



OUR LAND USE, HOUSING, AND TRANSPORTATION

Introduction

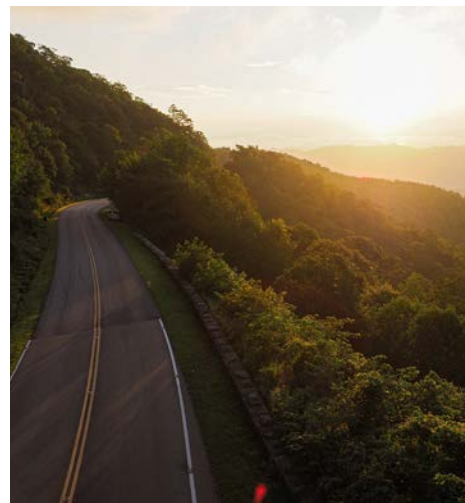
A critical component of a comprehensive plan is setting the direction for physical planning in a community. At the heart of this planning is the designation of projected growth areas and land uses that define how development should occur (or not) in different areas and how the transportation network should enhance connectivity, accessibility, and mobility.

Transportation

Buncombe County's transportation network includes NCDOT-managed roads, private roads, some limited bicycle and pedestrian infrastructure, greenways under development, and the deviated fixed-route and demand-response transit system. Outside of Buncombe County's municipalities, most of the roads that people use to travel are public and managed by the NC Department of Transportation (NCDOT).

The County does not build or maintain roads like the municipalities; its only involvement with road development is ensuring that new roads are built to the standards outlined in the County's Subdivision Ordinance. Therefore, when the County needs or wants a roadway improvement or a new road, it works through partnerships and planning with NCDOT, the French Broad River Metropolitan Planning Organization (FBRMPO), and in some cases, through partnerships with local project developers.

The transportation planning process can take a long



Critical to the success of comprehensive planning is the integration of land use (including housing) and transportation design. Each of these components of the county's physical framework should reinforce the objectives for each uniquely defined area in the county.

Image Source: Clayton Manche

time—several years can pass between the time a roadway project is first conceptualized until the project is complete. One intent of the Buncombe County Comprehensive Plan is to identify the transportation projects that will meet the County's future needs and goals, which will enable them to get these projects into the region's transportation project pipeline.

To make a connection between the County's land use planning efforts and the transportation network, it is helpful to understand how the County's transportation network operates and is functioning. This Buncombe County Comprehensive Plan Factbook section provides an overview of the County's transportation network, including: the parts, or components, of Buncombe County's roadway network; the limitations of the transportation network; the constraints of the planning process; how transportation projects progress from idea to construction; and available multimodal transportation options (ways people can get around other than driving a personal vehicle).

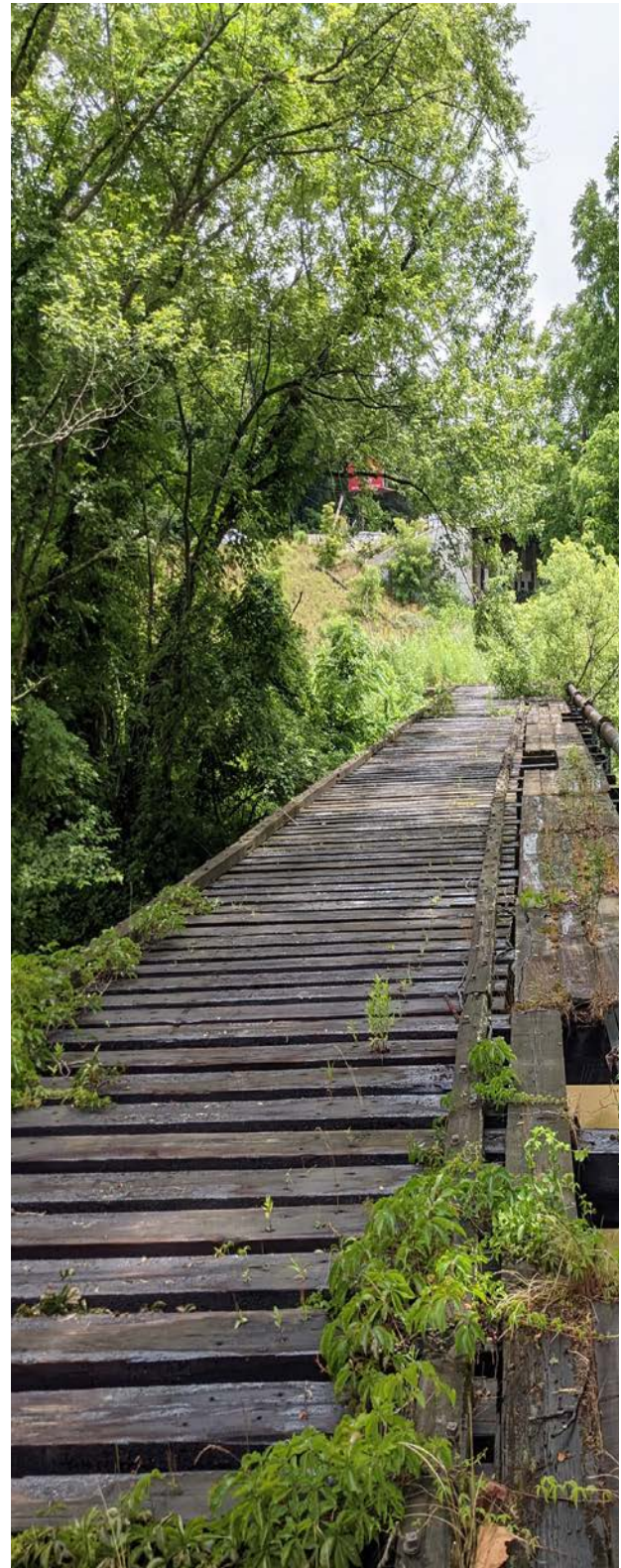
Land Use and Housing

Buncombe County's land use patterns have evolved over time as municipalities grew and matured and as market preferences for housing and commercial developments changed.

This section provides the fundamental facts and trends about the physical framework of the county that can be a resource when setting land use policy direction. The Land Use section provides information on jurisdictional boundaries, size of parcels, existing land uses, annexation and the former ETJ history, zoning, and potential development areas. The Housing section defines the type of units found in Buncombe, housing densities, tenure, occupancy rates, property values, and trends on cost-burdened households.

Integration of Land Use and Transportation

Critical to the success of comprehensive planning is the integration of land use (including housing) and transportation design. Each of these components of Buncombe's physical framework should reinforce the objectives for each uniquely defined area in the county.



Future Enka Heritage Trail, image courtesy of Buncombe County

A community's transportation needs and patterns are always changing. This picture depicts remnants of the rail line that served the American Enka Company (later BASF). As of February 2022, plans are in the works to transform portions of this former rail line to the Enka Heritage Trail.

OVERVIEW OF TRENDS & PLANNING INFLUENCES

Transportation

Transportation Network

- Buncombe County has approximately 3,560 miles of roadways which are classified into four categories: Interstate/Freeways, Arterials, Collectors, and Local Roads.
- Most roadways in Buncombe County are local roads; these tend to be the roads that people live along.
- Traffic volume data (AADT) indicates several locations in Buncombe County with high traffic including I-40, I-240, and I-26.
- Many of the county's interstates and highways are nearing or exceeding their volumes (referred to as the volume-to-capacity ratio, or how many vehicles the roadway can handle).
- Road safety scores indicate several locations with safety challenges including I-240 north of Asheville, US-23 in the southwest, and on several rural roads within the county.

Commuting Characteristics

- A large proportion of Buncombe County workers (nearly 78,000) both live and work in the county.
- The mean travel time to work is about 20 minutes for workers employed in Buncombe County.
- 75% of workers drove 24 miles or fewer to work, 49% drove less than 10 miles, 26% drove between 10 to 24 miles (2019 On the Map Data).
- Approximately 56,000 workers reside in

neighboring communities. Some of these may commute into the county or be remote workers with jobs based in Buncombe County.

Multimodal Mobility

- Bicycling in Buncombe County is a popular activity. However, the only dedicated bicycle facilities noted in the NCDOT's Pedestrian and Bicycle Information Network (PBIN) for unincorporated Buncombe County outside of the City of Asheville are widened shoulders on Pisgah Highway (NC 151) in Enka/Candler and Patton Cove Road in Swannanoa. These total 2.0 miles of on-road bicycling infrastructure.
- There are two transit systems in Buncombe County: Asheville Rides Transit and Mountain Mobility (MM), a Buncombe County operated deviated-fixed route and demand-response system. In 2019, MM provided 145,386 trips to Buncombe County residents, which was down from a high of 162,382 in 2015.
- Asheville Regional Airport is an important center in the region's transportation system and its presence in the local economy is also significant.

Transportation Project Planning Process

- New road projects occur through the following steps which can take several years:
 - Communities identify transportation needs through planning
 - Projects get prioritized using Municipal Planning Organizations
 - Projects are funded through the State Transportation Improvement Plan (STIP)
 - Projects get developed through environmental permitting and design

Future Planning

- With new growth in population, jobs, services and shopping, comes increased number of vehicles on the road traveling to destinations.
- Planning for increased vehicle trips is challenged by limited land to build or expand roads, limited funding for transportation

improvements, the length of time it takes to improve transportation facilities, limited policies to guide this growth, and few multimodal options to reduce trips (such as biking, walking, and transit).

- The interplay between land use and transportation will be examined to determine Buncombe County's best path forward.
- A potential outcome of Buncombe County's Comprehensive Plan will be projects and strategies to improve safety for all modes of transportation and a reduction in fatal and severe crashes across the County.

Land Use

- The planning and zoning jurisdiction of Buncombe County expanded by nearly 16,000 acres in 2013 and 2014 when the Asheville and Weaverville extraterritorial jurisdictions (ETJs) were abolished by the NC General Assembly.
- The single largest land use category in Buncombe County is single-family residential properties (39%). Following this category is unimproved land, which accounts for 25% of all land in the county—and upon which the most future development is likely to occur.
- Roughly 75% of Buncombe County's total planning and zoning jurisdiction is zoned as the Open Use district. The Open Use district allows for many different types of development, including single and multi-family residential, commercial, or industrial uses limited by infrastructure.
- A significant portion of land in the county is permanently protected by virtue of government or public utility ownership (federal, state and local), and also through conservation easements on private lands.
- Most new commercial and multi-family development over the past decade has occurred southwest of Asheville. For example, Weaverville is starting to experience commercial and multi-family growth.

- The county has a significant number of manufactured homes, especially in the rural areas west of I-26 with pocketed concentration of manufactured home parks nearer to the City of Asheville.

