

# Crozet Master Plan

ADOPTED MONTH XX, YEAR



# Crozet Master Plan

ALBEMARLE COUNTY, VIRGINIA

ADOPTED MONTH ##, YEAR

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# Table of Contents

## Introduction

About This Plan	I - 6
Guiding Principles	I - 7
Historic Context	I - 8
Crozet Today	I - 12
Key Challenges and Opportunities	I - 14

## Transportation

Overview & Background	T - 4
Crozet Bicycle & Pedestrian Network Plan	T - 6
Future Street Network Plan	T - 10
Intersection Improvements	T - 12
Street Typologies	T - 15
Transit & Transportation Demand Management	T - 18
Transportation Goals & Recommendations	T - 20

## Land Use

Overview & Background	LU - 4
Crozet Future Land Use Plan	LU - 6
Crozet Centers & Districts Plan	LU - 8
Future Land Use Typologies	LU - 10
Urban Design Guidance	LU - 14
Other Areas	LU - 24
Land Use Goals & Recommendations	LU - 26

## Conservation

Overview & Background	C - 4
Crozet Parks & Green Systems Plan	C - 6
Parks & Trails	C - 8
Other County-owned Properties	C - 13
Biodiversity, Natural Resources & Green Systems	C - 16
Cultural and Scenic Resources	C - 21
Conservation Goals & Recommendations	C - 24

## Implementation

Overview & Background	IP - 4
Catalyst Projects	IP - 6
Future Projects	IP - 18
Ongoing Projects	IP - 36

## Appendix\*

Glossary	<i>(in development)</i>
Community Engagement & Feedback	<i>(in development)</i>
Current Zoning & Future Land Use	<i>(in development)</i>
Middle Density Residential	A - 4
Crozet Parking Study	A - 10
Crozet Transportation Study	<i>(in development)</i>
Citations & References	<i>(in development)</i>

\*The Appendix is currently under development, existing draft sections are included in this document. Missing sections will be added in subsequent drafts.





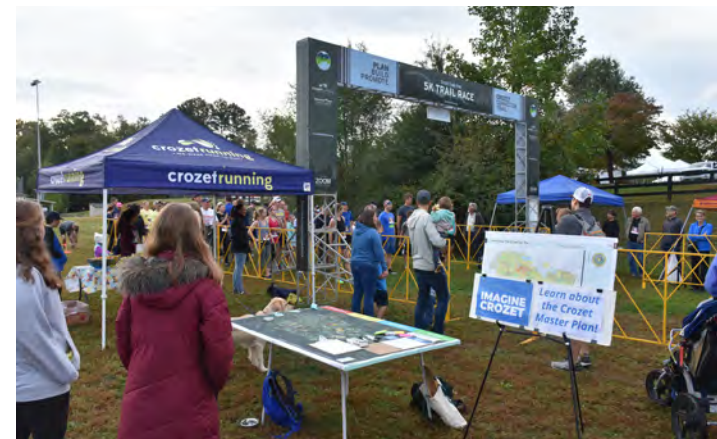
# Introduction



# About This Plan

This Master Plan document provides long-range policy direction for land use, transportation, and parks and green systems for the Crozet Development Area. It includes related recommendations for housing, economic development, historic and cultural resources, and rural connections. This Plan serves as a guide for elected and other public officials and County staff by establishing policies and priorities. The Plan is used for funding allocation, such as Capital Improvement Program funding, and to evaluate development proposals that require legislative review and approval. Each Chapter includes specific actionable recommendations to implement the Goals, which are further detailed in the final Implementation Chapter of the Plan. The Plan expresses the community's vision and priorities, including centers of activity, guidance for new development and redevelopment, creating a multimodal connected network, and enhancing parks and natural resources.

Crozet is one of Albemarle County's five Development Areas, also known as Growth Areas. Each Development Area has its own Master Plan, which is considered part of the County's Comprehensive Plan. Crozet is designated as a 'Community' in the Comprehensive Plan, as it is not adjacent to any other Development Areas or the Urban Ring and is expected to include a variety of land uses and housing types. The Community is surrounded by the Rural Area and is near a variety of regional amenities, including Shenandoah National Park and the Blue Ridge Tunnel. Crozet has multiple centers of activity with shops, restaurants, offices, and parks, including The Square, Old Trail Village, Music Today/ Starr Hill, Clover Lawn, and Crozet Park.



(Above) Prior to the COVID-19 pandemic, County staff held pop-ups and office hours around Crozet, such as a pop-up about transportation at the 2019 Crozet Trails Crew 5K Race.

## Community Engagement and Plan Drafting

The Plan was developed through a community-driven engagement process that began in Fall 2019 and was completed in Summer 2021. During Phase 1, community members identified concerns, hopes, and priorities for Crozet during a series of workshops. Community feedback was used to draft guiding principles for each of the Plan's four chapters and to list focus areas for continued discussion. Community members worked with staff and elected and appointed officials during Phase 2 to co-create strategies to address the challenges and goals within each focus area. While the first several workshops of Phase 2 were in-person, the remainder of Phase 2 and all subsequent Plan engagement was done virtually due to the COVID-19 pandemic. Virtual engagement included both virtual public meetings and online questionnaires.

The Plan's strategies were refined during Phase 3 for specific policy and project recommendations for land use, transportation, and conservation. During the final Phase 4, the full Plan was drafted, reviewed, and adopted. This phase included work sessions on each Chapter with the Planning Commission and the Board of Supervisors. Community members provided input on prioritizing projects during Implementation workshops, which informed the final Implementation Chapter recommendations.



Due to the COVID-19 pandemic, beginning in spring 2020, much of the community engagement for the Master Plan update was conducted virtually through Crozet Community Advisory Committee meetings and community workshops using Zoom webinars and a digital engagement hub at PublicInput.com for online questionnaires.

# Guiding Principles

## Land Use

**Support and strengthen Crozet's history as a self-sustaining town, while ensuring that new and infill development is compatible in scale and design and provides housing choice for all community members.**

## Transportation

**Create a multimodal transportation network that is safe and accessible for all community members, regardless of age, race, income, and ability.**

## Conservation

**Enhance Crozet's natural beauty, existing natural resources, and the surrounding rural areas with an integrated network of parks and gathering spaces, trails, and natural areas that offer increased opportunities for outdoor recreation and protect natural resources.**

## Implementation

**Provide strategic & timely support for community partnerships, local economic development, policy changes, and capital investments to support a changing Crozet.**



# Historic Context

## Pre-History and Early Settlement (1737-1899)

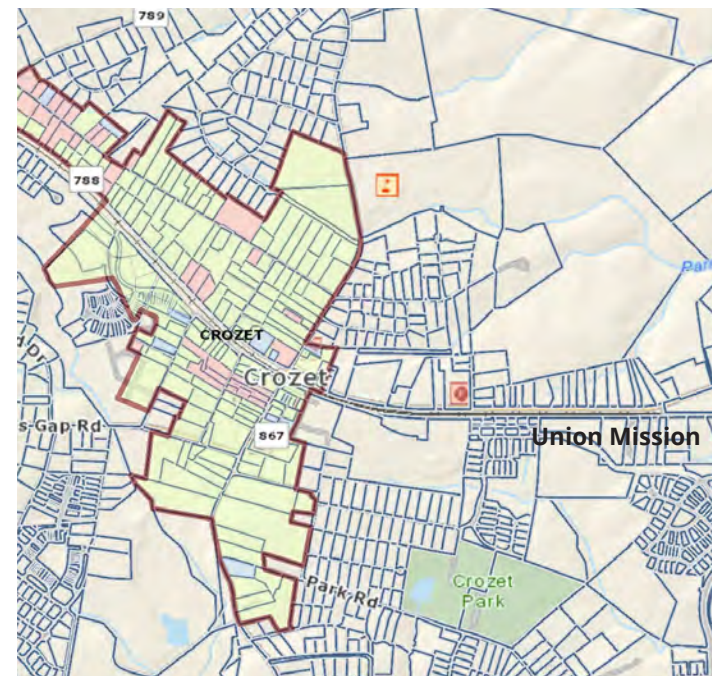
Crozet was originally known as 'Wayland's Crossing', named after the Wayland family, who were early land-owners and farmers in the area. From the mid 1700's until the late 1800's, the area was primarily farmland. While exact locations are not always known, the Monacan tribe is documented as living within Albemarle County, and may have historically been present in the Crozet area as well. Route 250 (Rockfish Gap Turnpike) was established as a major east-west connection chartered by the General Assembly in 1828. Communities such as Brownsville popped up along the turnpike around taverns, stores, and crossroads that supported travelers.

Wayland's Crossing was later renamed to Crozet for Colonel B. Claudius Crozet (1789-1864), who was a civil engineer and was the chief engineer for the railroad Blue Ridge Tunnel in nearby Afton. In 1876, the Chesapeake and Ohio Railroad (C+O) established a whistle stop in Crozet. This stop was requested by local farmers and by the Miller Manual Labor School (now the Miller School), which was founded that year. The C+O stop and related improvements, including upgrading the road between the Miller School and Crozet (now Crozet Avenue), resulted in both population and industry growth. The downtown Crozet area grew around the depot established for the C+O, which still exists today as the Crozet Artisan Depot (5791 Three Notch'D Road).

One of the earliest Crozet neighborhoods developed along St. George Avenue. Many properties started as farms, and were later developed due to the proximity to the railroad depot, especially in the late 1800's and early 1900's. Pleasant Green farm was an example of a larger farm that was later developed after the railroad depot was established. Around 1815, Benjamin Ficklin purchased 1,300 acres of land, which included much of present-day Crozet, and established the Pleasant Green Farm within this area. In the early to mid 1800's, enslaved laborers farmed fruit, tobacco, and livestock at the Pleasant Green Farm. As industry and job opportunities expanded, this land was divided and sold to provide more space for businesses and housing.

There is one National Register Historic District within the Crozet Development Area ('Crozet'; mainly along portions of Crozet Avenue and St. George Avenue) and one adjacent to the west in the Rural Area ('Greenwood-Afton Rural'). Both of these districts include properties and history that date back to the 1800's. The Yancey Mills (or Hillsboro) community dates back to the 1830's, and had grown significantly by the Civil War. These rural communities were often settled around community assets such as churches or schools. After the Civil War, rural free black communities were established and included Free Town, a portion of which still exists at Free Town Lane on the southern side of Route 250.

It should be noted that federal National Register Historic Districts do not provide protections for structures within their Districts. These Districts are mainly used for tax credit purposes and to document the historic significance of an area. Local historic districts or other local requirements are needed to regulate tear-downs and other alterations.



The map above shows the boundaries of the National Register Historic District in Crozet, outlined in red. Parcels with contributing (historic) structures are shown in light green. Parcels that are within the Historic District but that do not have historic structures are shown in light red. Parcels that need to be re-evaluated are shown in light blue.

The Union Mission neighborhood, to the east of the Historic District, is also labeled.

## Early 20th Century (1900-1940's)

In the early 1900's, the orchard industry was a significant part of Crozet's employment and local economy. In the 1930's, Crozet produced more Albemarle Pippin and Winesap apples than anywhere else in the state, and was known as the Peach Capital of Virginia. Crozet's location along Western Albemarle's transportation corridor also contributed to its economic development. Other significant businesses during this time included the Barnes Lumber Company, hotels, blacksmiths, millers, carpenters, automobile dealers, and apple-packing sheds.

Several existing buildings in Crozet are associated with its fruit production history. In 1912, what is now English Meadows assisted living in downtown Crozet was built as a cold storage facility for fruit. The building adjacent to Crozet Pizza (5796 Three Notch'D Road) was the Crozet Cooperage Company and Fruit Grower's Building, which supplied crates and barrels for the apple/orchard industry. What is now Crozet Pizza was the office for that business.

As the orchard and other industries grew, demand for housing continued, as did the selling and subdividing of larger farm properties. Areas such as Hilltop Street and Myrtle Street were developed as subdivisions concurrent with the growth of the Barnes Lumber company and anticipating additional industry growth in Crozet. Homes were constructed along Railroad Avenue to serve as worker's housing for railroad and orchard employees.

## Union Mission

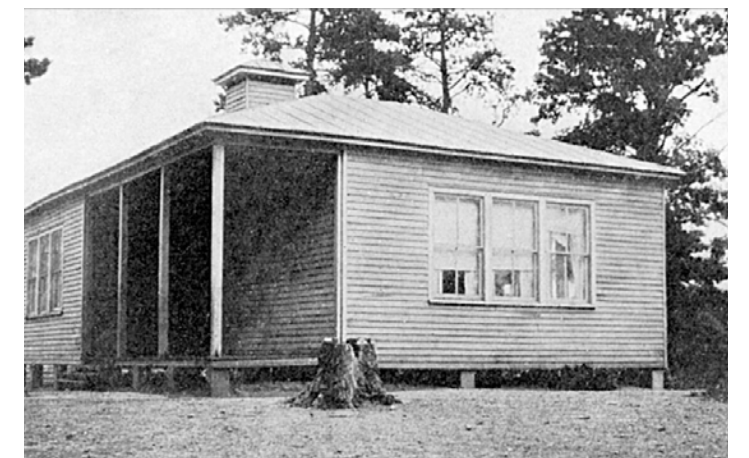
While the Union Mission community in eastern Crozet along Three Notch'D Road as existed for most of Crozet's history, it has often been left out of the narrative. Although this corridor east of the old railroad depot developed at the same time as Downtown Crozet in the early 1900s, it was not included in the Crozet Historic District nomination due to "a lack of integrity caused by a loss of its historic setting, feeling, and association with the development and growth of the African-American community in Crozet."

The community spanned much of Three Notch'D Road, but the area near Union Mission Baptist Church, which was organized in 1913, was one of its centers. Edgar Wesley, one of the church's founders trustees, and his wife Maggie lived in one of the homes across the street from the church, where they operated a small store next to their home. The store was a space where meetings of fraternal societies such as the Odd Fellows were held, and the Wesley family provided classroom space inside their home. Opportunities for education for the

African-American community lagged behind their white counterparts until a segregated school was established next door to Union Mission Church in 1916.

Students attended this school until the 7th grade before attending the Albemarle Training School on Hydraulic Road and later Jackson P. Burley High School on Rose Hill Drive, while white students learned at the Crozet School (originally on St. George Ave and then the Old Crozet School on Crozet Avenue). African-American students were later consolidated with Rosenwald schools in Greenwood and Ivy to Virginia L. Murray Elementary in 1960. The school building was razed in 1984, likely as it was no longer in use.

The Union Mission area included community leaders, educators, and business owners. As development and redevelopment in this area continues, it is important to preserve these histories that are less well-known or do not meet standards for "architectural significance".



(Above) The former Union Mission schoolhouse, which was used from 1916 to 1960. The building was razed in 1984.



## Postwar Crozet (1950's +)

After the decline of the orchard industry in the 1930's and 40's, Crozet's economy shifted in the early 1950's to manufacturing, with Morton Frozen Foods/ConAgra and Acme Visible Records opening during this time. The economic center of Crozet shifted east of the downtown area to a larger and more suburban form. These businesses were adjacent to the railroad, but were more dependent on the automobile to transport workers and trucks for exporting goods. Many buildings which were previously used to store apples and peaches were converted into commercial buildings and housing units. At one point, Morton Frozen foods was the largest employer in Albemarle County. These industries faded over time, with Acme Visible records closing in 2001 and subsequently requiring environmental remediation. The main Acme manufacturing building was torn down in 2013 to provide access to the soil and groundwater for remediation. Today, the Morton Frozen Foods building is home to MusicToday and Starr Hill Brewery.

## By the Numbers

Below are a few estimates about recent growth and development in Albemarle County and Crozet:

*approx.*  
**12.4%** of Albemarle County's Development Area population lives in Crozet.

*approx.*  
**12.3%** of Albemarle County's Development Area land is located in Crozet.

**12.8%** The percentage increase in number of dwelling units located in Albemarle County's Development Areas between 2013 and 2019.

**1.8%** The percentage increase in number of dwelling units located in Albemarle County's Rural Areas between 2013 and 2019.

## Recent Growth & Master Planning

Since 2000, there has been significant new development in Crozet. New development has occurred through a combination of rezonings for planned mixed-use communities (such as Old Trail Village and Wickham Pond) and by-right residential development. Many of these newer neighborhoods include both single-family detached and single-family attached (townhouses and duplexes) housing units. Several apartment complexes have also been developed since 2000, including the Vue and the Summit at Old Trail Village. Less than 10 percent of the total dwelling units in Crozet are multifamily (apartment) units. There has also been new commercial development along Route 250, including the Clover Lawn shopping center.

Crozet's first Master Plan was adopted in 2004, the County's very first Master Plan. The Crozet Master Plan was subsequently updated in 2010. During the past decade, there has been continued demand for housing in the Crozet Development Area. According to Census data, between 2011 and 2019 Crozet's population increased by 22.23 percent, while the County's population overall increased by 9.62 percent.

There are a variety of factors driving the population increases in Crozet and other Development Areas, including the Growth Management Policy in the Comprehensive Plan and demand for housing in the area.

The Growth Management Policy emphasizes that infrastructure is needed to support growth in the Development Areas. This includes transportation improvements, housing, parks and recreation, public utilities, public buildings and services (such as libraries), and schools. The Implementation Chapter of this Plan includes recommended Planning, Policy, and Capital projects for Land Use, Transportation, and Conservation. The Implementation Chapter also highlights projects that are 'ongoing', including those that are part of legislative application review. It should be noted that infrastructure capacity is evaluated with legislative applications, which include rezonings and special use permits. Implementation Projects support the goals of this Plan and the Comprehensive Plan's Growth Management Policy.

1957



1974



1990





# Crozet Today

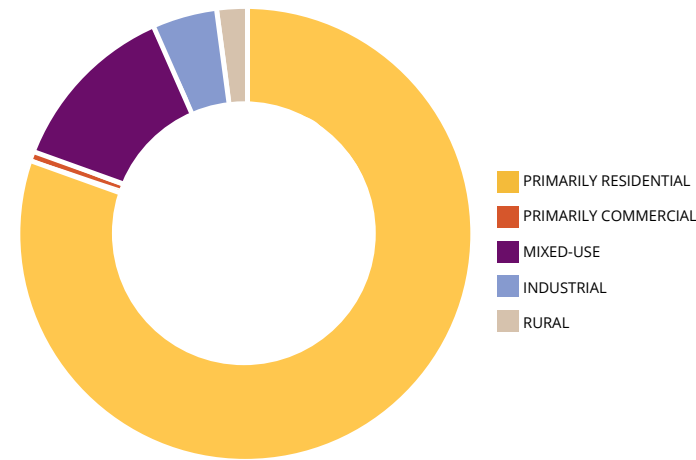
## Demographics

Selected statistics from internal population estimates and the 2019 American Community Survey 5-year estimates are shown in the following table for the Crozet Census Designated Place (CDP), which approximates the boundaries of the Development Area, as well as statistics for Albemarle County.

	Crozet CDP (Census Designated Place)	Albemarle County
Population Estimate	8,962	116,439
Median Age	41.5 years	39.1 years
% under 18 years old	28.4%	20.2%
% over 65 years old	17.1%	18.0%
Race	93.6% White 2.5% Black or African American 0% American Indian and Alaska Native 2.2% Asian 1.5% two or more races	81.8% White 9.5% Black or African American 0.3% American Indian and Alaska Native 5.2% Asian 2.4% two or more races
Poverty Rate	3.0%	9.1%

## Land Use Patterns

Compared with the County's Development Areas as a whole, Crozet has a relatively higher proportion of land zoned for primarily residential uses. Approximately two-thirds of the County's Development Areas are currently zoned for primarily residential uses, while approximately 80 percent of the Crozet Development Area is zoned for residential uses. Additionally, an estimated 50.14 percent of the land area in the Crozet Development Area is zoned Rural Area, R-1, or R-2 Residential.



(Above) Approximate land areas in Crozet dedicated to primarily residential, primarily commercial, mixed use (residential and commercial), industrial, and rural uses.

## Housing

The cost of housing is higher in Albemarle County compared with the U.S., while average housing costs in Crozet are also higher compared with the County overall. The following chart shows selected statistics from internal population estimates and the 2019 American Community Survey 5-year estimates. For comparison, the median housing value in the U.S. is \$217,500 and the median gross rent is \$1,062.

	Crozet CDP (Census Designated Place)	Albemarle County
Number of Housing Units	3,458	45,520
Median Housing Value	\$378,800	\$356,100
Median Gross Rent	\$1,437	\$1,273

While there have been recent developments in Crozet with a greater variety of housing types, the predominant housing type is still single-family detached, comprising approximately 58 percent of all housing units in Crozet. In 2020, approximately 54.31 percent of all of the housing units built in Crozet were single-family detached.

There are several housing developments for senior living and assisted living in Crozet, including Crozet Meadows, English Meadows, and the Lodge at Old Trail. Crozet Meadows is managed by the Piedmont Housing Alliance and is income-restricted housing.

## Employment and Commuting Patterns

The majority of commuters living in Crozet are driving to locations outside of Crozet to get to work. Only 5.8 percent of Crozet commuters both live and work in the Crozet CDP, compared with 40.3 percent of all Albemarle County commuters. The table below shows the total number of commuters coming into Crozet, out of Crozet, and remaining in Crozet, compared with totals for the County as a whole.

	Crozet CDP (Census Designated Place)	Albemarle County
Number Commuting In	936	36,275
Number Living and Working in Place	192	18,980
Number Commuting Out	3,114	28,101

Source: Census On the Map; Year 2018

Crozet has become a 'bedroom community' for commuters working in the City of Charlottesville and other areas of the County, due to the relatively lower number of jobs available in Crozet compared with Charlottesville and other areas of Albemarle. Crozet has a jobs to housing ratio of approximately 0.35, while a balanced jobs to housing ratio would typically be between 1.01 and 1.50. Route 250 and I-64 serve as major commuter routes for community members of Crozet to access Charlottesville and the County's Urban Ring.

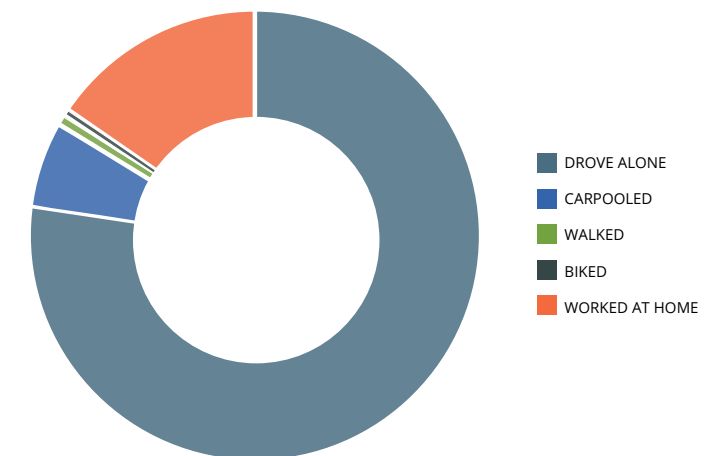
Jobs in Crozet are mainly concentrated in Downtown, Starr Hill/Music Today Employment District, and Old Trail Village. The top five industries, based on the percentage of total employees that are employed by those sectors in Crozet, are Health Care and Social Assistance, Accommodation and Food Services, Retail Trade, Administration and Support, and Other Services.

## Environment

There are many important water resources, habitats, topographic resources, and other natural resources both within the Crozet Development Area and in the surrounding Rural Area. Crozet is located approximately 10 miles from the entrances to Shenandoah National Park and the Blue Ridge Parkway. There are significant sensitive environmental resources within the Development Area, including preserved steep slopes and stream buffers. All streams in Crozet have stream buffers surrounding them, as Crozet is located within a water supply watershed.

The County's Biodiversity Action Plan (BAP) identifies Lickinghole Basin as an 'important site', which includes a small forest block and a variety of plant and animal species. The BAP also includes a 'Conservation Focus Area' just northwest of the Crozet Development Area, where land and forest protection are recommended. The Virginia Department of Environmental Quality has identified the following Crozet waterways as impaired, meaning they do not meet statewide water quality standards: Lickinghole Creek, Slabtown Branch, and an unnamed tributary of Parrot Branch. A Total Maximum Daily Load (TMDL) study is currently underway to address these impaired waterways.

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



# Key Challenges & Opportunities

## Downtown & Economic Revitalization

With the decline of the commercial fruit business and the closure of manufacturing plants, such as Morton Frozen Foods and ACME Visible Records, many of Crozet's largest employers left the Development Area. Today, Crozet is largely a bedroom community, with a greater number of people than jobs. The mismatch between jobs and population indicates that many residents are commuting to adjacent communities for work, such as the City of Charlottesville or Waynesboro.

With a significant proportion of the population leaving Crozet during regular business hours, fewer people are around to support businesses during the week, which can impact the ability for small local businesses to succeed. Further, as shown by the census data, the vast majority of commuters are leaving Crozet each day by single occupancy vehicle. This can cause traffic delays and long queues on local and regional roadways, especially during peak travel times. Long commutes are also a contributor to greenhouse gas emissions, with nearly 50% of the County's emissions coming from transportation sources, as found in a study in 2008.

There is an opportunity, especially with the redevelopment of Downtown, to achieve a more balanced jobs to population ratio within Crozet. New jobs within Downtown can help achieve the Land Use Guiding Principle to support and strengthen Crozet's history as a self-sustaining town. Co-benefits of adding more jobs within the Crozet Development Area include reduced traffic, cleaner air, and helping to support the County's goal to achieve net zero emissions by the year 2050. However, it is important to acknowledge that many jobs Downtown will be retail and service sector jobs. In order to achieve the benefits of walkable development patterns and centrally located jobs in Crozet, there must be viable housing options for Crozet employees of all income levels.

## Housing Choice & Affordability

As described earlier in this Chapter, the median housing value within Crozet is higher than both the County and national median home values. The majority of houses within Crozet are single-family detached homes, which tend to be larger and more expensive than most multi-family housing options. Often, in communities with expensive home values, public sector employees and those working in retail or service jobs can have difficulty finding housing they can afford.

Several of the older neighborhoods near Downtown contain smaller, modestly-priced single-family homes. Currently, these neighborhoods are providing affordable homes for residents living there. These homes are vulnerable to being torn down as they are sold and purchased by new owners, due to their proximity to Downtown and the rising housing and land values in the area. As growth continues, and as Downtown redevelops, important questions to consider and address include: How can the community support future growth that provides a variety of housing types and levels of affordability? How can affordability of existing homes be maintained? Could creatively designed and appropriately scaled infill development be one solution to support housing near Downtown for current and future residents?

## Upholding Community History

Population growth over last 20 years has brought rapid change to the community of Crozet. New residential development has precipitated a rapid transformation of the natural and cultural landscape of the community. With new development, Crozet has also seen the loss of some buildings and homes that were important to the early founding and historic fabric of Crozet.

Efforts have begun to preserve and acknowledge Crozet's history. Several historic buildings in and near Downtown have been rehabilitated and put to new use. There is a National Register Historic District, established in 2009, that covers all of Downtown Crozet and some adjacent streets and neighborhoods. However, the National Historic District designation does not regulate the protection of contributing historic structures from demolition and compliance with guidance for historic protections is voluntary. Furthermore, the Crozet Historic District tells only a partial history of Crozet. Important narratives, such as that of the African American community in Union Mission, were left out

of the District. Union Mission, located just east of Downtown, was home to community leaders, educators, and business owners that were integral to Crozet's history. Union Mission was left out of the historic district because it did not meet certain criteria for its remaining structures that were identified in a 2008 study.

Additional historic preservation measures are needed to sustain and uphold Crozet's history and to protect important historic structures, landscapes, and stories. Efforts should be expanded to lift up lesser known histories and communities, even when there are not "architecturally significant" structures remaining intact from these communities. Further, it is imperative that identified implementation projects within the Master Plan, such as transportation and parks projects, involve the impacted community members and consider community members' voices and community histories in the planning and design of these projects.

## Expanding Transportation Choice & Connectedness

Many neighborhoods in Crozet lack connectedness to other neighborhoods, with several having just one or two entrances onto a main roadway, such as Crozet Avenue, Three Notch'D Road, or Route 250. Crozet lacks a connected street network in many areas due to the topography, the stream network, and the railroad traversing east to west through the Development Area. However, some neighborhoods when developing chose not to provide connections to adjacent streets to reduce "through traffic" on their streets.

The lack of interconnectedness of Crozet streets poses a challenge for multimodal transportation. Offering efficient and dispersed transit service is difficult and backtracking is often necessary when stops are located within disconnected neighborhoods. This, in turn, increases the commute times for transit riders. Disconnected roadways are a challenge for walking and cycling within Crozet, especially because many of the main roads lack facilities for walkers and cyclists such as sidewalks or bike lanes.

To address this challenge, new road connections should be identified when new development projects are designed and built. The County should also prioritize adding bicycle and pedestrian facilities on main roads, where the majority of users are expected to be. Additionally, the trail network should continue to be built out and utilized as an important piece of the bicycle and pedestrian transportation network of Crozet.



## Infrastructure to Support Growth

Rapid population growth has created additional pressure on Crozet infrastructure, such as roads and utilities, and community facilities, such as parks and schools. Many of the roads in Crozet were built several decades ago when much of Crozet was comprised of rural farmlands. These aging roads do not meet today's roadway standards for features such as curb and gutter and sidewalks and were never designed to carry the level of traffic that they are currently experiencing. Many of these older roads are within or adjacent to Downtown, an area that has seen a dramatic increase in use over the past two decades.

Crozet schools are also experiencing the effects of rapid population growth. Crozet Elementary schools is currently over capacity and a school expansion project is planned within the current Capital Improvement Program budget. Yet, other area schools are expected to reach capacity soon.

Demands and pressure on community roads and schools is expected to continue with the Downtown redevelopment and as other residential developments, such as Old Trail and Pleasant Green continue to build out. How can the County and County Schools proactively plan for expected growth in the coming years? Can Downtown roadways be retrofitted to meet the needs of current and future residents of Crozet? How can the County retrofit deficient infrastructure to fit the current and future needs of Crozet?





## Connecting to Rural & Regional Amenities

Crozet's proximity to rural and regional amenities makes it a destination for tourists, local visitors, and prospective residents alike. It is just a few miles from Shenandoah National Park, the Blue Ridge Parkway, and the Blue Ridge Tunnel. Due to its setting, Crozet has become a recreational destination, drawing road cyclists, mountain bikers, runners, and hikers alike. Crozet is also located in close proximity to popular breweries, farms, and orchards. It offers prominent views of the Blue Ridge Mountains from several vantage points within the community.

Currently, access to nearby destinations is mostly limited to automobile travel. Confident road bicyclists often cycle on rural roads around Crozet; however, residents and visitors who do not feel comfortable sharing roads with vehicular traffic must drive to reach the amenities around Crozet. With thoughtful planning and investment, Crozet has the potential to become a cyclist and hiking "hub" for the larger region. With safer facilities connecting bicyclists and walkers to nearby parks, trails, and other destinations, cyclists, walkers, and runners of all comfort levels will have options for longer trips. Furthermore, providing facilities in town such as convenient bicycle parking, bicycle repair stations, wayfinding signage, and areas to stop for meals or an overnight stay could offer both visitors and residents the ability to leave their cars behind to experience the beauty of the region.

## Watershed Protection

The Crozet Development Area is entirely within water supply watersheds for the County and the City of Charlottesville. Portions of northern Crozet, north of Route 240, are within the Beaver Creek Water Supply Watershed, which provides drinking water for Crozet. The remainder of the Crozet Development Area is within the South Fork Rivanna water supply watershed, which supplies drinking water the County's other Development Areas and the City of Charlottesville. This portion of the Crozet Development Area drains into Lickinghole Creek. The Lickinghole Basin was constructed as a sediment control facility that helps to protect the watershed by detaining sediment from new construction before runoff makes its way downstream into the Mechums River and ultimately the South Fork Rivanna Reservoir.

According to the Department of Environmental Quality (DEQ), there are streams within Crozet that are classified as "impaired", which means that they contain higher levels of pollutants than is found to be acceptable by DEQ. Lickinghole Creek is one of these impaired waterways. Protecting Crozet's waterways is especially important due to its location in drinking water watersheds. Because of this, Crozet is uniquely positioned to be an example of sustainable growth practices. Creative solutions are needed to clean Crozet's impaired waterways and to protect those that are not impaired. Traditional 100-foot wide wooded-buffers are not always possible along Crozet's streams due to its status as a Development Area. Creative solutions and green building and site design practices are essential to protect Crozet's and the County's waterways.

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An aerial photograph of a town with a blue transportation network overlaid. The network consists of solid blue lines for major routes and dashed blue lines for secondary routes. A white road network is also visible. A blue box in the top right contains text. A large white title is at the bottom left.

Create a multimodal transportation network that is safe and accessible for all community members, regardless of age, race, income, and ability.

# Transportation





The map above shows the existing street network (in white) in the Crozet Development Area.

# Overview + Background

## Transportation Overview

The Transportation Chapter establishes the Guiding Principle, Goals and Recommendations for the streets, transit, and pedestrian and bicycle network in Crozet. The Guiding Principle calls for “a multimodal transportation network that is safe and accessible for all community members, regardless of age, race, income, and ability.”

The subsequent pages of the Transportation Chapter identify specific Goals to further the Transportation Guiding Principle. Goals seek to address network connectivity, safety and access for all users, local and regional transit, downtown investment, and regional connectivity. Each Goal is supported with actionable Recommendations. The Future Bike and Pedestrian Network, Future Street Connections, Street Typologies Plan, and supporting narrative also serve to reinforce the Guiding Principle and Goals.

The Transportation Chapter closely relates to the Conservation Chapter of the Master Plan, especially as it relates to the bicycle and pedestrian network. The Conservation Chapter includes recommendations related to off-road facilities such as trails and some

shared-use paths that are separate and apart from the street network. The Transportation Chapter contains recommendations related to the bicycle and pedestrian network that is on or parallel to the street network.

Transportation is also highly dependent on Land Use. Albemarle County’s Comprehensive Plan highlights the important connection between the two, especially in reference to the Growth Management Policy. Growth and density are directed into the County’s Development Areas, which supports opportunities for multimodal transportation. Concentrating both residential and business growth provides the needed density for public transit and for walkability from residential areas to commercial and employment areas.

Enhancing the availability of options for walking, bicycling, and using transit aligns with the recently adopted Albemarle County Climate Action Plan. Providing options for community members to reach destinations without needing to use a single occupancy vehicle supports the County’s emissions reductions goals identified in the Climate Action Plan.

The Recommendations in this chapter are also intended to align with complementary regional planning efforts, including the Thomas Jefferson Planning District Commission’s (TJPD) Jefferson Area Bicycle and Pedestrian Plan and the Charlottesville Albemarle Metropolitan Planning Organization Long Range Transportation Plan, along with other regional transit, transportation demand management, and transportation planning documents.

## Existing Conditions

Throughout the Crozet Master Plan update, community members identified improving multimodal connectivity as an opportunity and traffic congestion as a concern. Top priorities included enhancing walkability within the Downtown area, around parks and schools, and to and from existing neighborhoods and destinations such as Downtown. Other priorities included addressing traffic delays, increasing safety of the bicycle and pedestrian network, and providing more multimodal options for commuting.

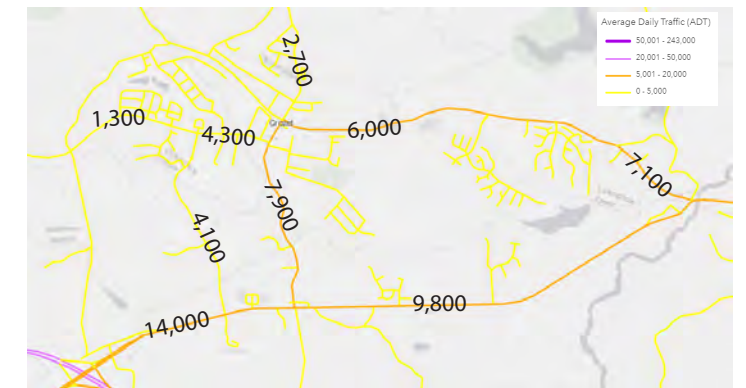
Currently, many of the main travel routes in Crozet lack sufficient bicycle and pedestrian facilities. Crozet Avenue, which serves as the central north to south connection within Crozet, and Three Notch’D Road, which serves as the northern east to west connection, both lack continuous bicycle and pedestrian facilities along their length. These roads carry high volumes of vehicular traffic and are key connections between neighborhoods, Downtown, and other Crozet destinations. The lack of bicycle and pedestrian facilities on these routes is a significant barrier to creating a connected multimodal transportation network within Crozet.

Gaps within the pedestrian network in existing neighborhoods also create barriers for walking. Missing segments of the sidewalk network, especially in eastern Crozet and within older neighborhoods surrounding Downtown, pose safety concerns for community members who wish to walk to Crozet’s schools, commercial and employment areas, and parks.

Traffic congestion was also a top concern shared by community members during this Master Plan update. Community members raised concerns about traffic congestion along Route 250, especially adjacent to the schools and at the Old Trail Drive and Crozet Avenue intersections. Traffic congestion within the Downtown area was also a top concern. A Transportation Analysis was completed as part of the Master Planning effort and to help inform future development of the street network and intersections within Crozet Square. The analysis confirmed community members’ concerns and identified issues related to the intersections along Route 250 and in Downtown.

Public transit and emerging transportation technology continue to gain importance in Crozet and County-wide. Currently, JAUNT provides commuter service between Crozet and Charlottesville with the Crozet CONNECT routes. In 2019, Crozet participated in a pilot program for an autonomous circulator shuttle. The AVNU (Autonomous Vehicle, Neighborhood Use) provided a transit route to connect neighborhoods with Downtown Crozet. The pilot program has since ended and there is currently no transit service providing routes within Crozet.

In response to the identified deficiencies, the Master Plan calls for intersection improvements in Downtown and on Route 250, additional street connections, and increased bicycle, pedestrian, and transit infrastructure. These recommendations include completing some of the previously identified projects in the 2010 Master Plan, prioritizing bicycle and pedestrian connections for Downtown and Eastern Crozet, and along Crozet Avenue and Three Notch’D Road. Additional intersection improvements based on the Crozet Transportation Analysis are also recommended.

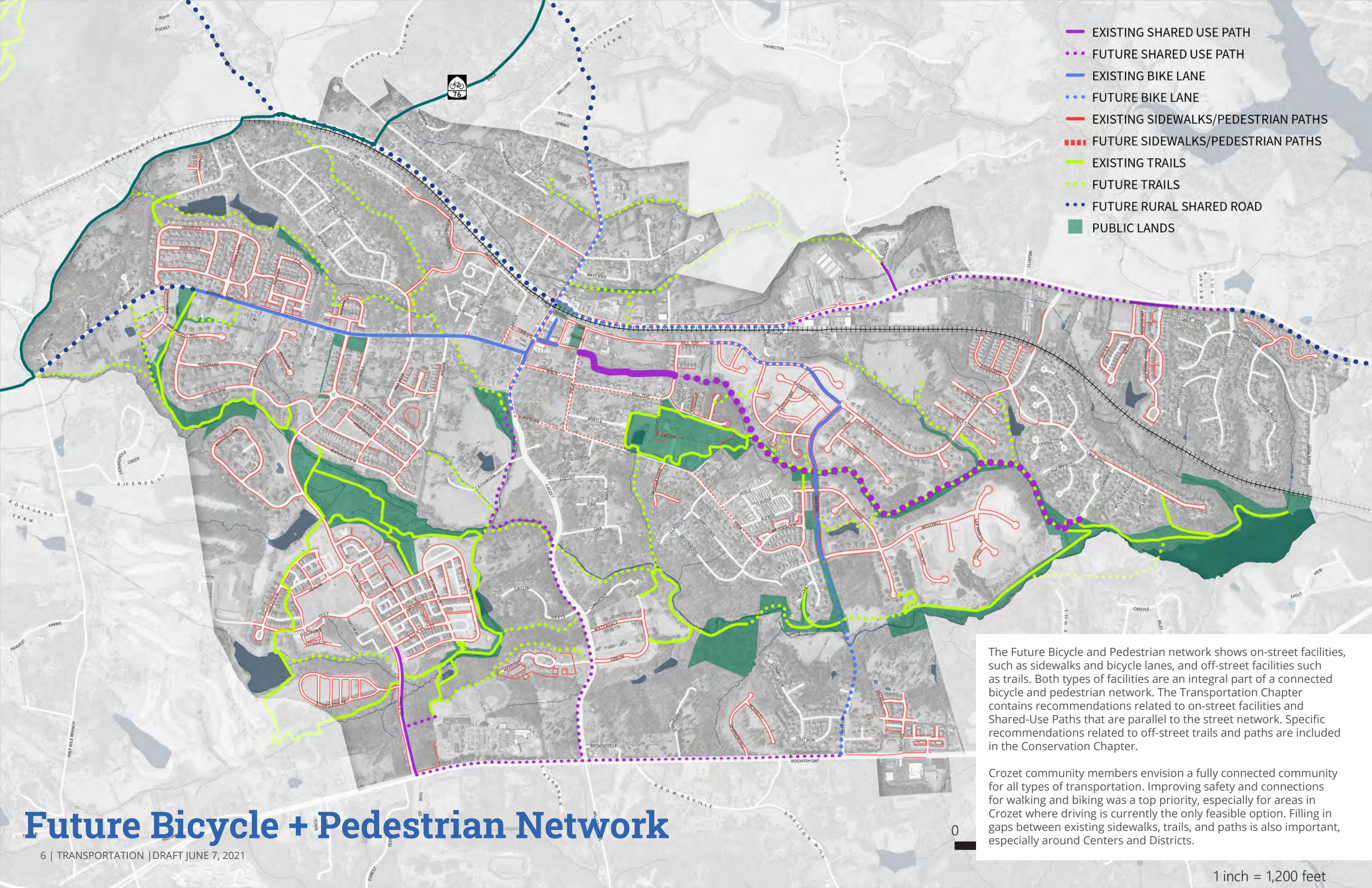


This map of traffic counts highlights the main routes in Crozet at Three Notch’D Road, Crozet Avenue, and Route 250. Approximately 14,000 vehicles per day travel along Route 250 between I-64 and Crozet Avenue.



Hot spot analysis of 2014-2020 accident data shows clusters (outlined in purple) along Route 250 West and in the Downtown area along Crozet Avenue and at the railroad underpass.





- EXISTING SHARED USE PATH
- ⋯ FUTURE SHARED USE PATH
- EXISTING BIKE LANE
- ⋯ FUTURE BIKE LANE
- EXISTING SIDEWALKS/PEDESTRIAN PATHS
- ⋯ FUTURE SIDEWALKS/PEDESTRIAN PATHS
- EXISTING TRAILS
- ⋯ FUTURE TRAILS
- ⋯ FUTURE RURAL SHARED ROAD
- PUBLIC LANDS

The Future Bicycle and Pedestrian network shows on-street facilities, such as sidewalks and bicycle lanes, and off-street facilities such as trails. Both types of facilities are an integral part of a connected bicycle and pedestrian network. The Transportation Chapter contains recommendations related to on-street facilities and Shared-Use Paths that are parallel to the street network. Specific recommendations related to off-street trails and paths are included in the Conservation Chapter.

Crozet community members envision a fully connected community for all types of transportation. Improving safety and connections for walking and biking was a top priority, especially for areas in Crozet where driving is currently the only feasible option. Filling in gaps between existing sidewalks, trails, and paths is also important, especially around Centers and Districts.

# Future Bicycle + Pedestrian Network



## Future Sidewalks, Trails, and 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. The Conservation Chapter includes recommendations about trails and off-road Shared-Use Paths (such as the Crozet Connector Trail). This chapter focuses on facilities that are adjacent or parallel to the street network.

As public spaces, sidewalks serve as the front steps to the Crozet 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 connected network within Crozet, with several east-west and north-south routes and an emphasis on connecting to Centers and Districts. There are also future rural and regional connections shown as Rural Shared Roads and potential Trails. Providing access to Mint Springs Park and Bicycle Route 76 were identified as important connections to the adjacent Rural Area.

During the Master Plan update process, community members prioritized several areas within Crozet for future pedestrian and bicycle improvements. Sidewalk connectivity in the Downtown area was identified as the highest priority for new sidewalks. The development of the Crozet Square site will also provide more pedestrian connectivity to and through Downtown in the near future.

