

CITY OF CHARLOTTESVILLE  
"A World Class City"

**Department of Neighborhood Development Services**

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January 14, 2013

**TO: Charlottesville Planning Commission, Neighborhood Associations &  
News Media**

# Please Take Notice

A Work Session of the Charlottesville Planning Commission will be held on **Tuesday January 22, 2013 at 5:00 p.m. in the NDS Conference Room in City Hall (610 East Market Street).**

## AGENDA

1. Comprehensive Plan Review
  - a. Transportation Chapter
  - b. Urban Design and Historic Preservation Chapter
2. Public Comment – 15 minutes

**In advance of the meeting, Commissioners have been invited to view the Rivanna River Vortex Project displayed at CitySpace.**

cc: City Council  
Maurice Jones  
Aubrey Watts  
Jim Tolbert  
Neighborhood Planners  
Melissa Thackston, Kathy McHugh  
Mary Joy Scala  
Craig Brown, Rich Harris

**CITY OF CHARLOTTESVILLE  
NEIGHBORHOOD DEVELOPMENT SERVICES**



**MEMORANDUM**

To: Charlottesville Planning Commission and City Council  
From: Missy Creasy, Planning Manager  
Date: January 14, 2013  
Re: January 22, 2013 Work Session - Comprehensive Plan Review

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The Commission will focus on the Transportation and Urban Design and Historic Preservation Chapters at the January 22, 2013 work session.

Transportation

At the January 8, 2013 Work session, the commission provided general comments concerning the Transportation Chapter. Ms. Keller provided additional guidance on the Appendix materials. Amanda Poncy has reviewed and made updates to the chapter and appendix based on those comments. The updated materials are attached and she will be available at this meeting

Urban Design and Historic Preservation

Chapter materials are located at <http://www.charlottesville.org/index.aspx?page=3366> and the comments memo is attached. Mary Joy Scala will be available at this meeting.

Other Updates:

Environment Chapter

The Commission signed off on the Environment Chapter at the January 8, 2013 work session. Since that time, Leslie Middleton with the Rivanna River Basin Commission provided comments. Comments from the RRBC, as well as staff's response to those comments, are attached to this memo.

These changes have been made and the updated chapter is available for your review. If you have any concerns, please let me know so we can place back on a work session agenda if needed.

Attachments:

- Work session Schedule
- Transportation Memo (1/10/13)
- Updated Transportation Chapter (1/10/13) and appendix.
- Transportation comments memo (11/7/12)
- Urban Design and Historic Preservation comments memo
- Environment Comment memo (1/14/13)
- Environment Chapter Update (1/14/13)

## Work Session Schedule (updated 1/14/13)

January 15, 2013 – Joint City County Planning Commission Meeting (5:30-7:30 County Office Building)

January 22, 2013 - Work Session (5-7PM NDS Conference Room City Hall)  
Complete Transportation Chapter review and Urban Design and Historic Preservation

January 31, 2013 – Community Outreach meeting – (4-7PM Water Street Center)  
(February 6<sup>th</sup> weather date)

February 5, 2013 – Work Session (5-8PM NDS Conference Room City Hall)  
Review Economic Sustainability, Housing, and Land Use Chapters - Will reserve additional time for City Council to provide comments on Land Use.

February 12, 2013 – Regular Planning Commission meeting  
Continue Land Use discussion, Review Community Values, Community Characteristics, Implementation, and Glossary.

February 26, 2013 – Work Session (5-7PM NDS Conference Room City Hall)  
Complete any pending discussions, Review Introduction and Community Facilities Chapter

March 5, 12 & 26, 2013 – Complete any pending discussions

The above schedule will be revised as needed based on the pace of chapter review. Commissioners will need to review the draft chapters noted for each session located here <http://www.charlottesville.org/index.aspx?page=3366> and staff will provide chapter update memos in advance of work sessions.



**CITY OF CHARLOTTESVILLE  
NEIGHBORHOOD DEVELOPMENT SERVICES**

**MEMO**

To: Missy Creasy, Planning Manager  
From: Amanda Poncy, Bicycle and Pedestrian Coordinator  
Date: January 9, 2013  
Re: Comprehensive Plan Update-Transportation Chapter

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On January 2, Planning Commission met to review the Transportation and Environment Chapters of the Comprehensive Plan. The Commission provided general comments on the Transportation Chapter. The following summarizes the responses to those comments and updated materials are attached for review. The next discussion for this chapter will take place on January 22, 2013.

**Comments Received**

Additional comments have been received from the following sources:

*Planning Commission 1-8-13*

*Genevieve Keller received 1-8-13*

The detailed comments are attached

**Summary of how comments have been integrated into the Draft**

1. The commission would like you to look at the chapter and attempt to consolidate further – it is too long.  
The 2007 Plan included 15 goals. The 2012 draft reduced the number of goals to 11. I have looked for redundancies and have consolidated the goals down to 9 by eliminating goals 3 (traffic calming) and 9 (technology). Each of the associated objectives have been assumed under *Goals 1, 2 and 4*. . *The commission might further consider removing goal 10 and including it in the community/public facilities chapter as many of the objectives are more facilities related than transportation specific.*
2. It was noted that the Transportation supplement document is not as reflective of the City's current transportation focus and opportunity should be taken to provide updates. I noted that this material was updated by a consultant in 2007 and for this plan review we anticipated

updating numbers but not rewriting the materials. They asked that you take a look and update as possible (not all commissioners had read this portion of the document yet).

*Effort was made to strike outdated language in the introduction and revise sections on bicycle and pedestrian access to be more consistent with current planning practice. Additional sections were added to provide more detail on other modes such as Zipcar, Greyhound, etc.*

3. It was felt that Objective 3.1, 3.2 and 3.3 could be combined.  
*Objectives 3.1 and 3.2 were combined and moved to Goal 1. Details about specific traffic calming measures were removed and included in the appendix. Objective 3.3 and 1.3 were virtually the same. These were combined.*
4. The details of traffic calming measures could be outlined in the appendix and those details removed from the objectives  
*See above.*
5. The Chapter needs further organization. The suggestion was to have subheadings in 4 categories: Pedestrian, Bike, Roadways and regional transportation (to include air and rail)  
*Subheaders would be a useful addition to this chapter, however, I think we need to be careful about creating silos for each road user as it goes against our desire to create complete streets. The original goals were written intentionally to highlight the importance of seeing bike/ped as an integral part of roadway projects – not separate from roadway projects. My suggestion is to use the following headers: Complete Streets, Regional Transportation, and Financial.*
6. Contact Meredith Richards for updated rail initiatives.  
*Contacted Meredith via email on 1/10. Awaiting response.*
7. In the vision statement, they would like “transportation network” noted as opposed to “street network” so it is not all about the cars (see copy at your desk).  
*Suggestions incorporated.*

## TRANSPORTATION GOALS

The City's transportation network provides the fundamental framework for creating a safe, livable community. The system connects people to each other and to destinations, fosters economic activity and provides public space for human interaction. As a result, the transportation system should be designed for everyone, whether young or old, motorist or bicyclist, walker or wheelchair user, bus rider or shopkeeper. The transportation network is an effective, flexible framework for building community.

### COMPLETE STREETS GOALS AND OBJECTIVES

**goal ONE: Increase safe, convenient and pleasant accommodations for pedestrians, bicyclists and people with disabilities that improve quality of life within the community and individual neighborhoods.**

- 1.1 Continue to implement the City's Bicycle and Pedestrian Master Plan to facilitate bicycle and pedestrian travel within the City.
- 1.2 Provide convenient and safe pedestrian connections within 1/2 miles of all commercial and employment centers, transit routes, schools, and parks by completing the sidewalk network using a priority system of: dual-side routes along all arterial and collector routes; dual-side safe routes to all city schools; dual-side routes to parks and public facilities; completing routes that have less than ¼ mile sections missing; mitigation rain run-off and drainage problems; and citizen requests in neighborhoods.
- 1.3 Provide design features on roadways, such as street trees within buffers, street furniture, sidewalk widths, and buffers, that improve the safety and comfort level of all users and contribute to the city's environmental goals.
- 1.5 Continue to include bicycle and pedestrian accommodations in conjunction with the planning and design of all major road projects, all new development, and road paving projects.
- 1.6 Consistently apply ADA standards to facility design and ensure that accessible curb ramps exist at all pedestrian crossings where conditions allow.
- 1.7 Coordinate with public schools to develop a Safe Routes to School Travel Plan for every public school in the City.
- 1.8 Seek to expand traffic calming where applicable throughout the City in collaboration with neighborhood residents and as part of the development process.
- 1.9 Explore and implement safe, convenient, and visually attractive crossing alternatives to enable pedestrians and bicyclists to cross major thoroughfares.

**goal TWO: Reduce the demand for automobile travel and improve quality of life through land use and community design techniques.**

- 2.1 Encourage a mix of uses in priority locations, such as along identified transit corridors and other key roadways, to facilitate multimodal travel and increase cost-effectiveness of future service.
- 2.2 Encourage new street connections where appropriate to distribute traffic volumes across a network and reduce trip lengths for pedestrians, cyclists, and vehicles.
- 2.3 Provide convenient and safe bicycle and pedestrian connections between new and existing residential developments, employment areas, and other activity centers to promote the option of walking and biking rather than driving.
- 2.4 Promote urban design techniques, such as placing parking behind buildings, reducing setbacks, and increasing network connectivity, to create a more pedestrian friendly streetscape to reduce speeds on high volume roadways.
- 2.5 Develop a comprehensive set of street design guidelines based on the Context Sensitive Solutions Approach that balances multimodal transportation options while considering design techniques that allow for urban scale, walkable communities where appropriate.
- 2.6 Improve walking and biking conditions by discouraging and/or minimizing curb cuts for driveways, garages, etc. in new development and redevelopment.
- 2.7 Provide financial assistance to efficient and effective Transportation Demand Management (TDM) programs.
- 2.8 Encourage existing and new employment and business uses to support alternative travel modes by providing on-site amenities such as transit shelters, bicycle storage (racks/lockers) and showers as appropriate.
- 2.9 Reduce parking requirements when a development proposal includes Transportation Demand Management (TDM) strategies that can be demonstrated to reduce trip making to and from the development.

## **goal THREE: Improve mobility and safety of the arterial roadway network.**

- 3.1 Preserve the traffic-moving capacity of the arterial roadway network using Travel Demand Management for local employers including, the University of Virginia, City of Charlottesville, Albemarle County and Charlottesville High School.
- 3.2 Continue to use Transportation System Management techniques such as Intelligent Transportation Systems to coordinate traffic signals, communicate emergencies, weather and incidents to drivers.
- 3.3 Develop Access Management standards for new development and redevelopment.
- 3.4 Identify multimodal solutions to reduce single occupancy vehicle use.
- 3.5 Identify additional roadway connections to improve the grid.

## **goal FOUR Maintain an efficient transportation system that provides the mobility and access that supports the economic development goals of the City.**

- 4.1 Establish designated truck routes within the City.
- 4.2 Minimize the impact of congestion on commuters and the movement of goods.
- 4.3 Prioritize funding for regular maintenance to preserve and sustain investments in our transportation system.

## **goal FIVE: Provide parking to adequately meet demand and support economic vitality without sacrificing aesthetics, minimizing environmental impacts and accommodating pedestrians, bicycles, transit users, and disabled individuals.**

- 5.1 Provide public parking to maintain the vitality of the City while using prices (including metering) and locations of parking to encourage use of transit, walking and bicycling.
- 5.2 Explore options for park-and-ride lots and examine parking exempt zones. Utilize the zoning regulations to promote sound private parking facility supply and design by private developers.
- 5.3 Encourage employers to provide incentives for employees who do not drive to work.
- 5.4 Work with University of Virginia officials to encourage students, faculty and staff to live closer to the University or to use alternative modes of transportation wherever they live.

- 5.5 Explore shared motor vehicle service for the Downtown and University areas.

- 5.6 Examine investment in municipal, shared surface or structured parking lot or lots on targeted mixed use corridors in an effort to encourage redevelopment.

- 5.7 Continue to provide bicycle parking at public buildings and explore opportunities to provide bicycle parking within public right-of-way to support local businesses.

## **REGIONAL GOALS AND OBJECTIVES**

### **goal SIX: Create a transit system that increases local and regional mobility and provides a reliable and efficient alternative for Charlottesville citizens.**

- 6.1 Continue to expand transit service and increase ridership.
- 6.2 Evaluate transit services, including attention to Sunday and after dark bus service and route restructuring, and update the City-wide transit plan.
- 6.3 Continue to work with Albemarle County, and the TJPDC to develop a transit system that adequately serves the residents of the entire Charlottesville-Albemarle community.
- 6.4 Work closely with state government, regional organizations and adjacent jurisdictions to support transit-oriented and transit-accessible employment throughout the region.
- 6.5 Accommodate the travel needs of all residents and employees, including low-income populations, the elderly and those with disabilities.
- 6.6 Encourage the development of transit-oriented /ready developments.
- 6.7 Explore the development of a dedicated funding source for future transit needs
- 6.8 Work closely with new developments to provide an accessible path from nearby transit stops to an accessible entrance of the site/building.
- 6.9 Work with appropriate agencies to evaluate the use of ITS/transit signal priority to promote transit efficiency.

### **goal SEVEN: Continue to work with appropriate governing bodies to create a robust regional transportation network.**

- 7.1 Develop a regional transportation network surrounding the City by actively working with VDOT, TJPDC, Albemarle County, and the University of Virginia to plan, design and construct new facilities.

**7.2** Evaluate regional transportation network priorities surrounding the City in MPO Plans.

**7.3** Actively work with the MPO to collect information regarding regional travel patterns, such as origin destination data, bicycle counts, etc., to improve access to destinations within the City and region.

**7.4** Increase communication and cooperation between City, County, University, interest groups, developers and the public for both recreational and transportation trails.

**7.5** Coordinate with the County to ensure consistency of bicycle and pedestrian facilities across City-County boundaries.

**7.6** Continue to work with the TJPDC, Albemarle County and VDOT on design solutions for Route 29 that balance the needs of both local and regional traffic.

**7.7** Encourage existing and new employment and business uses to support alternative travel modes by participating in the region's Rideshare and car/vanpooling programs.

## FINANCIAL GOALS AND OBJECTIVES

**goal EIGHT Develop sustainable transportation infrastructure by designing, constructing, installing, using, and maintaining the city's transportation assets and equipment in efficient, innovative, and environmentally responsible ways.**

**8.1** Integrate best management practices into all aspects of the city's transportation and facility maintenance activities.

**8.2** Develop policies and strategies, including collaboration with partnering organizations, to incorporate green infrastructure alternatives as an integral part of infrastructure planning.

**8.3** Develop strategies to assess the cost-effectiveness of using green infrastructure instead of more traditional alternatives for specific projects and ensure that the multifunctional benefits of green infrastructure are considered in cost-benefit analyses.