Housing

- The vast majority of housing units in the county are either single-family (or 1 unit) detached housing (62%) or manufactured homes (14%). Collectively these two categories comprise 76% of the housing stock in the county.
- In 2019, approximately 55% of the 123,477 units in Buncombe County were owner-occupied, 30% were renter occupied, and the remainder were seasonally vacant or otherwise considered vacant.
- Accounting for both rental and owner-occupied properties, Buncombe County has a household occupancy rate of between 75% and 95% across all census tracts, except for one tract in the southeast portion of the county, which in 2019 was around 65% occupied. Occupancy is defined as being occupied year-round, and many of the "unoccupied" units are seasonally occupied or short-term rentals.
- As of 2019, 56.6% of renter households in Buncombe County spent more than 30% of their income on rent and are deemed "cost-burdened" by the US Census.
- Between 2016 and 2020, the median price of a home sold in the county increased by 33%. In addition to higher prices, the market has generally tightened up, and in 2020 the average house was only on the market for 17 days, 97% of houses sold for at or above the listed price, and more than 30% of home closings were in cash.
- The 2021 "Housing Needs Assessment: Western North Carolina" from Bowen National Research projected demand for rental and owner-occupied housing, as well as continued demand for small housing units.¹

FINDINGS FROM ANALYSIS

Transportation

Components of the Network

When the people involved in transportation planning and project development want to understand how a roadway network operates, they look to a variety of factors. Some of the factors, which are covered below, include functional classification, the roadway types, roadway capacity, and the amount of traffic on the roadways.

Vehicle Mobility

Functional Classification

There are about 3,560 miles of roadway throughout Buncombe County, including four classes of roads: interstate/freeway, arterial, collectors, and local roads. The road classification was originally defined by the volume, or amount of traffic, traveling on them as well as the land (or land uses) to which the roads provided access.

Understanding functional classification is essential to planning Buncombe County's future because it is important to align land uses with the function of a roadway. For example, too much development with

many access points along an arterial roadway will eventually defeat the purpose of a roadway that is intended to carry many cars efficiently and safely—Hendersonville Road is a good example of a land use pattern that impedes the functional purpose of a roadway.

These functional classifications are generally grouped into the following categories:

1. Interstate/Freeway (high volume, low access at designated access points)

I-40, I-240, and I-26 are examples of roads in the interstate/freeway class. These roads are designed to carry many vehicles through an area as efficiently as possible and to provide for longer distance travel. Direct vehicle access to land uses from this class of roadway is not typically served (a designated exit serves the purpose of accessing land use). In general, roads in this class do not have dedicated multimodal facilities and have limited use in public transportation. There are exceptions, such as bus rapid transit, yet none of these are available in the region currently.

2. Arterial (high volume, lower degree of access)

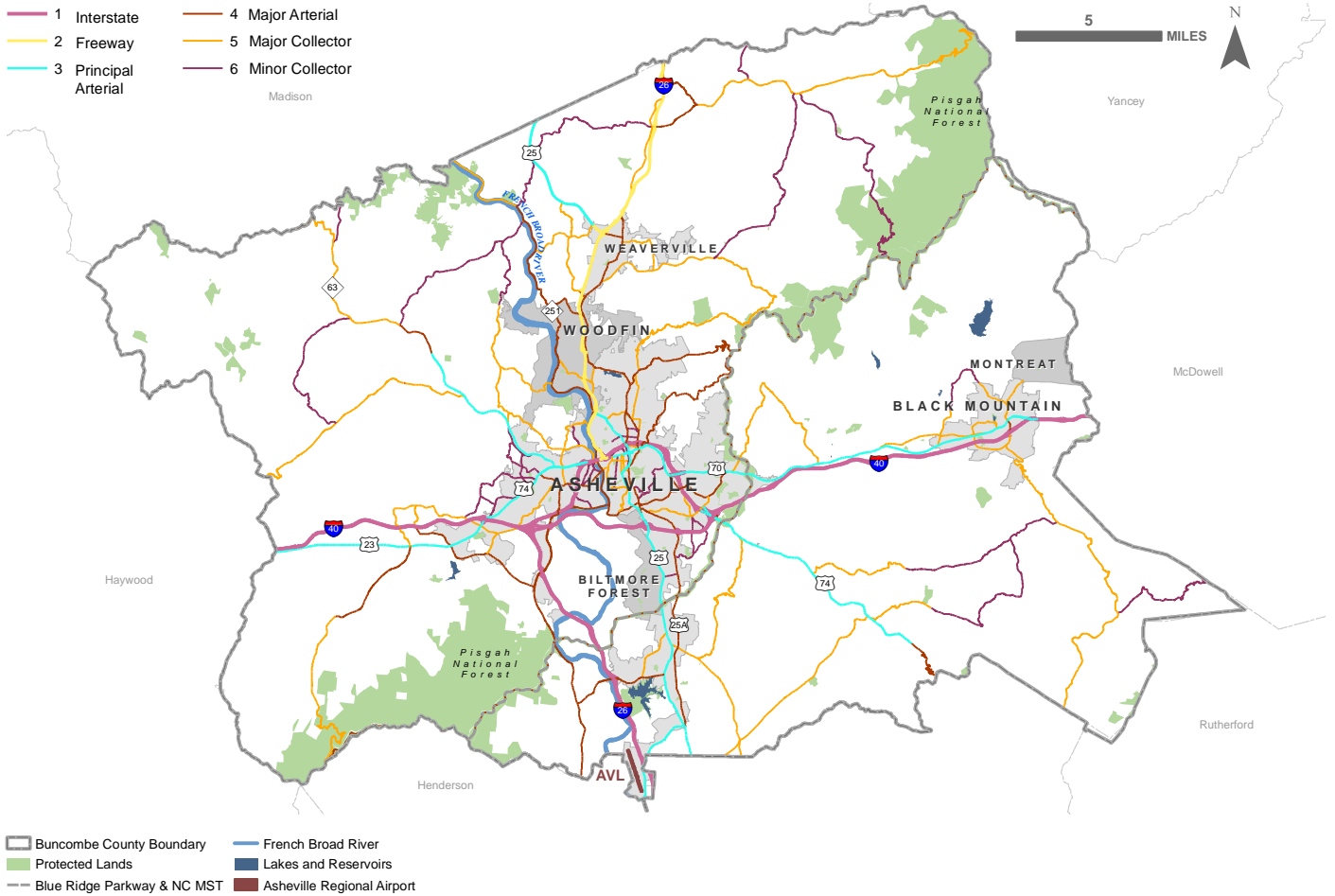
Examples of arterial roads in Buncombe County include Charlotte Highway (US 74 ALT), Leicester Highway (NC 63), US 70 through Swannanoa, Hendersonville Road (US 25), and Sardis Road (NC 112). Arterials can be classified as major or minor and serve urban areas (like Hendersonville Road) and rural areas (like Leicester Highway).



Road type continuum

Local roads, collectors and arterials provide a range of access and mobility. Local roads have the greatest means of entry and arterials have the highest speeds over long distances.

Roads: Functional Classification



When compared to interstates and freeways, the intents of arterials are to move many vehicles over moderate lengths and provide greater access to land uses along the roadways. Arterials often provide public transportation access, but tend to be without dedicated multimodal facilities. However, some communities have begun to plan for or have developed multimodal facilities along arterials when there is a high need for access to jobs and services and to support changing land uses (like more mixed-use development).

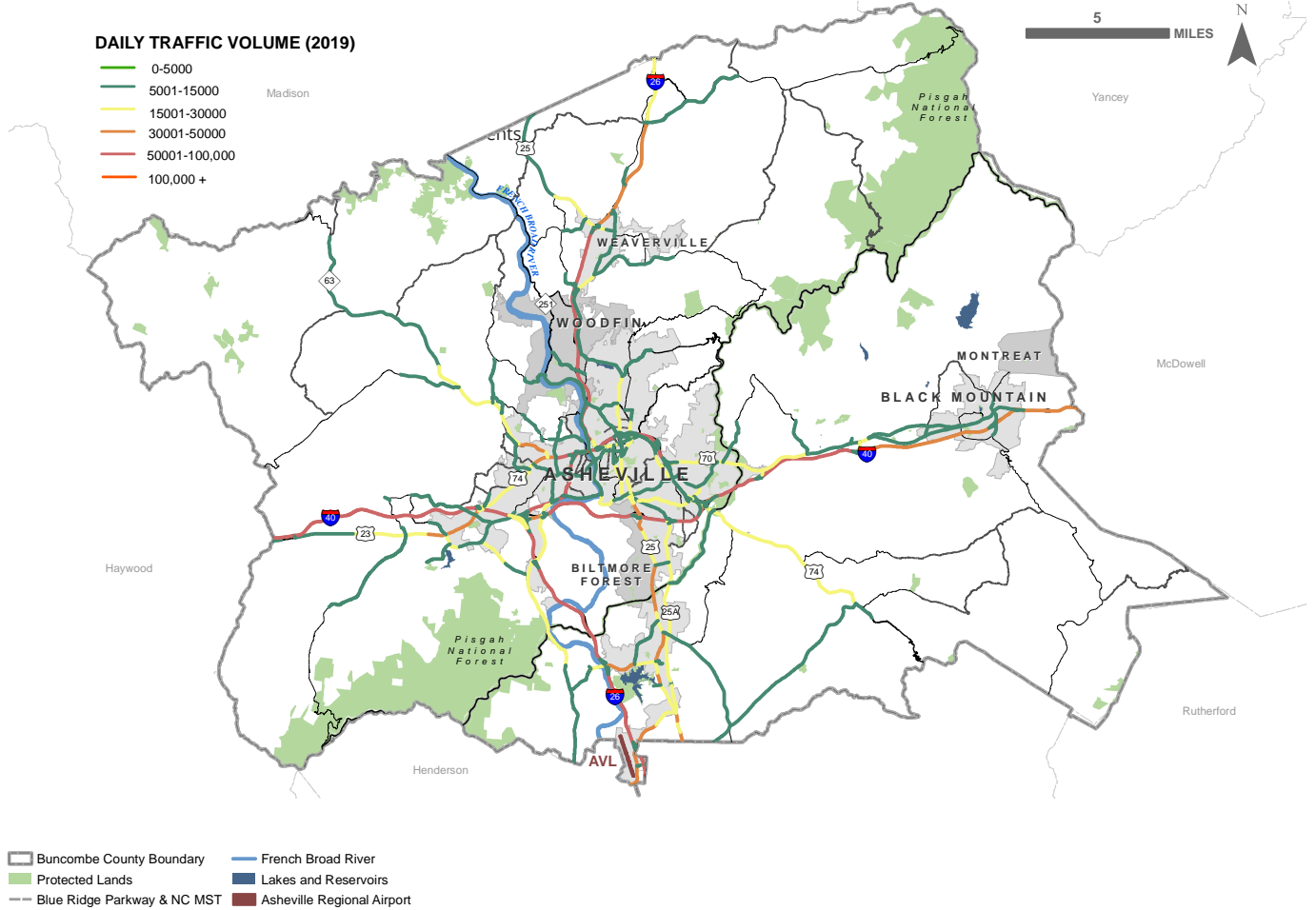
3. Collectors (balance between volume and access)

Collector roads gather traffic from local roads (as described below) and funnel it to the arterial network. For example, people who live in the Grovemont neighborhood in Swannanoa would travel on local streets to get to Old US 70 (a collector street) to then reach US 70 (an arterial). Collectors have the dual purpose of providing land access and moving a moderate level of traffic through an area. Collectors are prime candidates for dedicated multimodal transportation facilities and often provide public transportation access today.

4. Locals (low volume and high access to neighborhoods and other streets)

Most roadways in Buncombe County are local roads; these tend to be the roads that people live along. They are not intended for long- or medium-distance travel and their primary purpose is access to residential land uses, although they may also provide access to smaller-scale commercial areas. Local streets are an excellent location for dedicated multimodal facilities because they are typically roads that are more comfortable for people walking or biking. Public transportation typically does not travel on local streets, but pedestrian and bicycle access along local roads is a higher consideration when the local street directly connects to a collector street that serves a public transportation system. The figure above illustrates this network in Buncombe County.

