

Pantops

MASTER PLAN

DRAFT 5/2/2019



Pantops Master Plan

ALBEMARLE COUNTY, VIRGINIA
DRAFT MAY 2, 2019



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Introduction

The Pantops Master Plan is the culmination of countless hours of work by citizens, public officials, and staff who attended meetings and workshops, took surveys, presented ideas, and participated in framing the future of the Pantops community.



FLOW: The Rivanna River Arts Festival celebrated the river's history, ecology, and spiritual traditions through visual and performing arts.



This Master Plan document provides long range policy direction for land use, transportation, parks and greenspace for Pantops. It also includes recommendations relating to economic development, housing, public services, and historic and cultural resource protection. This Plan serves as a guide for elected and public officials by establishing policies and priorities and providing the framework for evaluating development proposals. It expresses the community's vision and priorities, and describes where development should occur, while also identifying resources that are worthy of protection and should be preserved for public use by current and future generations.

The Pantops community is distinctively situated between several of the County's most important natural, scenic, and historic assets. The Rivanna River forms the western and southern boundary of Pantops and provides over three miles of riverfront through Pantops. Immediately south of Pantops is Thomas Jefferson's Monticello, which is listed as a UNESCO World Heritage site, and directly east is the Southwest Mountains Rural Historic District, a 31,000-acre district that includes some of the Piedmont's most pristine and scenic countryside. Additionally, the topography of Pantops provides for some of the region's best views to the Blue Ridge and the City of Charlottesville.

Pantops' unique location adjacent to the City of Charlottesville with accessibility to abundant natural and cultural resources is part of what makes it such a desirable place to live, work, and recreate. This Master Plan provides a vision and recommendations for the future growth of the community that acknowledges the importance of protecting the relationships to the natural and cultural resources. The Plan provides a guide for how the community can grow in a responsible manner; one that improves access and connectivity to these treasured resources, while also providing for their protection.

Vision



Historic Context

For much of its history, Pantops and its built environment have been oriented towards two defining features: the Rivanna River and the historic route of the Three Notch'd Road.

The Rivanna River

The plantation economy of the antebellum Virginia Piedmont relied heavily on waterways to power mills and transport goods for export in the Tidewater region. The Rivanna River has served as a vital link to the James River from the northern half of Albemarle County. Large land holdings and mill villages bordering the river were defining qualities of the landscape near Pantops.

Many of these features still exist today with varying degrees of integrity, as preservation tracts or place names: moving upriver from the mill village of Milton (near present-day Stone-Robinson Elementary and the Milton Boat Launch), they included Thomas Jefferson's Shadwell, Tufton, Lego, Monticello, and Pantops; the port of Pireus near present-day Woolen Mills; Pen Park; and the birthplace of George Rogers Clark at Buena Vista.

During the early 19th century, the Rivanna Navigation Company was chartered to improve the river's navigability for batteaux, constructing locks, dams, canals, and towpaths. Remnants of these improvements exist today along the Old Mills Trail.

The Three Notch'd Road

The Three Notch'd Road, which is now the path of Route 250 (Richmond Road), was historically one of the primary east-west road connections linking the Shenandoah Valley to the Tidewater. Although records dating to 1741 indicate that a former road trace crossed the Rivanna River at Secretary's Ford (near the current Interstate 64 bridge), the most consequential crossing of the Rivanna came at Moore's Ford with the Free Bridge (left), which was constructed in the early 1800s at the site of the current bridge.

The Free Bridge crossing also facilitated improved access to the growing town of Charlottesville from the north, with the original path of Route 20 following Free Bridge Lane, Elk Drive, and Stony Point Road (Route 20) north towards Orange and Fredericksburg until the 1950s.



Free Bridge



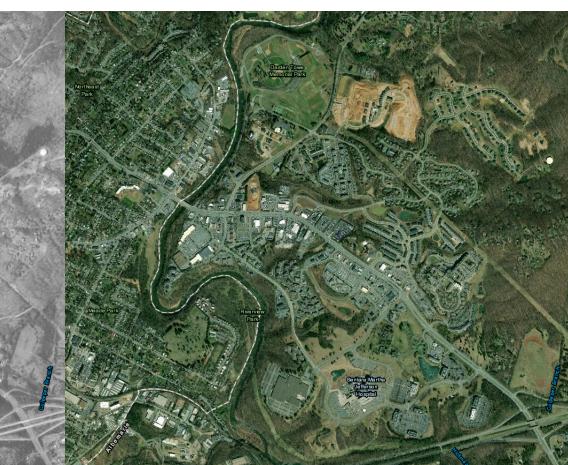
Pantops in 1937



Pantops in 1974



Pantops in 1990



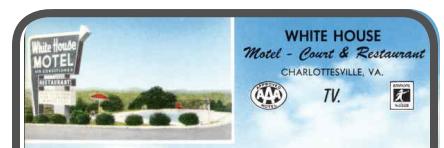
Pantops in 2018

Suburbanization

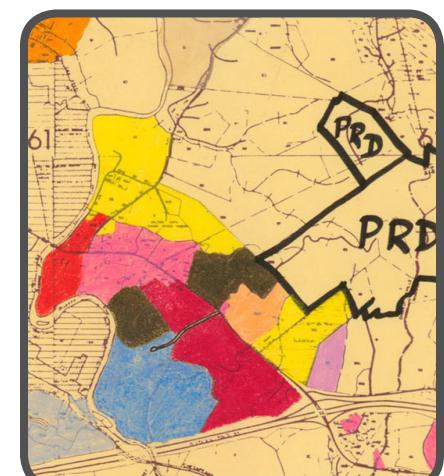
While Pantops remained primarily agricultural and undeveloped into the 1930s, the post-war boom of suburban development within the City of Charlottesville and the construction of the limited-access Route 250 Bypass began to push growth east towards the Rivanna River and Pantops. During the 1950s, transient, highway-oriented uses such as the Stanislaw Makielinski-designed Town & Country Motor Lodge and White House Motel (both now demolished) began to cluster in the area referred to today as "Dealership Row". However, the rest of the area remained fairly undeveloped, aside from the construction of Interstate 64.

The growth of modern suburban Pantops began in the late 1970s with the Ashcroft subdivision to the north of Route 250 and the larger State Farm & South Pantops development to the south. With the 1980 Zoning Ordinance, Pantops was designated for mixed commercial uses and dense residential development south of Route 250, highway commercial development along Route 250, and primarily low-density residential uses north of Route 250. Almost 40 years later, the zoning map for Pantops looks mostly the same.

Since 1980, large planned commercial developments have dominated the area south of Route 250, including the Pantops Shopping Center (1980s), Rivanna Ridge Shopping Center (late 1990s/early 2000s), and Peter Jefferson Place/Martha Jefferson Hospital (2000s). North of Route 250, more intensive residential development began in the 1990s and early 2000s with the Wilton Farm, Fontana, and Avemore developments and has continued through today.



Postcards of Pantops' Early Motels



Adopted 1980 Zoning Map

Pantops Today

	Pantops CDP	Albemarle County
Population Estimate	4,810	116,439
Median Age	39.4	38.6
% under 18	17.5%	20.7%
% over 65	28.7%	16.7%
Sex	45.5% male 54.5% female	47.8% male 52.2% female
Race	76.7% White, 17.3% Black or African-American, 0.5% American Indian and Alaska Native, 3.2% Asian, 2.3% two or more races	81.5% White, 9.6% Black or African-American, 0.2% American Indian and Alaska Native, 5.0% Asian, 2.4% two or more races
Average household/family size	1.90 household 2.61 family	2.44 household 3.02 family

Demographics

Selected statistics from internal population estimates and the 2013-2017 American Community Survey 5-year estimates are shown at left for the Pantops census-designated place (CDP), which approximates the boundaries of the Development Area, as well as Albemarle County.

Relative to the rest of Albemarle County, Pantops has an older population and smaller average household sizes, potentially due to its large multifamily and senior housing stock.

Land Use Patterns

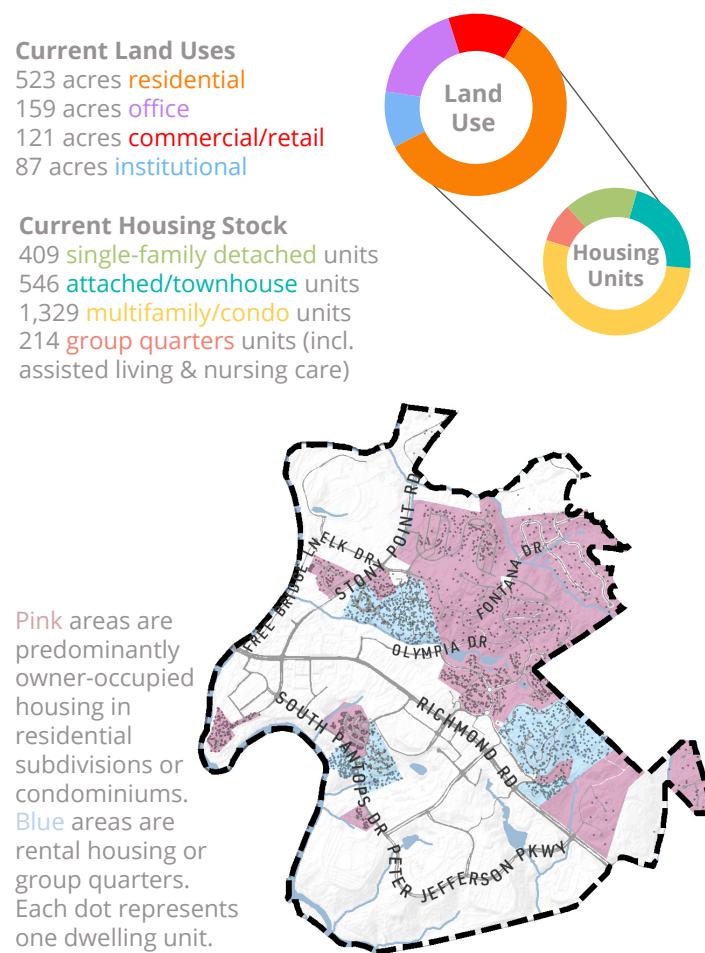
The legacy of suburban highway development is visible in Pantops' current land use patterns. The majority of acreage along Route 250 is devoted to commercial uses, including "Dealership Row" and the large strip-style Pantops Shopping Center and Rivanna Ridge Shopping Center. While commercial uses are the most visible, the largest non-residential land use type are offices, which are mainly clustered near Riverbend Drive and Martha Jefferson Hospital/State Farm at Peter Jefferson Place.

Residential developments consume about 523 acres, more land than all other uses combined, with residential subdivisions and condominiums (including common areas controlled by owners' associations) occupying about 400 acres. Despite this large acreage, the bulk of Pantops' housing stock is contained in about 123 acres of dense rental housing, which includes group quarters and senior living.

Housing

Pantops' housing mix leans heavily towards dense multifamily or attached unit types. While single-family home construction has increased in recent years, detached units still comprise less than a quarter of all dwellings within Pantops.

Pantops has a number of senior living, assisted living, and nursing & memory care facilities. An 2019 estimate shows that in addition to the 214 units/beds in assisted living and nursing care facilities, 517 dwelling units are located within age-restricted or senior living communities.



Employment & Commuting Patterns

There are approximately 7900 employees who work in Pantops and approximately 660 total businesses. The top five employment sectors are shown in the adjacent table. Sentara Martha Jefferson Hospital, Westminster-Canterbury of the Blue Ridge, and State Farm Insurance are currently the largest employers in Pantops.

As a major employment center within Albemarle County, Pantops has a large commute shed. 2015 data from the Census Bureau's Longitudinal Employer-Household Dynamics (LEHD) program shows this shed reaching east into Fluvanna and Louisa counties, as well as west towards Crozet and the Shenandoah Valley. However, residents of Pantops primarily work in other employment centers within the City of Charlottesville and Albemarle's urban ring such as Downtown Charlottesville, the University of Virginia, and the Route 29 corridor. Similarly, the Route 250 corridor within Pantops serves as a major commuting route for residents of areas east of the urban areas to access Downtown Charlottesville and the University of Virginia.

Environment

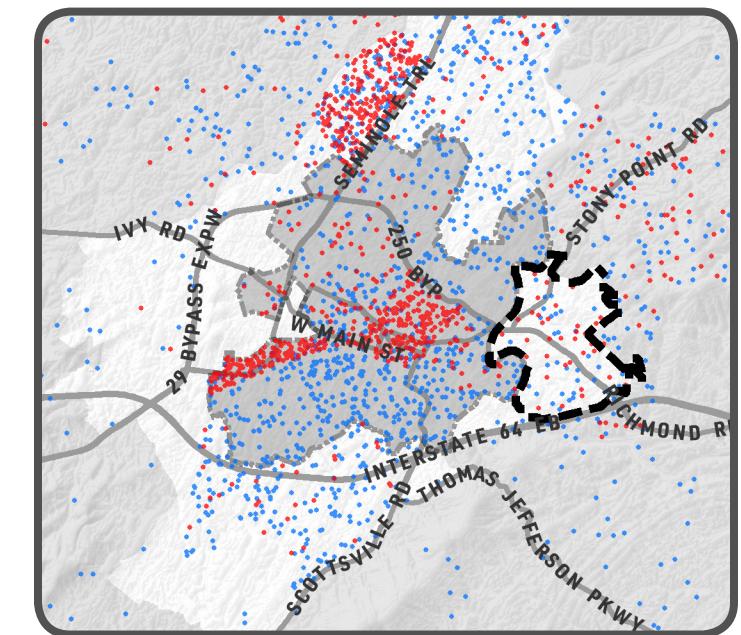
Pantops' location on Pantops Mountain and the lower portions of the Southwest Mountains creates an environment that is unique in Albemarle County due to its significant urbanization and topography. Substantial portions of the Development Area include steep slopes some of which have been disturbed or graded by prior development projects while others remain forested or undisturbed.

The most significant water resource is the Rivanna River, which forms the western border of the Pantops Development Area. A number of smaller perennial and intermittent streams drain from Pantops Mountain into the river and are associated with hillside systems. However, the Rivanna is currently identified as "impaired" in certain water quality categories by the Virginia Department of Environmental Quality.

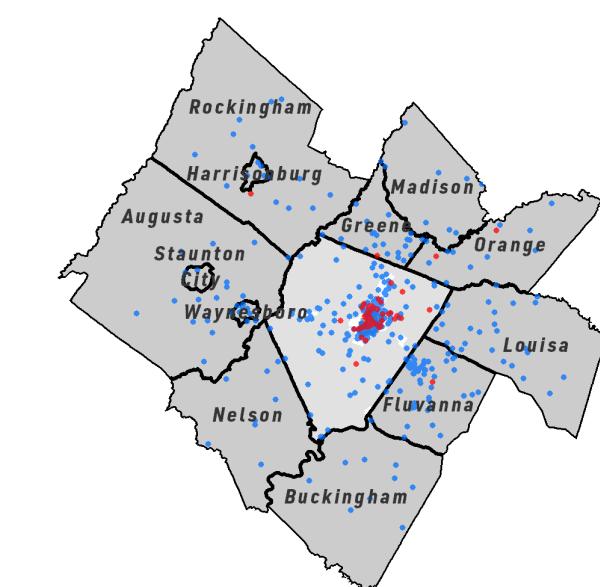
The Rivanna River Corridor is noted as a Focus Area in the County's Biodiversity Action Plan (BAP) and the Pantops section of the corridor includes two river bluffs identified as "Important Sites" in the BAP.

More information about existing environmental conditions can be found in the Conservation chapter.

Sector	# Employees	# Businesses
Health Care & Social Assistance	4000	378
Retail & Wholesale Trade	1047	39
Hospitality & Food Service	640	26
Finance & Insurance	532	75
Educational Services	470	8



Red dots show the general employment locations of commuters from Pantops. Blue dots show general residence locations of commuters to Pantops.



Key Challenges & Opportunities

Connecting Neighborhoods

U.S. Route 250 is a national highway that runs from Richmond, Virginia to Ohio. It is the largest east-west thoroughfare that runs through Pantops. Route 250 was designed to transport a large volume of through traffic at high speeds, with little consideration given to alternative modes of travel. The segment of U.S. 250 located within Pantops varies in width between 4 and 6 vehicular travel lanes, with some intersections widening up to 8 lanes. Currently, Route 250 is difficult and unsafe to cross by foot or bicycle, and there is only one dedicated crosswalk located at the State Farm Boulevard and Luxor Road intersection. The road creates a de facto barrier to connectivity between the northern and southern portions of Pantops. Residential neighborhoods to the north cannot easily access the commercial and office uses to the south unless traveling by vehicle.

How can we better connect neighborhoods north and south and provide safe and convenient routes for pedestrians and bicyclists? How can we bridge the divide created by Route 250?

Protecting Scenic and Cultural Landscapes

Thomas Jefferson gave Pantops its name, meaning "all seeing," when he inherited land in this area from his father. Pantops offers unparalleled scenic views of the Blue Ridge Mountains and the City of Charlottesville and its location near Monticello, the Southwest Mountains and the Rivanna River. These natural features, combined with the remnants of early American and Colonial settlements, offer a rich cultural landscape within and around Pantops that is worth celebrating and protecting.

How can development and redevelopment within Pantops expand access to, while also protecting, these important scenic and cultural resources?

How can we improve facilities for bicycle, pedestrian and transit to help ease traffic congestion along major roadways? How can we improve mobility and increase access to alternative modes of transportation for all, especially Pantops' large senior population?

Renewing the Riverfront

The Rivanna River is highly valued by citizens of Pantops and the larger region. It has become a signature recreational feature along the western boundary of Pantops and includes the Old Mills Trail greenway system along its eastern bank. In addition to its recreational value, the River also provides a natural ecosystem that is vital to the health of the environment and Pantops citizens. Although not yet fully realized, the Rivanna River offers abundant economic opportunities for the community. However, most buildings have physically "turned their backs" to the River corridor which has created a lack of interaction between private developments and the Riverbank. Furthermore, the portion of the Rivanna River between Meadow Creek and Moore's Creek has been designated as an impaired waterway by the Virginia Department of Environmental Quality (DEQ) for over a decade.

How can new development and redevelopment within Pantops reconnect and reorient to the river in a way that embraces this valuable community asset? How can future development and conservation initiatives be coordinated to renew the riverfront, enhance river health, and protect the local ecosystem?

Expanding Transportation Choice

One of the highest priorities identified by community members during the planning process is finding solutions to decrease traffic congestion on major roadways in Pantops. Routes 250 and 20 routinely experience traffic congestion during peak travel times. Development has the potential to compound this problem unless alternative transportation modes become more readily available in Pantops. Commuting data from the 2013-2017 American Community Survey 5-year estimates indicate that over 95% of Pantops residents who work outside of the home commute by car. More surprisingly, the survey estimates that none of the existing residents are regularly walking to work.

How can we improve facilities for bicycle, pedestrian and transit to help ease traffic congestion along major roadways? How can we improve mobility and increase access to alternative modes of transportation for all, especially Pantops' large senior population?



Providing Livability For All

Pantops has a diverse mix of housing types. Multi-family dwellings account for approximately half of the total available units, about a quarter are attached dwellings or townhouses, and a mix of single-family detached, nursing homes, and assisted living comprise the final quarter of the overall housing stock. As growth continues and land prices increase, there is potential for working class and low income families to be priced out of the Pantops community. Furthermore, as development continues and undeveloped land becomes more scarce, it becomes increasingly important to provide access to quality amenity spaces for the residents, employees, and visitors of Pantops.

How can we ensure that future growth maintains a mix of housing types and affordability for all ages and incomes? How can we grow in a manner that increases access to jobs, community services, and facilities, while also providing access to Pantops' natural and cultural assets and resources?

Collaborating with Regional Partners

Pantops shares its western border with the City of Charlottesville, and the Rivanna River creates a physical boundary between the localities. Currently, Free Bridge is the only crossing that connects Pantops to Charlottesville. As a result, those traveling between the two localities are funneled onto a single roadway, creating congestion and making it difficult to walk and bike between localities. Identifying opportunities for increased connectivity between Charlottesville and Pantops will require collaboration between the City and County. Similarly, efforts to improve water quality in the Rivanna River will require regional collaboration.

How can the County lead the way to forge a productive dialogue with the City of Charlottesville to find solutions to increased regional connectivity and improved stewardship of the Rivanna River? How can the County and City work together to develop a platform for coordinated planning for our collective future?

Overview

The Pantops Master Plan establishes a long-range vision and supporting recommendations for the transformation of the Pantops area. Citizens, stakeholders, public officials, and staff worked together to develop the vision and recommendations on the following pages. This Plan provides a guide to future decision making related to development and redevelopment, public investment, and capital projects for the area. The following chapters focus on the three topic areas from the vision: **Connectivity**, **Character**, and **Conservation**. The last chapter, **Implementation**, provides a road-map for achieving the vision.

CONNECTIVITY

Improve **multimodal transportation options for all residents**, regardless of age, race, income and ability. Enhance connectivity to, from, and within Pantops.

1. Establish a connected network of complete streets that provide safe, convenient, and viable transportation choices for all users.
2. Design and construct new pedestrian and cyclist crossings along the Rivanna River Corridor and across Route 250 to facilitate better access to the City of Charlottesville and connectivity within the Pantops Development Area.
3. Establish sidewalks, shared use paths, bicycle lanes and trails, where needed, to support a comprehensive and complete active transportation network.
4. Provide physically separated or buffered bicycle facilities on streets with steep grades or high traffic volumes to accommodate cyclists of all skill levels.
5. Collaborate with regional planning efforts, such as the Rivanna River Corridor Study and the Jefferson Area Bicycle and Pedestrian Plan to plan, design, and construct a network of bicycle and pedestrian infrastructure that is well aligned with the communities and infrastructure adjacent to Pantops.
6. Improve transit service and infrastructure quality at bus stops in Pantops with the goal of reducing single-occupancy vehicle trips, promoting transit choice, and increasing mobility and multi-modal transit across the Development Area.

CHARACTER

Encourage **high quality, walkable urban places** and support development that protects viewsheds and existing neighborhoods.

1. Encourage infill development that provides walkable, transit-oriented environments and respects natural systems.
2. Develop incentives to attract mixed-use, infill development, especially in the Urban Centers (Riverbend Urban Center and Rivanna Ridge Urban Center).
3. Encourage new development and redevelopment to contribute space to public parks and green systems in an effort to create an interconnected network of green and public amenity spaces in Pantops.
4. Reorient development to the Rivanna River in coordination with the future Rivanna River Corridor Plan, the Connectivity Chapter's recommendations to ensure access to the Rivanna River, and the Conservation Chapter's recommendations for protecting River health.
5. Collaborate with the Albemarle County Office of Housing to provide a variety of housing options in cost, unit type, and character to promote choice and equitable access in Pantops.
6. Pursue zoning changes, such as form-based code, to support desired building, street form, and uses as described in the Future Land Use Plan.



CONSERVATION

With the Rivanna River as the backbone, create an **integrated system of parks and greenways** throughout Pantops that provides accessible, usable amenity spaces and conserves and restores natural systems.

1. Provide pedestrian and trail connections to major natural systems and public amenities, such as the Rivanna River greenway corridor and Darden Towe Park.
2. Create a variety of public spaces to support active, passive, and social recreation and link existing neighborhoods to cultural assets.
3. Strategically preserve open space and tree canopy to create an internal green infrastructure network and amenity areas within the centers, districts, and neighborhoods.
4. Encourage design that minimizes impacts to critical natural resources including preserved slopes, streams & stream buffers, and floodplain areas.
5. Encourage low-impact development and onsite stormwater management strategies to improve surface water quality and protect the health of the Rivanna River.
6. Promote and protect locally significant vistas & view corridors by establishing public access points and building and landscape design guidelines.
7. Encourage compliance with the Monticello Viewshed Guidelines identified in the Comprehensive Plan.

