is a hallmark of a well-run transportation system. In order to have an efficient transit system throughout the Charlottesville and Albemarle region, transit planning must occur at a regional level, not solely focused on one locality or the other. Recommendations relating to transit are found later in this Chapter.

Strategy 3c: Create dedicated bicycle-pedestrian connections across physical barriers within the community.

There are many physical barriers that stand in the way of a good bicycle and pedestrian network. These barriers include:

- The Rivanna River at Pantops;
- The multi-lane travelways of Route 250 East and West;
- Interstate 64;
- Railroad tracks throughout the City and County;
- City and VDOT road system connection; and

- Multiple travel lanes on Route 29 North.

The City and County should strive to coordinate better pedestrian connectivity across City and County boundaries. This is particularly important when discussing pedestrian connectivity across physical barriers. The Livability project recognized this critical need and made it one of the top two priorities for the City and County to work together on.

Strategy 3d: Continue to provide community education about multimodal transportation options.

A regional multimodal system is a better way to connect people and places. Educating the public about multimodal transportation options helps the public understand the relationship among transportation, land use and air and water quality. Additional information on the benefits of multimodal transportation options can also help inform the public about incentives and benefits that could make it advantageous to use alternative forms of transportation.

Strategy 3e: Collaborate to strengthen intrastate and interstate rail and air transportation opportunities.

Air and rail transportation work together to serve the region's freight and passenger travel needs. The City and County Planning Commissions agreed that opportunities for improving rail and air transportation should be jointly pursued since improvement to both modes can benefit City and County businesses and residents.

Strategy 3f: Coordinate with developers and the City to provide and enhance multimodal connections between employment centers and areas of high residential density.

Connecting areas of high residential density with employment centers can help increase local transit ridership and other alternative forms of transportation. Increased transit ridership can help make transit services more economical to operate and reduce the automobile vehicle miles traveled, which helps improve air quality and reduce traffic. The County should support the expansion of transit service to areas of high employment and population growth.

Objective 4: Strengthen efforts to complete a local transportation system that includes access to pedestrian and bicycle facilities.

A complete local transportation system includes transit, sidewalks, pathways, bikeways, street lights in developed areas, and safe and convenient crosswalks. Pedestrian and bicycle access to these features is an important aspect of the County's overall multimodal transportation system. Pedestrian and bicycle access improvements can complement and enhance the mass transportation system by improving access to bus stops and places of economic activity. Providing an effective pedestrian and bicycle system can enhance the sense of community within developed or developing areas. Pedestrian and bicycle facilities can connect communities and encourage interaction within the area.

The County has several different types of pedestrian and bicycle facilities. These facilities may be part of VDOT's system or may be privately owned and maintained. Currently, there are on-road bike lanes on Hydraulic Road, Rio Road, Greenbrier Drive, Hillsdale Drive, Northfield Road, and Carrsbrook Drive, with off-road facilities on 5th Street/Old Lynchburg Road, and Fontaine Avenue.

The County's [Urban neighborhoods](#) have the majority of the locality's pedestrian facilities, which include sidewalks along Route 29 North, Rio Road, and Hydraulic Road, as well as some along neighborhood streets and trails. Asphalt sidewalk facilities, separate from but adjacent to roadways, exist along Georgetown Road, Fontaine Avenue, Avon Street, 5th Street Extended, and Old Lynchburg Road. Sidewalks also exist in the Town of Scottsville and in the Community of Crozet.

Strategy 4a: Continue to include bicycle lanes, bikeways, sidewalks, and crosswalks within new developments in the Development Areas. Provide amenities such as bike racks in employment and shopping areas.

Walking and biking connections are important parts of to a multimodal transportation network. Such connections are supported by Development Areas Master Plans and other regional long-range planning documents, including the MPO Long Range Transportation Plan, the Jefferson Area Bicycle, Pedestrian, and Greenways Plan, and the TJPDC Rural Long Range Transportation Plan. Master Plans often identify centers in Development Areas that serve as destinations for residents. The Master Plans show how bicycle and pedestrian accommodations can connect centers and other destination points.

Bicycle and pedestrian facilities benefit the County in multiple ways. They can remove barriers to mobility, broaden travel options for non-drivers, reduce conflicts between motorists and other road users, reduce automobile traffic, increase recreational activity and exercise, encourage non-motorized tourism, accommodate people with disabilities more effectively, and help create more livable communities. Improved pedestrian and cycling conditions can benefit everyone in the community regardless of how much they use non-motorized travel modes. It is important to provide amenities to encourage bicycle and pedestrian travel. Methods for securing bicycles at destinations should be provided in developments. If possible, shower and locker facilities should be provided at destinations to facilitate bike travel for commuting purposes.

Bicycling provides an alternative mode of transportation to vehicular travel. Bicycle travel is accommodated by on-road bicycle lanes that share lanes with vehicular traffic, and off-road paths and trails. Bicycles and pedestrians can share multipurpose paths; however, bicyclists should not travel on sidewalks for the safety of pedestrians and bicyclists. In addition to bicycle lanes and paths maintained by the State, a segment of the U.S. Bicycle Route System that extends from Virginia to Oregon is located in Albemarle County. Route 76 is one of two original U.S. Bicycle Routes.

Strategy 4b: Improve funding for an ongoing walkway, bicycle, and greenway construction fund in the Capital Improvements Program (CIP). Use all possible funding sources for the construction of walkways and bicycle facilities.