Annual Average Daily Traffic



AADT (Average Annual Daily Traffic)

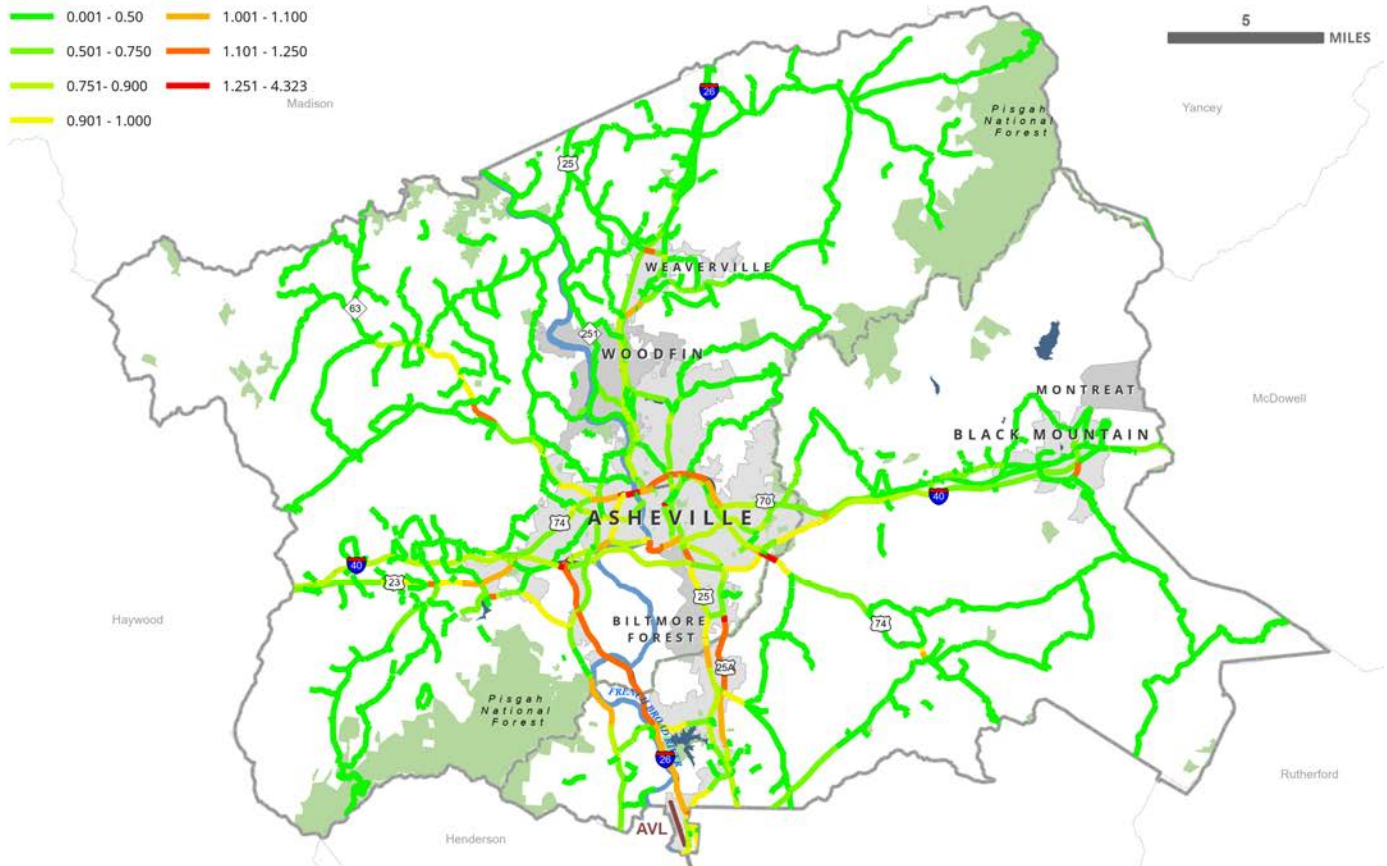
AADT, the average annual daily traffic, indicates the volume of traffic on roadways at a given point in time. In theory, this measure is the volume of traffic moving in both directions on a highway for the most average traffic day in the year for 24 hours. The map above illustrates these volumes for 2017-2019, from data provided by NCDOT. Much of the system carries an AADT of fewer than 5,000 vehicles with some exceptions. I-40 running east-west and I-26 running north-south do the lion's share of carrying traffic in the region. Other than interstates, some of the highest volumes include NC 63 in Leicester, US 25/70 between Weaverville and Marshal, US 74A near Fairview and US 19/23 Business in Weaverville.

AADT is a point in time look at traffic. It doesn't tell us if traffic is increasing or decreasing, or if the amount of traffic counted is too much for the roadway. However, it is an important tool to identify high traffic areas and is used as a basis for decisions regarding transportation planning.



One of the most congested areas in the county is near the Bowen Bridge between West Asheville and Downtown. Source: www.city-data.com

Volume to Capacity



Volume-to-Capacity Ratio

Volume-to-Capacity Ratio (V/C) measures the level of congestion on a roadway. V/C is simply the volume of traffic on the road divided by the capacity, or how many vehicles the road can handle. A V/C ratio that is less than 1 is a roadway that sustains a volume that is within what the roadway is designed to carry; however, a roadway with a V/C ratio greater than 1 is a roadway that is carrying more cars than it is designed to. This calculation is a measure that transportation officials use to determine if improvements to the roadway are needed to meet the vehicular demand of the region. As shown in the map above, many of the county's central interstates and highways are nearing or exceeding their volume-to-capacity ratio. Other areas with a high V/C include Hendersonville Road, Sweeten Creek Road, Leicester Highway and some roadway segments near Weaverville.

Key Definitions

Capacity: Roads are only capable of carrying a certain number of vehicles at one point in time. How many vehicles a road can carry varies depending on the number of lanes of traffic, how many traffic signals are along the road, and other factors. The number of vehicles a roadway can carry during at a given time at a defined point along the roadway is known as capacity. For example, a roadway segment that is designed to carry 10,000 vehicles during peak travel times, such as 7:00 am to 9:00 am, is at capacity when 10,000 cars are passing through that section of the roadway during peak hours. A roadway would be over-capacity when 20,000 vehicles pass through that same segment during peak hours. The red areas on the map are over-capacity roadways that have too many vehicles passing through during peak hours. Capacity tells us the total amount of vehicles we can expect on our roadways based on the roadway characteristics.

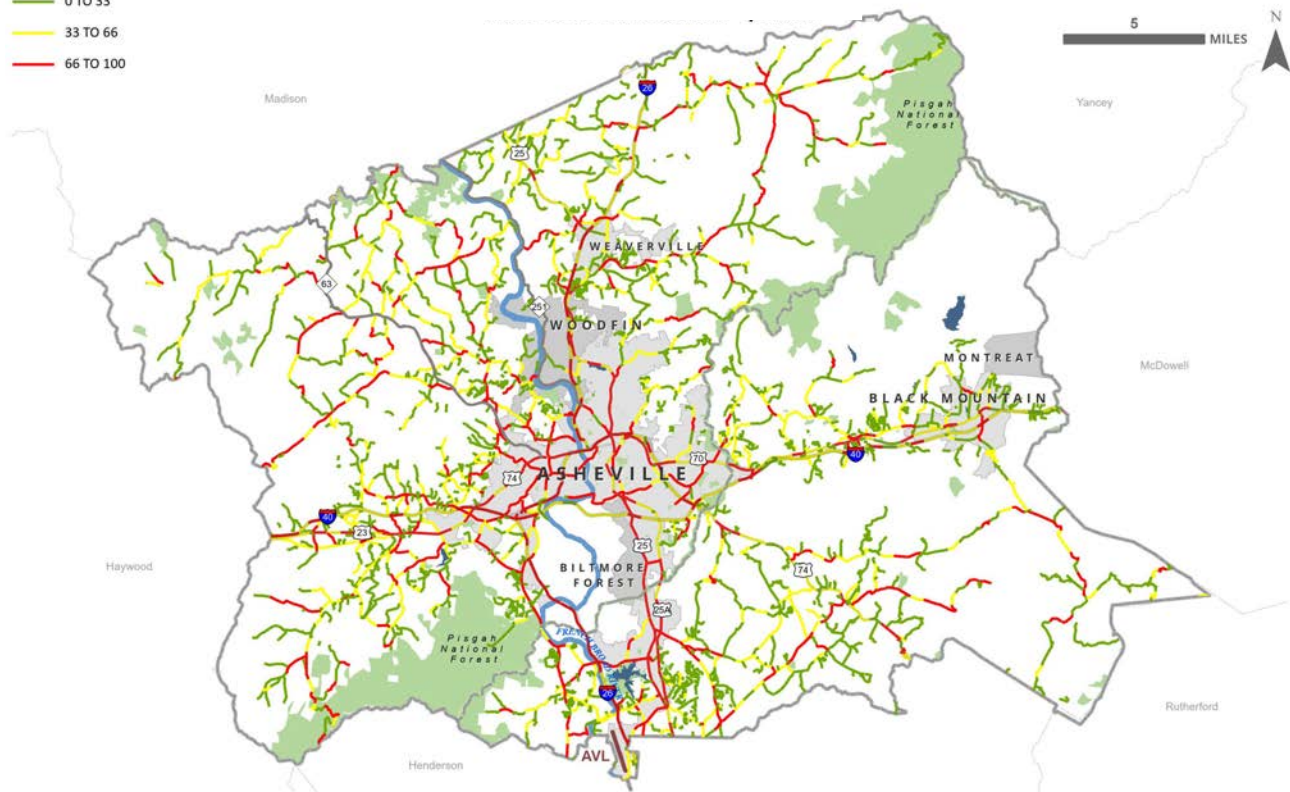
Volume: Traffic volume is the number of vehicles passing a given point on a roadway during a specified time. This is usually expressed as vehicles per hour or vehicles per day, such as AADT.

Volume Divided by Capacity (or V/C Ratio): By dividing current traffic volumes by the known capacity of a roadway, we get a ratio called a volume to capacity ratio. If the number is a 1.0 or higher, we know that volumes exceed capacity and that users are likely to experience delays. As the V/C ratio increases, and gets closer to a value of 1.0 (e.g. 0.9) we know the roadway is experiencing delays and is becoming more congested.

Planning Level Safety Score

Safety Score

- 0 TO 33
- 33 TO 66
- 66 TO 100



The project areas with the higher scores are considered to have the poorest highway safety performance.

Roadway Safety

Understanding the location and nature of crashes is an important way to measure the effectiveness of a transportation network. Crashes involving people driving, walking, and biking alerts us to problematic areas that may need further consideration to its design and operation. Looking only at the location of crashes alone does not tell a fully developed story. A better measure is NCDOT’s Planning Level Safety Score data that is presented in the map above. The Planning Level Safety Scoring Data ranks roadway segments based on crash density, crash severity, and the actual crash rate.² The road segments with higher scores have a poorer safety performance than we would expect to see based on comparable roadways across the state.