Community members also provided input on the need for pedestrian and bicycle infrastructure in Eastern Crozet, especially from Highlands and Wickham Pond to points west. Much of Three Notch'D Road is currently unsafe for pedestrians and bicyclists, and there are opportunities to connect these neighborhoods to the Starr Hill/Music Today Employment District. Community members also identified the need for pedestrian access along Route 250 to provide safe connections for those traveling to and from nearby schools and the Clover Lawn Village Center.

The Future Bicycle and Pedestrian Network and Implementation Chapter recommend pedestrian projects that will improve these and other major corridors in Crozet. Several of these have been identified as priorities, while others are planned as longer-term improvements.

Based on community feedback, top priorities for pedestrian and bicycle network improvements include Phase 1 of the Three Notch'D Road Shared-Use

Path (connecting Highlands to Park Ridge Drive) and sidewalk connections between Downtown and Crozet Park. The sidewalk connection along Park Road, east of Crozet Park to Brookwood Road was identified as a top priority to provide connectivity between Crozet Park and neighborhoods to the east (2A). The Park Road sidewalk and Three Notch'D SUP are identified as Catalyst Projects in the Implementation chapter. Additional information about bike/ped priorities is in the Implementation Chapter of this Plan.

Shared-use paths along Route 250 on the north side and along the western side of Crozet Avenue will require additional study to determine their alignments. Future east-west trails may serve as interim solutions for providing pedestrian access for neighborhoods around Crozet Avenue. Further study and coordination with VDOT will be needed for providing a trail crossing at Crozet Avenue near Chesterfield Landing and The Meadows.

Providing safe and accessible routes for pedestrians and bicyclists may also include new lighting. A lack of lighting may create a barrier to walking or biking outside of daylight hours. New lighting should be balanced with the community's desire for protection of dark skies and should be full cutoff lighting when feasible. Currently, the County does not have a requirement for street lighting. Additional lighting recommendations are included in the Land Use Chapter of this Plan.



(Above) A section of Park Road, which currently lacks sidewalks. Park Road was identified by community members as a top priority for future sidewalks projects.

## Bicycle Routes & Regional Connections

High quality, safe and connected bicycle facilities have several benefits, including reduced traffic congestion, improved health outcomes for commuters, and increased visibility and sales for commercial businesses. A connected bicycle network that offers both on and off street facilities is needed to support this Chapter's Guiding Principle and to provide opportunities for cyclists of all comfort levels and abilities.

Currently, there are existing bike lanes along Jarman's Gap Road (Jarman Lake Road to Crozet Avenue), Eastern Avenue (Park Ridge Road to Westhall Drive), and Library Avenue. The Future Bicycle and Pedestrian Network proposes bike lanes along Three Notch'D Road from the Employment District to Crozet Avenue North, along portions of Crozet Avenue North, Park Ridge Drive, and the remaining portions of Eastern Avenue, once completed. Sharrows and other traffic calming measures should be added along the portion of Park Ridge Drive from Eastern Avenue to Three Notch'D Road, as the design of the road does not allow for bike lanes.

Bicycle routes that connect to Rural Area amenities and destinations outside of Crozet are expected to be a mix of on-street, shared bicycle facilities, and regional trail (shared-use paths) routes. Rural Shared Roads are identified on the Future Bicycle & Pedestrian Network to provide connections to Mint Springs Park and Bicycle Route 76. There is also a recommendation to improve signage to and from Bicycle Route 76 or to consider rerouting the bicycle route through Downtown Crozet.

As shown on the Future Bicycle and Pedestrian Network, many of the existing and proposed bike routes converge into a hub around Downtown. Bicyclists will be able to travel to and from Downtown using Jarman's Gap Road, Crozet Avenue, Three Notch'D Road, and Eastern Avenue (from extended Park Ridge Drive). Rerouting Bike Route 76 through Downtown or providing wayfinding signage would also support this area as a destination for bicyclists. As Downtown redevelops, adding bicycle parking and storage should be considered. This may be evaluated with future updates to the Downtown Crozet District as well.

The County's Comprehensive Plan includes a recommendation to create a regional trail network, extending from Charlottesville to points west including Crozet and the Blue Ridge Tunnel, called the Three Notched Trail. The Conservation chapter includes a recommendation to conduct a feasibility study to determine an appropriate route for the Three Notched Trail adjacent to or through Crozet. Based on the findings of this study, additional bicycle routes providing connections to and from this route may be identified.



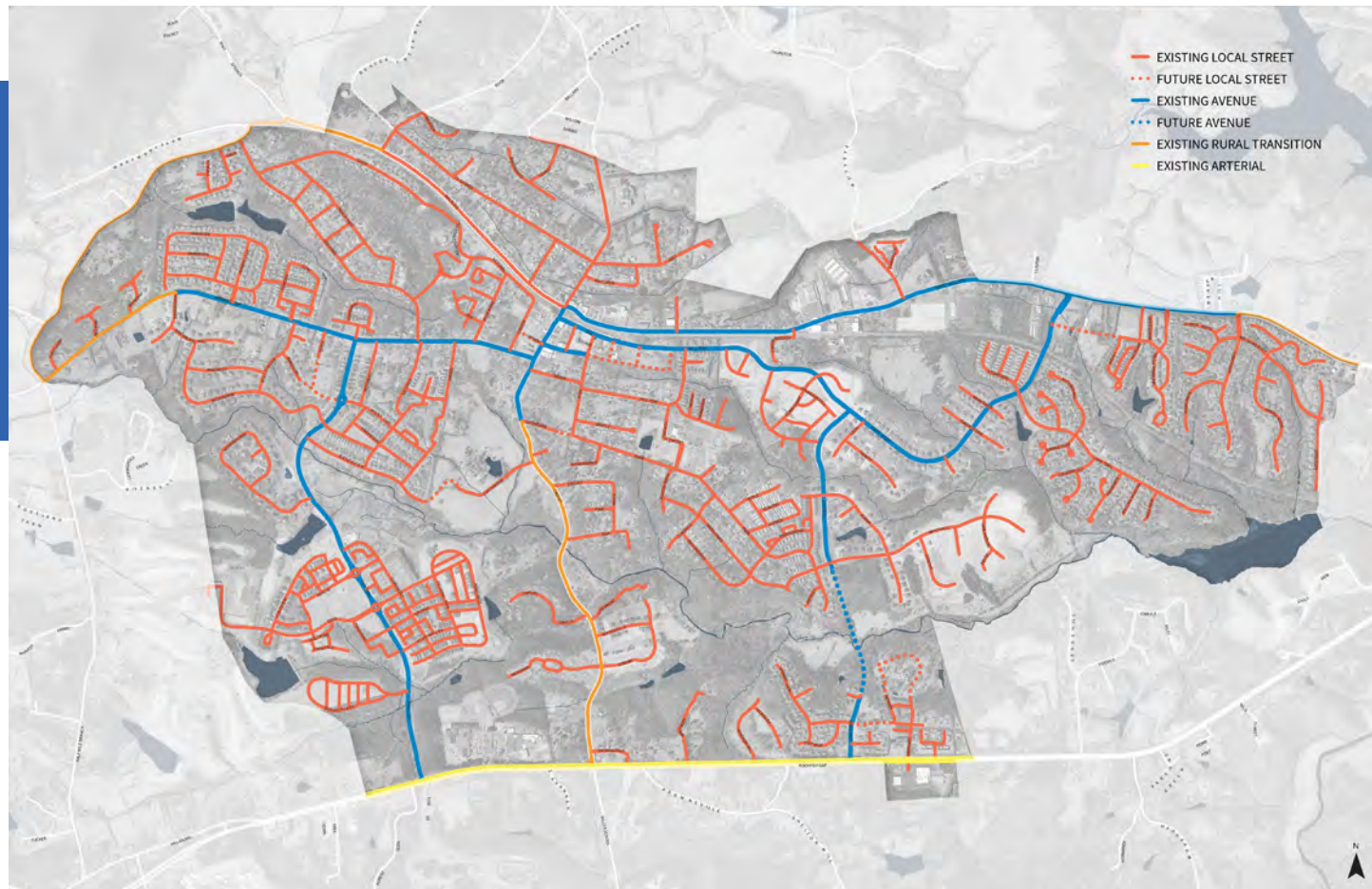
(Above) Existing bike lanes along Jarman's Gap Road.



(Above) An existing portion of the Three Notch'D Road Shared-Use Path, which will connect Eastern Crozet with Park Ridge Drive and eventually the Starr Hill/Music Today Employment District.



# Future Street Network



The map above shows the street typologies for each road in Crozet, as well as future street connections.

## Future Streets & Connections

Streetscapes should reflect a unified, “Complete Street” design that balances a wide variety of functions including: safe pedestrian, bicycle, and vehicular travel, public space, parking and loading, emergency access, and stormwater management.

The Future Street Network and supporting recommendations in this chapter envision a well-connected street network that can better enable movement within and between Crozet neighborhoods and Centers and Districts. Proposed streets should be Complete Streets, designed for all users – motorists, pedestrians, bicyclists, and transit riders. Streets within new development or streets that are upgraded as part of a redevelopment proposal should also be designed to achieve an interconnected street network and to provide new connections where possible. Existing streets should not be widened to add additional lanes for cars. Street right of ways may be widened to accommodate space for pedestrians and bicyclists, including for bike lanes.

Widening streets to add lanes for vehicles is typically a short-term and temporary traffic solution. Access to public transit, the ability to walk and bike, connecting the street network, and intersection improvements (such as roundabouts) are more effective for addressing traffic.

To encourage walking, biking, and transit, these routes should be inviting, safe, and enjoyable. For some destinations, the only feasible option will be to drive. For other trips, community members and visitors may choose to walk, bike, or hop on a bus, if these routes feel like a more attractive option. A shaded paved path or a dedicated bike lane may be more appealing than driving. The closer people are able to live to destinations, such as shopping, parks, and employment areas, the fewer miles they will need to drive. Reducing trips made by car and total miles traveled also reduces pollution from greenhouse gases and supports the County’s Climate Action Plan.

As shown on the Future Street Network, existing and proposed streets are categorized as Arterial, Avenues, Local Streets, or Rural Transition Streets. Within these

categories, specific types of pedestrian, bicycle, and parking may vary depending on the context and needs of the area. Additional guidance for each street type are provided in the Street Typology Section.

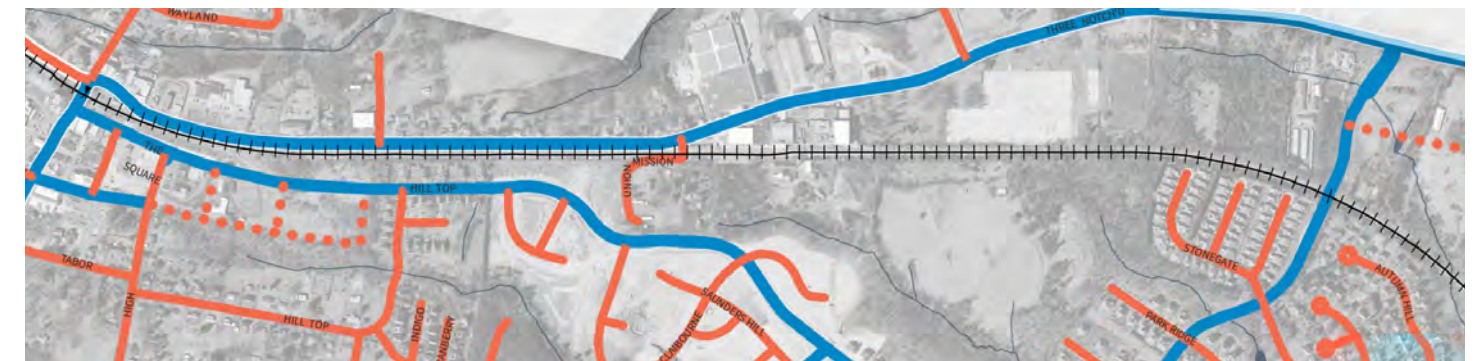
The Future Street Network shows new streets and new connections. Dotted lines convey the approximate locations of new streets or extended streets. Future streets are expected to be provided if and when the adjacent property develops or redevelops. New street locations are identified for the White Gate Farm property, north of Liberty Hall, at Cathaross Lane, and between Bradbury Court, West End Drive and Jarman’s Gap Road. These streets are all expected to be Local Streets, and final alignments should be determined concurrent with development.

A connection at Dunvegan Lane to Park Road is a recommended improvement from the Transportation Analysis. This connection would enhance connectivity and better distribute traffic, reducing nearby queueing and delays in the Downtown area. This two-lane local street should provide sidewalks and be accessible from a left turn lane on Crozet Avenue. An interim

improvement in this area could include converting Tabor Street into a right in and right out at Crozet Avenue.

Additional street “connections” should also be provided in areas where streets currently stub out or where there is an obvious opportunity for improved connectivity with streets ending just shy of an adjacent roadway. These connections are expected to be made if and when adjacent properties redevelop. Examples of future connections include: Millstream Drive to Jarman’s Gap Road, Rosthwell Lane to West End Drive, Killdeer Lane to Killdeer Lane, Haden Lane to Haden Terrace, Agatha Ridge Court to Jamestown Road, and Jamestown Road to Westhall Drive.

Where there are conflicts between future streets and existing or proposed trails, trail connectivity should be retained. On low traffic roadways, trail connectivity could be provided with at grade crossings, however for higher traffic roadways such as avenues, additional facilities such as crosswalks, signalization, trail tunnels, or bridges should be provided. Appropriate facilities for trail crossings should be determined in consultation with VDOT



The map above shows the study area for Recommendation 1D of this chapter, to conduct a feasibility study to determine if an additional railroad crossing is possible in northern Crozet, between Downtown Crozet and Park Ridge Drive.



The maps above show the approximate locations of future additional street connections where streets currently stub out or there are streets that nearly connect. These connections are expected if future redevelopment occurs.



# Intersection Improvements

The Crozet Transportation Analysis was completed by the consulting firm EPR, PC as part of this Master Plan update. The Transportation Analysis evaluates future conditions for the year 2045. The study evaluated intersections in Downtown Crozet and along the Route 250 corridor to determine how future development and traffic volumes will affect wait times, the length of car lines at intersections (queueing), and the overall level of service (LOS). The analysis proposes alternatives to address these issues, such as roundabouts, road connections, and turn lanes.

In Downtown, the study focused on intersections along Crozet Avenue between Tabor Street and Three Notch'D Road. The study found that there are some existing queueing issues on Crozet Avenue, and that this will continue to be the most significant future traffic issue in this area. Analysis of alternatives found that signals, even with the addition of turn lanes, or realignment of roads were not feasible; however, improving street connections and revising the Jarman's Gap and Crozet Avenue intersection would resolve future queueing issues.

Along Route 250, the study focused on the following intersections with Route 250: Old Trail Drive, the Schools, and Crozet Avenue/Miller School Road. The existing conditions analysis showed that there are current issues with queueing around the Schools (including Western Albemarle High School) and lower levels of service at Crozet Avenue. Future queueing and level of service issues can be addressed by adding roundabouts at these intersections.

Images shown on the following pages demonstrate what these proposed improvements could look like once completed. These images are conceptual, and the exact dimensions and layout will be determined during each project's design and construction.



The potential High Street connection (shown above) to the Square development will improve connectivity in the Downtown area and better distribute traffic, reducing queueing at nearby intersections. This connection will include a roundabout with full width lanes and sidewalks. Additional sidewalks along the west side of High Street may be constructed if redevelopment of properties on this side of High Street occurs.

## Downtown Crozet

The conceptual image (shown on the following page) demonstrates a potential configuration of a 'quadrant' intersection improvement on Crozet Avenue at Library Avenue. Left turns at Jarman's Gap Road/Crozet Avenue intersection, Library Avenue, and the connector street are restricted to improve the flow of traffic and reduce queueing. Further design work is needed for a finalized layout. While other intersection improvements were considered at this location, the quadrant intersection was found to provide a scale appropriate for Downtown and preserve more of the existing parking area for the adjacent church property. Coordination with affected and adjacent property owners would be needed during the design phase of work. This improvement could be phased, with the roundabout at Library Avenue constructed first.



The image above depicts Downtown Crozet, with potential 'quadrant' intersection on Crozet Avenue at Jarman's Gap Road and Library Avenue, alongside redevelopment of the Plaza.

The image below is a street-level view of a potential roundabout at Library Avenue and Crozet Avenue with bike lanes, pedestrian improvements and street trees.







The conceptual image above shows potential sidewalks and pedestrian crosswalks along Three Notch'D Road, outside of Starr Hill/Music Today.

## Route 250

The Crozet Transportation Analysis found that the addition of three potential roundabouts along Route 250 at Henley Middle School/Brownsville Elementary School, Old Trail Drive, and Crozet Avenue/Miller School Road would address future queuing and delay issues. Further design work is needed to determine a finalized layout. Additional study for pedestrian safety improvements is needed at Old Trail Drive and Route 250 at the crosswalk to Western Albemarle High School to enhance connectivity with the School.

## Three Notch'D Road/ Crozet Avenue

The Crozet Transportation Analysis did not find significant level of service or queuing issues at the Three Notch'D Road and Crozet Avenue intersection and did not result in any specific intersection recommendations. There is not sufficient area within the existing public right of way for a roundabout, and any intersection expansion would cause significant impacts to adjacent properties. The recommended intersection and connectivity improvements in Downtown are expected to sufficiently resolve future traffic issues in this area. Additionally, this Chapter recommends studying the possibility of an additional railroad crossing between Downtown and the Park Ridge Drive/240 intersection, which would also help distribute traffic.

# Street Typologies

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 and serve different functions along its length.

## Avenues

Avenues are intermediate-sized and medium capacity streets with low to moderate vehicular speeds. Examples of Avenues in Crozet are Jarman's Gap Road, Old Trail Drive, Eastern Avenue, and Three Notch'D Road. Avenues have two travel lanes, but should be designed to carry a significant volume of both automobile and bicycle and pedestrian traffic. Avenues should have dedicated bicycle and pedestrian infrastructure, or a nearby parallel or alternative route.

The Future Street Network does not propose any new Avenue road connections, other than the planned Eastern Avenue connection from Westhall Drive to Cory Farm Road. Several bike and pedestrian improvements are recommended, especially along Three Notch'D Road. There is an existing sidewalk on the north side from Music Today to the Three Notch'D railroad bridge in Downtown Crozet. A future shared-use path would connect the eastern neighborhoods to Starr Hill/Music Today, with bike lanes completing the rest of the connection to Downtown.

## Local Streets

Local Streets are low-capacity, low vehicular speed streets that form the majority of Crozet's street network. Examples of Local Streets in Crozet include Wickham Pond Drive, Claremont Lane, Orchard Drive, and Park Road. Several proposed future local street locations are identified on the Future Street Network, which build greater connectivity between residential neighborhoods and commercial areas. A well-connected local street network can help distribute traffic and provide multiple routes to destinations.

(Left) Library Avenue is an example of an Avenue in a mixed-use environment, that provides facilities for pedestrians, cyclists, and vehicles, as well as on-street vehicular parking.



(Above) A Local Street in the Wickham Pond neighborhood, with sidewalks, street trees, and street parking.



(Above) Portions of St. George Avenue have sidewalks and vehicular parking, while other sections do not have sidewalks or curb and gutter. As redevelopment/infill development occurs or funding is available, sidewalks should be constructed in aging neighborhoods to support a well-connected and safe pedestrian network.





Local streets should have dedicated sidewalks but typically do not need dedicated bicycle facilities due to the low volume and low speed of traffic.

Locations for new Local Streets on the Future Street Network are conceptual. Final locations will be determined during the design and construction phases of future development and redevelopment.

## Rural Transition Roads

Rural Transition Roads are medium-to-high capacity roads with moderate vehicular 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 Crozet.



The photo rendering above demonstrates potential improvements on Rural Transition Roads that provide safer facilities for cyclists. Where there is sufficient right-of-way, additional shoulder width should be provided to create a dedicated bicycle lane. Where site limitations prevent a separate bike lane, signage and sharrows may be used.



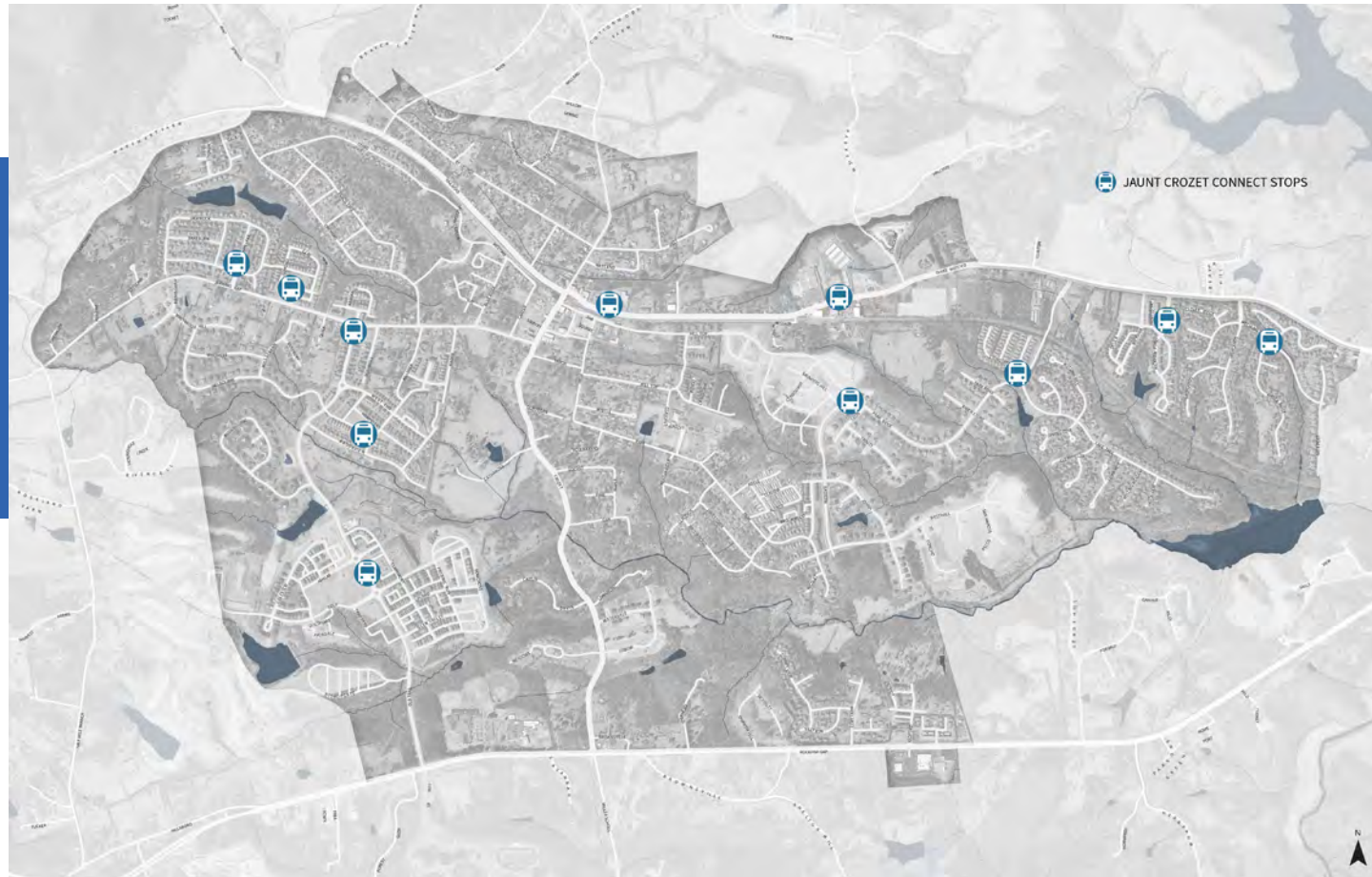
(Above) Route 250, alongside the Liberty Hall Neighborhood and Clover Lawn Village Center is the only Arterial in Crozet.

There are four Rural Transition Road segments called for in Crozet: the western edge of Jarman's Gap Road, the eastern portion of Three Notch'D Road, Crozet Avenue from Dunvegan Lane to Route 250, and Lanetown Road with a portion of Railroad Avenue included. This edge of Jarman's Gap Road connects to Bike Route 76 at Lanetown Road. Future improvements of these streets should balance pedestrian and bicycle safety with the rural character of the roads. Improvements could be coordinated with VDOT projects such as paving and maintenance.

## Arterials

Arterials are high-capacity and higher vehicular speed roads that can accommodate long-distance trips and connect multiple localities within a region. The only Arterial road in Crozet is Route 250 along the Development Area boundary. Route 250 is designated as a State Scenic Byway and is within the County's Entrance Corridor Overlay District. Specific land use and landscape buffer recommendations are included in the Land Use Chapter of this Master Plan. A shared-use path is recommended from Clover Lawn Village Center to Old Trail Drive along Route 250, providing connectivity between neighborhoods, schools, and commercial areas.





The map above shows the existing Crozet CONNECT bus stops in the Crozet Development Area.

# Transit and Transportation Demand Management

JAUNT's Crozet Connect route currently provides commuter service between Crozet and the City of Charlottesville. JAUNT's criteria for transit stops include: sufficient housing density for more trips to be served; sidewalks or paths to access stops; and road connectivity for efficient routes. JAUNT serves five counties, including Albemarle, and provides demand response transit and ADA transit service. JAUNT's services are especially important for providing affordable transit service to community members in the Rural Area, including those who may not have access to a vehicle.

During the engagement process, Crozet community members prioritized the factors they consider when choosing to ride transit, which include (in order from most important to least important): frequency of service, stop locations, and length of trip time. Public transit improvements in Crozet should include a focus on providing transit stops in designated Centers and

Districts, ensuring transit stops have sufficient shelter and infrastructure, providing bicycle storage both on buses and at transit stops, and establishing permanent routes with frequent, reliable service.

Emerging technology and related forms of transit will continue to become available. In 2019, the autonomous AVNU Circulator Shuttle pilot program in Crozet provided routes through Old Trail Village and Downtown Crozet. This pilot showed the potential for autonomous circulator routes to reduce the need for single-occupancy vehicles, provide local trip options, allow riders to park further away from their destination, and provide options for community members that are unable to drive. Continued coordination with transit providers, as outlined in Goal 3 of this Chapter, will be needed to enhance and expand transit routes and options.

## Downtown Crozet Parking Study

As part of the Crozet Master Plan update, the consulting firm, Kimley Horn, completed a Downtown Crozet Parking Study. This study included analysis of existing parking conditions and inventory, utilization of existing parking, and short and long-term recommendations for accommodating future demand. The study found that parking supply within Downtown Crozet (which includes areas currently zoned DCD) is typically underutilized, with a system-wide utilization of 47% during the weekday midday peak period and 30% during the Saturday evening peak period. There are a total of 886 parking spaces in the study area, and 198 of those spaces are public (22 percent). The study found that there is a perception that there is less parking than is actually available, due to the concentration of demand around the Square, Piedmont Plaza, and Crozet Pizza/shops. Many of the gravel lots are also underutilized, especially with the lack of signage.

The study found that as redevelopment of the Square occurs, there may not be sufficient parking based on existing utilization and future demand without additional parking strategies and improvements. The parking study recommends implementing shared

parking between businesses and uses as a parking mitigation strategy in Downtown Crozet. This approach would leverage the existing private surface lots that are currently underutilized.

Other parking mitigation strategies recommended by the study include providing a shuttle service (which could include autonomous vehicles), improving wayfinding signage (paired with bike and pedestrian infrastructure), and implementing shared valet parking zones. Longer-term parking mitigation could involve new public parking lots or public structured parking. Site selection would need to consider sidewalks and pedestrian access, property ownership, location, traffic access, the cost per space, and the amount of parking spaces.

Prior to the redevelopment of Downtown, the County should work with local businesses and the developer of Crozet Square to pursue shared parking opportunities within existing surface lots Downtown. Wayfinding signage should be used to identify locations of publicly available parking for visitors.

Downtown Crozet Parking Study

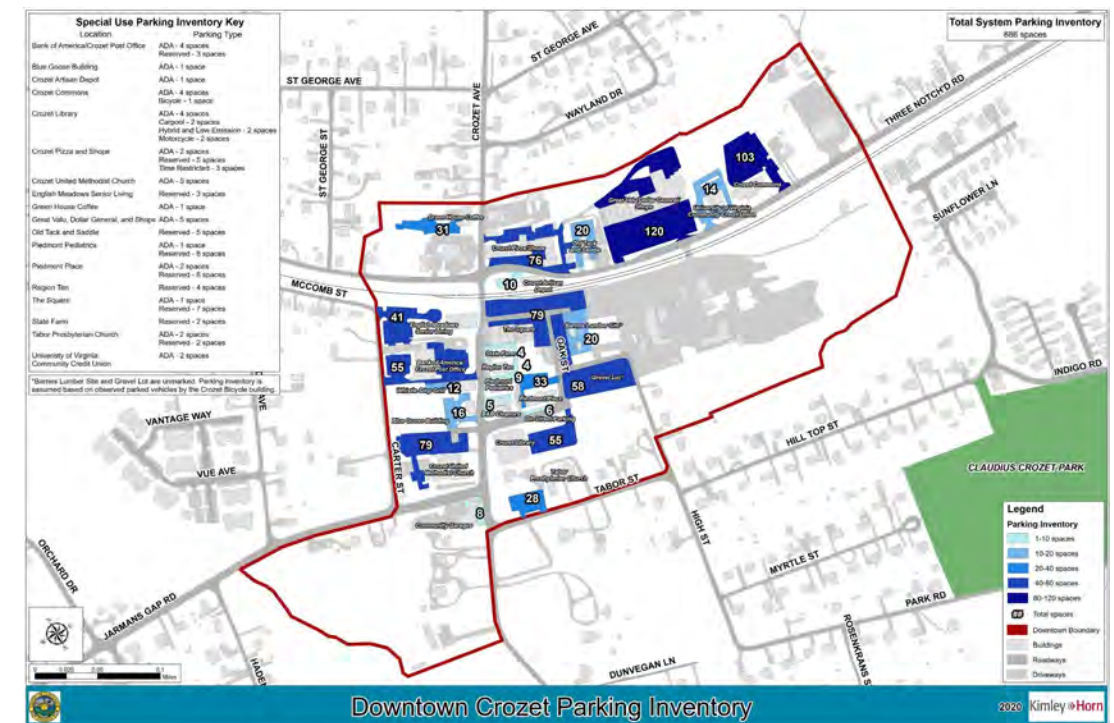


Figure 1. Parking Inventory Map

The above figure shows the area (outlined in red) included in the Crozet Parking Study completed by Kimley Horn. The figure also shows the number of existing parking spaces in the downtown area.



# Transportation Guiding Principle

Create a multimodal transportation network that is safe and accessible for all community members, regardless of age, race, income, and ability.

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

- A. Design and construct the roundabout at the intersection of Route 250 and Crozet Avenue. Provide opportunities for community feedback to guide final intersection designs and project phasing.
- B. Design and construct the roundabouts at the intersections of Route 250 and Old Trail Drive and at the Henley/Brownsville school entrances. Provide opportunities for community feedback to guide final intersection designs and project phasing.
- C. Complete construction of Eastern Avenue, including a stream crossing of Lickinghole Creek.
- D. Conduct a feasibility study on an additional railroad crossing between Downtown Crozet and the Park Ridge Drive and Three Notch'D Road intersection. Ensure that Union Mission community members are actively engaged in the ongoing process of establishing a new crossing with safe and convenient access.
- E. Provide a street connection at Dunvegan Lane, connecting Park Road and Crozet Avenue.
- F. Complete a Corridor Design for Park Road to determine the needed bicycle and pedestrian facilities to provide safe and convenient access through this corridor.

## Goal 2: Establish sidewalks, paths, trails, bike lanes, and other improvements to provide safety and access for all users.

- A. Construct priority segments of the sidewalk network shown on the Future Bicycle & Pedestrian Network Plan as funding becomes available, including missing segments of sidewalk along Crozet Avenue, Park Road, High Street, and Hilltop Street.

- B. Conduct a feasibility study to determine a north-south alignment for a shared-use path (SUP) along or parallel to Crozet Avenue to provide a connection between Route 250 and the Crozet Connector Trail.
- C. Provide traffic calming measures on Park Ridge Drive between Three Notch'd Road and Eastern Avenue in coordination with VDOT. Measures could include restriping, landscaping, bicycle sharrows, and mini roundabouts at intersections.
- D. Through a combination of new development and County-initiated capital projects, construct a shared-use path along the south side of Three Notch'D Road, with the first phase connecting the Wickham Pond and Highlands neighborhoods to Park Ridge Drive, and the second phase connecting to the Employment District.
- E. Through a combination of new development and County-initiated capital projects, construct a shared-use path along the north side of Route 250.
- F. Establish safe pedestrian connections (sidewalks or shared-use paths) as funding is available, or redevelopment/rezonings occur in historic and aging neighborhoods, especially within the Downtown Neighborhoods.



The above map shows the future sidewalk projects (dotted red lines) in Recommendation 2A. These are prioritized in the Implementation Chapter of this Plan.

It should be noted that the recommended sidewalks and paths for Recommendation 2F are not shown on the Future Bicycle and Pedestrian Network Plan, as their alignments and locations are not yet determined.

## Goal 3: Expand local and regional transit service, infrastructure, and options.

- A. Work with local transit providers to develop a transit plan to identify stop locations and infrastructure needs to establish permanent transit service within Crozet and commuter routes to and from Crozet. Prioritize providing transit infrastructure within identified centers, especially Downtown, to support local businesses and decrease reliance on parking and roadways.
- B. Through the rezoning and redevelopment process, secure sites and infrastructure for future transit stops (as identified in transit plans) to include sheltered waiting areas, benches, and wayfinding signage.
- C. Work with BRITE Transit to add a future Afton Express stop at the I-64/Exit 107 park & ride lot, once completed.

## Goal 4: Support the redevelopment of Downtown with appropriate transportation infrastructure improvements.


- A. In coordination with community members and relevant partners and agencies, design and construct improvements to High Street from Tabor Street to Library Avenue. Use the Crozet Transportation Analysis study recommendations for guidance, ensure improvements provide safe pedestrian and bicycle connections, and consider if a phased approach is appropriate.
- B. In coordination with community members and relevant partners and agencies, design and construct intersection improvements within Downtown, including the 'quadrant' intersection and improvements to Tabor Street. Use the Crozet Transportation Analysis study recommendations for guidance, ensure improvements provide safe pedestrian and bicycle connections, and consider if a phased approach is appropriate.
- C. Concurrent with the redevelopment of Crozet Square, pursue shared parking agreements with private surface lot owners near Downtown to support the Downtown redevelopment. Use the Parking Study as a guide to inform this effort.

- D. Pursue additional parking solutions concurrent with future phases of Crozet Square redevelopment and completion of the project, such as shuttle service, valet, and/or permanent parking facilities. Use the Parking Study as a guide to inform this effort.

## Goal 5: Provide safe bicycle and pedestrian routes to nearby County Parks in the Rural Area and other regional amenities.

- A. Upgrade Railroad Avenue and Mint Springs Road to a Rural Shared Road and add signage to provide a formal connection for cyclists to Mint Springs Park.
- B. Provide a more formal connection to Bicycle Route 76 by upgrading Jarman's Gap to a Rural Shared Road west of where the existing bicycle lane ends.
- C. Provide signage directing cyclists using Bicycle Route 76 to Downtown Crozet. As part of this initiative, explore opportunities to reroute Bicycle Route 76 through Downtown Crozet.
- D. Work with VDOT to coordinate shoulder widening, pavement markings, and signage on identified Rural Shared Roads during routine paving and maintenance work.





Support and strengthen Crozet's history as a self-sustaining town, while ensuring that new and infill development is compatible in scale and design, and provides housing choice for all community members.

# Land Use



# Overview + Background

## Land Use Overview

The Land Use Chapter establishes the future vision for development patterns and activities within Crozet over the next 20 years. Crozet residents, business owners, and stakeholders have shared their vision for how they would like to see the community grow and evolve. This Land Use Chapter reflects the community's vision and reflects the County's Comprehensive Plan, which sets the overarching vision for the County as a whole. The Comprehensive Plan, and supporting growth management policy, direct growth and density into the designated Development Areas to preserve the County's Rural Areas and to prevent premature expansion of the Development Areas.

The Guiding Principle for Land Use within Crozet is:

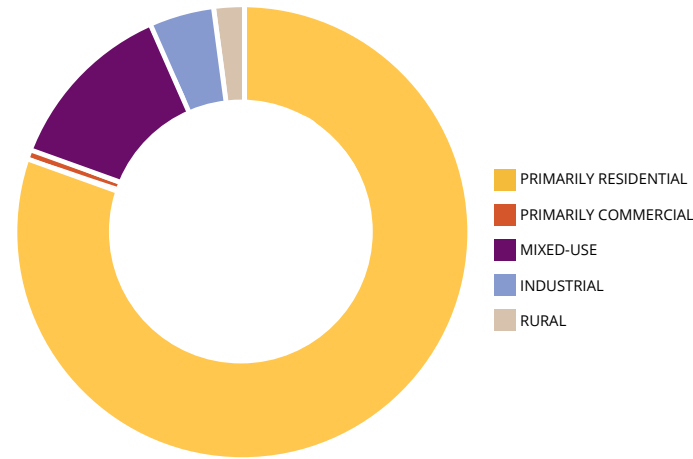
*"Support and strengthen Crozet's history as a self-sustaining town, while ensuring that new and infill development is compatible in scale and design and provides housing choice for all community members."*

The subsequent pages of the Land Use Chapter identify specific goals to further the Guiding Principle. Goals cover the topics of Downtown revitalization, housing choices for all income levels, sustaining and supporting existing and historic neighborhoods, maintaining the rural edge, and amplifying Crozet's culture and history. Each goal is supported with actionable recommendations. The Future Land Use Plan, land use guidance, design principles, and supporting narrative also serve to reinforce the Land Use Guiding Principle and Goals and provide additional guidance for future development and investment within Crozet.

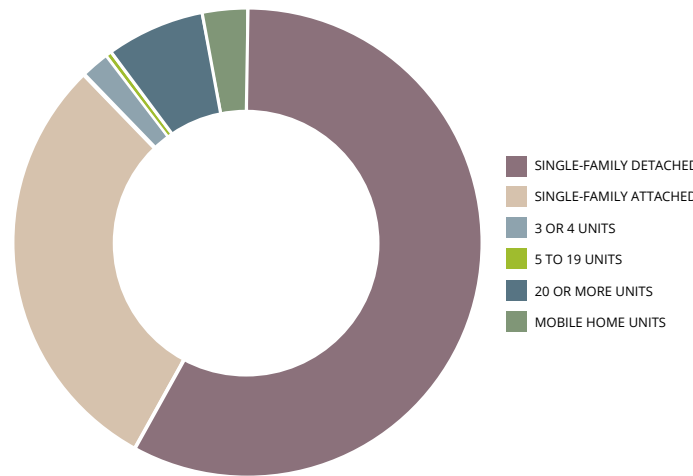
## Existing Conditions & Future Growth

The majority of Crozet is designated for residential development, but much of the land is already developed or built out. There are few remaining large vacant parcels within Crozet that do not already have pending site development applications under review.

Infill of existing areas is likely to become a more significant portion of future housing development in Crozet. Throughout the course of the Master Planning process, the community has expressed a desire to support affordable housing; infill and development of smaller vacant sites presents an opportunity to support this goal.

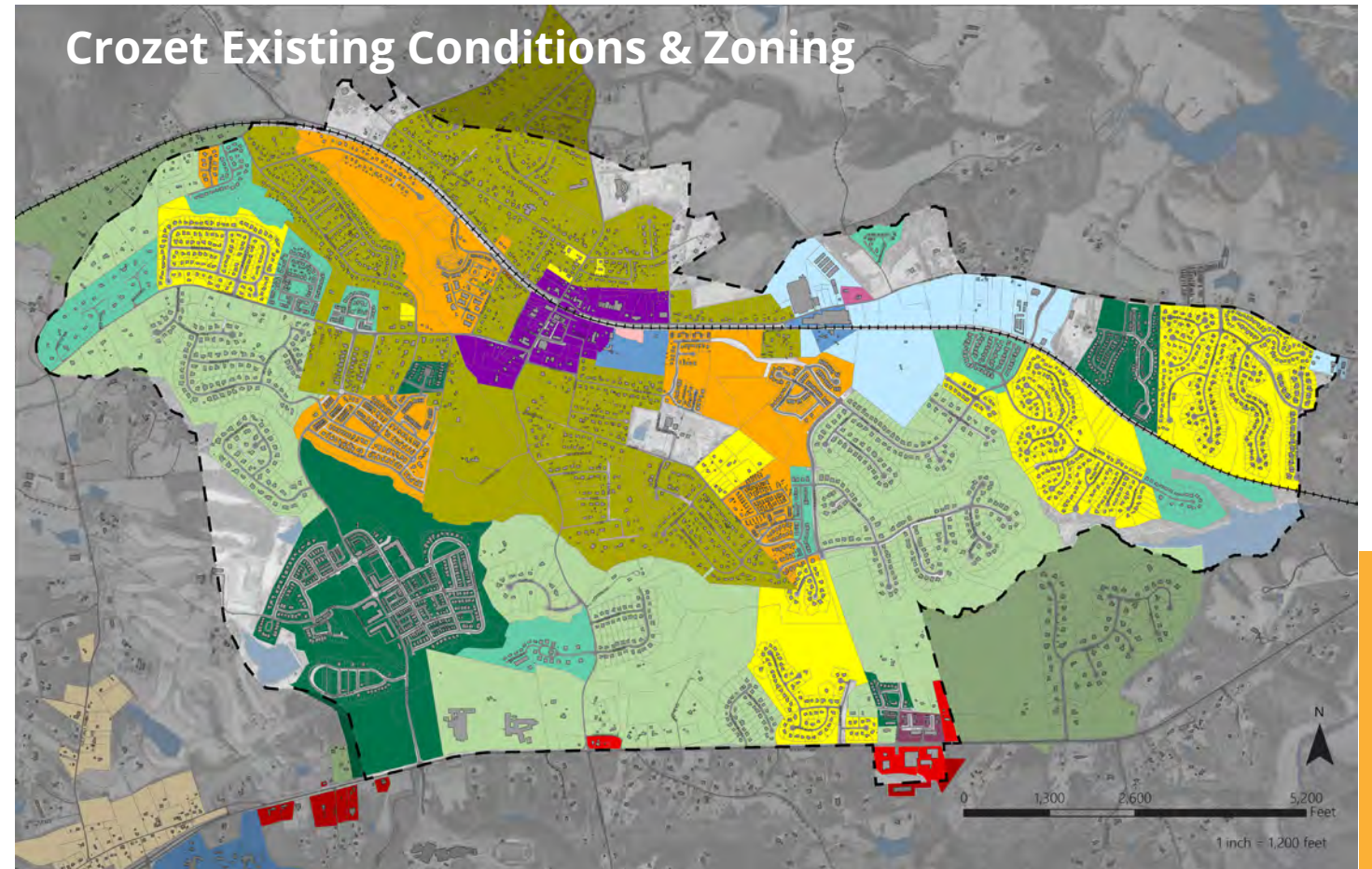


The above chart shows land uses in Crozet by current Zoning District, based on the uses allowed in each District. Approximately 80 percent of the land area in Crozet is primarily residential.

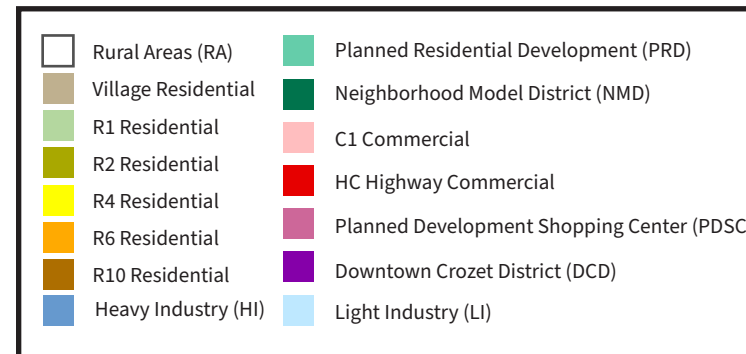


The above chart shows the distribution of housing unit types in Crozet. Approximately 58 percent of all units in the Development Area are single-family detached.