IMPLEMENTATION

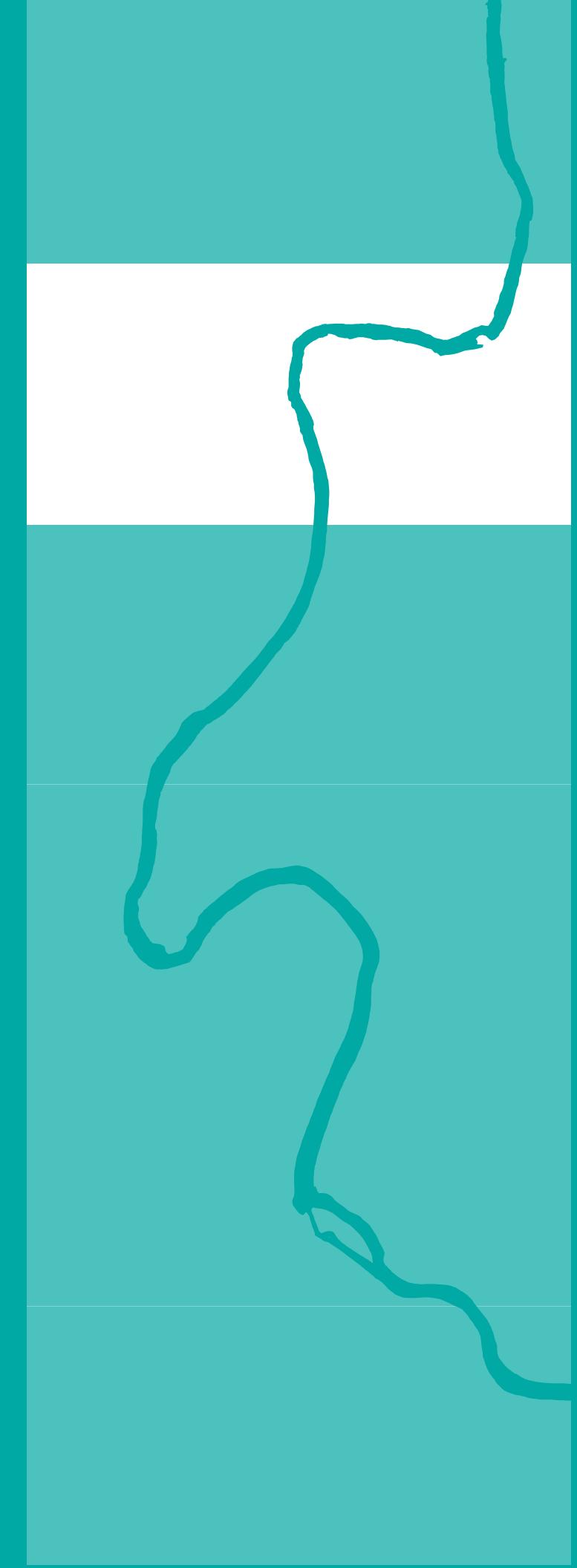
Support this Plan with **proactive implementation initiatives** such as updates to policy, zoning changes, and regional partnerships.

1. Direct County investment and policy changes to support the identified Priority Areas.
2. Complete the Rivanna River Corridor Plan in conjunction with the City of Charlottesville and the Thomas Jefferson Planning District Commission.
3. Create a performance management framework and evaluate development projects for their consistency with the Key Outcomes.
4. Complete the Policy and Coordination Projects identified in this Chapter.
5. Complete the Capital Projects identified in this Chapter.

CONNECTIVITY

Improve **multimodal transportation options for all residents**, regardless of age, race, income and ability.
Enhance connectivity to, from, and within Pantops.

CHAPTER TWO



Connectivity Overview

This Plan works to expand choice in transportation options to address the auto-oriented challenges in Pantops.

Vision

This Master Plan envisions Pantops as a connected community that offers multimodal transportation options for all residents regardless of age, race, income and ability. Citizens should be able to safely access areas within and adjacent to Pantops.

To achieve this vision, the Plan calls for improving the overall transportation network, with an emphasis on expanding the availability of bicycle, pedestrian and public transit systems. Providing a wide range of transportation modes is a vital component of community development initiatives in Albemarle County. These efforts enable designated Development Areas like Pantops to become cohesive communities where residents can live, work, play, and shop.



Dan Mahon, Albemarle County Outdoor Recreation Supervisor discusses construction of an access trail from Free Bridge to the Rivanna River Trail along the Rivanna River - a Neighborhood Improvement Funding Initiative (NIFI) project.

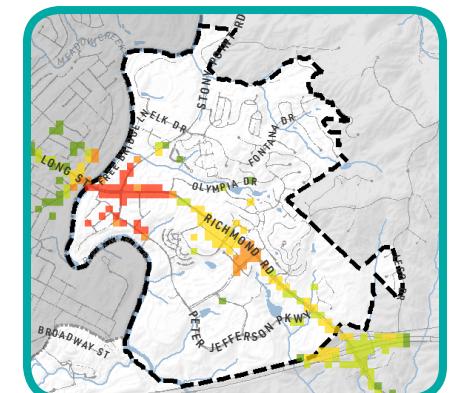
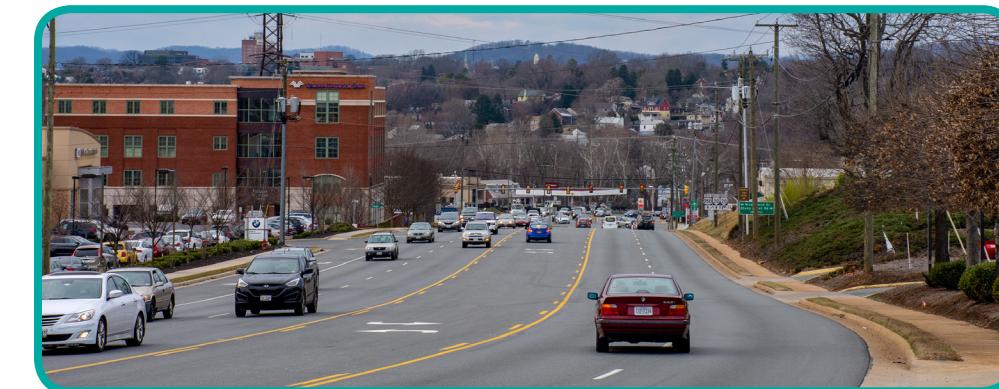
Existing Conditions

Consistent with the 2008 Master Plan, transportation remains one of the highest priority issues in Pantops. Through collaborative work with the Pantops Community Advisory Committee, residents and stakeholders have identified traffic congestion along Route 250 and Route 20 as a significant, ongoing challenge. Simultaneously, as an Entrance Corridor to the City of Charlottesville, preservation of the Monticello Viewshed and the rural and scenic nature of Route 20 as it enters the Pantops Development Area remain important.

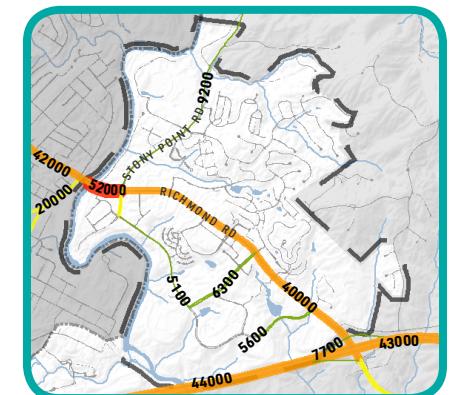
While traffic congestion along Route 250 and Route 20 is a regional challenge, the lack of bicycle, pedestrian and public transit infrastructure currently inhibits a safe commute for many residents. Manmade and natural landscape features physically restrict connection points between Pantops and the City of Charlottesville. The Rivanna River is a valuable recreational, transit and environmental asset to the community, yet there is a need for additional crossings to facilitate access between the City and County. Additionally, Pantops residents have stated that crossing Route 250 as a pedestrian or bicyclist can be unsafe and intimidating since the road caters predominantly to car-centric travel. The high volume of vehicular traffic along the Route 250 corridor is another barrier that inhibits cohesion and connectivity between the northern residential neighborhoods and commercial businesses and offices in the southern half of Pantops.

In response, the Master Plan calls for additional pedestrian crossings, an expanded internal street grid, and increased bicycle, pedestrian, and transit infrastructure. These recommendations aim to reduce vehicular traffic and congestion, increase transit service ridership, and foster a sense of place and community amongst Pantops residents.

There are several ongoing, regional planning efforts that address transportation issues affecting Pantops. These initiatives include the Thomas Jefferson Planning District Commission (TJPDC) and Piedmont Environmental Council's (PEC) Jefferson Area Bike and Pedestrian Plan, as well as the Rivanna River Corridor Study, which is a joint City-County collaborative project facilitated by TJPDC staff. The Master Plan illustrates the community's vision for Pantops specifically and sets an expectation for alignment with these other ongoing planning projects.



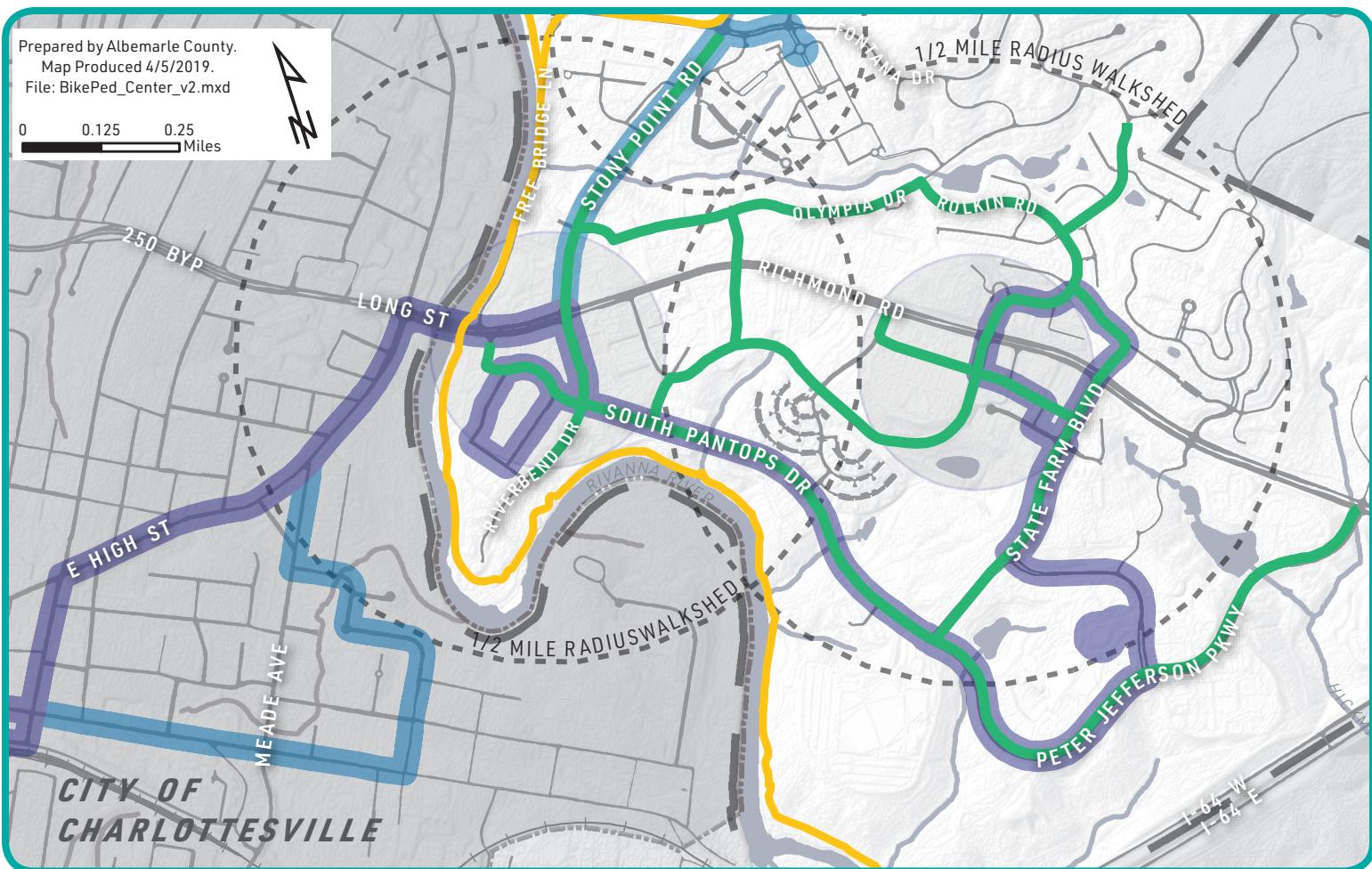
Hot spot analysis of 2011-2017 accident data reveals clusters near the intersections of Route 250 with Route 20/Riverbend Drive, State Farm Boulevard, and Rolkin Road; as well as a section of South Pantops Drive near Riverbend Drive.



This map of traffic counts highlights the influence of vehicles moving east-west along Route 250 between areas east of Pantops and the City of Charlottesville. Free Bridge carries an estimated 52,000 vehicles per day.

Future Bike & Pedestrian Network

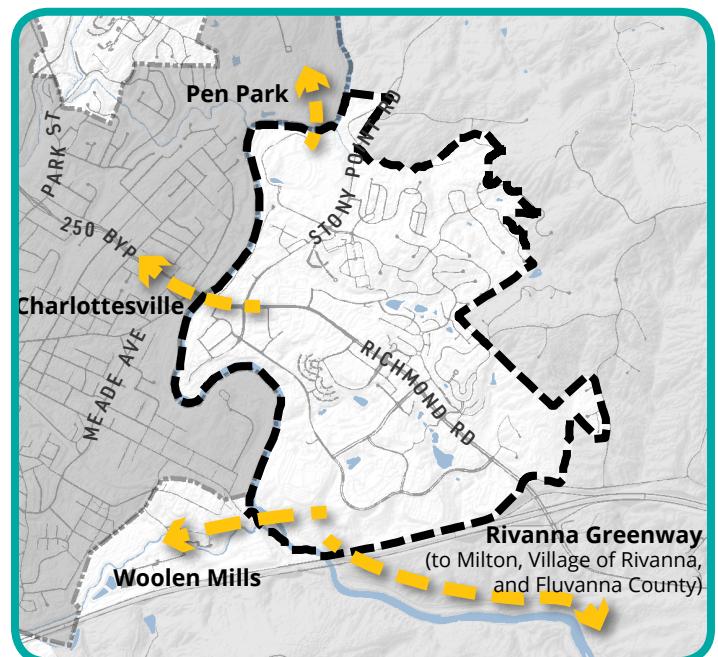
Expanding Bicycle, Pedestrian, and Transit Infrastructure



Map Legend

- Transit Routes (from 2018 CAT Transit Development Plan)
- Enhanced On-Street Bicycle Facilities
- Shared-Use Path
- Urban Center Core Area

With the goal of creating Complete Streets, bicycle and pedestrian infrastructure are essential in facilitating connected neighborhoods in Pantops.



Pantops residents who were engaged during the public feedback process envision Pantops as a “connected community”. Streets are often the most vital yet underutilized public spaces in communities. Streets provide the physical space necessary for travel, play a significant role in the public life of communities, and should be designed as public spaces and channels for movement.

With the goal of creating Complete Streets, bicycle and pedestrian infrastructure are essential features that create truly connected neighborhoods. These healthy and active modes of transit allow neighbors to engage with one another on a daily basis, which fosters a sense of identity within a community.

In addition to connectivity within Pantops, this Plan calls for additional connections to neighboring communities and amenities, including potential crossings of the Rivanna River to Pen Park, the City of Charlottesville, and the Woolen Mills area, as well as continuation of the Rivanna Greenway towards the Village of Rivanna and Fluvanna County.

Future Pedestrian Trails & Paths

Sidewalks, paths, and trails play a vital role in urban life. As conduits for pedestrian movement and access, they enhance connectivity and promote physical activity. As public spaces, sidewalks serve as the front steps to the Pantops community, activating streets socially and economically. Maintaining a safe, contiguous, and accessible sidewalk network is a fundamental and necessary investment for Albemarle County.

This Plan proposes a network of trails and shared use paths (SUPs) that connect neighborhoods *adjacent* to Pantops including: North Downtown Charlottesville, the Rivanna River Corridor, and the Woolen Mills neighborhood. In addition, this Plan envisions a complete pedestrian network *within* the Pantops Development Area, with greater connectivity between residential neighborhoods and commercial businesses, especially around Martha Jefferson Hospital and South Pantops Drive.

Stakeholders identified two key pedestrian infrastructure projects that are essential in supporting a more connected community throughout Pantops. The first project, identifying a location for, designing, and constructing an additional pedestrian crossing along the Rivanna River Corridor, would facilitate commuter and recreational access to the City of Charlottesville. The second project would address the northern/southern division created by Route 250, by constructing an above-grade pedestrian crossing of Route 250. This crossing could potentially be located either near the Pantops Shopping Center or near the Rivanna Ridge Shopping Center, both designated by this Plan as Urban Centers. The crossing should be designed in compliance with the American Disabilities Act (ADA) to ensure safe, convenient, and accessible travel for all users, regardless of age or physical ability.

Future Bike Lanes

This Plan envisions bicycling as a safe and convenient transportation option for all Pantops residents, regardless of race, income, or geography. High quality and connected bike facilities have several benefits, including reduced traffic congestion, improved health outcomes for commuters, and increased viability and sales for commercial businesses.

Currently, the only bicycle lanes in Pantops are located on Rolkin Road. The Connectivity Map proposes bike lanes from Stony Point Road (Route 20) to South Pantops Drive and Peter Jefferson Parkway. It also calls for bike lanes throughout the interior street network in the southern half of Pantops. This proposed network aims to create an alternate commuter path for cyclists, which is safely removed from high traffic roadways (such as Route 250). An equally important benefit is providing connections between neighborhoods and businesses in Pantops and the City of Charlottesville.

The exact locations of bike lanes may differ depending on future development patterns. Final locations will be partially determined by the form and character of redevelopment and new development proposals. The recommended bike lane design standards are shown in the street typologies section and should be built in compliance with VDOT and County regulations.

Future Street Network

Improving Connectivity & Network Performance



Map Legend

- Arterial
- Boulevard
- Avenue
- Local Street
- Rural Transition
- Future Street Alignment
- Signalized Intersection
- Roundabout Intersection
- Urban Center Core Area

Future Street Network

Streetscapes should reflect a unified, complete design that balances a wide variety of functions including: stormwater management, safe pedestrian, bicycle and vehicular travel, use as public space, parking and loading requirements, ease of maintenance, and emergency access.

The Future Street Network and supporting recommendations in this chapter envision a well-connected street network that can better enable movement within and between Pantops neighborhoods and the proposed Centers and Districts. Proposed streets should be Complete Streets, designed for all users – motorists, pedestrians, bicyclists, and transit riders.

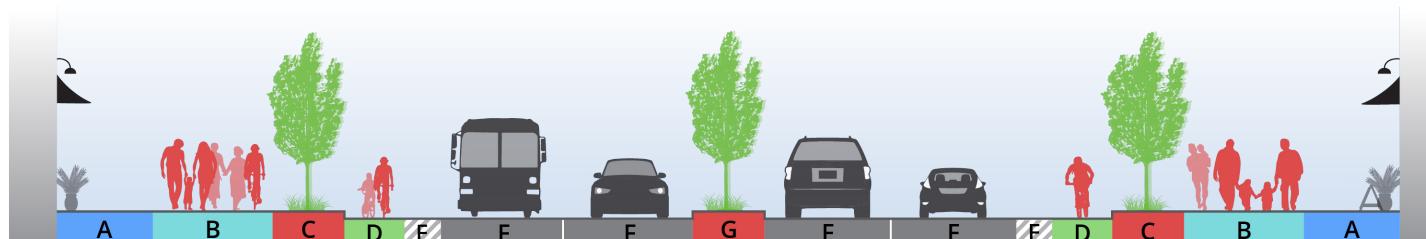
The Future Street Network proposes a hierarchy of streets based on capacity (how many people, cars, bikes, and buses it can accommodate) and function. The scale and design of streets should be both a reflection of a street's capacity and its role in the overall network. Additionally, a street that can be designed to hold a high amount of traffic may change its capacity and serve different functions along its length.

As shown on the Future Street Network, proposed streets fit within categories of principal arterial (Route 250), Boulevards, Avenues, local roads, and rural transition streets. The Network also shows key intersection improvements. The Future Street Network shows a conceptual plan that achieves the community's vision for connectivity. Dotted lines convey the approximate locations of new streets. Exact locations will be determined as redevelopment occurs.

The proposed Urban Center Core Areas are intended to have the highest development intensity. Streets in the Centers should have wider pedestrian sections and bike lanes in order to accommodate heavier flows of pedestrian and bike traffic.

Street Typologies

Boulevards



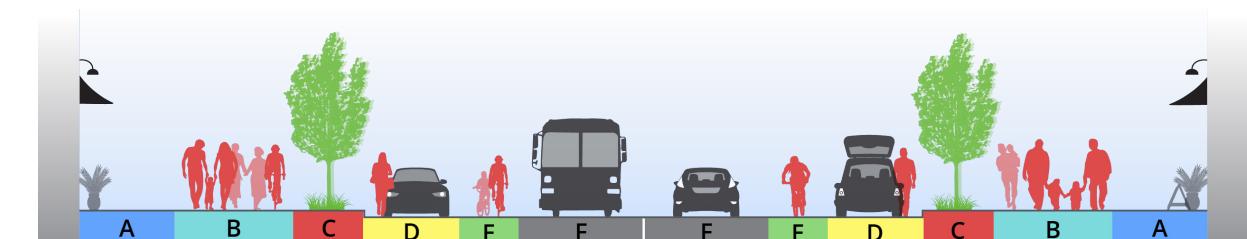
		Dimensions
A	Frontage Zone	5'-8'
B	Pedestrian Zone	8-10'
C	Separation Zone	6'
D	Bike Lane	5'
E	Buffer Zone	2-3'
F	Lane Width	10.5'
G	Median	6-10'

The Boulevard is the second highest capacity street that facilitates movement away from the principal arterials (Route 250) to other areas in Pantops. Boulevards typically have a center median as a function of the high capacity and provision of safety of bicyclists and pedestrians, with roundabouts and/or signalized intersections. When designed appropriately, the Boulevard can maintain its high capacity through the Urban Center Core Areas without altering the character of the surrounding centers, neighborhoods, and employment districts. The street design and function can also impact what uses are appropriate along a street.

*Median trees and landscaping should be consistent with viewshed protection guidelines.

*Bus shelters, street furniture, utility poles and other bicycle & pedestrian-oriented amenities should be located in the 6' separation zone.