**8.4** Continue to perform regular maintenance on existing transportation related equipment and facilities to maximize capital investment and minimize air, water, and noise pollution.

**8.5** Use environmentally safe products.

**8.6** Where feasible, use alternative energy sources to power equipment.

**8.7** Develop a plan to replace City owned vehicles with more environmentally friendly vehicles.

**goal NINE Identify and seek new sources of sustainable funding protocol and mechanisms for the maintenance of existing infrastructure and facilities and future development of the transportation system.**

**9.1** Identify additional funding sources for transportation improvements including grants, public-private partnerships, and potential for system operations revenues.

**9.2** Create a regional advocacy that brings all jurisdictions together to push for state-wide changes in transportation funding and to lobby the general assembly for additional funding/enabling authority to do so.

**9.3** Coordinate the funding and development of transportation facilities with regional transportation and land use plans, and with planned public and private investments.

**9.4** Explore the possibility of establishing a Transportation District or impact fee service areas for road improvement projects and determine the feasibility of implementing them.

**9.5** Make developers aware of new trail linkages needed and seek opportunities for private donations of trail easements and construction of trail enhancements such as bridges or interpretive signage.

**9.6** Pursue funding through state and federal grant programs to support multimodal transportation planning and the integration of transportation and land use.



## CHARLOTTESVILLE COMPREHENSIVE PLAN – 2012 UPDATE TRANSPORTATION APPENDIX

### 6.0 Background

The City’s transportation network provides the fundamental framework for creating a safe, livable community. Transportation networks connect people to each other and to destinations, foster economic activity and provide public space for human interaction. As a result, the transportation system should be designed for everyone, whether young or old, motorist or bicyclist, walker or wheelchair user, bus rider or shopkeeper. The transportation network is an effective, flexible framework for building community.

In 2010, City Council adopted a resolution that supports the idea that streets should be designed for all users. The City’s Complete Streets Resolution defines complete streets as “roadways that enable safe and convenient access for all users including bicyclists, children, persons with disabilities, motorists, movers of commercial goods, pedestrians, users of public transportation, and seniors.” It recognizes that streets that support multiple uses and users that are more conducive to public life and efficient movement of people than streets designed primarily to move automobiles and trucks. It also acknowledges the economic, environmental, health, fiscal and quality of life benefits to promoting pedestrian, bicycle and public transportation travel.

The transportation chapter of the city’s comprehensive plan seeks to better incorporate City Council’s policy by establishing a framework for coordinating transportation with land use, urban design, economic development, redevelopment, the environment and other elements essential to developing a sustainable transportation system. It provides direction, guidance and prioritization for transportation investments and mobility issues. The transportation chapter describes the balance of priorities that must take place in order to accommodate competing demands for finite resources in pursuit of more “Complete Streets.”

Overall Transportation System Goal: Develop a safe, equitable, and efficient transportation system that provides a range of transportation choices for all roadway users; reduces single occupancy vehicle travel (from 59 percent to 50 percent for commuters); enhances residents’ health, safety, and quality of life; facilitates development in appropriate locations; supports a strong, diverse economy; conserves natural resources and reduces greenhouse gas emissions.

### 6.1 INTRODUCTION

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 a result, the transportation network and land use beyond the City limits have a significant impact on travel through the City. Similarly, the City’s land use and transportation decisions affect regional travel. The limited regional transportation facilities surrounding the City connecting origins and destinations both located outside of the City limits place a significant burden on the City’s transportation network. The table below reflects the regional travel patterns of Charlottesville and Albemarle County residents in 2000 and 2010.

### Means of Transportation to Work by Workers 16 Years and Over

Mode	City of Charlottesville		Albemarle County	
	2000	2010	2000	2010
Drove Alone	60.4	58.8	78.8	76.9
Car Pool	9.7	10.5	12.0	10.5
Public Transit	5.0	7.3	1.6	2.5
Walked	16.5	14.6	1.5	1.7
Bicycle	1.9	2.3	0.2	0.3
Worked at Home	5.4	5.2	5.1	7.1

Source: U.S. Census of Population 2000 and 2010

Though other modes of transportation are used in Charlottesville, the automobile remains the primary means of travel for most residents. As reported in the 2010 Census 5 Year Estimates, the chart above indicates how people ages 16 and older in the City of Charlottesville are commuting to work. As shown, 58.8% of Charlottesville residents choose to drive alone to work, while only 14.6% of residents walk to work, the next highly used mode to the automobile. Compared to 2000 census data, the mode choice is relatively unchanged with all modes varying by three percent or less. Despite little change, it is important to note that since 2000 driving alone has decreased from 61% to 58.8%. At the same time, the statewide share of drive-alone work trips has dropped from 70 percent to 64 percent, according to DRPT’s Transit and TDM Report to the 2012 General Assembly.

The Charlottesville-Albemarle region of Central Virginia, as well as its adjoining counties, continues to experience population growth, commercial development and the associated increase in traffic congestion that has long plagued many larger Virginia municipalities. The addition of highway lanes on US Route 29 just north of Charlottesville in the mid-1990s allowed more vehicular throughput necessary to compliment continued commercial and residential growth along the corridor. Unfortunately, the throughput gained by the widening project has been negated somewhat by adjacent development contributing to increased traffic volumes approaching the capacity of the facility.

The transportation system includes not only vehicular travel, but travel by walking, transit, bicycle, rail, and air. In support of the community’s vision to enhance the quality of life, this Transportation Appendix considers all of the components of the transportation system in Charlottesville: to gauge how it moves people and goods, to identify travel issues and to set goals for the system to function safely and efficiently in the future.

The following text includes a review of the planning context for the Charlottesville transportation system including plans formulated by others at the regional level. It considers existing conditions for travel by all modes, including walking, transit, bicycle, rail, and air..

## 6.2 PLANNING CONTEXT

### VTrans2035 Corridors of Statewide Significance

VTrans2035 is Virginia's multimodal long-range transportation policy plan. Led by the Office of Intermodal Planning and Investment, it is a policy document that frames the vision for the future and the critical steps to make that vision a reality. The goals of VTrans2035 set the foundation for the future of transportation in the Commonwealth. It is these goals that guide and support the recommendations identified in the Virginia Surface Transportation Plan.

The Corridors of Statewide Significance (CoSS) concept was first introduced in VTrans2025 as the Multimodal Investment Network (MIN). These MINs were to be the focus of statewide investment. Eleven MINs were identified throughout the Commonwealth of Virginia and were defined as multimodal networks. It was envisioned that high priority multimodal projects within these corridors would be given increased consideration over single mode solutions in modal plans.

The City of Charlottesville is located at the crossroads of two major corridors of statewide significance: the east-west corridor (I-64) and the Seminole Corridor (Route 29) as represented in Figure 12.



House Bill 2019, adopted in 2009, requires that the long-range transportation plan sets forth an assessment of needs for all Corridors of Statewide Significance and that all modes of travel are considered.

Specifically, VTRANS 2035 contains four projects within the City of Charlottesville:

- Route 29 (Emmet Street) – Add third southbound lane on Route 29

- Route 29 (Emmet Street) - Route 29/Route 250 Interchange Project
- Route 250 – Construct grade separated interchange at McIntire Road
- I-64 (between Route 29 and Route 616, located in both City of Charlottesville and Albemarle County) - Widen to 6 lanes

## **Regional Planning - Metropolitan Planning Organization and Thomas Jefferson Planning District Commission**

Charlottesville is part of a regional planning organization called the Charlottesville- Albemarle Metropolitan Planning Organization (MPO). The Charlottesville-Albemarle MPO is the forum for cooperative transportation decision-making among Charlottesville, Albemarle County, state and federal officials. The MPO considers ongoing regional growth and combines public input, technical data, and agency collaboration to develop long-range transportation plans and programs for the region, specifically for the City of Charlottesville and for the urbanized area of Albemarle County immediately surrounding the City. The MPO also coordinates the transportation planning activities of the various local transportation-related agencies that have both a direct and indirect impact on regional travel.

The Charlottesville-Albemarle MPO consists of voting members: two elected officials from the City of Charlottesville, two from Albemarle County, and one Virginia Department of Transportation (VDOT) representative. Nonvoting members include a Technical Committee composed of citizens, University of Virginia staff, local planners, transit employees, and engineering/public works staff, VDOT, the Virginia Department of Rail and Public Transportation (VDRPT) and the Federal Highway, Transit and Aviation Administrations. The MPO is staffed by the Thomas Jefferson Planning District Commission (TJPDC) and is supported by federal, state and local government funds. Its fundamental documentation is a *Unified Planning Work Program* (UPWP) describing MPO activities that are to be developed each spring. Other regular planning documents include a *Transportation Improvement Program* (TIP), which list individual projects for the upcoming three years, and the 20-year *Charlottesville Area Transportation* (CHART) Plan, which is updated every five years. Transportation projects developed with federal funds must be approved in the TIP before the Federal Highway Administration or the Federal Transit Administration will approve funding.

The TJPDC is directed by a twelve-member board, consisting of two representatives appointed by each local governing board, more than half of whom are local elected officials. The Commissioners have varied backgrounds and currently serve on various boards and committees in the region. Meeting monthly, they provide direction and oversight for TJPDC activities.

In addition to the two voting members on the MPO Policy Board and two Commissioners on the TJPDC governing board, the City is represented by staff and the Planning Commission on the MPO Technical Committee and citizens on the CHART citizen's advisory committee.

The following summarizes current planning documents which directly effect the City of Charlottesville that have been developed by the Charlottesville-Albemarle MPO, in cooperation with the TJPDC.

## United Jefferson Area Mobility Plan 2035

UnJAM, the United Jefferson Area Mobility Plan, is the long range transportation plan for the Charlottesville-Albemarle Metropolitan Planning Area (MPO), which includes the City of Charlottesville and urbanized area of Albemarle County. This is the region's second long range transportation plan that combines the Charlottesville-Albemarle Metropolitan Planning Organization (MPO) long range transportation plan with the Rural Long Range Plan (RLRP). UnJAM 2035 builds upon the principles and goals established in UnJAM 2025, which captured local visions for land use and transportation growth and development, while achieving a regional consensus on priority projects and strategies. An update to UnJAM 2035 will be complete by 2014.

UnJAM 2035 capitalizes on the following set of adopted Regional Mobility Goals, which specify the steps we can take to achieve the Regional Vision.

### Improved, Expanded Roadway Network

- More complete network of parallel and connector roads
- Re-engineer existing roads for increased capacity, safety, and enhanced business environment
- Develop new roadway designs for balanced, multi-modal performance

### Efficient Transit System integrated with other travel modes

- Develop Enhanced Bus, Bus Rapid Transit (BRT), or Streetcars for fast, frequent, dependable service on major corridors
- Commuter Express service to outlying areas
- Improve Regional Rail service
- System improvements for downtown and neighborhoods
- Technology implementation to maximize efficiency and convenience

### Pedestrian Friendly Streets and Highways

- Complete and connect sidewalk system
- Safe, usable crosswalks with pedestrian refuges
- Better lighting, signage, landscaping and signals

### Complete Bicycle Network and Amenities

- On-road bike lanes on urban streets
- Off-road multi-purpose trails along major corridors
- Protected parking at all destinations

### Improved Integration & Support for Ridesharing and Travel Demand Management

- Designated travel lanes for car/vanpoolers
- Enhance employer-based incentives
- Improve and increase park and ride lots
- Improve coordination of TDM strategies with work, education and special events

### Safe & Efficient Freight Movement

- Separate freight movements from passenger travel where possible
- Support on-time delivery needs of business and industry

### Policy and Regulatory Changes

- Amend codes and standards for more flexible roadway and development designs

- Adjust funding formulas to deliver a truly multi-modal system
- Expand modeling and forecasting to coordinate transportation

### Regional Rail Conceptual Study

As part of the multi-pronged UnJAM planning process, TJPDC and the MPO sponsored a series of hands-on planning workshops to garner public input for creating the Regional Transportation (CHART) 2025 Plan. As a result of these workshops, there was broad-based interest in some sort of rail transport from outlying regions to the Charlottesville area. The Rail Conceptual Study, dated November 2004, highlights all of the potential rail options so that comparisons could be made for informed choices. The Regional Rail Conceptual Study examines light rail as well as commuter and intercity passenger rail alignments; the latter two options would primarily use existing Norfolk Southern Corporation and CSX Transportation lines. For short-intermediate trips, the Commonwealth of Virginia has already recommended a regional passenger rail service called the TransDominion Express (TDX) which would utilize Norfolk Southern lines in this region. This Rail Conceptual Study also outlines several proposals for commuter rail services which include Norfolk Southern (North-South) and CSX (East-West) lines, both of which are roughly parallel to Virginia state primary roads. The commuter rail proposals for CSX rail lines extend outside the PDC area as far west as the City of Staunton and as far east as Richmond. The commuter rail proposals along Norfolk Southern tracks would serve the University of Virginia, downtown Charlottesville and commercial and residential developments along the US 29 corridor.

In agreement with the Shaping Community document, this report recommends that the streetcar be an active part of the multimodal network. Integration of the streetcar mode is important in the urban area setting, and planning should begin to include the major trunk line along West Main Street and its inclusion into the downtown transit center recently constructed.

### TJPDC/VDOT Multi-modal Corridor Study

With funding from the VDOT State Transportation Planning Grant Program, TJPDC worked with Fluvanna, Louisa and Albemarle Counties to create a transportation plan for the Northwest Fluvanna/Southwest Louisa/Eastern Albemarle Corridor. The transportation plan supports safe, multi-modal transportation options for drivers, transit riders, pedestrians and bicyclists by identifying investment strategies and key spot improvements to improve the capacity and safety of existing roads in the corridor. The study analyzed the impacts of different development scenarios. Elements of the study may be incorporated into the County's Comprehensive Plan.

### US 29 North Transportation Corridor Study

The US 29 North Corridor Transportation Study is a multi-phased process to develop a plan to guide future public and/or private investment in the transportation infrastructure of the segment of US 29 from the Route 250 Bypass in the City of Charlottesville through Albemarle County to the Greene County boundary. The Transportation Study is a component of the Places29 Master Plan that is being prepared by Albemarle County. Places29 is a community planning project that brings residents, business owners and others together to map out the best possible shared vision

for this critical area. The project integrates land use planning for four designated urban communities within the US 29 North Transportation Corridor Study area. The transportation plan resulting from the US 29 North Corridor Transportation Study is the transportation component of the Places29 Master Plan that was adopted as part of the County's Comprehensive Plan.