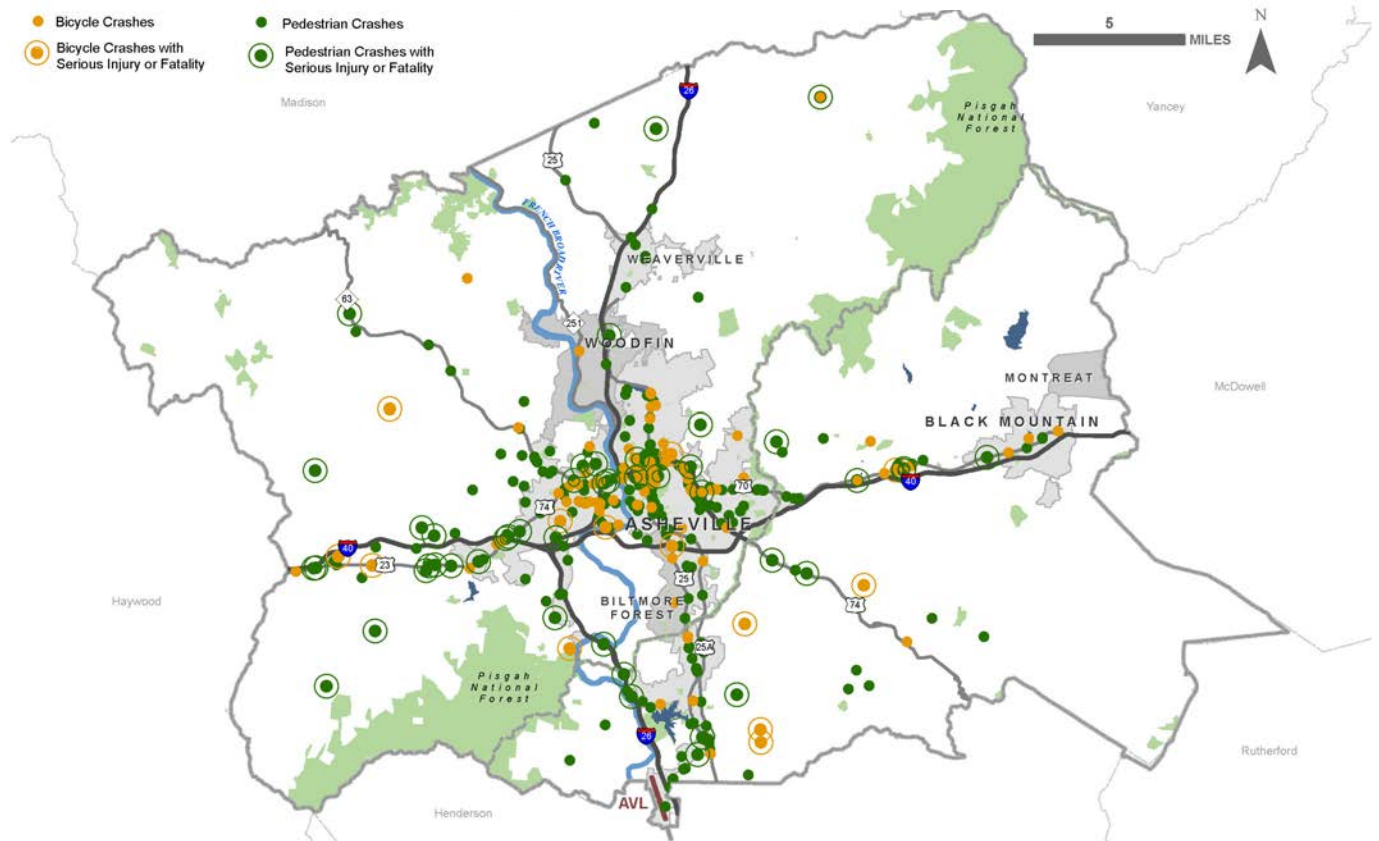
The map illustrates that several segments of our area’s Interstate system that have higher scores (red areas). Examples include the congested areas of I-240 downtown, between the Charlotte Street interchange and through the I-26 interchange. This area experiences frequent congestion and has many merging traffic areas which contribute to higher than average crash rates.

Similar trends can be seen on arterial roads. Areas of concern include:

- Roads leading into the City of Asheville, such as Merrimon Avenue, Broadway Avenue, Hendersonville Road in South Asheville, and Smoky Park Highway in Enka/Candler; and
- Busy intersections which have more frequent crashes, such as Brevard Road (NC 191) and Long Shoals Road (NC 146), and Mills Gap and Concord Road.

Finally, some of our area’s curvy, two-lane roads show higher crash rates. These sections can often correspond to sharp curves and lack of shoulders.

Bicycle & Pedestrian Crash Data



Bicycle & Pedestrian Safety

The map above shows locations of vehicle crashes in Buncombe County involving a person walking or biking. These are crashes that took place from 2015 through 2019 (the most recent year of full data available) and were reported to NCDOT. As many crashes are unreported, it is important to also explore other measures of safety, such as crashes that nearly occurred (near-hit) or predictive analyses to uncover where crash likelihood is higher; however, such methods are not explored in this analysis of Buncombe County.

People walking and biking are known as vulnerable users of our streets given that they are not protected by a vehicle, and they travel at much lower speeds. Speed is a significant predictor in crash *likelihood and severity* for people biking and walking.³ Bicycle and pedestrian crashes in high speed areas, like Airport Road, are more likely to happen and when they do happen, they will likely result in severe injuries or fatalities.

Trends reveal that vulnerable roadway users—people who walk and bike—are disproportionately involved in crashes. This means that, as a percentage of the

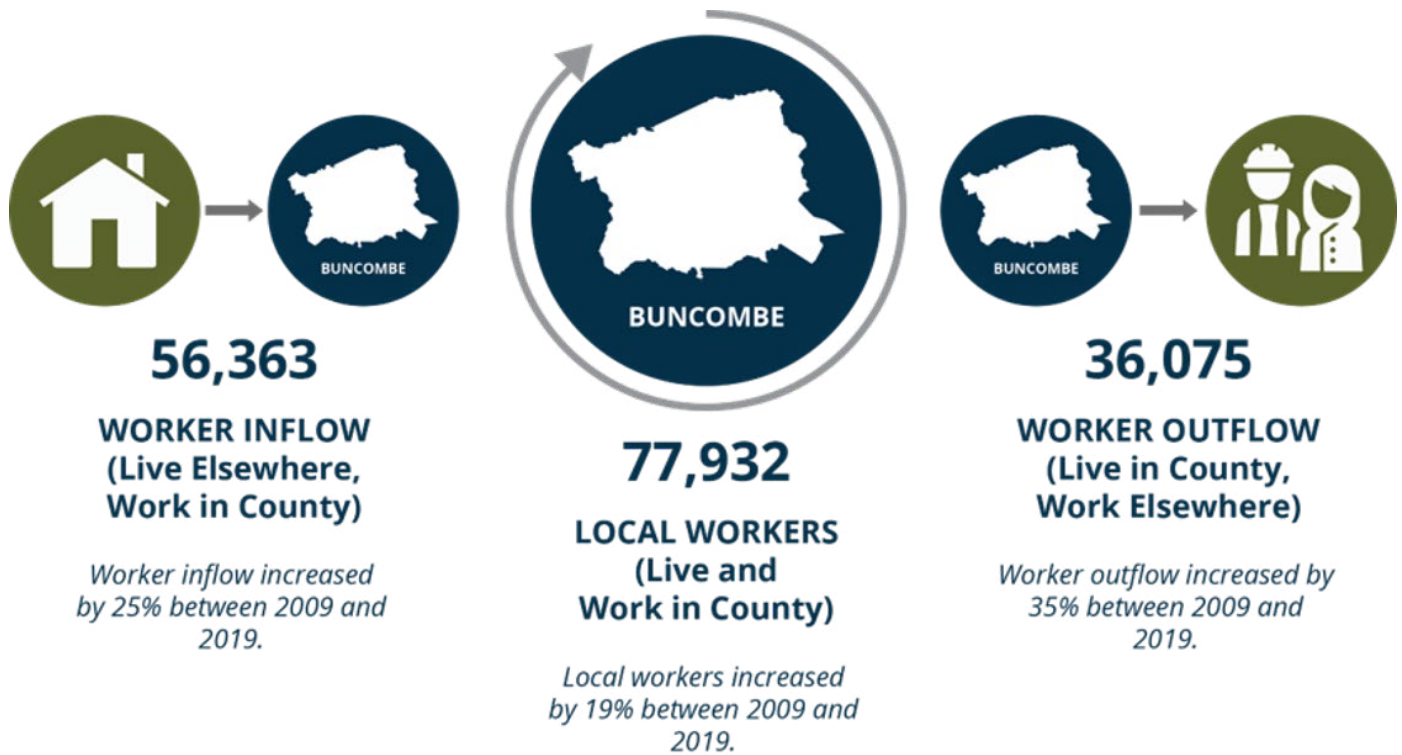
traveling public, there are fewer people who walk and bike than those who drive. Yet, the percentage of people involved in bicycle and pedestrian crashes is greater than what we'd expect to see, a trend that has been increasing consistently for over a decade.⁴ For example, in NC, 15.5% of all roadway fatalities in 2019 were pedestrians. For that same time period, only 1.8% of NC residents commuted to work by walking.

Research shows that when streets are designed to be safer for people walking and biking, they become safer for all road users.⁵ A potential outcome of Buncombe County's Comprehensive Plan will be projects and strategies to improve safety for all and a reduction in fatal and severe crashes.

Commuting Characteristics

Importance of Buncombe County to the Region

An evaluation of work commute trips in the region underscores Buncombe County's importance to transportation and travel. In the region, Buncombe County is often the beginning of a commute trip (home), the end of a commute trip (work), or is both the start and end of a trip (home and work are in the county). This is because the county has a large density of housing and jobs. According to the U.S. Census, in 2019 there were a total of 134,295 workers employed in the county; of those individuals, 42% (56,363) of the people lived outside of the county. Also in 2019, 114,007 workers lived in the county; of those individuals, 31.6% (36,075) were employed outside the county. These findings are illustrated in the figure below. More people travel into the county to work than those residents who live in the county and work outside, yet a sizable number of people (77,932) both live and work in the county so their work commute trip is bound by the county limits.⁶



Of all jobs in Buncombe County, 56,363 people traveled from outside the County to work within, while 36,075 traveled from their home within the County to work outside; the remainder of residents stayed and worked in the County. (Source: U.S. Census Bureau 2019 Longitudinal Employer-Household Dynamics)

Vehicle Availability

For workers 16 years or older, 79% of households in Buncombe County had at least two vehicles available to use with very few households (2.1%) having no vehicle available. These findings are illustrated in the figure to the top right.