Public sidewalks are maintained by VDOT and are located within public rights of way parallel to a roadway. Sidewalks are intended for Development Areas only and are required on new streets in the Development Areas. Urban streets with curb, gutter, and a tree lawn located between the back of the curb and the sidewalk are expected. Sidewalks are most typically constructed by the private sector as a part of development projects, but they are also built by the County or State in conjunction with public projects. VDOT maintains sidewalks on State routes that have been built to VDOT's subdivision street standards. On State routes not built to VDOT standards, VDOT determines maintenance eligibility after study by the County and local VDOT Resident Engineer.

Funding for public sidewalks typically comes from state and federal programs. Private sidewalks are expected within the developments of non-residential, multi-family, and mixed use developments in the

Development Areas. Some privately owned and maintained sidewalks are located adjacent to the right-of-way in single-family developments; however, this is the exception rather than the rule. All privately owned sidewalks are built by the private sector and are maintained by the development owner or an owners association.

Improved local funding is needed to continue buildout of the planned infrastructure for the Development Areas. It is important to complete planned infrastructure improvements such as sidewalks, bikeways, and greenways in order to improve the quality of life in these areas. Improving the quality of life can, in turn, attract the desired density to the area.

Strategy 4c: Continue to implement recommendations for future bicycle and pedestrian projects as identified in adopted local and regional transportation plans and studies and Development Areas Master Plans.

In 2004, the TJPDC created the Jefferson Area Bicycle, Pedestrian, and Greenways Plan which contains recommendations for sidewalks, bicycle improvements, and proposed greenways for the City of Charlottesville, UVA, and Albemarle County. These improvements can also be found in Development Area Master Plans, the LRTP, and the RL RTP. As updates to the regional bicycle, pedestrian, and greenways plan are adopted, they will help guide future CIP projects, volunteer activities, and proffers from developers. When built, these facilities will help to improve mobility in the community and the region.

Strategy 4d: Study and evaluate methods to ensure long-term maintenance of street trees within the tree lawn areas of road right-of-ways.

The appearance of Albemarle County's roads and streets is often enhanced with landscape features such as trees and shrubs. Street trees are expected in the Development Areas to help enhance the streetscape and create a more inviting environment for walkers and bicyclists. Street trees have been planted in many of Albemarle County's newer developments in the Development Areas. VDOT does not maintain street trees within public road right-of-ways and most often a development's owner's association is responsible for maintaining street trees. Most of the trees have not reached maturity where they offer shade and canopy. As they mature, maintenance and replacement of street trees will be needed. A plan for ensuring maintenance and replacement of street trees is needed to ensure that the streetscape is both attractive and safe for the long-term.

Strategy 4e: Continue to use VDOT and railroad excess and/or abandoned right-of-way for multi-use trails.

Trails and paths provide off-road pedestrian access in both private and public developments. Multipurpose paths can accommodate cyclists, as well as pedestrians. Trails and paths are sometimes located within greenways and provide a recreational and transportation function. It can be difficult and costly to acquire new right-of-way for trails and greenways. Existing road right-of-ways that are not needed for their original purpose can and should be used for multi-use trails where they can create connections within the larger network. Railroad right-of-way may be available for other transportation uses; however, this type of use is not guaranteed and consent from owners or compensation may be needed.

More information on off-road trails and paths can be found in the [Parks and Recreation, Greenways, Blueways and Green Systems Chapter](#).

Objective 5: Continue to preserve the functionality of the roadway systems in Albemarle County and plan for and implement access management strategies.

Automobile travel is the primary transportation mode in the County and one of VDOT’s main transportation roles is to assure that roads and streets function adequately to support the movement of vehicular traffic. VDOT organizes roads into three categories: primary, secondary, and urban. Streets in the urban category belong to municipalities. Roads in the primary and secondary category are in counties and in towns which do not maintain their own streets.

There are 115 miles of primary roadways in the County, including:

Route 29	Route 250	Route 20
Route 53	Route 231	Route 6
Route 22	Route 151	Route 240

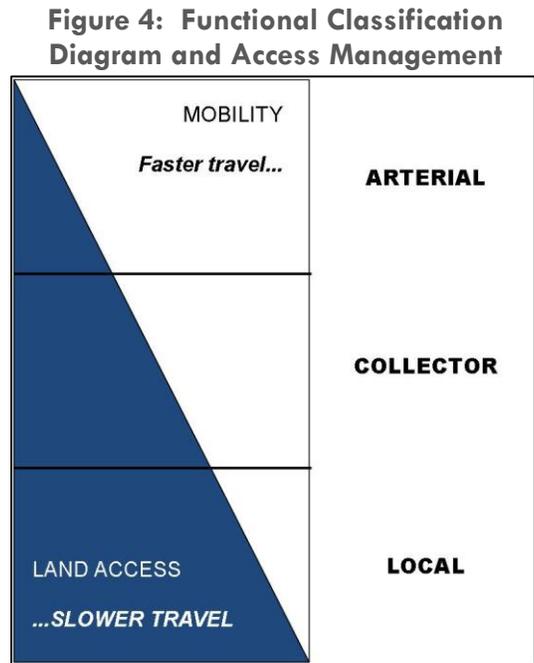
All of these primary roads are designated as Entrance Corridor routes, providing access to the County's and contiguous localities' historic districts and properties. Therefore, they are important not only for their transportation function, but also for their scenic and visual character. More information on [Entrance Corridors](#) and other scenic designations can be found in the [Historic, Cultural and Scenic Resources Chapter](#).

The majority of roads in Albemarle County are secondary roads. As of December 31, 2010, there were 870 miles of secondary roads in the County. Of these, 652 miles (75%) were hard-surfaced and 219 miles (25%) were unpaved rural roads.

Functional Classification of Roads

Each public roads is functionally classified as an arterial, collector, or local street according to the type of service it is intended to provide and its operational characteristics. Figure 4 shows the relationship between travel speeds and classifications of roads.