### 29H250 Phase 2 Plan

The 29H250 Phase 2 Study is a continuation of the 29H250 Intersections Study that was completed in May 2003. A team composed of representatives from the MPO, VDOT, Charlottesville and Albemarle County were joined by expert consultants for Phase 2 of the planning process which was completed in September 2004. The goal of this project was to develop a context-sensitive, multi-modal transportation improvement plan to complement existing and anticipated development along the US 29 corridor and Hydraulic Road, focusing on the extended area surrounding the intersections of US 29 with Hydraulic Road and US 250. Public workshops were held to introduce the design concepts for transportation system improvements in the area around US 29, US 250, and Hydraulic Road. After requested feedback, detailed technical and economic analyses were completed. The economic analysis indicated that tax revenues are projected to increase under all options. Property, meal and sales tax revenues (largely in the City) are projected to increase by \$1.4 to \$2.2 million per year depending upon the transportation option selected. At an interest rate of 5 percent over 20 years this stream of new tax revenue could generate \$17 to \$28 million in capital.

### Shaping Community with Transit

Published in 2005, Shaping Community with Transit presents an argument for a streetcar transit system on West Main Street to connect downtown Charlottesville and the University of Virginia. This report provides an overview of existing conditions in Charlottesville and a broad view of several available public transit options including bus, light rail, bus rapid transit (BRT) and streetcars, all of which have been considered as possible Charlottesville options in the past. This report also characterizes the types of land use and development patterns that are associated with transit systems and those that could support a streetcar transit system. Finally, this study provides a listing of steps that should be implemented to further assess the potential for and benefits of a streetcar transit system along West Main Street.

In the fall of 2003 the City of Charlottesville sponsored the "Summit on Transportation and Transit" to develop a vision for transit along the West Main Street corridor. The summit's goal was to develop an innovative transit strategy for the most visible and highly traveled corridor within the City. The final recommendations of the Summit were the following:

- Realize that Charlottesville 's quality of life is threatened by vehicle congestion.\_
- Build on the success of the downtown mall and the reputation of UVA.\_
- Re-invest in West Main transit.\_
- Short-term: improve shuttle between University and City Hall.\_
- Intermediate-term: pursue an urban streetcar.\_
- Long-term: develop regional bus rapid transit
- Light Rail does not make sense in this community.\_

- Develop a parking strategy that works with transit.

### Jefferson Area Bicycle, Pedestrian and Greenways Plan

TJPDC also supports, with a variety of efforts, those who travel on foot via roads, trails and public spaces. In April 2004, the TJPDC adopted the *Jefferson Area Bicycle, Pedestrian and Greenways Plan*. The purpose of this plan is to provide information and guidance on the development of facilities and other accommodations to enhance safe bicycle and pedestrian travel within the Thomas Jefferson Planning District. Descriptions are given as to how localities can create and maintain safe, efficient walking and biking systems that link people to the services they need. An overall network is proposed to connect the many communities of the region while creating smaller networks within those communities. The plan also identifies methods for increasing awareness among the public, especially automobile drivers, about the needs of walkers and cyclists. Implementation and funding issues are discussed, as well. This plan offers recommendations for both physical improvements and programs aimed at improving bicycle and pedestrian facilities and safety.

This regional plan is designed so that it can easily be incorporated into local/municipal plans. It begins with a description of existing conditions, demands and needs, and possible facility types for both bicycles and pedestrians. It also includes plans for each locality and references to any existing plans. Each local plan has a pedestrian and bicycle section, including maps. Facilities linking to localities surrounding the planning district are coordinated with those localities' plans.

### Northtown Trail

The Thomas Jefferson Planning District and the Charlottesville-Albemarle Metropolitan Planning Organization, working with the City of Charlottesville and the County of Albemarle, completed planning for the Northtown Trail Project in 2010. The planning effort identifies a conceptual bicycle and pedestrian trail that will extend from the Charlottesville Downtown Mall to Lewis and Clark Drive in northern Albemarle County. Though only about 1.5 miles of the Northtown Trail are within the City boundaries, this trail will benefit Charlottesville residents by providing alternative commuting options, minimizing the need for vehicular parking, and increasing use of the City's in-place bicycling and pedestrian facilities.



## **Albemarle County Comprehensive Plan**

Albemarle County surrounds the City of Charlottesville entirely. As a result, the land use and transportation decisions made by the County have a significant impact on transportation within the City. Albemarle County's current Comprehensive Plan aims to "...channel development into designated Development Areas while conserving the balance of the County as rural areas." The plan outlines the Neighborhood Model and focuses on three types of Development Areas.

The Neighborhood Model, appended to the Comprehensive Plan in 2001, "supports a change in the form of urban development from what currently exists" and "...recognizes that if the Development Areas are to be the primary areas receiving residential growth, density must be increased..." and "to achieve that density, the form of development must change and that form must be more urban and less suburban." The Neighborhood Model Goals that relate to the transportation on a regional scale include:

- Network – A network of streets, bikeways, pedestrian paths, and bus routes will connect new neighborhoods as well as existing residential areas and nonresidential districts.
- Mixed Uses – Neighborhoods will contain a true mix of uses, including residences, shops, and places of employment, as well as civic, religious, and cultural institutions.
- Transportation Options – Convenient routes for pedestrians, bicyclists, and buses/other transit including light rail will augment the street network. Public transit stops will be located within each Development Area. Walking to them will be safe and convenient. Waiting for transit will be comfortable and a normal part of activity.

**Figure 6-1** illustrates the locations of the designated Development Areas. The Urban Area immediately surrounds the City and is divided into seven neighborhoods. These neighborhoods are intended to be less suburban and more consistent with the character of the City.

The Communities are smaller urban centers removed from the Urban Area. Three Communities are included:

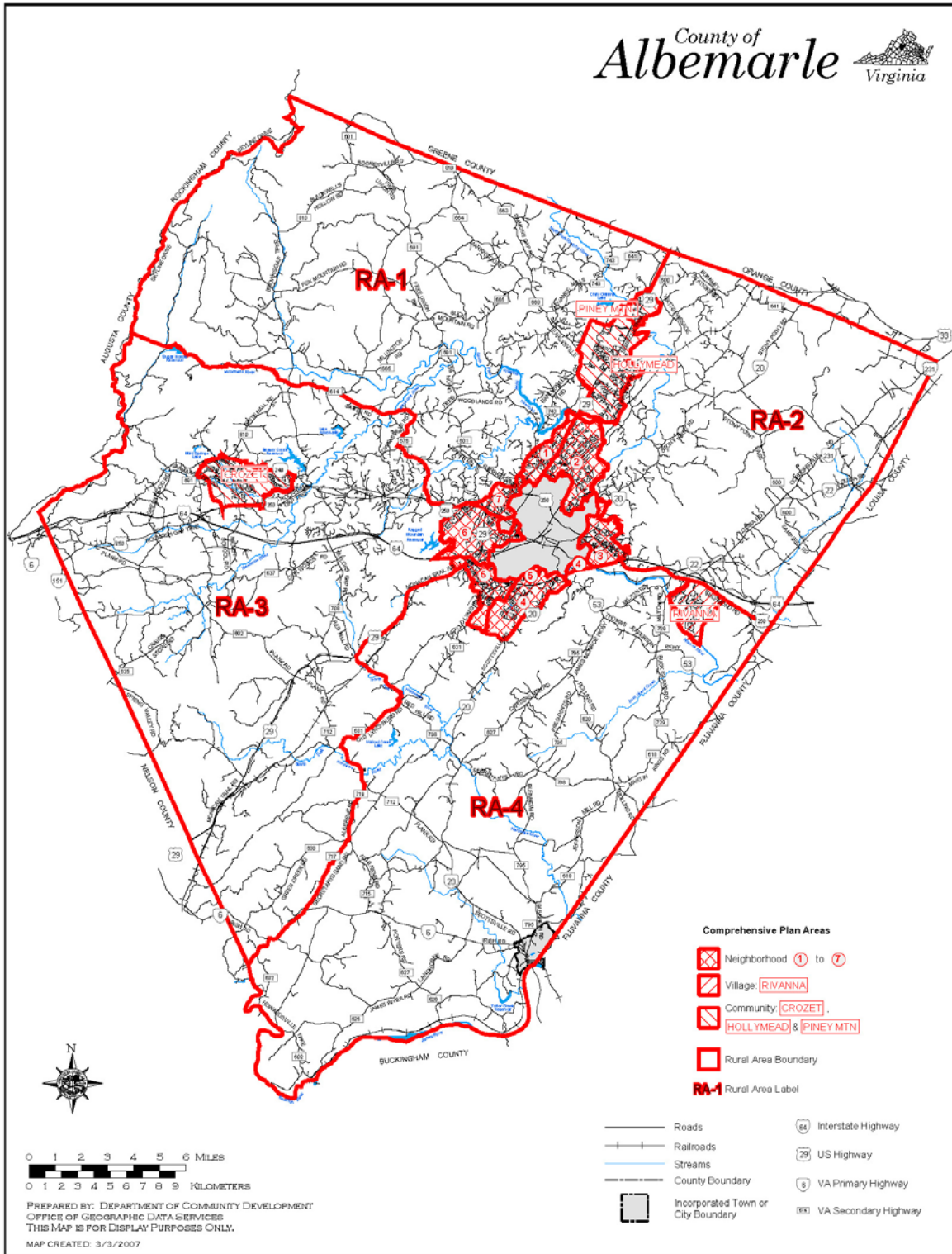
- Crozet - located to the west of Charlottesville bordered by US 250 and VA 240
- Hollymead - located north of Charlottesville and the Urban Area surrounding US 29
- Piney Mountain – located north of Hollymead surrounding US 29

In addition to the Urban Area neighborhoods and the three communities one Village, Rivanna, is identified. Different from the Urban Area and Communities, it is anticipated that Villages will most likely be established based on public requests rather than County initiative. Villages strive to combine the feeling of "country living" with the Development Area amenities.

Ideally, if implemented as outlined in the Comprehensive Plan, the Neighborhood Model and Development Areas would decrease vehicle dependency by locating work, home and amenities in close proximity to one another and increase the feasibility of transit through the increased densities.

Figure 6-1

# ALBEMARLE COUNTY DEVELOPMENT AREAS



## **City of Charlottesville Transportation Planning**

Planning for the roadway system in Charlottesville is accomplished through engineering, planning and capital improvement project programming by the City of Charlottesville's Department of Neighborhood Development Services, through the long-range planning activities of the MPO and as a function of the TJPDC. Plans for other modes of travel are reflected in the following documents.

### Charlottesville Transit Improvement Study and Transit Development Plan

The Charlottesville Transit Development Plan (TDP) offers recommendations to improve Charlottesville Transit Service (CTS) in both the City of Charlottesville and Albemarle County. It may, therefore, serve as a bridge between the municipal transit system operated by the City and a new regional system governed by a partnership.

To address these issues and to begin the process of restructuring CTS into a system that will serve the growing metropolitan area, the Charlottesville Transit Improvement Study (TIS) was completed in 2005. This project studied ridership patterns and undertook an evaluation of existing route structures. A survey was conducted of riders on all CTS routes to determine the characteristics of those using the system and the origins/destinations of trips made on the bus. Studies were also conducted of the travel times of CTS routes and the proportion of time spent, by location, in-motion, and/or picking up passengers or delayed by traffic signals or by congestion. This data was supplemented by data collected in 2000 which reported boardings and alightings at each bus stop on each trip and the on-time performance of each bus trip. Several of the recommendations in the Transit Improvement Study were implemented in fall 2005.

Based on the on-survey results the majority of CTS riders could be classified as transit dependent. Specific characteristics are listed below:

- A majority of CTS riders on both day and evening routes have annual incomes below \$30,000. The average annual household income for all CTS riders is approximately \$37,400.
- Almost one-third of CTS riders are affiliated with the University of Virginia; UVA students make up nearly 22 percent of night ridership.
- Approximately 54 percent of all respondents have a driver's license.
- A large proportion of riders on both day and night routes are drawn from households that do not own an automobile, about 55 percent and 65 percent, respectively. Riders on night routes own fewer vehicles than riders on day routes. A greater proportion of night route ridership is drawn from ridership that does not have an automobile available for the trip. Even so, 24 percent of nighttime riders and 34 percent of day riders had an automobile available that could have been used for the trip.

The Charlottesville TDP is a five-year plan for CTS, which builds off of the recommendations presented in the Transit Improvement Study. The TDP is divided into two main categories of improvements. The first category includes recommendations that are cost neutral for Charlottesville but would require additional funding from Albemarle County. These recommendations are divided into two phases. Phase I includes recommendations to be

implemented in FY 2007 while Phase II includes recommendations to be implemented between FY 2008 and FY 2011. Most of the TDP recommendations were implemented in conjunction with the opening of the new Downtown Transit Station in March 2007. The second category of service improvements includes additional service to Charlottesville, Albemarle County and several variations of fare-free service. In May 2007 UVA students and staff began riding CTS fare-free. There is no timeline for implementation of the other improvements included in the TDP.

### Charlottesville Bicycle and Pedestrian Facilities Master Plan

The City initiated the Bicycle and Pedestrian Facilities Master Plan in March 2001, in response to the desire of the community to become more bicycle and pedestrian friendly, rely less on motorized vehicles, provide quality recreation and preserve open space. By completing this Master Plan, the City of Charlottesville has begun the preliminary steps to achieve its goal of creating a comprehensive network of on-street bicycle facilities and off-street, recreational trails. The recommendations in the plan were based upon the identification of physical opportunities and constraints within the City of Charlottesville. Major opportunities that were identified during the master planning process include:

- Community desire for alternative transportation to the automobile
- Need to reduce the dependency on cars and parking lots
- Community need for multi-use recreational trails that are accessible
- Existing lineal corridors such as the Rivanna River, Moore's Creek, Meadow Creek and railroads
- Connections to and between existing on-street bike lanes
- Connection to the University of Virginia Grounds Walk
- Connection to the Thomas Jefferson Parkway trail
- Connection to Rivanna Trails Foundation (RTF) trails
- Connection to Albemarle County trails
- Connection to the Downtown Pedestrian Mall
- Connections to City and County parks

Major constraints include:

- Charlottesville's rolling topography
- Lack of available land for the development of multi-use recreational trails
- Highways and railroads which interrupt possible routes
- Narrow, busy roads and off-set or skewed street intersections
- Lack of an existing off-street, multi-use trail that meets current design and safety standards
- Wide flood plains making it difficult to construct bike/pedestrian bridges
- Lack of funding
- Existing Rivanna Trails Foundation Trails that are not to be altered into accessible, multi-use trails

In response to these opportunities and constraints, the Master Plan recommends different types of on and off-street facilities and locations to meet the needs of the various types of users, who live,

work and recreate in the City of Charlottesville. **Figure 6-2a and b**, from the Master Plan, illustrate the recommended on-street and off-street bicycle and pedestrian projects.