Downtown Crozet is in the process of redeveloping into a mixed-use residential, office, and commercial-retail hub within the heart of Crozet. It provides an additional opportunity for housing choices for the community. It will also provide social gathering space for residents and visitors alike. With this redevelopment, Downtown is poised to continue to grow and evolve into the historic and cultural heart of Crozet.



The map above shows the current zoning for the Crozet Development Area. This master plan update aims to minimize inconsistencies between the Plan's long-range vision and current zoning.



## Rural Context

Crozet's setting as a satellite community separate from the County's urban ring Development Areas makes it important that the community develop in a way that allows it to operate independently with a mix of housing types, commercial, and employment uses. Its location as a satellite community also means that it is surrounded on all sides by the County's designated Rural Area. This rural context is important to residents who have identified a goal for Crozet to grow in a way that maintains a distinct rural edge and a visual connection to Blue Ridge Mountains and surrounding landscape.

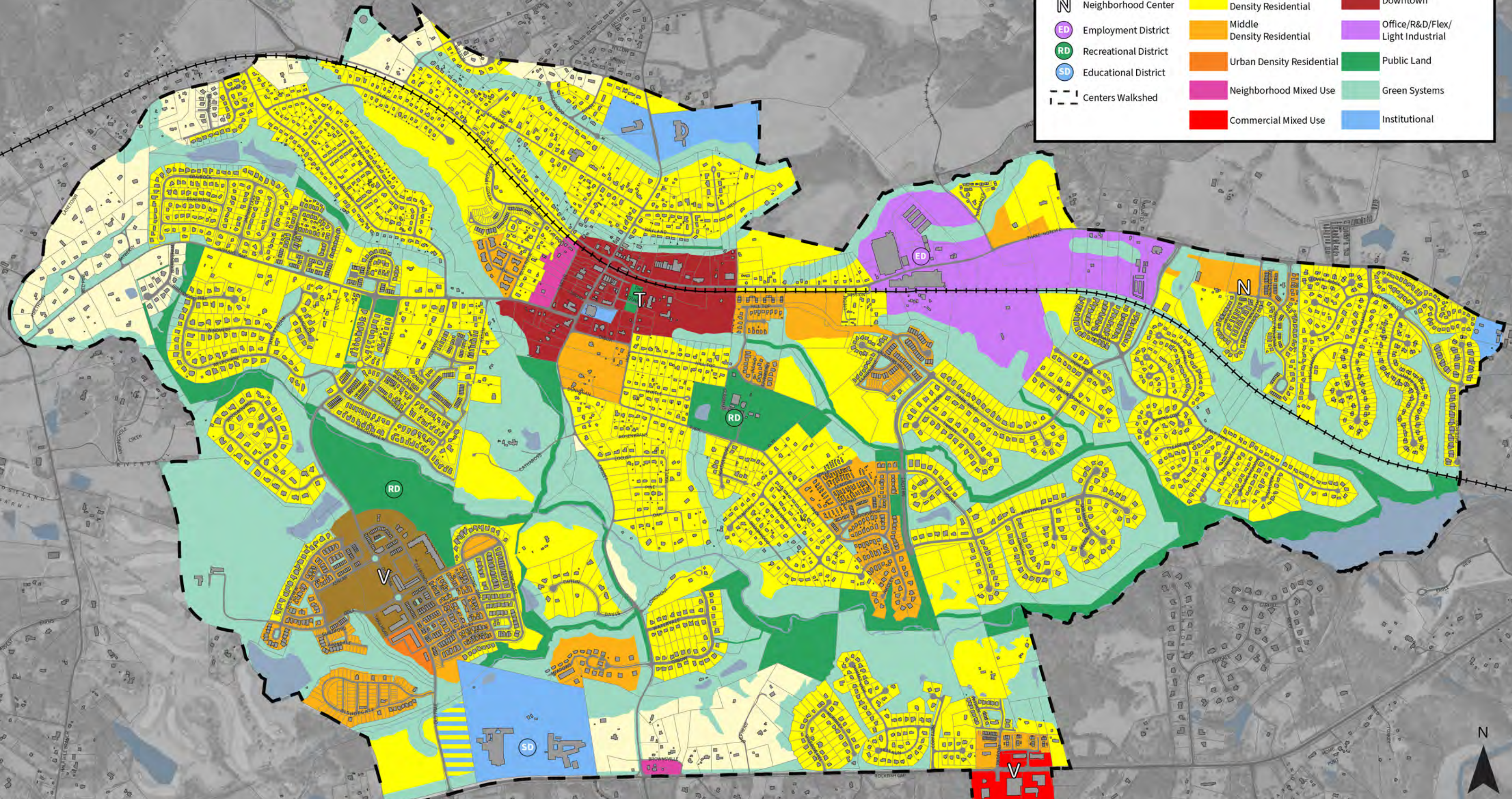
## Land Use & Existing Zoning

The Future Land Use Plan has been updated to minimize inconsistencies between the long-range vision and by-right development scenarios (i.e. the current zoning) that are not subject to review by the Planning Commission and Board of Supervisors. Part of this effort to bring consistency included reviewing and updating parcels that were designated entirely as Greenspace on the 2010 Land Use Plan. Many of the 2010 Greenspace parcels are under private ownership, are not planned for future Parks, and have portions of land that are not hindered by critical resources. The updated 2021 Future Land Use Plan shows an updated Land Use designation for many of these properties on areas that are outside of critical resources.



# Crozet Future Land Use Plan

T	Town Center	Neighborhood Density Residential - Low	Community Mixed Use
V	Village Center	Neighborhood Density Residential	Downtown
N	Neighborhood Center	Middle Density Residential	Office/R&D/Flex/Light Industrial
ED	Employment District	Urban Density Residential	Public Land
RD	Recreational District	Neighborhood Mixed Use	Green Systems
SD	Educational District	Commercial Mixed Use	Institutional
- - -	Centers Walkshed		

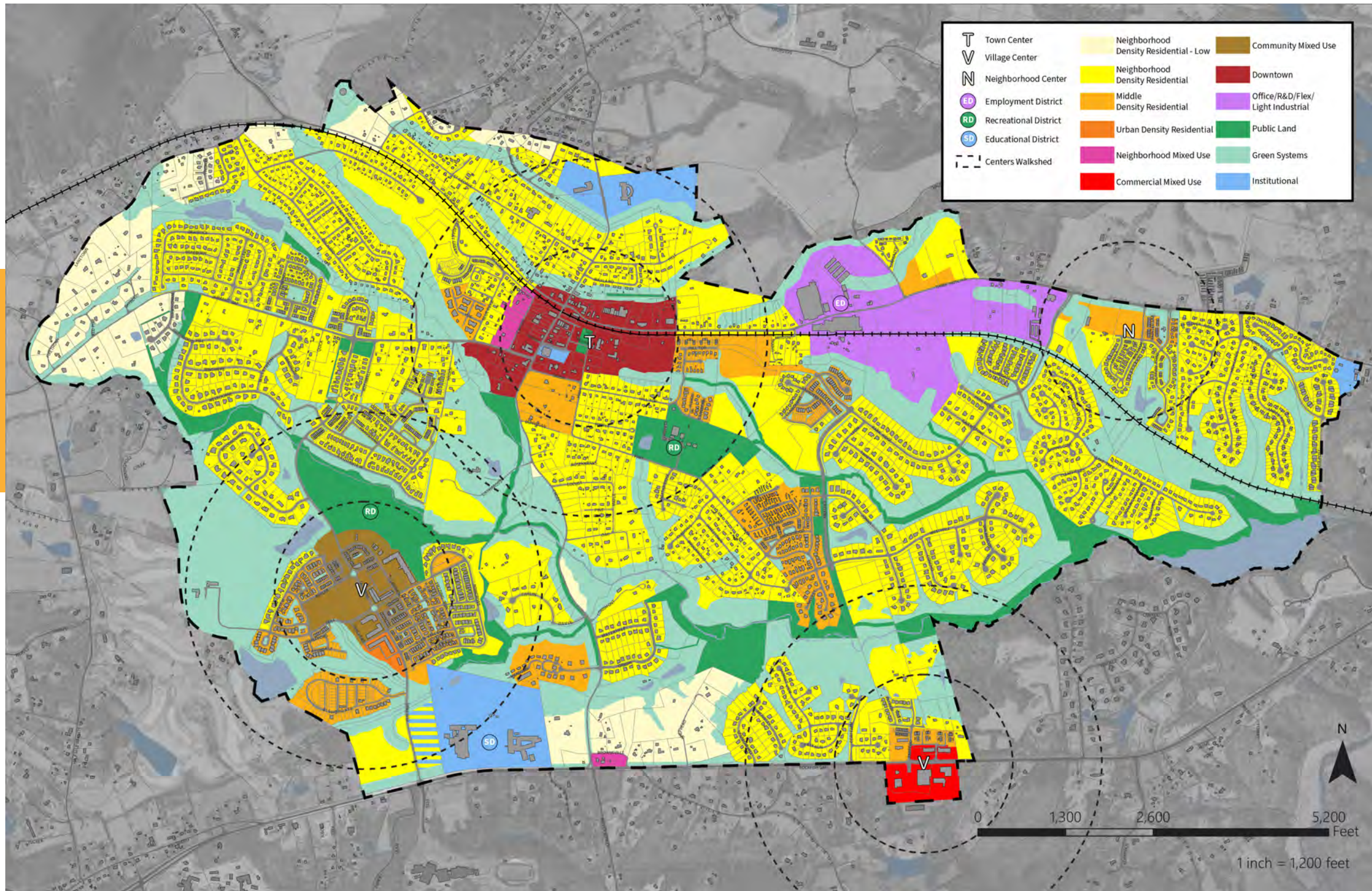


Future land use typologies are identified by the different colors on the Future Land Use Plan, above. The Future Land Use Typologies table on pages 12-15 describes the intent of each land use typology, guidance for use, building types, and form recommendations. The use recommendations are meant to provide guidance on appropriate uses, though future uses not listed could be considered if consistent with the intent of the district and form guidance.





# Crozet Centers & Districts



The Future Land Use Plan identifies multiple centers and districts within Crozet. 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 to Crozet. 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.

The Land Use Table on pages 10-13 illustrates the expectations for development in Crozet. 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 and form guidance. Recommendations for building type, form, height, and massing are also provided in the table.

Additional urban design guidance and example development patterns are provided on pages 14-15. For those areas within Centers and Districts, additional guidance is provided in the Centers and Districts section on pages 16-22.

One property within Crozet has a split land use designation (shown as hatched yellow and blue). This property is Block 19 within the Old Trail Village development and was designated as entirely Neighborhood Density Residential in the 2010 Master Plan. The current approved zoning for this Block allows between 12 and 90 dwelling units. The property owner has expressed interest in amending the existing approved zoning to allow for institutional uses on the property. Since the property is adjacent to the Brownsville Elementary/Henley Middle Schools site and Educational District, institutional uses within this Block would be appropriate. The split designation of Neighborhood Density Residential and Institutional allows for potential future institutional uses and also for the property owner to develop the site for residential uses under existing approved zoning.

This guidance illustrates the appropriate form and scale



# Future Land Use Typologies

	Neighborhood Density Residential (Low)	Neighborhood Density Residential		Middle Density Residential	Urban Density Residential
Intent	Existing residential areas with density of less than 2 units per acre and areas for future low density development.	Low-density residential development patterns with neighborhood-scale commercial, retail, and institutional uses.		Low to mid-density residential and small-scale non-residential uses such as commercial and institutional uses; intended to encourage a variety of housing types, encourage smaller housing units that are naturally more affordable, and to promote housing choice and affordability.	Medium to high-density residential development supported by small to medium scale commercial, retail, and institutional uses.
Primary Use	<ul style="list-style-type: none"> <li>Residential at a density of less than 2 units per acre</li> </ul>	<ul style="list-style-type: none"> <li>Residential at a density of 3-6 units per acre</li> </ul>		<ul style="list-style-type: none"> <li>Residential densities in the range of 6-12 units per acre are recommended. Residential density of up to 18 units per acre could be considered to accommodate additional affordable housing (beyond any baseline affordability requirements); or to allow for construction of small-scale housing types: bungalow courts, small multiplexes, accessory dwelling units, live/work units, and small single family cottages, tiny houses.*</li> <li>*see housing types descriptions in Appendix</li> </ul>	<ul style="list-style-type: none"> <li>Residential at a density of 12-34 units per acre</li> <li>Religious assembly uses</li> <li>Schools and child care</li> <li>Institutional</li> </ul>
Secondary Use	<ul style="list-style-type: none"> <li>Religious assembly uses</li> <li>Schools and child care</li> <li>Institutional</li> </ul>	<ul style="list-style-type: none"> <li>Religious assembly uses</li> <li>Schools and child care</li> <li>Institutional</li> <li>Commercial/retail</li> </ul>		<ul style="list-style-type: none"> <li>Religious assembly uses</li> <li>Schools and child care</li> <li>Institutional</li> <li>Commercial/retail</li> </ul>	<ul style="list-style-type: none"> <li>Commercial/retail</li> <li>Offices</li> </ul>
Building Type & Form Guidance	Residential: single-family detached and accessory dwellings	<i>Residential:</i> townhomes, single-family attached, single-family detached, accessory dwellings <i>Commercial/retail/office/institutional:</i> uses should be located in small buildings or as part of mixed-use buildings with small shop-fronts along streets		Residential forms including but not limited to: small multiplexes, live/work units, bungalow courts, accessory dwellings, single family cottages and other similarly scaled residential development. Townhouses and single family detached units are allowable building forms, though smaller unit types on smaller lots are encouraged to increase affordability. Larger multiplexes are not recommended within this land use. A mix of housing types should be provided with developments over 20 units, though exceptions can be made for developments providing predominantly small-scale housing types referenced in Primary Uses.	<i>Residential:</i> multifamily, townhomes, single-family attached encouraged; single-family detached should be secondary <i>Commercial/retail/office/institutional:</i> uses should be located in small buildings or as part of mixed-use buildings, with small shop-fronts along streets
Height & Massing	<ul style="list-style-type: none"> <li>Up to 3 stories</li> <li>Suggested maximum building footprints for non-residential: 15,000 sq. ft.</li> </ul>	<ul style="list-style-type: none"> <li>Up to 3 stories</li> <li>Suggested maximum building footprints:               <ul style="list-style-type: none"> <li>Commercial/retail: 5,000 sq. ft.</li> <li>Office/Institutional: 20,000 sq. ft.</li> </ul> </li> </ul>		<ul style="list-style-type: none"> <li>Up to 3 stories</li> <li>Suggested maximum building footprints:               <ul style="list-style-type: none"> <li>Commercial/retail: 5,000 sq. ft.</li> <li>Office/Institutional: 20,000 sq. ft.</li> <li>Residential single use building: 12,000 sq. ft.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Up to 4 stories</li> <li>Suggested maximum building footprints:               <ul style="list-style-type: none"> <li>Commercial/retail: 8,000 sq. ft.</li> <li>Office/Institutional: 25,000 sq. ft.</li> </ul> </li> </ul>
Prioritized Design Principles	<ul style="list-style-type: none"> <li>Pedestrian &amp; bicycle connectivity.</li> <li>Access to parks, amenities, and green systems.</li> <li>Maintain clear boundaries with the Rural Areas.</li> </ul>	<ul style="list-style-type: none"> <li>Pedestrian &amp; bicycle connectivity.</li> <li>Access to parks, amenities, and green systems.</li> <li>Maintain clear boundaries with the Rural Areas.</li> </ul>		<ul style="list-style-type: none"> <li>Provide a mixture of housing types and affordability.</li> <li>Bicycle and pedestrian connectivity.</li> <li>Access to parks, amenities, and green systems.</li> </ul>	<ul style="list-style-type: none"> <li>Provide a mixture of housing types and affordability.</li> <li>Promote density of uses and compact development, including infill and redevelopment.</li> <li>Access to parks, amenities, and green systems.</li> </ul>



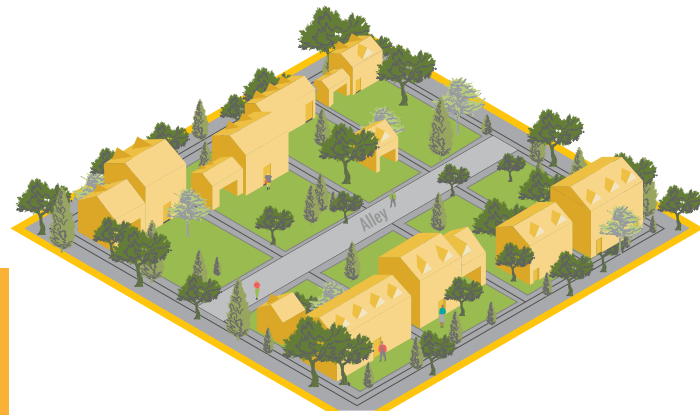
		Neighborhood Mixed Use	Community Mixed Use	Commercial Mixed Use	Downtown		Office/R&D/Flex/Light Industrial	Green Systems	Public Land	Institutional	
Prioritized Design Principles	Intent	Mixed use development with neighborhood serving retail and service uses for nearby residential areas. Residential development supported by small to medium scale commercial/retail 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.	This designation is applied to the most intensely developed area in the heart of Crozet. It is intended to be a mixed use area providing for employment, service, and residential uses.		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.	Development consisting primarily of government buildings, schools, public safety facilities, public utilities, and major health care facilities, or unprogrammed government property.	
	Primary Use	<ul style="list-style-type: none"> <li>Residential at a density of up to 18 units per acre</li> <li>Commercial/retail</li> <li>Offices</li> <li>Religious assembly uses</li> <li>Schools and child care</li> <li>Institutional</li> </ul>	<ul style="list-style-type: none"> <li>Commercial/retail</li> <li>Offices</li> <li>Residential at a density of 6-34 units per acre</li> <li>Religious assembly uses</li> <li>Schools and child care</li> <li>Institutional</li> <li>Hotels/conference facilities</li> </ul>	<ul style="list-style-type: none"> <li>Commercial/retail</li> <li>Wholesale businesses</li> <li>Hotels/conference facilities</li> <li>Auto-commercial sales &amp; services</li> <li>Religious assembly uses</li> <li>Schools and child care</li> </ul>	<ul style="list-style-type: none"> <li>Offices</li> <li>Commercial/retail</li> <li>Institutional</li> </ul>		<ul style="list-style-type: none"> <li>Offices</li> <li>Research and development</li> <li>Flex spaces</li> <li>Light industrial</li> </ul>	<ul style="list-style-type: none"> <li>Sensitive environmental features including stream buffers, flood plains, and steep slopes.</li> <li>Privately owned open space with passive and/or active recreation amenities, parks, playgrounds, outdoor sitting areas, plazas, etc.</li> <li>Natural areas.</li> </ul>	<ul style="list-style-type: none"> <li>Existing publicly owned parks and greenway systems.</li> </ul>	<ul style="list-style-type: none"> <li>Schools, colleges, universities, and ancillary facilities</li> <li>Fire stations, hospitals, libraries</li> <li>Public facilities and major utilities</li> </ul>	
	Secondary Use	<ul style="list-style-type: none"> <li>Auto-commercial sales &amp; services within a building</li> <li>Office/R&amp;D/Flex/Light Industrial</li> </ul>	<ul style="list-style-type: none"> <li>Office/R&amp;D/Flex/Light Industrial</li> <li>Existing auto-commercial sales &amp; services</li> </ul>	<ul style="list-style-type: none"> <li>Office/R&amp;D/Flex/Light Industrial</li> <li>Residential at a density of 6-34 units per acre</li> <li>Institutional</li> </ul>	<ul style="list-style-type: none"> <li>Residential at a density of up to 36 units per acre</li> <li>Hotels/conference facilities</li> <li>R&amp;D/Flex/LI</li> <li>Religious assembly uses</li> <li>Schools and child care</li> </ul>		<ul style="list-style-type: none"> <li>Commercial/retail</li> <li>Residential at a density of 6-34 units per acre</li> <li>Institutional</li> </ul>				<ul style="list-style-type: none"> <li>Offices supporting primary uses</li> <li>Nursing homes, assisted living facilities, convalescent homes</li> </ul>
	Building Type & Form Guidance	<i>Residential:</i> multifamily, townhomes, single-family attached, live/work. <i>Commercial/retail/office/institutional:</i> 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. <i>Commercial/retail/office/institutional:</i> 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. <i>Residential:</i> multi-family encouraged; townhouses and single-family attached should be secondary. <i>Light Industrial:</i> 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 encouraged. Light Industrial activities and uses should be located inside of buildings.	<i>Residential:</i> multifamily, preferably within mixed use buildings and live/work units. <i>Commercial/Office:</i> Mixed-use buildings and developments encouraged. Single-use commercial or residential buildings acceptable, with future conversion to ground story active uses along main streets encouraged. Flex/Light Industrial activities and uses should be located inside of buildings.		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.	
Height & Massing	<ul style="list-style-type: none"> <li>1-3 stories, with 2-3 stories encouraged</li> <li>Suggested maximum single use building footprints:</li> <li>Commercial/retail: 15,000 sq. ft.</li> <li>Office/R&amp;D/Flex/LI/Institutional: 25,000 sq. ft.</li> </ul>	<ul style="list-style-type: none"> <li>2-4 stories (5 by exception)</li> <li>Blocks should be 300-400 feet in length</li> <li>Stepback/facade breaks should be incorporated to protect areas identified for viewshed protection</li> </ul>	<ul style="list-style-type: none"> <li>Up to 4 stories (5 by exception)</li> <li>Blocks should be 300-400 feet in length</li> </ul>	<ul style="list-style-type: none"> <li>2-4 stories (up to 6 by exception)</li> <li>Blocks should be 200-400 feet in length</li> </ul>		<ul style="list-style-type: none"> <li>Up to 4 stories (5 by exception).</li> <li>Blocks should be 300-400 feet in length.</li> <li>Stepback/facade breaks should be incorporated to protect areas identified for viewshed protection.</li> </ul>	<ul style="list-style-type: none"> <li>1-2 stories</li> <li>Buildings and amenity areas should avoid critical environmental resources</li> </ul>	<ul style="list-style-type: none"> <li>Building design guidance should be vetted through a park master planning process</li> <li>Buildings and amenity areas should avoid critical environmental resources</li> </ul>	<ul style="list-style-type: none"> <li>Up to 4 stories (5 by exception)</li> <li>Building height and massing should be respectful of adjacent neighborhoods and areas identified for viewshed protection.</li> </ul>		
Design Principles	<ul style="list-style-type: none"> <li>Human-scaled development.</li> <li>Block-scale development within centers and interconnected streets.</li> <li>Pedestrian &amp; bicycle connectivity.</li> </ul>	<ul style="list-style-type: none"> <li>Block-scale development within centers and interconnected streets.</li> <li>Promote density of uses and compact development, including infill and redevelopment.</li> <li>Human-scaled development.</li> </ul>	<ul style="list-style-type: none"> <li>Relegate parking to the side and rear of buildings.</li> <li>Promote appropriate scale, massing and enclosure.</li> <li>Block-scale development and interconnected streets.</li> </ul>	<ul style="list-style-type: none"> <li>Promote density of uses and compact development, including infill and redevelopment.</li> <li>Block-scale development and interconnected streets.</li> <li>Human-scaled development.</li> </ul>		<ul style="list-style-type: none"> <li>Promote density of uses and compact development, including infill and redevelopment.</li> <li>Access to parks, amenities, and green systems.</li> <li>Site design accommodates multi-modal transportation infrastructure.</li> </ul>	<ul style="list-style-type: none"> <li>Interconnectivity to other areas of open space, parks, greenways, and recreational amenities</li> <li>Respecting existing terrain and careful grading/re-grading of terrain.</li> <li>Preserve natural systems where shown in the Master Plan.</li> </ul>	<ul style="list-style-type: none"> <li>Interconnectivity to other areas of open space, parks, greenways, and recreational amenities</li> <li>Respecting existing terrain and careful grading/re-grading of terrain.</li> <li>Preserve natural systems where shown in the Master Plan.</li> </ul>	<ul style="list-style-type: none"> <li>Connections to open space, parks, greenways, and recreational amenities</li> <li>Site design accommodates multi-modal transportation infrastructure</li> <li>Promote density of uses and infill redevelopment</li> </ul>		



# Urban Design Guidance

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.

*PLACEHOLDERS: The gray boxes indicate diagrams that will be developed for Future Land Use categories.*



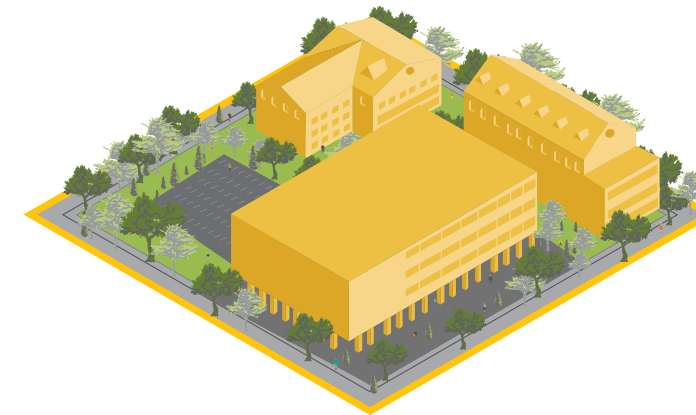
## Neighborhood Density Residential

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



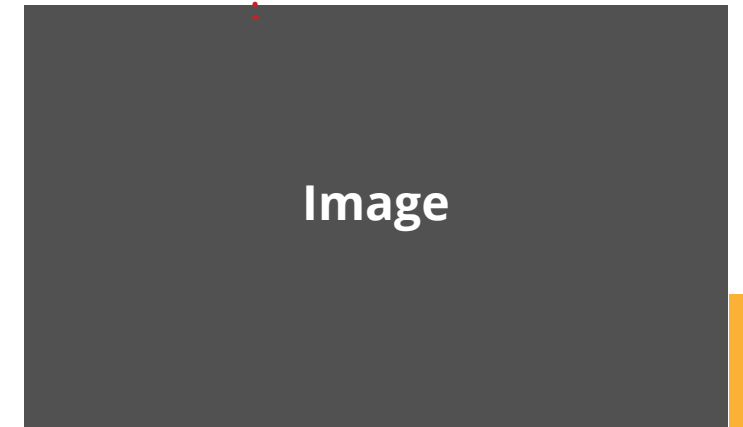
## Middle Density Residential

- Provide a mixture of housing types and affordability, with a focus on affordable housing and smaller housing types that are naturally more affordable.
- Pedestrian & bicycle connectivity.
- Access to parks, amenities, and green systems.



## 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.



## Neighborhood Mixed Use

- Provide small-to-medium scale, neighborhood-serving commercial, retail, and service uses.
- Mixed-use buildings, with active ground-floor uses.
- Human-scale development.



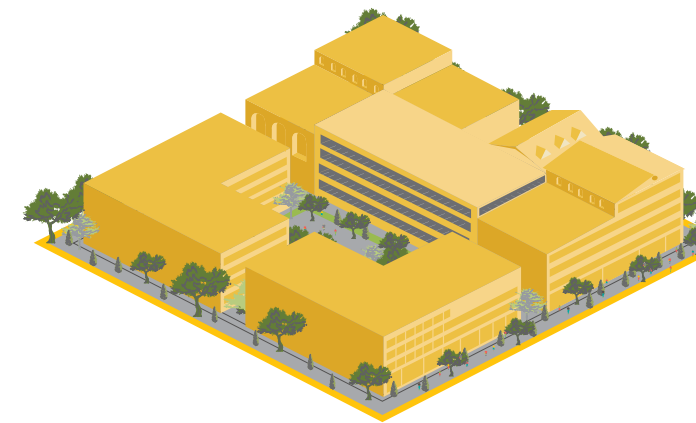
## Urban Density Residential

- 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.



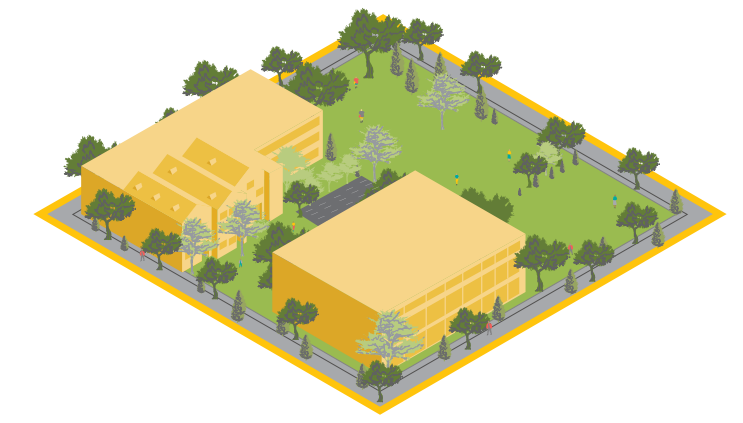
## Downtown

- Mixture of uses, including employment, service, and residential.
- Walkable, multi-story buildings with active ground floor uses.
- Promote density of uses and compact development, including infill and redevelopment.
- Human-scale development.



## Community Mixed Use

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



# Centers + Districts

	Town Center (T)	Village Center (V)	Neighborhood Service Center (N)		Recreational District	Employment District	Educational District
<b>Intent</b>	The focal point for cultural and commercial activities for a town or place. Development should promote a mixture of uses in a walkable and compact pattern. The Town Center is expected to be served by transit.	An area with a higher concentration of commercial or cultural activities. Development should promote a mixture of uses in a walkable and compact pattern. The center may be served by transit.	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.		Designated amenity spaces of regional importance; intended to provide opportunities for active, passive, and social recreation for the community.	An area with employment-generating uses supporting basic industries and economic development goals with secondary residential uses and commercial and retail uses that support employees and residents.	A designated school or college campus of regional importance; Educational districts serve as key community gathering spaces for both students and members of the public living in the surrounding areas.
<b>Walkshed / Multimodal Service Area</b>	1/4 to 1/2 mile radius from center	1/4 to 1/2 mile radius from center	1/4 mile radius from center		Park boundaries and any adjacent or related greenways, public amenity spaces, or public uses	Concentrated areas with Office/R&D/Flex/Light Industrial land use designations and any connected or related employment uses	School property boundaries and any adjacent/related public facilities
<b>Core Area</b>	Generally 1/4 mile radius from Center and adjacent areas/parcels	Generally 1/4 mile radius from Center and adjacent areas/parcels	Not applicable		Not applicable	Not applicable	Not applicable
<b>Building Type</b>	Vertical mixed-use buildings are strongly encouraged within the core. Single-use buildings should be constructed to allow ground-story commercial/retail along street frontages.	Vertical mixed-use strongly encouraged within the core. Single-use buildings should be constructed to allow ground-story commercial/retail along street frontages.	Vertical mixed-use buildings are encouraged. Buildings should be constructed to allow ground-story commercial/retail along street frontages, adjacent to transit, and public amenities.		Few buildings expected. Community centers, indoor recreational centers, and other community-serving buildings may be appropriate.	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.	Building types should be consistent with underlying land use. Single use buildings are expected, but districts often serve as community gathering spaces outside of school hours; such uses should be allowed and encouraged through building and site design.
<b>Use</b>	<ul style="list-style-type: none"> <li>Use should be consistent with underlying land use.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Use should be consistent with underlying land use.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Use should be consistent with underlying land use.</li> <li>Secondary uses such as retail, commercial service, office encouraged to locate in Center.</li> <li>Active ground-story uses strongly encouraged adjacent to transit and public amenities.</li> </ul>		<ul style="list-style-type: none"> <li>Use should be consistent with underlying land use and supportive of goals and recommendations from the Conservation Chapter</li> </ul>	<ul style="list-style-type: none"> <li>Use should be consistent with underlying land use.</li> <li>Uses supportive of the County's Economic Development goals are strongly encouraged.</li> </ul>	<ul style="list-style-type: none"> <li>Use should be consistent with underlying land use and supportive of goals and recommendations from the Land Use and Transportation Chapters</li> </ul>
<b>Form &amp; Site Design Guidance</b>	<ul style="list-style-type: none"> <li>2-4 stories within core areas, up to 6 by exception</li> <li>Blocks in the Core should be 200-300 feet in length</li> <li>Bike/ped connections between center and adjacent neighborhoods should be provided and an improved transit stop should be provided in the Core</li> <li>All parking should be relegated; structured parking strongly encouraged in Core.</li> </ul>	<ul style="list-style-type: none"> <li>2-4 stories.</li> <li>Massing, height, and stepbacks should be consistent with any any localized recommendations (such as viewshed protection or screening from adjacent areas, etc.)</li> <li>Bike/ped connections between adjacent areas such as districts, existing neighborhoods, and proposed developments should be provided.</li> <li>Parking should be relegated to the side and rear of buildings.</li> </ul>	<ul style="list-style-type: none"> <li>2-4 stories.</li> <li>Massing, height, and stepbacks should be consistent with any localized recommendations (such as viewshed protection or screening from adjacent areas, etc.)</li> <li>Bike/ped connections between the adjacent districts, existing neighborhoods, and proposed developments should be provided.</li> <li>Parking should be relegated to the side and rear of buildings.</li> </ul>		<ul style="list-style-type: none"> <li>Where development does occur, respecting existing terrain and careful grading/re-grading of terrain is expected.</li> <li>Buildings and amenity areas should avoid critical environmental resources</li> </ul>	<ul style="list-style-type: none"> <li>2-4 stories (up to 6 by exception).</li> <li>Massing, height, and stepbacks should be consistent with any localized recommendations (such as viewshed protection or screening from adjacent areas, etc.)</li> <li>Relegated and structured parking encouraged.</li> </ul>	<ul style="list-style-type: none"> <li>Bicycle and pedestrian connections between adjacent areas such as existing neighborhoods, adjacent centers or districts should be provided.</li> <li>Massing, height, and stepbacks should be consistent with any localized recommendations (such as viewshed protection or screening from adjacent areas, etc.)</li> </ul>



## Town Center: Downtown Crozet



(above) The Square in Downtown Crozet is an iconic, focal point of the community, with a variety of retail, service and office uses.

Town Centers are intended to serve as the focal point for cultural and commercial activities and promote a mixture of uses. Town Centers should be accessible by walking, biking, or taking transit. The most intense activities are concentrated within a quarter-mile radius of the defined center point, which for Downtown Crozet is The Plaza public park. Within the core, vertical mixed-use buildings and active ground-story uses are strongly encouraged.

Downtown Crozet is the only Town Center within the Crozet Development area. The core area of this Center includes Crozet Square, the Library, Piedmont Place, the Crozet Pizza plaza, and Great Valu plaza, and adjacent residential neighborhoods to the north and south.

Most of the area within the core of the Town Center is zoned Downtown Crozet District (DCD). The form guidelines for the Town Center are intended to reflect the requirements of the DCD and continue to encourage compact and mixed-use development.

The first phase of the Crozet Square rezoning was approved as part of the Barnes Lumber redevelopment rezoning this area to DCD. Crozet Square is within the core of the Town Center, with The Plaza as the focal point. The street system will connect Park Ridge Drive, High Street, and Library Avenue to Crozet Square. The existing Crozet Connector Trail will also be extended as a shared-use path to Crozet Square. Crozet Square will provide additional retail, commercial, office, and

residential uses in Downtown Crozet, consistent with the DCD urban form requirements.

There are several residential neighborhoods within the half-mile walkshed of Downtown Crozet, including neighborhoods at Hilltop and High Streets, neighborhoods along Blue Ridge Avenue and Carter Street, and neighborhoods along St George Avenue. Enhanced pedestrian and bicycle connectivity is needed to better connect these neighborhoods to Downtown and promote walkability.

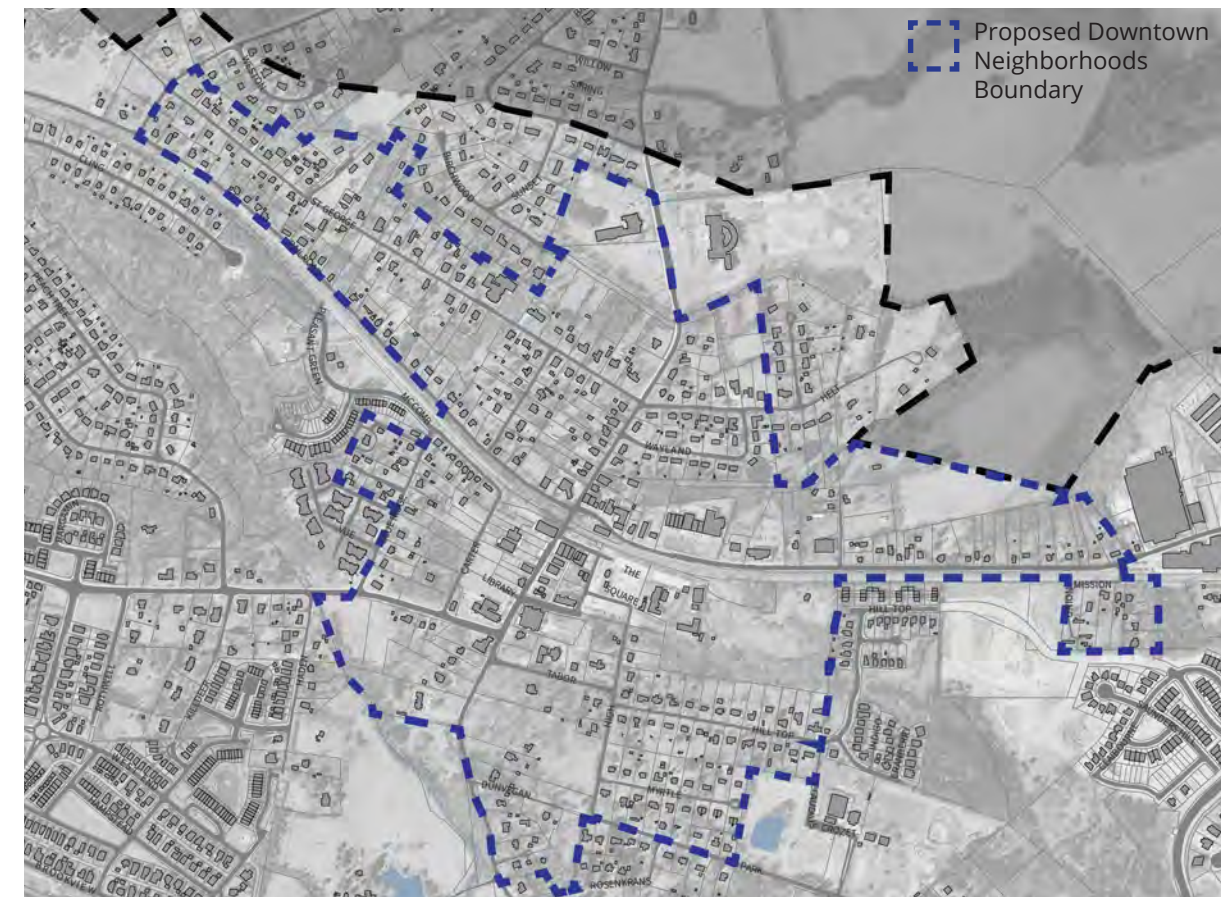
In the near term, the residential neighborhoods within the quarter mile walkshed of Downtown that are designated for Neighborhood Density Residential are not encouraged for significant redevelopment. More study and neighborhood outreach is needed (as described in the Downtown Neighborhoods Design Guidance section) to determine appropriate levels of infill and redevelopment for these neighborhoods.

Non-residential uses within the Downtown core should decrease in scale and intensity as they transition toward primarily residential neighborhoods. Though this land use category calls for residential uses to be secondary and within mixed use buildings, it should be noted that the current retail market within Crozet may not support vertical mixed use for the entire Downtown area. Smaller live/work units, townhouses, and multiplexes may be appropriate in some areas, especially around the edges of Downtown, adjacent to existing residential neighborhoods.

## Downtown Design Guidance

The neighborhoods surrounding Downtown reflect the long and varied history of Crozet. Within these neighborhoods one can see a diverse collection of building types and architectural styles that reflect the town's growth and development from its early settlement to the present. Architectural styles that range in date from the early 19th century to the present are visible as one traverses west of Downtown along Blue Ridge Avenue and Carter Street, north along Railroad and St George Avenue, east along Three Notch'D Road to Union Mission, and south to Hilltop Street and surrounding neighborhoods.

Downtown and areas west are part of the National Register Historic District. This area was selected as a Historic district due to the "integrity of location, design, setting, materials, workmanship, feeling, and association" of the structures within this area through a study that was conducted in 2008-2009. The eastern neighborhoods within the boundary shown on the map, though not officially part of the National Register Historic District, still tell an important story about Crozet's past. The working-class housing constructed for workers at Barnes Lumber along Hill Top Street and the heart of the African American community within Crozet in Union Mission are important to the fabric and history of Crozet, and more work is needed to develop strategies to honor this history.



(left) Map of neighborhoods surrounding Downtown Crozet that are important to the history, urban fabric and housing stock in Crozet.

Crozet residents have expressed a desire to protect the Downtown Neighborhoods and fear that their location close to Downtown makes these areas vulnerable to teardowns and the loss of this important historic fabric of Crozet. Additionally, several of these neighborhoods provide naturally occurring affordable housing stock for the community, with modestly sized and priced homes.

Given these neighborhoods' location close to Downtown, these areas could also provide an opportunity for additional infill development, if designed appropriately. Consideration could be given to allowing additional density for accessory dwellings and conversion of existing homes to multiple units to provide additional affordable or workforce housing. More study and neighborhood engagement is needed to determine the appropriate tool(s) for neighborhood preservation near Downtown. Possible methods could include the development of design guidelines to guide future development, a new historic overlay zoning district, or a zoning update to allow appropriate scaled infill and redevelopment within these neighborhoods, while still addressing impacts such as parking and pedestrian infrastructure. Additional outreach will be needed to residents of these neighborhoods before the County proceeds with any implementation steps.





(Above) The 'Bamboo Grove' development was approved through a rezoning application in Fall 2020. The approved density (9 units per acre) exceeds the recommended density in the 2010 Crozet Master Plan (3-6 units per acre). However, the proposal was supported by the community, due to its form, scale, housing types, and inclusion of affordable housing.

Photo Credit: The Housing Lab LLC

## Housing Choice in Crozet

Given that much of Crozet's developable land is built out, large residential developments with significant numbers of affordable units are unlikely to be constructed. However, opportunities still exist for smaller-scale infill development that support provide housing choice for all community members through appropriately scaled developments (Land Use Guiding Principle).

The Future Land Use Plan's density recommendations can disincentivize development of affordable housing. Density, as a singular tool, does not necessarily promote affordable housing. Density ranges do not distinguish between housing types, sizes, or cost, and therefore, by using density as a primary land use factor, developers are incentivized to build larger, more expensive units to achieve higher returns, especially on properties with lower density ranges. Affordable housing developments within the density range of 3 to 6 units per acre are unlikely to be constructed due to current land values, unless subsidies or additional funding sources are made available to incentivize and support the construction of affordable units.

Creatively designed infill development that provides affordable and workforce housing options are encouraged in Crozet, especially in neighborhoods that are walkable to Downtown, Crozet schools, and the Employment District. Infill development that preserves existing housing stock, provides Middle Density housing types identified in this Plan, and that are priced within County's definition of affordable or workforce housing are encouraged. When both the Land Use Goals outlined in this chapter and the County's housing policy are met, it may be appropriate to allow densities to exceed those within recommended density ranges, especially if impacts, such as parking, can be adequately addressed.



(above) Old Trail Village is an example of a Village Center in Crozet, with vertically mixed-use buildings, active uses on the ground floor as well as bicycle and pedestrian connections.

## Village Center: Old Trail

Village Centers are intended to promote a mixture of uses in a walkable and compact development pattern. These Centers have a higher concentration of commercial or cultural activities. Buildings within the core are encouraged to be mixed-use with active ground floor uses. Development should provide pedestrian and bicycle connections to adjacent neighborhoods. Both Village Centers in Crozet have existing approved mixed-use development.