Arterial roads are large more heavily traveled roads and often thought of the main roads in an area. Collectors provide access to arterial roads, carry less traffic than arterials, and provide interconnections in the community. Local roads and streets are the least traveled thoroughfares and usually connect only to collectors. Many arterial roads are State primary roads, and some are collector roads. Secondary roads are mostly local and collector roads. Generally, routes within the Primary System are numbered under 600 and routes within the secondary system are numbered 600 and above.



Source: Albemarle County 2013

A roadway’s functional classification defines the role a given facility plays in the overall transportation network. The functional classification also dictates how many access points to residential and non-residential development may be provided. Functional classifications provide a guideline for managing a roadway’s through-traffic versus the provision of access to adjacent property.

In Albemarle County, functional classifications for local roadways that follow the Neighborhood Model was a concept discussed as part of the 2004 Crozet Master Plan and the 2011 Places29 Master Plan. The concept includes additional street types that are of a neighborhood scale, with reduced lane widths and emphasis on slower speeds. These street types complement existing federal functional classification used by VDOT. More information on Neighborhood Model street types may be found in the recommended guidelines for Setbacks, Sidewalks, and Urban Streets in the [Appendix](#).

Access Management

Access management is a planning tool that provides for more efficient roadways by consolidating or limiting driveways, entrances, and median openings along collector and arterial roads. It also enhances the functional capacity of intersections of roadways. Figure 4 also illustrates how traffic volumes and land uses are related. Roadways like arterials favor through-movement of traffic over direct access to property. Limiting property access on higher volume roads requires fewer access points or access from lower volume roads such as local or collector roads that intersect with the higher volume roads.

Access management regulations govern access and intersection spacing along all State-maintained roads. Access points are locations for potential vehicle conflicts as motorists enter, maneuver, and exit the roadway. Access management maximizes the effectiveness and safety of the roadway system as it relates to providing access to land adjacent to the roadway.

Important benefits of access management include:

- **Safety** - The implementation of good access management practices on a corridor can reduce vehicle crashes by 50% or more.
- **Mobility** - Spacing traffic signals at appropriate distances permits signals to be coordinated for optimized operation. Optimal signal spacing can reduce the need to increase a roadway's capacity by widening intersections and corridors.
- **Reducing conflicts with non-motorized modes** - Controlling the number and width of driveways reduces areas of exposure for pedestrians and bicyclists along a roadway.
- **Aesthetics** - By providing raised medians and reducing the width of driveways, more room is available for landscaped beds or decorative hardscape surfaces. Access management is appropriate for all roadway types, but the techniques employed depend upon roadway functional classification and context area.
- **Roadway function** - The highest level of access management applies to high-speed regional and community arterial roadways.
- **Land use context** - Greater access control is appropriate for higher order roadways in suburban areas, where operating speeds are highest. Conversely, a higher concentration of driveways is normally found in urban areas. However, the number of driveways should be moderated on main streets to reduce conflicts between motorists and pedestrians or bicyclists.

As Albemarle County continues to develop, access management techniques are increasingly important to maintain roadway efficiency and traffic safety because road improvements and expansions are very expensive. When access proliferates excessively, highways lose their intended function (i.e., quicker mobility) and capacity causing an increase in accidents. Arterial roads, originally designed to connect communities, instead become congested with local traffic, leading to delays and safety problems not only for motorized traffic but also for pedestrians and other non-motorized traffic.

Strategy 5a: As Development Areas Master Plans are updated, address access management strategies. When transportation studies or projects are planned in the Rural Area, ensure that access management strategies are addressed.

In 2008 and 2009, VDOT adopted new access management regulations. Since 2009, VDOT has been implementing access management standards for arterials, collectors, and local roads. Spacing standards for signals, intersections, and entrances were reduced for certain situations in 2011.

An Access Management Strategy Report was developed and adopted as part of the Places29 Master Plan and can be found in the [Appendix](#). The Report provides a series of strategies for managing access along Rt. 29 in Charlottesville and Albemarle. The strategies of this study were incorporated into the objectives and strategies found in the Transportation Section of the Places 29 Master Plan. The Places 29 Access Management Strategy Report is the only report currently adopted as part of the Comprehensive Plan.

Objective 6: Continue to provide safe, effective, and improved urban roads in the Development Areas while recognizing that multimodal opportunities help to improve road functions.

Roads in the Development Areas are expected to be “complete streets” that can accommodate and encourage pedestrians, bicyclists, and transit, in addition to cars. Complete streets make it easier to cross the street, walk to shops, and bicycle to work. They allow buses to run on time and make it safe for people to walk to and from bus stops, among other things.

Strategy 6a: Use and continue to implement Development Areas transportation planning recommendations as found in adopted local transportation planning documents and studies.

New development and redevelopment in the Development Areas rely on the recommendations of the Neighborhood Model which expects a more urban than suburban form of development. A detailed discussion of the [Neighborhood Model](#) can be found in the Development Areas Chapter and the [Neighborhood Model Design Guidance](#) found in the Appendix. Other local transportation planning documents include the [Development Areas Master Plans](#) and the [Recommended Guidelines for Setbacks, Sidewalks, and Urban Streets](#), all of which are in the Appendix.

Strategy 6b: Standardize a process and method to complete the major road network in the Development Areas.

Traditionally, most County roadway improvements have been limited to funding through VDOT’s six year plan programs (SYIP and SSYP) for both primary and secondary roads. However, the County has made a more concerted effort to fund the development of locally important proposed roads and to work with the development community to encourage them to participate in developing these roads. Examples of these projects include the connection of Commonwealth Drive to Greenbrier Drive, the construction of Hillsdale Drive-Branchlands Boulevard, and the construction of Berkmar Drive Extended, in which the County and developers shared construction costs. While progress towards completing the network will be incremental, the County needs to have a process in place that makes it easier to identify, prioritize, and find funding for projects to complete the transportation network in the Development Areas.