### **6.3 ROADWAY NETWORK AND PARKING**



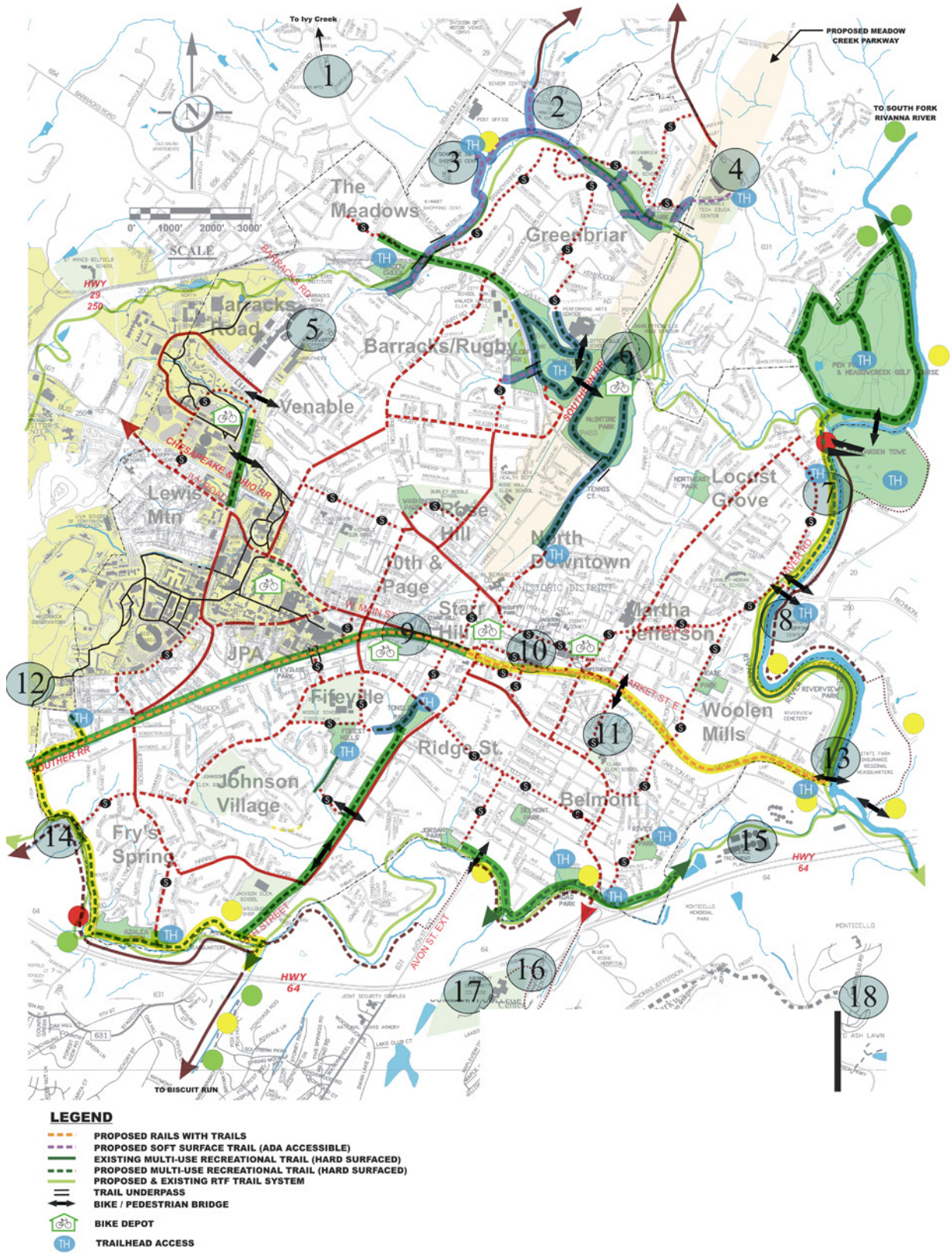






Figure 6-2b

# BICYCLE AND PEDESTRIAN OFF STREET PRIORITIES





**OFF STREET FACILITIES THAT COMPLETE OR EXTEND CONNECTIONS  
BETWEEN EXISTING FACILITIES**

**LEGEND**

STR - SHARE THE ROAD  
WSBL - WHITE STRIPE BIKE LANE  
SBL - SOLID BIKE LANE

YELLOW - HIGH PRIORITY  
BLUE - MEDIUM PRIORITY  
GREEN - LOW PRIORITY

	<b>CORRIDOR</b>	<b>LOCATION</b>	<b>TYPE OF TRAIL</b>
1.	Reconstruction Rivanna River	Riverview Fork to the 250 bypass	concrete paved Multi-use
	New Construction	250 bypass to Pen Park	concrete paved Multi-use
2.	Chesapeake & Ohio Railw with trails	Water Street to the Rivanna River	concrete paved Multi-use
3.	Moore's Creek	5th Street to Fontaine Research Park	concrete paved Multi-use
4.	Meadow Creek	Greenbrier Park to Meadow Creek Park	soft surface Multi-use
5.	McIntire Park	Internal park loop trail and bicycle\ Pedestrian bridge over the railroad Tracks, 250 bypass underpass trail To Greenleaf Park connection to the High School & Performing Arts Center	concrete paved Multi-use
6.	Pen Park	Internal park loop trail and bicycle\ Pedestrian bridge over Rivanna River	concrete paved Multi-use
7.	5th Street	Moore's Creek to Tonsler Park, Connectors to Forest Hills Park	concrete paved Multi-use
8.	Holliday Drive/ 250 bypass	Emmet Street to McIntire Park	concrete paved Multi-use
9.	Emmet Street / UVA	Ivy Road to Copeley Drive	concrete paved Multi-use
10.	Southern RailRoad	West City Boundary to West Main Street	concrete paved Multi-use
11.	Moore's Creek	Jordan Park to East City limit Near Nassau Street	concrete paved Multi-use



**CHARLOTTESVILLE** BICYCLE & PEDESTRIAN FACILITY MASTER PLAN  
OFF STREET BICYCLE AND PEDESTRIAN FACILITIES RECOMMENDATIONS



## **Functional Classification of Roads**

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, adopted prior to 1970, is shown in **Figure 6-4**.

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.

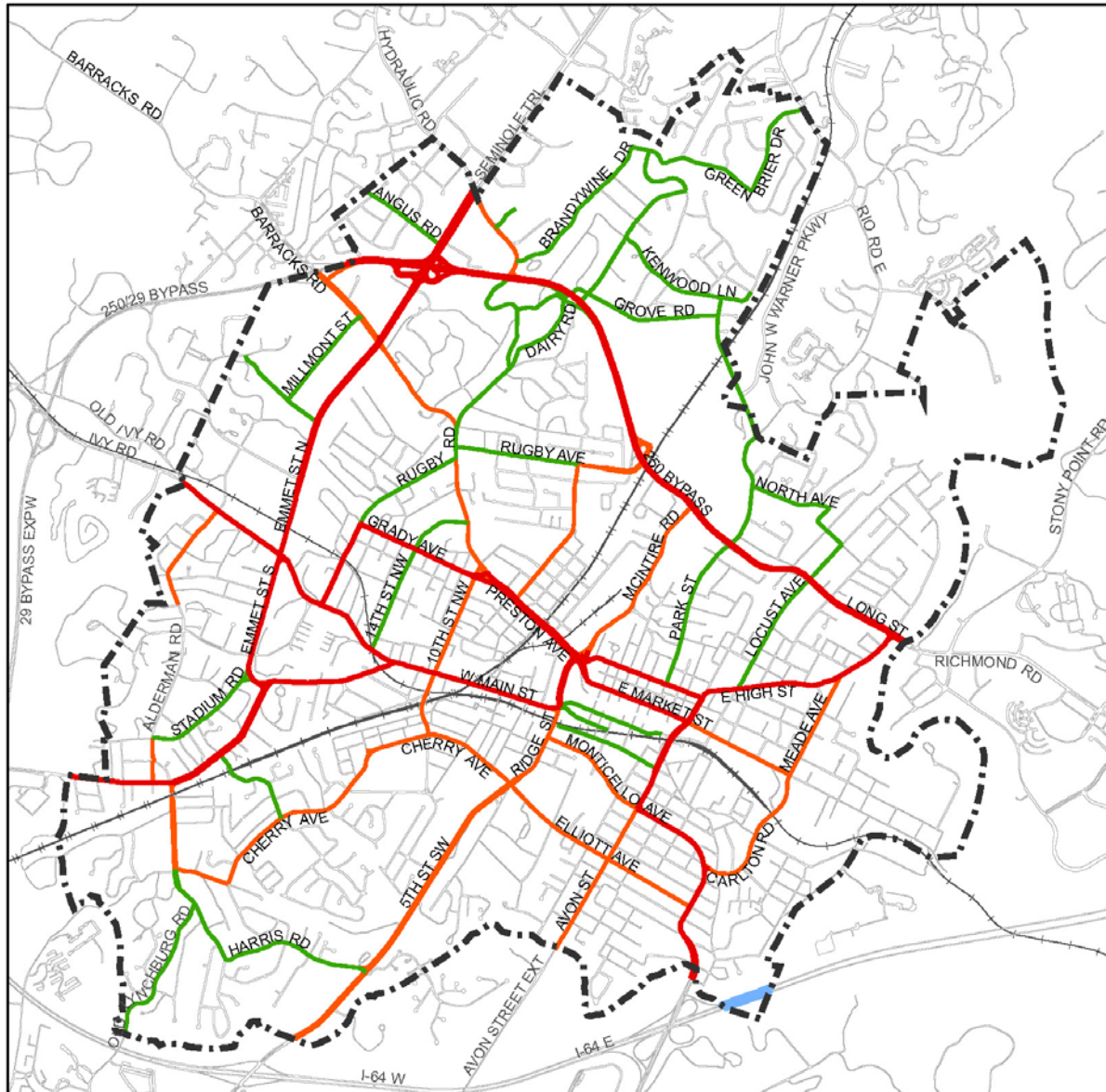
The local street system makes up the majority of the roadway network within the City. Its primary purpose is direct access to property and, as a result, it offers the lowest level of mobility. Service to through-traffic is deliberately discouraged on these roadways. Bus service currently operates on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

## **Traffic Volumes**

The more significant traffic volumes on the City roadway network are shown in **Figure 6-5**. Based on VDOT's 2010 Daily Traffic Volume Estimates Report (supplemented with City data where available), the highest traffic volumes are currently on US 29 and the US 250 Bypass. US 29 north of the US 250 Bypass carries upward of 50,000 vehicles per day (vpd). South of the US

FIGURE 6-4 – Functional classification of roads

## Functional Classification of Roads



July 2012

City of Charlottesville



- Interstate
- Principal Arterial
- Minor Arterial
- Collector
- Local

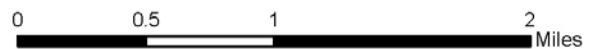
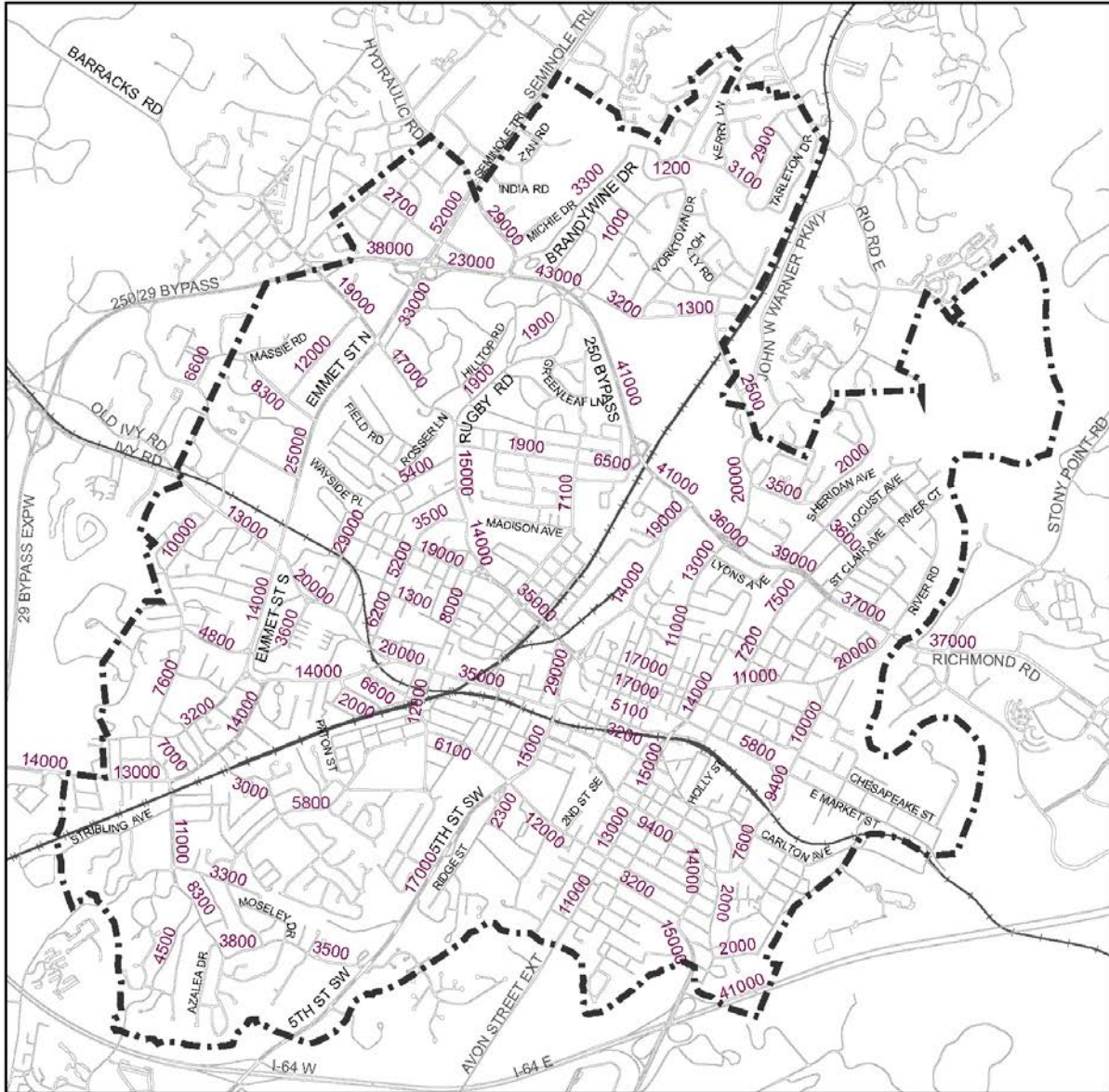




Figure 6-5 AADT Traffic Volumes

# Average Annual Daily Traffic Volumes



July 2012

City of Charlottesville



1000 Average Annual Daily Traffic Volume Estimate, VDOT 2010



250 Bypass US 29 traffic volumes decrease significantly but are still in the range of 20,000 to 40,000 vpd. Similarly, the US 250 Bypass carries between 35,000 and 40,000 vpd along most of the stretch. Portions of West Main Street and Preston Avenue also carry volumes in excess of 35,000 vpd. Other high volume corridors include Ridge/McIntire, Rugby Road, Fontaine Avenue, Ivy Road, Jefferson Park Avenue, 5th Street, Avon Street and High Street.