The Old Trail Village development was approved as a Neighborhood Model District rezoning in 2005 and has been building out over time since then. The Old Trail rezoning allows between 100,000 and 250,000 square feet of non-residential uses. The center point of the Old Trail Village Center is at Old Trail Drive between Blocks 6 and 1, where there is an existing JAUNT transit stop. This central area of Old Trail allows for the most intensive uses, including retail stores, offices, restaurants, and civic and recreational uses. Existing uses include a coffee shop, restaurant, gym, and medical offices. Future mixed-use development in this area will continue to provide connectivity and walkability.

## Village Center: Clover Lawn

The development at Clover Lawn was approved over time through several different rezonings. Existing uses include a grocery store, restaurants, a building supply store, and a bank. The south side of the Village Center is entirely commercial and retail development, while the north side also has residential development. The center point is located between the north and south side, as the Center is divided by Route 250.

Enhanced multimodal connectivity should be provided with future development and redevelopment. The extension of Eastern Avenue will also provide additional trail and bicycle lane connections. The recommended shared-use path along Route 250 from Old Trail Drive to the sidewalks in front of Clover Lawn would also provide access for pedestrians and cyclists. Opportunities for transit to serve this Center should be explored. New and infill development should establish a more interconnected street and pedestrian network, and human-scaled, walkable development patterns. Pedestrian connectivity should especially be enhanced within the Center's walkshed, allowing pedestrians from nearby residential neighborhoods to more easily access the Center.

## Neighborhood Service Center: Wickham Pond

Neighborhood Service Centers are intended to provide areas of activity that support surrounding residential neighborhoods. Neighborhood Service Centers should contain small-scale, mixed-use development patterns that are compatible with surrounding uses. The focal point of these centers should be an improved transit stop or a public amenity. Neighborhood Service Centers are smaller in size and intensity than Town and Village Centers and have a one-quarter mile walkshed. Development should be pedestrian-scale and walkable from adjacent neighborhoods. Vertical mixed-use buildings with active ground-floor uses are encouraged.

The Wickham Pond future mixed-use area is the only Neighborhood Service Center in the Crozet Development Area. The zoning for Wickham Pond allows up to 16,000 square feet of small-scale retail, commercial, and institutional uses. The center point of the Neighborhood Service Center is located on the undeveloped Wickham Pond property along Route 240. There is an existing JAUNT transit stop on Wickham Pond Drive. Future development in this Center should enhance multimodal connectivity, especially to Park Ridge Drive and the adjacent Employment District. Future development should also provide permanent transit infrastructure to serve eastern Crozet.

## Employment Districts

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 jobs. Expanded employment opportunities in this area could allow more community members to both live and work in Crozet.



Specific primary sector industries, businesses consistent with the goals of Project Enable (the County's Economic Development Policy), and uses consistent with the underlying Office/R&D/Flex/LI land use should be targeted for this area. Emerging industries and businesses such as green technology and incubator and maker spaces should also be considered. However, this list should not be interpreted to exclude related sectors that support the cultivation and nurture growth of existing businesses.

The Employment District includes properties along Route 240 between Park Ridge Drive and Union Mission Lane. 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. The primary employment anchors are Music Today e-commerce marketing agency and Starr Hill Brewery. There are several other existing businesses, including self-storage facilities, a medical office, and a car wash.

Approximately 62 acres of the Employment District are part of the former Acme Visible Records site. Chemicals used to paint and finish the products at Acme caused contamination of the soil and groundwater on the property and environmental remediation and continued monitoring of the site is required by the Environmental Protection Agency (EPA). The main manufacturing building on the property was demolished in 2013 to improve site access for the cleanup effort. A building pad and parking lot remain on the site and could offer opportunities for redevelopment. Behind the building pad is a mostly cleared field and some woods.

Future uses on the ACME site could include industrial or commercial redevelopment, dependent upon the timeline of the clean up and if permitted by the EPA. The potential for community solar should also be explored on the site to support the County's Climate Action Plan goals, either as an interim use, or with the redevelopment of the property. The EPA prohibits certain uses for the Acme site, including residential uses, schools, and daycare facilities and continued groundwater monitoring will be required.

There are significant opportunities for infill and new development to occur throughout the District. Development and redevelopment should strive for compact walkable development patterns with an internal street network and multimodal connectivity. Opportunities for rail access should also be explored in conjunction with Buckingham Branch Railroad, should this be determined to be an asset for existing or future industries.

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. Residential uses are encouraged to locate on upper stories of mixed use buildings. These uses are not permitted within the Acme site, even with future redevelopment.

## Recreational Districts

Recreational Districts are designated amenity spaces of regional importance that are intended to provide opportunities for active, passive, and social recreation. The amenities in these districts support the recreational needs of Crozet and the County as a whole. There are two Recreational Districts in the Crozet Development Area: Crozet Park and Western Park.

Crozet Park is a 22-acre public park which is owned by the non-profit organization Claudius Crozet Park, Inc. Park amenities include sports fields and courts, a swimming pool, recreational facility, trails, pavilions, and a dog park. Access to some of the amenities, such as the swimming pool and indoor recreation facilities, requires a paid membership. Crozet Park is also an access point to the Crozet Connector trail. The annual Crozet Arts and Crafts Festival is held at Crozet Park. Maintenance and funding for the park occurs through both private and County (Capital Improvement Program) funds. Future trail and road connectivity will allow community members to walk from Crozet Park to Downtown. Additional opportunities for connectivity with surrounding neighborhoods and existing trails should be explored, including an enhanced and more visible access point to the Crozet Connector Trail.



(above) A portion of the Employment District, along Route 240, in Crozet is comprised of Music Today e-commerce marketing agency and Starr Hill Brewery.



(above) Henley Middle School and Brownsville Elementary School Educational District.

Western Park is a planned 36-acre public park adjacent to Old Trail Village and accessible from Old Trail Drive. Amenities for the park will include sports fields and courts, trails, community gardens, playgrounds, and natural areas. Trails through the park will also connect to Old Trail Village, Henley Middle School and Brownsville Elementary School, and residential neighborhoods to the north.

Additional opportunities for students to walk and bike to schools should be explored, consistent with the recommendations in the Transportation and Conservation Chapters of the Master Plan. Trail connections from Old Trail Village to the north and from Old Trail Drive to the west should continue to be provided and enhanced.

## Educational Districts

Educational Districts are designated schools or college campuses of regional importance that are intended to serve as community gathering spaces for both students and community members. The 50-acre Henley Middle School and Brownsville Elementary School campus on Route 250 is the only Educational District in the Crozet Development Area. Both schools are accessed from a shared entrance at Route 250 and have sports fields and courts, indoor recreation facilities, and trails.

The Educational District is located adjacent to the Rural Area boundary, and students in both the Development Area and Rural Area attend the schools within the Crozet Development Area. Additionally, Western Albemarle High School is located across Route 250 in the Rural Area. There are existing traffic concerns along Route 250, especially during peak traffic hours and school drop-off/pick-up. The recommendations in the Transportation Chapter call for roundabouts along Route 250, including at the Henley and Brownsville Schools entrance.



# Other Areas

## Crozet Avenue Corridor

The Crozet Avenue Corridor (part of Route 240) is the main north-south road in Crozet and connects Three Notch'D Road with Route 250 West. Crozet Avenue is designated as an Avenue street section from Three Notch'D Road to Dunvegan Lane and a Rural Transition section from Dunvegan Lane to Route 250. The Avenue portion of this street should have sidewalks, street trees, and enhanced connectivity for pedestrians and cyclists. A streetscape project for the Downtown portion of Crozet Avenue (from the Square to Tabor Street) was completed in 2014. Additional connectivity and multimodal transportation options along Crozet Avenue should be provided, consistent with the recommendations outlined in the Transportation Chapter.

The Rural Transition portion of Crozet Avenue is a two-lane winding section with connections to residential neighborhoods, including Chesterfield Landing and the Meadows. This section of Crozet Avenue is intended to retain its more rural character. Options for bike and pedestrian connectivity are more limited in this section, due to topography, right-of-way, and stream crossing challenges. Recommendations in the Transportation Chapter provide potential options for a shared-use path along or parallel to this segment of Crozet Avenue. More study is needed to determine the feasibility and alignment of this path. Additional residential development along Crozet Avenue is possible based on existing zoning. Trees along the Rural Transition section should be preserved to the extent feasible.



The Crozet Avenue Corridor is the main north-south road in Crozet, with segments designated as an Avenue and a Rural Transition (shown above) near Chesterfield Landing and The Meadows.

## Rural Edges

The Crozet Development Area is one of three designated 'communities' in the County's Comprehensive Plan and is entirely surrounded by the Rural Area. Maintaining rural edges to protect scenic resources and respect the adjacent rural context was identified as a priority during the planning process. The Development Area boundary was adjusted in one location during this Master Plan update, which was on the western edge at the Old Trail clubhouse and restaurant. The boundary was adjusted to include the entire clubhouse and restaurant, which are both connected to public utilities, and to more closely follow parcel boundary lines. The existing Green Systems designation was retained.

The majority of the edge areas in Crozet are either residential development, private open space, or public parks. The exception is the Route 250 West boundary. Route 250 is designated a Virginia Scenic Byway, indicating that the road has a "relatively high aesthetic or cultural value, leading to or within areas of historical, natural or recreational significance." The Scenic Byway designation on its own does not require any additional regulations for adjacent properties. Regulations are achieved through the County's Entrance Corridor zoning overlay district, which includes Route 250. Any new development (with the exception of single-family detached houses) within the Entrance Corridor overlay must be reviewed by the Architectural Review Board (ARB) and be consistent with ARB guidelines.

There are a variety of residential, commercial, and industrial uses along Route 250, both within Crozet's Development Area and in the adjacent Rural Area. For properties within the Development Area, a 50-foot landscaped buffer (150 feet at Old Trail Drive) is recommended along the northern edge of Route 250. Any new development or redevelopment should provide this buffer and will require ARB review. The Future Land Use Plan should be used to guide development form and uses.

In the adjacent Rural Area to the west, existing zoning allows for a variety of commercial and industrial uses. Many of these uses are not consistent with the recommended Rural Area uses in the Comprehensive Plan or with the intent of the Scenic Byway designation. Future development that is not by-right should refer to the Comprehensive Plan recommendations on interstate interchanges and recommended uses in the Rural Area.

Several roads designated 'Rural Transition' sections help define the Development Area boundary, including Lanetown Road, a portion of Railroad Avenue, and a portion of Three Notch'D Road. These roads should retain their rural character while still accommodating bike and pedestrian connectivity where feasible. Any road improvements should be focused on safety upgrades.

## Old Crozet School

The County is the current owner of the Old Crozet School building on Crozet Avenue, across from Crozet Elementary School. This facility has been serving the community since 1924, first as a combined elementary and high school, and later as an elementary school until 1990 when Crozet Elementary was completed across the street. Currently, the building is leased to two tenants, the Field School, a private middle school for boys, and Old Crozet School Arts (OCSA). OCSA is a non-profit school for arts instruction. The school is also within the Crozet Historic District as a contributing building.

The Field School is planning to move a new location in the coming years. As the Field School prepares to relocate, new uses for this property should be considered. The County should solicit community input to help determine an appropriate use of the school building and adjacent grounds. Consideration should be given to uses that support the County's goals for Affordable Housing, school needs, and uses that provide historic and cultural programming.

Any development or redevelopment of the adjacent parcel to the South, which is also owned by the County, should include restoration efforts for the Parrot Branch stream buffer and a trail. Space for a small pocket park or public outdoor civic area should be considered with the reuse of this property in partnership with the future users and/or developers of the property. Sustainability should also be a priority for the reuse of the school and adjacent grounds, as it provides an opportunity to support the County's Climate Action Plan with any retrofit of the school building and the surrounding site design.



(above) An existing field on the site, looking toward the stream, and the Old Crozet School building.

## Tabor Street/Crozet Avenue Middle Density Residential

There are additional review criteria for any future legislative review applications for new development in the block designated Middle Density Residential that is bounded by Tabor Street, High Street, Crozet Avenue, and Dunvegan Lane. This block is comprised of seven parcels that total 15.86 acres. All of the parcels are currently zoned R-2 Residential.

There are seven existing dwelling units on the properties. Five out of seven of the parcels are within the National Crozet Historic District, and six of the structures are contributing.

This block is surrounded by four streets; however, transportation upgrades are needed, especially for bike and pedestrian connections. There are no sidewalks or paths along any portions of the roads directly adjacent to this block. Specific recommendations for road connections and bike and pedestrian infrastructure are included in the Transportation Chapter of this Plan.

Due to the existing historic resources, existing tree canopy, and needed transportation improvements in this area, there are additional considerations for future development of this block. Future development of this site should preserve the historic houses and portions of the tree canopy, and should be sensitive to these existing historic and natural resources. Areas of tree canopy to be preserved should be identified by an independent certified arborist.

This block is located in close proximity to Downtown Crozet, and future development could provide additional housing units within walking distance of Downtown businesses and public spaces. Future development of this block would need to provide sidewalks along the portions of Tabor Street, High Street, Crozet Avenue, and Dunvegan Lane that are adjacent to the site. Future development would also need to provide or partner in providing right-of-way for bike lanes along Crozet Avenue and right-of-way for a street connection at Dunvegan Lane. Once completed, the recommended Park Road and Dunvegan Lane Corridor Design (Implementation Project 1F) may provide additional project opportunities for this area as well.



(above) One of the existing historic structures within the Tabor Street/Crozet Avenue Middle Density Residential block.



## Land Use Guiding Principle

Support and strengthen Crozet's history as a self-sustaining town, while ensuring that new and infill development is compatible in scale and design and provides housing choice for all community members.

### **Goal 1: Support the continued revitalization of Downtown as the historic, cultural, and commercial heart of Crozet with distinctively urban design and support a mixture of uses in Crozet's other designated centers of activity.**

- A. Provide wayfinding signage Downtown and in other destinations to help visitors and residents navigate area amenities, parking locations, parks, and trails.
- B. Conduct a public engagement process to review and update the Downtown Crozet District (DCD) Zoning District requirements to a) evaluate and incorporate appropriate Downtown design guidelines and b) review and update use requirements to reflect market demands and the goals of the Master Plan.
- C. Work with the Downtown Crozet Initiative (DCI) and other community partners to support programming for Crozet Square and to establish a formal mechanism for long term improvements and maintenance of public amenities such as a Business Improvement District (BID) or special service district.
- D. Explore opportunities for community and rooftop solar projects with development Downtown and within the Employment District, especially on buildings with large footprints, parking structures, or as a possible interim use on the Acme property.

### **Goal 2: Support existing neighborhoods and the historic context of Crozet through ensuring that new and infill development is compatible in design and scale with existing neighborhood fabric and allowing reuse of historic buildings.**

- A. Downtown Neighborhoods Architectural and Cultural Resources Study (2 Phases):
  - i. Phase 1: Using the 2009 Community of Crozet Architectural Resources Study as a starting point, conduct a subsequent study to evaluate the Downtown Neighborhoods not considered in the previous study

to create a comprehensive Downtown Neighborhoods Architectural and Cultural Resources study.

- ii. Phase 2: After completion of the Downtown Neighborhoods Architectural and Cultural Resources Study, conduct a public engagement process with residents of the Downtown Neighborhoods to develop actionable strategies to allow appropriate infill and redevelopment within Downtown Neighborhoods while supporting residents' desires for neighborhood preservation.
- B. For future legislative proposals along Carter Street, consider impacts to adjacent residential uses, especially noise and lighting impacts.

### **Goal 3: Provide a variety of housing options that meet the needs of Crozetians at all income levels.**

- A. Naturally Occurring Affordable Housing Survey and Recommendations (2 Phases):
  - i. Phase 1: Conduct a survey of Naturally Occurring Affordable Housing (NOAHs) within Crozet
  - ii. Phase 2: Identify programs and tools to support maintenance/preservation of NOAHs, such as a Housing Rehabilitation Zone.
- B. Allow infill development within the Downtown Neighborhoods and other areas that are walkable to centers or schools through the legislative review process. Consider allowing densities higher than the recommended land use for proposals that are consistent with the Land use Goals and Guiding Principle, the County's housing policy, and that are appropriately scaled to the surrounding neighborhood.
- C. Implement a priority review process to support development of new affordable and workforce housing within appropriate locations including within and adjacent to Centers and the Employment District.


### **Goal 4: Maintain a distinct rural edge along Crozet's boundary to provide a visual connection to its cultural heritage as a town nestled in the Blue Ridge Mountains.**

- A. Work with community and the Architectural Review Board to develop Corridor-specific design guidelines for the Route 250 West Entrance Corridor.
- B. For lighting improvements to public buildings and on public lands, use full cutoff lighting fixtures. For parks and natural areas, consider motion-activated lighting and lighting that is turned off between dawn and dusk.
- C. Update the County's lighting requirements in the Zoning Ordinance to reduce lighting spillover, glare, and excessive brightness.

### **Goal 5: Leverage and amplify Crozet's artisan community, culture, history, and entrepreneurial spirit through creative placemaking projects and partnerships.**

- A. Increase capacity of the CCAC, local schools, or other community groups to initiate, implement, and manage placemaking projects.
- B. Conduct an engagement opportunity to solicit community feedback for the future use of the Old Crozet School and adjacent grounds, with a focus on supporting goals for housing, school needs, green building/site design, and historical and cultural programming.





Enhance Crozet's natural beauty, existing environmental resources, and the surrounding rural areas with an integrated network of parks and gathering spaces, trails, and natural areas that offer increased opportunities for outdoor recreation and protect natural resources.

# Conservation





# Overview + Background Conservation Overview

The Conservation Chapter establishes the Guiding Principle, Goals, and Recommendations related to parks, trails, and environmental features in the Crozet Development Area. Crozet community members shared their desire to protect natural features in Crozet, such as tree canopy and waterways, and to enhance outdoor recreation opportunities. This Chapter highlights the importance of a connected network of Green Systems, including providing connectivity to the adjacent Rural Area amenities such as the Blue Ridge Mountains and nearby County Parks.

Goals within this Chapter address parks, trails, regional amenities, and natural resources in Crozet. Each goal is supported with actionable recommendations. The Future Parks & Green Systems Plan and supporting narrative also serve to reinforce the Conservation Guiding Principle and Goals.

The Lickinghole Basin Natural Area provides a habitat for over 200 species of birds and serves as a sediment basin for stormwater management.



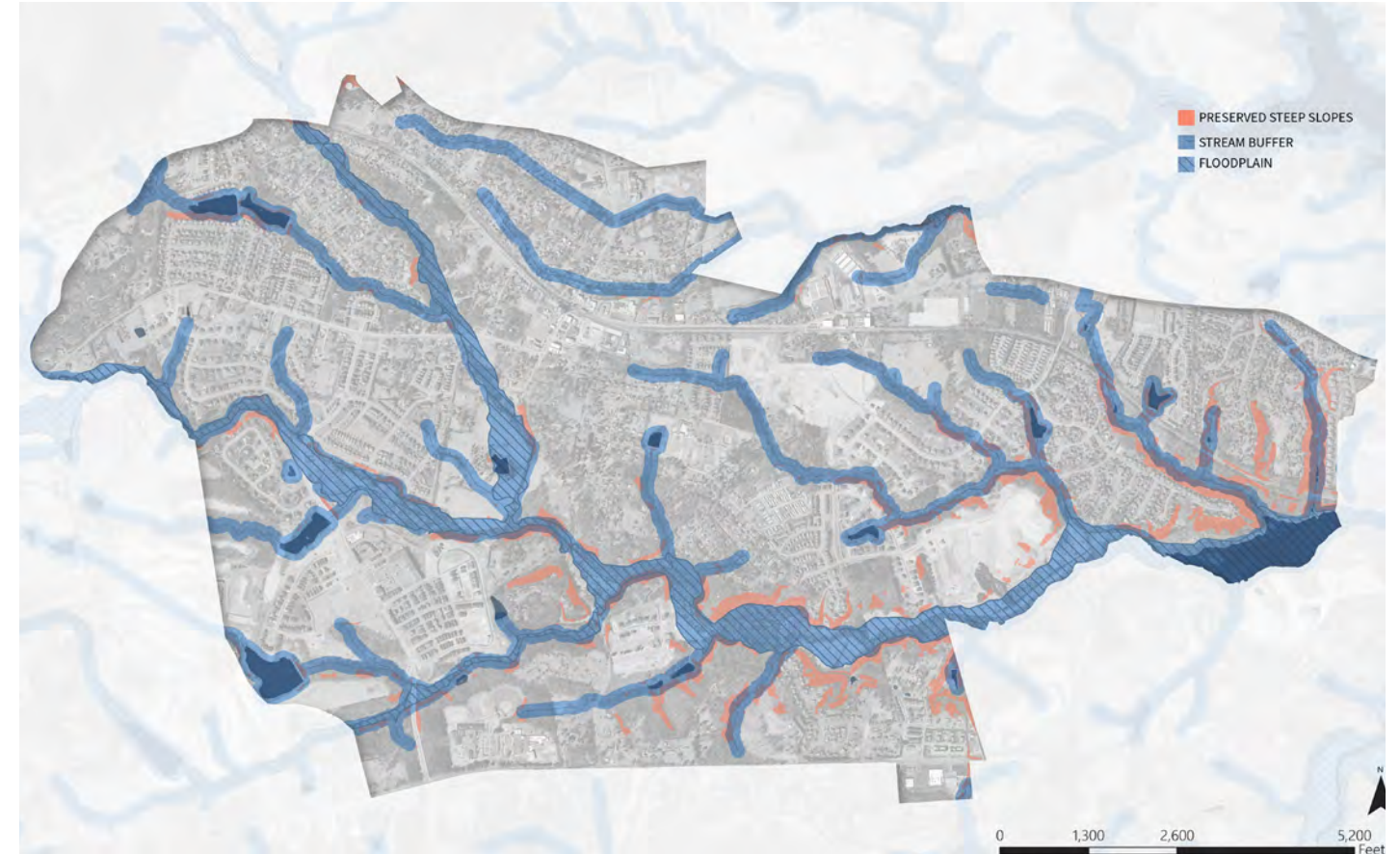
Mint Springs Park is located nearby in the Rural Area, and provides opportunities for hiking, swimming, and fishing.

## Existing Conditions and Environmental Features

Crozet is known for its location nestled in the Blue Ridge Mountains as well as its natural, cultural, and scenic resources. Downtown Crozet is located approximately 10 miles from the entrances to Shenandoah National Park and the Blue Ridge Parkway. Nearby County Parks in the Rural Area include Mint Springs Park and the Beaver Creek Reservoir, which is partially managed by the Parks & Recreation Department.

Within the Crozet Development Area there are several public parks that are in various stages of development, such as Crozet Park, the Downtown Plaza, and Western Park. Additional development of Western Park is needed to provide additional recreational opportunities for Crozet community members.

The Crozet Trail system has been building out over the past several years, in large part due to efforts by The Crozet Trails Crew, a volunteer organization that helps plan and build segments of the trail network within Crozet. The Crozet Connector Trail is one such trail that provides connectivity between Lickinghole Basin and Crozet Park. There are still key segments of trails missing in Crozet, especially trail connections providing north-south routes and connections to schools.



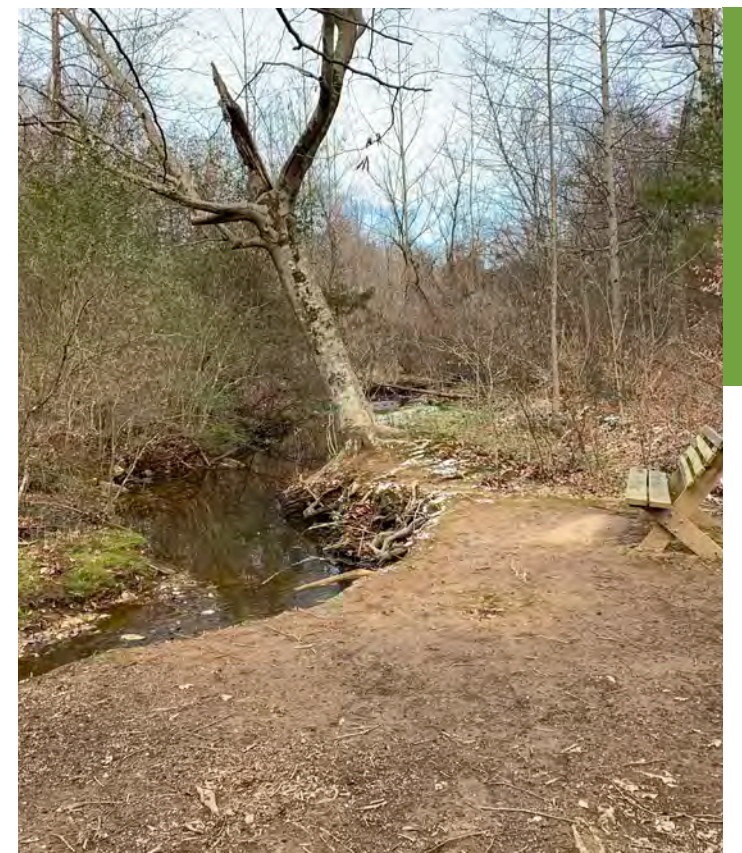
The map above shows the existing Environmental Features in Crozet, which include preserved steep slopes (pink), stream buffers (blue), and the 100-year floodplain (hatched blue).

There is a significant network of “Environmental Features” within the Crozet Development Area. Environmental Features consist of land that is within the 100-year floodplain, within stream buffers, or consist of preserved steep slopes.

The County’s Water Protection Ordinance (WPO) regulates stream buffers within the County. The WPO requires 100-foot wide stream buffers on each side of perennial streams within the Development Areas and on each side of both intermittent and perennial streams in the Rural Area and within water supply watersheds. Since Crozet is within a water supply watershed, both perennial and intermittent streams in Crozet have 100-foot stream buffers. Piped portions of streams do not have stream buffers. Buffers are intended to preserve existing vegetation and stream banks.

Development is restricted within the Environmental Features shown on the Parks & Green Systems Plan. Disturbance of these features requires additional design standards and approvals. Recreational amenities and activities may be permitted, and should be sited carefully to protect streams, stream banks, and other waterways.

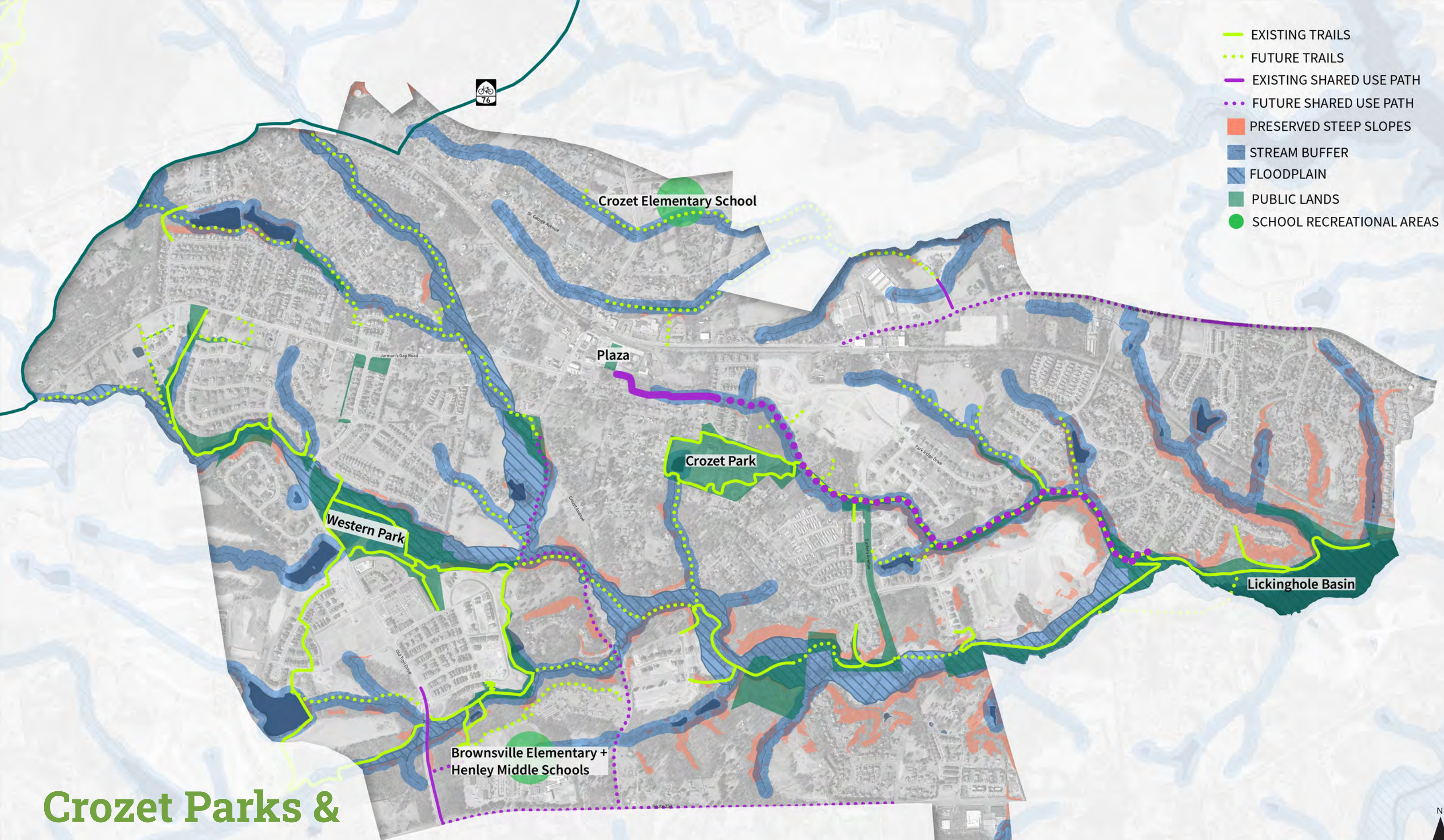
Protection of Environmental Features and of water quality is especially important as Crozet is within a water supply watershed.



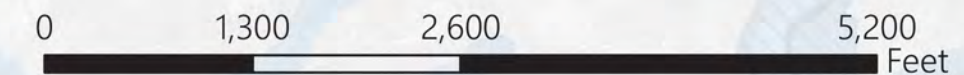
Much of the Crozet Connector trail follows along waterways.



- EXISTING TRAILS
- ⋯ FUTURE TRAILS
- EXISTING SHARED USE PATH
- ⋯ FUTURE SHARED USE PATH
- PRESERVED STEEP SLOPES
- STREAM BUFFER
- FLOODPLAIN
- PUBLIC LANDS
- SCHOOL RECREATIONAL AREAS



# Crozet Parks & Green Systems Plan



1 inch = 1,200 feet



# Parks & Trails

The Parks & Green Systems Plan for Crozet shows existing and proposed public parks, publicly-owned land, and trails. Future trails are shown with dotted lines. The exact alignment of future connections should be determined in collaboration with Albemarle County Parks and Recreation staff, County Planning staff, and property owners, with consultation from trail groups when appropriate (such as the Crozet Trails Crew).

## Park Typologies

Different types of parks serve different functions and provide unique amenities and experiences to their users. This section of the Master Plan identifies different types of parks and describes their intended function and typical amenities provided. Park master plans should be used to guide individual park designs.



(Above) An example of a Plaza Park Typology.

## Plaza

A central amenity space intended to function as the primary outdoor civic space for an area. It is designed to accommodate a range of functions and uses, such as event spaces, social gathering spaces, farmers markets, outdoor learning, food trucks, and more.

## Recreational Park

A park that provides a variety of spaces for formal recreation, such as athletic events and gatherings, with sports fields, pavilions, playgrounds, and associated facilities.



(Above) Lickinghole Basin is an example of a Natural Area in Crozet and is home to a variety of wildlife, including the bald eagle.

## Natural Area

An area intended to preserve and protect natural resources and to provide opportunities for respite from the surrounding developed environment. Natural Areas should be designed to protect natural resources, such as forest, streams, or wetlands. Natural Area amenities could include trails, walking paths, and passive recreation amenities such as benches and picnic areas.

## School Recreational Area

Amenities available at Albemarle County Public Schools (ACPS), such as playgrounds, sports fields, and walking paths. The School Recreational Areas in Crozet are identified on the Parks and Green Systems Plan. These amenities are accessible at ACPS' discretion and are not available to the general public during school hours.



(Above) Crozet Elementary School is one of the School Recreational Areas, and includes a playground and athletic fields.

## Parks in Crozet

There are four main public parks within the Crozet Development Area: Crozet Park, the Downtown Plaza, Western Park, and Lickinghole Basin Natural Area. Each of these parks serves different recreational needs. Continued build-out and amenity development will occur at The Plaza and Western Park. Expanded amenities, trails, and educational signage may occur over time at Crozet Park and Lickinghole Basin Natural Area.

## Crozet Park



(Above) A photo of the existing Crozet Park.

Crozet Park is a 22-acre Recreational Park. While the majority of outdoor amenities and facilities are publicly-accessible, most of the indoor facilities and activities require a paid membership. The non-profit Claudius Crozet Park, Inc. owns the park, except for the County-owned dog park. The Crozet Connector Trail is accessible from the eastern edge of Crozet Park and leads to Lickinghole Basin about 1.5 miles to the east. Eventually the Crozet Connector Trail will also provide a connection between Crozet Park and The Plaza (Downtown) to the east.

Given the many adjacent neighborhoods and parking availability at Crozet Park, it is an ideal access point to the Crozet Connector Trail. Opportunities for enhancing the Park connection to the Crozet Connector Trail should be explored. Potential expansions of amenities may occur at Crozet Park through both private and public funding.

Crozet Park is designated as a Recreational District, and additional information on use, form, site design guidance, and building types can be found in the Land Use Chapter of this Plan.

## The Plaza



(Above) A rendering of the future Downtown Plaza. Credit: Mahan Rykiel Associates and Warren Byrd

The Downtown Plaza is a planned public Plaza that will be completed as part of the Crozet Square redevelopment. As the Downtown area in Crozet continues to expand and add a variety of uses, the Plaza will provide an important gathering space and opportunity for events.

The developer of Crozet Square and Albemarle County have entered into a public-private partnership to develop and design The Plaza. Significant community input was used to determine the final Plaza design, and support for future plaza programming may be provided by the Downtown Crozet Initiative in partnership with County Parks & Recreation. Crozet Plaza is shown as the center point of the Town Center in this Master Plan's Land Use Chapter, highlighting its importance and location in the core of Downtown.





The drawing above illustrates the future Western Park, as shown in the adopted 2018 Western Park Master Plan.

## Western Park

Western Park is a 36-acre planned Recreational Park and Natural Area to the northeast of the Old Trail Village Development. According to the Western Park Master Plan, the western portion of the park will include formal recreational amenities such as sports fields and playgrounds. The eastern portion of the park contains areas with floodplain, stream buffers, wetlands, and a variety of wildlife habitats. This area will function as a Natural Area and will include trails, meadows, and natural play areas.

Parking and vehicular access from Old Trail Drive is planned along the southern park edge. Western Park will be developed in phases, with the earlier phases expected to provide a playground, parking and access, shelter and restroom facilities, landscaping, and stormwater management.

Western Park is also designated as a Recreational District on the Future Land Use Plan and additional information on use, form, site design guidance, and building types can be found in the Land Use Chapter of this Plan.



(Above) A portion of the site of future Western Park, with the Ballard Field/Old Trail neighborhood visible.



(Above) A photo of the existing Lickinghole Basin, a Natural Area and sediment basin in Crozet.

## Lickinghole Basin

Lickinghole Basin is a public 70-acre Natural Area and sediment basin (for stormwater management) with trail access from adjacent neighborhoods and the Crozet Connector Trail. The Basin and surrounding land are owned by the Rivanna Water and Sewer Authority (RWSA), which also manages the Basin and associated dam. The Basin captures a portion of eroded and disturbed soil that washes off of upland developed areas during rain events, helping to protect the quality of downstream waterways. The Basin is identified as a priority area in the County's Biodiversity Action Plan due to the variety of species and habitats, including over 200 species of birds and a bald eagles' nest.

This Natural Area should continue to be used for trails, bird watching, and other lower intensity recreational activities. It is not an appropriate location for more intensive uses, such as sports fields or vehicular access. New and extended trails should be sited carefully, keeping habitats and sensitive stream banks in mind. Opportunities for educational signage, invasive species management, trail connections, and furnishings, such as benches, should be explored in collaboration with staff from Parks & Recreation, Natural Resources Planning, and RWSA.

## Trail Typologies



(Above) A portion of the Crozet Connector Trail.

### Trail

A primitive waking path with a typical width of at least 5 feet. Some trails may be narrower, especially "spur trails" which provide connections from main trails to neighborhoods or streets. Surfaces include stone dust, gravel, mulch, or earth.



(Above) A Shared-Use Path outside of the Wickham Pond neighborhood in Crozet.

### Shared-Use Path (SUP)

A shared accessible path that is a minimum width of 10 feet with space for both pedestrians and bicyclists. The trail surface is usually paved with asphalt, but can also be crushed gravel. SUPs are ADA-accessible and are shared by people walking, running or riding bikes. They can offer routes not provided by the road network, provide additional recreational opportunities, or serve as a direct commuter route adjacent to a road.





(Above) An existing portion of the Crozet Connector Trail, an important segment of the bicycle and pedestrian network in Crozet.

## Trail Connectivity and Improvements

The Crozet Connector Trail is intended to be the ‘backbone’ of Crozet’s off-road pedestrian and bicycle network. The trail will eventually connect Downtown to Crozet Park and Lickinghole Basin. The current surface is a mix of gravel and earth, and the width and grade vary along its length. It is recommended to be upgraded to a shared-use path to provide enhanced accessibility and to serve as a commuter and recreational route between destinations.

Additional east-west trail connectivity should be provided between Lickinghole Basin and Western Park. The final alignment for this connection should be determined with Parks and Recreation staff, Planning staff, property owners, and Crozet community members. A potential crossing at Crozet Avenue (near

Chesterfield Landing and the Meadows) will also require VDOT review and approval.

The primary north-south trail route is identified for a future SUP and trail along Crozet Avenue and Powells Creek. Alignment of this route will require further study. This alignment is challenging due to right-of-way and topography constraints.

Currently, there are few formal trailheads in Crozet. Trailheads may include enhanced signage, maps and other information, gateway entrances, and parking. They are intended to serve as clear access points to trails and paths. Crozet Park is currently used as an informal trailhead for the Crozet Connector trail. Additional trailheads and options to enhance the Crozet Park trailhead should be explored.

# Other County-Owned Properties

Along with properties such as Western Park and the public schools sites, there are several other County-owned parcels in Crozet. The following three properties have been identified as areas with unique features where additional recommendations can support the goals of this chapter.

## Lickinghole Creek Property

The County owns a 15-acre property (Tax Map Parcel 56N-D) to the east of Chesterfield Landing and north of Sparrow Hill, where Lickinghole Creek runs along the northern portion. The Creek is surrounded by a significant stream buffer due to the flood hazard overlay. The property is entirely wooded. There are existing trails through this site, with a trail connection planned to the east to connect to Eastern Avenue and to the natural area at Lickinghole Basin. Trail planning will require careful consideration due to the preserved steep slopes on the site and the need to protect Lickinghole Creek from erosion and damaged stream banks. Stream restoration efforts are needed along the Creek, as there are existing issues with erosion. The stream buffer should be enhanced with plantings and other restoration efforts as needed. Due to the sensitive Environmental Features on this property, the tree canopy should be retained, and it should continue to be used as a natural area with limited improvements.

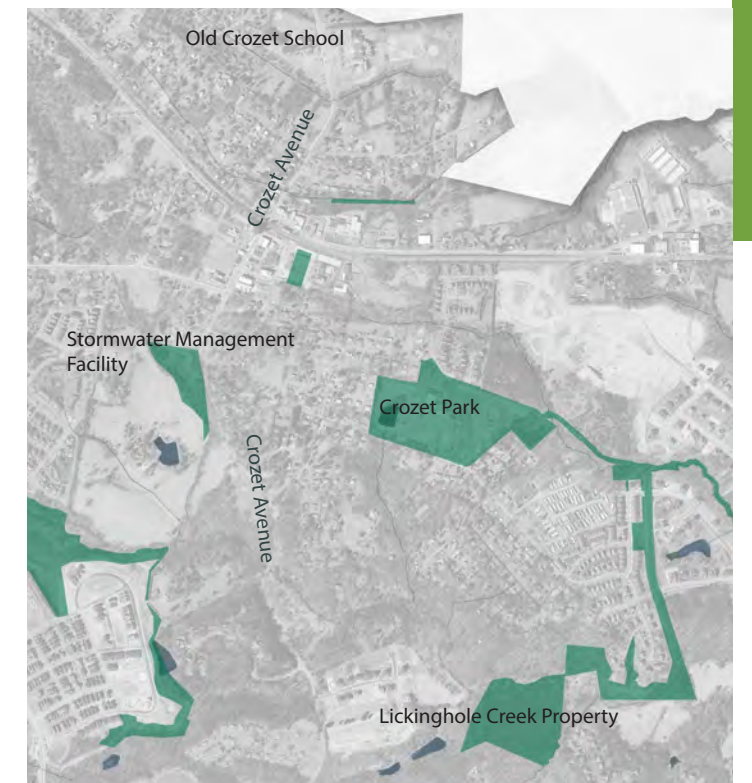
## Stormwater Management Facility along Crozet Avenue

This property (Tax Map Parcel 56-11) is used as a County-owned stormwater management facility. These “stormwater wetlands” help reduce stormwater pollution from 50 acres of Downtown Crozet. Powells Creek runs along the western portion of the site and includes a larger stream buffer due to the additional flood hazard overlay along the creek. There are also preserved steep slopes on most of the eastern portion of the property along Crozet Avenue. A future trail is recommended through this site and would continue across Jarman’s Gap Road along Powells Creek. This property should continue to be used as a stormwater management facility and should be enhanced as a more accessible natural area. Improvements could include seating, additional educational signage, and a trail access point. While this natural area has a different scale and form than most of Crozet’s other natural areas, it can still provide access to trails and to wildlife viewing.

## Old Crozet School Property

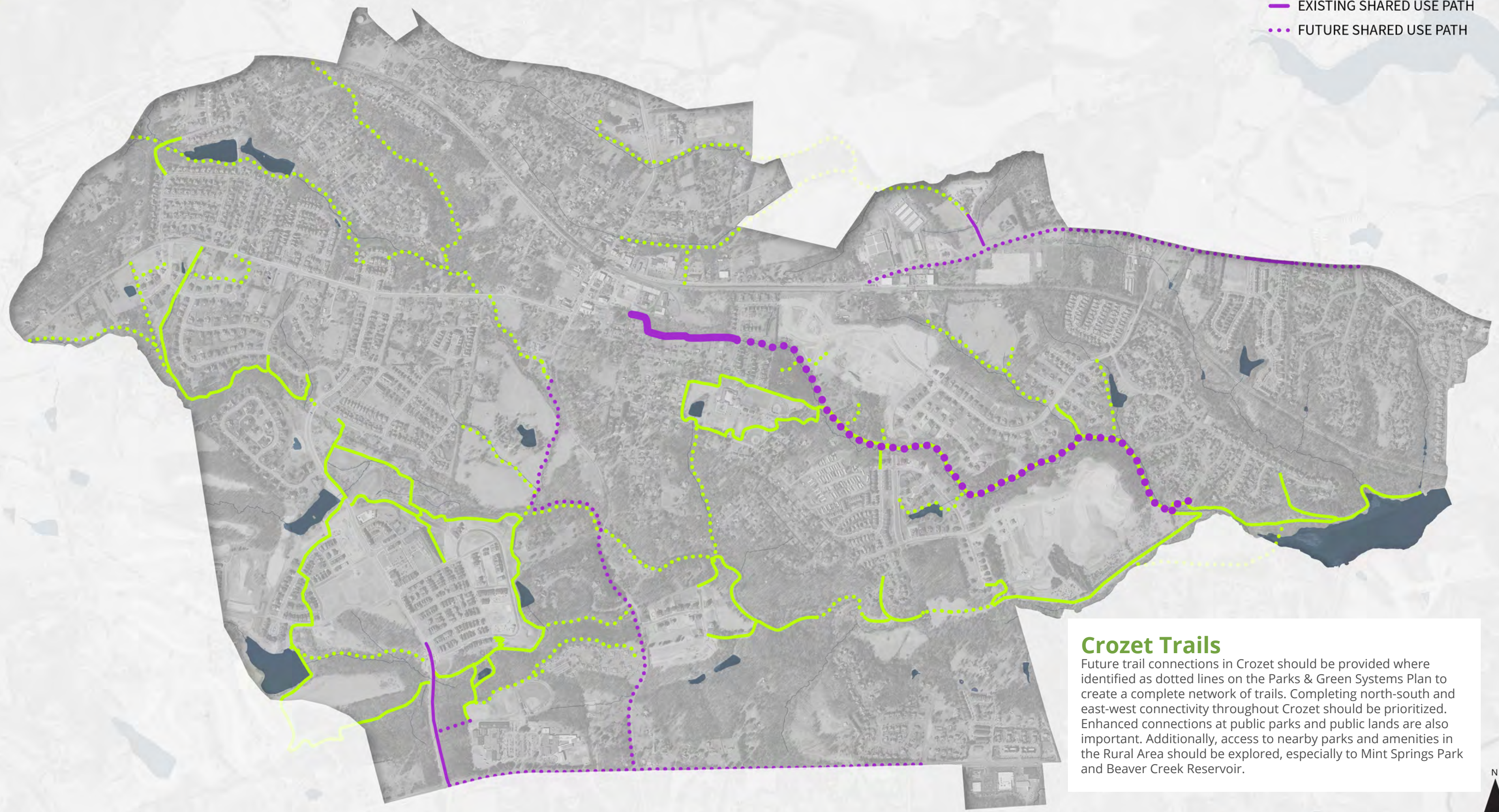
The property directly south of the Old Crozet School (Tax Map Parcel 56-61) is mostly undeveloped and is on the western side of Crozet Avenue North. The Parrot Branch waterway runs along the southern edge of both this site and the Crozet Elementary School property, where there is a 100-foot stream buffer expected on both sides of the stream. A future trail is recommended along Parrot Branch which could eventually connect to Three Notch’D Road and Park View Drive. Restoration efforts are underway for the stream buffer around Parrot Branch on the eastern side of Crozet Avenue, as portions of the 100-foot buffer currently lack forest cover. Additionally, there is a stormwater management facility on the Crozet Elementary School site, just north of Parrot Branch.