Avenues



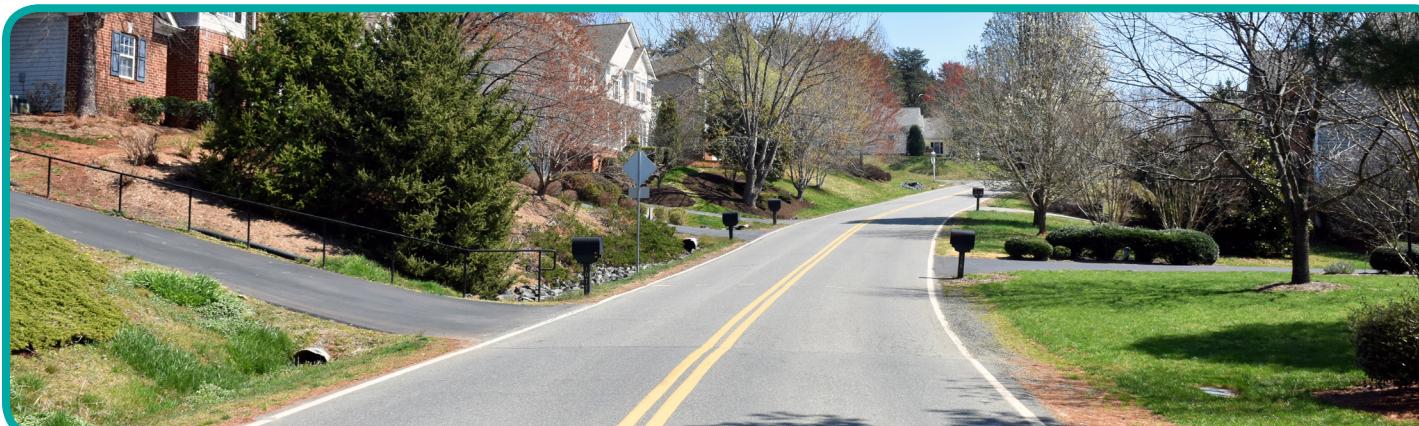
Avenues (2 lanes across) are intermediate-sized and medium capacity streets with low to moderate speeds. Examples of Avenues in Pantops are South Pantops Drive, Rolkin Road, and Olympia Drive. Avenues only have two travel lanes, but are designed to carry a significant volume of both automobile and bicycle/pedestrian traffic.

The Future Street Network proposes Avenue road connections between Olympia Drive and Stony Point Road (Route 20), Olympia Drive and Route 250, and Route 250, Rolkin Road, and Pantops Shopping Center. These proposed Avenues seek to connect existing commercial businesses to one another and provide alternate travel routes for local commuters.

		Dimensions
A	Frontage Zone	5'-8'
B	Pedestrian Zone	8-10'
C	Separation Zone	6'
D	Parking Zone	8'
E	Bike Lane	5'
F	Lane Width	10.5'

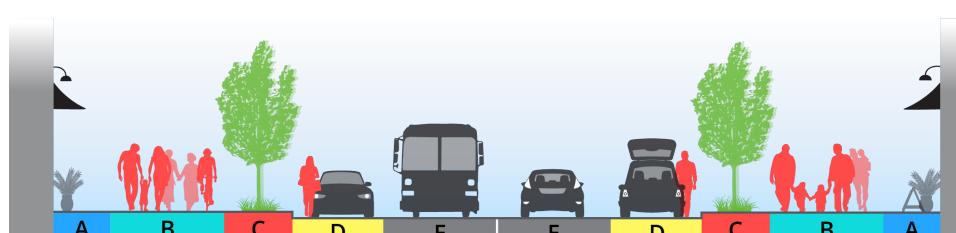
Street Typologies

Local Streets



		Dimensions
A	Frontage Zone	5'-15' (up to 20')
B	Pedestrian Zone	Variable
C	Separation Zone	Variable
D	Parking Zone	8'
E	Lane Width	9-10'

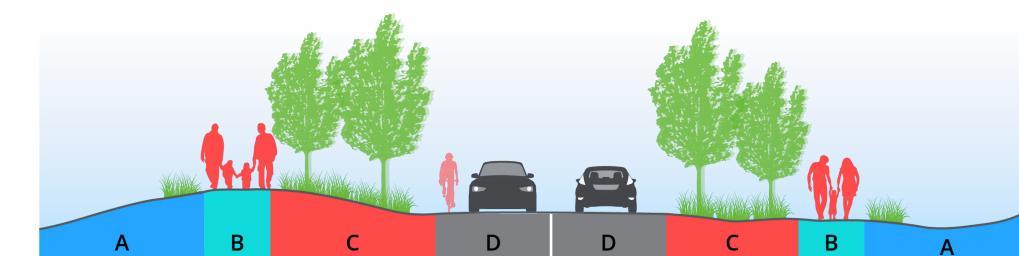
*Existing Local Streets are not expected to meet all standards shown in the section (at right), however, infill of missing pedestrian and bicycle links should be prioritized.



Local Streets are low-capacity, low-speed streets that form the majority of Pantops' northern residential street network. Several proposed future local street locations are identified on the Future Street Network, which build greater connectivity between residential neighborhoods and commercial areas.

Local street locations on the Future Street Network are conceptual and final locations will be determined by future development and redevelopment.

Rural Transition Streets



Rural Transition Streets are medium-to-high capacity roads with moderate speeds that reflect edge conditions of the Development Area. These streets are designed with respect for the rural character of the area, but still contribute to bicycle and pedestrian connectivity in Pantops.

This street typology is only called for on one segment of Stony Point Road (Route 20) north of Elk Drive, and portions of Hansen Mountain Road and the Ashcroft Subdivision. The cross-section features drive lanes, as well as a buffer/separation zone in alignment with Route 20's Scenic Byway designation and pedestrian connectivity for new development.

Route 20 was designated a National Scenic Byway in 2009, as part of the "Journey Through Hallowed Ground". The Living Legacy Tree Project: Master Plan Report designates this portion of Route 20 as Rural Residential (Area E), calling for trees to be placed 20-40 feet apart with a variety of species. In viewshed areas, trees should be placed 100-300 feet apart to preserve views and openness of the landscape (where appropriate).

		Dimensions
A	Frontage Zone	5'-15' (up to 20')
B	Pedestrian Zone	Variable
C	Separation Zone	Variable
D	Lane Width	10.5'

*Variable separation zone with vegetated buffer.

*These streets are not intended to have curb/gutter.

*May have sidewalk or shared-use path on one or both sides of road, but should provide transition from rural byway character to urban street standards.

Connectivity Recommendations

The following recommendations work to address the key priorities outlined by the community during this planning process, including alleviating traffic congestion and expanding transportation choice.

Policy and coordination projects that address these recommendations are indicated with ○, while capital projects are indicated with ●. Implementation of these recommendations is not limited to the specific projects referenced in the Implementation Chapter.

1. Establish a connected network of complete streets that provide safe, convenient, and viable transportation choices for all users.

1 C D E H K L N O P Q R

2. Design and construct new pedestrian and cyclist crossings along the Rivanna River Corridor and across Route 250 to facilitate better access to the City of Charlottesville and connectivity within the Pantops Development Area.

1 2 A B I

3. Establish sidewalks, shared use paths, bicycle lanes and trails, where needed, to support a comprehensive and complete active transportation network.

3 G J M

4. Provide physically separated or buffered bicycle facilities on streets with steep grades or high traffic volumes to accommodate cyclists of all skill levels.

G

5. Collaborate with regional planning efforts, such as the Rivanna River Corridor Study and the Jefferson Area Bicycle and Pedestrian Plan to plan, design, and construct a network of bicycle and pedestrian infrastructure that is well aligned with the communities and infrastructure adjacent to Pantops.

2 A

6. Improve transit service and infrastructure quality at bus stops in Pantops with the goal of reducing single-occupancy vehicle trips, promoting transit choice, and increasing mobility and multi-modal transit across the Development Area.

F

KEY OUTCOMES

How We Will Measure Progress

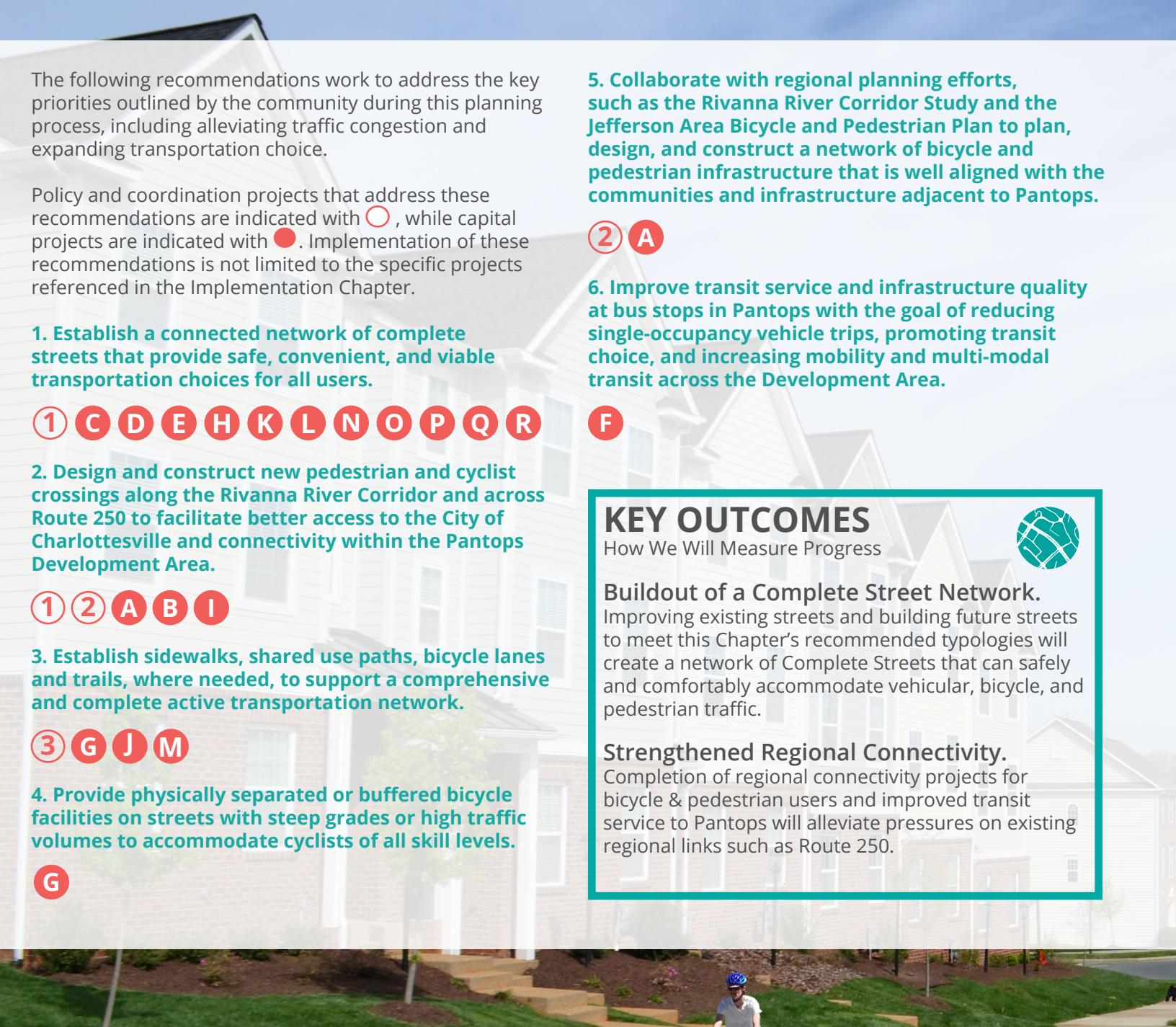


Buildout of a Complete Street Network.

Improving existing streets and building future streets to meet this Chapter's recommended typologies will create a network of Complete Streets that can safely and comfortably accommodate vehicular, bicycle, and pedestrian traffic.

Strengthened Regional Connectivity.

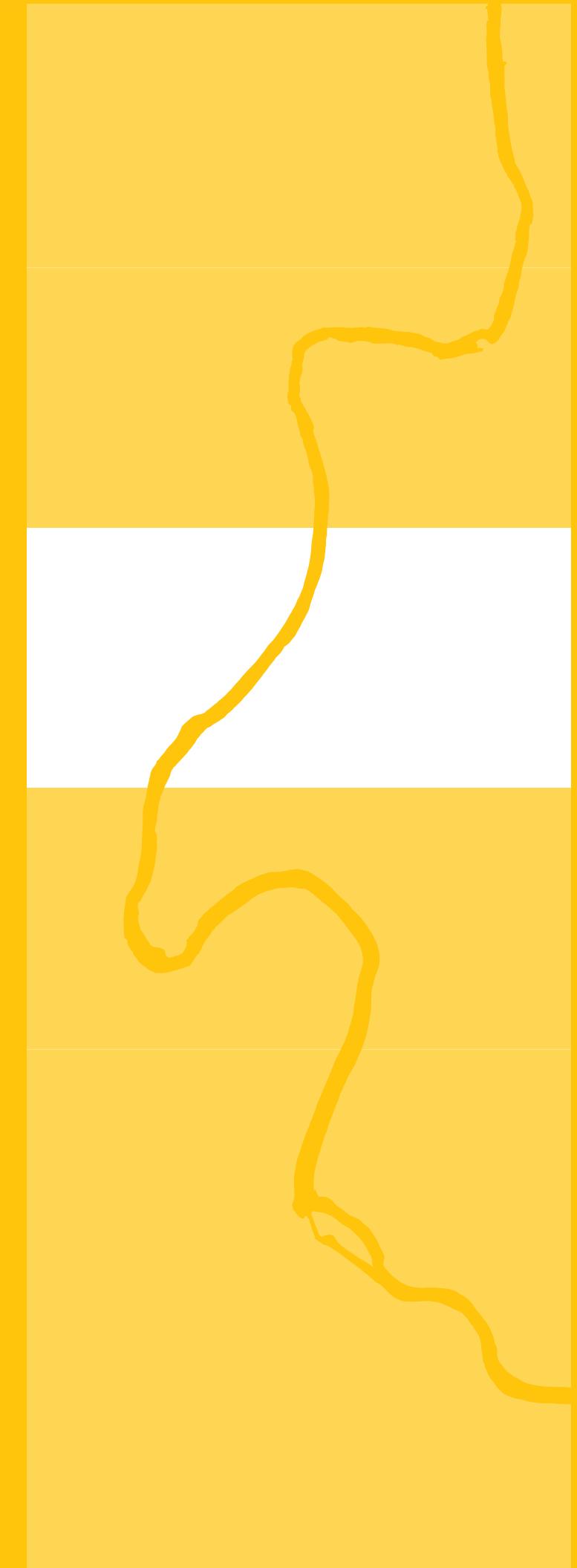
Completion of regional connectivity projects for bicycle & pedestrian users and improved transit service to Pantops will alleviate pressures on existing regional links such as Route 250.



CHARACTER & LAND USE

Encourage **high quality, walkable urban places** and support development that protects viewsheds and existing neighborhoods.

CHAPTER THREE



Character & Land Use Overview

The Pantops community values its neighborhoods and surrounding rural areas. The thoughtful redevelopment and infill of its suburban spaces can contribute to the preservation of valued places.

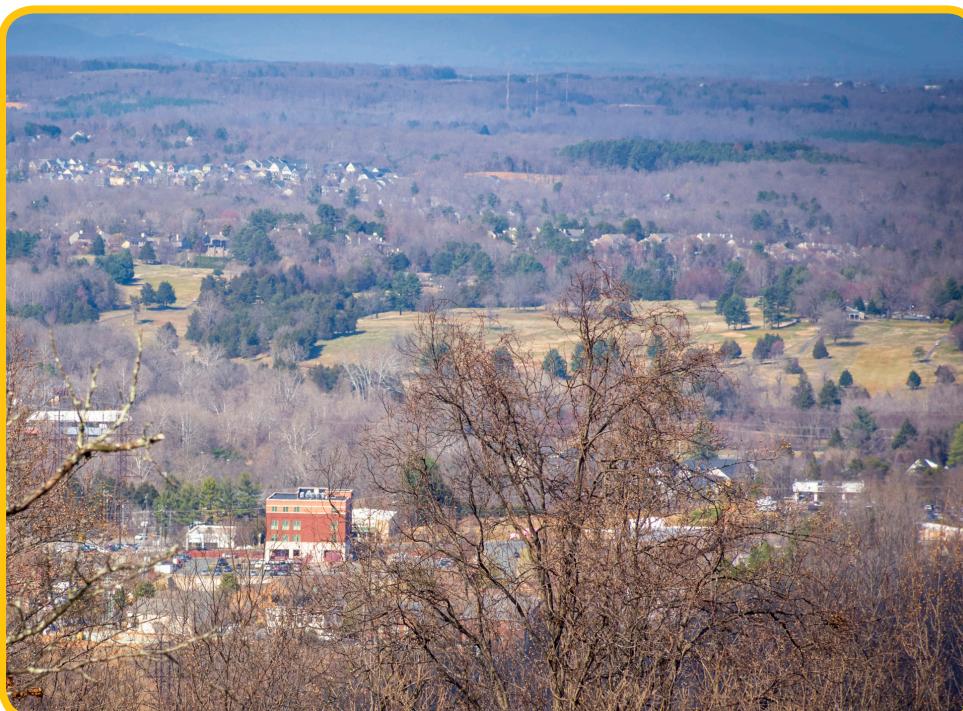
Vision

The Character and Land Use chapter establishes the future vision for development patterns and activities across all properties within Pantops. Through the master planning process, Pantops residents, business owners, and other stakeholders have shared their vision for the future of the community to support this updated document.

The Master Plan envisions the development of high quality urban places within Pantops and encourages development that protects viewsheds and existing neighborhoods. Supporting recommendations call for mixed use development, public places, and affordable housing.

Protecting existing residential neighborhoods is a key component of the Plan's vision, as recommended by citizens and stakeholders. This can be accomplished by balancing the size, scale and location of new developments with the character of surrounding neighborhoods. The land use designations throughout Pantops have been refined to strategically preserve open space, natural areas, and recreational amenities.

The Plan also encourages infill of commercialized suburban land use patterns that currently exist along the major transportation corridors. In order to accomplish the Plan's vision, planning and design of redevelopment projects should be consistent with the use, form, and building recommendations called for in this chapter. This is especially important for properties located within the centers identified on the Future Land Use Plan. Centers are intended to become dense, walkable nodes of activity which feature a mixture of residential and non-residential land uses. Centers will become focal points for the community that can be accessed through enhanced pedestrian, bicycle, and transit opportunities.



Pantops and Darden Towe Park as viewed from Monticello's North Terrace.

Existing Conditions

As mentioned in previous chapters, much of the residential development within Pantops is north of Route 250 and commercial and office uses are concentrated along and south of Route 250. This pattern is not expected to change significantly in the next 20 years, however, opportunities for infill and redevelopment are identified in this chapter.

Since redevelopment of existing residential neighborhoods is not expected, changes to future land use designations are not proposed in these areas. Future land use designations are based on the current residential density in existing neighborhoods. Open space parcels and other areas under common ownership by homeowners associations (HOAs) or other unit owners associations in each neighborhood have been classified as Parks & Green Systems.

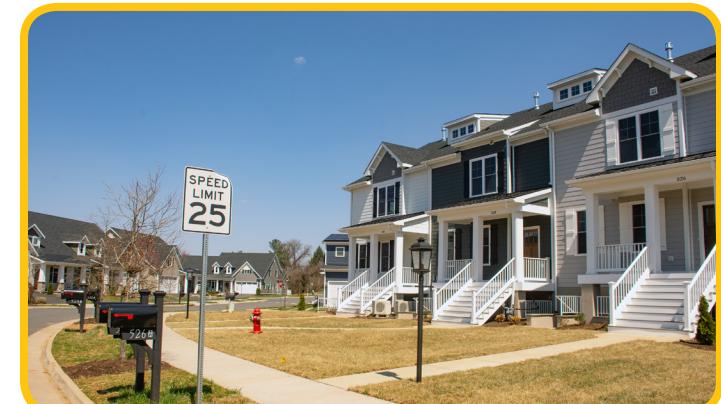
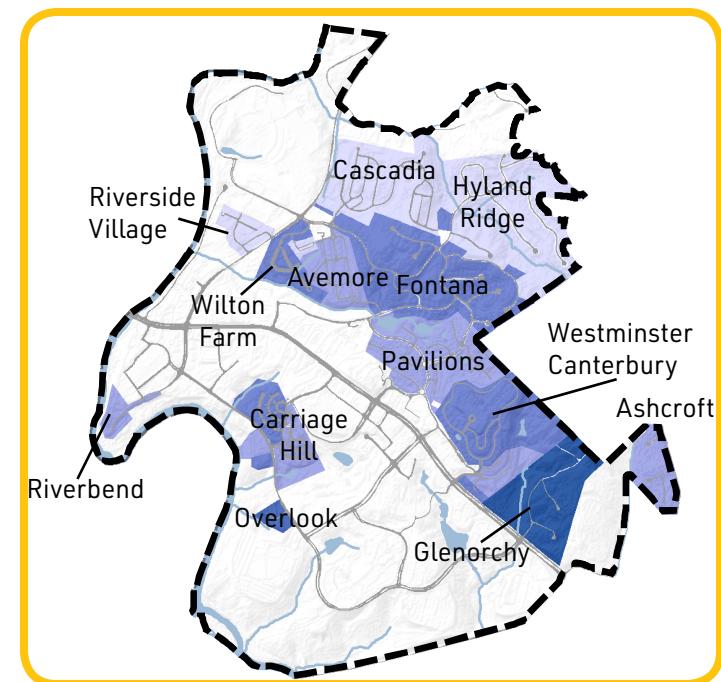
Rural Character

Pantops makes up the eastern edge of Albemarle's "urban ring" surrounding the City of Charlottesville and is surrounded by historic landscapes in the Southwest Mountains and Southern Albemarle Rural Historic Districts.

Maintaining the rural character of properties located outside of Pantops was identified as a priority during the planning process. Therefore, the Pantops Development Area boundary is not altered or expanded in this updated Master Plan. The Development Area boundary will be reevaluated during the next update process, with particular attention to properties within the Shadwell Interchange area south of I-64.