Mode Share (How People Get to Work)

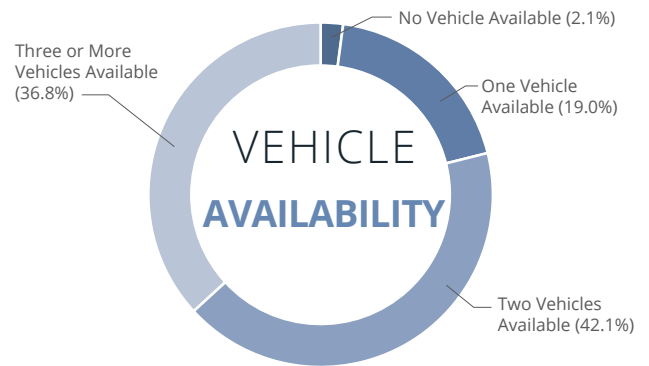
Most people in Buncombe County travel to work by driving alone (77.9%). The remaining share of the county carpooled (7.9%), used public transportation (0.6%), walked (2.3%), rode a bicycle (0.3%), took a taxi, motorcycle or other means (0.9%). Finally, 10.1% of residents worked from home which is almost twice the state average of 5.8%.⁷ The commute mode share is illustrated in the figure to the right.

Travel Time

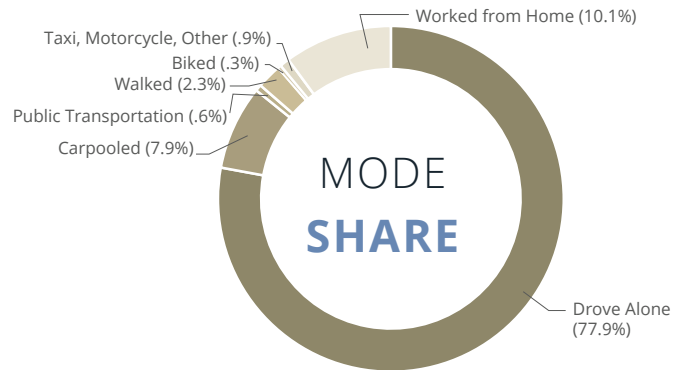
Travel time is another common measure used in transportation, to quantify in minutes the amount of time when traveling from home to work or vice versa. Workers employed in Buncombe County spent on average 20 minutes to commute to work in 2019.

Work From Home

Buncombe County has the highest “work from home” rate of any county in the state of North Carolina.⁸ This is also a notable trend in the City of Asheville; according to the French Broad River Metropolitan Planning Organization, Asheville ranks #6 in the nation for the percentage of the workforce that “works from home”.⁹ With the COVID-19 pandemic, many professional services transitioned to a work from home model; the lasting effects of this has likely increased Asheville and Buncombe County’s work from home rate. Data for 2020 and 2021 will likely be higher than in the years preceding the initial surge of COVID-19.



(Source: U.S. Census Bureau American Community Survey 2019 5-Year Estimates)



77.9% of commuters travel by driving alone. The remaining commuters travel using the following modes of transportation (Source: U.S. Census Bureau American Community Survey 2019 5-Year Estimates)

Travel Time: According to US Census Data from 2019, 49% of workers in Buncombe County who commute to work drove 10 miles or fewer to work. For the workers recorded as driving longer distances, like those driving more than 50 miles, they may be telecommuting rather than actually driving to their place of employment.



Multimodal Mobility

Pedestrian Infrastructure

As a governmental entity, Buncombe County does not construct sidewalks, nor does it have a comprehensive set of policies requiring sidewalk development or a plan for sidewalk maintenance. New sidewalk construction is dependent on NCDOT or private developers. Additionally, Buncombe County does not require sidewalk construction with development projects. Therefore, the miles of sidewalk in the county outside of municipal boundaries are relatively low. According to NCDOT's Pedestrian and Bicycle Information Network (PBIN), there are approximately 38 miles of sidewalk in the county or that share a boundary with a municipality.¹⁰ For comparison, the City of Asheville has 213 miles of sidewalk.

Some residential subdivisions and mixed-use developments, mostly which appear to have been part of the City of Asheville's extraterritorial jurisdiction (ETJ) prior to it being repealed by the General Assembly, have sidewalks. An example is the sidewalk network at Biltmore Lake and small sidewalk segments such as those in Estelle Park off Johnston Boulevard. Throughout the county, there are a small number of sidewalks that are longer and provide greater connection to destinations for pedestrians.

Bicycle Infrastructure

Bicycling in Buncombe County is a popular activity, however, the only dedicated bicycle facilities noted in the Pedestrian and Bicycle Information Network (PBIN) are widened shoulders on Pisgah Highway (NC 151) in Enka/Candler and Patton Cove Road in Swannanoa, totaling 2.0 miles of on-road bicycling infrastructure.

Greenways

In recent years, Buncombe County has made great progress in increasing multimodal options through planning and constructing trails and greenways. Trails and greenways are discussed in Our Environment, Recreation, and Community Health Chapter.

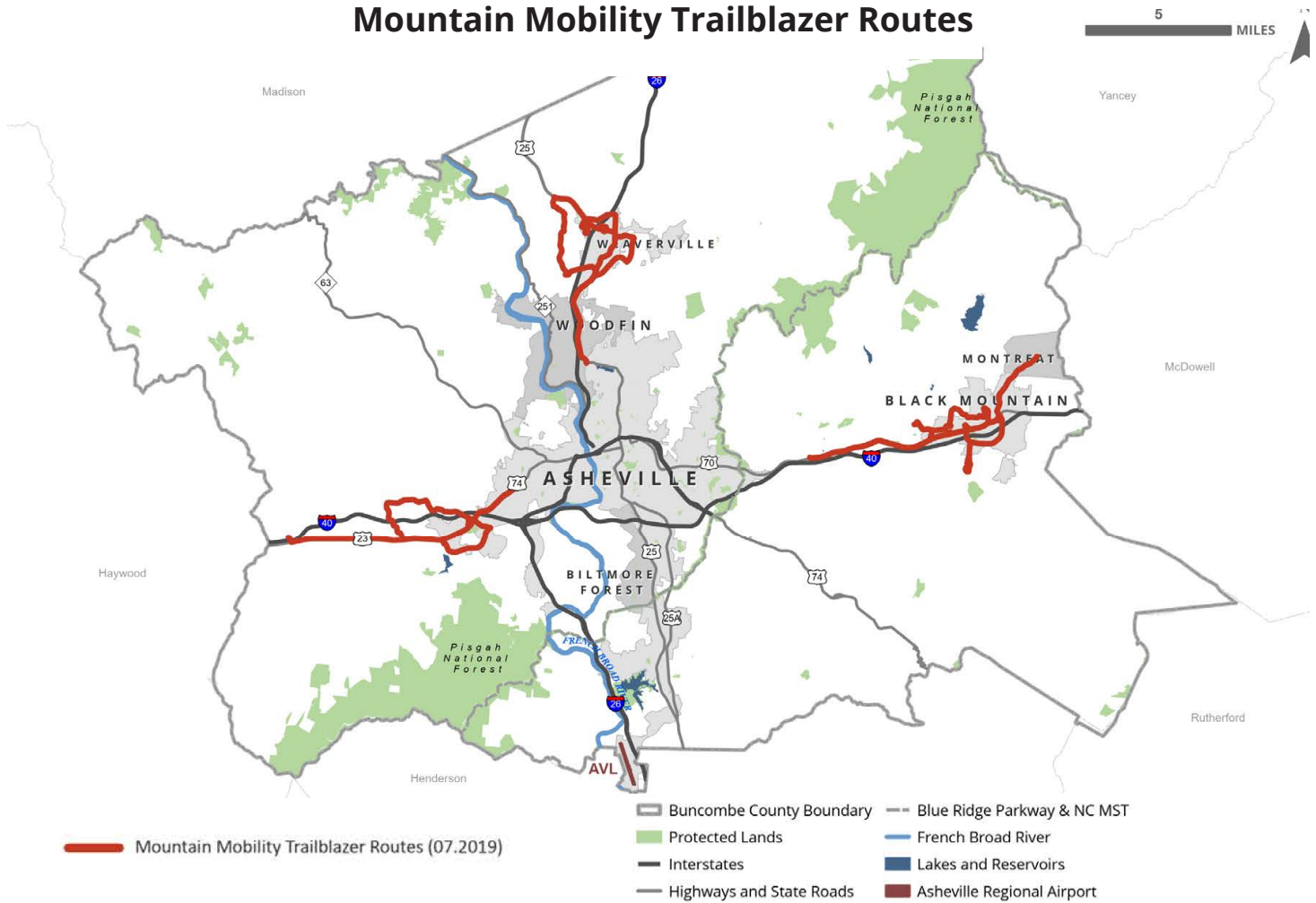
Public Transportation

Public transportation is one option for the Buncombe County residents who cannot, or choose not to, drive for all trips. Two transit providers serve Buncombe County residents, Mountain Mobility and Asheville Rides Transit (the ART System or ART).



With a few exceptions, sidewalks in Buncombe County are in its municipalities, such as these sidewalks found on Weaverville's Main Street.

Mountain Mobility Trailblazer Routes



Mountain Mobility

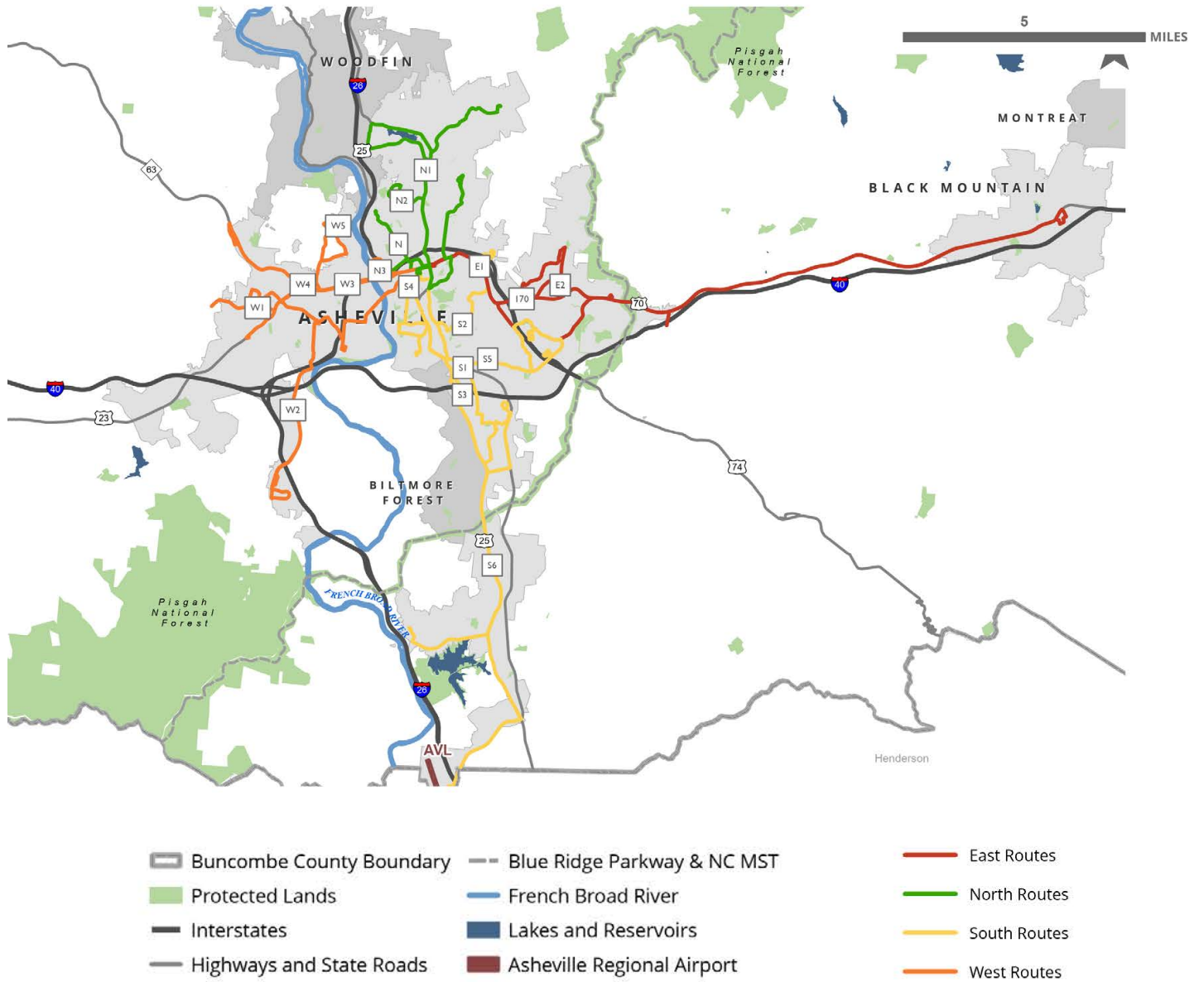
Mountain Mobility (MM) is Buncombe County’s Community Transportation System that provides demand response and deviated fixed route service to Buncombe County residents that live in the County or within one of the municipalities. Buncombe County government manages the system. In 2019, MM provided 145,386 trips to Buncombe County residents, which was down from a high of 162,382 in 2015.¹¹

Through demand-response or scheduled services, MM provides three types of services to eligible users. Eligibility is determined by several factors, including where a person lives, age, trip needs, Medicaid eligibility, and access to fixed-route bus service, among others.