As the current tenant of the Old Crozet School prepares to relocate, the County should solicit community input about a future use of the property. Future use should include restoration efforts for the stream buffer, a retrofitted storm water management approach to this property that uses natural elements such as native plants, and other sustainable site design measures. Space for a small pocket park or other outdoor public civic area should also be considered.

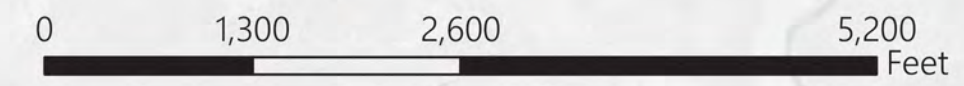




- EXISTING TRAILS
- ⋯ FUTURE TRAILS
- EXISTING SHARED USE PATH
- ⋯ FUTURE SHARED USE PATH



**Crozet Trails**  
 Future trail connections in Crozet should be provided where identified as dotted lines on the Parks & Green Systems Plan to create a complete network of trails. Completing north-south and east-west connectivity throughout Crozet should be prioritized. Enhanced connections at public parks and public lands are also important. Additionally, access to nearby parks and amenities in the Rural Area should be explored, especially to Mint Springs Park and Beaver Creek Reservoir.





# Biodiversity, Natural Resources, and Green Systems

## Green Systems

Crozet's Green Systems consist of public parks, trails, other public lands, and areas referred to as "Environmental Features," which consist of land within the 100-year floodplain, stream buffers, and steep slopes. The Green Systems network, sometimes referred to as a "green infrastructure network", provides a variety of benefits such as improved air quality, water quality protection, flood protection, climate mitigation, and aquatic and terrestrial habitat. Green Systems also provide opportunities for outdoor recreation such as hiking and wildlife observation.

## Water Quality

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. Waters that do not meet DEQ water quality standards are designated as "impaired" and subsequently issued Total Maximum Daily Loads (TMDL) to achieve DEQ water quality standards. Pollution is carried into waterways by runoff from surrounding land areas (non-point sources), direct discharge from a pipe or other conduit (point source), and erosion of stream banks.

DEQ has identified the following waterways as impaired in Crozet: Lickinghole Creek, Slabtown Branch, and an unnamed tributary of Parrot Branch.

DEQ is currently completing a TMDL study for the South Fork Rivanna River watershed, which includes the Crozet Development Area. A TMDL study determines the maximum amount of pollutant allowed to enter a waterbody so that the waterbody will meet water quality standards. The study also identifies the causes of the impairment and a pollutant reduction target.

The final draft of the South Fork Rivanna River watershed study is expected to be approved by EPA in early 2022. The resulting Implementation Plan to decrease non-point source pollution in impaired waterways will provide additional opportunities for federal and state funding and grants. Non-point source pollutant reduction actions are implemented through both regulatory and incentive-based programs. Examples of implementation actions include cost-

sharing programs, stormwater management Best Management Practices (BMP's), and educational campaigns. Point source pollutants are regulated through EPA's National Pollutant Discharge Elimination System (NPDES) permits.

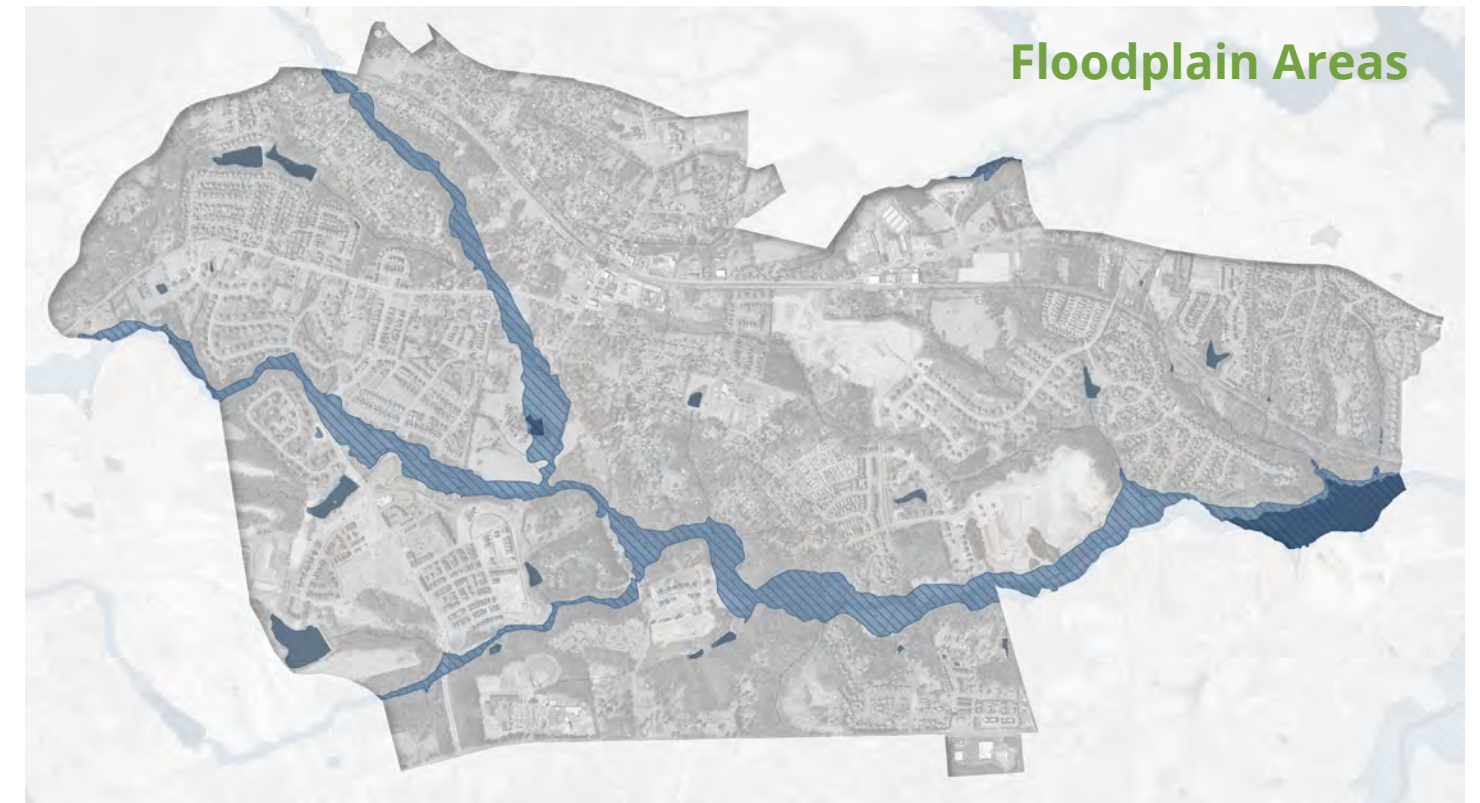
DEQ has found high levels of nitrogen in the unnamed Parrot Branch tributary. Existing septic systems from nearby neighborhoods may be a potential source of nitrogen. While these neighborhoods are within the jurisdictional area for public water and sewer, some homes are still using septic systems. Virginia Department of Health (VDH), Albemarle County Service Authority (ACSA), and Albemarle County should collaborate with property owners to explore options for connecting to public utilities in this area and other areas as needed in the Crozet Development Area.

There are several areas in Crozet where waterways exist without vegetated and established buffers. Most of these areas are neighborhoods where development predates current WPO regulations, such as along St. George Avenue. These waterways are largely located on private, residential property. The County should hire an independent third-party consultant to study this area and confirm the status of these waterways (see Conservation Goal 4). If the consultant finds these waterways should be officially classified as streams, then subsequent recommendations for re-establishing buffers and restoring stream health should be developed, in consultation with property owners.

## Stormwater Management

Stormwater management is encouraged to be addressed on-site with development projects, especially by incorporating Low-Impact Development (LID) strategies. Practices that mimic or preserve natural drainage processes, such as bioswales, depressions, and vegetated areas, can help protect Crozet's waterways. DEQ has identified Lickinghole Creek as impaired due to sediment buildup. Additionally, these techniques remove pressure from the sediment basin in Lickinghole Basin and slow the rate of sediment accrual there.

The County owns an existing stormwater management facility in Crozet's downtown area, to the west of Crozet Avenue. A future trail is recommended through this site, which would connect to Jarman's Gap Road and a future trail network to the north. This property should continue to serve as a stormwater management facility and should be enhanced with native plantings and landscapes.



The map above shows areas within the floodplain (blue striped areas) and waterways (dark blue). A floodplain is an area adjacent to a body of water that is susceptible to being inundated by water normally associated with a 100-year flood or storm event. This includes, but is not limited to, Federal Emergency Management Agency (FEMA) designated floodplains.



The map above shows stream buffers within the Crozet Development area (transparent blue) and waterways (dark blue). Stream buffers are areas of land at or near stream banks and/or nontidal wetlands that provide environmental services, such as improving water quality, or are sensitive to changes that may result in water quality degradation. These areas are regulated by Albemarle County's Water Protection Ordinance, and are often referred to as the "WPO buffer".



## Biodiversity and Climate Action Planning

Albemarle County's Biodiversity Action Plan (BAP) identifies important species, habitats, and sites within the County and outlines goals and strategies to protect these habitats and species, such as minimizing habitat fragmentation and management of public lands to conserve and enhance biodiversity. The BAP maps large (greater than 100 acre) and small (between 10 and 99 acres) forest blocks throughout the County. A small forest block exists around Lickinghole Basin, which is also identified in the Plan as an important site.

The BAP also identifies a large area of the County, just northwest of the Crozet Development Area, as a "Conservation Focus Area" where land and habitat protection should be prioritized. The Northwest Focus Area includes land within Shenandoah National Park, Bucks Elbow Mountain, and Mint Springs Park. The BAP recommends protection of lands within the focus areas, and where possible, connections among them. The Green Systems Network within Crozet, especially the greenways along Lickinghole and Powells Creek, provide opportunities to preserve and enhance habitat corridors that provide potential connections to the Northwest Conservation Focus Area.

The County's Phase 1 Climate Action Plan (CAP) provides recommendations for reducing greenhouse gas emissions and mitigating the impacts of climate change within Albemarle County, such as protection of publicly-owned forested land and the use of native plant species. The Climate Action Plan discusses the importance of vegetative buffers and forest cover for multiple benefits, including carbon sequestration.

## Urban Forestry and Tree Canopy

Urban forests and tree canopies 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. They also reduce stormwater runoff from impervious surfaces and decrease flood risk. Urban forests and tree canopies include trees in parks, natural areas, gardens, river corridors, wetlands, greenways, and in parking lots and along streets.

In addition to their role in providing valuable ecosystem services, trees create an inviting, livable, and healthy atmosphere for community members, businesses, and visitors. Roots from large trees also stabilize soils, reduce sediment runoff, provide habitat for birds and other wildlife, and further enhance the quality of

surrounding water systems such as Lickinghole Creek and Powells Creek. Trees in more developed areas, including street trees and trees in parking areas, help reduce the heat island effect of hot pavement in the warmer months and provide shade for pedestrians.

In addition to supporting Goals of the CAP and BAP, protecting and enhancing the tree canopy within forest blocks and sensitive environmental features also supports the Conservation Guiding Principle. It is especially important to preserve native tree canopy in areas with identified forest blocks and areas within the floodplain and stream buffers. The Lickinghole Creek forest block should be protected and enhanced or expanded with additional native tree canopy where possible.

Opportunities for potential future tree canopy enhancement and restoration are shown on the Tree Canopy Map (page 20). Efforts to enhance and expand urban forest cover should be focused in areas that can increase habitat connectivity, such as along and adjacent to the Lickinghole Creek and Powells Creek greenway, areas that can contribute to water quality protection, such as within the floodplain and stream buffers, and those properties that are publicly-owned, such as parks, schools, public lands, and natural areas. Opportunities should also be explored to work with neighborhood associations to enhance tree canopy on their commonly held open space parcels, where no further development is expected, and areas that are shown for Green Systems on the Future Land Use Plan.

## Steep Slopes

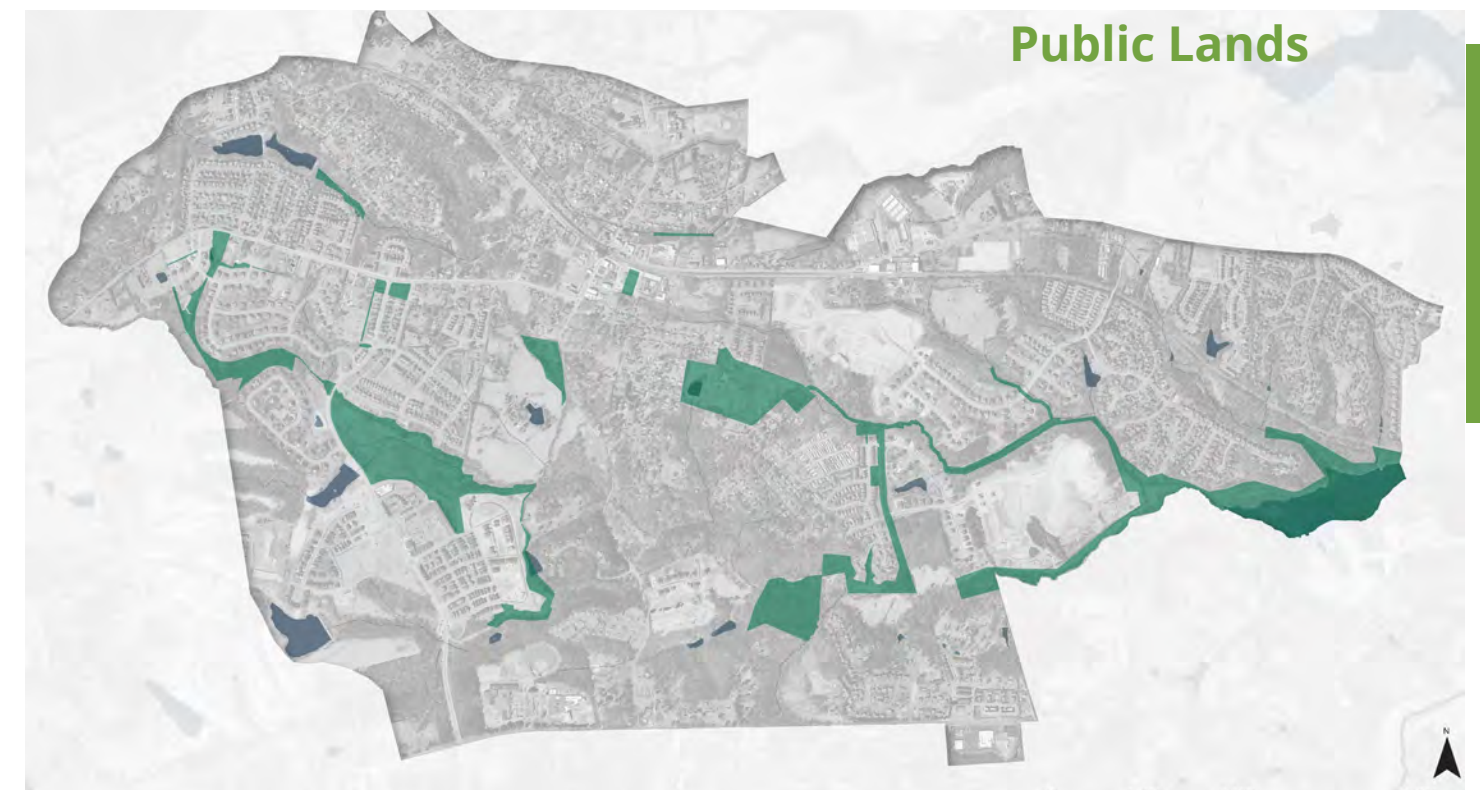
The majority of the preserved steep slopes in Crozet (and the County's other Development Areas) are along river and streambanks. Protecting these slopes is vital for the health of Crozet's waterways. The County's steep slopes overlay district requires additional design considerations to protect identified steep 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. This Chapter also recommends preserving existing vegetation within stream buffers and floodplain and ensuring careful siting of new trails, which also help protect these steep slopes.



This is an aerial image of the portion of St. George Avenue with a waterway that exists without a vegetated and established stream buffer.



The map above shows areas within preserved steep slopes in light pink. Steep slopes are areas of incline with a 25 percent grade or greater (grade refers to the angle of the incline, where horizontal or flat equals zero). Steep slopes are regulated through a steep slopes overlay district in the Albemarle County Zoning Ordinance.



The map above shows areas that are publicly-owned land for recreation and conservation in Crozet. These areas include public parks and publicly-owned land around public trails.





(Above) This map identifies opportunities for potential future tree canopy enhancement and restoration.



This map identifies impaired streams and a small forest block in Crozet from the Albemarle County Biodiversity Action Plan (BAP).

# Cultural and Scenic Resources

## Heritage and Cultural Tourism

Crozet's location near the Blue Ridge Mountains and Shenandoah National Park and its variety of events, festivals, and activities in both the Development Area and adjacent Rural Area present opportunities for continued and expanded heritage and cultural tourism.

Bike Route 76 is a long-distance bicycling route between the Chesapeake Bay in Virginia and Missouri, and which then continues westward as the TransAmerica Trail, ending in Oregon at the Pacific Ocean. It includes shared roadways, on-road accommodations, and off-road shared-use paths. Bike Route 76 runs along the edge of the Crozet Development Area, including portions of Lanetown Road, Railroad Avenue, and Buck Road. Consideration should be given to either re-route Bike Route 76 through Downtown Crozet (via Jarman's Gap) or to include signage at Jarman's Gap and Lanetown Road for visitors to stop in Downtown Crozet.

Several annual parades and events take place in Downtown Crozet and Crozet Park. These include the twice-annual Crozet Arts and Crafts Festival in the Park, which features local food and beverages, live music, and the sale of local artisanal goods.

Farms and orchards within the Rural Areas adjacent to Crozet, including Chiles Orchard and Henley's Orchard, offer activities including pick your own fruit, live music, and shopping for artisanal goods. Additionally, there are opportunities for locally-grown food within Crozet, such as Decker's Happy Eggs and local produce at the weekly Farmers Market in Downtown. There are also nearby country stores in the surrounding Rural Area with local produce, wine, cider, and baked goods, such as Greenwood Grocery.

Crozet is near several vineyards on the Monticello Wine Trail. There are also breweries in both the Development and Rural Areas. Starr Hill Brewery in Crozet is also part of the "Brew Ridge Trail", which is a self-guided network of local craft breweries within the region. Visitors and locals may use small tour buses to 'hop' to several different nearby wineries and breweries.



(Above) Access to Bike Route 76 along Railroad Avenue in Crozet.



(Above) The Crozet Arts and Crafts Festival in Crozet Park.





(Above) Lanetown Road, Crozet

## Rural Connections

These activities and resources highlight the need for connections between the Development and Rural Areas. The type of connection will depend on the distance from the Development Area and the feasibility of providing pedestrian and bicycle access. The four Rural Shared Road sections recommended in the Transportation Chapter are intended to provide enhanced bicycle access to the nearby Rural Area, including Mint Springs Park. Additional opportunities for trail connections to Beaver Creek Reservoir and Mint Springs Park should be explored.

The County's Comprehensive Plan recommends future trail connections in the Rural Areas adjacent to Crozet. One is the Three Notched Trail connecting the Western Neighborhoods to Crozet along Route 250 and a trail connecting Crozet from Half Mile Branch Road to the Blue Ridge Tunnel in Afton. Alignments for these trails will require further study. This chapter recommends a feasibility study in coordination with regional partners to determine the appropriate alignment of this trail network through or adjacent to Crozet.

## View Corridors and Vistas

While walking, biking, hiking, driving, and relaxing outdoors in Crozet, the surrounding mountains are often visible. These mountains include the Blue Ridge mountains, Bucks Elbow Mountain, and several smaller peaks. Many of these view corridors and vistas are visible from the public right of way and public parks and trails. Promontory decks are planned for Western Park, which will provide public access points for these views. Views along Lanetown Road, Railroad Avenue, and Buck Road are also important, as they are part of national Bike Route 76. Future development and redevelopment along these roadways and adjacent to Western Park should consider mountain viewsheds and preserve their visibility from the public streets and park to the extent feasible.



(Above) The Blue Ridge Tunnel in nearby Afton.



This map shows potential areas for future regional connectivity, including to the Blue Ridge Tunnel Trail which is within Nelson County and Augusta County.



# Conservation Guiding Principle

Enhance Crozet's natural beauty, existing natural resources, and the surrounding rural areas with an integrated network of parks and gathering spaces, trails, and natural areas that offer increased opportunities for outdoor recreation and protect natural resources.

## Goal 1: Continue to develop community parks and support expanded opportunities for a variety of outdoor recreation activities in Crozet.

- A. Construct Western Park in general accord with the 2018 Western Park Master Plan.
- B. Manage Lickinghole Basin and the surrounding area primarily as a Natural Area with passive recreation opportunities and trails that are compatible with Environmental Features and wildlife habitat, such as wetlands and the bald eagle nest.
- C. Pursue opportunities for interpretative and educational signage, removal of invasive species, as well as installation of additional site furnishings (e.g. benches) at Lickinghole Basin.
- D. Enhance the existing County-owned stormwater management facility along Crozet Avenue to provide a trail access point, educational signage, site furnishings, and areas for viewing wildlife.
- E. Through the development review process and through future Parks and Green Systems Planning efforts, explore opportunities for new trailheads that provide vehicular parking to increase access to Crozet Trails.

## Goal 2: Build and maintain an interconnected network of trails that expand recreational opportunities in Crozet and provide alternate routes for travel between neighborhoods and to centers of activity.

- A. Extend and upgrade the Crozet Connector Trail to a shared-use path standard from Downtown Crozet to Westhall, creating a multimodal route with a natural aesthetic. If phased, the priority should be to finalize and upgrade the connection between Eastern Avenue and Downtown.
- B. Establish a trail along Lickinghole Creek, creating a continuous trail between Lickinghole Basin and Western Park.

- C. As opportunities through new development proposals arise, continue to pursue trail connections as shown on the Parks & Green Systems Plan and to provide spur trail connections to new and existing neighborhoods.

## Goal 3: Leverage Crozet's proximity to the Blue Ridge Mountains and County Parks in the Rural Area by expanding access to rural and regional amenities.

- A. Explore opportunities for trail connections between Crozet Trails to Mint Springs Park and to Beaver Creek Reservoir.
- B. In coordination with regional partners (such as VDOT, TJPDC, and community trail groups), conduct a feasibility study to determine the appropriate alignment of the planned Three Notched Trail through or adjacent to Crozet, including a connection between Crozet and the Blue Ridge Tunnel.

## Goal 4: Conserve and enhance Crozet's natural resources through natural resources planning, sustainable land management practices, and the use of sustainable and restorative site design practices.

- A. As new County-owned parks and trails are constructed or improved, leverage opportunities for installing educational and interpretive signage about biodiversity, ecosystem services, and habitat protection. Explore partnerships with local schools and community groups in this effort.
- B. Protect areas with important biodiversity and natural resources through careful siting of trails and other recreational opportunities, especially around Lickinghole Basin and areas identified on the Tree Canopy Map as existing or potential forest blocks.
- C. Hire an independent, third-party consultant to study the status of the Parrot Branch tributary stream between Railroad Avenue and St. George Avenue to identify the status of the stream. Based on study findings, develop recommendations for restoring stream health while allowing current uses to continue adjacent to the stream.
- D. Continue stream restoration efforts along Parrot Branch on County-owned properties. As part of these improvements, retrofit the existing stormwater management facility at Crozet Elementary School to improve runoff and treatment.

- E. Update residential zoning requirements to eliminate cluster and bonus-cluster lot size and frontage requirements to allow for more open space, tree canopy, and stream buffer preservation.

## Goal 5: Support County-wide initiatives such as the Climate Action Plan (CAP) and Biodiversity Action Plan (BAP) by identifying areas to enhance and expand tree canopy and other native habitats within Crozet.

- A. Explore opportunities to enhance and expand Crozet's urban forest, increase native tree canopy, and restore stream banks and buffers, especially within and adjacent to Powells Creek and Lickinghole Creek Greenways, the Lickinghole Basin Natural Area, and on County-owned parcels such as parks, natural areas, and public lands.
- B. Collaborate with willing Homeowners Associations and developers to enhance and expand native tree canopy on their open space parcels, especially those adjacent to the Lickinghole Creek and Powells Creek Greenways.
- C. Where possible, reduce mowing in public parks and on County-owned property in Crozet and replace mowed lawns with natural landscapes such as forest, pollinator gardens, and meadows.
- D. As opportunities arise, through new development and County-initiated projects, remove invasive species in stream buffers, floodplains and greenways and replace with native planting to improve aquatic ecosystem health, water quality, and riparian habitat quality.



An aerial photograph of a suburban area, likely Crozet, Virginia, with a semi-transparent red overlay. The map shows a dense network of streets and residential buildings. In the upper right corner, there is a solid red rectangular box containing white text. At the bottom of the image, the word 'Implementation' is written in a large, bold, white sans-serif font.

**Provide strategic & timely support for community partnerships, local economic development, policy changes, and capital investments to support a changing Crozet.**

**Implementation**



# Overview + Background

The Implementation Chapter provides a guide for achieving the vision identified within the Master Plan. Each Master Plan chapter identifies recommendations that are action steps to support the Land Use, Transportation, and Conservation Goals and Guiding Principles. Completion of each the identified recommendations will bring Crozet closer to realizing the Plan vision.

Achieving the Master Plan vision will require sustained commitment from the County, community members, developers, and local partners and organizations. It will require investment in and development of new and upgraded roadways, trails, parks, sidewalks, and bicycle infrastructure. It will also require planning and policy initiatives to develop new designs and regulations for future development and investment.

The Implementation Chapter provides a holistic view of each recommendation within the Plan's Land Use, Transportation, and Conservation Chapters. It identifies community priorities to guide future work and investment and sets expectations so that community members have an understanding of project costs and potential project timelines and sequencing. However, it is important to note that completion of many of the Plan recommendations is dependent upon outside factors such as a state funding commitments and availability of County revenues. In addition, circumstances may change over time and community priorities may shift. The list of projects is meant to be used as a guide for future work, with the recognition that present day circumstances may change the need for a project or the County's ability to complete a project within the recommended timeline.

It is important to have continued community engagement on the Implementation recommendations. Opportunities for community engagement should be provided as the recommended projects make their way through the design and funding phases. It is also important to periodically review the project prioritization and to provide an opportunity to revise and update Plan recommendations if major changes are needed.

## Prioritized Projects

This chapter identifies different categories of Plan recommendations. First are the recommendations that have an expected timeline associated with them. These are projects that are expected to have a clear start and completion date and do not involve ongoing or sustained work. These recommendations are broken down into three categories:

**Planning projects** are detailed analyses, visioning, or design plans focused on an individual project, corridor, or specific geography. Planning projects will allow for more in depth planning and engagement to bring a project from high-level concept to a detailed and actionable plan or design.

**Policy projects** are those that involve updates to the County's zoning ordinance and development review processes. A necessary step for implementation of the Master Plan Recommendations will be establishing appropriate regulations for new development and to ensure that legislative review projects that meet the Master Plan goals are sufficiently prioritized.

**Capital projects** are physical projects that require investment and typically some level of design and construction to complete. These projects are public amenities such as parks and trails, and the infrastructure necessary to support growth and development in Crozet, such as sidewalks and intersection improvements. Capital projects can be publicly funded, funded through private development, or through a combination of both private and public funding.

## Ongoing Projects

The Master Plan also includes several recommendations that are either ongoing, or have a timeline associated with them that is outside of the County's ability to control. Ongoing projects include those that may be part of a County process, such as development review for proposed zoning map amendments. Other ongoing projects are those that are recommended to support future growth and development, such as parking initiatives for the Downtown redevelopment. The timeline for these initiatives relies on outside applicants and the timing of proposed development. These projects are described in more detail at the end of this chapter.

## Project Prioritization

Planning, Policy, Capital projects are further categorized based on community priorities and expected completion timelines. These are broken up into two timeline categories: Catalyst and Future Projects.

**Catalyst Projects** are those expected to be completed or nearly completed within 0 to 10 years of Plan adoption. Catalyst Projects are identified as the community's top priority projects. Catalyst Projects play an important role in achieving the vision outlined in this Plan and are projects that provide critical infrastructure and the highest need planning and policy projects. The selected number and variety of catalyst projects was intentional and those that could be realistically be expected to be completed within this timeline. It is anticipated that most Catalyst Projects can be fully completed within 10 years, but others, especially some of roadway projects that require outside funding sources may have phases completed or will have made substantial progress towards completion within this timeframe (such as land and funding acquisition).

**Future Projects** are those that are expected to be completed within 10-20 years of Plan adoption. Future Projects may take longer to complete given cost or timeline considerations, and are projects that, while still important, were identified as lower priorities than Catalyst Projects by community members. County staff will continue to work on implementing these projects as opportunities arise (such as grants, redevelopment, and community partnerships), which may expedite the anticipated timeline in some instances.

The tables for the Catalyst (Page 10) and Future Projects (Page 22) are listed in priority order; however, this order does not necessarily reflect the order that projects will be completed. It is likely that the more simple projects and those with lower cost estimates could be completed sooner than many of the more complex and higher cost projects.

## Project Timing

The tables also include an estimated Realization Timeframe. **Realization Timeframe** refers to the amount of time that it will take for a project to be completed, from start to finish, when everything is in place for the project, such as funding and land acquisition. Funding and realization timelines for identified transportation projects are estimates based on current State and Federal Transportation funding programs. When outside funding sources are needed (especially for the higher cost projects), timelines are determined by State and Federal processes. Delays are also possible if the County is not able to secure funding for identified projects, which is not uncommon due to the competitive nature of these programs.

## Cost Estimates

**Cost estimates** are general ranges and do not consider outside funding sources (such as state funds, federal funds, grants, etc.) that may reduce the project's cost to the County.




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

## Project Key

The colors and numbers throughout this document are associated with the draft Crozet Master Plan chapters. Each letter and number combination aligns with recommendations in the draft chapters.

**Yellow** are from the Land Use Chapter,  
**Blue** are from the Transportation Chapter, and  
**Green** are from the Conservation Chapter.

Additionally, the symbol shapes throughout this document are associated with the three Project Types:

-  Planning Projects are shown with a triangle symbol.
-  Policy Projects are shown with a hexagon symbol.
-  Capital Projects are shown with a circle symbol.



# Catalyst Projects

## Catalyst Projects: 0 to 10 years

Catalyst projects are identified below. These projects reflect community priorities and play an important role in achieving the vision outlined in this plan. This list includes capital, planning, and policy projects.

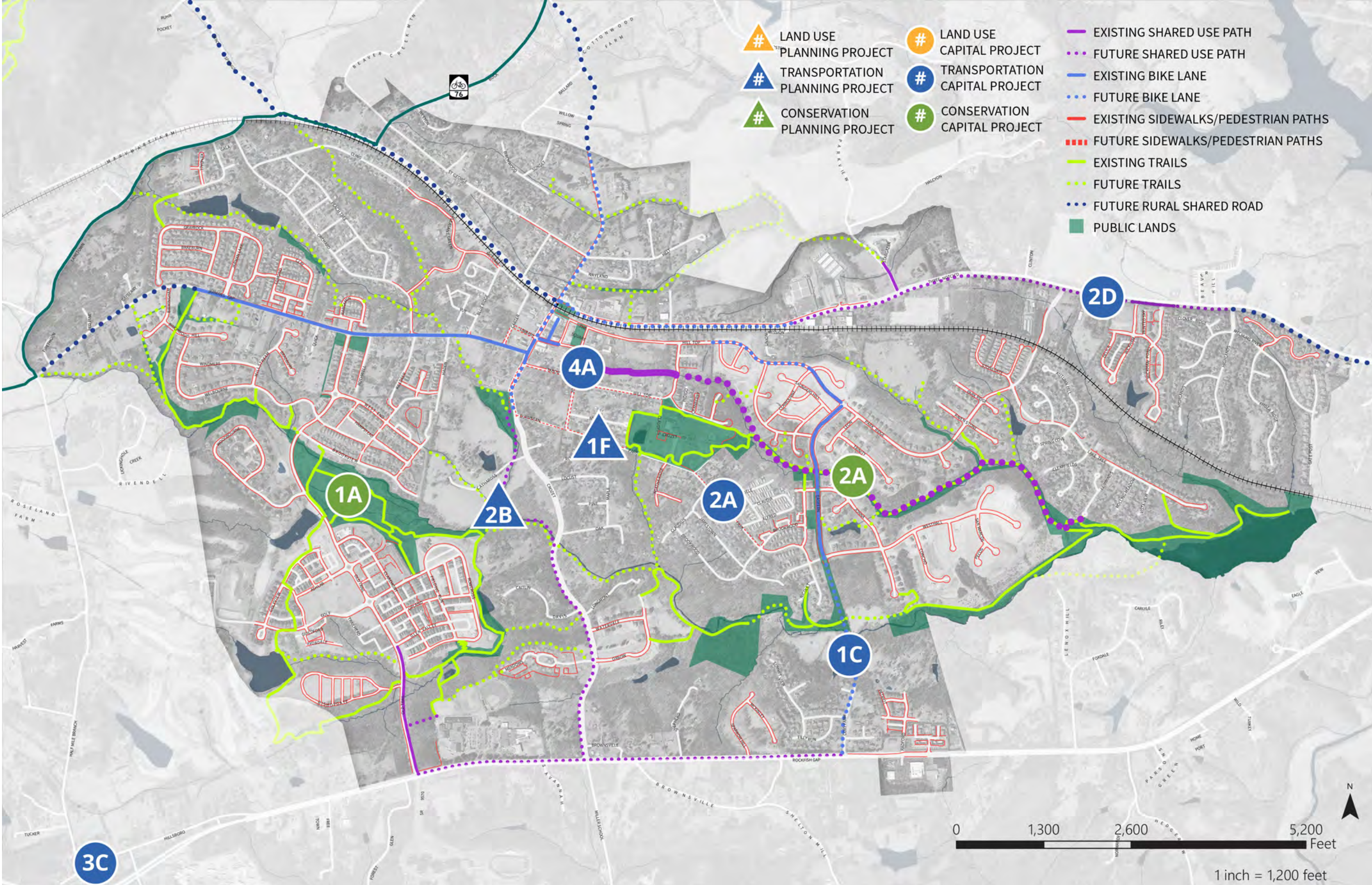
Staff anticipates that some projects will be completed within 10 years, while others may have phases completed and/or made substantial progress (such as land and funding acquisition).

Name	Chapter	Number	Recommendation Type	Cost Estimate	Realization Timeframe
<b>Eastern Avenue Construction (including Lickinghole Creek Stream Crossing)</b>	Transportation	1C	Capital	\$\$\$\$\$	5 years
<b>Crozet Connector Trail Upgrade and Extension</b>	Conservation	2A	Capital	\$\$	1 year (and ongoing maintenance)
<b>Western Park (Phase 1)</b>	Conservation	1A	Capital	\$\$	2 -3 years
<b>Three Notch'D Road Shared-Use Path (Phase 1)</b>	Transportation	2D	Capital	\$\$ - \$\$\$	4 years
<b>Three Notched Trail Feasibility Study</b>	Conservation	3B	Planning	\$	1 year
<b>Priority Sidewalk Connections (Park Road from Crozet Park to Brookwood Road)</b>	Transportation	2A	Capital	\$\$\$	3 - 4 years
<b>Downtown High Street Improvements</b>	Transportation	4A	Capital	\$\$	3 years
<b>Park Road Corridor Design</b>	Transportation	1F	Planning	\$	1 year
<b>Crozet Avenue Shared-Use Path Feasibility Study</b>	Transportation	2B	Planning	\$	1 year
<b>Downtown Crozet District (DCD) Zoning Updates</b>	Land Use	1B	Policy	\$	1-2 years
<b>Residential Zoning Update to Allow for Natural Resource Preservation</b>	Conservation	4E	Policy	\$	1 year
<b>County Lighting Requirements Update</b>	Land Use	4C	Policy	\$	1 year
<b>Affordable/Workforce Housing Priority Review Process</b>	Land Use	3C	Policy	\$	1 year
<b>Crozet Transit Plan</b>	Transportation	3A	Planning	\$	1 year
<b>Afton Express Stop</b>	Transportation	3C	Capital	\$	1 year

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# Location of Catalyst Projects





## 1C Eastern Avenue Construction (including Lickinghole Creek Stream Crossing)

**Complete construction of Eastern Avenue including a stream crossing of Lickinghole Creek.**

Eastern Avenue was an identified project in the 2010 Crozet Master Plan and has been partially constructed. The 2010 Plan recommended that Eastern Avenue be constructed by developers during new development, with the exception of the Lickinghole Creek crossing, which would need to be a County initiated project. The road is completed between Park Ridge Drive and Westhall Drive. Eastern Avenue will be extended to cross over Lickinghole Creek and connect with Cory Farm Road, completing the connection between Route 240 and Route 250. The alignment has been determined by the County and VDOT. Bike lanes will be continued along this extension of Eastern Avenue. This project has a high cost in part due to the required bridge that will be needed to cross Lickinghole Creek.

This project is currently being evaluated through an alignment study and conceptual design which is funded through the Transportation Leveraging Fund in the CIP. The result of this study, which will produce 30% level design drawings and a conceptual cost estimate, will be used to seek the necessary funding to complete construction on the project. The alignment report was presented to the Board in January and the preferred alignment was selected. This project is being considered for a Revenue Sharing Grant application.

**Estimated Cost: \$\$\$\$\$**

**Realization Timeframe: 5 years**

- Existing Avenue
- Future Avenue
- Existing Local Street
- Future Local Street



The map above shows the conceptual route of the recommended Eastern Avenue extension.

## 2A Crozet Connector Trail Upgrade and Extension

**Extend and upgrade the Crozet Connector Trail to a shared use path standard from Downtown Crozet to Westhall, creating a multimodal route with a natural aesthetic. If phased, the priority should be to finalize and upgrade the connection between Eastern Avenue and Downtown.**

The Crozet Connector Trail is considered the 'backbone' of the trail system in Crozet. The trail currently connects Crozet Park with the Lickinghole Creek Natural Area and will eventually connect to Crozet Square. Additionally, there are multiple spur trails that provide access to nearby neighborhoods. Upgrading the Crozet Connector to a shared-use path will provide better accessibility to community members and improve current drainage and mud issues. If phased, the priority shared-use path upgrade is between Eastern Avenue and Crozet Square.

Additionally, this project includes improved wayfinding signage for accessing the Crozet Connector Trail from Crozet Park. Although Crozet Park serves as a major access point to the Trail, the connection from the loop trail in Crozet Park to the Crozet Connector is not well-marked. Creating a prominent access point using signage, wayfinding, or similar site improvements will make navigation of the trail system easier for community members and visitors.

**Estimated Cost: \$\$**

**Realization Timeframe: 1 year**

## 1A Western Park Construction: Phase 1

**Construct Western Park in general accord with the 2018 Western Park Master Plan.**

Western Park is a planned 36-acre public park to the north of Old Trail Village. Based on the 2018 Western Park Master Plan, the Park will include formal recreational amenities such as sports fields and playgrounds, and more natural areas with trails, meadows, and overlooks. The Park will be developed in phases. The land for the Park and \$50,000 were proffered as part of the approval for the Old Trail development rezoning. Phase 1 of Western Park, which includes an access road, parking, playground, and utilities and other infrastructure, is a catalyst project.

Some of the planned amenities from the Western Park Master Plan are shown below.

**Estimated Cost: \$\$**

**Realization Timeframe: 2 - 3 years**





## 2D Three Notch'D Road Shared-Use Path: Phase 1

*Through a combination of new development and County-initiated capital projects, construct a shared-use path along the south side of Three Notch'D Road, with the first phase connecting the Wickham Pond and Highlands neighborhoods to Park Ridge Drive, and the second phase connecting to the Employment District.*

The eastern-most neighborhoods of Wickham Pond and Highlands do not currently have options for walking or biking safely to the rest of the Crozet Development Area. A shared-use path to accommodate both bike and foot traffic is recommended from the Highlands to the Employment District. The project should be completed in two phases. The first phase will connect the Highlands to Park Ridge Drive, which would provide a connection to other roads, bike lanes, sidewalks, and paths that connect to Downtown and other important locations. The second phase from Park Ridge Drive to the Starr Hill/Music Today Employment Center is included as a future project. Properties that develop or redevelop along Three Notch'D Road should provide right-of-way and construct portions of the shared-use path along their properties.

**Phase 1 Estimated Cost: \$\$ - \$\$\$**

**Phase 1 Realization Timeframe: 4 years**



Above: The existing portion of the Three Notch'D Road Shared-Use Path, which is along the front of Wickham Pond.

## 3B Three Notched Trail Feasibility Study

*In coordination with regional partners (such as VDOT, TJPDC, and community trail groups), conduct a feasibility study to determine the appropriate alignment of the planned Three Notched Trail through or adjacent to Crozet, including a connection between Crozet and the Blue Ridge Tunnel.*

The Three Notched Trail is a proposed shared-use path that would provide a connection between the Blue Ridge Tunnel in Afton and the City of Charlottesville. This route would also provide access to the trail for the Crozet Development Area. The trail is proposed by the non-profit Rivanna Trails Foundation. It is included in the County's Comprehensive Plan as well. The first step to achieving this trail is to conduct a feasibility study with regional partners (including VDOT, TJPDC, and community trails groups) to determine the appropriate alignment of the proposed trail.