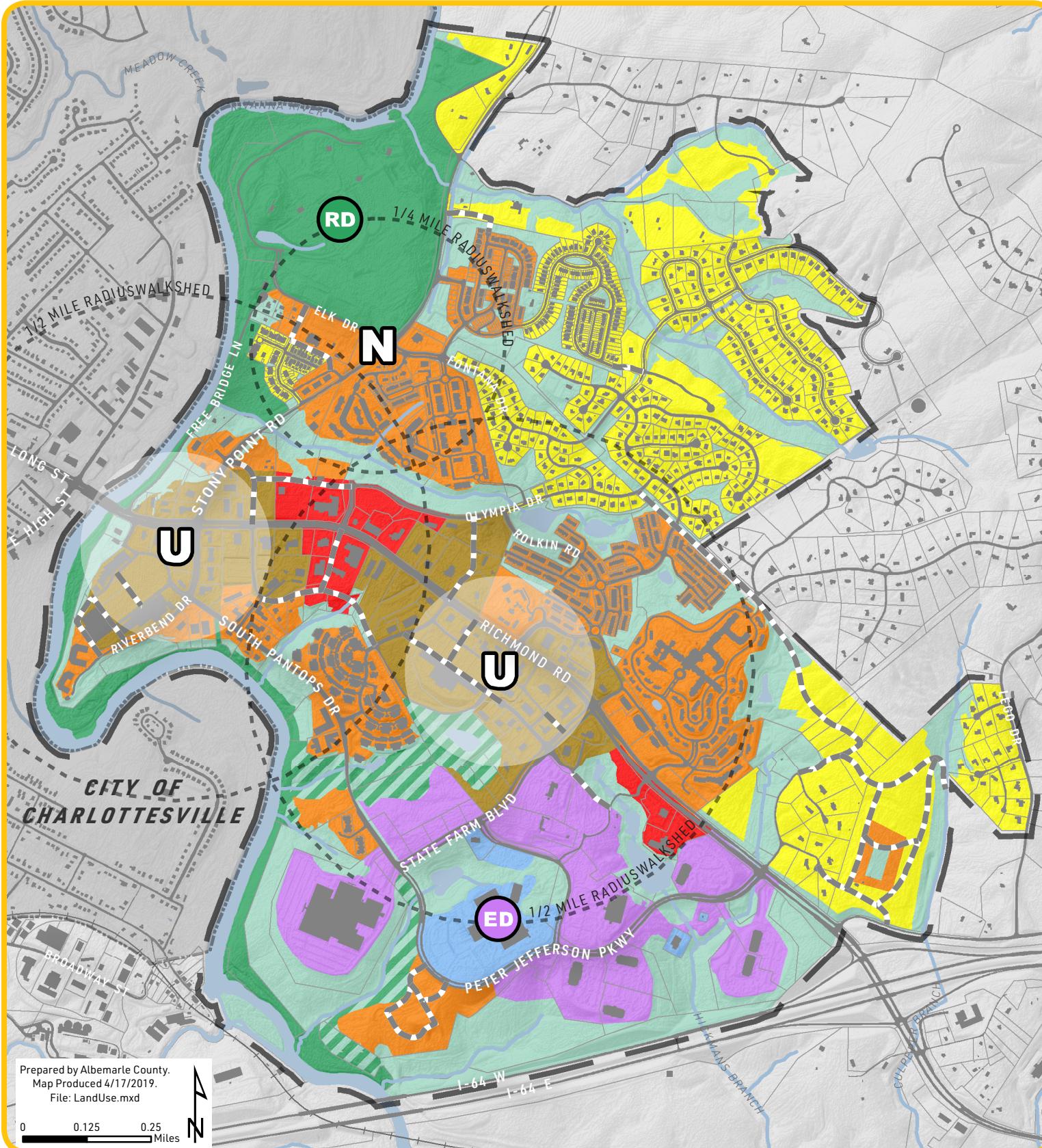
Land Use & Existing Zoning

The need to bring consistency between the Future Land Use Plan recommendations and existing zoning districts was identified early in the planning process. The Future Land Use Plan has been updated to minimize inconsistencies between the long-range vision and by-right development scenarios that are not subject to review by the Planning Commission and Board of Supervisors. This works to build trust with the community and maintain expectations about future development.



Future Land Use Plan

Guiding Pantops' Future Form & Feel



Map Legend

- Neighborhood Density Residential
- Urban Density Residential
- Community Mixed Use
- Commercial Mixed Use
- Office / R&D / Flex / Light Industrial
- Parks & Green Systems
- Potential Public Park
- Public Parks
- Institutional
- Urban Center
- Neighborhood Service Center
- Employment District
- Recreational District
- Urban Center Core Area
- Walkshed
- Future Street Network

Future Land Use Typologies

Future land use typologies are identified by the different colors on the Future Land Use Plan, at left. A table on the next page describes the intent of each land use typology, guidance for use, building types, and form recommendations. The use recommendations are meant to provide guidance on appropriate uses, though future uses not listed could be considered if consistent with the intent of the district and form guidance.

Urban Design Guidance

Each future land use typology includes suggested guidelines for building types, urban design and form (e.g. block sizes and scale) and prioritized design principles. All future developments are expected to comply with the Neighborhood Model principles identified in the County's Comprehensive Plan (A.8.3 Neighborhood Model Design Guidance). Additionally, certain areas and viewsheds have been identified for future study and consideration for site-specific design principles.

Centers & Districts

The Future Land Use Plan identifies two center types within Pantops: Urban Centers and Neighborhood Service Centers. Centers are intended to be nodes of activity that feature a dense mixture of uses that foster a sense of community for residents, employees, and visitors of Pantops. Each center is located along a major transportation corridor and land uses have been coordinated to support improved transit options with a walkshed scaled to the intensity of the Center.

Two districts are identified: 1) an Employment District centered around major employers at Martha Jefferson Hospital and Peter Jefferson Place, and 2) a Recreational District at Darden Towe Park. Districts lack a core area and the urban form of a Center but their regional importance indicates that they should have multimodal connectivity to other Centers and amenities.

Infill & Redevelopment

Redevelopment proposals should proactively set aside the physical space needed to complete the capital projects called for in the Implementation Chapter of the Master Plan. Where necessary, utility infrastructure and other hardscape improvements that will enable completion of the projects should also be installed by private developers carrying out projects.

Infill development within Centers is strongly encouraged as greenfield sites become less available within Pantops. Redevelopment is expected to conform to the guidance described on the following pages and should also be respectful of the character of adjoining properties, especially existing residential neighborhoods. Areas outside of Centers where redevelopment and development is expected to occur in the near term are described in more detail in "Other Areas."

Future Land Use Typologies

The Land Use Table below and Urban Design Guidance on the following page illustrate the expectations for development in Pantops. The Future Land Use Typologies Table describes the intent for each land use as well as recommendations for primary and secondary uses. The use recommendations are meant to provide guidance on appropriate uses, though future uses not listed could be considered, if consistent with the intent of the district and form guidance. Recommendations for building type, form, height, and massing are also provided in the table.

	Neighborhood Density Residential	Urban Density Residential*	Community Mixed Use*	Commercial Mixed Use
Intent	Low-density residential development supported by small-scale neighborhood serving commercial, retail, and institutional uses.	Medium to high-density residential development supported by small to medium scale commercial, retail, and institutional uses.	Mixed use development with a mix of medium to high-density residential, commercial, retail, office, and other uses that serve the community, with a high intensity of uses expected in a walkable development pattern.	Commercial retail, service, and automobile-oriented uses, with infill residential or employment-generating uses encouraged.
Primary Use	<ul style="list-style-type: none"> Residential at a density of 3-6 units/acre 	<ul style="list-style-type: none"> Residential at a density of 6-34 units/acre Offices Religious assembly uses Schools and child care Institutional 	<ul style="list-style-type: none"> Commercial/retail Residential at a density of 6-34 units/acre Religious assembly uses Schools and child care Institutional Hotels/conference facilities 	<ul style="list-style-type: none"> Commercial/retail Wholesale businesses Hotels/conference facilities Auto-commercial sales & services Religious assembly uses Schools and child care
Secondary Use	<ul style="list-style-type: none"> Religious assembly uses Schools and child care Institutional Commercial/retail 	<ul style="list-style-type: none"> Commercial/retail 	<ul style="list-style-type: none"> Office/R&D/Flex/Light Industrial Existing auto-commercial sales & services 	<ul style="list-style-type: none"> Office/R&D/Flex/ Light Industrial Residential at a density of 6-34 units/acre Institutional
Building Type & Form Guidance	Residential: Single-family detached, single-family attached, townhomes. Commercial/Retail/Office/Institutional: uses should be located in small buildings or as part of mixed-use buildings with small shop-fronts along streets.	Residential: Single-family detached, single-family attached, townhomes, multifamily. Commercial/retail: uses should be located in small buildings or as part of mixed-use buildings, with small shop fronts along streets.	Mixed use buildings with active ground-story uses along street fronts encouraged. Commercial/retail: large scale uses should locate in multi-story buildings with small shop-fronts along streets. Single use buildings should be constructed to allow future conversion to active ground-story uses along main streets. Residential: multi-family encouraged; townhouses and single-family attached should be secondary. Light Industrial: activities and uses should be located inside of buildings.	Mixed-use buildings and developments encouraged. Single-use commercial buildings acceptable, with future conversion to ground story active uses along main streets. Light Industrial: activities and uses should be located inside of buildings.
Height & Massing	<ul style="list-style-type: none"> Up to 3 stories Suggested maximum building footprints: Commercial/retail: 5,000 sq. ft Office/Institutional: 20,000 sq. ft. 	<ul style="list-style-type: none"> Up to 4 stories Suggested maximum building footprints: Commercial/retail: 8,000 sq. ft Office/Institutional: 25,000 sq. ft. 	<ul style="list-style-type: none"> 2-4 stories (up to 5 by exception). Blocks should be 300-400 feet in length. Stepback/facade breaks should be incorporated to protect areas identified for viewshed protection. 	<ul style="list-style-type: none"> Up to 4 stories (5 by exception). Blocks should be 300-400 feet in length. Stepback/facade breaks should be incorporated to protect areas identified for viewshed protection.

*See Centers table for additional guidance.

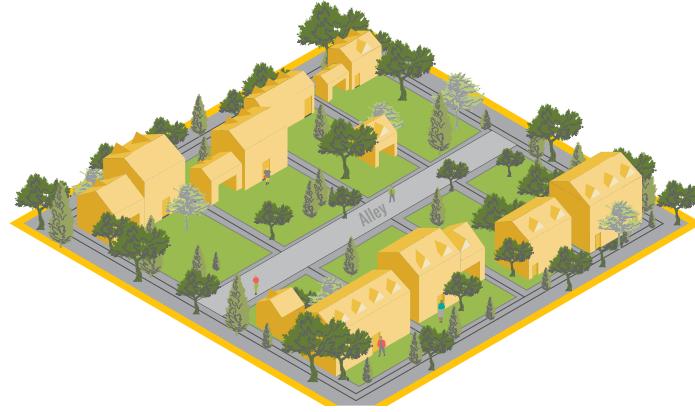
Intent, Use, & Building Type

Additional urban design guidance and example development patterns are provided on pages 33-34. For those areas within centers and the Employment District, additional intensity of development is encouraged, with the appropriate form and scale. Guidance for these areas can be found on pages 35-38.

Office/R&D/Flex/ Light Industrial*	Parks & Green Systems	Public Parks	Institutional*
Employment-generating uses and basic industries meant to bolster economic development goals, supported by secondary commercial/retail, and residential uses to serve employees.	Areas providing ecosystem and cultural services (including recreation), critical environmental resources, and areas held in common ownership in existing developments.	Existing and proposed publicly owned parks and greenway systems for active, passive, or social recreational use.	Government buildings, schools, public safety facilities, public utilities, and major health care facilities; unprogrammed government property.
<ul style="list-style-type: none"> Offices, research and development, flex spaces, light industrial. 	<ul style="list-style-type: none"> Sensitive environmental features including stream buffers, flood plain, and steep slopes. Privately owned open space with passive and/or active recreation amenities, parks, playgrounds, outdoor sitting areas, plazas, etc. Natural areas. 	<ul style="list-style-type: none"> Existing publicly owned parks and greenway systems. 	<ul style="list-style-type: none"> Schools, colleges, universities, and ancillary facilities Fire stations, hospitals, libraries Public facilities and major utilities
<ul style="list-style-type: none"> Commercial/retail Residential at a density of 6-34 units/acre Institutional 			<ul style="list-style-type: none"> Offices supporting primary uses Nursing homes, assisted living facilities, convalescent homes
Mixed-use buildings and developments encouraged with active ground-story uses along main streets. Single-use office/R&D/Flex buildings acceptable. Light Industrial: uses and activities should be located inside of buildings.	Few buildings expected, although exceptions can be made for community-serving uses such as neighborhood recreational amenities.	Few buildings expected, although exceptions can be made for community-serving uses such as public recreational amenities.	Building types dependent on use, mixed use encouraged in public facilities where appropriate.
<ul style="list-style-type: none"> Up to 4 stories (5 by exception). Blocks should be 300-400 feet in length. Stepback/facade breaks should be incorporated to protect areas identified for viewshed protection. 	<ul style="list-style-type: none"> 1-2 stories Buildings and amenity areas should avoid critical environmental resources. 	<ul style="list-style-type: none"> Building design guidance should be vetted through a park master planning process. Buildings and amenity areas should avoid critical environmental resources. 	<ul style="list-style-type: none"> Up to 4 stories (5 by exception). Building height and massing should be respectful of adjacent neighborhoods and areas identified for viewshed protection.

Urban Design Guidance

This guidance illustrates the appropriate form and scale of development within each category and highlights prioritized design principles that will be necessary for achieving the desired form. All future developments are also expected to comply with the applicable Neighborhood Model principles identified in the Comprehensive Plan.



Neighborhood Density Residential

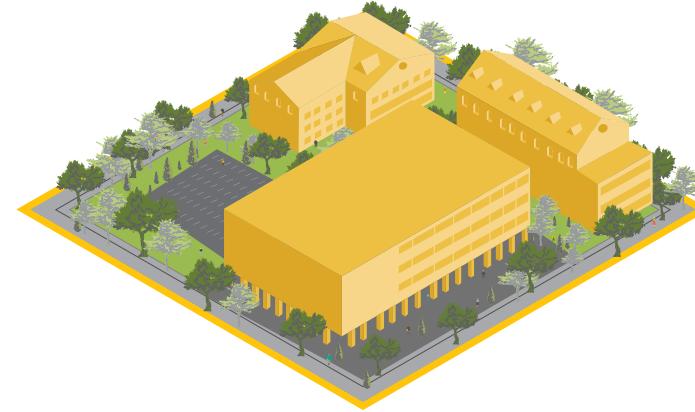
- Pedestrian & bicycle connectivity.
- Access to parks, amenities, and green systems.
- Maintain clear boundaries with the Rural Areas.



Urban Density Residential

- Provide a mixture of housing types and affordability.
- Promote density of uses and compact development, including infill and redevelopment.
- Access to parks, amenities, and green systems.

Form & Prioritized Design Principles



Office/R&D/Flex/Light Industrial

- Promote density of uses and compact development, including infill and redevelopment.
- Access to parks, amenities, and green systems.
- Site design accommodates multi-modal transportation infrastructure.



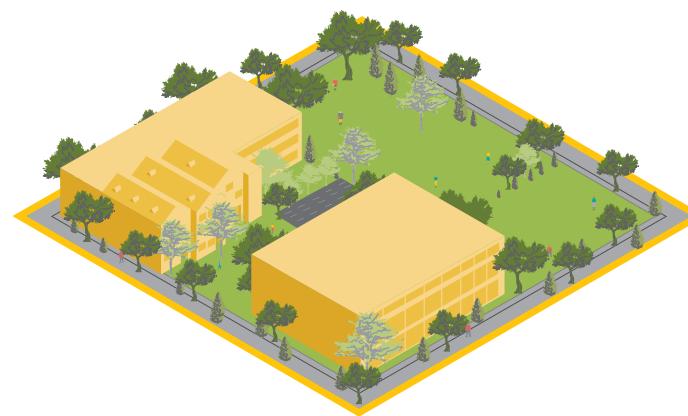
Institutional

- Connections to open space, parks, greenways, and recreational amenities
- Site design accommodates multi-modal transportation infrastructure
- Promote density of uses and infill redevelopment



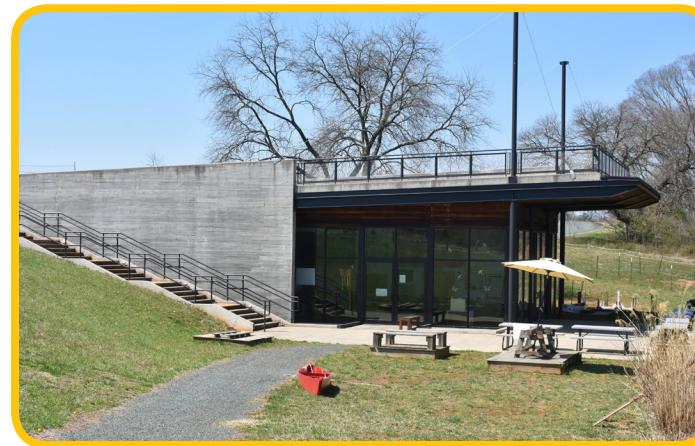
Community Mixed Use

- Block-scale development within centers and interconnected streets.
- Promote density of uses and compact development, including infill and redevelopment.
- Human-scaled development.



Commercial Mixed Use

- Relegate parking to the side and rear of buildings.
- Promote appropriate scale, massing and enclosure.
- Block-scale development and interconnected streets.



Public Parks

- Interconnectivity to other areas of open space, parks, greenways, and recreational amenities.
- Respecting existing terrain and careful grading/re-grading of terrain.
- Preserve natural systems where shown in the Master Plan.



Parks & Green Systems

- Interconnectivity to other areas of open space, parks, greenways, and recreational amenities
- Respecting existing terrain and careful grading/re-grading of terrain.
- Preserve natural systems where shown in the Master Plan.

Centers

Centers & Districts should be Pantops' most active places, with community amenities and multimodal access.

Urban Centers

Urban Centers are intended to create community focal points, or nodes, that feature high-density, compact, mixed-use development patterns. Urban Centers create connectivity between regional transit networks and are intended to be walkable, bikeable places that offer a mix of people's daily needs, such as places to work, live, and shop, within a walkable area.

The most intense activities are concentrated in the Core of the Urban Centers, which is generally defined as land within a quarter-mile radius of a central feature such as a prominent intersection or regional amenity. Supporting amenities and development patterns may extend up to a half-mile within an Urban Center, though the intensity of development is expected to decrease around the edges of the Center, especially in areas adjacent to existing residential neighborhoods.

Two Urban Centers are identified in Pantops: Riverbend (currently the area of Pantops Shopping Center), and Rivanna Ridge (currently the area of the Rivanna Ridge Shopping Center).

Riverbend Urban Center

Development within the Riverbend Urban Center should focus on re-orienting the built environment toward the Rivanna River. Infill development and intensification of uses is expected in this Center, especially within the current Pantops Shopping Center, where much of the land is dedicated to surface parking and single story strip commercial development.

Development projects in this Center should establish a more diverse mix of uses, an interconnected street network, and human-scaled, walkable development patterns. Care should also be taken to preserve natural systems adjacent to the River, such as 100-year floodplains and land within Water Protection Ordinance stream buffers. Future study is needed to determine if a street or bicycle and pedestrian connection from this Center to the City of Charlottesville is feasible. This should be evaluated during the Rivanna River Corridor Planning Process in collaboration with stakeholders from the City.



Riverbend Urban Center



Rivanna Ridge Urban Center

Rivanna Ridge Urban Center

Development within the Rivanna Ridge Urban Center should focus on reestablishing development patterns that promote walkability and transform the existing auto-oriented development patterns into buildings and spaces of human scale. The existing retail strip development pattern makes it difficult to navigate the area on foot or by bicycle, with large stretches of surface parking separating stores. Establishing an internal street network of complete streets will help transform this Center into a walkable node, with Rolkin Road and Abbey Road serving as Center's main streets.

The Rivanna Ridge Urban Center should provide connectivity to the future Rivanna Ridge Park, which will provide a green space adjacent to the Center with connections to the Rivanna River Greenway. New development is highly encouraged to be oriented to this public outdoor amenity space.

Neighborhood Service Center

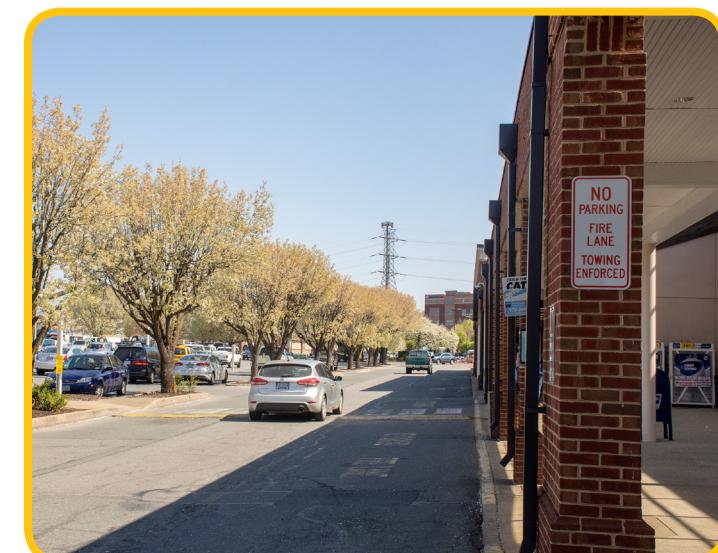
Neighborhood Service Centers are intended to provide areas of activity that support surrounding residential neighborhoods. Neighborhood Service Centers should be served by transit, and contain small-scale, mixed-use development patterns that are compatible with surrounding uses. Development is expected to be concentrated around and oriented toward a community focal point, such as a public amenity space, park, or plaza.

Neighborhood Service Centers are smaller in size and intensity than Urban Centers, and can be concentrated in an area of one-eighth to one-quarter of a mile radius from a central feature. Development should be pedestrian-scale and walkable from adjacent neighborhoods.

There is one Neighborhood Service Center identified in Pantops, located at the intersection of Elk Drive and Stony Point Road (Route 20), directly south of Darden Towe Park. Development in this Center directly adjacent to Darden Towe should be oriented toward the Park and additional connections between the Park, Center, and adjacent neighborhoods should be incorporated into the design of this Center.



Neighborhood Service Center and the intersection of Elk Drive and Stony Point Road, facing southwest. Darden Towe Park can be seen in the upper right corner.



The Pantops Shopping Center comprises a significant portion of the land area within the Riverbend Urban Center. While home to a variety of local commercial services and CAT transit stops, the strip design of the center underutilizes this land with excess parking and single-story development.



The Rivanna Ridge Shopping Center and surrounding commercial uses near Hansen Road and Abbey Road are part of a large planned commercial development within the Rivanna Ridge Urban Center. Although vehicle travelways and circulation form a rough street grid, there is a lack of human scale and pedestrian infrastructure.

Districts

Employment District

Employment Districts are intended to support the County's economic development initiatives and create investment opportunities in the Development Areas. A central goal of the Employment District is to expand employment opportunities for area residents in high-paying "good jobs." Specific primary sector industries should be targeted for locating their facilities within the Employment District. Optimal target industries include: biosciences, medical device technology and research, information technology, business and financial services, communications, defense and security, multi-media, engineering, and light manufacturing in the agribusiness and food processing sectors. However, this list should not be interpreted to exclude related sectors that support the cultivation and nurture growth of existing businesses.

The Employment District encompasses properties located south of Route 250 and adjacent to Peter Jefferson Parkway and State Farm Boulevard. While the District is not intended to have a hard boundary, it is meant to include those properties shown for Office/R&D/Flex/LI.¹

The two primary employment anchors in the Employment District are Sentara Martha Jefferson Hospital and the State Farm Insurance Operations Center. There are also extensive professional and medical office spaces located along Peter Jefferson Parkway and Martha Jefferson Drive.

While the Employment District is suburban in character and existing buildings are unlikely to be demolished during this Master Plan life cycle, there are opportunities for infill development to occur throughout the District, particularly on properties near Worrell Drive. Multiple users may occupy individual buildings, but preference should be given to professional fields that complement and enable expansion of existing primary sector employers in the area. Building designs and form should comply with the recommendations specified in the Land Use and Center and District tables.

¹ It should be noted that heavy industrial and heavy manufacturing uses are not permitted under the Office/R&D/Flex/Light Industrial future land use classification. Light manufacturing, warehousing, and distribution activities are acceptable uses provided they are combined with office, research and development, or flex space. Light industrial uses must demonstrate that noise, light, and other impacts to surrounding properties will be minimized.

To enable walkability and reduce traffic congestion at peak travel hours on surrounding streets, secondary commercial service and retail uses should be incorporated into redevelopment proposals when possible. Vertical mixed-use buildings are preferred throughout the District, but are most appropriate on properties closest to the core of the Rivanna Ridge Urban Center. Ground floors may feature a mix of office/R&D/flex/light industrial and commercial space, with upper floors occupied by other uses consistent with the Office/R&D/Flex/Light Industrial land use classification.

Single-use buildings occupied by primary uses consistent with the Office/Flex/R&D/Light Industrial land use classification and horizontal mixed-use buildings may be permitted on properties close to the watershed boundary of the Rivanna Ridge Urban Center. However, any projects proposing single-use buildings should comply with the Neighborhood Model principles and form guidance recommendations specified in the Land Use and Center/District tables.