- ADA Paratransit Service to complement the City of Asheville’s ART system for customers qualifying under the Americans with Disabilities Act (ADA),
- Medicaid Transportation for non-emergency medical trips to Medicaid recipients, and
- Demand Response Service which allows eligible users to schedule certain types of trips.

There are three deviated fixed route lines, known as Trailblazer Routes, that serve the Black Mountain, Enka Candler, and North Buncombe areas. MM’s drivers can deviate from the fixed route to pick up/drop off a customer if the customer’s address is within a quarter of a mile from the fixed route. Unlike the demand-response services, Trailblazer Routes are open to the public who do not need to meet eligibility criteria. Trailblazer customers can transfer to the City of Asheville’s ART lines or Haywood (County) Public Transit lines.

Asheville Rides Transit Routes



Asheville Rides Transit System

The City of Asheville’s Asheville Rides Transit System (ART or ART System) is comprised of eighteen routes that primarily travel within the Asheville city limits. The WE1, W1, W5 and the W2 have small sections that travel out of the city and many of the routes travel along an edge of the city boundary, making ART lines accessible to Buncombe County residents. ART also operates Route 170, which connects transit riders from Asheville with Black Mountain, through Swannanoa.

Asheville Regional Airport

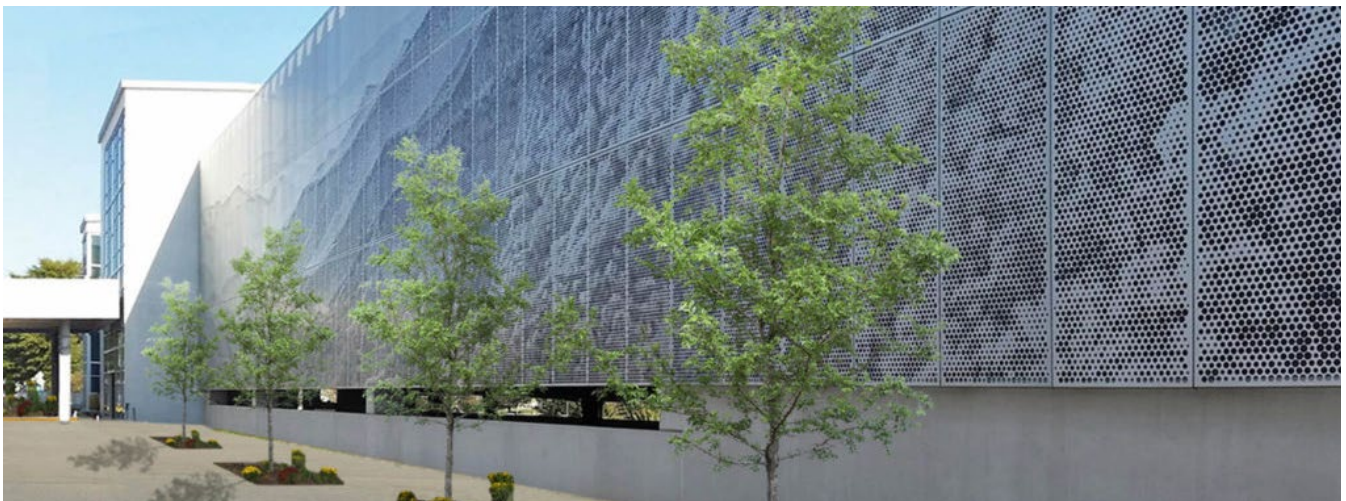
Aviation connects the local and state economy with global activity. The Asheville Regional Airport (AVL) is Buncombe County's only global transportation connection, and brings tourists, freight, and jobs to the region.

Asheville's airport opened in 1961; it is currently governed by the Greater Asheville Regional Airport Authority (GARAA) which is comprised of seven members, two of which are appointed by the Buncombe County Commission. In 2014, the airport broke ground on a \$115M construction project known as Project SOAR, which redeveloped the airfield. In the years following, the airport experienced rapid growth: 2018 saw a 19% growth in passengers and 2019 brought an astounding 43% increase in those numbers. 2020 began with unprecedented passenger records in January and February, and March was on track to be equally successful until the COVID-19 pandemic arrived in the United States. As a global transportation system, air travel all but stopped, and in April 2020, the Asheville Airport saw a 97% drop in passenger utilization.

AVL, and the entire aviation industry, responded swiftly to the pandemic. The rest of 2020 saw a slow and partial recovery, with continued investment in infrastructure at the airport, including a recommissioning of a runway, utility upgrade, and ground transportation lot upgrade. 2021 saw some progress the airport, with American Airlines launching more service, Sun Country Airlines beginning service, and two additional nonstop destinations from AVL (to Minneapolis/St. Paul and Key West).

Not only is AVL an important center in the region's transportation system, but its presence in the local economy is also significant. According to a January 2021 report released by the N.C. Department of Transportation's Division of Aviation, the Asheville Regional Airport (AVL) contributes nearly \$2 billion to the region's economy and supports 12,520 jobs. Of this economic impact, the airport contributes nearly \$500 million in personal income, and \$65.4 million in state and local taxes. The methodology for the Division's report is detailed in its report.¹²

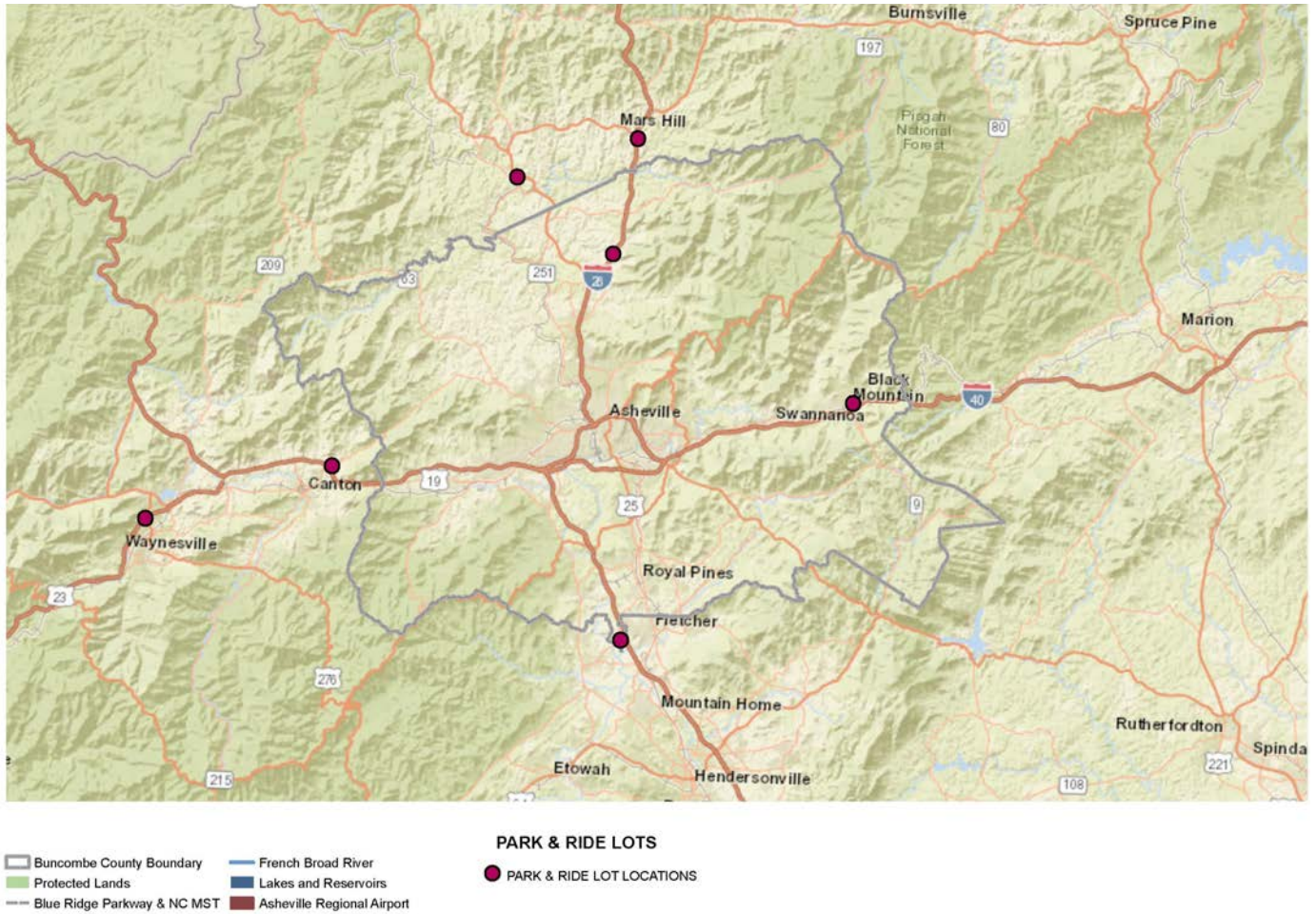
As the airport looks towards the future, they have set their sights on a terminal modernization and expansion project, including expanding from seven to 12 gates.



Asheville Regional Airport. Photo by Gresham, Smith & Partners

According to a January 2021 report released by the N.C. Department of Transportation's Division of Aviation, the Asheville Regional Airport (AVL) contributes nearly \$2 billion to the region's economy and supports 12,520 jobs; of this economic impact, the airport contributes nearly \$500 million in personal income, and \$65.4 million in state and local taxes.

Area Park & Ride Locations



Park and Ride Lots

While not formally part of the region’s multimodal transportation system, the French Broad River MPO region has established seven park and ride lots. Park and Ride lots allow commuters to connect with others to carpool (or rideshare) to high demand locations.