### **Traffic Congestion**

Congestion within in the City occurs primarily during the morning and afternoon commuter peak periods. Locations of concern, shown in **Figure 6-6** include: Emmet Street from Hydraulic Road to Ivy Road, the 250 Bypass, Avon Street between Monticello Avenue and Market Street. Nearly all of these roadways are classified as arterials; the backbone of mobility for the City. However, due to congestion, drivers divert to roadways which are of a lesser classification to move through the City.

Congestion on Emmet Street is largely due to the high traffic volumes, lack of access management and the merge onto the US 250 Bypass westbound from southbound US 29. Currently improvements to the ramp from US 29 onto the Bypass are being explored to improve traffic flow in this area.

Much of the US 250 Bypass is currently operating at its capacity. Given that this is the City's only limited access facility, preservation of the capacity of this roadway should be a priority. A number of local neighborhood traffic calming concerns stem from drivers using local streets to avoid use of the Bypass. The 250 Interchange Project planned at the intersection of McIntire Road, currently being designed, will improve traffic flow on the Bypass at this location. However, elimination of the at grade intersection at this location will not remedy the larger, regional issue creating congestion on the Bypass which stems from the lack of transportation facilities outside of the City connecting housing and employment centers.

### **Crash Locations**

Not surprisingly, the locations with the highest crash rates are consistent with the locations with the highest traffic volumes. This is due to a number of characteristics these roadways share including a lack of access management, roadway and intersection geometry and proximity to UVA. In the future the City hopes to more effectively use the available crash information to identify safety concerns and solutions.

### **Municipal Parking**

In 2008, the City commissioned a comprehensive study to examine the supply and demand of parking downtown. According to that study, Downtown Charlottesville has approximately 6,000 spaces, of which about 5,000 (84%) are off-street and about 1,000 (16%) are on-street.

On typical weekdays during the business day, there is currently enough parking overall for everyone. At the busiest time of the survey, only 63% of spaces were occupied. There were approximately 800 spaces available in the off-street public lots. ('Public lots' includes lots for

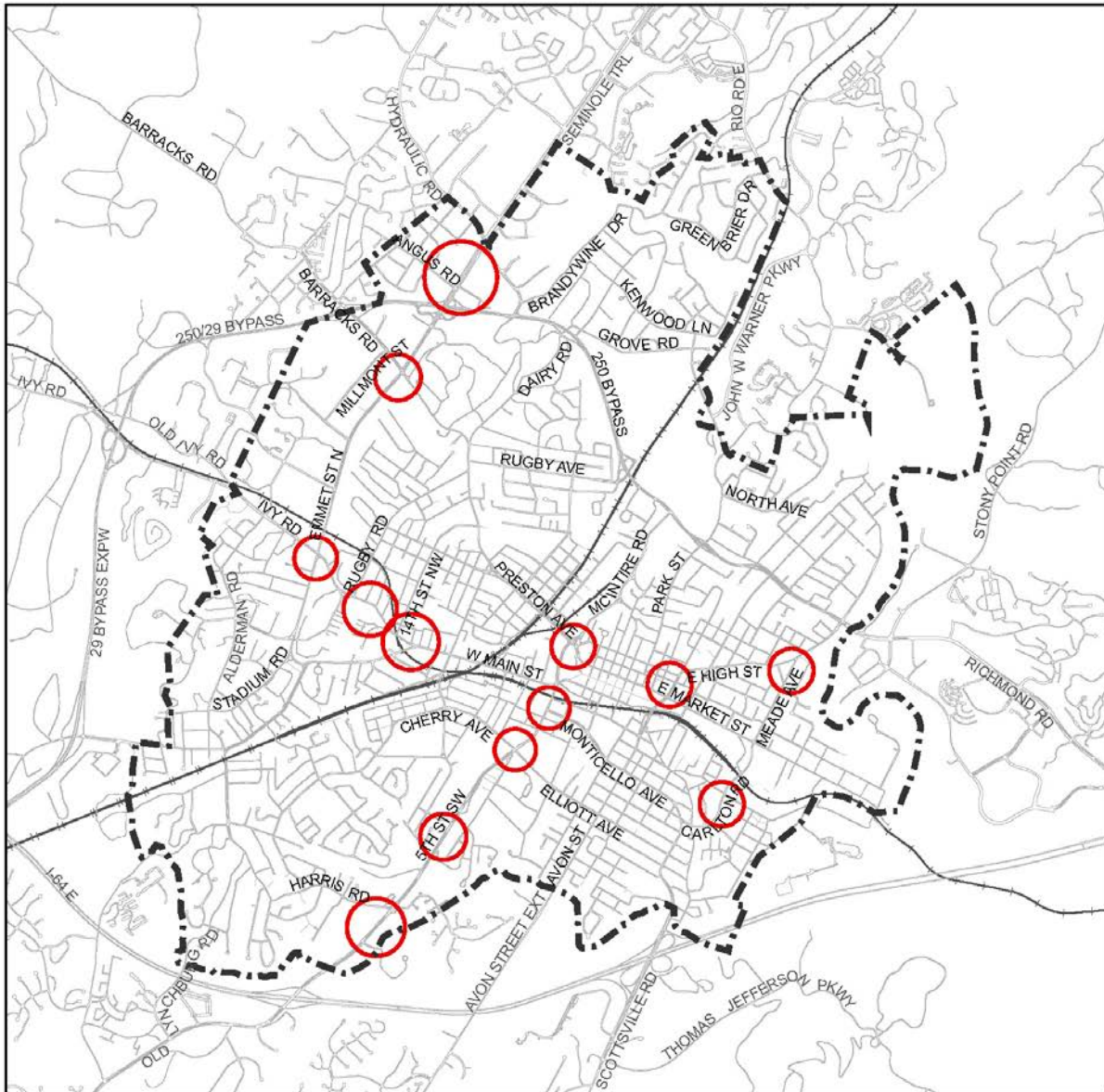
which the public can buy hourly or monthly parking; these may be publicly-owned or privately-owned.) This included approximately 380 spaces in the Water Street garage, 130 in the Market Street garage, 80 in the Water Street lot, and the remaining 220 in other lots. (Note that this refers to a typical business day. On busy weekend evenings with special events, the two main garages can be full or nearly full.)

The private lots (lots that are restricted to employees or customers of a particular business) have approximately 1,200 available spaces. However, many of these private lots are unsuitable for public parking (e.g. residential, very small lots, etc).

Generally, it is perceived that there is a lack of free parking in the downtown area, and results of the 2008 parking study indicated stress on the on-street parking facilities. In particular, the two-hour spaces exceeded 85% occupancy (the desirable maximum) for much of the day. It was estimated that at least 10% of vehicles using the two-hour spaces were either performing the 'Two-Hour Shuffle' or staying in the same space for four hours or more. Although this is a relatively small proportion of the vehicles, their all-day presence gives them a disproportionate impact on parking occupancy. At the busiest times of day, more than 30% of the two-hour spaces were occupied by these people. Without them, occupancy of the two-hour spaces would not have exceeded 75% at any time.

Figure 6-6 Crash/congestions hot spots

# Crash Hot Spots



August 2012

City of Charlottesville



 Crash Hot Spots

0 0.5 1 2 Miles



## 6.4 NON-AUTOMOBILE MOTORIZED MODES OF TRAVEL

In addition to the automobile, there are a variety of alternate modes of transportation with limited availability to residents and visitors to the City of Charlottesville. All of them contribute to moving people and goods to their destinations often interfacing with one another in an interdependent process. This section explores the alternatives to motor vehicle travel in Charlottesville.

### Transit Services

Since the 1890s, when the first streetcar system was started in Charlottesville, public transportation has been part of moving residents throughout the community. However, after World War II, with ever-increasing automobile ownership, Charlottesville, like other communities across the United States has been challenged to provide transit services that residents will choose to use even when a private automobile is available. Furthermore, as development has sprawled outside the core of the City, efficient delivery of public transit has become increasingly difficult. Transit and rail routes and facilities are shown in **Figure 6-7**.

#### Charlottesville Transit Service (CAT)

Public transportation in Charlottesville and the urban areas of Albemarle County is provided by Charlottesville Area Transit Service (CAT). CAT operates seven days a week with limited service on Sundays. There are seventeen daily fixed routes. Day service is from 6:15am to 6:45pm. We have 4 night service from 6:45pm to 11:45pm.

Creating the hub of the public transportation network, bus routes circle around the downtown pedestrian mall before breaking off in different directions. Service now extends south to the County Office Building on 5th Street Extended, as far north on US 29 as Wal-Mart, and on US 250 east to Pantops. Service runs on the hour except for the most heavily used commuter routes during peak hours.

There are many transfer points. Transfer information for each route is included under the route timetables. Buses are wheelchair accessible and CTS offers paratransit programs in conjunction with JAUNT for riders with disabilities who are unable to use regular route buses. CTS buses are also equipped with bike racks. In July 2007, CTS implemented the fare-free agreement between CTS and the University of Virginia (UVA) which allows UVA students, faculty and staff to ride CTS for free with a valid student ID.

In 2008, CTS installed “Bus Finders” with real-time passenger information service at 25 bus stops and the Downtown Transit Station. This service is also available through the CTS website. Bus Finders allow passengers to locate the bus in real time and determine when it will arrive so that they can manage their trip more efficiently. CTS has also added its route information to Google Transit, which provides trip planning information and maps to users.

#### *Fleet*

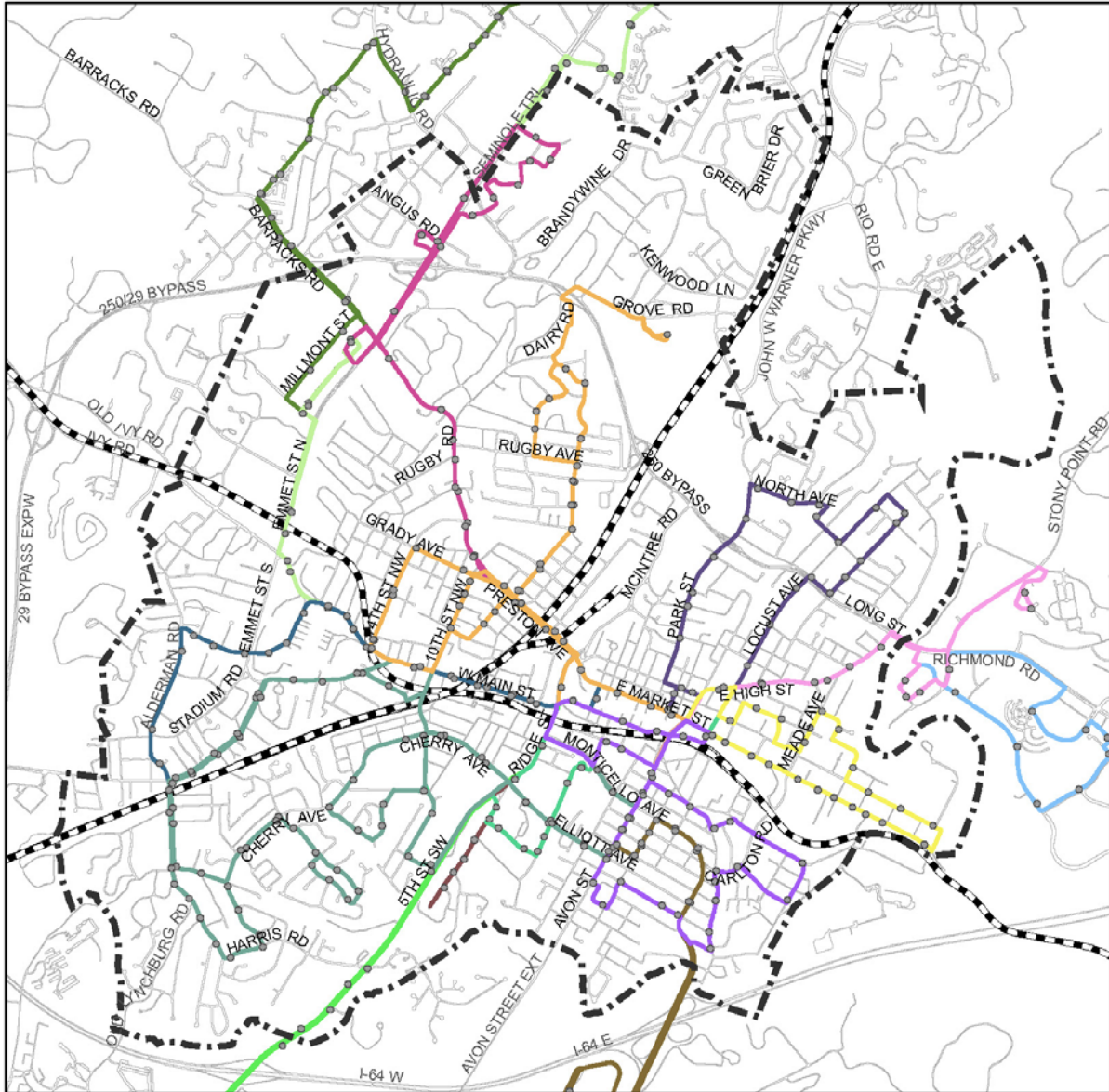


Including expansion of the fleet planned in the immediate future, service is provided with the following 32 vehicles:

- Six mini-buses (primarily used for night service on Routes 21, 22, 23, and 24)

Figure 6-7 Transit

## Transit and Rail Routes



July 2012

### City of Charlottesville

- Bus Stop
- Railroad
- Trolley
- Route 1A
- Route 1B
- Route 2A
- Route 2B
- Route 3
- Route 4
- Route 5
- Route 6
- Route 7
- Route 8
- Route 9
- Route 10
- Route 21
- Route 22
- Route 23
- Route 24



- Thirteen 35-foot buses (primarily used for high ridership day-time routes and on Route 7 at night)
- Nine 30-foot buses (primarily used for neighborhood day-time routes)
- Four replica trolley buses (FREE Trolley route only)

### *Ridership*

Analysis of CTS ridership from FY 2006 through FY 2012 shows that annual ridership has been increasing. Route 7 (Downtown/Fashion Square) and the Free Trolley (Downtown/UVA) have consistently shown the greatest ridership yielding approximately 787,969 and 994,520 boardings in FY 2006, respectively. Route 7 and the FREE Trolley also generate the most boardings at night. Ridership on the other routes has remained relatively constant with a notable increase on Route 5 (Barracks Road Shopping Center/Wal-Mart) resulting from service changes in 2005 funded by Albemarle County.

### *Downtown Station*

In 2007, a central hub for CAT buses and the Free Trolley was constructed. The first floor, on the Water Street level, provides a waiting area out of the weather for CTS passengers and a place to make timed connections between bus routes. The second floor, on the Pedestrian Mall level, includes the Downtown Visitor Center of the Charlottesville/Albemarle Convention and Visitors Bureau. The Downtown Transit Station is a hub for residents and visitors alike, drawing positive attention to CAT and encouraging more people to try transit.