Objective 7: Continue to provide safe and effective transportation options while preserving the character of the Rural Area.

With their scenic and visual character, roadways in the Rural Area serve as gateways for people traveling to visit the County's rural resources, such as historic sites or wineries. Greater traffic volume and traffic safety on these roads is a concern of residents and drivers. Roadways in the Rural Area are shared by pedestrians, equestrians, farm vehicles, bicyclists, and automobiles.

Strategy 7a: In the Rural Area, continue to focus on safety improvements rather than on paving and widening rural roads. Consider rural traffic calming techniques to reduce speeding. Adhere to and implement the recommendations found in the Rural Road Design Standards.

The County expects that roads in the Rural Area will have a rural look and feel. Improvements to rural roadways that improve safety are encouraged, but, they should not be built or upgraded to increase vehicle speed, by adding lanes. Tactile improvements such as changing the texture on rural area roads from a smooth surface to a courser material can increase driver awareness of speed. Improvements such as making bridges visually distinctive would call attention to a stream crossing by providing a visual cue to slow down. Operational changes, such as adding roundabouts to rural intersections can improve safety by bringing vehicle speeds down, reducing crashes and moving traffic better than traffic signals. Roundabouts could also serve as a unique gateway to a rural area. More information on traffic calming and safety improvements on rural roads can be found in the [Reference Documents](#).

Strategy 7b: Except for agricultural and forestal purposes, continue to limit construction of new roads in the Rural Area, especially where road building would have an impact on or fragment natural habitats.

Road projects can negatively impact existing natural resources if not constructed carefully. Widening rural roads without appropriate drainage measures can increase soil runoff. Stream crossings can erode stream banks and culverts can interfere with aquatic life. Because natural resource protection is very important in the Rural Area, new road projects and road improvement projects should include measures that avoid degrading habitats or actively improve them. For example, if a new road must cross a migration corridor, wildlife tunnels can be designed and built to assist in habitat connectivity which can help to reduce habitat fragmentation and protect biodiversity of species.

Strategy 7c: Continue to pursue the Rural Rustic Roads Program as an alternative to the Pave-In-Place program for qualified roads that have been designated to be paved by the County.

The Pave-In-Place program is a VDOT program designed to pave low-volume unpaved public roads. However, the Pave-in-Place program is typically used for secondary road projects that may require more intense improvements, such as drainage and slope improvements and acquisition of additional right-of-way for safety improvements.

The Rural Rustic Roads (RRR) Program is a more environmentally friendly and less costly way to pave secondary roads than the Pave-In-Place Program. The RRR Program typically improves roadways (such as surfacing unpaved roads) between existing drainage ditches with very minor drainage and slope improvements, if any. The RRR program allows for safety improvements to be completed on rural roadways in a more cost-effective and timely manner without the need for disturbing significant amounts of land in the Rural Area.

Strategy 7d: Continue to provide and enhance rural transit opportunities for elderly and disabled residents. Enhance ridesharing opportunities.

Although the County's Growth management Policy is intended to provide improvements and services to the Development Areas, there continue to be residents in the Rural Area who need to travel to the Development Area for services. Expanding the use of transportation alternatives for residents with the most need in the Rural Area can help reduce traffic and vehicles miles traveled. For rural residents, such alternatives are critical for those that do not have reliable personal transportation. Improving transportation alternatives for Rural Area residents can include expanding para-transit services offered by JAUNT and creating more Park and Ride lots to encourage ride sharing to employment and population centers.

Objective 8: Continue to improve public transit service.

Public transportation in the Development Areas is provided through three separate agencies: Charlottesville Area Transit (CAT), the University Transit Service (UTS), and JAUNT, Inc. These three agencies often collaborate to improve services within the region, but each has their own service responsibilities and goals.

University of Virginia Transit Service (UTS)

UTS offers transportation and charter services to students, employees, and visitors to UVA. It operates six fixed routes throughout the calendar year with a focus on the academic year. UTS has three types of service: full, holiday, and commuter. UTS and CAT share multiple stops where transfers can be made between the two systems. Commuter routes serve parking lots, while charter service provides spectator transport during special events.

Charlottesville Area Transit (CAT)

CAT provides public transportation in Charlottesville and the urban neighborhoods of Albemarle County. The County participates in funding County routes. CAT operates seven days a week with some evening service and very limited service on Sundays. Routes that provide service in the County include:

- **Route 1**, which provides service to Piedmont Virginia Community College;
- **Route 3**, which provides service to the County Office Building on 5th Street Extended and Southwood Mobile Home Park;
- **Route 5**, which provides service to Walmart on Route 29 North;
- **Route 7**, which provides service to the Shops at Stonefield and Fashion Square Mall also on Route 29;
- **Route 8**, which also provides service to the Shops at Stonefield and Fashion Square Mall
- **Route 9**, which provides service to Fashion Square Mall from Greenbriar Drive and a small part of Rio Road;
- **Route 10**, which provides services to the Pantops area and Martha Jefferson Hospital on R 250 East; and
- **Route 11**, which provides service to CATEC, Fashion Square Mall, and neighborhoods in the Rio Road corridor.

Figure 5 shows the CAT service system map which reflects the current routes. These routes will change over time.

JAUNT, Inc. Paratransit Service

The City of Charlottesville and Albemarle County jointly fund paratransit service through JAUNT. JAUNT is a regional public transportation system providing fixed-route and demand-response service to the general public, agency clients, the elderly, and people with disabilities throughout Central Virginia including existing communities in Albemarle's Rural Area.