**Estimated Cost: \$**

**Realization Timeframe: 1 year**

## 2A Priority Sidewalk Connection: Park Road from Crozet Park to Brookwood Road

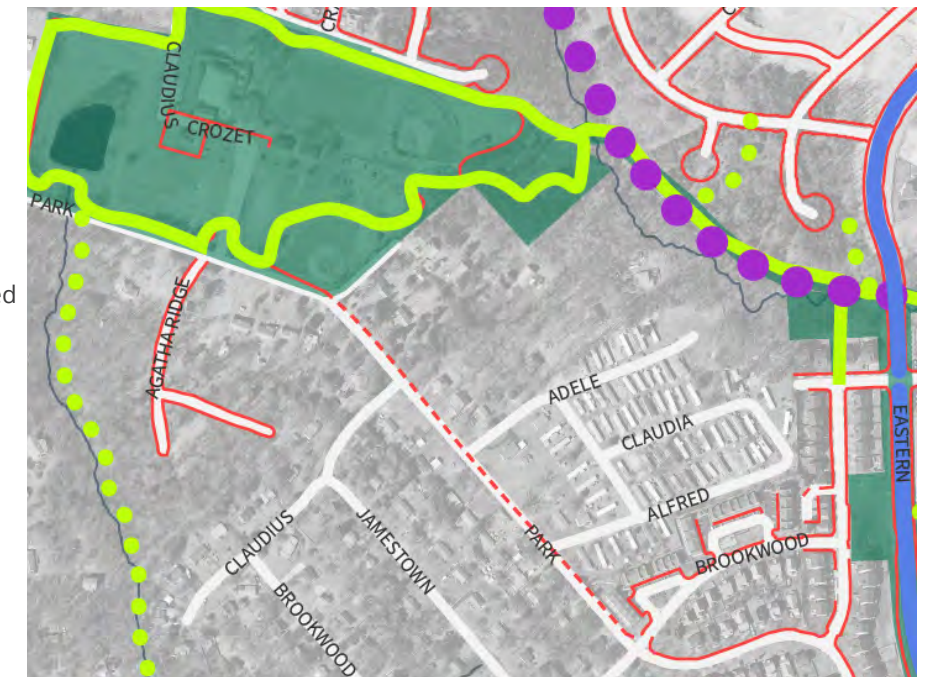
*Construct priority segments of the sidewalk network shown on the Future Bicycle & Pedestrian Network Plan as funding becomes available.*

Throughout the engagement process, community members consistently highlighted the need for filling in sidewalk gaps in the Downtown area to provide safe routes for pedestrians. Community members identified areas around the Square, Crozet Park, and nearby neighborhoods as priority areas for sidewalk connections. These have been divided into individual projects for funding and timeline purposes. Based on community input and the need for providing safe access for nearby neighborhoods to Crozet Park (and eventually to Downtown), the sidewalk project for Park Road from Crozet Park to Brookwood Road is a catalyst project and highest priority of the five sidewalk projects. The second highest priority is providing a sidewalk along Hilltop Street from High Street to Indigo Road, to connect Crozet Park and nearby neighborhoods with Downtown. This project, along with the other three priority sidewalk projects, is included in the Future Projects.

**Estimated Costs: \$\$\$**

**Realization Timeframe: 3 - 4 years**

(Right) This map shows the Park Road recommended sidewalk improvement in the red hatched line.





## 4A Downtown High Street Improvements

**In coordination with community members and relevant partners and agencies, design and construct improvements to High Street from Tabor Street to Library Ave. Use the Crozet Transportation Analysis study recommendations for guidance, ensure improvements provide safe pedestrian and bicycle connections, and consider if a phased approach is appropriate.**

The Crozet Transportation Analysis recommends improving and connecting High Street from Tabor Street to Library Avenue. This should be a two lane local street with sidewalks on the east side of High Street and a crosswalk at Tabor Street. High Street will connect the Square with nearby neighborhoods, where community members can walk to Downtown.

A sidewalk on the west side of High Street should be provided if and when the adjacent properties redevelop.

**Estimated Cost: \$\$**



**Realization Timeframe: 3 years**

(Left) A conceptual drawing of the recommended improvement to High Street from Tabor Street to Library Avenue, using recommendation from the Crozet Transportation Analysis.

## 1F Park Road Corridor Design

**Complete a Corridor Design for Park Road to determine the needed bicycle and pedestrian facilities to provide safe and convenient access through the corridor.**

Park Road currently provides vehicular connections to Crozet Park and surrounding neighborhoods. However, there are no bicycle and pedestrian facilities on Park Road. A corridor design will determine the most appropriate type of facilities to provide safe and convenient bicycle and pedestrian access along the corridor, which may be on or off-street facilities (or a combination). Once the Dunvegan Lane connection from Park Road to Crozet Avenue is completed, this corridor will provide an important route for trips to and from Crozet Park, Downtown, and surrounding neighborhoods.

**Estimated Cost: \$**

**Realization Timeframe: 1 year**

## 2B Crozet Avenue Shared-Use Path Feasibility Study

**Conduct a feasibility study to determine a north-south alignment for a shared-use path (SUP) along or parallel to Crozet Avenue to provide a connection between Route 250 and the Crozet Connector Trail.**

Throughout this Plan's engagement process, community members highlighted the importance of establishing both north-south and east-west connections for pedestrians and bicyclists in Crozet. A shared-use path along or near Crozet Avenue would provide a paved connection from the planned Route 250 shared-use path up to the planned bike lanes through Downtown Crozet. The first step of establishing this north-south path is determining the alignment. There are topography and right-of-way challenges that will need to be studied and addressed.

**Estimated Cost: \$**

**Realization Timeframe: 1 year**

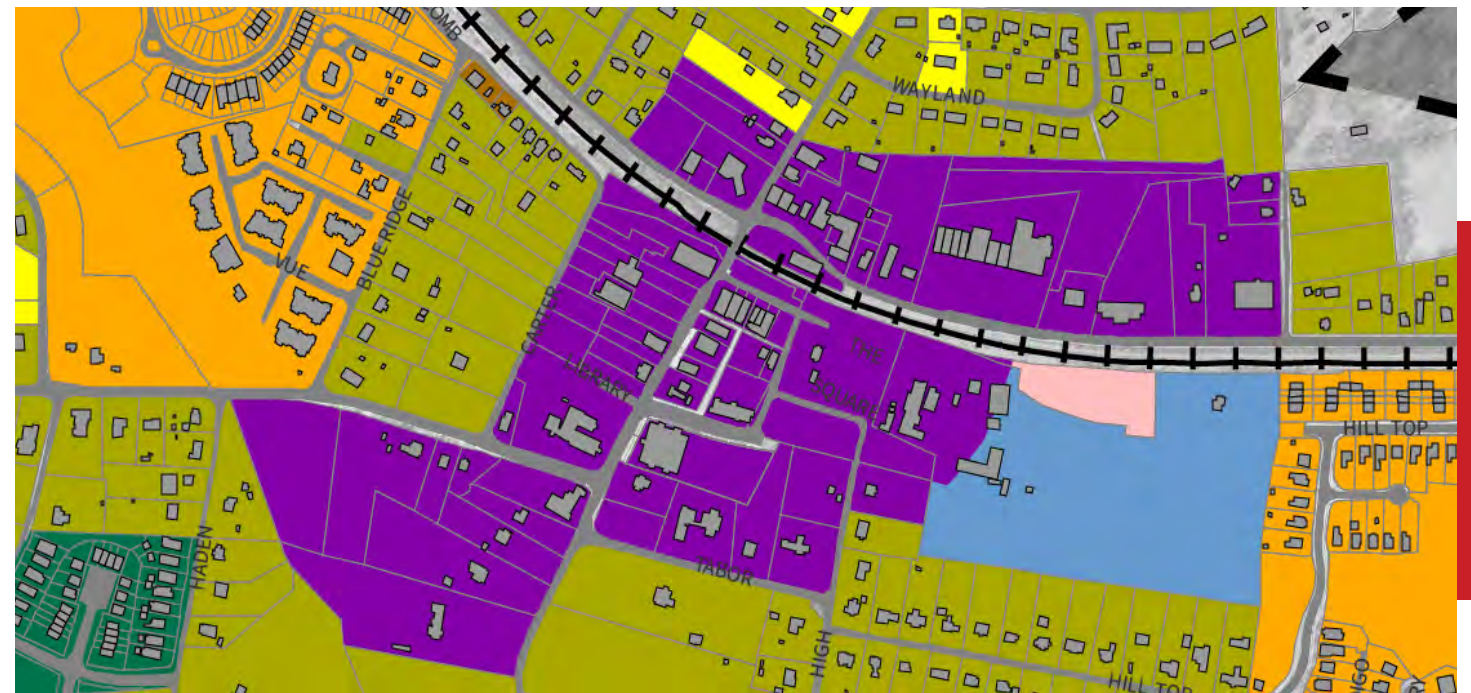
## 1B Downtown Crozet District (DCD) Zoning Updates

**Conduct a public engagement process to review and update the Downtown Crozet District (DCD) Zoning District requirements to a) evaluate and incorporate appropriate Downtown design guidelines and b) review and update the use requirements to reflect market demands and the goals of the Master Plan.**


The majority of the area on the Future Land Use Plan within the 'Downtown' land use designation and within the Town Center is also zoned Downtown Crozet District (DCD - shown in purple on the map below). The DCD was added to the County's Zoning Ordinance in 2013. Since then, plans for the Crozet Square redevelopment have continued to evolve and move forward. The DCD requirements should be evaluated and updated to include appropriate Downtown design guidelines and to reflect the market demands of this area and the goals of the Master Plan. This update should include evaluating which types of housing are most appropriate for Downtown and what level of ground floor commercial uses can be supported by market demands.

**Estimated Cost: \$**

**Realization Timeframe: 1 - 2 years**



The map shows the zoning districts for each parcel in Downtown Crozet, and the surrounding neighborhoods.

 Downtown Crozet District



## 4E Residential Zoning Update to Allow for Natural Resource Preservation

**Update residential zoning requirements to eliminate cluster and bonus-cluster lot size and frontage requirements to allow for more open space, tree canopy, and stream buffer preservation.**

The County's current cluster development and bonus density requirements are found in the Zoning Ordinance (County Code Chapter 18) in Sections 2.2 and 2.4 and within the requirements of applicable residential zoning districts. Cluster development is intended to create more compact forms of residential development that preserve sensitive environmental features and open space. However, the current regulations still require minimum lot sizes and frontage along a street. Eliminating minimum lot size and frontage requirements would allow additional open space to be retained and allow for more creative and sensitive design that promotes the Land Use and Conservation goals of this Plan.

**Estimated Cost:** \$

**Realization Timeframe:** 1 year

## 4C County Lighting Requirements Update

**Update the County's lighting requirements in the Zoning Ordinance to reduce lighting spillover, glare and excessive brightness.**

The County's current outdoor lighting requirements are found in the Zoning Ordinance (County Code Chapter 18) in Section 4.17 and apply to lighting that emits 3,000 or more lumens. Section 4.17 requires all lighting that emits 3,000 or greater lumens to be full cutoff fixtures and limits lighting spillover on public roads and property in rural and residential districts to one-half (0.5) a foot candle. Additional lighting review is required for properties in the Entrance Corridor overlay. These cutoff and foot candle standards have not been revised since 2001. The most recent update was in 2017 to clarify that LED's that emit 3,000 or more lumens are also subject to these standards. Updating these regulations will provide more current requirements that are consistent with today's technology and will also help protect views of dark skies by reducing lighting spillover, glare, and excessive brightness.

**Estimated Cost:** \$

**Realization Timeframe:** 1 year

## 3C Affordable / Workforce Housing Priority Review Process

**Implement a priority review process to support development of new affordable and workforce housing within appropriate locations including within and adjacent to Centers and the Employment District.**

Currently, the only process for priority review development projects in the County is for projects that have been identified by the Economic Development Office. A priority review for affordable and workforce housing projects will provide expedited site plan and related review to shorten the timeline to approval. This is especially important for projects seeking tax credits and financing, where there are tight deadlines for grant and tax credit approvals. Priority should be given to projects in appropriate locations and consistent with the land use recommendations of the Master Plan that support this type of housing, including within and adjacent to Centers and the Employment District.

**Estimated Cost:** \$

**Realization Timeframe:** 1 year

## 3A Crozet Transit Plan

**Work with local transit providers to develop a transit plan to identify stop locations and infrastructure needs to establish permanent transit service within Crozet and commuter routes to and from Crozet. Prioritize providing transit infrastructure within identified centers, especially Downtown, to support local businesses and decrease reliance on parking and roadways.**

A transit plan is needed to establish permanent transit service within Crozet and to identify opportunities for expansion of existing commuter services. The AVNU autonomous shuttle program demonstrated the potential for transit service within Crozet, connecting identified centers and neighborhoods. The County in partnership with local transit providers should use the plan to identify the infrastructure and funding needed for these enhanced services.

**Estimated Cost:** \$

**Realization Timeframe:** 1 year

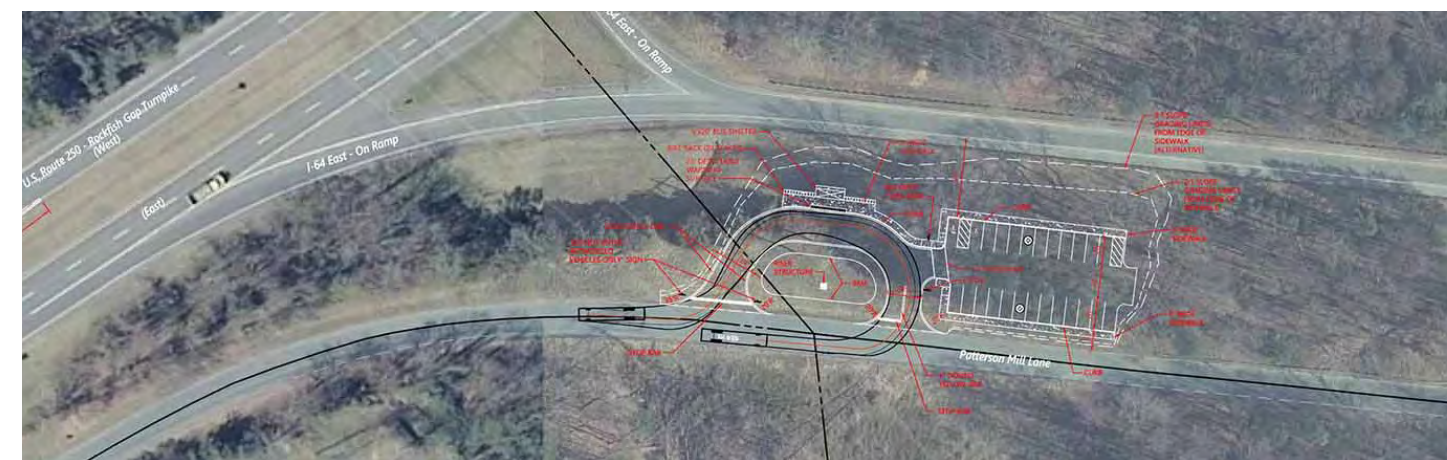
## 3C Afton Express Stop

**Work with BRITE Transit to add a future Afton Express stop at the I-64/Exit 107 park & ride lot, once completed.**

Through the TJPDC, the County has submitted a SmartScale application for funding for a new park and ride lot at the I-64/Exit 107 interchange. This planned lot will provide 25 parking spaces and include a bus turnaround, transit shelter, bike racks, and turn lane improvements. BRITE Transit, which currently serves the Augusta County/Waynesboro regions, is planning to provide a two-year pilot program for its Afton Express line. This Express route will connect Staunton, Fishersville, Waynesboro, Charlottesville, and Albemarle County. An Afton Express stop should be provided at the Exit 107 Park and Ride lot, which will provide more transit options for commuters. The project is proposed to be funded in the FY22-27 Six-Year Improvement Plan with a total cost of ~\$3MM.

**Estimated Cost:** \$

**Realization Timeframe:** 1 year



(Above) A conceptual image of the Park & Ride Lot, shown in Albemarle County's SmartScale application.



# Future Projects

## Future Projects: 10-20 years

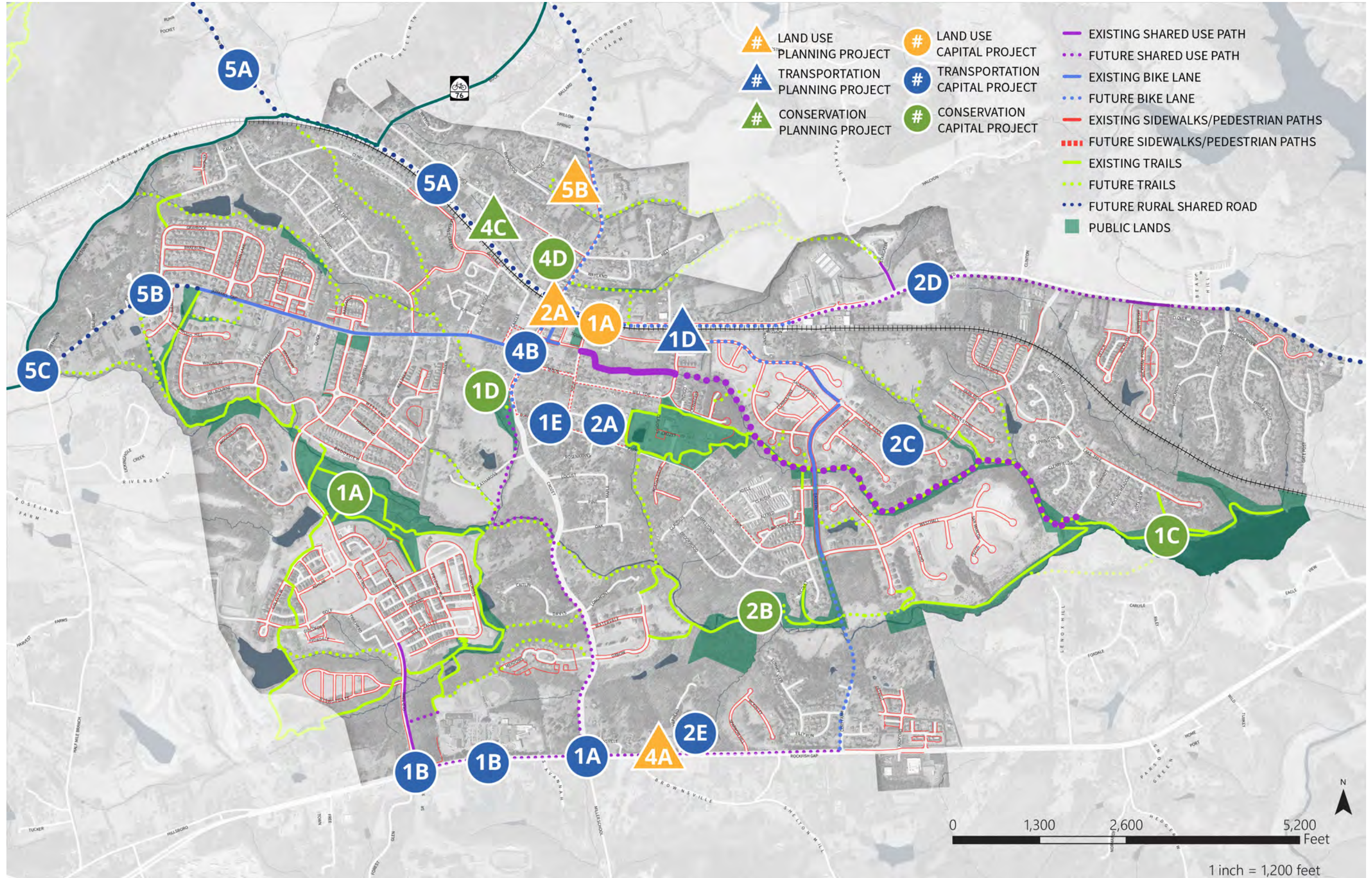
Future projects may take longer to complete given cost or timeline considerations, and/or are projects that were not identified as a high priority by community members. County staff will continue to work on implementing these projects as opportunities arise (such as grants, redevelopment, and community partnerships), which may expedite the anticipated timeline.

Name	Chapter	Number	Recommendation Type	Cost Estimate	Realization Timeframe
<b>Western Park (Phases 2 - 3)</b>	Conservation	1A	Capital	2. \$\$ 3. \$\$	2 - 3 years
<b>Priority Sidewalk Connections</b>	Transportation	2A	Capital	1. \$\$ 2. \$\$\$ 3. \$\$\$ 4. \$\$	3 - 4 years per project
<b>Naturally Occurring Affordable Housing Survey &amp; Recommendations</b>	Land Use	3A	Planning	\$	1 year
<b>Downtown Neighborhoods Architectural and Cultural Resources Study</b>	Land Use	2A	Planning	Phase 1: \$ Phase 2: \$	Phase 1: 1 year Phase 2: 1-2 years
<b>Three Notch'D Road Shared-Use Path (Phase 2)</b>	Transportation	2D	Capital	\$\$	4 years
<b>Downtown Intersection Improvements</b>	Transportation	4B	Capital	\$\$\$	5 years
<b>Downtown Wayfinding Signage</b>	Land Use	1A	Capital	\$	1 year
<b>Lickinghole Creek Trail</b>	Conservation	2B	Capital	\$ - \$\$	1 - 2 years (and ongoing maintenance)
<b>Route 250 Roundabouts Old Trail and Henley/Brownsville Entrances</b>	Transportation	1B	Capital	\$\$\$\$ - \$\$\$\$\$	5 years
<b>Jarmans Gap Road Upgrade to Rural Shared Road</b>	Transportation	5B	Capital	\$\$	3 years
<b>Railroad Avenue and Mint Springs Road Upgrade to Rural Shared Road</b>	Transportation	5A	Capital	\$\$	3 years
<b>Parrot Branch Tributary Stream Health Study</b>	Conservation	4C	Planning	\$	1 year
<b>Parrot Branch Stream Health Restoration</b>	Conservation	4D	Capital	\$	1 year
<b>Route 250 and Crozet Avenue Roundabout</b>	Transportation	1A	Capital	\$\$\$	4 years

Name	Chapter	Number	Recommendation Type	Cost Estimate	Realization Timeframe
<b>Route 250 West Design Guidelines</b>	Land Use	4A	Planning	\$	1 year
<b>Railroad Crossing Feasibility Study</b>	Transportation	1D	Planning	\$	1 year
<b>Dunvegan Lane Connection</b>	Transportation	1E	Capital	\$\$\$	5 years
<b>Route 250 Shared-Use Path (between Crozet Avenue and Corey Farm)</b>	Transportation	2E	Capital	\$\$\$	5 years
<b>Park Ridge Drive Traffic Calming</b>	Transportation	2C	Capital	\$\$	5 years
<b>Crozet Avenue Stormwater Management Facility Trail Access Enhancement</b>	Conservation	1D	Capital	\$	1 year (and ongoing maintenance)
<b>Lickinghole Basin Interpretive and Educational Signage</b>	Conservation	1C	Capital	\$	1 year (and ongoing maintenance)
<b>Old Crozet School Community Engagement</b>	Land Use	5B	Planning	\$	1 - 2 years
<b>Bike Route 76 Signage</b>	Transportation	5C	Capital	\$	1 year



# Location of Future Projects





# 1A Western Park Construction: Phases 2 and 3

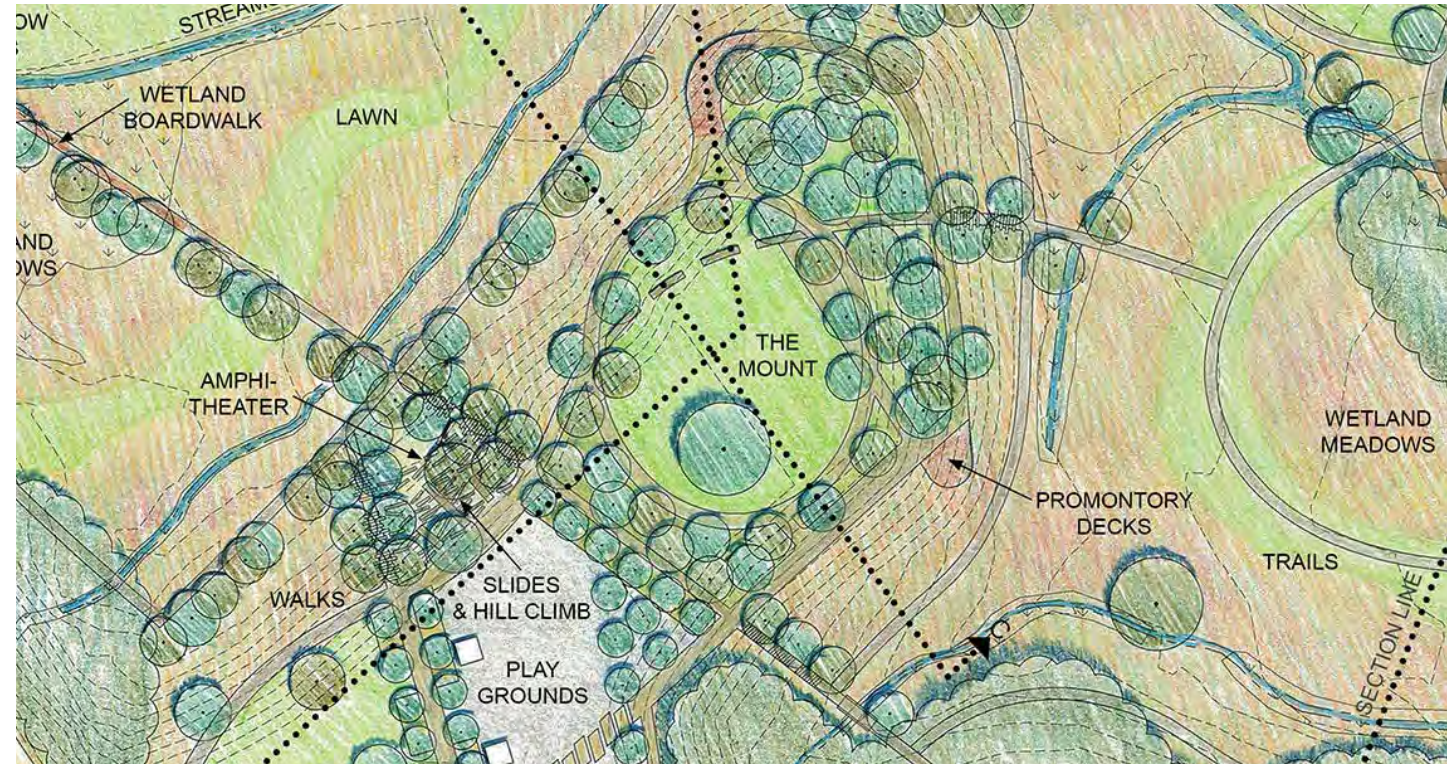
Construct Western Park in general accord with the 2018 Western Park Master Plan.

Western Park is a planned 36-acre public park to the north of Old Trail Village. Based on the 2018 Western Park Master Plan, the Park will include formal recreational amenities such as sports fields and playgrounds, and more natural areas with trails, meadows, and overlooks. The Park will be developed in phases. The land for the Park and \$50,000 were proffered as part of the approval for the Old Trail development rezoning. Phases 2 and 3 of the Park are future projects, and may be completed in stages as funding is available.

Some of the planned amenities from the Western Park Master Plan are shown below.

**Estimated Cost: \$\$**

**Realization Timeframe: 2 - 3 years**



# 2A Priority Sidewalk Connections

Construct priority segments of the sidewalk network shown on the Future Bicycle & Pedestrian Network Plan as funding becomes available.

Throughout the engagement process, community members consistently highlighted the need for filling in sidewalk gaps in the Downtown area to provide safe routes for pedestrians. Community members identified areas around the Square, Crozet Park, and nearby neighborhoods as priority areas for sidewalk connections. The map below shows the missing sidewalks in these areas as dotted lines. These have been divided into individual projects for funding and timeline purposes. The highest priority project, which is a sidewalk along Park Road from Crozet Park to Brookwood Road, is included as a catalyst project. The following future projects for sidewalk connections are listed in priority order:

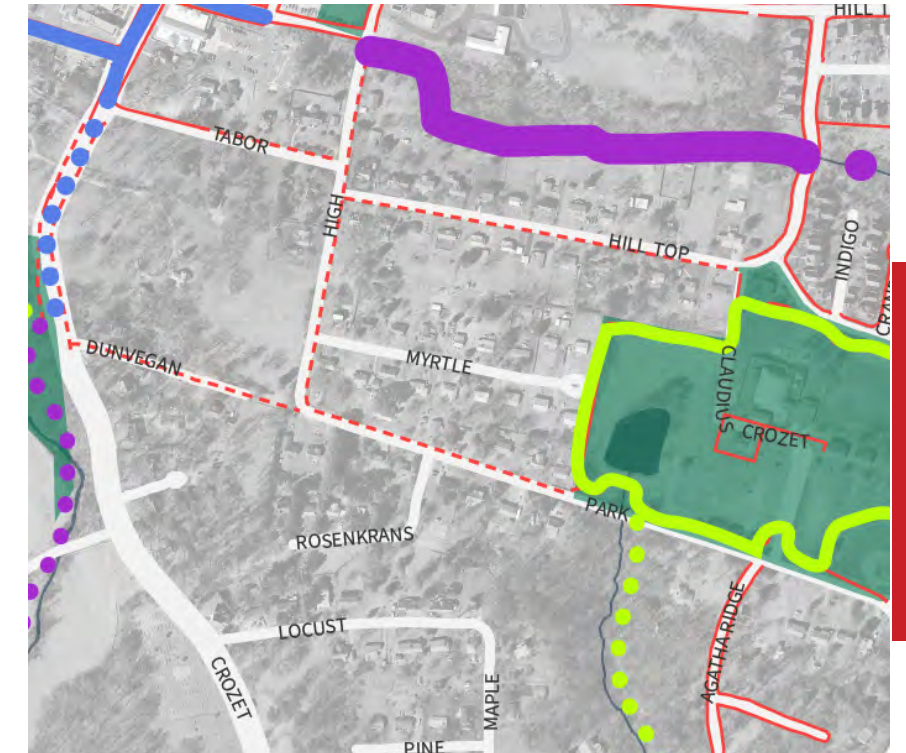
- Hilltop Street from High Street to Indigo Road
- High Street and Park Road from Hilltop Street to Crozet Park
- Crozet Avenue from Tabor Street to Dunvegan Lane
- Tabor Street to the existing Hilltop Street path, including pedestrian crossings

Note: While this project recommends sidewalks on one side of High Street and Tabor Street, sidewalks should also be provided by developers on the west side of High Street and the south side of Tabor street if the adjacent properties redevelop in the future.

**Estimated Costs**

**Realization Timeframes: 3 - 4 years per project**

- **Hilltop Street from High Street to Indigo Road: \$\$**
- **High Street and Park Road from Hilltop Street to Crozet Park: \$\$\$**
- **Crozet Avenue from Tabor Street to Dunvegan Lane: \$\$\$**
- **Tabor Street to the existing Hilltop Street path: \$\$**



The map above shows recommended sidewalk improvements in the red hatched line. --- Future Sidewalks



### 3A Naturally Occurring Affordable Housing Survey and Recommendations

**Phase 1:** Conduct a survey of Naturally Occurring Affordable Housing (NOAHs) within Crozet.

**Phase 2:** Identify programs and tools to support maintenance/preservation of NOAHs, such as a Housing Rehabilitation Zone.

Naturally Occurring Affordable Housing (or NOAHs) refers to existing housing units (owner-occupied or rentals) that are relatively affordable due to their size, age, or other factors. NOAHs are not subsidized or constructed by a public entity. NOAHs are often at risk of being lost due to redevelopment pressures. Throughout the engagement process, community members cited the concern that NOAHs in the Downtown area would be redeveloped and no longer be affordable. Additionally, some NOAH homeowners are unable to afford the needed repairs and maintenance to keep their housing. Once a survey of NOAHs in Crozet has been completed, programs and tools can be used to help maintain and preserve these housing units.

**Phase 1 Estimated Cost:** \$

**Phase 2 Estimated Cost:** \$

**Phase 1 Realization Timeframe:** 1 year

**Phase 2 Realization Timeframe:** 1 year

### 2A Downtown Neighborhoods Architectural and Cultural Resources Study

**Phase 1:** Using the 2009 Community of Crozet Architectural Resources Study as a starting point, conduct a subsequent study to evaluate the Downtown Neighborhoods not considered in the previous study to create a comprehensive Downtown Neighborhoods Architectural and Cultural Resources study.

**Phase 2:** After completion of the Downtown Neighborhoods Architectural and Cultural Resources Study, conduct a public engagement process with residents of the Downtown Neighborhoods to develop actionable strategies to allow appropriate infill and redevelopment within Downtown Neighborhoods while supporting residents' desires for neighborhood preservation.

The 2009 Community of Crozet Architectural Resources Study was completed by the consulting firm Arcadia Preservation, LLC. It recommended much of the Downtown Crozet area be submitted for consideration for a National Register Historic District designation. This area was accepted by the federal National Register of Historic Places in November 2012.

Several areas around Downtown Crozet that also have important histories and historic structures were not included in the Historic District, such as the Union Mission neighborhood to the east. Further study with inclusion of these neighborhoods should be completed in the first phase. The map on the following page shows both the approved National Historic District (white) and the proposed Downtown Neighborhoods boundary (red).

Once the Study is completed, opportunities for appropriate infill and redevelopment should be identified through community input. Infill in these neighborhoods, when compatible with the existing scale and form, can provide additional housing choice in a central location with options for multimodal transportation. Options could include design guidelines, a new local historic overlay zoning district, or other zoning ordinance updates.

**Phase 1 Estimated Cost:** \$

**Phase 2 Estimated Cost:** \$

**Phase 1 Realization Timeframe:** 1 year

**Phase 2 Realization Timeframe:** 1 - 2 years



(Above) The Crozet Historic District (National Register) is outlined in white, and the proposed Downtown Neighborhoods study area is outlined in red.

### 2D Three Notch'D Road Shared-Use Path: Phase 2

**Through a combination of new development and County-initiated capital projects, construct a shared-use path along the south side of Three Notch'D Road, with the first phase connecting the Wickham Pond and Highlands neighborhoods to Park Ridge Drive, and the second phase connecting to the Employment District.**

The eastern-most neighborhoods of Wickham Pond and Highlands do not currently have options for walking or biking safely to the rest of the Crozet Development Area. A shared-use path to accommodate both bike and foot traffic is recommended from the Highlands to the Employment District. The project should be completed in two phases. The first phase, connecting the Highlands and Wickham Pond neighborhoods to Park Ridge Drive, is a catalyst project. The second phase will connect from Park Ridge Drive to the Starr Hill/Music Today Employment Center, which would connect to an existing sidewalk along several plazas and to future planned bike lanes to Downtown. Properties that develop or redevelop along Three Notch'D Road should provide right-of-way and construct portions of the shared-use path along their properties.

**Phase 2 Estimated Cost:** \$\$

**Phase 2 Realization Timeframe:** 4 years

(Right) Phase 2 of the Three Notch'D Road Shared-Use Path, shown with purple dotted lines. This Shared-Use Path would continue from Park Ridge Drive (end of Phase 1) and connect with the Starr Hill/Music Today Employment District.





## 4B Downtown Intersection Improvements

*In coordination with community members and relevant partners and agencies, design and construct intersection improvements within Downtown, including the 'quadrant' intersection. Use the Crozet Transportation Analysis study recommendations for guidance, ensure improvements provide safe pedestrian and bicycle connections, and consider if a phased approach is appropriate.*

The Crozet Transportation Analysis provided multiple recommendations for the Downtown area, including intersection improvements and street connections. The main intersection improvement recommended is at Jarman's Gap Road/Crozet Avenue and Crozet Avenue/Library Avenue and is referred to in the Plan as the 'Quadrant'. The Quadrant, along with the proposed street connections, will address future queueing issues in the Downtown area. Renderings are conceptual only, and the final design will need to be determined in coordination with community members and relevant partners and agencies. A phased approach may be used, beginning with the Crozet Avenue/Library Avenue intersection.

Conceptual renderings of these improvements are shown on the following page.

**Estimated Cost:** \$\$\$

**Realization Timeframe:** 5 years



## 1A Downtown Wayfinding Signage

*Provide wayfinding signage Downtown and in other destinations to help visitors and residents navigate area amenities, parking locations, and parks, and trails.*

Providing wayfinding signage in Downtown Crozet, as well as other destinations (such as trailheads and parking locations) will help both community members and visitors navigate the businesses, amenities, and activities in Crozet. Wayfinding signage will be especially helpful as the Square develops and new destinations are created. This project has the potential to be completed within 10 years if Crozet community groups have the capacity to take the lead on this project in partnership with the County. Community engagement and decisionmaking around the wayfinding approach, design, and locations is recommended. Organizations such as the Downtown Crozet Initiative have already begun doing this work and may be an appropriate community partner.

**Estimated Cost:** \$

**Realization Timeframe:** 1 year





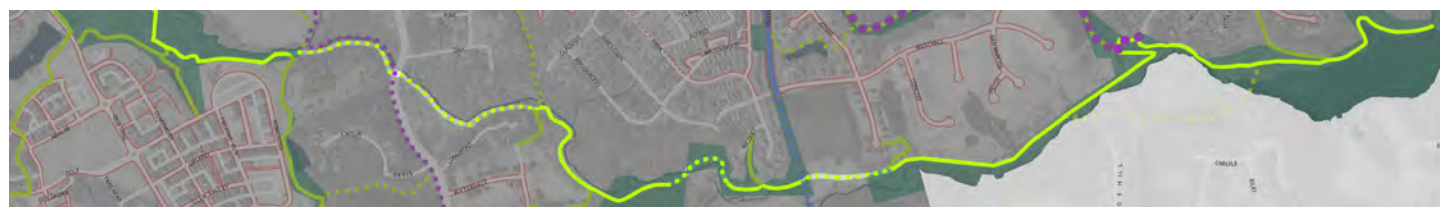
## 2B Lickinghole Creek Trail

**Establish a trail along Lickinghole Creek, creating a continuous trail between Lickinghole Basin and Western Park.**

Portions of the planned east-west Lickinghole Creek Trail are completed in Crozet, including around Westhall, Chesterfield Landing, and Old Trail. Additional trail connections are needed along the Creek to provide a continuous trail from Lickinghole Basin to Western Park. Any bridges and trails along and across the Creek must be sited carefully, due to the sensitive and sometimes steep stream banks.

**Estimated Cost:** \$ - \$\$

**Realization Timeframe:** 1 - 2 years



(Above) Existing and planned portions of the trail along Lickinghole Creek. Note planned alignments are approximate.

## 1B Route 250 Roundabouts at Old Trail and Henley/Brownsville Entrances

**Design and construct the roundabouts at the intersections of Route 250 and Old Trail Drive, and Henley/Brownsville school entrances. Provide opportunities for community feedback to guide final design and project phasing.**

The other Route 250 capital project recommended by the Transportation Analysis is a roundabout at Old Trail Drive/Route 250 and a roundabout at the Henley Middle/Brownsville Elementary Schools entrance. These roundabouts would improve queuing, which is especially important given the school traffic during pick up/drop off. This project will also provide improvements for pedestrians who need to cross Route 250 to access Western Albemarle High School.

**Estimated Cost:** \$\$\$\$ - \$\$\$\$\$

**Realization Timeframe:** 5 years

## 5B Jarman's Gap Road Upgrade to Rural Shared Road

**Provide a more formal connection to Bicycle Route 76 by upgrading Jarman's Gap Road to a Rural Shared Road west of where the existing bicycle lane ends.**

Adjacent to the Grayrock development, Jarman's Gap Road transitions from an Avenue to a Rural Shared Road, where the existing bike lanes end. A more formal on-street bicycle connection should be provided from the existing bike lanes to Bike Route 76, which intersects with Jarman's Gap Road at Lanetown Road. Improvements should be coordinated with VDOT projects such as VDOT's paving program for regular maintenance.

**Estimated Cost:** \$\$

**Realization Timeframe:** 3 years

## 5A Railroad Avenue and Mint Springs Road Upgrade to Rural Shared Road

**Upgrade Railroad Avenue and Mint Springs Road to a Rural Shared Road and add signage to provide a formal connection for cyclists to Mint Springs Park.**

Rural Shared Roads are medium-to-high capacity roads with moderate vehicular speeds that reflect edge conditions of the Development Area. These roads should respect the existing rural character while enhancing the safety of bicyclists. Improvements should be coordinated with VDOT projects such as VDOT's paving program for regular maintenance. During the engagement process, community members expressed a desire for safer access for cyclists to Mint Springs Park. Upgrading Railroad Avenue and Mint Springs Road to Rural Shared Roads will provide safer on-street facilities for cyclists.

**Estimated Cost:** \$\$

**Realization Timeframe:** 3 years



(Above) A conceptual rendering of a Rural Shared Road.



## 4C Parrot Branch Tributary Stream Health Study

**Hire an independent, third-party consultant to study the status of the Parrot Branch tributary stream between Railroad Avenue and St. George Avenue to identify the status of the stream. Based on study findings, develop recommendations for restoring stream health while allowing current uses to continue adjacent to the stream.**

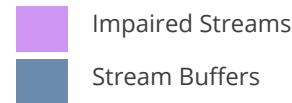
A tributary to Parrot Branch, which is located between St. George Avenue and Railroad Avenue, has been identified by the Virginia Department of Environmental Quality as an impaired stream (shown in purple on map below). Much of the stream is located on residential lots, which were built out prior to the current stream buffer regulations. Therefore, much of the stream lacks a natural buffer around it, and portions of it appear to be piped. An independent, third-party consultant will identify the status and location of the stream and develop recommendations for restoring stream health. This will require coordination with private property owners. The study can identify ways for current uses of the property to continue while still allowing for opportunities to enhance and restore the buffer, such as through native plantings. There are separate stream restoration efforts underway for portions of the tributary on County-owned property.

**Estimated Cost: \$**

**Realization Timeframe: 1 year**



The map above shows the Parrot Branch tributary that is recommended for study in purple.



## 4D Parrot Branch Stream Health Restoration

**Continue stream restoration efforts along Parrot Branch on County-owned properties. As part of these improvements, retrofit the existing stormwater management facility at Crozet Elementary School to improve runoff and treatment.**

The Parrot Branch stream runs along the southern portions of the County-owned Crozet Elementary School and Old Crozet School properties. Restoration efforts for Parrot Branch have already been underway on the Crozet Elementary School property; this restoration will be continued on the Old Crozet School site. Additionally, the stormwater management facility at Crozet Elementary School will be retrofitted to improve stormwater runoff and treatment.

**Estimated Cost: \$ - \$\$**

**Realization Timeframe: 1 year**

## 1A Route 250 and Crozet Avenue Roundabout

**Design and construct a roundabout at the intersections of Route 250 and Crozet Avenue. Provide opportunities for community feedback to guide final design and project phasing.**

The Crozet Transportation Analysis was completed by the consulting firm EPR, PC as part of this Plan update and recommends three roundabouts along Route 250 to address current and future queueing and level of service issues. The recommended roundabouts have been divided into two capital projects due to timing and funding considerations. One major capital project is a roundabout at the intersection of Route 250 with Crozet Avenue and Miller School Road. This roundabout will address current and future level of service and queueing issues at this intersection. The project will need to consider the potential alignment of shared-use paths along Route 250 and Crozet Avenue.

**Estimated Cost: \$\$\$**

**Realization Timeframe: 4 years**

## 4A Route 250 West Design Guidelines

**Work with community and the Architectural Review Board to develop Corridor-specific design guidelines for the Route 250 West Entrance Corridor.**

Route 250 West forms one of the Development Area boundaries for Crozet and is also designated as both a County Entrance Corridor and a Virginia Scenic Byway. Currently, the County has general, County-wide Entrance Corridor guidelines that are used to evaluate development proposals within the County's Entrance Corridors; there are not specific guidelines for individual roadways. Corridor-specific guidelines for Route 250 should consider the relevant recommendations in this Plan, including the landscaped buffers recommended in the Future Land Use Plan.

**Estimated Cost: \$**

**Realization Timeframe: 1 year**



← — → Route 250 West



## 1D Railroad Crossing Feasibility Study

**Conduct a feasibility study on an additional railroad crossing between Downtown Crozet and the Park Ridge Drive and Three Notch'D Road intersection. Ensure that Union Mission community members are actively engaged in the ongoing process of establishing a new crossing with safe and convenient access.**

While the railroad tracks through northern Crozet are an important part of its development and provide opportunities for additional transportation options, they can also act as a barrier to connections. There are four existing railroad crossings in Crozet. A feasibility study between Downtown and Park Ridge Drive would identify if an additional railroad crossing can be pursued. If so, the study would also determine if a full vehicular and pedestrian/bicycle crossing is feasible, or if only a pedestrian/bicycle crossing would be possible. Community member input will be used to inform the study, especially in the Union Mission neighborhood, where an existing at-grade crossing is present.

**Estimated Cost: \$**

**Realization Timeframe: 1 year**



The map above shows the study area for the recommended Railroad Crossing Feasibility Study.