The Downtown Station, together with the nTelos Pavilion, is considered the eastern gateway of the Pedestrian Mall. The facility contributes to the economic vitality and the energy of the public space, including the Free Speech Monument, around City Hall.

### *Routes*

Fixed-route transit service is designed to operate on a “pulse.” All routes are scheduled to arrive and depart from a common location at approximately the same time. The logic behind this practice is to facilitate transfers between routes, especially since several routes operate infrequently at 60-minute headways. In practice, the “pulse” is often difficult to maintain, especially since traffic congestion and tight schedules can cause delay.

Daytime service on CAT operates as a hub-and-spoke system and is shown in Figure 6-8. Route 7 and the Free Trolley serve as the backbones of CAT, providing service along Charlottesville’s main arteries: Route 29, University Avenue, West Main Street and Jefferson Park Avenue - between the Downtown Mall, the University of Virginia and Fashion Square Mall. Most of the other routes connect outlying neighborhoods to downtown Charlottesville. During the day, route headways vary between 15 and 60 minutes. The Free Trolley and Route 7, which experience the greatest ridership, provide high-quality service that operates on 15-minute headways throughout the day. At this level of service, it is generally assumed that riders do not have to plan their trip in advance. Routes 4 and 6 operate at 30-minute headways during peak periods (from 7:00 a.m.

to 10:00 a.m. and from 3:00 p.m. to 7:00 p.m.) and at 60-minute headways during off peak periods. Route 5 operates on 45-minute headway. Routes 1, 2, 3 and 10 are largely neighborhood circulators, and provide service at 60-minute intervals.

The six night routes operate with headways between 15 and 60-minutes and are shown in Figure 6-9. The headway for the Free Trolley remains 15 minutes, but the headway for Route 7 decreases to 30 minutes. Route 21, which is the Belmont branch of Route 3 during the day, and Route 22, which is the night version of Route 6 (Ridge Street) during the day operates at 30-minute headway. Route 23, which is the PVCC branch of daytime Route 1 and Route 24, which serves much of the area served by daytime Route 10, operate at 60-minute headway.

### *Funding*

For the purpose of assessing responsibility for the local share of funding to support CTS operations, each of the fixed routes can be considered to be either a City route, a County route, or a route shared by both jurisdictions, depending on the areas that a route serves. Most fixed routes operated during the day primarily serve Charlottesville and are paid for by the City. Routes 5 and 10 largely provide service to areas outside of Charlottesville, and are funded by Albemarle County. Charlottesville also pays for the majority of routes operated at night—the Free Trolley, Routes 7, 21, 22 and 23. Albemarle County pays for Route 24.

Figure 6-8

# CAT DAY SERVICE



Day Service Map



Monday-Saturday service on all routes  
 LINK service Monday-Friday  
 Sunday service on FREE Trolley and Route 7

**T** DOWNTOWN TRANSIT STATION  
 615 East Water Street

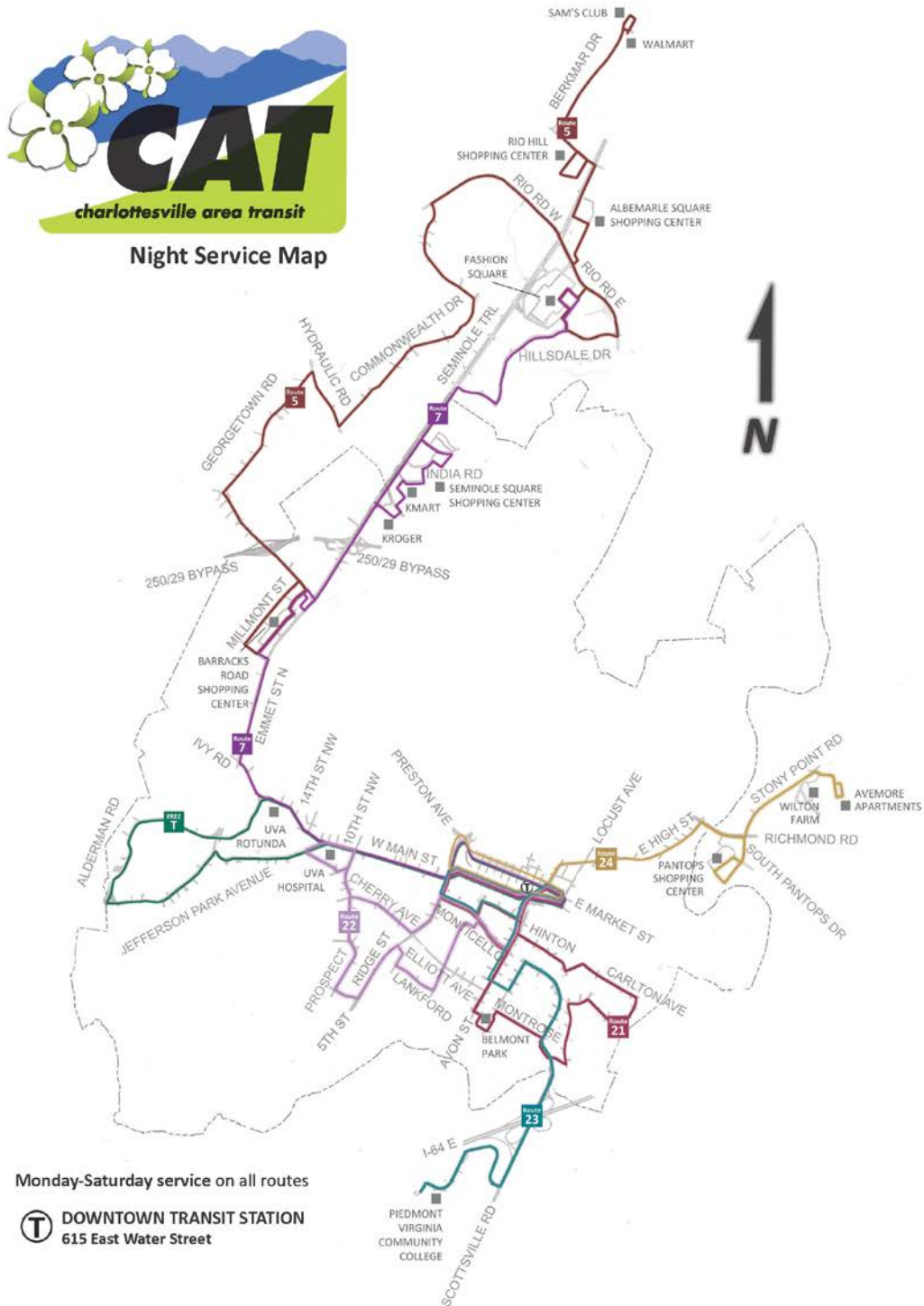
434.970.3649 | [www.catchthecat.org](http://www.catchthecat.org) | [f CharlottesvilleAreaTransit](https://www.facebook.com/CharlottesvilleAreaTransit)

Real-Time Bus Arrivals 434.244.5180 please have your 5-digit stop number ready when calling

Effective August 20, 2011

Figure 6-9

# CAT NIGHT SERVICE



Monday-Saturday service on all routes

**T** DOWNTOWN TRANSIT STATION  
615 East Water Street

434.970.3649 | [www.catchthecat.org](http://www.catchthecat.org) | [f CharlottesvilleAreaTransit](https://www.facebook.com/CharlottesvilleAreaTransit)

Real-Time Bus Arrivals 434.244.5180 please have your 5-digit stop number ready when calling

Effective August 20, 2011



### 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 CTS 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 CTS bus. Figure 6-7 includes the UTS routes.

### Para-Transit

Jefferson Area United Transportation, Inc. (JAUNT, Inc.) is a regional public transportation system providing service to Charlottesville, Albemarle, Louisa, Nelson, Buckingham and Fluvanna. The 70-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 has maintained a strong record of safety, cost efficiency and high quality service, and has been recognized both statewide and nationally for its performance. In FY2011, JAUNT provided 318,814 trips of 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 Transit Service (CTS) 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.

### Private Bus Service

Greyhound Bus Lines is the single private bus service operating eleven buses daily to and from Charlottesville connecting north to DC and NY, east to Richmond and points east and south, as well as to Lynchburg. The actual number of passengers that board and de-board Greyhound buses in Charlottesville is not available.

### Regional Transit Authority

Since January 2006, the Charlottesville-Albemarle Metropolitan Planning Organization (MPO) Policy Board has been discussing the possibility of creating a Regional Transit Authority (RTA)

to serve Albemarle County and the City of Charlottesville. Regional transit has been of special interest and a regular topic at monthly MPO Policy Board meetings.

The vision of the proposed Charlottesville-Albemarle Regional Transit Authority is to provide fast, frequent, dependable and seamless transit service throughout the area. This vision is based on public input from previous plans and studies in both Charlottesville and Albemarle. The goals and working methods, as outlined in the RTA Vision adopted by the City, County, and MPO, are identified below.

#### Goals

- Provide direct links between and among the four major destinations in the City of Charlottesville and Albemarle County: Downtown, UVA/Medical Center, Pantops and the Rt. 29 North corridor.
- Provide competitive choices for travel throughout the region – for residents, commuters, employees, students and visitors.
- Improve routes and choices for underserved communities and individuals.
- Attract ‘choice’ riders – those who currently drive for most trips.
- Increase access to medical, employment, tourist, recreation, education, service and retail destinations throughout the region.
- Integrate transit fully with other modes of transportation - walking, wheeling, carpooling, driving alone and regional bus and rail.
- Serve as a tool to help make the area ‘Livable for a Lifetime.’
- Reduce traffic congestion, pollution, energy consumption and personal travel costs.

#### Working Methods

- Create a unified regional transit plan to identify 1) routes, 2) level of service, 3) phasing, 4) vehicle technology, 5) funding requirements and 6) operating responsibilities.
- Secure a sustainable, stable funding source for new equipment, physical improvements, operations and maintenance.
- Work with localities, businesses and developers to plan for mixed-use Transit Oriented Development (around existing service) and Transit-Ready Development (for future system expansion).
- Design routes and schedules so that service to existing areas is maintained or improved.
- Coordinate physical improvements around bus waiting areas and transit stations.
- Maximize service efficiency through:
  - Innovative use of technology for vehicle tracking/on-time performance/real-time info.
  - Increased coordination of service planning and operations.
  - Seamless marketing, communications, and education for user-friendly customer experience.
- Promote and provide opportunities to utilize public-private partnerships

In 2009, the Albemarle County Board of Supervisors and the Charlottesville City Council received enabling legislation authorizing the formation of an RTA from the General Assembly. This legislation does not form the Authority, but grants the City and the County permission to form the Authority when deemed appropriate by both bodies. A second piece of legislation that



would have granted enabling authority for the County and City to ask voters if they would approve of an increase to the local sales tax by up to one-cent in each locality did not pass. Revenues that might be generated by the tax would be used to fund the operations of the new RTA and remaining funds would be used for other priority transportation projects. A Joint Working Group was formed to discuss next steps for the RTA.

## **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, 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 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 regional service 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.

In FY2010, AMTRAK's rail service carried 91,707 passengers to and from Charlottesville, compared to 45,648 in FY2005. This trend is consistent with the long-term nationwide increases in AMTRAK's ridership that has led to eight records in the last nine years, including 30.2 million passengers in FY 2011.

## **Air Transportation**

Air travel through the Charlottesville-Albemarle Airport (CHO) has witnessed steady passenger growth in recent years. 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 the major hubs of 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 recommends extending one runway 1200 feet to the north to accommodate the additional air traffic. The runway extension was approved by the Federal Aviation Administration and the Virginia Department of Aviation, but very few funds have been allocated to the project. 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.

### 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.

### Zipcar

The University of Virginia and Zipcar, the world's largest car-sharing service, launched the Zipcar program at U.Va on November 17, 2009. Six self-service Zipcars - two hybrid Honda Insights, two Honda Civics, one Scion xD, and one hybrid Toyota Prius - are available for use 24 hours a day, seven days a week. The cars are located in three locations on Grounds and are available to all faculty, staff, and students aged 18 and over. Gas, insurance, 180 free miles and roadside assistance are included in low hourly and daily rates

## **6.5 NON-MOTORIZED MODES OF TRANSPORTATION**

### **Pedestrian and Bicycle Access**

Charlottesville boasts strong community support for healthy living and active transportation, as evidenced in the City Council Vision statement (2011) and Complete Streets Policies (2010), various planning documents, "Walk Friendly Community" (Silver level, 2011) and League of American Bicyclists "Bicycle Friendly Community" designations (Gold level, 2007; Silver level 2012), and strong local, grass-root-efforts to make walking and bicycling preferred modes of transportation.

The City is poised to make significant progress in installing various bicycle and pedestrian improvements while pursuing the goal of decreasing the share of single occupancy vehicle travel from 61% to 50% by 2030. This requires an integrated approach – providing mixed use, higher density development that create a range of housing opportunities / choices for persons at all income levels in close proximity to employment destinations, which are supported by transportation infrastructure that encourages people to use other modes besides the automobile. By creating safe, convenient and pleasurable walking and biking options, the City provides opportunities for active transportation and recreation, helps conserve the environment, promotes economic development, and creates more interaction among people.

Existing pedestrian infrastructure, as well as walking/hiking trails, in Charlottesville are shown in **Figure 6-10**. The City is currently in the process of inventorying all curb ramp locations as part of efforts to improve accessibility City-wide.