Other Transportation Providers

County residents are also served by private taxi services and inner city bus services, such as Greyhound Bus Lines which has a bus station on West Main Street in Charlottesville.

Strategy 8a: Continue to use the recommended improvements for public transit in local Development Areas Master Plans and regional transportation plans such as the Long Range Transportation Plan, the Transit Development Plan, and other studies to determine the location and timing for the provision of transit services.

CAT completed a Transit Development Plan (TDP) for FY 2012-2017 in 2011. The Virginia Department of Rail and Public Transportation (DPRT) require the TDP to identify public transit service and facility needs for six years and include public transit recommendations from the MPO Long Range Transportation Plan. At the request of the City, the TDP also included an extensive evaluation of the existing service characteristics and facility needs.

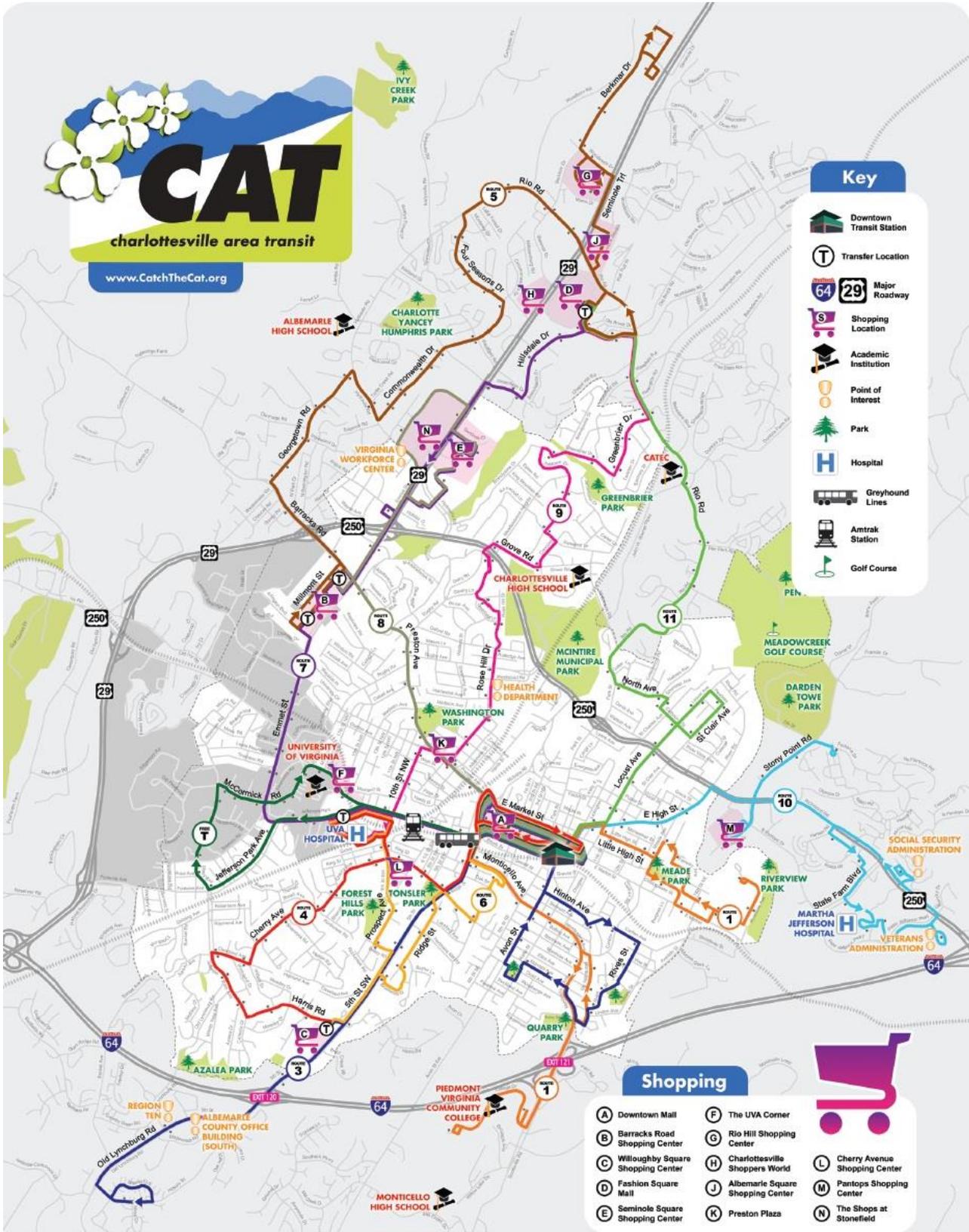
Strategy 8b: Continue to provide public transit service hours at nights and on weekends on appropriate routes to improve ridership and service. Continue to provide service to the Rio Road area, including service to CATEC and the residential neighborhoods along Rio Road.

CAT currently provides evening and weekend services (Saturday only) on several public transit routes that travel into the County. It is important to continue to provide bus service on night and weekends to serve people who work evening and weekend shifts. In addition, evening bus service allows those taking night education classes (such as at PVCC) to return home after classes end. Longer hours of operation increase ridership and ultimately make transit a more viable alternative.

Strategy 8c: Expand transit service to the Hollymead Development Area, Cedar Hill Mobile Home Park, south of I-64 on Avon Street Extended, and Route 250 West.

In March 2013, the City concluded the 2013 CAT Transit Study that built upon the efforts of the 2011 TDP. The 2013 study focused on identifying adjustments to existing fixed-route bus services by increasing ridership, improving service quality, and improving route efficiency. Some of the routes have been adjusted, a new route was added, but more services are needed in the future.