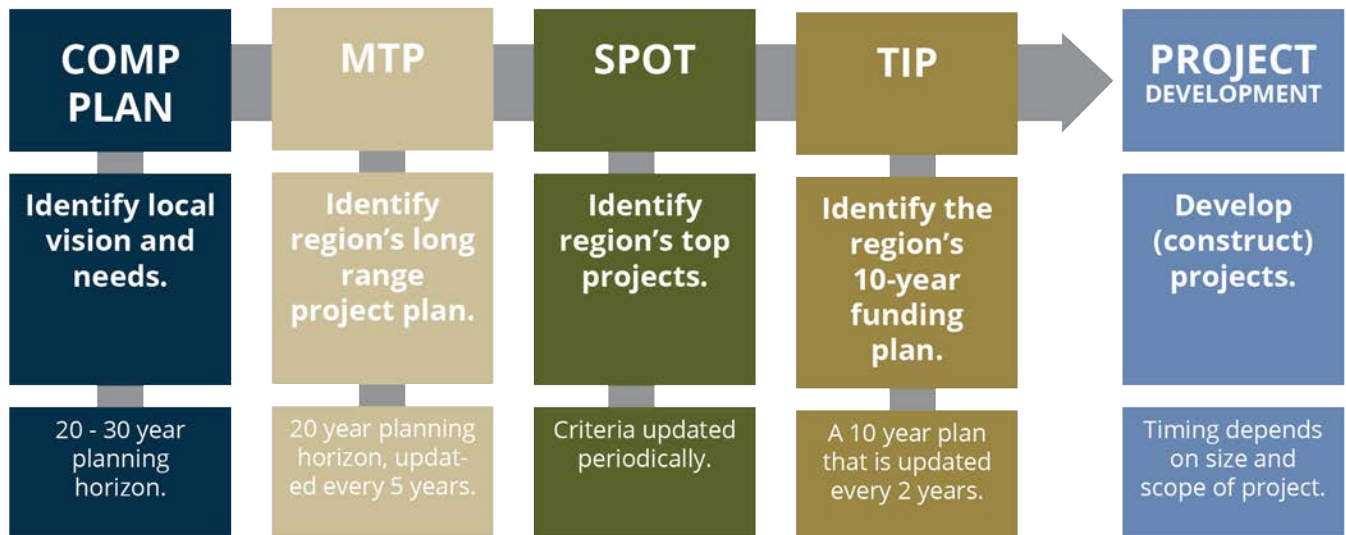
The Transportation Project Planning Process

Buncombe County is a member of the French Broad River Metropolitan Planning Organization (FBRMPO), which is a partnership organization between local and state governments that makes decisions about transportation projects in the MPO region. Working in partnership with member governments, the FBRMPO develops the region’s long range transportation priorities.

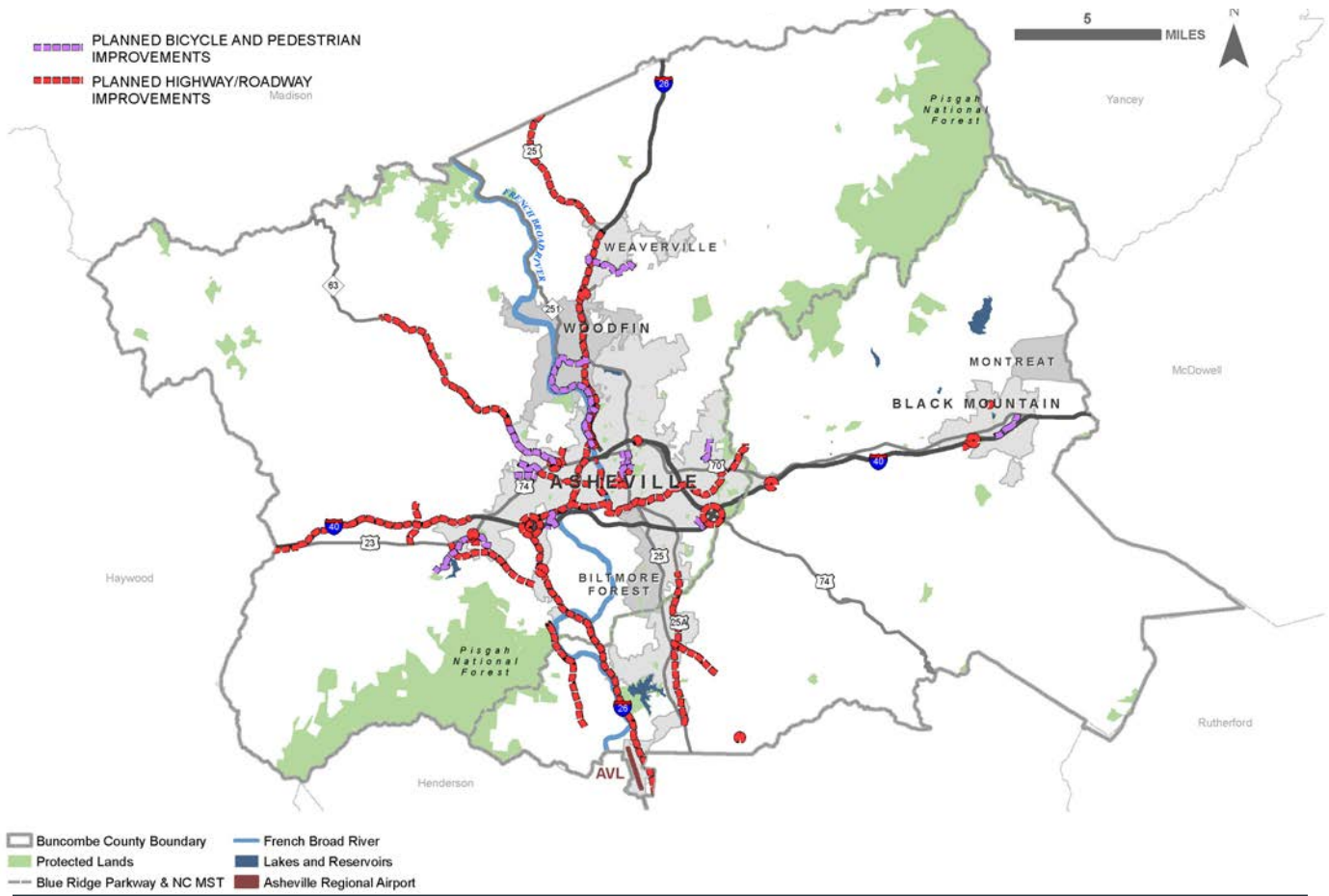
Transportation project development can be a long process. While there are some exceptions, the following steps take place before a project is eligible for funding:¹³

1. The project need is identified and defined. This process generally happens through a Comprehensive Transportation Plan (CTP) or in some cases, through a local plan such as Buncombe County’s Comprehensive Plan.
2. Once the project’s purpose and need are identified, it is placed in the region’s Metropolitan Transportation Plan (MTP) which identifies the projects the region hopes to move forward over a twenty-year time horizon. While projects in the MTP have an associated cost estimate, projects in the MTP remain unfunded.
3. Projects move from unfunded projects in the MTP to funded when the FBRMPO’s prioritization process, also known as the SPOT (Strategic Prioritization) process.¹⁴ The SPOT process scores and ranks projects from the MTP as well as projects NCDOT has identified outside of the MTP process. Those projects which score the highest move into the Transportation Improvement Plan (TIP) for the region. Projects that do not score high enough for the TIP may be funded through future rounds of prioritization.
4. Once a project makes it into the TIP, it is a funded project that is expected to be completed. Each project receives a refined project estimate and a broad schedule that identifies the anticipated years for key milestones such as right-of-way acquisition and construction.
5. NCDOT begins its project development process which will eventually lead to a constructed project.

TRANSPORTATION PLANNING PROCESS



State Transportation Improvement Program



The current State Transportation Improvement Program, which identifies transportation projects that will receive funding between 2020 and 2029, is made up of 1,718 projects, including 399 non-highway projects, in every county across the state.

Planned Projects

The TIP is where we can learn about projects planned for Buncombe County’s transportation network. While these projects are on the TIP, it is widely known that NCDOT continues to have a funding shortfall and that project are becoming more expensive to implement. The FBRMPO and NCDOT continually evaluate TIP projects and those listed in the tables below are subject to change—some of the projects may be removed from the list, changed in scope, or pushed to a later development timeline.

Roadway

The table below describes the NCDOT-managed roadway projects that are planned for the next 10 years.

Interstate Improvements (I-40, I-26, I-240)				
Buncombe County and surrounding communities along with NCDOT have been engaged in an extended planning process to plan for and implement interstate improvements along I-40, I-240, and I-26 as well as interchange improvements at key interstate points. Additionally, the region has plans for two interchange projects that are separate from the overall interstate improvement projects.				
I-2513 Projects (The I-2513 projects are the I-26/I-240 projects that have been under discussion for many years. Project overviews are available from NCDOT, the City of Asheville, the Asheville Design Center, and the Asheville Area Chamber of Commerce)				
<i>NCDOT Project #</i>	<i>Project Name</i>	<i>Project Description</i>	<i>Identified ROW Year</i>	<i>Identified Project Type</i>
I-2513A	I-26	I-26/I-40/I-240 interchange to south of SR 3548 (Haywood Road). Includes initial improvements at I-26/I-40/I-240 interchange.	2022	Widening
I-2513D	SR 1477 (Riverside Drive)	SR 1517 (Hill Street) to SR 1781 (Broadway Street).	2022	Widening
I-2513B	I-26 Connector	South of SR 3548 (Haywood Road) to SR 1781 (Broadway). Widen to multi-lanes.	2022	Widening
I-2513C	I-26/I-40	I-26/I-40/I-240 interchange improvements.	2029	Intersection Improvements
The following projects will widen I-26 to the east and west of the I-2513 projects, and I-40 West.				
<i>NCDOT Project #</i>	<i>Project Name</i>	<i>Project Description</i>	<i>Identified ROW Year</i>	<i>Identified Project Type</i>
I-4700	I-26	NC 280 (Exit 40) to I-40 at Asheville. Add additional lanes. This is the Buncombe County portion (I-240 to NC 280/Airport Road) of the current I-26 widening project that extends from the end of the I-2513 projects through Henderson County to Exit 54 (Flat Rock/Upward Road).	Construction in progress as of January 2022.	Widening
I-4409	SR 2500 (Blue Ridge Road)	Convert I-40/SR 2500 (Blue Ridge Road) to grade separation to interchange. Widen SR 2500 (Blue Ridge Road) to three lanes from US 70 to south of I-40 and upgrade roadway south of I-40 to SR 2713 (Old Lakey Gap Rd).	2023	Intersection Improvements
A-0010AA	I-26 (US 19/US 23)	SR 1781 (Broadway Street) to US 25. Add additional lanes. This is a longer-range project that will widen I-26 between the end of the I-2513 projects to US 25, Weaver Boulevard/Exit 19 A in Weaverville.	2026	Widening
I-6018	I-40/I-240/US 74A	I-240/US 74 Alternate Interchange. Improve Interchange.	2029	Intersection Improvements
I-6021	I-40	SR 2838 (Porters Cove Road) Interchange. Improve Interchange.	2029	Intersection Improvements
I-6054C	I-40	SR 1200 (Wiggins Road) to SR 1224 (Monte Vista Road). Add additional lanes. This widening project will add additional lanes to increase capacity between	2029	Widening
The following projects are standalone interchange and bridge improvements along I-40 and I-240.				
<i>NCDOT Project #</i>	<i>Project Name</i>	<i>Project Description</i>	<i>Identified ROW Year</i>	<i>Identified Project Type</i>
I-4759	I-40 (Liberty Road)	I-40/SR 1228 (Liberty Road). Convert grade separation to an interchange and construct two lane roadway north of I-40 to SR 1224 (Monte Vista Rd) and four lane roadway south of I-40 to US 19/US 23/NC 151 with parts on new location.	2020	Intersection Improvements (Will result in a new interchange)

Roadway - Continued

The table below describes the NCDOT-managed roadway projects that are planned for the next 10 years.