- Existing Avenue
- Existing Local Street
- ⋯ Future Local Street

## 1E Dunvegan Lane Connection

**Provide a street connection at Dunvegan Lane, connecting Park Road and Crozet Avenue.**

The Crozet Transportation Analysis recommends providing a street connection at Dunvegan Lane between Park Road and Crozet Avenue. This should be a two lane local street with sidewalks. A left turn lane would likely be needed on Crozet Avenue to access Dunvegan Lane. This connection would provide more options for pedestrians, cyclists, and drivers, and would better distribute traffic in the Downtown area.

**Estimated Cost: \$\$\$**

**Realization Timeframe: 5 years**

## 2E Route 250 Shared-Use Path (between Crozet Avenue and Cory Farm)

**Through a combination of new development and County-initiated capital projects, construct a shared-use path along the north side of Route 250, between Crozet Avenue and Cory Farm.**

A shared-use path along Route 250 will stretch from the existing path at Old Trail Drive to the existing sidewalk at the Clover Lawn Village Center (shown in white below). Community members have provided feedback on the importance of providing safe pedestrian and bicycle access along Route 250 and of connecting neighborhoods with the Schools. Properties that develop or redevelop along Route 250 should provide right-of-way and construct portions of the shared-use path along their properties.

**Estimated Cost: \$\$\$**

**Realization Timeframe: 5 years**



The white, hatched line above shows the general location of the recommended shared-use path along Route 250.

## 2C Park Ridge Drive Traffic Calming

**Provide traffic calming measures on Park Ridge Drive between Three Notch'D Road and Eastern Avenue in coordination with VDOT. Measures could include restriping, landscaping, bicycle sharrows, and mini roundabouts at intersections.**

The portion of Park Ridge Drive from Route 240 to Eastern Avenue does not have bike lanes and is unable to accommodate bike lanes in the future due to the number of curb cuts for driveways. Traffic calming measures should be provided to improve safety for cyclists. Improvements could include restriping, landscaping, sharrows, and mini roundabouts at intersections. If feasible, improvements should be timed with the construction of the remaining portion of Eastern Avenue.

**Estimated Cost: \$\$**

**Realization Timeframe: 5 years**



## 1D Crozet Avenue Stormwater Management Facility Trail Access Enhancement

*Enhance the existing County-owned stormwater management facility along Crozet Avenue to provide a trail access point, educational signage, site furnishings, and areas for viewing wildlife.*

Currently, the County-owned stormwater management facility on Crozet Avenue is difficult to publicly access, as there are not maintained paths or places to sit. The facility will be enhanced to provide a trail access point, educational signage, site furnishings, and areas for viewing wildlife. A future trail is recommended through this site and would continue across Jarman's Gap Road along Powells Creek.

**Estimated Cost:** \$

**Realization Timeframe:** 1 year



The existing County-owned stormwater management facility recommended for enhancement to provide a trail access point is pictured above.

## 1C Lickinghole Basin Interpretive and Educational Signage

*Pursue opportunities for interpretative and educational signage, removal of invasive species, as well as installation of additional site furnishings (e.g. benches) at Lickinghole Creek Reservoir.*

As part of managing Lickinghole Basin as a Natural Area, there are opportunities for interpretive and educational signage, removal of invasive species, and installation of site furnishings (such as benches). With over 200 species of birds present in the Natural Area, adding signage and places to observe wildlife will provide additional amenities and experiences for community members.

**Estimated Cost:** \$

**Realization Timeframe:** 1 year



Examples of signage from other localities are shown above.



## 5B Old Crozet School Community Engagement

*Conduct an engagement opportunity to solicit community feedback for the future use of the Old Crozet School and adjacent grounds, with a focus on supporting goals for housing, school needs, green building/site design, and historical and cultural programming.*

The County owns two properties (Tax Map Parcels 56-61 and 56-62) totaling 8.08 acres along Crozet Avenue North and across from Crozet Elementary School. The use of these properties is currently leased to two tenants: the private Field School and the non-profit Old Crozet School Arts. The 'Old Crozet School' building on these properties is also a contributing building within the Historic District. Once the Field School completes its planned move to a different location, community input should be used to identify future uses for this site that support the goals of this Plan. Any development of the site must also include protection and enhancement of the existing stream buffer.

**Estimated Cost:** \$

**Realization Timeframe:** 1 - 2 years



(Above) The Old Crozet School, viewed from the existing field near the stream, facing northeast.

## 5C Bike Route 76 Signage

*Provide signage directing cyclists using Bike Route 76 to Downtown Crozet. As part of this initiative, explore opportunities to reroute Bicycle Route 76 through Downtown Crozet.*

National Bike Route 76 runs along the edge of the Crozet Development Area, including portions of Lanetown Road, Railroad Avenue, and Buck Road. Signage should be provided to direct cyclists to Downtown Crozet via Jarman's Gap Road. This provides potential for additional visitors and tourists for Downtown. Based on community feedback, consideration could also be given to rerouting Bike Route 76 through Downtown, and reconnecting via Crozet Avenue North to Buck Road.

**Estimated Cost:** \$

**Realization Timeframe:** 2 years



# Ongoing Projects

The following is a list of this Plan's Ongoing Projects. These include projects that may happen with future development or redevelopment, such as the development review process for proposed legislative applications. These also include projects that are part of ongoing County programs and processes, including ongoing maintenance of County land and facilities. Other projects may be completed as funding or partnerships become available, such as pedestrian connections.

Refer to the full text for each Recommendation by its letter and number and corresponding Chapter in the Plan (yellow for Land Use, blue for Transportation, and green for Conservation).

The following are expected outcomes for Ongoing Projects:

- Buildout of a Bicycle and Pedestrian Network
- Strengthened Regional Connectivity
- Protected and Enhanced Natural and Scenic Resources
- Appropriately-Scaled Redevelopment and Infill in Existing Neighborhoods

**1E** Opportunities for New Trailheads

**3A** Opportunities for Trail Connections to Mint Springs and Beaver Creek

**5A** Urban Forestry, Tree Canopy, and Stream Restoration Opportunities

**2B** Carter Street: Review Considerations for Legislative Review Applications

**3B** Infill Development within Downtown Neighborhoods

**4B** Lighting Improvements on Public Buildings and within Public Lands

**1D** Community and Rooftop Solar Projects

**5A** Placemaking Projects

**3B** Future Transit Stops

**4C** Shared Parking Agreements in Downtown

**4D** Additional Downtown Parking Solutions

**4B** New Trail Siting and Alignment

**1C** Crozet Square Programming and Long Term Maintenance and Improvements of Public Spaces

**2F** Additional Pedestrian Connections in Historic and Aging Neighborhoods

**5D** Coordination with VDOT on Rural Shared Road Improvements

**1B** Manage Lickinghole Basin as a Natural Area with Passive Recreation

**1C** Lickinghole Basin Interpretive and Educational Signage, Removal of Invasive Species, and Site Furnishings

**2C** Trail Connections: Parks and Green Systems Plan and Neighborhood Spur Trails

**4A** Educational and Interpretive Signage for New County Parks and Trails

**5B** Collaboration with HOA's to Enhance and Expand Native Tree Canopies

**5D** Removal of Invasive Species

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# Appendix



# Middle Density Residential Guidance

The Middle Density Residential land use category is intended to encourage housing types that are similar in size and scale to the existing neighborhoods of the County, especially those areas that are designated for Neighborhood Density Residential. Due to the sizes and types of housing encouraged within Middle Density Residential, housing in this category can easily become a part of the fabric of an existing single family neighborhood without causing abrupt transitions between different housing types and scales of buildings. The Middle Density Residential land use category helps to bridge the gap between single-family housing and multi-level apartment buildings. Not only does it help bridge a gap in building sizes and scales by providing better transitions between building sizes, it can also help fill an affordability gap. By encouraging modestly sized housing types in targeted areas, the Middle Density Residential category can encourage smaller and more affordable market rate units such as accessory dwelling units, multiplexes, and bungalow courts. In density and scale, the Middle Density Residential category fits between Neighborhood Density Residential and Urban Density Residential.

**Intent:** Low to mid-density residential and smallscale non-residential uses such as commercial and institutional uses; intended to encourage a variety of housing types, encourage smaller housing units that are naturally more affordable, and to promote housing choice and affordability.

**Primary Uses:** Residential densities in the range of 6-12 units per acre are recommended. Residential density of up to 18 units per acre could be considered to accommodate additional affordable housing (beyond any baseline affordability requirements); or to allow for construction of small-scale housing types: bungalow courts, small multiplexes, accessory dwelling units, live/work units, and small single family cottages, tiny houses.\*

**Building & Form Guidance:** Residential forms including but not limited to: small multiplexes, live/work units, bungalow courts, accessory dwellings, single family cottages and other similarly scaled residential development. Townhouses and single family detached units are an allowable building forms, though smaller unit types on smaller lots are encouraged to increase affordability. Larger multiplexes are not recommended within this land use. A mix of housing types should be provided with developments over 20 unites, though exceptions can be made for developments providing predominantly small-scale housing types referenced in Primary Use.

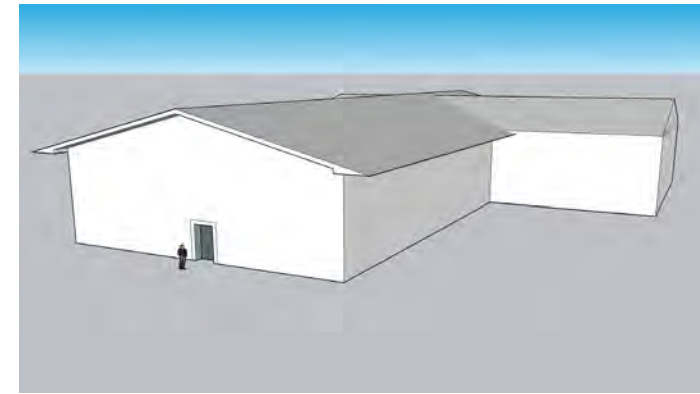
## Height & Massing

- Up to 3 stories
- Suggested maximum building footprints:
- Commercial/retail: 5,000 sq. ft.
- Office/Institutional: 20,000 sq. ft.
- Residential single use building: 12,000 sq. ft.

## Prioritized Design Principles:

- Provide a mixture of housing types and affordability.
- Bicycle and pedestrian connectivity.
- Access to parks, amenities, and green systems.

## Middle Density Housing Types



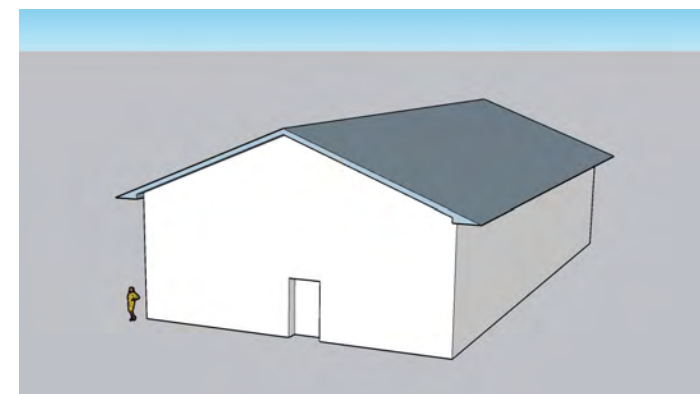
### Medium Multiplex

A multiple-family dwelling structure containing 7-12 dwelling units. The units may be arranged side-by-side and/or stacked. Units typically share an entrance along the street.

- o Height: 2-2.5 stories
- o Footprint: up to 18,000 sq ft
- o Unit size: up to 1,500 sq ft



(Above) An example of a medium multiplex with the appearance of a medium-to-large single-unit house. *Image Credit: missingmiddlehousing.com*



### Small Multiplex

A multiple-family dwelling structure containing 2-6 dwelling units. The units may be arranged side-by-side and/or stacked, and are also commonly referred to as a duplex, triplex, or quadruplex.

The units collectively have an appearance similar to a medium to large single-unit house. The structure may include a rear yard and a shared entry from the street.

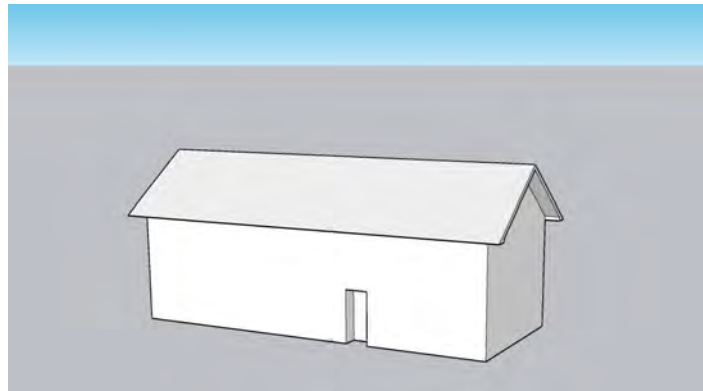
- o Height: 2-2.5 stories
- o Footprint: up to 5,000 sq ft
- o Typical unit size: up to 1,200 sq ft

(Right) Examples of small multiplexes with the appearance of medium single-unit houses. *Image Credit (Top): missingmiddlehousing.com*



\*see housing types descriptions for more information





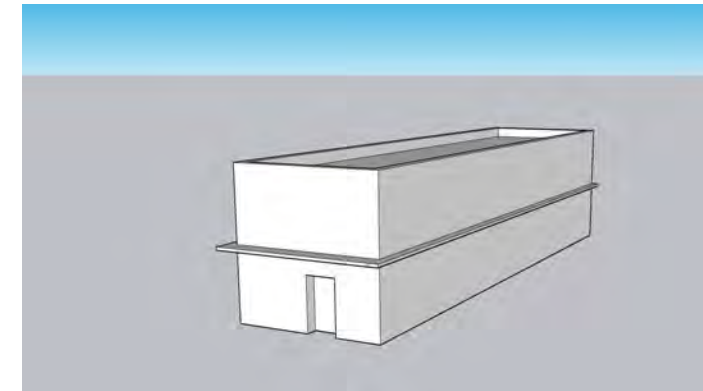
**Small single-family cottages**

A building containing one dwelling unit that meets the form guidance below:

- o Height: 1-2 stories
- o Footprint: up to 1000
- o Unit size: up to 1500
- o Lot size: less than .2 ac



(Above) An example of a small, single-family cottage in Crozet.



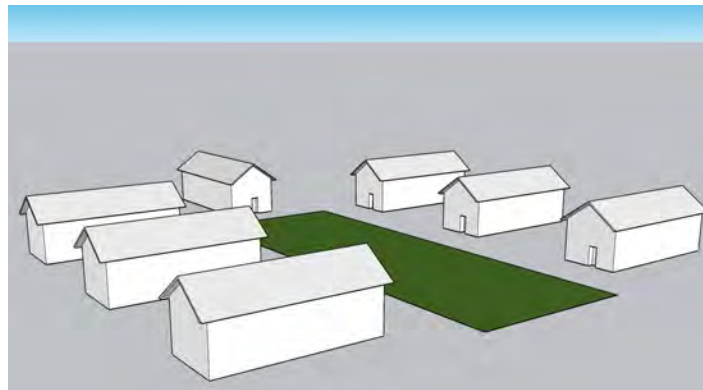
**Live/Work Units**

An attached or detached structure consisting of one dwelling unit above or behind a fire-separated ground floor space that can accommodate a small-scale non-residential use. The non-residential space and residential unit typically have separate street entrances.

- o Height: 2-3 stories;
- o Footprint: up to 2,000 sq ft
- o Unit size: up to 2,000 sq ft



(Above) Existing buildings in Downtown Crozet that meet the form recommendations for live/work units.



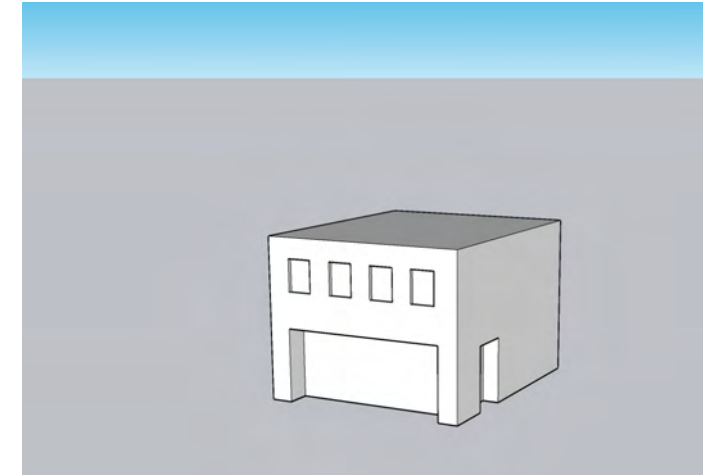
**Bungalow / cottage courts**

A group of small, typically detached, single-unit structures (may contain duplexes) arranged around a shared amenity space visible from the street. The amenity space is a community-enhancing element, which can be a court or green space and unit entrances should be from the shared space. It replaces the function of a rear yard.

- o Height: 1-2 stories
- o Area: .25 acres+
- o Footprint: up to 800 sq ft
- o Unit size: up to 1,200 sq ft



(Above) An example of a bungalow court.  
Photo Credit: Allison Ramsey Architects



**Accessory dwelling units**

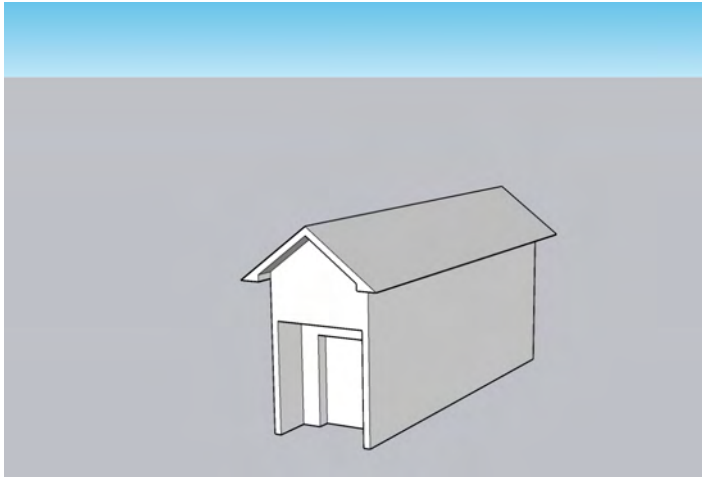
A secondary dwelling that shares the building lot of a larger, primary house. Accessory dwelling units (ADUs) can be internal/attached, or external/detached.

- o Height: 1-2 stories
- o Footprint (detached): up to 800 sq ft
- o Unit size: up to 1,200 sq ft



(Above) Existing detached, external accessory dwelling units in Old Trail, Crozet.





**Tiny house**

A building containing one dwelling unit, meeting the form guidance below:

- o Height 1-1.5 stories
- o Unit size less than 400 sq ft (state building code)



(Above) An example of a tiny home.

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# Downtown Crozet Parking Study

July 2020 | Final

Prepared for



Prepared by

Kimley»Horn





# TABLE OF CONTENTS

- Introduction..... 1
- Data Collection..... 1
  - Parking Inventory ..... 1
  - Parking Utilization..... 2
  - Field Observations..... 2
- Gap Analysis ..... 6
  - Projected Changes to Parking Supply ..... 6
  - Near-Term Developments ..... 6
  - Potential Parking Impacts ..... 9
    - Short-Term..... 9
    - Mid-Term ..... 10
    - Long-Term ..... 10
- Zoning Ordinance Parking Requirement Comparison .....10
- Recommendations .....11
  - Parking Management Strategies..... 11
    - Improve Wayfinding ..... 11
    - Multimodal Infrastructure and Streetscape Improvements..... 11
    - Convert Unrestricted Parking to Time-Restricted ..... 11
  - Parking Mitigation Strategies ..... 12
    - Shared Use Parking..... 12
    - Shared Valet Parking Zones ..... 14
    - Shuttle Service..... 14
    - Build New Parking..... 14
- Implementation Plan .....15
  - Short Term Action Items ..... 15
  - Midterm Action Items..... 15
  - Long Term Action Items ..... 15
- APPENDIX .....16



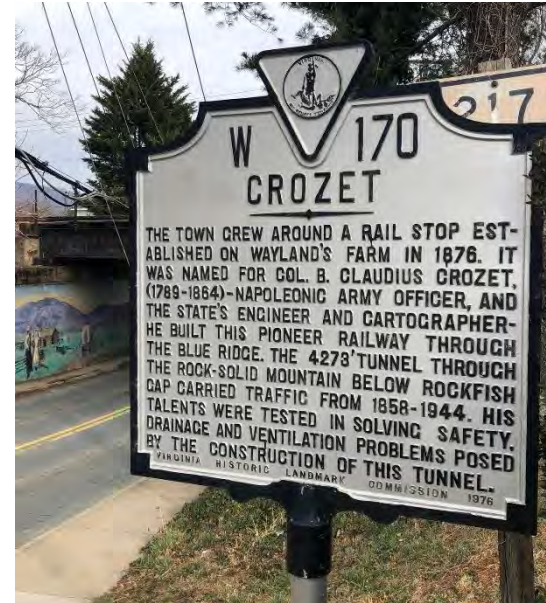


## INTRODUCTION

Crozet, Virginia located in Albemarle County, is a small, rural town positioned approximately 12 miles west of Charlottesville and 21 miles east of Staunton. Over the past 15 years, residential development in Crozet has increased due to its proximity to Charlottesville and its designation as a strategic growth area by Albemarle County. Additional change coming to Crozet includes roadway improvements at The Square and redevelopment of the old Barnes Lumber property.

In connection with the County's parallel master planning effort, the town commissioned this parking study to assess existing parking operations, conditions, inventory, and utilization within the Downtown area toward development of recommendations to incorporate into adopted planning policies.

A gap analysis was performed to compare existing parking inventory and utilization to future parking inventory, including projected impacts based on future development and land uses including the Crozet Square and Barnes Lumber property redevelopment projects. Based on the results of this study, opportunities were identified for mitigating impacts of the planned roadway improvements and redevelopment projects to parking inventory and availability within Downtown Crozet.



## DATA COLLECTION

### Parking Inventory

Kimley-Horn performed an inventory of available on- and off-street parking within the Downtown Crozet study area in January 2020. The limits of the study area are depicted in **Figure 1** and described as approximately 250 feet south of Wayland Drive to the north, Firehouse Lane to the east, Tabor Street to the south, and Carter Street to the west.

The parking facilities considered in the study include on- and off- street parking for office, restaurant, retail, religious assembly, and commercial land uses. The study did not consider parking supply for residential land uses or public safety facilities (i.e. fire station). Parking inventory data for the study area is summarized in **Table 1** in terms of number of parking spaces, accessible spaces, and parking space restrictions including time restrictions and user types. A total of **886 parking spaces** were inventoried within the study area.

The table characterizes parking facilities as either private or public. The vast majority of parking within the study area is private parking, with only 140 public parking spaces. Absent any signed designation, the inventoried gravel lot of 58 spaces was observed to be used as public parking. With these 58 spaces, the total number of public parking spaces within the study area is **198 parking spaces**, or 22% of the overall inventory.

A parking inventory map is provided in **Figure 1**, showing the location and quantities of each type of parking available at the parking facilities.

Table 1. Parking Inventory

Downtown Crozet - Parking Inventory					
Facility Name	Facility Number	Private or Public	Stall Type	Inventory	Location
Community Garages	1	Private	Regular	8	1146 Crozet Avenue
Crozet United Methodist Church	2	Private	Regular	74	1156 Crozet Avenue
			ADA	5	
Blue Goose Building	3	Private	Regular	15	1186 Crozet Avenue
			ADA	1	
Whistle Stop Grill	4	Private	Regular	12	1200 Crozet Avenue
Crozet Post Office/Bank of America	5	Private	Regular	47	1214 Crozet Avenue
			Reserved (Bank)	3	
			ADA	4	
			Loading Zone - Dock	1	
English Meadows Senior Living	6	Private	Regular	37	1214 Crozet Avenue
			Reserved (Transport Vehicles)	2	
			Reserved (Employee of the Month)	1	
			Loading Zone - Dock	1	
Green House Coffee	7	Private	Regular	30	1260 Crozet Avenue
			ADA	1	
Crozet Pizza and Shops	8	Private	Regular	66	5798 Three Notch'd Rd
			ADA	2	
			Timed	3	
			Reserved (Sam's Hot Dog)	2	
			Reserved (Century Link Parking)	3	
Crozet Artisan Depot	9	Private	Regular	9	SE corner of Crozet and Three Notch'd (address not provided in Parcel Mapper)
			ADA	1	
Old Tack and Saddle	10	Private	Regular	15	Just West of Great Valu - 5778 Three Notch'd Rd
			Reserved (Santasha Yoga)	5	
Great Valu, Dollar General, and Shops	11	Private	Regular	115	5734 Three Notch'd Rd
			ADA	5	
University of Virginia Community Credit Union	12	Private	Regular	12	Just East of Great Valu - 5714 Three Notch'd Rd
			ADA	2	



Table 1. Parking Inventory

Downtown Crozet - Parking Inventory					
Facility Name	Facility Number	Private or Public	Stall Type	Inventory	Location
Crozet Commons	13	Private	Regular	98	5690 Three Notch'd Rd
			ADA	4	
			Bicycle	1	
The Square	14	Public	Regular	71	The Square
			Reserved (Hardware Store)	4	
			Reserved (Parkway Pharmacy)	3	
			ADA (Reserved) (Parkway Pharmacy)	1	
Barnes Lumber Site	15	Private	Unmarked Lot (Crozet Bicycle)	20	Barnes Lumber Site
Gravel Lot	16	Quasi-Public	Unmarked Lot	58	Across from Piedmont Place
State Farm	17	Private	Regular	2	1207 Crozet Avenue
			Reserved	2	
Piedmont Pediatrics	18	Private	ADA	1	1193 Crozet Avenue
			Reserved	8	
Region Ten	19	Private	Reserved	4	1193 Crozet Avenue
B&B Cleaners	20	Private	Regular	5	1189 Crozet Avenue
Crozet Library	21	Public	Regular	45	2020 Library Avenue
			ADA	4	
			Carpool Only	2	
			Motorcycle	2	
			Hybrid and Low-Emission	2	
Piedmont Place	22	Private	Regular	25	2025 Library Avenue
			ADA	2	
			Reserved (Residents)	6	
Tabor Presbyterian Church	23	Private	Regular	24	5804 Tabor Street
			ADA	2	
			Reserved	2	
On-Street Parking - Library Avenue	24	Public	Regular	6	Library Avenue south of Piedmont Place

### Parking Utilization

Parking utilization data was collected during one weekday time period (Wednesday 11:00 AM to 1:00 PM) and one weekend time period (Saturday 5:00 PM to 7:00 PM) in February 2020. Albemarle County identified these peak time periods for analysis based on known high parking utilization trends, imbalanced parking usage, and feedback from representatives of the Downtown Crozet Initiative.

Parking utilization represents the number of vehicles present in parking facilities, represented as a percentage. The parking utilization was calculated by parking facility for each time period.

Parking utilization maps, showing the percent occupancy of parking by facility are provided in *Figure 2 and Figure 3* for the peak weekday and peak weekend time periods, respectively.

**Generally, parking supply within the study area is underutilized, with a system-wide utilization of 47% during the Wednesday midday peak period and 30% during the Saturday evening peak period.**

Trends identified from the data also include:

- During the Wednesday 11:00 AM to 1:00 PM timeframe, there was system-wide surplus parking, but demand is spread out over more uses.
- During the Saturday 5:00 PM to 7:00 PM timeframe, there was system-wide surplus parking, but demand is centralized around the Square, Piedmont Place, and Crozet Pizza/Shops, contributing to a perceived parking issue.
- Overall system utilization was lower during the Saturday timeframe than the Wednesday timeframe, in part due to many perimeter parking facilities (office, bank, churches) being nearly empty.

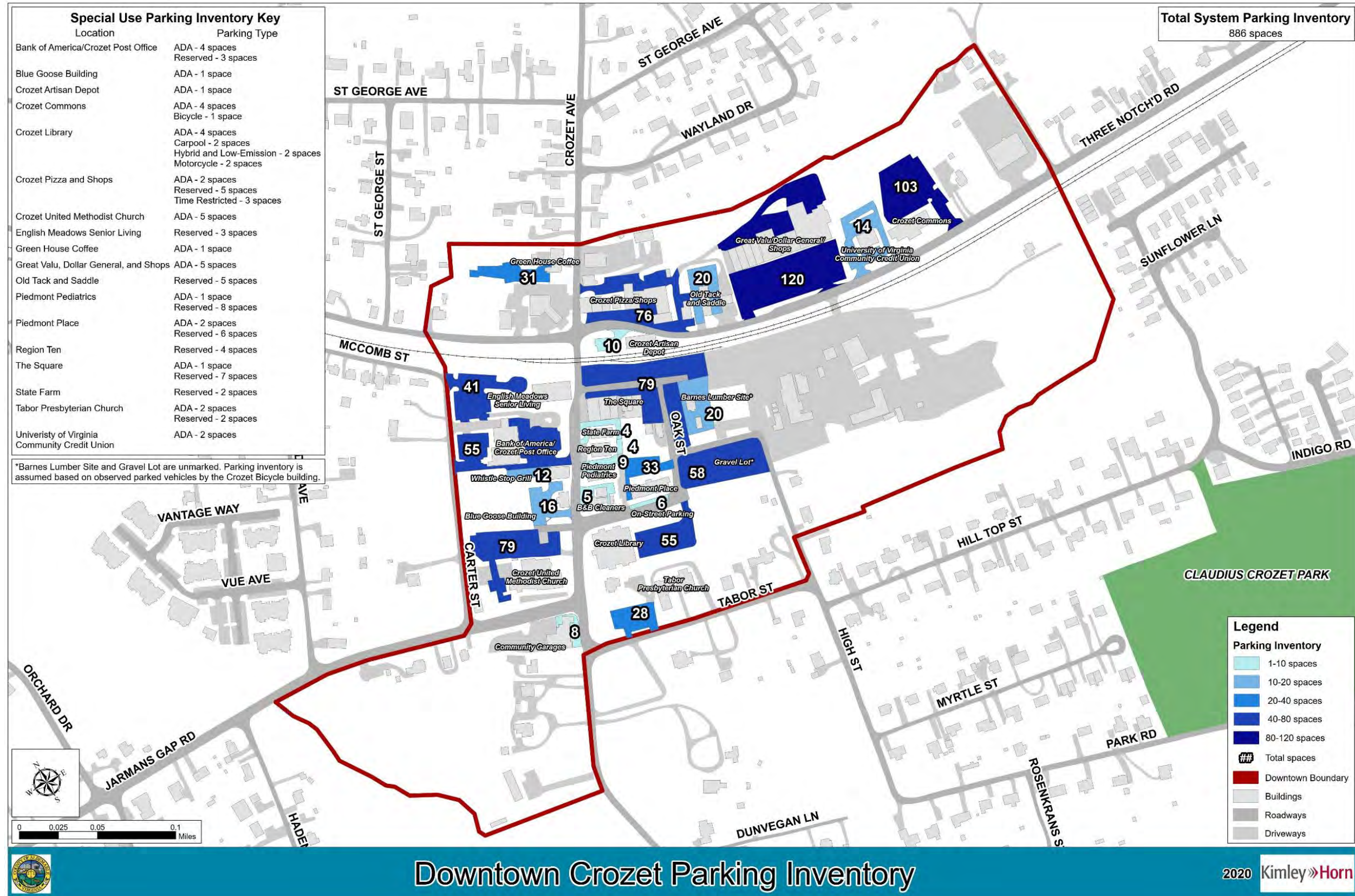
### Field Observations

Existing condition observations within the study area were made concurrently with parking inventory and parking utilization data collection. The following observations regarding parking operations were noted:

- Unmarked gravel lots result in an inconsistent utilization of physical space and contribute to variable parking inventory in these facilities. Further, there is a lack of signage indicating whether the gravel lot is permitted parking which may impact utilization.
- There is limited wayfinding signage guiding visitors to businesses and parking within Downtown.
- Steep roadway grades behind the Crozet Pizza and Shops commercial uses contribute to operational challenges. Lower parking utilization was observed in the parking area behind the shops, which may be explained by the accessibility and operational challenges. Additionally, parkers tend to underutilize parking that is not visible from the street in general.
- While there are streetscape elements and bicycle infrastructure within the study area that help promote safe and efficient multimodal activity, driving to downtown destinations appears to be the preferred travel mode.
- An internal site circulation plan is implemented for daycare pick-up at the Crozet United Methodist Church.
- Narrow drive aisles at The Square contribute to circulation challenges.







# Downtown Crozet Parking Inventory

2020 Kimley»Horn

Figure 1. Parking Inventory Map





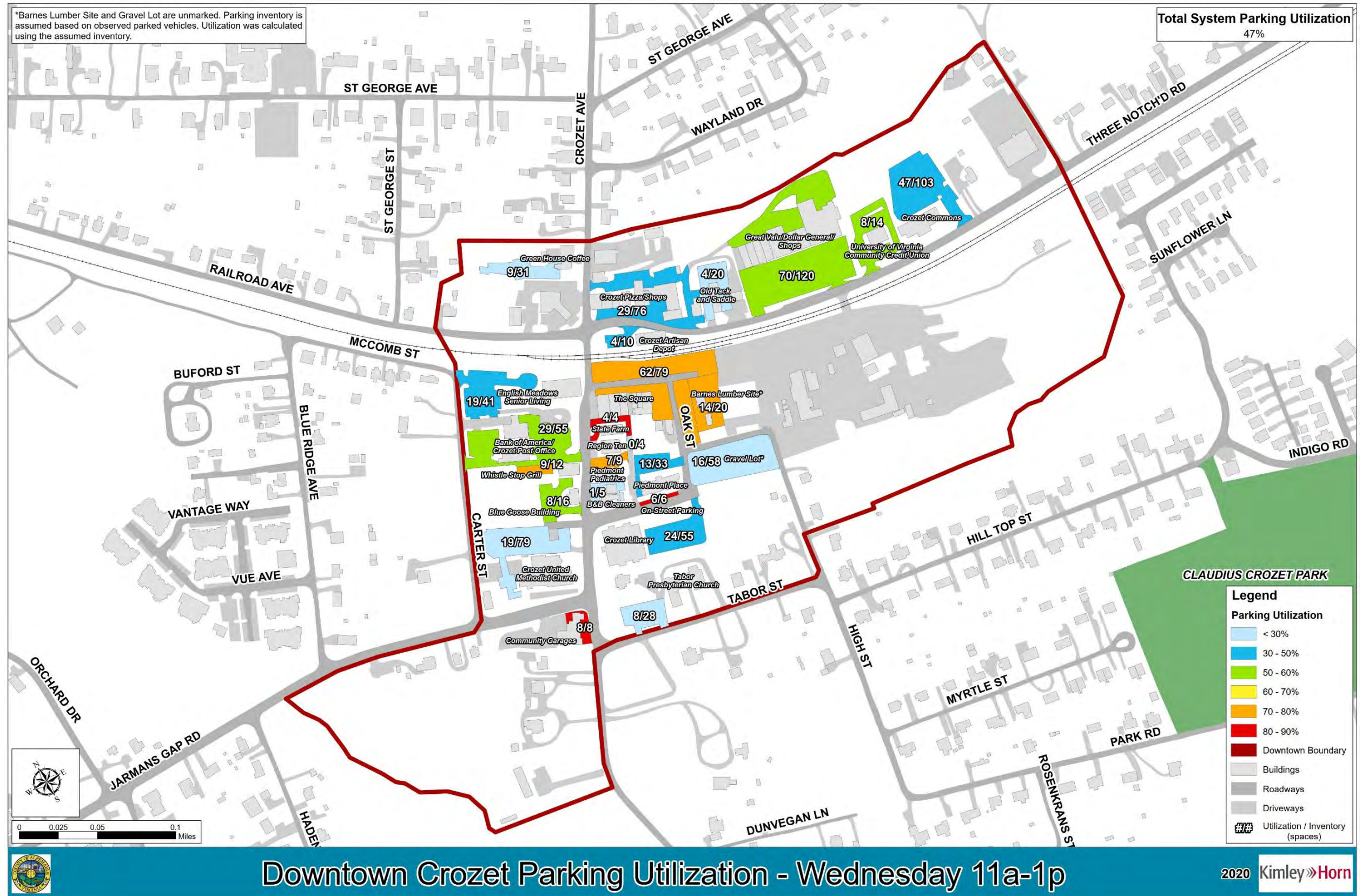


Figure 2. Parking Utilization Map – Wednesday 11:00 AM to 1:00 PM





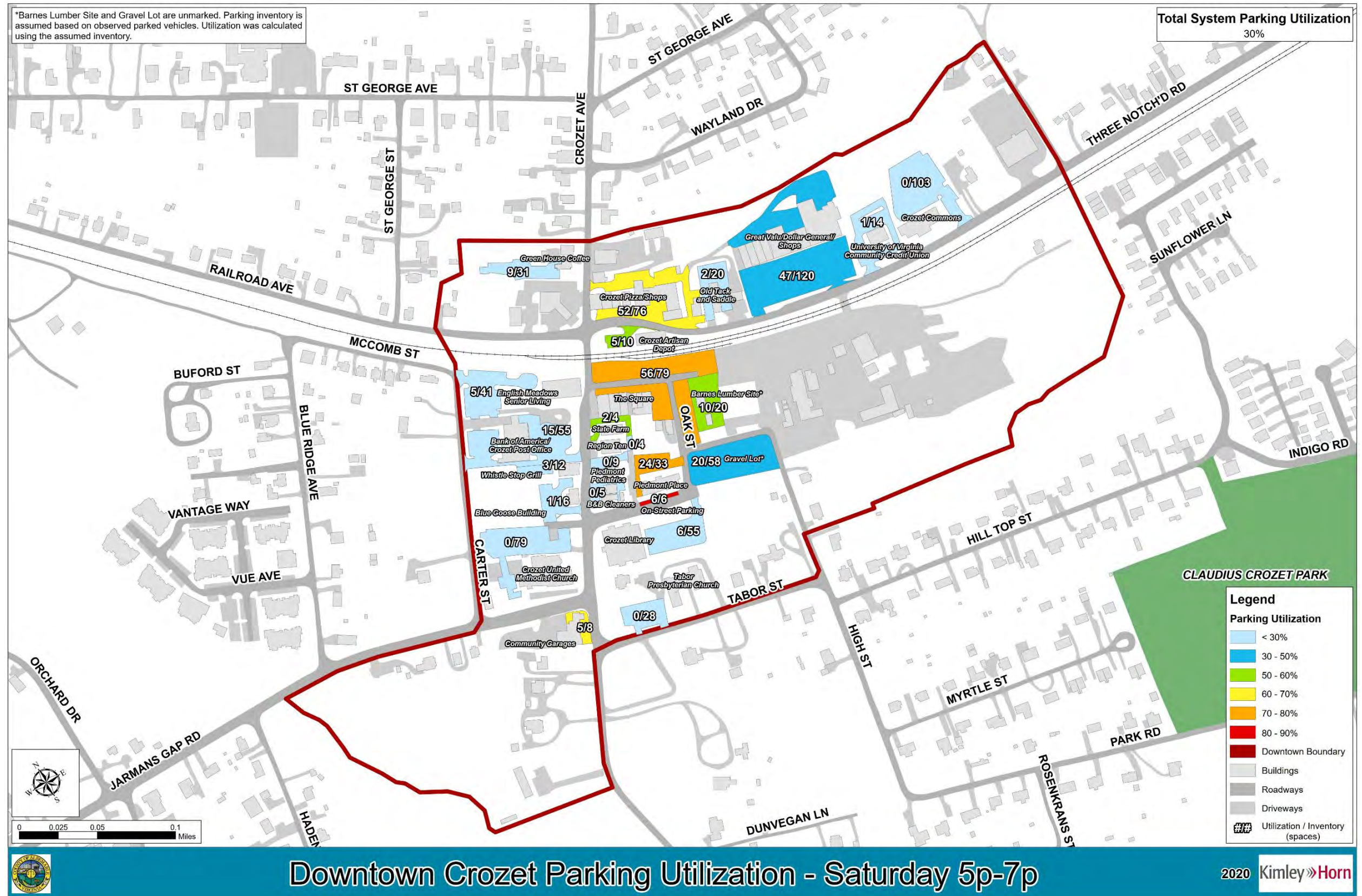


Figure 3. Parking Utilization Map – Saturday 5:00 PM to 7:00 PM



## GAP ANALYSIS

A gap analysis was conducted to compare existing parking inventory and utilization to future parking inventory in the Downtown area based upon known, planned redevelopment or roadway changes that will impact parking supply. The gap analysis method uses data to identify areas of Downtown that warrant specific parking mitigation during time periods of highest observed utilization. The analysis is based upon existing parking utilization trends.

Figure 4 shows the percent occupancy of parking by facility during the peak period for each facility, illustrating current conditions under the maximum observed utilization, or the peak of the peak conditions.

### Projected Changes to Parking Supply

The following known, planned redevelopment or roadway changes were considered in the gap analysis. A summary of projected changes to parking supply as a result of the changes is provided below.

- 1193 & 1205 Crozet Avenue Renovation** – This project includes the renovation of the existing, vacant Region Ten building (1205 Crozet Avenue) into a new restaurant with outdoor seating capacity. Parking supply will be reduced from four spaces to three spaces. This project also includes changes to the existing parking supply at the Piedmont Pediatrics doctor’s office (1193 Crozet Avenue), reducing the number of parking spaces from nine to four spaces.
- Route 1217 (The Square) Roadway Project** – This project includes improvements to the existing intersection of Crozet Avenue and The Square and reconstructs the roadway and parking facilities around The Square and along Oak Street to Library Avenue. This project will close off access to the existing gravel parking lot to the east of Oak Street near Piedmont Place. Parking supply will decrease from 157 to 70 parking spaces, a delta of 87 spaces.
- Route 1204 (High Street) Extension, Library Avenue Extension and Primary Street Construction** – This project will construct new roadway to extend Library Avenue to High Street, The Square to Hill Top Street, and High Street Between Library Avenue and The Square. The proposed on-street parking along the new roadway segments will add 67 parking spaces where there are no existing parking facilities.

The limits of the known, planned redevelopment or roadway changes considered in the gap analysis are depicted in Figure 5 as an overlay to the peak utilization data by facility to visualize the projected changes to parking supply and potential impacts to parking operations within the study area. Collectively, these three changes will reduce parking inventory in the study area by approximately 3%.

**As the overall system parking supply is not projected to significantly change, existing parking surplus would more than offset the limited loss of parking in the Downtown study area.**

However, there are projected impacts to parking conditions in and around The Square and Barnes Lumber property during construction and upon completion of the Barnes Lumber redevelopment that will significantly increase parking demand and utilization in the centralized, high-demand parking area. Short-term, mid-term, and long-term conditions were analyzed and are documented in the subsequent sections.



### Near-Term Developments

The potential change in existing parking demand in the surrounding area of the roadway improvements at The Square and redevelopment of the Barnes Lumber property was considered. Parking utilization rates during variable times of day may change during construction of the roadway improvements and near the future development location.