Figure 5: 2015 Charlottesville Area Transit Bus Routes and System



Source: www.charlottesville.org Transit Schedule

The Places 29 Master Plan addresses specific public transportation needs for the northern Development Areas. As population and employment continue to rise along the Route 29 North Corridor more regional and local transit options will be needed such as Bus Rapid Transit (BRT) for regional users and more local routes to address more localized needs. Current service extends to Wal-Mart on Route 29, but does not extend north of the Rivanna River.

The Southern and Western Neighborhoods Master Plan addresses specific public transportation needs for these Development Areas. Population densities are increasing in the Avon Street Extended and Route 20 area. In addition, PVCC is located nearby. While public transit is provided to PVCC, local service is not yet provided on Avon Street Extended or to Monticello High School on Mill Creek Drive. Service will be needed in these areas in the future.

Strategy 8d: Continue to recognize JAUNT as the primary public transportation provider for rural Albemarle County and the County's transportation disadvantaged.

Providing over 318,000 trips throughout its multi-county service area in Fiscal Year 2011, JAUNT serves to connect the Rural Area with the County's Development Areas and the City. For existing Rural Area residents who lack sufficient transportation, JAUNT provides an important service for access to employment and services in the urban area. The County should continue to recognize and support JAUNT's role in the provision of rural public transportation services and continue to maintain and improve existing levels of service provided to County residents.

Strategy 8e: Participate in the formation of a Regional Transit Authority (RTA) that is sufficiently funded to significantly expand transit service in the region with fast, frequent transit service along priority transit corridors.

In 2008, the TJPDC and Vanhase Hangen Brustlin (VHB) produced an RTA Plan. This Plan introduced a series of service and capital expansions that included high speed, priority transit along Route 29 North, expanded service in the Pantops area, and circulator routes to serve neighborhood business centers, such as the Hollymead Town Center and farther south in the heart of the Route 29 North commercial area. Implementing the Plan necessitates formation of an RTA, which has been explored by the City of Charlottesville and Albemarle County since 2006. An RTA would require both localities to fund, manage and govern the transit system. In February 2009, the General Assembly approved the necessary enabling legislation for the formation of the RTA but did not approve the funding-option legislation associated with the initiative. Thus, the City and the County can form an RTA, but the RTA cannot fund its own projects. With the creation of an RTA, Charlottesville Area Transit could expand both its route network and the frequency of service on existing routes.

Objective 9: Continue to implement travel demand management strategies.

One of the most cost-effective means to improve transportation system performance is to make the most of capacity. For example, highways have a fixed capacity that is over-utilized at some times of the day and under-utilized at others. Transportation Demand Management (TDM) strategies, which reduce congestion by providing incentives for commuters to take transit, carpool, and travel at non-peak periods, can boost system performance without adding highway capacity.

TDM seeks to reduce travel demand by reducing the emphasis on single-occupant vehicles and by redistributing transportation demand in space or time. TDM strategies can include biking and walking, carpooling & vanpooling, using Park and Ride lots, and riding transit.

Strategy 9a: Continue to work with the MPO and JAUNT to develop a regional system of Park and Ride lots.

Park and Ride lots offer commuters opportunities to connect with others traveling to a same or similar destination. There are nine Park and Ride lots within the Development Areas and two in the Rural Area. They are located at:

- Maple Grove Christian Church
- Peace Lutheran Church
- Mountainside Senior Living
- Pantops Shopping Center
- Avon Street Extended
- Scottsville at the Scottsville Market
- Forest Lakes North (Health Services Center)
- Wal-Mart South Lot
- Darden Towe Park
- US 29 South and I-64 at Teel Lane
- Route 20 Keene at Piedmont Veterinary Service

The Park and Ride lots offer varying degrees of formality and amenities. Several of the lots are owned and operated by VDOT and include lighting and trash cans. Other parking lots are gravel strips along VDOT right-of-way at major intersections. Most of the Park and Ride lots exist at private facilities through agreements with the property owners. Increasing the number of such facilities will improve opportunities for commuters to rideshare into Albemarle and Charlottesville for jobs.

Strategy 9b: Continue to contribute to and participate in ride sharing services.

RideShare is a program of the Thomas Jefferson Planning District Commission, which works to reduce traffic congestion and increase mobility throughout the City of Charlottesville and the Counties of Albemarle, Fluvanna, Greene, Louisa, and Nelson by promoting alternatives to the single occupant vehicle. Its services include car and vanpool matching, referrals to transit providers, inventory, marketing, developing Park and Ride lots, operating the Guaranteed Ride Home Program, and promoting bicycle and pedestrian transportation. This program continues to expand and most recently has implemented a SchoolPool program to assist schools with the traffic congestion that frequently occurs in their lots. RideShare is also an active participant in the Commuter Information Team (CIT), which includes RideShare, CAT, JAUNT, UTS, and Greene County Transit. RideShare is a formalized program to encourage carpooling. Carpooling is one of the best ways to reduce individual vehicles miles traveled.

Strategy 9c: Continue to work with area employers through the MPO to encourage development of ridesharing and vanpooling programs and transportation demand reduction programs. Encourage development of ridesharing and transportation demand reduction programs as part of rezonings and parking lot requests for major industrial, office, and commercial development projects.

Ridesharing is the most significant contribution individuals can make to reduce vehicular emissions and reduce the need to widen roadways. At times, however, individuals need incentives which can be provided by major employers. At present, some employers assist with vanpooling, such as State Farm Insurance in the Pantops Development Area. The IRS provides for certain tax benefits for employers that use vanpools. County and MPO staff involvement in assisting employers to encourage ridesharing can help to create ways to retain road capacity.

Objective 10: Continue to support air transportation planning and participation in the Charlottesville-Albemarle Airport Authority.