Residential uses could be allowable in the Employment District, especially as a way to provide live/work opportunities for workers employed by businesses in the District. However, residential uses should be clearly secondary to businesses that generate employment. Further, the presence of residential should not preclude future light industrial uses in the District.

Recreational District

The Recreational District is anchored by Darden Towe Park, which is jointly owned by Albemarle County and the City of Charlottesville. This Recreational District also includes adjacent areas designated as Public Parks. Darden Towe Park is an amenity of regional importance and will soon undergo a master planning process to address visibility, access to the Park, and updates to Park facilities.

Projects supporting this expectation, including the Old Mills Trail, the Riverside Village Park, and the Free Bridge Lane green street are further detailed in the Conservation and Implementation chapters.

Portions of the Recreational District are within the watershed of the Neighborhood Service Center near Elk Drive and Stony Point Road (Route 20). Future development adjacent to Darden Towe Park should provide pedestrian connections to the Park.

	Urban Center	Neighborhood Service Center	Employment District
Intent	Development with urban character, a high level of activity density, and multimodal connectivity. Compact, walkable development patterns with a connected street network expected with access to improved transit located near the built Core.	A neighborhood-serving activity center oriented around an improved transit stop or a public amenity, with residential and small-scale commercial uses near the amenity.	An area with employment-generating uses supporting basic industries and economic development goals with secondary residential uses; commercial and retail uses that support employees and residents.
Walkshed / Multimodal Service Area	1/2 mile radius from center	1/4 mile radius from center	Martha Jefferson Hospital, areas with Office/R&D/Flex/Light Industrial land use designations and adjacent parcels.
Core Area	Generally 1/4 mile radius from Center and adjacent areas/parcels	None	None
Building Type	Vertical mixed-use should be predominant building type in the Core. Buildings should be constructed to allow ground-story commercial/retail along Boulevard street frontages, adjacent to transit, and public amenities.	Vertical mixed-use encouraged. Buildings should be constructed to allow ground-story commercial/retail along street frontages, adjacent to transit, and public amenities.	All light industrial activities should be located inside of buildings. Vertical mixed-use buildings encouraged for infill and redevelopment. Horizontal mixed-use buildings permitted if no residential units are proposed.
Use	<ul style="list-style-type: none"> Use should be consistent with underlying land use. Active ground-story uses strongly encouraged along streets and public spaces in the Core. Where active uses are not feasible (due to market conditions or other circumstances), other uses may be permitted if form allows for future conversion to ground-story active uses. 	<ul style="list-style-type: none"> Use should be consistent with underlying land use. Secondary uses such as retail, commercial service, office encouraged to locate in Center. Active ground-story uses strongly encouraged adjacent to transit and public amenities. 	<ul style="list-style-type: none"> Use should be consistent with underlying land use. Uses supportive of the County's Economic Development goals are strongly encouraged.
Form & Site Design Guidance	<ul style="list-style-type: none"> 2-5 stories within core areas (up to 6 by exception). Massing, height, and stepbacks should be consistent with any future viewshed studies/recommendations. Blocks in the Core should be 200-300 feet in length. All parking should be relegated; structured parking strongly encouraged in Core. 	<ul style="list-style-type: none"> 2-4 stories. Massing, height, and stepbacks should be consistent with any future viewshed studies/recommendations. Bike/ped connections between the Recreational District, existing neighborhoods, and proposed developments are required. Parking should be relegated to the side and rear of buildings 	<ul style="list-style-type: none"> 2-4 stories (up to 6 by exception). Massing, height, and building stepbacks should promote visibility of significant views and view corridors. Relegated and structured parking encouraged.

Larger blocks may be allowed by exception if internal circulation is designed to promote walkability, frequent façade breaks are incorporated to allow bicycle/pedestrian circulation throughout the site, and the minimum vehicular connectivity as shown in the Future Street Network is established.

Other Areas

State Farm Boulevard

Properties on the west side of State Farm Boulevard have the potential to redevelop with a diverse mix of employment-generating uses, commercial businesses, and secondary residential uses. The southern terminus of State Farm Boulevard, near the intersection of South Pantops Drive, offers some of the best views in Pantops. Care should be taken with future development along this stretch of roadway to preserve this viewshed.

Development on the west side of State Farm Boulevard should maintain clear views of the Blue Ridge Mountains to the west from a pedestrian standpoint along the street. Multi-story buildings are encouraged on these sites, but development should be designed in a way to preserve terminated vistas to the Blue Ridge Mountains to the west. Site design features such as pedestrian building and facade breaks, pedestrian plazas, or providing top story stepbacks along prominent view sight lines can help achieve this goal. Monolithic facades that entirely block these valued viewsheds are discouraged.

Additionally, the Future Land Use Plan and Future Parks & Green Systems Plan show a public park, identified as the Rivanna Ridge Park, to the west of this area. Public access from State Farm Boulevard to Park should be provided through development along State Farm Boulevard, via trails, pedestrian promenades, new streets, or sidewalks. More than one point of access should be provided to this future Park, and care should be taken to connect new pedestrian trails to areas of existing trails on the Martha Jefferson Hospital campus.

250 Corridor “Dealership Row”

The prevailing development pattern along Route 250 is auto-oriented retail and commercial service uses and retail development. Car dealerships are the predominant use in the stretch of Route 250 between Pantops Shopping Center and Rivanna Ridge Shopping Center, earning this area the nickname “Dealership Row”.

The Commercial Mixed Use land use encourages a mix of land uses. Redevelopment in this area should focus on how to use land more efficiently to create infill development opportunities on underutilized land. For instance, re-imagining the form of the traditional

highway oriented car dealership can allow for a more appropriate scale of development. Relegating parking and dedicating less land to display of inventory could help transform this stretch of the Route 250 Entrance Corridor into a community gateway, in an area that offers prominent views to the Blue Ridge Mountains and City of Charlottesville. As opportunities arise for redevelopment, the focus should be on a mixed-use form that emphasizes bringing buildings closer to the street, creating appropriate scale and enclosure, and relegated parking.

Olympia Drive

North of Dealership Row and behind the current Malloy Ford properties is an area of underdeveloped and undeveloped land that is a mix of parking and wooded managed and preserved slopes. The Future Road Network calls for the extension of Olympia Drive through this area to provide connectivity to Stony Point Road (Route 20). It is anticipated that the construction of this roadway may necessitate the disturbance of preserved slopes in areas designated on the Future Land Use Plan as Parks and Green Systems. Due to the anticipated disturbance from the construction of the street, it could be appropriate to allow development along the north side of the Olympia Drive extension in areas currently shown for Parks and Green Systems.

More analysis of the site and a final road design is needed to determine the appropriate level of development here. Development activity that is consistent with the adjacent Urban Density Residential land uses and the form and design principles discussed in this chapter could help create a sense of enclosure along the future Avenue street section. Any disturbance that is proposed in land dedicated to Parks and Green System should be further analyzed for impacts and appropriateness, and should identify mitigation measures to offset the disturbances to environmental features.

Martha Jefferson Hospital

Martha Jefferson Hospital's campus is currently governed by an application plan approved with a 2003 rezoning. The hospital has a separate master plan that anticipates additional future medical office buildings and structured parking decks. Future expansion and redevelopment should comply with the design principles articulated in this chapter.



State Farm Boulevard



“Dealership Row”



Olympia Drive



Martha Jefferson Hospital Complex

Recommendations

As one of the most central elements of this Master Plan, the Future Land Use Plan will be used to inform decisions regarding use and form throughout Pantops.

Policy and coordination projects that address these recommendations are indicated with ○, while capital projects are indicated with ●. Implementation of these recommendations is not limited to the specific projects referenced in the Implementation Chapter.

1. Encourage infill development that provides walkable, transit-oriented environments and respects natural systems.

2 3 5 7 A B F G

2. Develop incentives to attract mixed-use, infill development, especially in the Urban Centers (Riverbend Urban Center and Rivanna Ridge Urban Center).

2 3 5 A B F G M N GC RR

3. Encourage new development and redevelopment to contribute space to public parks and green systems in an effort to create an interconnected network of green and public amenity spaces in Pantops.

2 3 5 7 8 I J GC RR ET

• Utilize recommendations specified in the Character & Land Use and Conservation Chapters when evaluating private development proposals.

4. Reorient development to the Rivanna River in coordination with the future Rivanna River Corridor Plan, the Connectivity Chapter's recommendations to ensure access to the Rivanna River, and the Conservation Chapter's recommendations for protecting River health.

2 7 8 I J

5. Collaborate with the Albemarle County Office of Housing to provide a variety of housing options in cost, unit type, and character to promote choice and equitable access in Pantops.

3

- Where feasible, require a mix of affordable, workforce and market-rate housing.
- Encourage affordable housing through incentives such as height or density bonuses and parking reductions for inclusion of affordable housing.

6. Pursue zoning changes, such as form-based code, to support desired building, street form, and uses as described in the Future Land Use Plan.

2 7

KEY OUTCOMES

How We Will Measure Progress



Redevelopment & Infill within Centers.

Reutilizing excess surface parking and encouraging more density within these areas will reinforce a human-scaled urban environment, promote walkability, and provide opportunities for housing and employment.

Vibrant & Connected Neighborhoods.

Encouraging quality design, public amenities, and a variety of housing types in new development and creating links between existing neighborhoods will promote equitable access and greater choice for all Pantops residents.



CONSERVATION

With the Rivanna River as the backbone, create an **integrated system of parks and greenways** throughout Pantops that provides accessible, usable amenity spaces and conserves and restores natural systems.

CHAPTER FOUR



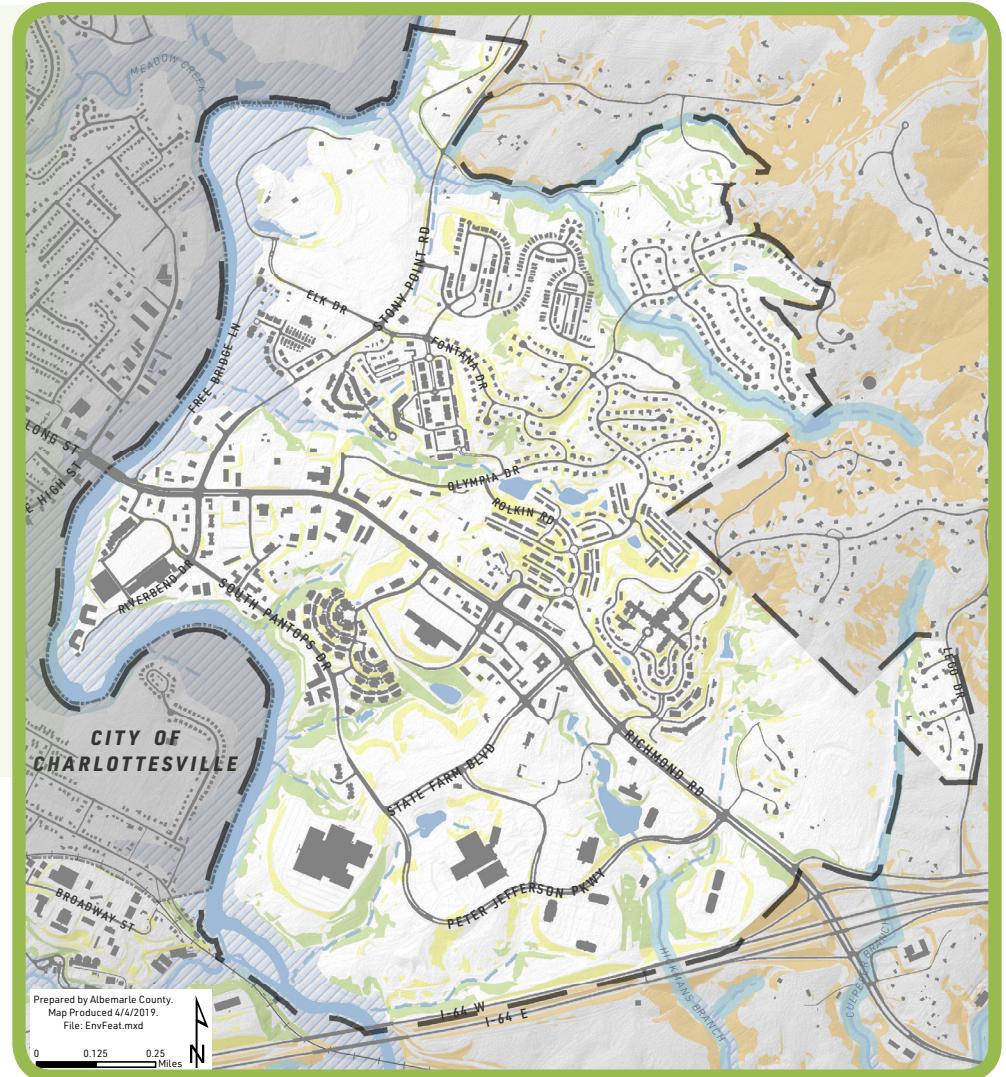
Conservation Overview

Existing Conditions

Map Legend

- 100-Year Floodplain
- Water Protection Ordinance Buffer
- Preserved Steep Slopes
- Managed Steep Slopes
- Critical Slopes (in Rural Area)

- Perennial Stream
- Intermittent Stream



Vision

The Pantops Development Area is known for its prominent landscape features including the Rivanna River and extensive views of the Blue Ridge Mountains. Building off of these key features, the vision for Pantops is to create an integrated system of parks and greenways that provides accessible, usable amenity spaces and conserves and restores natural systems.

The Rivanna River forms the western boundary of the Pantops and has a long history of culturally significant use and land development. While many historic, cultural, and recreational resources exist along the Rivanna River Corridor, it is also a critical community resource that provides drinking water to residents downstream and receives treated wastewater and stormwater runoff.

This Plan acknowledges that Pantops is nested within several larger natural systems, including the Rivanna River Corridor, one of three Conservation Focus Areas identified in Albemarle County's Biodiversity Action Plan. Conservation Focus Areas are key locations/corridors in Albemarle County that have significant conservation value and should be a focus of conservation efforts. Pantops also contains portions of Hickmans Branch and Culpeper Branch - perennial streams that are valuable natural and scenic resources that support stormwater management in the area.

Existing Conditions

The Rivanna River, slopes and hillsides, and native tree canopy provide essential ecosystem services in addition to their aesthetic and recreational value.

However, the most recent 2016 Virginia Department of Environmental Quality (DEQ) assessment identified the segment of the Rivanna River bordering the Pantops Development Area boundary as "impaired" for the following uses: aquatic life (based on benthic macroinvertebrate data) and recreation (based on coliform bacteria levels). Impaired aquatic life assessments indicate low biodiversity levels for beneficial aquatic species in the River. Impaired recreation assessments indicate high bacteria levels that make popular activities such as swimming and wading unhealthy for humans.¹

As development continues, both greenways and natural areas need to be strategically preserved and recreational amenities need to be further developed - in quantity and quality - to support a healthy environment for both human and ecological well being.

The only public park within Pantops is the regional 110-acre Darden Towe Park, jointly-owned by the County and City of Charlottesville. While there are privately-owned green spaces and networks in Pantops neighborhoods, smaller pocket and neighborhood parks are needed to ensure varied and accessible recreational options for local residents and visitors.

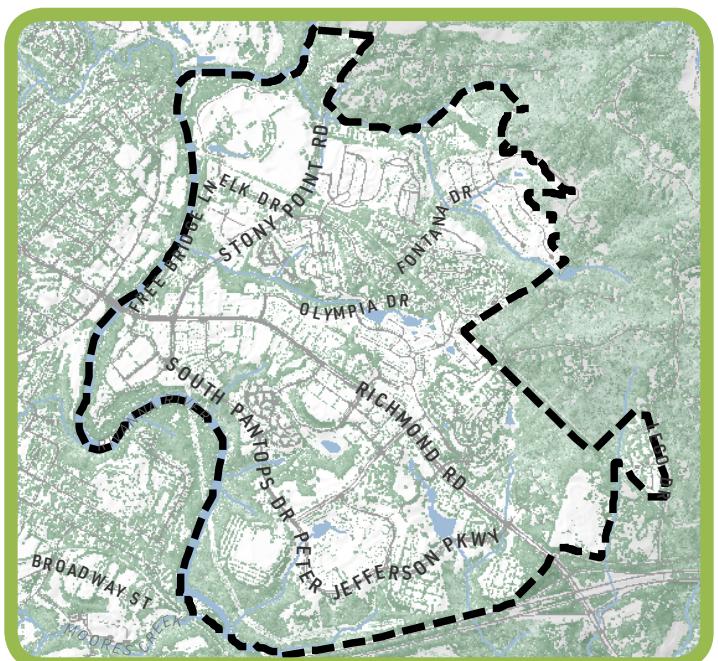
Additionally, while the Rivanna Greenway Trail is a valuable recreational asset that connects to regional amenities, there is a need for additional connections to the City of Charlottesville (for more information on existing conditions and recommendations, see Connectivity chapter).

Tree Canopy

Urban forests provide an important natural resource to Albemarle County's Development Areas as they have a significant role in mitigating the effects of climate change and urban heat islands. In addition to their role in providing valuable ecosystem services, trees create an inviting, livable, and healthy atmosphere for residents, businesses, and visitors.

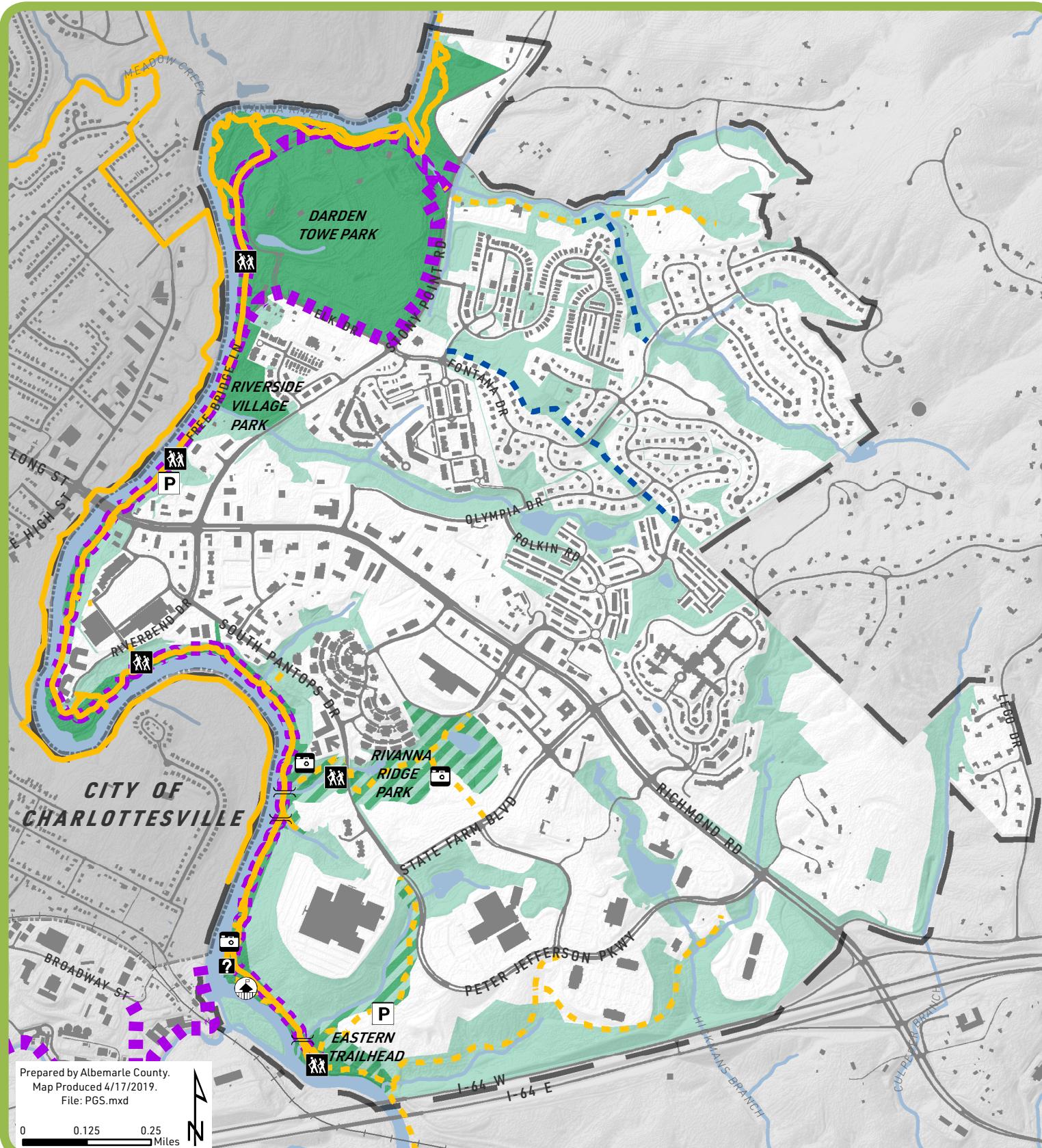
The below tree cover map approximates the location and extent of forested areas within Pantops in green. While much of the River Corridor is forested, significant portions of the urbanized area along Route 250 lack tree cover and include a large amount of impervious surface.

There are several benefits to planting trees for urban development including reduction of stormwater runoff from impervious surfaces, reduction of heat island effect by providing shade, and improvements to air quality. Roots from large trees also stabilize soils, reduce sediment runoff, and further enhance the quality of surrounding water systems such as the Rivanna River.



¹ The Virginia Department of Environmental Quality (DEQ) assesses the quality of all surface waters within the state every two years in order to comply with requirements of the U.S. Clean Water Act and Virginia Water Quality Monitoring, Information and Restoration Act. Each DEQ assessment evaluates the quality of six "uses," or attributes, of surface waters. Waters that do not meet DEQ water quality standards are designated as "impaired." The DEQ assessments are based on samples taken at numerous places along water systems which makes it difficult to identify specific causes for impaired waters, such as a point pollution source.

Future Parks & Green Systems Plan



Map Legend

- Public Parks
- Potential Public Park
- Parks & Green Systems
- Existing Public Trail
- Proposed Public Trail
- Proposed Shared Use Path
- Proposed Neighborhood Trail Connection

Old Mills Trail Features

- Old Mills Trail Access Point
- Trail Parking
- Vista
- Historical Site
- Pedestrian Bridge
- Informational Kiosk

The Future Parks & Green Systems Plan mirrors the Future Land Use Plan by identifying areas with existing public parkland, opportunities for new public parks, and other green systems to be protected. It also identifies potential new trail alignments and other public amenities to be pursued in the future.

Creating Recreational Opportunities

In addition to existing or already planned amenities such as Darden Towe Park and the Old Mills Trail, new public park areas, trails, and Rivanna River access points are proposed to provide improved access to amenities and the River, especially within the southern portion of Pantops. These amenities are intended to provide a range of recreational opportunities and ensure that all areas of Pantops have access to parks and trails.

Activating the Rivanna River

The spine of Pantops' parks & green systems is the Rivanna River, where a substantial amount of land is publicly owned or accessible by the Old Mills Trail, which is part of the larger Rivanna Greenway system. Besides protecting the Rivanna's environmental resources, the Plan identifies opportunities to improve access to the River and amenities along the Old Mills Trail. The County is also participating in the Rivanna River Corridor Plan process with the City of Charlottesville and the Thomas Jefferson Planning District Commission, which will determine a shared vision for the River and more detailed recommendations for how it should develop in the future.