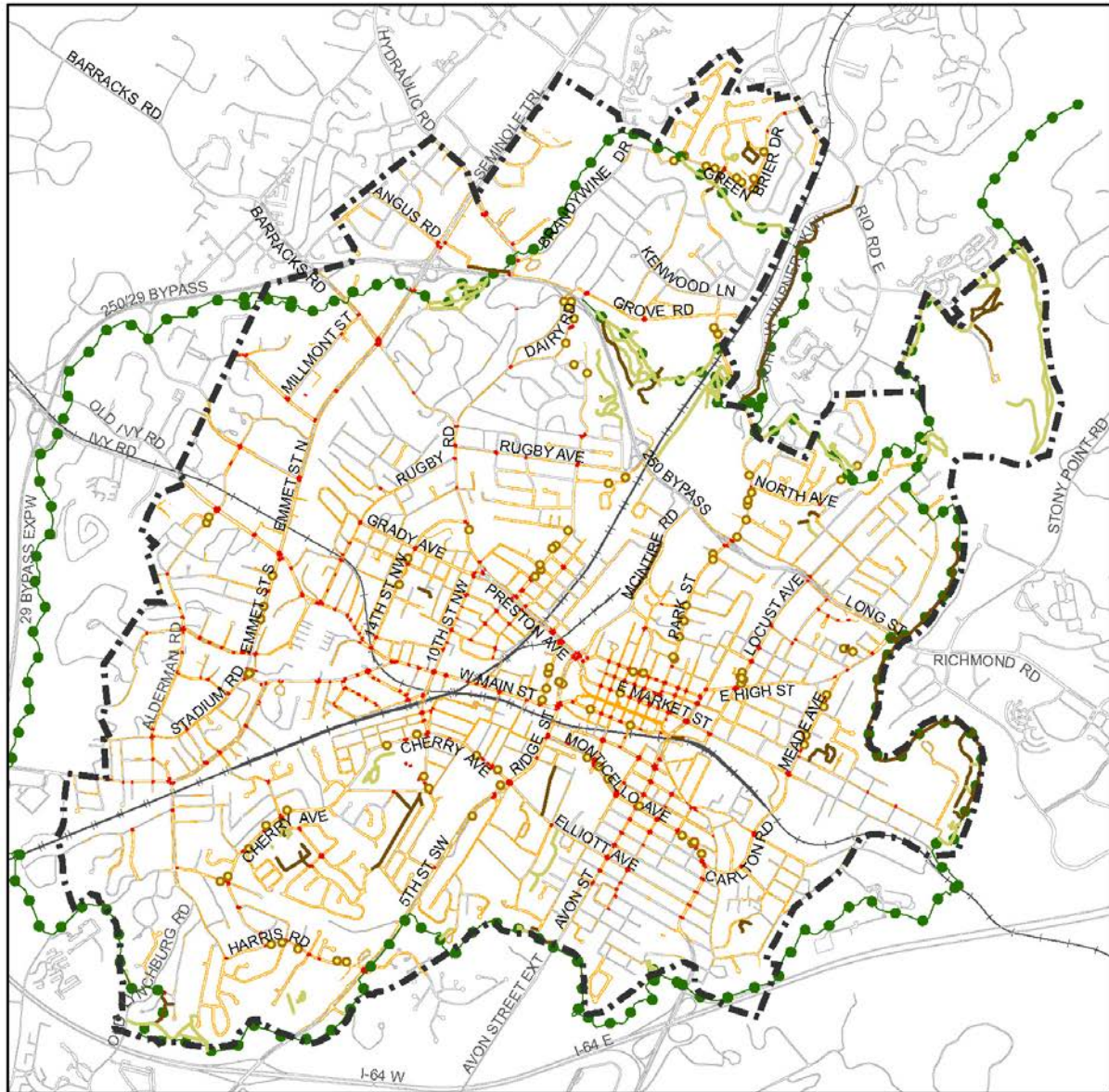
Existing bicycle facilities are shown in **Figure 6-11**. These include designated bicycle routes (not necessarily with a bike lane), on-road bicycle lanes, bicycle racks and off-road multi-use paths. CAT and JAUNT welcome cyclists aboard and provide bike racks on all their vehicles. The racks are located on the front of regular buses and trolleys, and at the rear on the vans.

Major trails maintained by the city include the 2.3-mile paved Rivanna River Greenbelt Trail at Riverview Park; 1 ½ miles of soft surface nature and river trails in Pen Park; a ½-mile, paved fitness loop trail at Pen Park; a ¼ mile stone dust trail along McIntire Road, several forested and creekside nature trails at McIntire Park; and a soft surface creekside trail at Greenleaf Park, which connects the Park with Walker School. The city also manages the Antoinette Street paved trail, which leads south from Forest Hills Park. Many city trails are located entirely within an individual park and they do not extend beyond park boundaries or connect to other trails.

The Rivanna Trails Foundation (RTF) is a non-profit organization whose mission is to “create and protect natural footpaths, which follow the Rivanna River and its tributaries, for the enjoyment of all.” There are 25 miles of RTF footpaths that encircle the city and connect with several city parks. The RTF footpaths generally parallel the city/county boundary, with some sections located outside city limits. The Parks and Recreation Department works with the Rivanna Trails Foundation in coordination of trail planning, construction, maintenance, and improvement efforts across the city. The RTF also depends upon volunteers who work to maintain trails on weekend workdays and to walk trails and ensure that they are in relatively good shape. The RTF trails are maintained to Appalachian Trail Standards, which are unpaved and somewhat rustic. The RTF trail map can be found at <http://avenue.org/rivanna/>.

FIGURE 6. 10 Sidewalk/Trails

## Pedestrian Facilities



July 2012

City of Charlottesville



- Pedestrian Crossing Sign
- Crosswalk
- Sidewalk
- Soft Surface Trail
- Multi-Use Trail
- RTF Trail

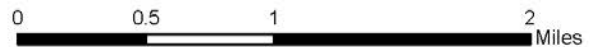
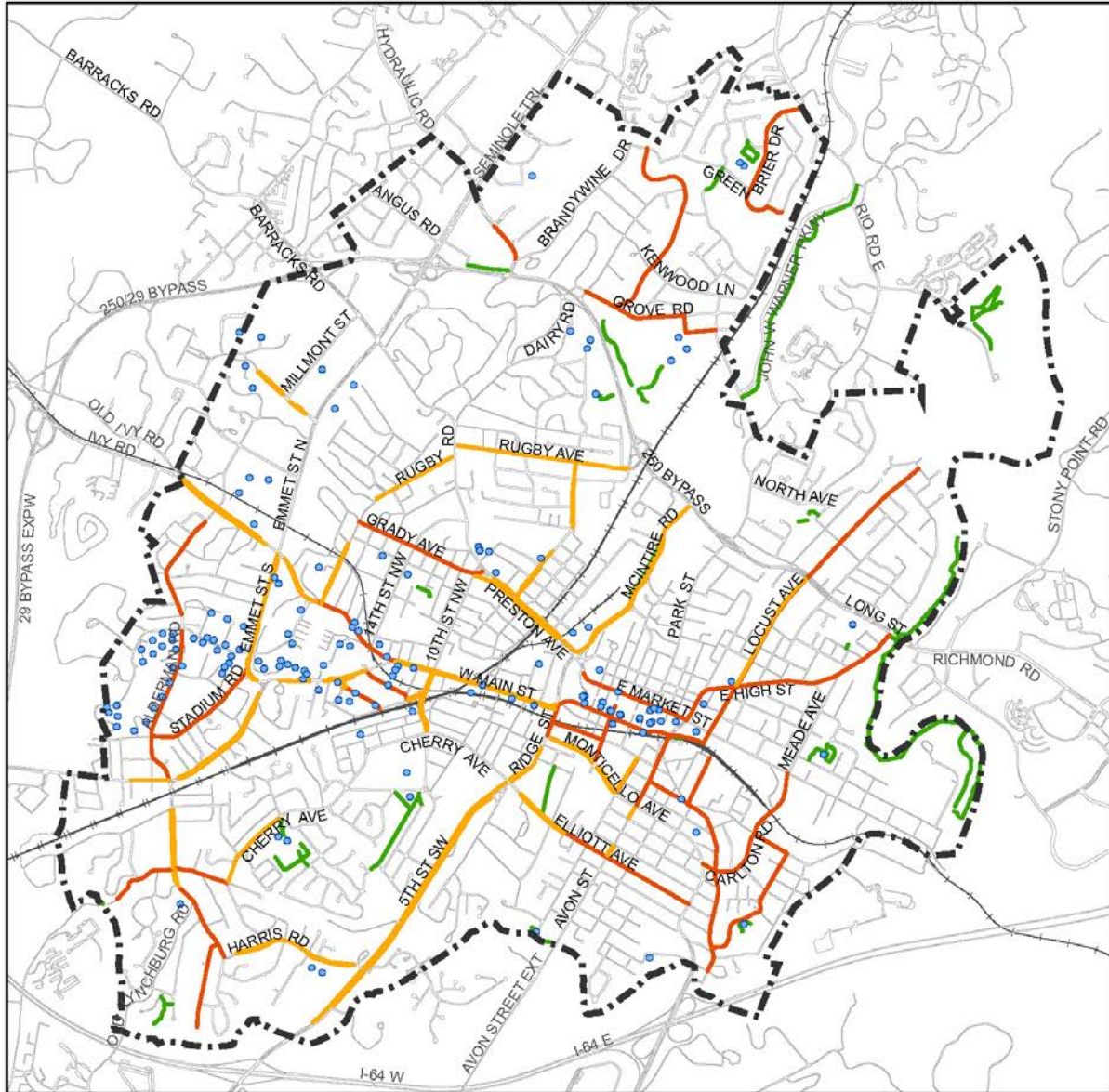




Figure 6-11 Bicycle Facilities

# Bicycle Facilities

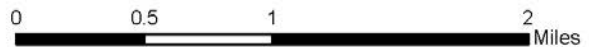


July 2012

City of Charlottesville



- Bike Lane
- Shared Lane
- Bike Rack
- Multi-Use Trail





**CITY OF CHARLOTTESVILLE  
NEIGHBORHOOD DEVELOPMENT SERVICES**

**MEMO**

To: Missy Creasy, Planning Manager  
From: Amanda Poncy, Bicycle and Pedestrian Coordinator  
Date: November 7, 2012  
Re: Comprehensive Plan Update-Transportation Chapter

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Transportation Chapter of Comprehensive Plan comments and responses which warrant additional discussion (reference the chapter draft to review comments in context of the draft):

**Comments Received**

Comments have been received from the following sources:

*Dan Rosensweig, received 9-20-12 and 11-5-12*

*Kurt Keesecker received 9-20-12*

*John Shepard received 10-18-12*

*Southern Environmental Law Center (SELC) received 11-1-12*

*Tree Commission received 11-2-12*

*Mike Osteen received 11-7-12*

*Dan Painter, VDOT, received 11-19-12*

*Genevieve Keller received 12-3-12*

The detailed comments are attached

**Summary of how comments have been integrated into the Draft**

*Many of the comments received were editorial/rewording comments that have been incorporated as appropriate throughout the document.*

*One person recommended that the overall transportation system goal be removed from the chapter as it was inconsistent with the formats of other chapters. Staff feels that the overall goal remains valid, but recognizes the inconsistency with the rest of the plan. The overall Transportation System Goal will be placed in the appendix to maintain consistency throughout the plan.*

*A handful of comments stressed the need to better incorporate "green space" in highly developed areas and "green infrastructure" techniques as part of transportation projects. While the City is actively trying*



*to incorporate green space and green infrastructure as part of the transportation planning processes, the draft plan's policies did not adequately highlight these topics. The comments pertaining to green infrastructure have been largely incorporated into Goal 10 with some modifications to individual goals/objectives where appropriate.*

*Reference to a Regional Transit Authority will reflect language as presented by the Joint City County Planning Commission review.*

*Revised Goal 3.5/3.6*

**Comment: Revise parking goal to include the following objectives:**

**Objective F: Provide municipal, structured parking lot or lots on West Main Street to allow greater density without excess parcel by parcel parking**

**Objective G: Examine investment in municipal, structured parking lot or lots on targeted mixed use corridors that have been slow to redevelop.**

The following was added as Objective 8.4 to address this comment:

*“Examine investment in municipal, shared surface or structured parking lot or lots on targeted mixed use corridors in an effort to encourage redevelopment.”*

**Comment: Grade separated interchanges on Route 29 at Hydraulic and Rio Roads (Dan R.)**

The following was added as Objective 6.6 to address this comment:

*“Continue to work with the TJPDC, Albemarle County and VDOT on design solutions for Route 29 that balance the needs of both local and regional traffic.”*

**Comment: Dual Sidewalks on arterials/collectors (John S.)**

This objective was revised to address this comment:

*“Objective 1.2 Provide convenient and safe pedestrian connections within 1/2 miles of all commercial and employment centers, transit routes, schools, and parks by completing the sidewalk network using a priority system of: dual-side routes along all arterial and collector routes; dual-side safe routes to all city schools; dual-side routes to parks and public facilities; completing routes that have less than ¼ mile sections missing; mitigation rain run-off and drainage problems; and citizen requests in neighborhoods.”*

**Comment: Add new objective to incorporate the concept of “shared streets”**

Proposed Objective H: Update standards and design manual, subdivision ordinance and zoning ordinance to allow for alternative road designs enabling and encouraging the concept of “shared streets.”

Discussion: A shared street is a common space created to be shared by pedestrians, bicyclists, and low-speed motor vehicles. They are typically narrow streets without curbs and sidewalks, and vehicles are slowed by placing trees, planters, parking areas, and other obstacles in the street. Motorists become the intruders and must travel at very low speeds below 16 km/h (10 mi/h). This makes a street available for public use that is essentially only intended for local residents or businesses. A shared street can be a residential street, or it can be a street in a commercial area. In the latter case, the streets are often populated by restaurants, cafes, merchant displays, street vendors, and other outdoor commercial uses. This concept is consistent with recent planning efforts to promote multimodal transportation on low volume neighborhood streets.

Potential questions/comments for consideration: What are “shared streets?” Where do we want them? How far do we want to go to encourage “shared streets?” Should these be codified? Under what circumstances?

Staff Recommendation: Staff feels the idea of updating the standards to include more flexible designs (including “shared streets” is captured in the following objective: Objective 2.5 Develop a comprehensive set of street design guidelines based on the Context Sensitive Solutions Approach that provide flexible, multi-modal transportation options for citizens and enhance the surrounding neighborhood character.

Elements for memo to address comments received from the public/staff/ Commissions since the 10/05/12 draft posted on line for comment.

Urban Design and Historic Preservation Chapter  
Updated draft November 2012

**Comments Received**

Comments have been received from the following sources:

Planning Commissioners: Keller (12/03/2012),  
Sienitsky (11/20/2012),  
Osteen (11/05/2012)  
SELC (11/01/2012)  
Charlottesville Tree Commission (11/2/2012)

The detailed comments are attached.

**Summary of how comments have been integrated into the Draft**

*Goals and objectives were modified or new objectives added under appropriate goals.*

**Topics which need additional discussion**

Comments: Maintain the historic views from Monticello to the Lawn at the University of Virginia. Preserve for visitors the integrity of these historic landscapes so that they can be interpreted in their historic contexts.

Protect access land and water routes and views to and from our community's World Heritage Sites, the University of Virginia and Monticello....

Discussion: These comments were made under the Entrance Corridor goal. Entrance Corridors are enabled to allow design review along specific routes of tourist access. The suggested comments are not appropriate in this section.

Potential questions/comments for consideration: It is unrealistic to think that the view from Monticello to the Lawn could ever again appear as it did historically.

Staff Recommendation: Do not include these suggested comments.

# CITY OF CHARLOTTESVILLE NEIGHBORHOOD DEVELOPMENT SERVICES



## MEMORANDUM

To: Charlottesville Planning Commission  
From: Michael Smith, Neighborhood Planner  
Date: January 14, 2013  
Re: Environmental Chapter Update – Comments from the RRBC

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We received a number of comments from the Leslie Middleton with the RRBC following the work session on January 8, 2013 specific to the Environment Chapter. The following outlines responses to those comments as well the updated chapter with comments addressed. City comments are noted in red.