The Charlottesville-Albemarle Airport (CHO) is the only commercial service airport in the region and is located in northern Albemarle County west of Route 29 at Routes 649 and 606, approximately eight miles north of Charlottesville. Service began at CHO by Piedmont Airlines in 1955. Since then, the facility has grown to include a 60,000 square foot terminal facility with modern customer amenities offering onsite 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 number of passengers departing from CHO on commercial flights continues to grow, from just over 65,000 passengers in 1980 to over 230,000 in fiscal year 2012, as seen in Figure 6.

Figure 6: Passengers departing on Commercial Flights at CHO

Year	Passengers
1980	65,620
1990	132,432
2000	165,938
2010	197,776

Source: Charlottesville Airport 2012

The benefits of air travel to Albemarle County and the region include being an efficient means of long distance travel for residents, as well as a method for assisting in travel demand management between localities. Recent improvements to the roadway network around the airport have improved its accessibility. An improved roadway network allows for a future transit connection to the Airport. Transit would connect County and City residents to the airport and other regional activity centers, which is an important step in connecting different modes of Albemarle County's multimodal transportation system.

Strategy 10a: Continue to participate in the Charlottesville-Albemarle Airport Authority.

The County recognizes that the Airport Authority is responsible for the management, planning, and expansion of the Charlottesville-Albemarle Airport facilities. The airport is a driver for economic development and tourism in the County and region. It is also important for those traveling to events at UVA. The County and the Airport Authority should coordinate long-term land use and development plans for the airport area to ensure compatibility of uses and the continued viability of the airport.

The Airport has maintained a master plan for facility development since 1972. The Federal Aviation Administration (FAA) requires an airport to maintain a master plan in order to be eligible to receive grant-in-aid funding through its airport improvement program. There are no set guidelines from the FAA on how often an airport master plan should be updated. Each master plan includes forecasts of aviation activity that are applicable for 5, 10, and 20-year periods. Historically, CHO has conducted an update every 10-12 years.

Strategy 10b: Continue to participate in updates and revisions to the Charlottesville-Albemarle Airport Master Plan in order to ensure land use coordination.

The purpose of the Charlottesville-Albemarle Airport Master Plan adopted in 2004 is to provide the Charlottesville-Albemarle Airport Authority with useful, understandable information and guidance to develop and maintain a safe and efficient airport. It also provides the FAA and the Virginia Department of Aviation with information concerning the planned development at CHO. The Charlottesville-Albemarle Airport Master Plan is a comprehensive planning guide that ensures CHO remains a safe, efficient, and environmentally sensitive air transportation facility, while serving the growing needs of air travelers throughout the region. The Airport Master Plan notes that the vast

majority of customers reach the airport by car. This fact emphasizes the importance of the street system that serves the airport. Traffic delays on the access roads (Route 29 North, in particular) have an impact on the convenience of using the airport and, therefore, its economic vitality. Maintaining a predictable, reasonable travel time from the population and employment centers in the City of Charlottesville and Albemarle County to the Airport is vital to its continued success.

Additional information about the transportation network serving the airport may be found in the Route 29 North Corridor Transportation Study Final Report, dated August 18, 2008, including the eleven Technical Memos all of which may be found in the Places29 Master Plan.

Objective 11: Continue to support rail service for passengers and freight.

Passenger and freight rail service are available in north-south and east-west directions throughout the region. Rail access is an important component of the County's overall transportation system as a complement and supplement to other transportation modes. It is especially important to industrial activities.

Tracks owned by two Class I freight railroads intersect at Charlottesville's West Main Street Station-Norfolk Southern's north-south Piedmont mainline and CSX's east-west line, which is leased and operated by Buckingham Branch Railroad, a local short line railroad.

The rural long range transportation plan states that railways are becoming a more significant means of transportation goods and commodities safety and effectively through our region. An expanded freight railway system can help ease congestion on roadways. While trucking continues to be the primary mode of transporting goods in Albemarle County, continued congestion along Route 29 North and other key routes can decrease business efficiency and the County's economic competitiveness.

Freight Rail

Two freight railroads, CSX and Norfolk Southern, provide service to major consumer markets in the North, South, and Midwest. CSX and Norfolk Southern Railroads provide a network of approximately 20,000 miles of track in 22 states and the District of Columbia and serve every major container port in the eastern United States. North to south freight rail service is provided by Norfolk Southern Railroad, while east to west freight service is provided by CSX Railroad. The Buckingham Branch Railroad company leases the CSX railroad and operates trains on the CSX tracks through Albemarle County and the City of Charlottesville. A second CSX route roughly follows the James River in southern Albemarle County. Presently no freight originates or is received in Albemarle County. Freight rail service supports businesses and economic development efforts of the County. Information on the need for ensuring that hazardous freight is appropriately managed can be found in the [Community Facilities Chapter](#).

Passenger Rail

The Albemarle–Charlottesville region is a growing marketplace for passenger rail. The 2013 Virginia General Assembly passed a transportation funding bill (HB2313) that includes more than \$500 million over the next decade for intercity passenger rail.

Ridership at the Charlottesville West Main Street Passenger Rail Station grew from 52,546 in FY 2009 to 127,524 in FY 2012. Intercity passenger service for Charlottesville is provided by the National Railroad Passenger Corporation (AMTRAK), which took over the Southern Crescent route through Charlottesville in 1979 and continues to offer daily round trip service on the AMTRAK Crescent between New Orleans and New York, including stops in Greensboro, North Carolina, Atlanta, Georgia, and Birmingham, Alabama, among others.