Protecting Sensitive Environmental Features

In addition to the features included within public park areas, additional areas with identified sensitive environmental resources were included in the "Parks & Green Systems" land use designation. This designation includes critical environmental resources such as preserved steep slopes², water protection ordinance buffers, and floodplain; additional areas that provide ecosystem and cultural services (including recreation) and create linkages between other green systems, and areas held in common ownership in existing developments.

Managing Cultural & Scenic Resources

Balancing development with the protection of resources that contribute to Pantops' cultural history and scenic beauty is a priority identified in this chapter, as well as mitigating impacts on surrounding resources. Three strategies identified include encouraging development that is sensitive to the Monticello Viewshed guidelines, promoting cultural & heritage tourism, and managing expectations for viewshed preservation.

² Preserved Steep Slopes on existing lots of record containing single-family dwellings were not included in this designation, as the primary and accessory structures are exempt from steep slopes regulations per Section 30.7.3.b of the Zoning Ordinance.

Recreational Opportunities

Trails

Pantops has some of the most extensive public trail networks within Albemarle County, with the Old Mills Trail running along the Rivanna River through the length of Pantops. The Old Mills Trail is part of the larger Rivanna Greenway Network, which when completed will run along the River Corridor from Pantops to the Village of Rivanna and east to the Fluvanna County line.

Though the Old Mills Trail is currently completed, upgrading the trail surface, improving trail access, visibility, and connectivity to adjacent areas are needed. Additional trail improvements such as wayfinding signage, artwork, historical markers and opportunities for passive recreation such as benches and picnic areas could further enhance the Greenway and transform this area into a linear park along the River's length through Pantops.

There are several other existing trails within Pantops, many of which were built through private development, such as the trail network within Peter Jefferson Place and throughout the Martha Jefferson hospital campus. The Parks and Green Systems Plan identifies areas for future trails and critical links between existing trails, with a focus on providing greater connectivity throughout Pantops and increasing access to parks and the Rivanna River.

Future development and redevelopment within Pantops should seek to enhance the trail network and provide greater connectivity to recreational resources, especially in areas identified for future trails on the Parks and Green Systems Map.

Parks

Currently, the only public park within Pantops is the 110-acre Darden Towe Park, which is classified as a Regional Park, serving residents of Pantops and the larger community. The Park provides play fields, a fenced dog park, running trails, a canoe launch and is home to the Lewis & Clark Exploratory Center. Future Master Planning efforts for Darden Towe Park should be completed to further identify park needs and opportunities.

In addition to Darden Towe Park, the Parks & Green Systems Plan identifies three future public parks: Riverside Village Park, the Eastern Trailhead, and Rivanna Ridge Park (final names for these parks will be

determined at time of park master planning). Of these three parks, only the Riverside Village Park is currently owned by the County. Land for the other parks should be acquired through adjacent development or purchased by the County when funds become available. Park master plans should be developed for all of these future parks, in conjunction with the community, to identify appropriate active, passive, and social recreation opportunities for each park.

Urban Parks and Plazas

In addition to the community and neighborhood scale parks identified in the Parks and Greenways Plan, future development, especially in areas identified as centers, should plan for smaller more urban public spaces such as plazas or greens. These can be small public spaces that can offer seating areas, art work, water features, or other amenities where people can gather and socialize amongst a developed area.

Plazas and greens should be designed into future developments or redevelopment of areas such as Pantops Shopping Center, Rivanna Ridge Shopping Center, and Gazebo Plaza. These amenity spaces can be small in size, but should be prominent features of the design and easily accessible on foot for residents and visitors of the area.



Rivanna Greenway Sign Along the Old Mills Trail

Activating the Rivanna River

There has been a renewed interest in the Rivanna River recently. Pantops has seen newly established festivals and events celebrating the River, and the area's first paddling outfitter and guide service also recently opened. Further work is needed to improve access to the River, to improve its visibility and to reconnect the Pantops community to this Rivanna River.

North of Route 250, the River runs along Darden Towe Park and the future Riverside Village Park for much of its length, providing an opportunity to highlight the River as a recreational asset. The Park provides a canoe launch with parking, which also serves as trailhead parking for the Old Mills Trail. Further Park planning and development should focus on how to enhance the recreational opportunities along the River, while also protecting its diverse natural ecosystem.

Just South of the two parks, the River runs parallel to Free Bridge Lane, a low volume local street that connects Darden Towe Park to Route 250. Free Bridge Lane provides a unique opportunity to further enhance the River corridor while improving upon the bicycle/pedestrian connectivity in the area. Free Bridge Lane should be reimagined as a "green street" that integrates elements of stormwater management into the street design to reduce runoff, while also enhancing facilities

for bicycle and pedestrian travel along its length. Future street design should take care to prioritize these elements and further enhance this stretch of River corridor.

South of Route 250, the River passes behind areas of commercial and residential development. This reach of the Rivanna has the most potential to serve as an economic asset for Pantops. Future development and redevelopment of areas such as Pantops Shopping Center and the State Farm site should consider reorienting development towards the River and providing outdoor plazas or seating areas on the developable land adjacent to the River. Future development along the River should be done in a way to increase access and visibility of the River to take advantage of its natural beauty and this unique landscape; however, care should be taken to preserve and enhance the River ecosystem and to keep development out of sensitive features such as preserved slopes, water protection ordinance buffers, and floodplain.

Additional work to further define a vision for the Rivanna River Corridor and to identify ways to reactivate and reorient to the River should be identified through future phases of the Rivanna River Corridor Plan, to be completed in collaboration with the City of Charlottesville.



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Environmental Protection

Parks and green systems provide invaluable recreational assets that contribute to a high quality of life and sense of place for Pantops residents. Their presence and health requires development that is respectful of the natural environment, systems and topography.

Several specific elements of Pantops' natural environment need special consideration and protection, which are detailed below.

Water Quality

The Pantops Development Area contains portions of the Rivanna River, Hickmans Branch, and Culpeper Branch, which are all perennial streams, or streams that have continuous flow throughout the year. Protecting the integrity of stream channels and stream buffers in Pantops that feed into these perennial water bodies can help to rectify the impairments classified by the Virginia DEQ and maintain water quality in the future.

Albemarle County's Water Protection Ordinance (WPO) requires preservation of a 100-foot wide vegetative buffer on both sides of USGS-identified perennial streams. While a significant portion of existing development in Pantops was built prior to the WPO, properties undergoing redevelopment will be required to meet the current stormwater management regulations to reduce potential impacts on downstream flooding, erosion, and pollution. It is important to note that all natural water bodies - including intermittent streams - have value for water quality, biodiversity and other ecosystem services. Leaving a vegetated and undisturbed buffer around streams undeveloped, where possible, is encouraged.

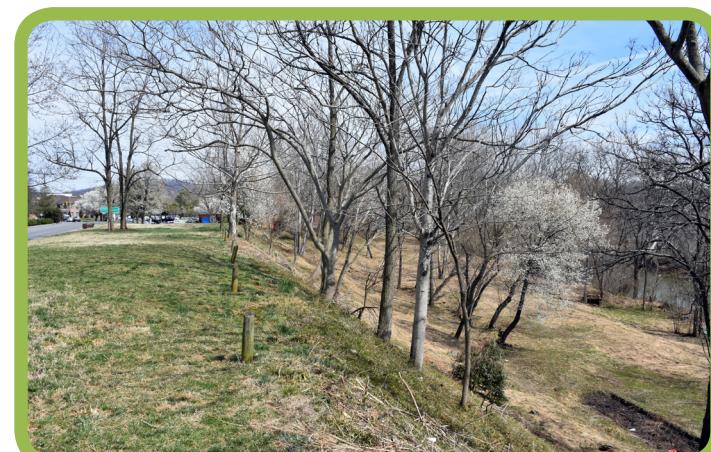
Additionally, the Future Land Use Plan (see Character & Land Use Chapter) has identified locations of other water flow channels that feed into the Rivanna River, which are classified as "Parks and Green Systems". Development on properties classified as Parks and Green Systems should carefully evaluate and preserve potential stream channels and adjacent buffers as they serve stormwater management functions and maintain water quality of the Rivanna River.

Stream Buffers & Hillside Systems

The preservation of Pantops' natural landscape, hillsides and slopes are vital to improving and maintaining a healthy Rivanna River. Albemarle County's Steep Slopes Overlay District establishes areas where land disturbance is subject to additional design considerations and attention to protect slopes, downstream lands, and waterways. The intention of this regulation is to prevent movement of soil and rock, excessive stormwater runoff, and degradation of surface water. It classifies slopes and hillsides into preserved slopes, or slopes that "warrant their preservation by the prohibition of disturbance" and managed slopes, or "slopes where development may occur, provided that design standards are satisfied to mitigate the impacts caused by the disturbance of the slopes" (Albemarle County Code).

In addition to these regulations, topography and natural landscapes should be respected on sites throughout Pantops. On-site stormwater management is encouraged (see below for more information).

Many local organizations focus their work on the Rivanna River and its watershed and will be instrumental partners in repairing and maintaining a healthy Rivanna River, including: the Rivanna Conservation Alliance, Rivanna Water and Sewer Authority, Rivanna River Basin Commission, Thomas Jefferson Soil and Water Conservation District, Thomas Jefferson Planning District Commission (TJPDC), and Piedmont Environmental Council (PEC).



Hillside Adjacent to the Rivanna River on Riverbend Drive

Biodiversity

The Biodiversity Action Plan (BAP) has identified that the presence of non-native invasive plant species is a major threat to biodiversity and environmental health across Albemarle County. These plants are most often introduced into non-native environments by humans, both intentionally and unintentionally. Other forms of non-native invasive wildlife that may affect Pantops as well, including insects, fungi, and other small vertebrates. The recommendations developed through the BAP and future Comprehensive Plan updates should be implemented within Pantops once adopted by the County.

In the interim, landscape plans for new development projects should install native, non-invasive species wherever possible, especially where landscaping is used as a stormwater management tool and/or green infrastructure. This will enhance soil and water quality throughout Pantops, facilitate interconnected habitats and networks, and help to reduce the spread of invasive species. Landowners and developers should contact staff with the Albemarle County Department of Community Development to obtain lists of locally native vegetation when pursuing site development activities or other landscaping projects.



Animal tracks along the banks of the Rivanna River in Pantops.

Stormwater Management

Given the precious natural resources in the Pantops Development Area that provide a variety of environmental services to County and City of Charlottesville residents, stormwater management is encouraged to be addressed on-site, especially through low-impact development (LID) strategies.

As Pantops continues to develop, practices that mimic or preserve natural drainage process to manage stormwater will be increasingly necessary. Adding on-site LID strategies, such as bioswales, depressions, and vegetated areas, can help the Rivanna River watershed act more like an undeveloped watershed.



An existing stormwater outfall from Interstate 64 near the Old Mills Trail. This type of facility is discouraged.

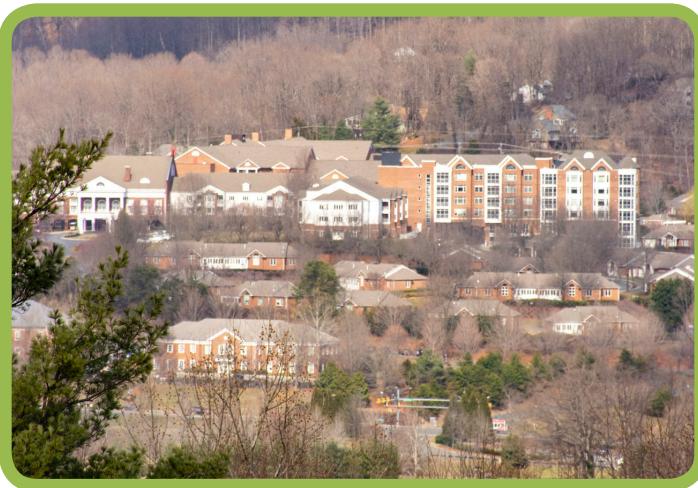
Tree Canopy

To promote tree coverage in Pantops, development proposals should evaluate the existing canopy coverage within the project boundaries and how it relates to adjacent forested areas and networks. When existing trees are removed through construction, developers should replant native, non-invasive tree species that can eventually mature into urban forests and help replace lost canopies (see Biodiversity section above).

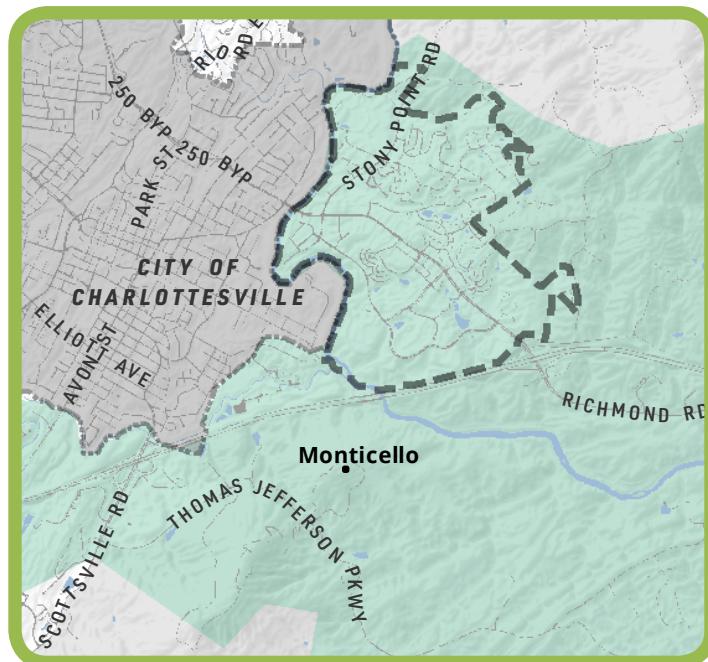
In addition to maintaining existing tree canopy, future redevelopment should design sites that provide more tree coverage than existed prior to redevelopment. As mentioned previously, tree canopy provides a number of environmental services including stormwater management and mitigation of urban heat island effects. The importance of maintaining these ecosystem functions will only grow in the future as impervious surface area and intensity of uses grows.



Cultural & Scenic Resources



Westminster-Canterbury (above) and Pantops (bottom) as viewed from Monticello's East Walk. The areas shown in green on the below map are within Monticello's Viewshed.



Pantops' contexts of the Rivanna River and surrounding mountain landscapes includes a legacy of culturally significant uses and land development. Managing Pantops' unique relationship to these resources contributes to the continued economic viability of heritage tourism and residents' quality of life.

Monticello Viewshed

Because of its significant historical value and its economic contribution to the community, Monticello stands out as resource that deserves special recognition. Monticello is a National Historic Landmark and is the only house in the United States designated a UNESCO World Heritage Site. It is also an important economic asset, as it draws approximately half a million visitors each year.

Monticello's elevated location south of Pantops means that the view from the mountaintop is subject to significant change based on development patterns in Pantops. Therefore, it is important to consider impacts to Monticello's viewshed when development occurs in Pantops. Development within Pantops should continue to follow the steps outlined in Chapter 5 of the County's Comprehensive Plan, which includes sharing the Voluntary Guidelines prepared by the Thomas Jefferson Foundation (TJF) with applicants of proposed development that falls within the Monticello viewshed. Additionally, during the review of legislative applications (special use permits and rezonings) in Pantops, care should be taken to consider impacts on Monticello's viewshed. Where viewshed impacts are anticipated, staff and applicants should work with TJF to identify and encourage mitigation measures that are consistent with the County's Comprehensive Plan and this Master Plan.

Heritage & Cultural Tourism

The surrounding historic landscapes (including the Journey Through Hallowed Ground National Heritage Area) and cultural institutions such as the Lewis & Clark Exploratory Center and the Kluge-Ruhe Aboriginal Art Collection present opportunities for Pantops to become a hub for heritage & cultural tourism. Implementation of connectivity improvements and wayfinding and historical marker programs will enhance the visibility and accessibility of these resources.

View Corridors & Vistas

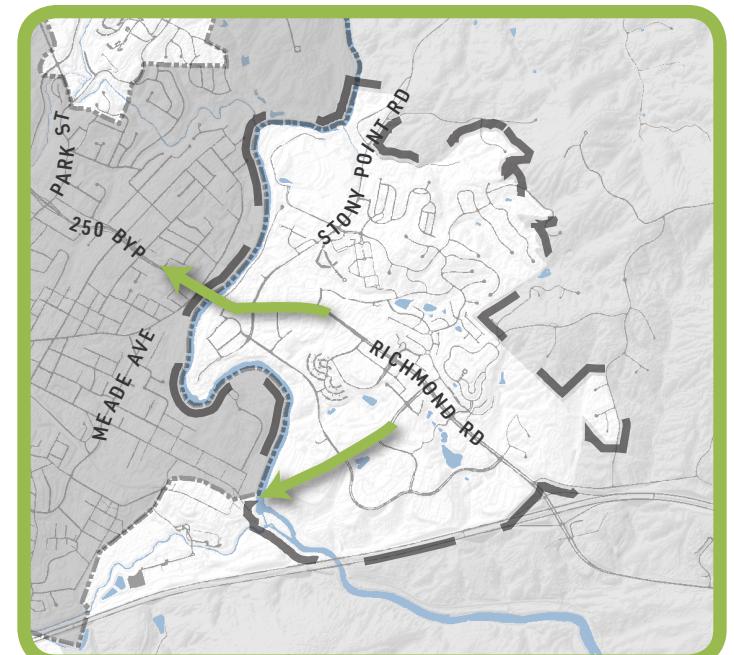
Pantops' significant visual qualities are captured in its "all-seeing" name, and its residents, workers, and visitors delight in views of the Southwest Mountains to the east, and the City of Charlottesville and the Blue Ridge Mountains to the west. However, balancing the preservation of views with the height and massing of urban development presents a challenge for implementation due to the difficulty in defining and administering viewshed protections.

The Future Parks & Green Systems Plan identifies multiple vistas due to their visual quality and opportunities for public access. Securing public access to vista sites should be prioritized and can serve as waysides on trails or gathering spaces in urban developments.

The View Corridors Map (at right) identifies view corridors which parallel existing roadways. Care should be taken with these corridors to coordinate building and landscape design to frame their terminated vistas: specifically, the City of Charlottesville from Route 250, and Montalto and the Ragged Mountains from State Farm Boulevard.



The Woolen Mills water tower as viewed from Pantops and the Rivanna River.



The View Corridors Map (above) identifies view corridors along Route 250 west of Town & Country Lane and along State Farm Boulevard southwest of Martha Jefferson Drive. The vista (below left) from State Farm Boulevard and the view corridor along Route 250 (below right) are examples of significant views in Pantops.



Recommendations

Environmental preservation and expanding outdoor recreational opportunities are two of the most important objectives that can help realize the Master Plan's vision for Pantops.

Policy and coordination projects that address these recommendations are indicated with ○, while capital projects are indicated with ●. Implementation of these recommendations is not limited to the specific projects referenced in the Implementation Chapter.

1. Provide pedestrian and trail connections to major natural systems and public amenities, such as the Rivanna River greenway corridor and Darden Towe Park.

1 2 6 7 8 I J ET RR GC NT

2. Create a variety of public spaces to support active, passive, and social recreation and link existing neighborhoods to cultural assets.

2 7 ET RR RV

3. Strategically preserve open space and tree canopy to create an internal green infrastructure network and amenity areas within the centers, districts, and neighborhoods.

2 3 5 7 I J

- Utilize recommendations specified in the Character & Land Use Chapter when evaluating private development proposals.

4. Encourage design that minimizes impacts to critical natural resources including preserved slopes, streams & stream buffers, and floodplain areas.

2 3

- Utilize recommendations specified in the Character & Land Use Chapter when evaluating private development proposals.

5. Encourage low-impact development and onsite stormwater management strategies to improve surface water quality and protect the health of the Rivanna River.

2 3

6. Promote and protect locally significant vistas & view corridors by establishing public access points and building and landscape design guidelines.

4 7 8 ET

7. Encourage compliance with the Monticello Viewshed Guidelines identified in the Comprehensive Plan.

2 7 8

KEY OUTCOMES

How We Will Measure Progress



A Completed Rivanna River Corridor.
Creating new parks, trailheads, and connections will expand public access to the Old Mills Trail, the Rivanna River, and Darden Towe Park.

Protected Natural & Scenic Resources.
Continued enforcement and quality design that accommodates these resources will improve the health of natural systems and ensure that they are available for future generations to enjoy.

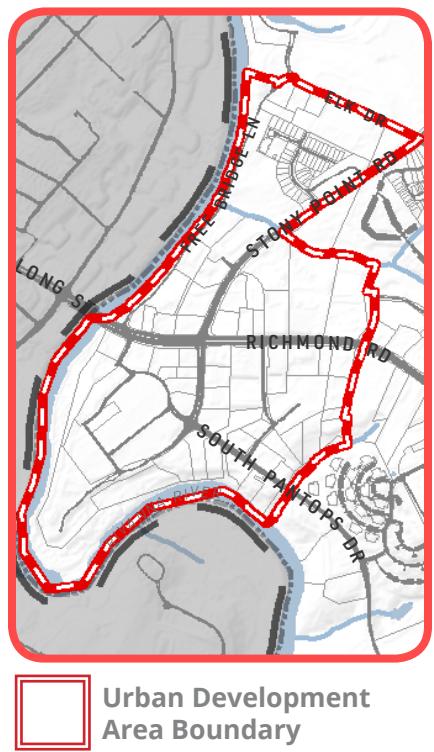


IMPLEMENTATION

Support this Plan with **proactive implementation initiatives** such as updates to policy, zoning changes, and regional partnerships.

Implementation Overview

Achieving this Plan's vision will require concerted effort by the County, its residents, and stakeholders.



Urban Development Area Boundary

Priority Areas

Central to creating the desired Pantops community will be the continued revitalization and investment in Pantops' centers and infrastructure. Pantops' ability to accommodate future growth in a manner that fulfills this Plan's aims for connectivity, character, and conservation will largely depend on infill and redevelopment opportunities in these identified Priority Areas. Although redevelopment will be driven by the private sector, County partnerships, investment, and support are most appropriate in these areas for projects that support this Plan's vision.

Three areas have been identified as Priority Areas for County policy and investment:

- Pantops Urban Development Area
- Rivanna River Corridor
- Rivanna Ridge Urban Center

The Pantops Urban Development Area (UDA) includes the areas in the Riverbend Urban Center & Riverside Village Neighborhood Center. Its prime location bordering the Rivanna River and the City of Charlottesville presents opportunities for mixed-use infill and redevelopment that will provide housing choice, regional connectivity, and access to recreational amenities with the Rivanna River Corridor. A number of connectivity improvements focused on improving roadway performance and enhancing multimodal access have been identified for this area.

The ongoing Rivanna River Corridor Plan is a joint planning effort between the County, the City of Charlottesville, and the Thomas Jefferson Planning District Commission. This plan will identify a vision for the portion of the urban waterfront shared by both localities, including the potential for new or improved connections across the Rivanna River. Phase 2 is expected to begin in 2019. Future County investments and plans for areas adjacent to the River should be aligned with the Rivanna River Corridor Plan's recommendations.

The Rivanna Ridge Urban Center is identified as another location for a potential pedestrian crossing of Route 250 and future roadway improvements. Any County efforts in this area should focus on improving multimodal infrastructure, buildout of a network of Complete Streets, and public recreational amenities such as a future Rivanna Ridge Park.

Other Areas

For other existing neighborhoods and areas not within a Priority Area, County investment should be limited to facility and service improvements necessary to provide the adequate level of service for the existing populations and developed areas. These types of projects may include infill sidewalk projects and public trail connections. The County should not be expected to contribute to infrastructure improvements that would normally be expected with new private development and which will be necessary to mitigate the impacts from these projects.