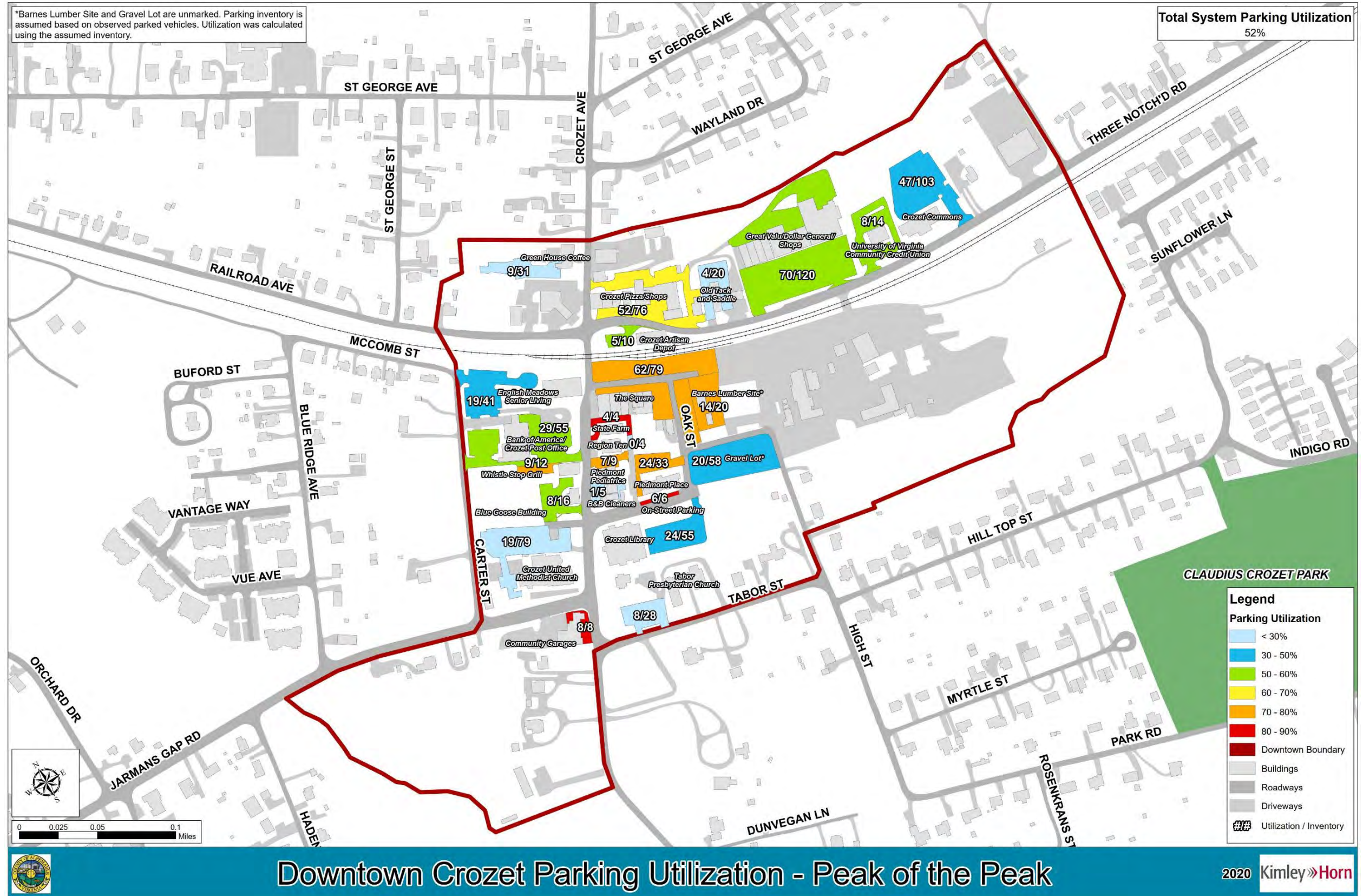
Parking generation was calculated for Phase 1 and Phase 2 of the Barnes Lumber property redevelopment assuming the land use densities provided in Table 2, as provided by the County.

Table 2. Barnes Lumber Property Redevelopment – Land Use Densities

Barnes Lumber Phase 1	
Land Use	Density
Retail/Other Commercial	24,900 SF
Restaurant	12,000 SF
Hospitality/Hotel	30,000 SF (assumes 50 rooms)
Office	20,000 SF
Residential	52 units - (assumes 32 1-bedroom and 20 2-bedroom)
Barnes Lumber Phase 2	
Land Use	Density
Commercial	169,050 SF
Residential	120 units - (assumes 72 1-bedroom and 48 2-bedroom)

The Urban Land Institute (ULI) Shared Parking Model is a tool used to determine cumulative parking demand for developments with multiple land uses. The model considers that while each land use generates demand for a certain number of parking spaces, these parking demands fluctuate hour-by-hour, day-by-day, and month-by-month. Because individual land uses may not experience peak parking demand at the same time, the model considers the collective parking demand throughout the day to allow the sharing of parking between these land uses and minimizing of space and resources devoted to parking. Additionally, the ULI Shared Parking Model allows for alternative mode and non-captive ratio adjustments to be made for mixed-use developments, such as the Barnes Lumber property redevelopment, to account for interactions between uses internal to the site.



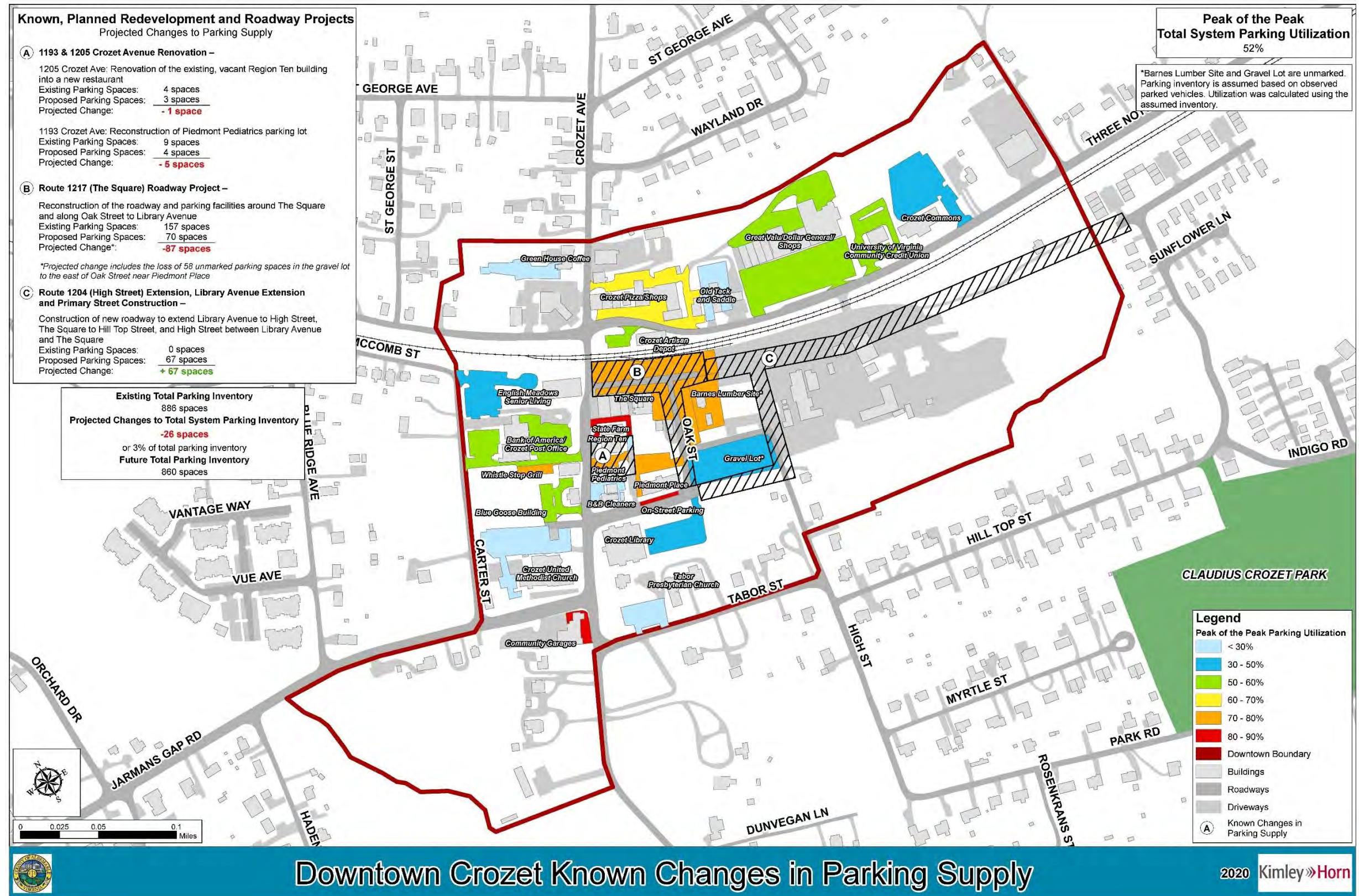


## Downtown Crozet Parking Utilization - Peak of the Peak

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Figure 4. Peak Utilization Map by Facility





## Downtown Crozet Known Changes in Parking Supply

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Figure 5. Projected Changes to Parking Supply





ULI shared parking methodologies were applied to the Barnes Lumber property mixed-use development land uses provided to Kimley-Horn, which are summarized in *Table 2*. ULI time-of-day, weekly, and monthly adjustments were applied to the ULI base parking rates for each proposed land use. Base parking rates for retail, commercial, and restaurant land uses were adjusted for noncaptive ratios. The base parking ratios for the hotel, office, and residential land uses were not adjusted for noncaptive ratios as these uses are primary parking generators. For example, someone shopping at a store or eating at a restaurant would not generate additional parking demand if they already live there or work in a store. However, people parking for the hotel, office, and residential uses are generally not already parked on site. Further, the analysis assumed that residential parking demand would be accommodated via reserved spaces.

*Table 3* summarizes the results of the shared parking model for the Barnes Lumber property mixed-use development.

**Table 3. Barnes Lumber Property Redevelopment – Parking Generation**

Barnes Lumber Redevelopment	Unadjusted Peak Parking Demand (spaces)		Estimated Shared Peak Parking Demand (spaces)	
	Weekday	Weekend	Weekday	Weekend
<b>Phase 1</b>	466	413	370	334
<b>Phase 2*</b>	624	682	613	666

*\*Based on information provided by the County, Phase 2 of the Barnes Lumber redevelopment is anticipated to include a less-parking intensive blend of commercial land uses. As such, 1 space per 3,000 square feet was assumed as the base parking generation ratio for the commercial land use density.*

With no shared parking assumptions taken, Phase 1 of the development would be expected to generate a peak demand of 466 parking spaces on a weekday and a demand of 413 spaces on a weekend day, representing a sum of each use’s peak demand. Applying the shared parking methodology, demand is expected to be 370 parking spaces during the weekday peak period, yielding a total reduction in weekday peak demand of 21% percent. During the weekend peak period, demand is expected to be 334 spaces, which is a reduction of 19% percent.

The benefit of shared parking is less realized by Phase 2 of the development as the residential land use has only a 1% non-captive adjustment to retail/commercial land uses based on ULI base values. As such, demand is expected to be 613 parking spaces during the weekday peak period and 666 spaces during the weekend peak period, which each represent 1% reductions.

Supporting documentation from the ULI Shared Parking Model is provided in *Appendix A*.



## Potential Parking Impacts

To consider how projected changes to parking supply during construction and after completion of roadway improvements and redevelopment in the study area may impact parking utilization and operations, the following short-term, mid-term, and long-term scenarios were assessed.

- **Short-Term** – In the short-term, it is assumed that the 1193 & 1205 Crozet Avenue Renovation is complete and that the following three projects are under construction: Route 1217 (The Square) Roadway Project, Route 1204 (High Street) Extension, Library Avenue Extension and Primary Street Construction, and Barnes Lumber property Redevelopment.
- **Mid-Term** – Under mid-term conditions, it is assumed that the Route 1217 (The Square) Roadway Project and Barnes Lumber property Phase 1 redevelopment are complete. The Route 1204 (High Street) Extension Library Avenue Extension and Primary Street Construction will be partially complete.
- **Long-Term** – Completion of the Route 1204 (High Street) Extension Library Avenue Extension and Primary Street Construction and Phase 2 of the Barnes Lumber property redevelopment is assumed as the long-term scenario.

*The assessment considers that parking supply and demand is not simply about parking inventory, but rather the quality and location of parking relative to the location of the demand.* As the projected changes to parking supply are centralized around The Square and Barnes Lumber property, the existing parking facilities of The Square, Barnes Lumber property, and nearby gravel lots were considered as existing parking supply for the assessment as opposed to the total Downtown study area parking system. The results are described in the following three sections and summarized in *Table 4*.

### Short-Term

In the short-term, it is assumed that the 1193 & 1205 Crozet Avenue Renovation is complete. The renovation will reduce the existing parking supply from 13 spaces to 7 spaces and potentially increase existing parking demand. The maximum observed parking occupancy was 7 vehicles during peak conditions. As such, the projected change in parking supply for the renovation is not anticipated to displace parked vehicles and the potential increase in future demand was not considered in further analysis.



During construction of the Route 1217 (The Square) Roadway Project, Route 1204 (High Street) Extension, Library Avenue Extension and Primary Street Construction, and Barnes Lumber property redevelopment, a partial closure of The Square/Oak Street (35 spaces assuming a 50% closure) and full closures of the Barnes Lumber site and gravel lot (78 spaces) were assumed. As such, existing parking supply in the area will decrease from 157 spaces to 44 spaces. The maximum observed parking occupancy based on existing parking demand was 96 spaces. **During the short-term scenario, there is a potential impact of 52 displaced parked vehicles that are not accommodated in or around The Square and Barnes Lumber property.**



**Mid-Term**

Under mid-term conditions, it is assumed that the Route 1217 (The Square) Roadway Project and Barnes Lumber property Phase 1 redevelopment are complete, which will add 35 spaces and 78 spaces, respectively. The 78 parking spaces associated with the Barnes Lumber property redevelopment in the mid-term are temporary parking spaces.



The Route 1204 (High Street) Extension Library Avenue Extension and Primary Street Construction will be partially complete, which will add 33 parking spaces (assuming a 50% completion).

With the additional of 146 parking spaces in and around The Square and Barnes Lumber property vicinity, existing parking demand can be accommodated. There will be 94 surplus parking spaces based on existing parking demand.

The potential increase in parking demand generated by the Barnes Lumber Phase 1 redevelopment is 370 parking spaces during the peak period. Assuming that 200 parking spaces will be provided on-site the development and there are 94 surplus parking spaces in the vicinity, **there is a potential impact of 76 new parked vehicles that are not accommodated during the mid-term scenario in or around The Square and Barnes Lumber property.**

**Long-Term**

Completion of the Route 1204 (High Street) Extension Library Avenue Extension and Primary Street Construction and Phase 2 of the Barnes Lumber property redevelopment is assumed as the long-term scenario. While the Route 1204 (High Street) Extension Library Avenue Extension and Primary Street Construction project will add 34 parking spaces into the system (the remaining 50% of parking to be provided by the project), the completion of the Barnes Lumber redevelopment will remove the 78 temporary parking spaces previously provided. As a result, there will be 146 spaces provided in and around The Square and Barnes Lumber property vicinity.

Similar to the mid-term scenario, existing parking demand can be accommodated by the 146 parking spaces provided while still having 50 surplus parking spaces based on existing parking demand. The potential increase in parking demand generated by the Barnes Lumber Phase 2 redevelopment is 666 parking spaces during the peak period. Assuming that 400 parking spaces will be provided on-site the development and there are 50 surplus parking spaces in the vicinity, **there is a potential impact of 216 new parked vehicles that are not accommodated during the long-term scenario in or around The Square and Barnes Lumber property.**

Table 4. Potential Parking Impact based on Existing and Future Parking Demand

Scenario	Parking Supply*	Projected Changes to Parking Supply	Existing Peak Parking Demand*	Potential Impact Based on Existing Utilization and Demand	Potential Change in Peak Parking Demand	Estimated On-Site Parking Provided~	Potential Impact Based on Existing Utilization and Future Demand
Short-Term	157 spaces	- 113 spaces = 44 spaces	96 spaces	52 displaced parked vehicles that are not accommodated	N/A	N/A	N/A
Mid-Term	44 spaces	+ 146 spaces = 190 spaces	96 spaces	0 parked vehicles displaced (94 space surplus)	370 new parked vehicles	200 spaces	76 new parked vehicles that are not accommodated
Long-Term	190 spaces	- 44 spaces = 146 spaces	96 spaces	0 parked vehicles displaced (50 space surplus)	666 new parked vehicles	400 spaces	216 new parked vehicles that are not accommodated

\*Existing parking inventory and utilization data for the existing parking facilities of The Square, Barnes Lumber property, and nearby gravel lots were considered for the assessment.

~Data for estimated parking provided on-site the Barnes Lumber redevelopment was provided by the County.

Based on the scenario results and the gap analysis, parking mitigation strategies were identified and are provided in the Recommendations and Implementation Plan sections.

**ZONING ORDINANCE PARKING REQUIREMENT COMPARISON**

Understanding the current parking requirements compared to parking supply for land uses within the study area is vital to identifying potential impacts that future changes may have on County zoning ordinances and parking requirements. Gross square footage data provided by the County for the land uses associated with the analyzed parking facilities was used to develop a summary of parking space to square foot ratios for the various land uses within the study area.

By reviewing the available data for the overall study area, one parking space is provided for every 270 gross square foot of land use.

System Summary		1 space / 270 SF
239,897	886	
total gross square footage	total spaces	

A summary by land use and how the data compares to Albemarle County’s current parking requirements is provided in Table 5.

There are 64 spaces in the study area that were not included in the individual land use assessment. The gravel lot (58 spaces) and on-street parking (6 spaces) were not assigned to a land use for the purposes of this comparison.



Table 5. Parking Supply Compared to Parking Requirements by County Zoning Ordinance

Parking Supply by Land Use				Summary of County Zoning Ordinance (Sec. 4.12.6)
<b>Service repair garage</b>		679.63	SF / space	1 space per each employee plus two spaces per each service stall
5,437	8	translates to		
SF	spaces	<b>1</b>	<b>space / 680 SF</b>	
<b>Religious Assembly</b>		183.16	SF / space	If the assembly area seats more than 100 persons, 1 space per 3 fixed seats or per 75 square feet of area of assembly
19,598	107	translates to		
SF	spaces	<b>1</b>	<b>space / 180 SF</b>	
<b>Office, Business, Admin, Prof.</b>		254.25	SF / space	1 space per 200 square feet of net office floor area
65,089	256	translates to		
SF	spaces	<b>1</b>	<b>space / 250 SF</b>	
52,071	256	203.40	Net SF / space	
Net SF (80%)	spaces	<b>0.98</b>	<b>space / 200 Net SF</b>	
<b>Restaurant</b>		138.00	SF / space	13 spaces per 1,000 square feet of gross floor area
5,934	43	translates to		
SF	spaces	<b>7.25</b>	<b>space / 1,000 SF</b>	
<b>Retail/Services</b>		262.45	SF / space	1 space per each 100 square feet of retail sales area for the first 5,000 square feet and 1 space per each 200 SF of retail sales area above 5,000 square feet
90,807	346	translates to		
SF	spaces	<b>1</b>	<b>space / 260 SF</b>	
72646	346	209.96	Sales SF / space	
Sales Area SF (80%)	spaces	<b>0.95</b>	<b>space / 200 Sales SF</b>	
<b>Dry Cleaners</b>		383.00	SF / space	1 space per 50 square feet open to the public plus one space per employee
1,915	5	translates to		
SF	spaces	<b>1</b>	<b>space / 380 SF</b>	
479	5	95.75	Open SF / space	
SF open to public (25%)*	spaces	<b>0.52</b>	<b>space / 50 Open SF</b>	*25% assumed
<b>Gift, Craft, Antique Shop</b>		261.30	SF / space	1 space per 200 square feet of gross floor area
2,613	10	translates to		
SF	spaces	<b>0.77</b>	<b>space / 200 SF</b>	
<b>Residential - DCD</b>		1.00	unit / space	1 space for each dwelling unit having 1 bedroom; 2 spaces for each dwelling unit having 2+ bedrooms
6	6	translates to		
units	spaces	<b>1</b>	<b>space / unit</b>	
<b>Multi-family for elderly</b>		1085.46	SF / space	1½ spaces per unit plus one space per employee on the largest shift
44,504	41	translates to		
SF	spaces	<b>1</b>	<b>space / 1,000 SF</b>	

SF = Square Footage

## RECOMMENDATIONS

The construction of roadway improvements and redevelopment in the study area will alter the supply of parking in and around The Square and Barnes Lumber property. Parking users have certain expectations concerning availability and convenience. As the County looks to the future, it needs to meet these expectations within an increasingly limited physical space and a projected increase in parking demand. Below are several parking management recommendations and parking mitigation strategies identified for the study area. The Implementation Plan section provides a timeline for action relative to the short-term, mid-term, and long-term scenarios analyzed.

### Parking Management Strategies

#### Improve Wayfinding

Traditional wayfinding programs aim to provide motorists with directional guidance in order to reduce travel times while navigating and locating destinations and nearby off-street parking. Wayfinding is usually located on key ingress routes in the area to reduce extraneous traffic circulation and to inform unfamiliar visitors of destination and parking locations. Typically, parking wayfinding is combined with other destination-oriented signage in an area in a standardized format. Parking wayfinding is typically used in conjunction with parking facility branding. A well-implemented wayfinding program will help to increase utilization of off-street parking facilities by making the facilities more visible and easier to find.

It is recommended that the County deploy a Downtown Crozet Wayfinding Signage System to consist of directional parking signs and parking identification signs. Directional parking signs are often rectangular, with a circular shape surrounding a capital letter “P” and the text “Public Parking.” The parking identification signs contain the same circular shape surrounding a capital letter “P,” serving as a consistent brand for publicly accessible parking facilities. While the County has limited public parking within the study area, a Wayfinding Signage System should be deployed in conjunction with Shared Use Parking which is described below.

#### Multimodal Infrastructure and Streetscape Improvements

To continue to enhance and add pedestrian and bicycle infrastructure within the study area, the County should make efforts to incorporate streetscape improvements at and between key parking facilities to increase safety and enhance the overall parking experience. Elements can include sidewalk, marked crosswalks, pedestrian scale lighting, murals or other community street art. The segment of roadway along High Street north of Hill Top Street will be a critical multimodal connection between the Barnes Lumber development and the surrounding community. To ensure walking and biking is a viable mode choice to access Downtown and surrounding businesses and attractions, missing multimodal links such as bike lane segments or sidewalk need to be added to provide connectivity that will foster and improve multimodal comfort and safety.

#### Convert Unrestricted Parking to Time-Restricted

The application of time restricted parking can help direct users to appropriate parking facilities based on their intended lengths of stay. Time restricted parking can help to deter vehicles from remaining in high demand spaces all day. The need for this management tool does not yet appear to be warranted based on observed utilization trends and land uses within the study area. Based on field observations and the interaction between land uses within the study area, many parkers park for their destination and then leave as opposed to remaining parked in one location for multiple destinations. The conversion of parking spaces from unrestricted to time-restricted is not recommended at this time but may be beneficial when new development and a broader mix of land uses characterize the area and change parking habits. The County should continue to monitor parking demand as redevelopment occurs to assess whether all parking in The Square should be





converted to time-restricted parking. Higher turnover, which can be achieved by time restricted parking, is pertinent for sections of the study area where parking supply and demand will be impacted by redevelopment. Longer term users such as visitors to multiple nearby destinations or employees should be redirected to parking spaces that have less priority to serve businesses that rely on high turnover. This often needs to be coupled with effective enforcement to make sure that the parking time regulations are followed.

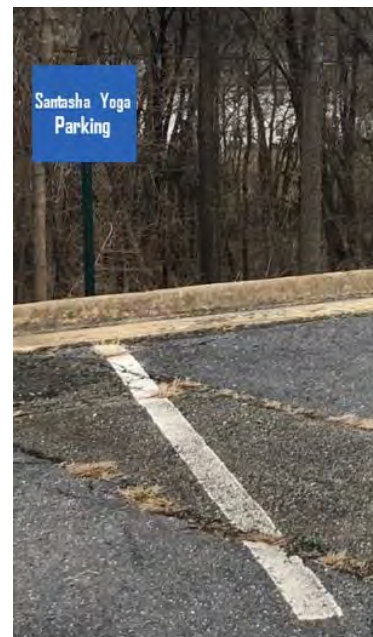
## Parking Mitigation Strategies

### Shared Use Parking

Shared parking is a parking management technique that allows off-street parking facilities to be used more efficiently for the benefit of both the users and property owners. Shared parking works on the basis that most privately-dedicated parking facilities are only used at certain times of the day and therefore severely underutilized during other times of the day. Shared parking works best in areas where land uses are within relatively easy walking distance, such as the study area. Adequate signage for wayfinding to the shared use parking is a component of a successful shared use parking system.

Shared parking increases a facility’s overall utilization during more periods of the day, thereby maximizing the parking system and reducing the number of new spaces that would otherwise be constructed for a single use. There are several keys to successful implementation, including targeting the right type of development for shared parking, understanding the true parking needs of the developments, ensuring walkability within the shared uses, and creating synergy for the shared approach. The County can play an important role as a facilitator in establishing shared-use opportunities. Bringing information to the table with owners of private and underused parking facilities can lead to access and capacity enhancements in the study area that may be affected by increased parking demand due to future development.

There is an existing shared parking arrangement between the Santasha Yoga studio located in the Crozet Pizza/Shops strip of developments and the adjacent Old Tack and Saddle store. There are five parking spaces within the Old Tack and Saddle parking facility that are signed and designated for Santasha Yoga visitors. Simple signage can make the shared off-street parking accessibility known to customers.



### Candidate Shared-Use Parking Locations

Contractual agreements between two property owners will formalize shared parking agreements, explicitly defining hours for which shared use is allowed and outlining expected responsibilities such as insurance, taxes, maintenance, and enforcement. Contractual agreements can be written in a way that provides mutual benefit to each involved party. The use of valet stands is one way to reduce concerns about insurance and liability because the valet operator will likely have protections in place to insure the facility owner.

Many private off-street parking facilities were significantly under capacity during parking utilization data collection and observations. These private property owners, particularly in areas having high parking demand, should be approached about providing a portion of their parking capacity for use by the public. This would minimize the need for constructing additional public surface lots and parking garages, providing cost and environmental benefits, supporting businesses within Downtown Crozet, and providing an immediate solution to displaced Crozet Square parking demand. The private property owners would retain all liability for their parking facilities.

As outlined in the County Ordinance, Chapter 18 (Zoning), Sec. 4.12.10 (Shared Parking), parking spaces may be shared among two or more uses that typically experience peak parking demands at different times and are located on the same lot or nearby lots. Many times, shared use parking is not permitted and requires special permitting and flexible parking standards. The County already has the permissible ordinance in place.

Candidate off-street shared parking locations were identified within the study area and are outlined in **Table 6**, providing the location of the parking with its primary land use, hours of operation, and parallel recommendations, if applicable. A map of the locations is provided in **Figure 6**.

Shared use parking arrangements can be tailored to meet the needs and desires of respective businesses. For instance, certain restrictions, such as time of day (i.e. evening only), can be included on signage to accommodate different agreements. It is recommended that the County facilitate meetings with these business owners to explain, discuss, and encourage shared use parking on both a large and small scale. The number of desired parking spaces listed in **Table 6** were identified based on existing utilization so that if shared parking were heavily utilized the overall parking facility utilization would still be less than 80% occupied, and parking lot layout to allow for simple demarcation within a lot.

Table 6. Candidate Shared Use Parking Locations

ID on Map	Off-Street Parking Location	Primary Use	Hours of Operation	Desired Number of Spaces	Parallel Recommendations
A	2020 Library Avenue	Crozet Library	Tuesday – Saturday 10:00 AM to 2:00 PM	22	Wayfinding
B	1156 Crozet Avenue	Crozet United Methodist Church	Tuesday – Friday 9:00 AM to 1:00 PM Sunday 9:00 AM to 12:30 PM	42	N/A
C	1214 Crozet Avenue	Bank of America/Crozet Post Office	Monday-Friday 9:00 AM to 5:00 PM	16	Shared Valet
D	1214 Crozet Avenue	English Meadows Senior Living	Unknown	15	Shared Valet
E	5734 Three Notch’d Road	Great Valu/Dollar General/Shops	Monday-Sunday 8:00 AM to 9:00 PM	22	Shuttle Service
F	5690 Three Notch’d Road	Crozet Commons (Crozet Family Medicine)	Monday-Friday 8:00 AM to 5:00 PM	30	Shuttle Service



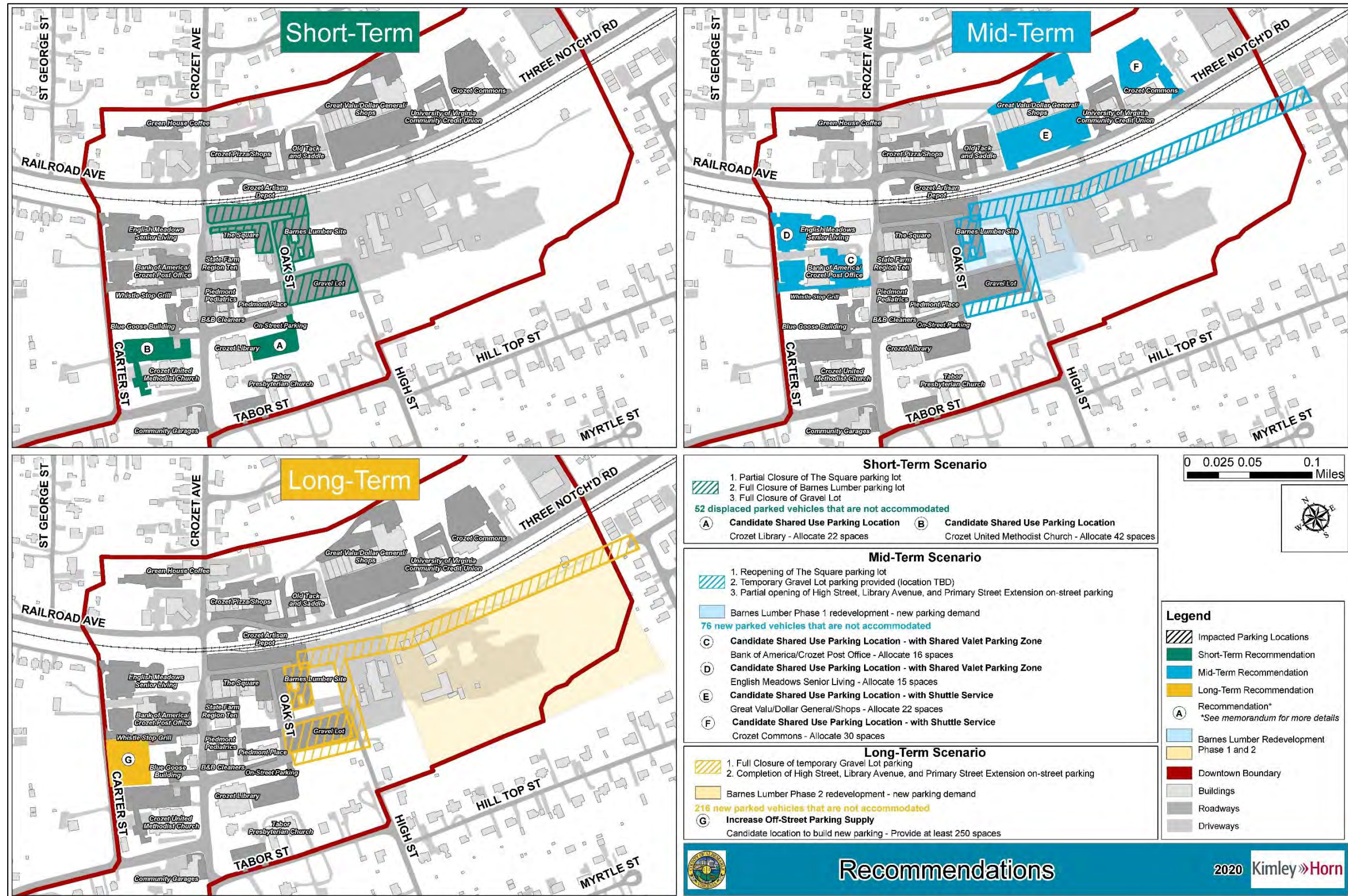


Figure 6. Recommendations



### Shared Valet Parking Zones

Valet parking zones are defined as the area of the right-of-way where patrons of a business may set up a temporary, removable structure, or valet parking stand, to offer parking services. It is recommended that a shared valet operation be established at The Square.

A shared valet station limits overall pedestrian and traffic flow disruption and may make shared parking arrangements with the Bank of America/Crozet Post Office and English Meadows Senior Living more palatable as these property owners may have security concerns with allocating a portion of parking to the public. Shared parking is not always embraced by everyone. Many times, property owners are not willing to share their available spaces due to the perception of security issues or vandalism. To overcome these objections, implementing agencies must work with the community and stakeholders to educate and to identify specific problems.

### Shuttle Service

To make it easier for visitors to park once and reach multiple destinations, it is recommended that a Downtown Crozet circulator or shuttle service between public or shared use parking and major destinations be provided to help spread out parking demand within the study area. As shown in the parking utilization data, parking facilities located around the perimeter are underutilized. Shared parking arrangements coupled with a shuttle service allows visitors to park further from their end destinations, which increases available supply of viable parking.

The Autonomous Vehicle Neighborhood Use (AVNU) Crozet shuttle service is currently operating as a pilot program with variable fixed routes over the trial period to evaluate performance and mobility use in different areas of Crozet. AVNU is provided through a partnership between Albemarle County, Perrone Robotics, and JAUNT. Albemarle County should explore ways to continue this shuttle service with a route dedicated to connectivity between public or shared use parking locations and primary destinations, such as The Square.

Another example of a similar type of shuttle service is Free Ride Every Day (FRED) offered in Downtown Norfolk. FRED is a free battery-operated vehicle available to complete trips that originate or end in the Downtown Norfolk Improvement District.



### Build New Parking

As parking demand increases in the study area, it will become necessary to provide additional public parking supply that is owned and operated by the County. A candidate lot for public parking is identified in **Figure 6**. The candidate lot was identified as one of the few vacant areas of land in the study area and based on proximity to The Square and locations of higher parking demand.

Based on existing parking utilization data and projected parking demand associated with the Barnes Lumber Redevelopment, an off-street supply of at least 250 parking spaces will help to mitigate parking capacity concerns. As the County investigates other potential sites or considers partnerships with property owners to build new parking supply, the following site characteristics should be assessed: location, ownership, accessibility, traffic operations and access, multimodal connectivity, the amount of parking can be provided on the site, and cost per space. It is recommended that the County prioritize the identification of a site to

build new parking located south of Three Notch'd Road such that multimodal connectivity is provided and accessibility concerns with crossings at Three Notch'd Road and Crozet Avenue are addressed. Other base criteria for a site to accommodate at least 250 parking spaces is a minimum footprint of 180' by 225' to allow for approximately six rows of parking, drive aisles for circulation, and at least two parking levels with 125-150 spaces per level. A feasibility study may be warranted to evaluation potential opportunities and challenges associated with building a new parking facility within Downtown Crozet.

Surface parking lots are not considered the highest and best use of land. If construction of a parking deck is an option, ground level active uses should be provided to activate the space and promote a feeling of safety in the public realm adjacent to the deck.

Parking decks are more costly than surface parking. There are several alternative parking solutions listed below that offer ways to maximize a surface parking lot for additional parking space capacity. An assessment to evaluate cost comparisons of these alternative solutions to a two to three level parking deck is recommended to determine feasibility and appropriateness to candidate sites for building new parking.

- Modular parking structures, such as More Park or ReloPark. These systems are modular, demountable steel and concrete structures with adjustable columns and precast steel planks that nearly double the capacity of parking on a surface lot by installing a second level of parking with a ramp over the existing parking. Currently, the only installations of the More Park system are in Europe and the United Kingdom. While construction time of modular parking structures is less than a traditional parking deck, these solutions often come with long leases and there is currently a lack of proven return on investment.
- Vertical parking solutions, such as car stackers. Where car stackers are installed, cars are parked on top of each other using mechanical pallet systems. Car stackers are often used in large cities or inside buildings where there is a low ceiling height or short depth.
- Stacked parking. Stacked parking, or tandem parking, coupled with valet operations allows for increased parking capacity by blocking in parked vehicles. The first car to park in a tandem space will be blocked in by the second car to park. As such, valet operations are critical to a stacked parking configuration.



## IMPLEMENTATION PLAN

The recommendations described above are prioritized relative to the short-term, mid-term, and long-term scenarios analyzed.

- Short-term actions indicate those that should be completed prior to completion of Crozet Square and Barnes Lumber Redevelopment Phase 1.
- Mid-term actions should be completed after completion of Crozet Square and Barnes Lumber Redevelopment Phase 1.
- Long-term actions should take place concurrently or after completion of Barnes Lumber Redevelopment Phase 2.

### Short Term Action Items

In the short term, the County should focus on:

- Allocating a portion of parking at Crozet Library to be dedicated public parking
  - This could be accomplished by striping new parking lane lines in a different color to denote public, shared parking spaces versus library use parking spaces
- Facilitating a shared use agreement with Crozet United Methodist Church
- Improving the parking facility wayfinding signage system to encourage utilization of existing off-street parking

### Midterm Action Items

In the midterm, the County should work to:

- Facilitate shared use agreements with the Bank of America/Crozet Post Office, English Meadows Senior Living, Great Valu, and Crozet Commons
  - Shared use parking agreements should aim to be as consistent as possible with minimal differences in hours of allowed shared use such that the program is easier to manage by the County and the public understands what is permitted
- Establish a shared valet zone at The Square
- Provide a Downtown Crozet shuttle service

### Long Term Action Items

In the long term, the County should consider:

- Continuing enhancements and additions of streetscape elements to encourage multimodes to manage parking demand
- Increasing off-street parking supply by providing a dedicated public parking facility with at least 250 spaces
- Converting unrestricted parking to time-restricted parking in The Square if new parking demand and utilization trends as a result of redevelopment warrant higher turnover



## APPENDIX



## ULI Shared Parking Model Results – Barnes Lumber Phase 1

Shared Parking Demand Summary																		
Peak Month: DECEMBER -- Peak Period: 1 PM, WEEKDAY																		
Land Use	Project Data		Weekday					Weekend					Weekday			Weekend		
			Base Ratio	Driving Adj	Non-Captive Ratio	Project Ratio	Unit For Ratio	Base Ratio	Driving Adj	Non-Captive Ratio	Project Ratio	Unit For Ratio	Peak Hr Adj	Peak Mo Adj	Estimated Parking Demand	Peak Hr Adj	Peak Mo Adj	Estimated Parking Demand
	Quantity	Unit										1 PM	December		12 PM	December		
<b>Retail</b>																		
Retail (<400 ksf)	24,900	sf GLA	2.90	100%	99%	2.86	ksf GLA	3.20	100%	99%	3.17	ksf GLA	100%	100%	72	100%	100%	79
Employee			0.70	100%	100%	0.70		0.80	100%	100%	0.80		100%	100%	18	100%	100%	20
<b>Food and Beverage</b>																		
Fast Casual/Fast Food	12,000	sf GLA	12.40	100%	84%	10.36	ksf GLA	12.70	100%	87%	11.09	ksf GLA	100%	96%	120	100%	96%	128
Employee			2.00	100%	100%	1.99		2.00	100%	100%	1.99		100%	100%	24	100%	100%	24
<b>Entertainment and Institutions</b>																		
<b>Hotel and Residential</b>																		
Hotel-Business		keys	1.00	59%	100%	0.59	key	1.00	69%	100%	0.69	key	55%	60%	-	55%	60%	-
Hotel-Leisure	50	keys	1.00	50%	100%	0.50	key	1.00	50%	100%	0.50	key	65%	50%	8	65%	50%	8
Hotel Employees	50	keys	0.15	100%	100%	0.15	key	0.15	100%	100%	0.15	key	100%	50%	4	100%	50%	4
Restaurant/Lounge		sf GLA	6.67	63%	90%	3.78	ksf GLA	7.67	54%	30%	1.24	ksf GLA	100%	100%	-	100%	100%	-
Meeting/Banquet (0 to 20 sq ft/key)		sf GLA	0.00	68%	60%	0.00	ksf GLA	0.00	68%	70%	0.00	ksf GLA	65%	100%	-	65%	100%	-
Meeting/Banquet (20 to 50 sq ft/key)		sf GLA	0.00	68%	60%	0.00	ksf GLA	0.00	68%	70%	0.00	ksf GLA	65%	100%	-	65%	100%	-
Meeting/Banquet (50 to 100 sq ft/key)		sf GLA	0.00	68%	60%	0.00	ksf GLA	0.00	68%	70%	0.00	ksf GLA	65%	100%	-	65%	100%	-
Convention (100 to 200 sq ft/key)		sf GLA	0.00	68%	60%	0.00	ksf GLA	5.50	68%	70%	2.62	ksf GLA	100%	100%	-	100%	100%	-
Convention (> 200 sq ft/key)		sf GLA	5.50	68%	60%	2.24	ksf GLA	5.50	68%	70%	2.62	ksf GLA	100%	100%	-	100%	100%	-
Restaurant/Meeting Employees		sf GLA	0.00	100%	100%	0.00	ksf GLA	0.00	100%	100%	0.00	ksf GLA	100%	100%	-	100%	100%	-
<b>Residential, Suburban</b>																		
Studio Efficiency		units	0.00	100%	100%	0.00	unit	0.00	100%	100%	0.00	unit	40%	100%	-	68%	100%	-
1 Bedroom	32	units	0.00	100%	100%	0.00	unit	0.00	100%	100%	0.00	unit	40%	100%	-	68%	100%	-
2 Bedrooms	20	units	0.00	100%	100%	0.00	unit	0.00	100%	100%	0.00	unit	40%	100%	-	68%	100%	-
3+ Bedrooms		units	0.00	100%	100%	0.00	unit	0.00	100%	100%	0.00	unit	40%	100%	-	68%	100%	-
Reserved	100%	res spaces	1.19	100%	100%	1.19	unit	1.19	100%	100%	1.19	unit	100%	100%	62	100%	100%	62
Visitor	52	units	0.10	100%	100%	0.10	unit	0.15	100%	100%	0.15	unit	20%	100%	1	20%	100%	2
<b>Office</b>																		
Office <25 ksf	20,000	sf GFA	0.30	100%	100%	0.30	ksf GFA	0.03	100%	100%	0.03	ksf GFA	45%	100%	3	90%	100%	1
Reserved		empl	0.00	100%	100%	0.00		0.00	100%	100%	0.00		100%	100%	-	100%	100%	-
Employee			3.50	100%	98%	3.43		0.35	100%	98%	0.34		85%	100%	58	90%	100%	6
<b>Additional Land Uses</b>																		
													Customer/Visitor	204	Customer	218		
													Employee/Resident	104	Employee/Resident	54		
													Reserved	62	Reserved	62		
													Total	370	Total	334		





## ULI Shared Parking Model Results – Barnes Lumber Phase 2

Shared Parking Demand Summary																		
Peak Month: DECEMBER -- Peak Period: 12 PM, WEEKEND																		
Land Use	Project Data		Weekday					Weekend					Weekday			Weekend		
			Base Ratio	Driving Adj	Non-Captive Ratio	Project Ratio	Unit For Ratio	Base Ratio	Driving Adj	Non-Captive Ratio	Project Ratio	Unit For Ratio	Peak Hr Adj	Peak Mo Adj	Estimated Parking Demand	Peak Hr Adj	Peak Mo Adj	Estimated Parking Demand
	Quantity	Unit										1 PM	December		12 PM	December		
Retail																		
Retail (<400 ksf)	130,000	sf GLA	2.90	100%	100%	2.89	ksf GLA	3.20	100%	100%	3.19	ksf GLA	100%	100%	376	100%	100%	415
Employee			0.70	100%	100%	0.70		0.80	100%	100%	0.80		100%	100%	91	100%	100%	104
Food and Beverage																		
Entertainment and Institutions																		
Hotel and Residential																		
Residential, Suburban															0%			
Studio Efficiency		units	0.00	100%	100%	0.00	unit	0.00	100%	100%	0.00	unit	40%	100%	-	68%	100%	-
1 Bedroom	72	units	0.00	100%	100%	0.00	unit	0.00	100%	100%	0.00	unit	40%	100%	-	68%	100%	-
2 Bedrooms	48	units	0.00	100%	100%	0.00	unit	0.00	100%	100%	0.00	unit	40%	100%	-	68%	100%	-
3+ Bedrooms		units	0.00	100%	100%	0.00	unit	0.00	100%	100%	0.00	unit	40%	100%	-	68%	100%	-
Reserved	100%	res spaces	1.20	100%	100%	1.20	unit	1.20	100%	100%	1.20	unit	100%	100%	144	100%	100%	144
Visitor	120	units	0.10	100%	100%	0.10	unit	0.15	100%	100%	0.15	unit	20%	100%	2	20%	100%	4
Office																		
Additional Land Uses																		
															Customer/Visitor	379	Customer	419
															Employee/Resident	91	Employee/Resident	104
															Reserved	144	Reserved	144
															Total	613	Total	666