### General Comments

- The Vision Statement has lost its “vision” between the two drafts. It is also missing some important components, specifically recognition of the Rivanna River itself. In addition, the new statement implies that “clean air and water, sustainable neighborhoods, and open space and natural areas” exist to mitigate the effects of increased development rather than have value in and of themselves. Recommendation:  
*Charlottesville will be a “Green City,” with lush green neighborhoods, healthy rivers and streams, clean air and water, energy efficient homes and buildings, and natural areas, including the Rivanna River and its corridor, while accommodating increased density and economic vitality.*  
**Staff believes the current vision is comprehensive and straightforward and recommends retaining the current language of the vision.**
- We strongly recommend that Goal THREE as previously written be included as a separate goal. The previous Goal THREE (Protect and restore stream ecosystems to improve habitat, watershed health, and water quality) provides a more scientifically accurate and functional way of organizing the Objectives, which is lost in the new organization. For example, Objectives 3.7 and 3.8 would seem to work better under the current Goal Four, but Goal FOUR has been reworded to focus on stormwater infrastructure and stream ecosystems.  
**In response to this comment, staff has amended goal FIVE under “Water Resources Protection” to state the following:**  
*goal FOUR: Value the Rivanna River as a major asset in the life of our city and region, restore it to a healthy condition within our ecosystem in order to improve habitat, watershed health, and water quality (new)*  
*4.1: Develop a Rivanna River corridor plan in conjunction with Albemarle County and other watershed localities.(new)*  
*4.2: Continue collaboration and cooperation with Rivanna Watershed stakeholders, including Albemarle County, University of Virginia, residents, businesses, and developers on watershed and stormwater management. (Reworded and Relocated. Previously objective 3.8 under “Urban Landscape and Habitat Enhancement”)*  
*4.3: Participate and partner with the Rivanna River Basin Commission on planning, assessment, educational, and outreach efforts related to the Rivanna River, its corridor and watershed. (New and Relocated. Previously objective 3.9 under “Urban Landscape and Habitat Enhancement”)*  
**Staff believes the wording of goal FOUR adequately addresses this comment. Additionally, previous goal FIVE(“Develop a Rivanna River Corridor Plan”) has been reworded and amended as objective 4.1. Objectives 3.8 and 3.9 have also been relocated and are currently represented as objective 4.2 and 4.3.**
- Use of the wording “as well as” diminishes the importance of the second phrase in numerous places. For example, Goal Four (“Improve public and private stormwater infrastructure, as well as protect and restore stream ecosystems”) could be revised to read: *Improve public and private stormwater infrastructure while protecting and restoring stream ecosystems.* This recognizes that these are not two distinct and separate functions but (should) occur simultaneously. Likewise, the current Objective 1.2 could read: *Implement and update the Urban Forest Management Plan to protect*

quality of air, water, and lands; manage stormwater; provide shading; and absorb CO<sub>2</sub>. Each of these functions is distinct and equally important. See also Objective 1.1, 7.2 where the phrase is used.

Added.

- Please note the following strategies specifically listed in the *2012 Rivanna Watershed Snapshot*. We would be pleased to review these with you to see how they can be woven in to the Environment chapter goals and strategies:

Stormwater management: Private landowners and local governments can help reduce the impact of development projects on streams by:

- Installing stormwater management practices at public wherever possible.
- Encouraging private urban stormwater management practices through incentives and other financial tools.
- Planting stream side buffers where possible and protecting and maintaining these buffers as land is developed.
- Ensuring that streets and parking lots do not create impervious cover in excess of that needed for safe and orderly development.
- Limiting construction on steep (or critical) slopes, especially adjacent to streams and creeks.
- Steering higher density development to Urban Growth (or Development) Areas to help maintain rural character and protect natural resources.

We can improve the health of our watershed if we:

- Improve stormwater management parcel-by-parcel, from fields, homes, and businesses, reducing damaging flows to our streams and increasing water resources for all.
- Identify and protect the landscapes that best protect river and watershed health.
- Improve forested stream buffers and systematically protect and restore these natural defense systems.
- Use policies, incentives, and education to create a culture of watershed protection in our community.
- Establish a water budget for all human and ecological needs and to inform water resource planning.
- Monitor and plan for the impacts of changing weather patterns on our water resources and natural systems.
- Develop tools for selecting the most effective and economical strategies for land and water conservation.

- Last but not least, this Chapter appears to be lacking a monitoring and assessment goal or strategy. Perhaps these are to be included in the Implementation Chapter or as part of the annual assessment. However, it seems important to note that the current version does not actually have as a goal to RESTORE impaired waters to aquatic health and safety, noting that the Rivanna and several tributaries that run through or adjacent to the city is impaired for not only aquatic life (due to excessive stormwater), but also for bacteria, which is a public health issue. There may be similar goals for waste reduction, energy efficiency, and air quality that could be cited (as is done in the tree canopy strategy).

Staff recommends the strategies noted above be utilized, as appropriate, as implementation tools for the Environment Chapter.

### Specific Goals and Objectives

- Goal TWO (native plants), while a worthy goal in and of itself, seems better suited to be an objective under the current Goal THREE and/or Goal EIGHT because it is a strategy for achieving both of those goals.  
Added. Former “goal TWO” now represented as objective 2.8.
- Goal TWO (native Plants) could be much stronger: *Utilize native and drought tolerant plants in all public projects and promote their use in private landscapes.* Why not?  
Not added. Too specific.
- 3.1 – What does it mean to “evaluate the development” of a wildlife management plan and policy? Suggestion: *Evaluate how wildlife management plan and policies could protect green space, buffers, and neighborhood amenities.*  
Not added. Too specific.
- 3.2 – Provide an interconnected system of green space and buffers along streams *to improve water quality and provide habitat for wildlife and birds*  
Added.
- 3.3 – Is a strategy for implementing Objective 3.2 and Objective 3.5
- 3.5 – This strategy should include aquatic habitat as one of the results desired, e.g., “Improve stream and vegetated buffer conditions to *improve wildlife and aquatic habitat*, groundwater recharge and stream base flow; decrease sedimentation; and improve environmental aesthetics.”  
Added.

- 3.5 – What are environmental aesthetics? Is this trying to get at the value to humans?
- 3.6 – This currently does not mention the critical loss of aquatic habitat that results from piping streams. Suggested revision: *Improve water quality and aquatic and streamside habitats by minimizing additional underground piping of city streams.*  
**Not added. Too specific.**
- 3.9 – Please use this wording: *Continue to participate in the Rivanna River Basin Commission (RRBC) and work with (partner with?) with the RRBC in planning, assessment, and education and outreach for the Rivanna River, the river corridor, and the watershed.*  
**Added. Currently objective 4.3.**
- Goal FOUR – Suggested revision: *Improve public and private stormwater infrastructure while protecting and restoring stream ecosystems.* Please see comments on the need to restore the former Goal THREE.  
**Added. Currently goal THREE.**
- 4.3 - Why use the words “identify or establish funding,” when the objective is to secure funding. Should this not be aspirational?
- 4.5 - This objective is not clear. Is the intent for the City to examine whether it could recreate public (municipal) stormwater facilities for the benefit of multiple development or redevelopment projects that would enable higher FAR, etc.? If so, this is a worthy objective, but not clear in the wording. Also, what are target zones? Is this an accepted planning term?  
**Staff will discuss this comment with staff from the Environmental Sustainability office.**
- 4.6 - Suggested rewording to make this is more positive statement: *Update the subdivision ordinance and standards and design manual to accommodate greater design flexibility that encourages forest and tree protection and more pervious surfaces.*  
**Added.**
- Goal FIVE – Develop a Rivanna River Corridor Plan *in conjunction with Albemarle County and other watershed localities.*  
**Added. Currently objective 4.1.**
- 6.1 – This objective seems very similar to Objective 4.6.
- Goal SEVEN: Suggested reword that is stronger for the City (implement) and less so (promote) for households and businesses. *Implement effective and innovative energy and fuel management in City operations and promote energy efficiency citywide.*  
**Staff will discuss this comment with staff from the Environmental Sustainability office.**
- Objectives 7.3 and 7.4 are very similar. Objective 7.3 seems to be about City operations, though it is not clear. 7.4 appears to be about both the City and the community.
- 7.4 – What is meant by “strategically explore?” Suggested rewrite: Track greenhouse gas emissions in City operations and the community and strategically explore and implement initiatives to achieve emissions reductions.
- Goal EIGHT - Suggested rewrite: *Promote citywide water efficiency and conservation and implement water efficiency and conservation strategies in City buildings and operations.* [This includes citizens and households in the mix.]  
**Added.**
- Goal NINE – Clarify “diversion” as Waste diversion.”  
**Added.**



## ENVIRONMENTAL GOALS

Charlottesville will be a “Green City,” with clean air and water, sustainable neighborhoods, and open space and natural areas that mitigate the effects of increased development and density in residential and economic centers *(reworded)*

### Urban Landscape and Habitat Enhancement *\*Replacing the 2007 language “Urban Forest”*

**goal ONE: Promote practices throughout the City that contribute to a robust urban forest. (new)**

1.1: Implement and update the Urban Forest Management Plan to protect quality of air, water and lands; manage stormwater, provide shading, and absorb CO<sub>2</sub>. *\*Rewording of Objective A an existing objective of the 2007 Urban Forest goals.*

1.2: Expand the overall tree canopy of the City and increase the canopy of neighborhoods in an effort to achieve American Forests recommendations for urban (25%), suburban (50%) and center business zones (15%). *\*Revamping the 40% canopy goal in the 2007 Urban Forest goal*

1.3: Develop methods, including financial incentives, to support retaining and increasing healthy tree canopy on private lands. *\*Rewording of Objective H, an existing objective of the 2007 Urban Forest goals.*

**goal TWO: Protect green space and buffers that support appropriate habitat for wildlife and birds. Reworded and relocated from Water Resources Protection section, Goal Three, Objective 1. (new)**

2.1: Evaluate the development of a wildlife management policy and plan. **(new)**

2.2: Provide an interconnected system of green space and buffers along streams to improve water quality and wildlife and bird habitat. **Reworded and relocated from Water Resources Protection section, Goal Three, Objective 1.**

2.3: Identify gaps in the system to provide additional habitat corridors and opportunities to implement natural habitat improvements. **Reworded and relocated from Water Resources Protection section, Goal Three, Objective 1.**

2.4 : Promote and participate in programs to establish conservation or open-space easements of forested stream-side lands to ensure permanent protection. **(reworded)**

2.5: Improve stream and vegetated buffer conditions to increase wildlife and aquatic habitat, groundwater recharge and stream base flow, decrease sedimentation, and improve environmental aesthetics. **(reworded)**

2.6: Reduce loss of open waterways and habitats by minimizing additional underground piping of city streams. **(reworded)**

2.7: Increase public stewardship of city lands and habitats through showcase projects and education. **(reworded)**

2.8: Promote use of native and drought tolerant plants. **(New. Formerly, goal TWO under “Urban Landscape and Habitat Enhancement”)**

### Water Resources Protection *\*Replacing the 2007 language “Water Quality, Stormwater, and Watershed”*

**goal THREE: Improve public and private stormwater infrastructure while protecting and restoring stream ecosystems. (new)**

3.1: Create a permanent, dedicated funding mechanism to meet a range of water resources goals and challenges, including regulatory compliance, stormwater infrastructure, drainage and flooding, water quality, and environmental stewardship. **(reworded)**

3.2: Assess infrastructure and prioritize solutions for the repair, upgrade, and improvement of the City’s stormwater infrastructure, and establish an ongoing program for inspections, operation and maintenance. **(reworded)**

3.3: Identify and track stormwater hazards such as flooding and drainage problems that may be threatening people and property and identify or establish funding to repair or prevent safety hazards. **(reworded)**

3.4: Reduce and/or eliminate stormwater runoff impacts from sites that lack adequate stormwater treatment by incentivizing reductions in overall imperviousness (i.e., effective imperviousness) and encouraging retrofits on developed properties to address stormwater management. **(reworded)**

3.5: Examine feasibility of municipal, sustainable storm water management facilities such as rain gardens to facilitate higher FAR on urban lots, particularly in or adjacent to target zones such as entrance corridors. **(new)**

3.6: Update the subdivision ordinance and standards and design manual to allow for greater design flexibility that encourages tree protection and pervious surfaces. **(new)**

3.7: Provide technical assistance and educational outreach regarding water quality and land management practices for homeowners and businesses. **(reworded)**

**goal FOUR: Value the Rivanna River as a major asset in the life of our city and region, restore it to a healthy condition within our ecosystem in order to improve habitat, watershed health, and water quality (new)**

4.1: Develop a Rivanna River Corridor Plan in conjunction with Albemarle County and other watershed localities. **(new)**

4.2: Continue collaboration and cooperation with Rivanna Watershed stakeholders, including Albemarle County, University of Virginia, residents, businesses, and developers on watershed and stormwater management. **(Reworded and Relocated. Previously objective 3.8 under “Urban Landscape and Habitat Enhancement”)**

4.3: Participate and partner with the Rivanna River Basin Commission on planning, assessment, educational, and outreach efforts related to the Rivanna River, its corridor and watershed. **(New and Relocated. Previously objective 3.9 under “Urban Landscape and Habitat Enhancement”)**

**Sustainable Development, Resource Efficiency, Waste Reduction, and Climate Protection** **(Added Resource Efficiency and Waste Reduction)**

**goal FIVE: Encourage high performance, green building standards and practices and the use of the U.S. Green Building Council's (USGBC) LEED certification program, Earthcraft, Energy Star, or other similar systems. (reworded)**

5.1: As appropriate, create policy and financial incentives to encourage higher building and site performance. **(new)**

**goal SIX: Promote effective and innovative energy and fuel management in both City and community buildings and operations.**

6.1: Reduce energy demand by an average of 30% in existing building and operations; support and collaborate with local energy efficiency partners and stakeholders (i.e., the Local Energy Alliance Program [LEAP]) **(reworded)**.

6.2: Pursue and promote cleaner sources of electrical energy (e.g., renewable energy strategies).**(reworded)**

6.3: Reduce vehicle-related emissions through increased fuel efficiency, reduced vehicle miles traveled, fleet downsizing, anti-idling efforts, and use of alternative fuels (e.g., compressed natural gas, biodiesel, and electric vehicle technology). **(reworded)**

6.4: Track greenhouse gas emissions in City operations and the community and strategically explore and implement initiatives to achieve emissions reductions. **(new. Formerly, Goal Six under “Sustainable Development, Resource Efficiency, Waste Reduction, and Climate Protection”)**

**goal SEVEN: Promote citywide water efficiency and conservation and implement water efficiency and conservation strategies in City buildings and operations. (reworded)**

**goal EIGHT: Promote and implement strategies to reduce waste generation and increase recycling and waste diversion to decrease environmental impacts, including greenhouse gas emissions. (reworded)**