Performance Management

Each chapter contains identified Key Outcomes and a brief explanation. These Key Outcomes are listed below:

- Buildout of a Complete Street Network
- Strengthened Regional Connectivity
- Redevelopment & Infill within Centers
- Vibrant & Connected Neighborhoods
- A Completed Rivanna River Corridor
- Protected Natural & Scenic Resources

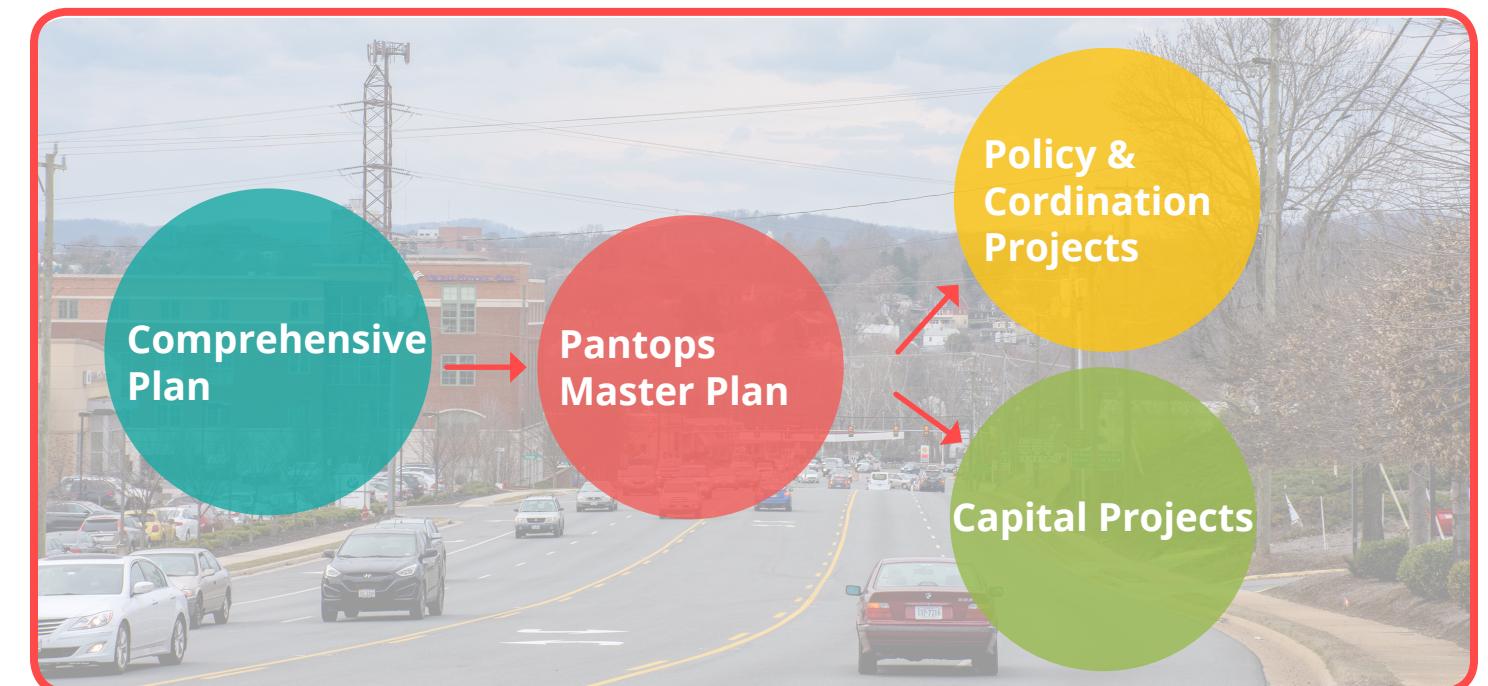
Continued organizational capacity-building in performance management and community engagement will be necessary to ensure that the community's needs and expectations are being met. Projects can be evaluated for their consistency with the Master Plan using the Key Outcomes.

These Key Outcomes may lend themselves well to metrics similar to the Indicators of Progress identified in the County's Comprehensive Plan. A performance management framework should be created and endorsed by the Board of Supervisors and Planning Commission.

Planning, Policy, & Zoning

A future Small Area Plan may be appropriate at the Pantops or Rivanna Ridge Urban Center locations to permit detailed coordination and planning of land use and transportation, including improved bicycle/pedestrian crossings. The need for this effort should be identified in conjunction with the findings of the Rivanna River Corridor Plan and other studies identifying the location and type of such crossing(s).

A recommendation of the Character & Land Use chapter is to pursue zoning changes, to support desired building, street form, and uses in the Plan. The last comprehensive rezoning of Pantops was in 1980 with the adoption of the current Zoning Ordinance. With the exception of applicant-initiated rezonings since that time, the current zoning map largely reflects that adopted in 1980, with designations that are inconsistent with this Plan's land use recommendations. However, no specific zoning changes are recommended at this time. The scope of any Pantops-specific zoning changes should be determined in conjunction with future planning efforts.



The Pantops Master Plan provides for the localized implementation of the principles articulated in the County's Comprehensive Plan by applying site-specific land use designations and identifying infrastructure needs. Future small area and corridor planning efforts can provide more detailed study and recommendations to supplement this Master Plan and aid the County in implementing the vision for Pantops.

Policy & Coordination Projects

The following projects have been identified as important steps in future planning, policy development, and implementation. They involve operating support and coordination between stakeholders and the County rather than capital investment:

1 Location for Rt. 250 Pedestrian Bridge

Complete a future planning effort to identify a location for a pedestrian bridge across 250, which could include a full Small Area Plan effort to incorporate transportation, form and design recommendations for the areas identified as Urban Centers.

2 Rivanna River Corridor Plan (RRCP)

Complete the Rivanna River Corridor Plan (RRCP) in cooperation with the City of Charlottesville to identify a preferred bicycle/pedestrian crossing location or a full vehicular, transit, and bike/ped crossing.

3 Zoning Ordinance Update

Update the zoning ordinance and/or maps to more closely reflect the recommended land uses, prioritizing updates to areas identified as Centers to foster mixed-use development and redevelopment.

4 Entrance Corridor Guidelines Update

Update Architectural Review Board (ARB) Design Guidelines specific to Pantops' Entrance Corridor to ensure that the guidelines support development consistent with the vision described in this Plan.

5 Economic Development Incentives

Collaborate with the Economic Development Office to support and incentivize development consistent with the Plan, specifically within areas identified as Centers and Employment Districts.

6 Pantops Trails Crew

Establish a Pantops Trails Crew to support and assist with maintenance and programming along the Pantops greenways network.

7 Community Engaged Design

Facilitate an engaging and inclusive community design process in support of the recommendations throughout the Plan's chapters.

8 Historic & Cultural Programming

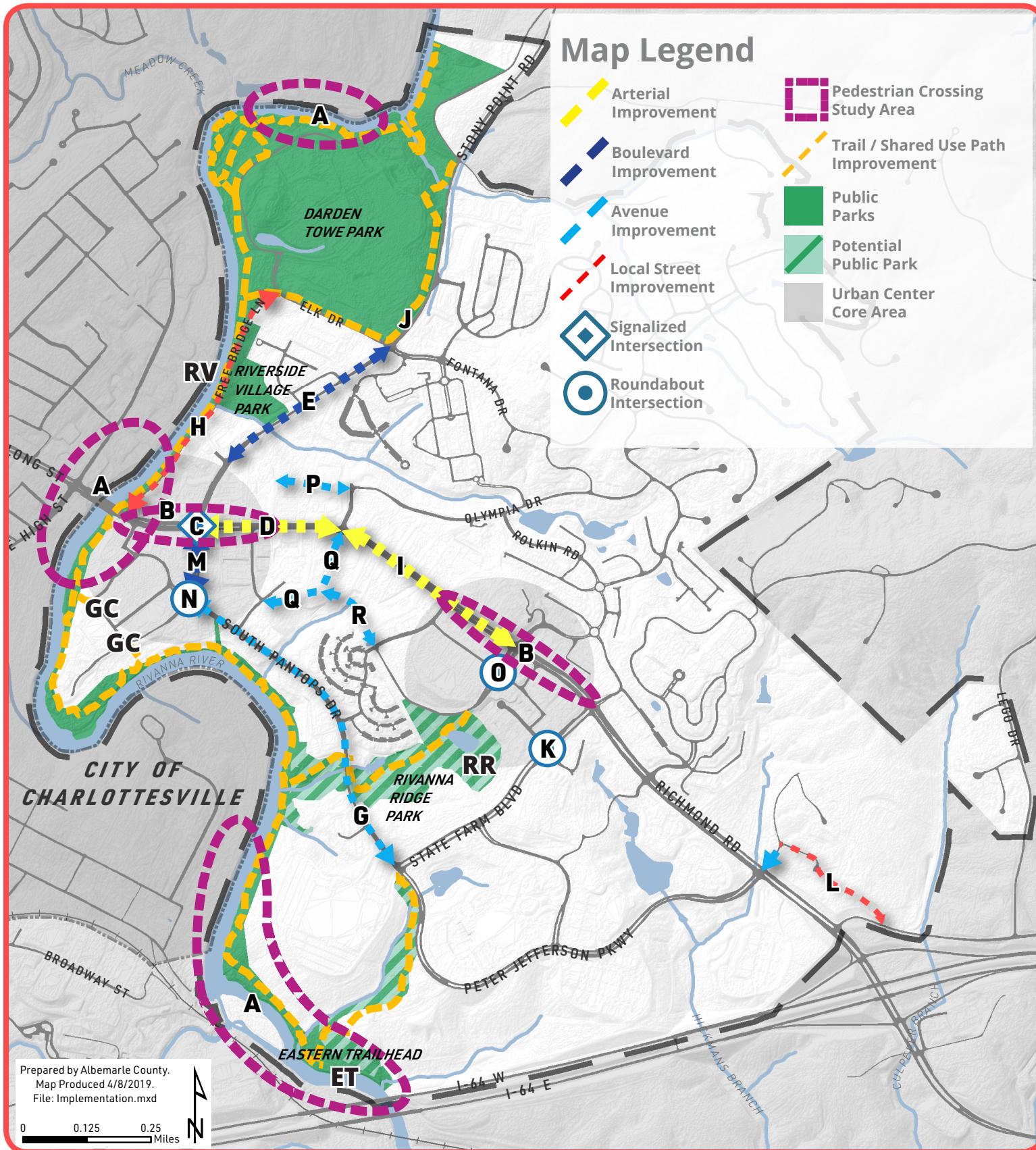
Expand Historic/Cultural programming along the Old Mills Trail and other locations identified by the community as important resources.

9 Library Services Study

Study the possibility of establishing a library branch or other expanded library services within the Pantops community.



Capital Projects



Achieving the vision for a connected Pantops community will require investment in its infrastructure by public and private actors. Projects are listed in a suggested order of implementation based on anticipated availability of funding and need. The order of projects should not be construed as a prioritized list.

Where possible, implementation of these projects should be timed to be concurrent with redevelopment or where economies of scale can be achieved. Catalyst projects are intended to be completed within the first 8 years of this Master Plan. Key Outcomes achieved by a project are identified by chapter icons.

Project	Timing	Outcomes
A Rivanna River Crossing Alternatives	Catalyst	
B Route 250 Pedestrian Crossing Alternatives	Catalyst	
C Route 250 / Stony Point Road (Route 20) Intersection Improvements	Catalyst	
D Route 250 Medians & Turn Lanes (Western Phase)	Catalyst	
E Route 20 Improvements	Catalyst	
F CAT Service & Infrastructure Improvements	Catalyst	
G South Pantops Drive Bike/Ped Improvements	Catalyst	
H Route 250 Medians & Turn Lanes (Eastern Phase)	Catalyst	
I Free Bridge Lane Green Street Conversion	Catalyst	
J Darden Towe Park Shared-Use Path	Long-term	
K State Farm Blvd./ Hickman Rd./ Isham Ave. Roundabout	Long-term	
L Hansens Mtn. Rd./ Glenorchy Connector South	Long-term/Redevelopment	
M Riverbend Dr. Improvement	Long-term/Redevelopment	
N Riverbend Dr. / South Pantops Dr. Roundabout	Long-term/Redevelopment	
O Rolkin Rd./ Abbey Rd. Roundabout	Long-term/Redevelopment	
P Olympia Drive Extension to Route 20	Long-term/Redevelopment	
Q Spotnap Rd. Extension to US 250/Town & Country Ln	Long-term/Redevelopment	
R Rolkin Road Extension to Spotnap Rd.	Long-term/Redevelopment	
RV Riverside Village Park	Catalyst	
ET Eastern Trailhead Park	Catalyst	
RR Rivanna Ridge Park	Catalyst	
NT Neighborhood Trails	Long-term	
GC Riverbend Urban Center Greenway Connections	Long-term	

Capital Projects

Timing
Catalyst projects are intended to be completed within the first 8 years of this Master Plan. Long-term projects can also be coordinated with redevelopment projects.

*Values are based on cost estimates in 2019 dollars and do not account for future inflation rates. Estimates are general ranges and do not consider outside funding sources (state funds, federal funds, grants, etc.) that may reduce the project's cost to the County.

Cost Index*
\$: <500,000
\$: 500,000 - 3,000,000
\$\$\$: 3,000,000 - 8,000,000
\$\$\$\$: 8,000,000 - 12,000,000
\$\$\$\$\$: >12,000,000

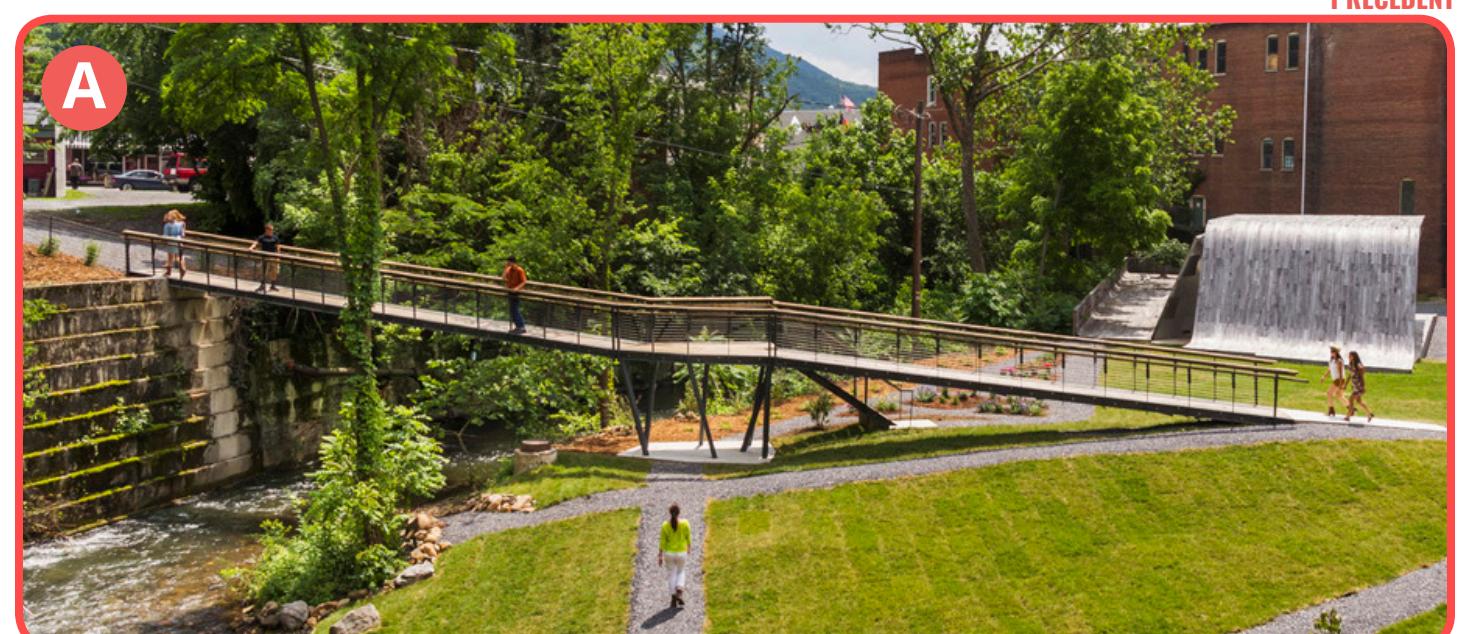
Key Outcomes
 Connectivity Chapter
 Character Chapter
 Conservation Chapter

A Rivanna River Crossing Alternatives

Phase 1: Determine location/alignment for bike and pedestrian and/or vehicular crossing
Phase 2: Design/Construction

The ongoing Rivanna River Corridor Plan (RRCP) is a joint planning effort between the County, the City of Charlottesville, and the Thomas Jefferson Planning District Commission. This plan will identify a vision for the portion of the urban Riverfront shared by both localities, including the potential for new or improved connections across the Rivanna River.

Phase 1 will study and determine the location(s) and appropriate crossing type(s) for bicycle, pedestrian, and/or vehicular crossings.



Smith Creek Pedestrian Bridge Clifton Forge, VA



Precedent image - College Avenue Bridge Columbia, MO



Current Conditions Route 250, looking south toward Stony Point Road (Route 20)

B Route 250 Pedestrian Bridge

Phase 1: Pedestrian Bridge Study
Phase 2: Bridge Design/Construction

Throughout the master planning process, Pantops community members identified the need for additional cyclist and pedestrian crossings across Route 250. Additional crossing(s) aim to support a more connected and pedestrian-oriented environment in Pantops.

Phase 1 will study and determine appropriate locations for pedestrian/bicycle bridge crossing(s) of Route 250. If more than one location is identified, crossings will be prioritized. Locations studied should include at or near Rivanna Ridge Shopping Center and Pantops Shopping Center, given their designation as Urban Centers in the Future Land Use Plan.

Phase 2 will design and construct priority location(s) for pedestrian and cyclist crossings. Design and construction in this phase will be based on community preferences and needs identified in Phase 1.

Cost: Phase 1 - \$
Phase 2 - \$\$

C Route 250/Stony Point Road Intersection Improvements

Route 250 is a auto-centric corridor that bisects the Pantops Development Area. This project identifies the need for additional turn lanes, pedestrian facilities and improved signals to enhance operations and safety at the Route 250/Stony Point Road (Route 20) intersection.

Funding sources for these improvements have not yet been identified, but should be prioritized in future transportation planning work in Albemarle County.

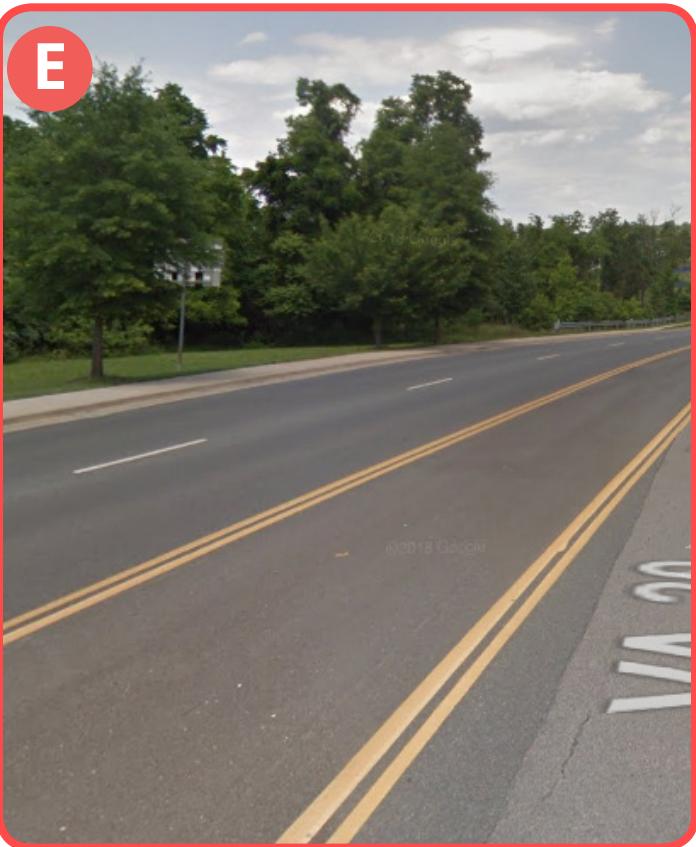
Cost: \$\$\$

D Route 250 Medians and Turn Lanes (Western Phase)

Alongside Route 250/Stony Point Road intersection improvements (C), medians, and a continuous right turn lanes are needed westbound on Route 250 from Stony Point Road (Route 20) to Town & Country Lane. The goals of adding new medians and a continuous right turn lane are to improve visibility and traffic management and maintain an adequate Level of Service along Route 250.

Cost: \$\$

Capital Projects



Current conditions on Route 20.

E Route 20 Infrastructure Improvements

Addressing safety of all users and creating Complete Streets were consistent themes throughout the master planning process. Improvements to Route 20 from Winding River Lane to Elks Drive/Fontana Drive are recommended to enhance both the pedestrian experience through landscaping and buffering, while also extending the 4-lane section to improve vehicle operations and capacity.

Examples of these infrastructure improvements are shown in the rendering above.

Cost: \$\$



Existing CAT stop at Pantops Shopping Center.

F CAT Service and Infrastructure Improvements

The 2018 Charlottesville Area Transit (CAT) Transit Development Plan recommends improving transit service and improving quality of infrastructure at bus stops.

In consistency, this Plan recommends that improvements be made to transit service and stops throughout Pantops, prioritizing the stops/routes with the highest use and need. This will expand travel choices and increase mobility for Pantops residents and commuters working/living in the City of Charlottesville. As traffic remains a major concern among residents, this project seeks to reduce single-occupancy vehicle use and mitigate vehicular traffic.

CAT service and infrastructure improvements will be funded as part of a broad transit funding agreement currently under development by the Regional Transit Partnership.

Cost: \$



Rendering of possible improvements to South Pantops Drive.

G South Pantops Drive Bicycle Improvements

Additional bicycle infrastructure is needed along South Pantops Drive in order to meet the Avenue design standards outlined in the Connectivity Chapter. A "road diet" is recommended to reallocate portions of the existing wide vehicle travel lanes for bicycle facilities, creating these needed facilities and slowing traffic speeds.

The road diet can be accomplished in the interim by restriping the existing pavement at a relatively low cost, but long-term designs should accommodate physically separated bike lanes.

Cost: \$

H Route 250 Medians and Turn Lanes (Eastern Phase)

Install medians and a continuous right turn lane for both east and westbound vehicular traffic on Route 250 from Town & Country Lane to Rolkin Road.

This project seeks to improve visibility, traffic management and maintain an adequate Level of Service along Route 250, from Town & Country Lane to Rolkin Road.

Cost: \$\$

Capital Projects



Rendering of Free Bridge Lane as a one-way "green street" with a contra-flow bike lane.

I Free Bridge Lane Green Street Conversion

Consistent with both the Connectivity and Parks and Green Systems chapters in this Master Plan, this project proposes converting Free Bridge Lane into a "green street" to improve connectivity to and from the Rivanna Greenway, Darden Towe Park, and the Riverbend Urban Center. It contributes a key linkage and green space to the broader green systems network in Pantops.

This project will convert Free Bridge Lane into a one-way, southbound street that is pedestrian, cyclist and car-friendly with landscaping and design to manage stormwater. The road condition will be upgraded to meet VDOT standards and should be coordinated with the proposed Riverside Village Park and Darden Towe Master Plan.

Cost: \$\$

J Darden Towe Shared Use Path

Currently, there are no sidewalks or bicycle paths along the Route 20 corridor north of Elk Drive or along Elk Drive, preventing connectivity to the northern edge of the Development Area and to the Old Mills Trail from areas east of Route 20. Constructing a shared use path along Elk Drive and Route 20 will improve bicycle and pedestrian connectivity and safety.