AMTRAK also provides long distance service three days a week on the Cardinal line between Chicago and New York, including stops in Staunton and Clifton Forge in Virginia, White Sulphur Springs (the Greenbrier) and many others in West Virginia, and also stops in Kentucky, Indiana, and Cincinnati, Ohio on its journey west.

Both of these long-distance routes also link the region to Washington, D.C. and the Northeast Corridor, including stops in Baltimore, Philadelphia, Trenton, and New York City's Penn Station. On both routes, more passengers board and alight in the Charlottesville area than at any other station in Virginia.

In addition to the two long distance routes, AMTRAK provides daily roundtrip service on the Northeast Regional between Lynchburg and Washington, DC. The service, which began in October 2009, is the first State-supported intercity passenger train in modern Virginia history. It offers one-seat service between the Charlottesville-Albemarle area and Washington, New York, and Boston, and includes intermediate stops in Culpeper, Manassas, Alexandria, Baltimore, BWI Airport, Philadelphia, Newark, NJ and New Haven, CT, among others.

Factors such as increasing congestion on the Route 29 corridor, a growing tourist market, a thriving business community with strong connections to the Washington, D.C. area, and a growing population of seniors who may prefer the safety and convenience of rail travel over driving, all contribute to the growing desire for passenger rail service.

Strategy 11a: Provide support for the Charlottesville passenger train station in order to accommodate future demand by Albemarle County residents.

A significant long-term problem is the limited size of the Charlottesville station waiting area, as well as the absence of boarding platforms and sheltered boarding areas. Charlottesville's limited station size is a factor potentially affecting the future growth of passenger rail for this area. As many as 200-350 passengers might board the Northeast Regional in Charlottesville on a busy day, yet the waiting area, with its 37 seats and 110 person occupancy limit, can comfortably accommodate only about 75 people. Albemarle County should support the upgrade of the Charlottesville train station and, as appropriate, help to secure funding from available sources to support the future growth of passenger service. Funding through a combination of federal, State, and local grants has aided communities in upgrading their train stations. AMTRAK's Great American Stations Project provides design and engineering services, as well as grants to aid communities in upgrading their stations.

Strategy 11b: Participate in studying the benefits of increased passenger train frequencies that can assist with ridership growth in the Albemarle-Charlottesville region, as well as extended service to the Roanoke area.

To accommodate the anticipated growth in ridership for the Albemarle-Charlottesville region and to support the extended service to Roanoke, additional train frequencies may be needed. While the County will not be actively involved in increasing ridership, the County can provide assistance in promoting rail travel and in encouraging the Virginia Department of Rail and Public Transportation (DPRT) to study the future demand for, and feasibility of, additional service for the Charlottesville and Lynchburg corridor.

The AMTRAK Crescent and Cardinal routes typically run at capacity, and the Northeast Regional route often requires that AMTRAK add two or three coach cars daily to accommodate demand. At least one additional frequency, preferably at an earlier hour for travelers who need to arrive in Washington,

D.C. before mid to late morning, is needed. An earlier train would accommodate business, university, and defense-industry travelers for whom the existing schedules are not well-suited. This also would encourage the use of rail for recreational or business day trips to Washington, D.C., further removing cars from Route 29 North. A daily mid-afternoon train would also be a popular addition for overnight or weekend trips to Washington, D.C. and travel to the Northeast, especially for students, recreational travelers, and tourists.

Strategy 11c: Participate in a study of a new east-west passenger train route through the Albemarle-Charlottesville region.

A possible new passenger route could be developed for Charlottesville that could serve both daily commuters from the West and northbound travelers to Washington, D.C. and the Northeast. The proposed route would begin each morning in either Harrisonburg or Staunton and follow the Cardinal route on the Buckingham Branch line to Charlottesville, with intermediate stops in Waynesboro and Crozet. From the Charlottesville area, the train would continue east on the Buckingham Branch line, making stops in Gordonsville and Orange before switching to the Norfolk Southern Piedmont line (Route 29 North) for the trip North to Washington, D.C. and the Northeast Corridor. A feasibility study by AMTRAK for enhanced service to Charlottesville should include a study of this route. This route has the added advantage that millions of dollars of public investment have already been made by DRPT on the Buckingham Branch line, in part to facilitate the faster movement of AMTRAK's Cardinal trains. Studying a new east-west route would show how much the County's economic development and tourism efforts can improve with increased passenger service.

Strategy 11d: Support extending rail service from Charlottesville to Roanoke.

The City of Roanoke has not had passenger service since 1971 and is the last remaining major urban area in Virginia without passenger rail. Both AMTRAK and the Virginia Department of Public Transportation are working to close that gap. DRPT's 2008 Statewide Rail Plan and Draft 2013 Updated Rail Plan both call for extension of the Lynchburg-Washington, D.C. service to Roanoke. When completed, the Roanoke extension may give Albemarle County passengers direct service to Roanoke and the Shenandoah Valley. The County should support this new passenger rail service to improve the County's economic development and tourism efforts.

Strategy 11e: Continue to implement railroad improvement at intersections with roadways and trails by adding adequate safety devices for passage across the tracks using grade-separated intersections where possible.

Rail service can result in conflicts with pedestrians and automobiles at crossing points. Also, hazardous materials are transported daily along railroad lines. Safety records show that railroad shipment of such material is by far safer than shipment on highways. The shipment of hazardous material further increase the importance of railroad crossing improvements, such as the installation of warning devices to minimize potential collisions.

Railroad-highway crossings at-grade are the responsibility of VDOT and, therefore, are addressed in the Six Year Improvement Plan (SYIP) process. Grade-separated crossings, whether underpasses or overpasses, are preferable to at-grade crossings. Grade separated crossings and bridges are generally the responsibility of the railroad involved. Working with the railroad companies and VDOT is important to find ways to improve safety of railroad crossings.