This project seeks to provide expanded accessibility to Darden Towe Park and should be coordinated with the Darden Towe Park master planning process.

Cost: \$

K State Farm Blvd/Hickman Rd/ Isham Avenue Roundabout

This project proposes to convert the intersection at State Farm Boulevard, Hickman Road, and Isham Avenue to a roundabout. This project will improve traffic operations and safety for all users.

Cost: \$\$\$

L Hansens Mountain Road/ Glenorchy Connector South

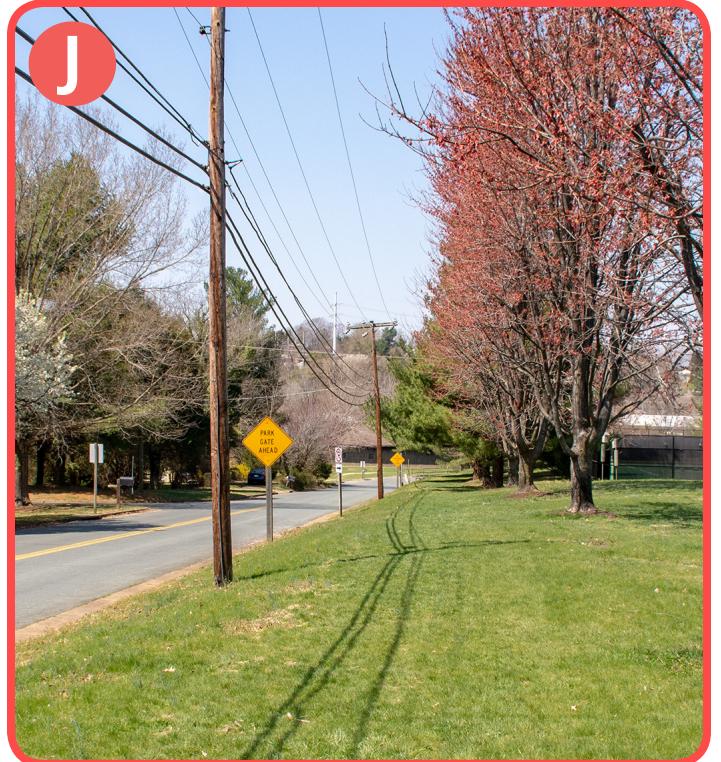
Improved access between Hansens Mountain Road and the future Gazebo Plaza development is expected. Timing of this should be coordinated with development.

Cost: \$\$\$

M Riverbend Drive Improvements

Improvements to Riverbend Drive from Route 250 to South Pantops Drive are needed to meet Boulevard design standards outlined in the Connectivity chapter. The goal of these road improvements are to expand pedestrian infrastructure and to support and facilitate redevelopment of this area as an Urban Center (see Future Land Use Plan) in Pantops.

Cost: \$\$



Current conditions looking west on Elk Drive.



Current conditions on Riverbend Drive.

Capital Projects

N Riverbend Drive/South Pantops Drive Roundabout

Alongside improvements to Riverbend Drive (Project M), the existing signalized intersection of Riverbend Drive and South Pantops Drive should be converted into a roundabout, with the goal of improving operations and safety for all users.

Cost: \$\$\$



Current conditions at Riverbend Drive and South Pantops Drive, facing south.

O Rolkin Road/Abbey Road Intersection Roundabout

This project proposes converting the existing 4-way stop intersection of Rolkin Road and Abbey Road into a roundabout, with the goal of improving operations and safety for all users.

Cost: \$\$

P Olympia Drive Extension to Route 20

The Future Street Network identifies extending Olympia Drive west from its terminus at Town & Country Lane to complete a parallel street network north of US 250. A portion of this network near Route 250 and Route 20 intersection is proposed to be completed with the Pantops Corner development, leaving a missing section near the Malloy Ford properties.

This project should be undertaken concurrent with redevelopment of the Malloy Ford property, which includes areas of preserved and managed steep slopes that will likely need to be disturbed to complete this connection.

Cost: \$\$\$



This oblique aerial photo (facing east) shows portions of the proposed Pantops Corner development and Malloy Ford sites. The conceptual road connections shown in red are proposed with the Pantops Corner development, and the connection shown in blue is the Olympia Drive extension in project "P".

The Malloy Ford site includes areas of preserved and managed steep slopes that will likely need to be disturbed to complete this connection.

Q Spotnap Road Extension to US 250/Town & Country Intersection

A connection between Spotnap Road, Route 250, and Town & Country Drive intersection will enhance connectivity between two major east west corridors in Pantops (Route 250 and South Pantops Drive).

Cost: \$\$\$

R Rolkin Road Extension to Spotnap Road

Alongside the extension of Spotnap Road (Project Q), extending Rolkin Road to Spotnap Road will improve east west connectivity between two Urban Centers.

Cost: \$\$\$\$



This oblique aerial photo (facing north) shows portions of the area between South Pantops Drive and Route 250. The Spotnap Road Extension (Project Q) is shown in blue, while the Rolkin Road Extension (Project R) is shown in red. The exact alignments of these projects should avoid disturbing steep slopes wherever possible to minimize environmental impacts and costs related to earthwork & grading.

Parks, Trails, & Greenways Projects



Trail connections are expected with new development and re-development to provide connectivity to existing and proposed greenways and parks.



The Rivanna River as viewed from the edge of the Pantops development area near the Eastern Trailhead park site.

RV Riverside Village Park

This park space is intended to provide an additional public park and open space near the Rivanna River, adjacent to the Riverside Village neighborhood. The design for this park space should be coordinated with the future design of the Free Bridge Lane green street and should provide connectivity to the Old Mills Trail.

The County received a \$30,000 cash proffer with the Riverside Village development for a park master plan, which should be used to engage the community and identify appropriate uses and facilities for the space.

Cost: \$\$

ET Eastern Trailhead Park

The Eastern Trailhead Park should provide an eastern access point to the Old Mills Trail near the proposed Martha Jefferson Hospital apartments. Future design and engagement is needed to identify final park elements, but trailhead parking, river access and historic and cultural programming should be provided.

Cost: \$

RR Rivanna Ridge Park

Phase 1: Land acquisition and design

Phase 2: Construction

Rivanna Ridge Park (final park name should be determined at time of park design) is intended to provide a public park space in southern Pantops, located behind Rivanna Ridge Shopping Center and north of South Pantops Blvd. The park space should provide opportunities for active and passive recreation and should provide a greenway connection to the River, State Farm Blvd, and adjacent developments. A park master plan should be completed to identify appropriate park facilities.

Cost: \$\$



This aerial photo (facing northeast) shows the general area of the proposed Rivanna Ridge Park.

NT Neighborhood Trails

Ongoing work is needed to enable interested neighborhoods and new developments to connect to the parks and green systems within Pantops. Connections identified on the Parks and Green Systems Map and connections to the River, Old Mills Trail, and Darden Towe Park should be prioritized.

Cost: \$

GC Riverbend Urban Center Greenway Connection

Currently the only public access point from the Riverbend Urban Center to the Old Mills Trail and River is at Free Bridge Lane. This project is intended to provide an additional access point or points to the River from the Core Area of this Center. Timing should be concurrent with redevelopment in this area, or alternatively, as a capital project completed in partnership with the current property owner.

Cost: \$

Glossary

Affordable Housing: Albemarle County defines affordable housing as "housing affordable to households with income not exceeding 80% of the area median income established by the U.S. Department of Housing and Urban Development adjusted by family size". For rental units, expenses include monthly rent and utilities, while for for-sale units, expenses include the mortgage, taxes, and interest paid. The County does not have a local housing authority, however it does contribute funds toward vouchers and the creation of affordable rental units. Affordable housing is also created through state and federal funding, as well as incentive programs such as Low-Income Housing Tax Credit (LIHTC).

Basic Industry: An industry or firm that produces goods primarily for consumption by external customers, bringing new revenue into the local economy.

Building Footprint: The amount of land area (square footage) a building takes up with its first floor. Large-scale commercial uses, such as single-story big-box stores and malls, have large building footprints.

By-right: Development and land uses that can occur by administrative review, rather than legislative review (involving the Board of Supervisors). If the application or proposal meets the requirements of the County's Zoning Ordinance and other relevant codes, the application must be approved.

Complete Streets: Streets designed to safely accommodate all modes of transportation, including bicyclists, pedestrians, motorists, and transit users.

Comprehensive Plan: A document that lays out the community's developmental aspirations and long-term vision for the community. The Comprehensive Plan is a policy document intended to act as a guide future decisions and development. The Comprehensive Plan is does not carry the force of law, but can inform County Ordinances, budgets, and other policy decisions.

Density (dwelling units/acre): When used in planning, refers to the concentration of people, buildings, or streets in an area. Density is typically expressed in terms of dwelling units per acre. A higher number of units per acre has a greater density than a smaller number.

Dwelling Unit: A single unit providing complete, independent living facilities for one or more persons. Type of dwelling units include: Single-Family Detached

(units that do not share any walls with other units, or standalone houses), Single-Family Attached (units that do share walls, such as a townhouse or duplex), and Multi-family (multiple dwelling units within one building or complex, usually in the form of apartments or condos).

Economic Development: The process through which a community works to make its transaction of goods and services, resources, or market responsiveness more sustainable and resilient.

Ecosystem Services: The processes that nature inherently carries out that provide benefits to humans, such as water and air filtration and flood control.

Façade: The front of a building.

Flex Space: Space designed for a variety of employment uses, which may include: administrative or other office space, Research & Development (R&D), laboratories, and even small assembly or manufacturing areas.

Grading: Ensuring a level base or re-shaping the land to have a specified slope.

Green Infrastructure: Consists of the interconnected network of biologically active land such as forest, streams, marsh, and grassland that support native species, maintain natural ecological processes, sustain air and water resources and contribute to health and quality of life.

Greenfield: Undeveloped or vacant land.

Heat Island Effect: Describes the phenomenon of built and paved surfaces retaining heat and making predominantly urban areas up to 5.4° F hotter than rural areas during the day and up to 22° F hotter during calm nights.

Human Scale: Human scale refers to urban design for pedestrians, or how a space looks and feels to a person walking through and using it. A buildings' location on the lot in relation to the street, the height and massing, and architecture all contribute to human scale.

Infill Development: Building in the under-used parcels of already-developed areas. This increases building density and land conservation.

Intermittent Stream: A stream that carries water a considerable portion of the time, but that ceases to flow occasionally or seasonally.

Land Use: The purpose that a lot or group of lots is being used for, such as commercial, institutions (e.g. schools), residential, or office.

Mixed-Use: A variety of land use types in the same area or within the same building. For example, a mixed use building could be one that has stores and restaurants on the ground story and apartments in the upper stories.

Multimodal: accommodating or consisting of several different transportation types or modes (e.g. bicycle, transit, etc.).

Node: A center where much of a development's activity occurs, whether economic, social, or transportation.

Perennial Stream: A stream that has continuous flow in parts of its stream bed all year round during years of normal rainfall.

Preserved Slopes: Slopes of twenty-five (25) percent or greater within the County's Development areas that are designated for preservation and as depicted on the County's Zoning Map.

Public Amenity Spaces: Indoor or outdoor communal spaces that can be used for social or recreational activities. These include plazas, trails, and civic centers.

Relegated Parking: Parking that is located behind or to the side of buildings relative to the street. Relegated parking to the side should be set back further than the building and screened from the street.

Research & Development: Uses including design, experimentation, development of prototypes, engineering, scientific applications, and administration. Includes fields such as medical technology, communication systems, transportation, multi-media, and development of electronic technology, communication systems, or information systems. Development, construction, and testing of prototypes may be associated with this use.

Right-of-Way (ROW): A general term denoting land or property, usually in a strip, acquired for or devoted to a street, which can include the travel lanes, bike lanes, planting strips, medians, and sidewalks.

Setbacks: The minimum or maximum distance a building must be from the street, sidewalk, edge of a parcel, or another boundary. Setbacks can be for the front, rear, and sides of a building.

Small Area Plan (SAP): A specific plan for a portion of the locality's jurisdiction. It is often tailored considering the challenges and goals unique to the SAP's boundary.

Stepbacks: A break in the face of a building made by recessing the upper part back from the lower part. Stepbacks may be required over a certain height or a certain number of stories. They allow more sunlight onto the street below and create a more open overall feeling for pedestrians.

Stormwater Management: Facilities and activities that handle and treat the volume and pollution from water that runs off of impervious surfaces. This can be done through gray (pipes and water treatment plants) and green (plants and pervious methods) infrastructure.

Stream Buffer: A vegetated area near a stream. This shades and protects the stream for adjacent land uses and stormwater runoff. See Chapter 17 of the County Code for a detailed description of County stream buffer regulations.

Traditional Neighborhood Development (TND): A type of development that is classified by walkable neighborhood centers, diverse and easily accessible land uses, and interconnected streets (i.e. similar to the structure of neighborhoods prior to auto-oriented suburbs).

Transit-Oriented Development (TOD): The creation of compact, walkable, mixed-use communities centered around access to train or transit systems.

Urban Development Area (UDA): Places designated for higher density in a locality's comprehensive plan that incorporate the principles of Traditional Neighborhood Development. Further criteria are described in §15.2-2223.1 of the Code of Virginia. UDAs may be eligible for assistance funded by the Office of Intermodal Planning and Investment.

Wayfinding: A form of real-time "spatial problem solving" through landmarks, architectural clues, lighting, and signage.

Zoning District: An area that is designated for certain uses as permitted by the Zoning Ordinance.

Zoning Code/Ordinance: A law that determines whether certain uses and designs are allowed under the district in question. May also regulate lot size, placement, bulk, density, and the height of structures.

Community Engagement & Feedback



Master Plan Update Process

1/22/2018 Kickoff - Open House for Pantops community - Albemarle Co. Office Building McIntire

2/26/2018 Public Meeting Topic 1 – Land Use and Pantops Development Area Boundary north of I-64

3/26/2018 Public Meeting Topic 2 – Traffic and Transportation

4/23/2018 Public Meeting Topic 3 – Parks, Recreation & Greenway Trails

5/21/2018 Public Meeting Topic 4 – Economic Development (including Shadwell Interchange) and Redevelopment

6/25/2018 Public Meeting Topic 5 – Implementation and Prioritization

7/2018 Staff Work - synthesize feedback and prepare draft of major concepts for the public

7/23/2018 Pantops Community Advisory Committee (PCAC) Meeting - staff presents overview of concepts to PCAC for feedback and updates on progress of Rivanna River Corridor Plan

8/2018 Staff Work - synthesize feedback and prepare draft of major concepts for the public

8/27/2018 PCAC Open House with PCAC and Pantops community for comment(s) on proposed plan

8-9/2018 Staff work – continue to refine major concepts for Master Plan update

9/24/2018 PCAC worksession – PCAC endorsement of parks and greenways and economic development

10/22/2018 PCAC worksession – endorsement of land use and guiding principles

11/19/2018 PCAC worksession – endorsement of transportation and implementation

12/11/2018 Planning Commission (PC) worksession – land use, transportation, parks & green systems

2/5/2019 Planning Commission (PC) worksession – implementation

3/6/2019 Board of Supervisors (BOS) worksession – all topics

3-4/2019 Staff Work to refine concepts, write text, prepare final draft

5/14/2019 Tentative PC Public Hearing and recommendation to Board of Supervisors

5-6/2019 Staff Work to refine plan for BOS (if applicable)

6/19/2019 Tentative BOS Public Hearing – adoption of plan



Relationship to 2008 Master Plan Land Use

Through engagement with the Pantops Community Advisory Committee and input from the public, the future land use types have been reclassified since the 2008 Master Plan update to better reflect and align with other Development Area master plans and the Comprehensive Plan.

The Future Land Use Plan replaces the "Pantops Master Plan Framework Plan" map that was created with the 2008 Master Plan. The future land use classifications recommended on some properties have been updated to reflect the type, character, and density of uses that currently occupy developed parcels throughout Pantops. The future land use classifications called for on properties which remain undeveloped have been refined in order to allow development patterns that follow the community's vision and goals for Pantops.

Another key theme of the land use chapter is to bring consistency between the future land use classifications and the existing primary zoning district on some properties. The intent is to minimize inconsistencies between by-right development scenarios that are not subject to review under the Master Plan land use recommendations, and the expectations of the community.

Pantops Development Area Boundary Discussion

As part of the public input process, changes to the Pantops Development Area boundaries were considered. Discussion on this topic centered on whether properties south of I-64 in the Shadwell Interchange should be brought into the Development Area. Several properties south of the interchange are currently within the Comprehensive Plan Rural Area boundary, but feature primary zoning districts other than RA. Final consensus between the public and County staff was that the Pantops Development Area boundary should not be altered or expanded with this update. The topic will be reevaluated during the next update process and particular attention will be paid to properties within the Shadwell Interchange area south of I-64.

Pantops Community Advisory Committee

The Pantops Community Advisory Committee (CAC) will provide assistance, feedback and input to County staff and the Board of Supervisors on community and county efforts related to implementation and support of the adopted Master Plan, in accordance with established county procedures. CAC members will communicate with their constituencies to increase understanding of and support for successful implementation of the Master Plan.

The membership is broad-based to incorporate a variety of perspectives and ideas and to provide citizens, business people, and representatives of community groups a chance to be engaged and to be heard in a constructive and meaningful way.

Citations & References

Image Citations

Free Bridge, Charlottesville, Virginia. Charlottesville, VA: University of Virginia Library, undated.

Gillick Printing, Inc. Town and Country Motor Lodge. Cardcow.com. Accessed March 2019. <https://www.cardcow.com/296069/town-country-motor-lodge-charlottesville-virginia/>

LeRoy, Inc. White House Motel Court & Restaurant. Cardcow.com. Accessed March 2019. <https://www.cardcow.com/492842/white-house-motel-court-restaurant-charlottesville-virginia/>

Historic Information

Nolting, Lindsay, and J. Stephen Pence. "Rivanna River History." Rivanna Conservation Alliance. February 1996. Accessed April 2019. <http://www.rivannariver.org/wp-content/uploads/2015/02/RCS-Rivanna-River-History.pdf>

Pawlett, Nathaniel Mason. "Albemarle County Roads 1725-1816." Charlottesville: Virginia Highway & Transportation Research Council, January 1981, revised September 2003. http://www.virginiadot.org/vtrc/main/online_reports/pdf/81-r36.pdf

Pawlett, Nathaniel Mason, and Howard J. Newlon, Jr. "The Route of the Three Notch'd Road: A Preliminary Report." Charlottesville: Virginia Highway & Transportation Research Council, January 1976, revised September 2003. http://www.virginiadot.org/vtrc/main/online_reports/pdf/76-r32.pdf

Schwartz, Kenneth. "A Brief History of the Rivanna River." Charlottesville Urban Design and Affordable Housing. Institute for Advanced Technology in the Humanities. Last modified July 28, 2005. Accessed April 2019. <http://www2.iah.virginia.edu/schwartz/vhill/rivanna.html>

Referenced Plans

Thomas Jefferson Planning District Commission & Piedmont Environmental Council. Jefferson Area Bicycle and Pedestrian Plan. 2019. <http://tjpcdc.org/transportation/jefferson-area-bike-and-pedestrian-plan/>

The Journey Through Hallowed Ground Partnership & Rhodeside & Harwell. Journey Through Hallowed Ground/The Living Legacy Project Master Plan. 2014. http://lhp.hallowedground.org/LLTPP_Master_Plan.pdf

Albemarle County Community Development. Biodiversity Action Plan. June 2018. <https://www.albemarle.org/department.asp?department=cdd&relpage=22534>

Albemarle County Community Development. Comprehensive Plan. June 10, 2015. <https://www.albemarle.org/department.asp?department=cdd&relpage=3969>

Demographics & Mapping Data

All maps, graphics, and geospatial data layers produced by Albemarle County Community Development unless otherwise stated.

Crash & Traffic Data (2011-2017) from Virginia Department of Transportation.

Historic Aerial Imagery for 1937, 1974, 1990, 1996 obtained from the University of Virginia Library Geoportal. <https://geoportal.lib.virginia.edu/UVAlImageDiscovery/>

Impaired stream information from Virginia Department of Environmental Quality Final 2016 305(b)/303(d) Water Quality Assessment Integrated Report.

Oblique aerial imagery from Pictometry © Copyright 2018 EagleView.

Population estimate by Albemarle County Community Development, March 1, 2019 for Certificates of Occupancy Issued Through 1/22/2019.

Street section on p.68 from Google Maps StreetView.

Tree canopy analysis produced using 2016 LIDAR data from the Virginia Geographic Information Network (VGIN) and 2018 aerial imagery from the United States Department of Agriculture (USDA) Farm Service Agency's National Agriculture Imagery Program (NAIP).

U.S. Census Bureau. American Community Survey: 2013-2017 American Community Survey 5-Year Estimates, Table S0101 Age & Sex, S0801 Commuting Characteristics By Sex. DP02 Selected Social Characteristics in the United States. Accessed February 28, 2019 using American FactFinder. <http://factfinder.census.gov>

U.S. Census Bureau, OnTheMap Application and LEHD Origin-Destination Employment Statistics (Beginning of Quarter Employment, 2nd Quarter of 2002-2015). Accessed March 6, 2019 using OnTheMap 6.6. <https://onthemap.ces.census.gov/>

Funding Sources & Implementation

[funding sources removed from Implementation chapter - bring in table from Rio29 here]

The County's Capital Improvements Program (CIP), based on a two-year financial cycle, is the final authority for funding policy, including funding level, timing and sources associated with specific improvements. The actual programming of projects in the CIP will be based on priority needs and availability of funding from the sources anticipated in this section. The County will take the lead in initiating projects and coordinating with other entities such as the City of Charlottesville and the Virginia Department of Transportation (VDOT). In some instances, initiatives will be joint projects and the project manager would not necessarily be the County.

Rio29 summary below

Smart Scale

Smart Scale grants are funded through State and Federal Transportation appropriations and are awarded to Virginia's most critical transportation needs. Albemarle County can apply for projects that address VTRANS needs identified for Corridors of Statewide Significance (CoSS), regional networks, Urban Development Areas, or Safety with a resolution of support from the Charlottesville-Albemarle Metropolitan Planning District Commission (C-A MPO). The C-A MPO may also submit applications on the County's behalf for needs identified on CoSS or Regional Networks (with a resolution of support from the County). Albemarle County is in Tier 1 population threshold and can submit a maximum of 4 applications for each two-year application cycle.

Revenue Sharing

A VDOT grant for federal and state transportation funding in which the locality and VDOT share the cost of the transportation project. 50% of funding comes from state/federal sources, and 50% from local county/private funds, where multiple parties can contribute.

Transportation Alternatives

This grant is used to fund a wide range of projects that support alternative modes of transportation, including pedestrian and bicycle facilities, recreational trails, safe routes to school projects, community improvements such as historic preservation and vegetation

management, and environmental mitigation related to stormwater and habitat connectivity. It is funded through the U.S. Department Of Transportation.

Virginia Department of Rail and Public Transportation (DRPT) Grants

DRPT provides grants for public transportation and commuter services that include funding for planning, operating, and/or capital expenses. Numerous grants are awarded each year to public entities and local governments and typically require a small project match.

Albemarle County Capital Improvement Plan (CIP)

A portion of Albemarle's budget is dedicated to the Capital Improvement Plan (CIP). All public facilities, infrastructure projects and capital equipment must be in the CIP to become reality. The CIP is based on the County's physical needs and development and looks forward 5 - 10 years.

Private Development

Developers may fund projects that are particularly attractive to them. They can also contribute to County funds to yield higher grant matches.