<i>NCDOT Project Number</i>	<i>Project Name</i>	<i>Project Description</i>	<i>Identified ROW Year</i>	<i>Identified Project Type</i>
I-5888A, I-5888B, I-5889A I-5889B, I-5890 I-5901, I-6054C, I-6063	I-40 I-240	Varies	Varies	Rehabilitate pavement and bridges Preserve bridges Add additional lanes
US & NC Route Improvements				
<i>NCDOT Project #</i>	<i>Project Name</i>	<i>Project Description</i>	<i>Identified ROW Year</i>	<i>Identified Project Type</i>
U-5834	SR 3116 (Mills Gap Road)	US 25 (Hendersonville Road) to SR 3157 (Weston Road). Upgrade existing roadway.	2020	Modernization
U-3301	NC 63 (Leicester Highway)	SR 1615 (Gilbert Road) to west of SR 1004 (Newfound Road) in Asheville. Widen to multi-lanes, some relocation.	Under Construction	Widening
U-2801A	US 25A (Sweeten Creek Road)	US 25 (Hendersonville Road) to SR 3081 (Rock Hill Road). Widen to multi-lanes.	2024	Widening
U-6047	NC 112 (Sardis Road/Sandhill Road)	NC 191 (Brevard Road) to US 19/23 (Smokey Park Highway). Widen roadway.	2025	Widening
U-3403B	NC 191 (Brevard Road - Old Haywood Road)	SR 3498 (Ledbetter Road) to north of Blue Ridge Parkway. Widen to multi-lanes	2029	Widening
U-5837	SR 2002 (Riceville Road)	US 70 (Tunnel Road) to SR 2285 (Clear Vista Lane). Upgrade Roadway.	2029	Modernization
U-5972	NC 63 (Leicester Highway)	NC 63 (New Leicester Highway), US 19/23 (Patton Avenue) to Newfound Road. Construct Access Management Improvements.	2029	Access Management
U-5973	Weaverville Highway and New Stock Road	US 19 Business (Weaverville Highway) and SR 1740 (New Stock Road). Construct Intersection Improvements.	2029	Intersection Improvements
U-6046	NC 81 (Swannanoa River Road)	US 70 (Tunnel Road) to US 74 (South Tunnel Road). Upgrade Roadway.	2029	Upgrade
U-5971B	Patton and New Leicester Final	US 19 (Patton Avenue) and NC 63 (New Leicester Highway). Construct final intersection improvements.	POST YEAR (Planned after the current 10 Year TIP)	Intersection Improvements
State Route (SR) Improvements & Other				
<i>NCDOT Project #</i>	<i>Project Name</i>	<i>Project Description</i>	<i>Identified ROW Year</i>	<i>Identified Project Type</i>
U-6251	New Route - Enka Heritage Road	US 19/23 (Smokey Park Highway) to Walkoff Way. Construct Access Road on New Location.	2021	New Location
U-6053	New Route	Construct access road to the commerce park near the intersection of I-40 and SR 2500 (North Blue Ridge Road).	Under Construction	New Location
U-6230	Walk Off Way - Access Road	Construct access road for Haakon Industries in Enka Commerce Park.	Under Construction	New Location
U-4739	SR 3556 (Amboy Road/Meadow Road)	I-240 to NC 81/SR 3214 (Biltmore Avenue). Widen to multi-lanes with new bridge over the French Broad River.	2025	Modernization
U-6162	SR 1332 (North Louisiana Avenue)	US 19/23 (Patton Avenue) to SR 1338 (Emma Road). Modernize Roadway.	2025	Modernization
U-6163	SR 3116 (Mills Gap Road)	SR 3136 (Cane Creek Road) intersection. Realign intersection and add left turn lanes.	2025	Intersection Improvements

Pedestrian and Bicycle Projects

While few pedestrian and bicycle facilities exist in Buncombe County, there are several projects in a planning stage that have received TIP funding. Many more facilities, which are not detailed here, are described in planning documents, such as the Blue Ridge Bike Plan (2013), but remain unfunded. The following table describes the projects in the TIP that include a bicycle and pedestrian element.

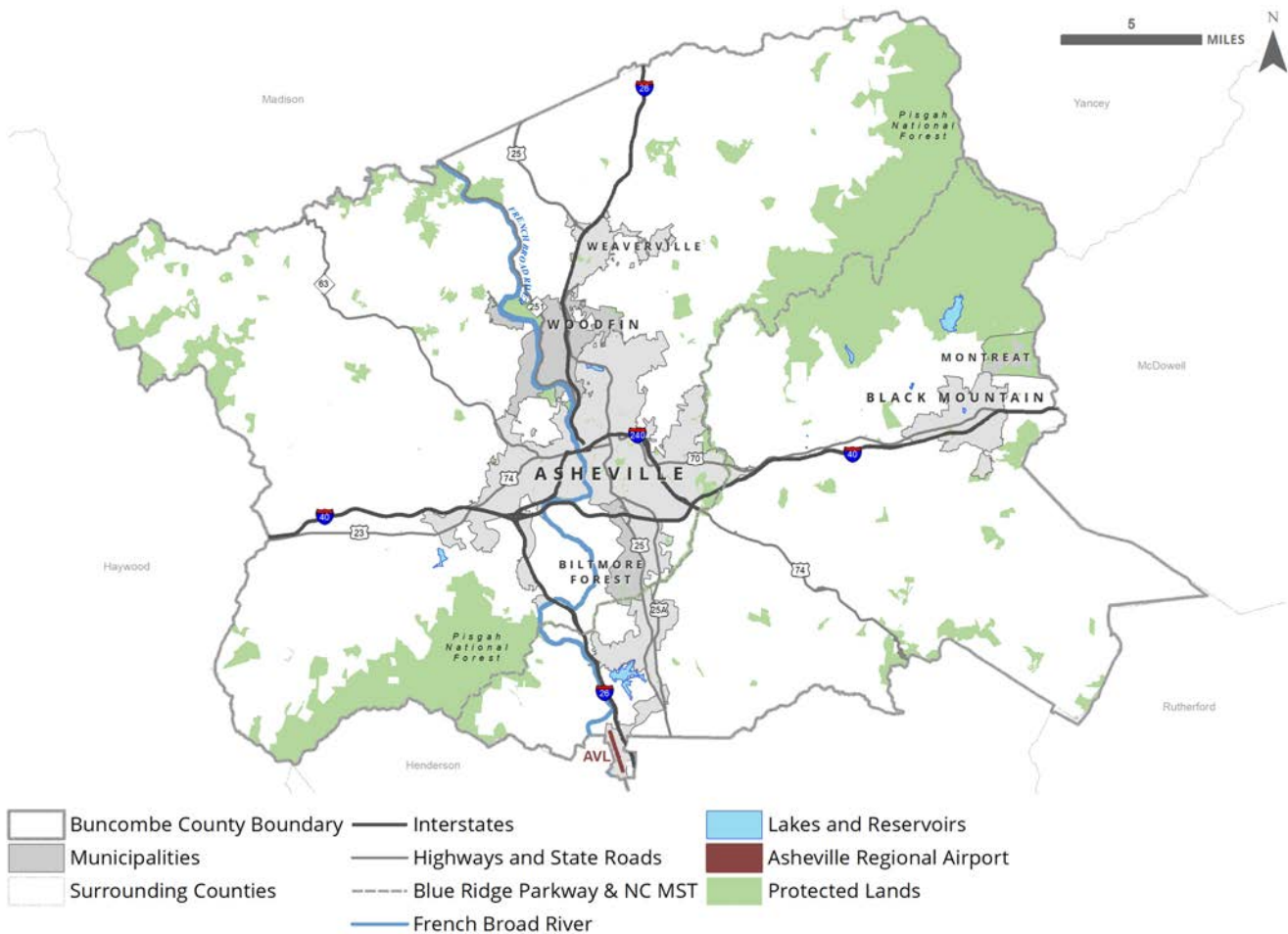
Pedestrian and Bicycle Projects					
<i>NCDOT Project Number</i>	<i>Project Name</i>	<i>Project Description</i>	<i>Identified Bicycle (B)/Pedestrian (P) Outcome</i>	<i>Identified ROW Year</i>	<i>Identified Project Type</i>
U-5834	SR 3116 (Mills Gap Road)	US 25 (Hendersonville Road) to SR 3157 (Weston Road). Upgrade existing roadway.	B: Bike Lane P: Buffered Side-walk	2020	Modernization
U-3301	NC 63 (Leicester Highway)	SR 1615 (Gilbert Road) to West of SR 1004 (Newfound Road) in Asheville. Widen to multi-lanes, some relocation.	Cross section not defined.	Under Construction	Widening
U-2801A	US 25A (Sweeten Creek Road)	US 25 (Hendersonville Road) to SR 3081 (Rock Hill Road). Widen to multi-lanes.	B/P: Multiuse Path P: Buffered Side-walk	2024	Widening
U-6162	SR 1332 (North Louisiana Avenue)	US 19/23 (Patton Avenue) to SR 1338 (Emma Road). Modernize Roadway.	B: Bike Lane P: Buffered Side-walk	2025	Modernization
U-6047	NC 112 (Sardis Road/Sandhill Road)	NC 191 (Brevard Road) to US 19/23 (Smokey Park Highway). Widen Roadway.	B: Bike Lane P: Buffered Side-walk	2025	Widening
U-3403B	NC 191 (Brevard Road - Old Haywood Road)	SR 3498 (Ledbetter Road) to North of Blue Ridge Parkway. Widen to multi-lanes.	B: Bike Lane P: Buffered Side-walk	2029	Widening
U-5837	SR 2002 (Riceville Road)	US 70 (Tunnel Road) to SR 2285 (Clear Vista Lane). Upgrade roadway.	Not in MTP	2029	Modernization
U-5972	NC 63 (Leicester Highway)	NC 63 (New Leicester Highway), US 19/23 (Patton Avenue) to Newfound Road. Construct Access Management Improvements.	B/P: Multiuse Path P: Buffered Side-walk	2029	Access management
U-6048	US 19, US 23	SR 1836 (Chestnut Mountain Road) to SR 1200 (Wiggins Road). Upgrade Roadway.	B/P: Multiuse Path	2029	Modernization
U-6173	US 25/70	North of SR 1584 (Tillery Branch Road) to SR 1727 (Monticello Road). Upgrade Roadway to Superstreet.	Cross section not defined.	2029	Access management

LAND USE

Jurisdictional Boundaries and Land Subdivisions

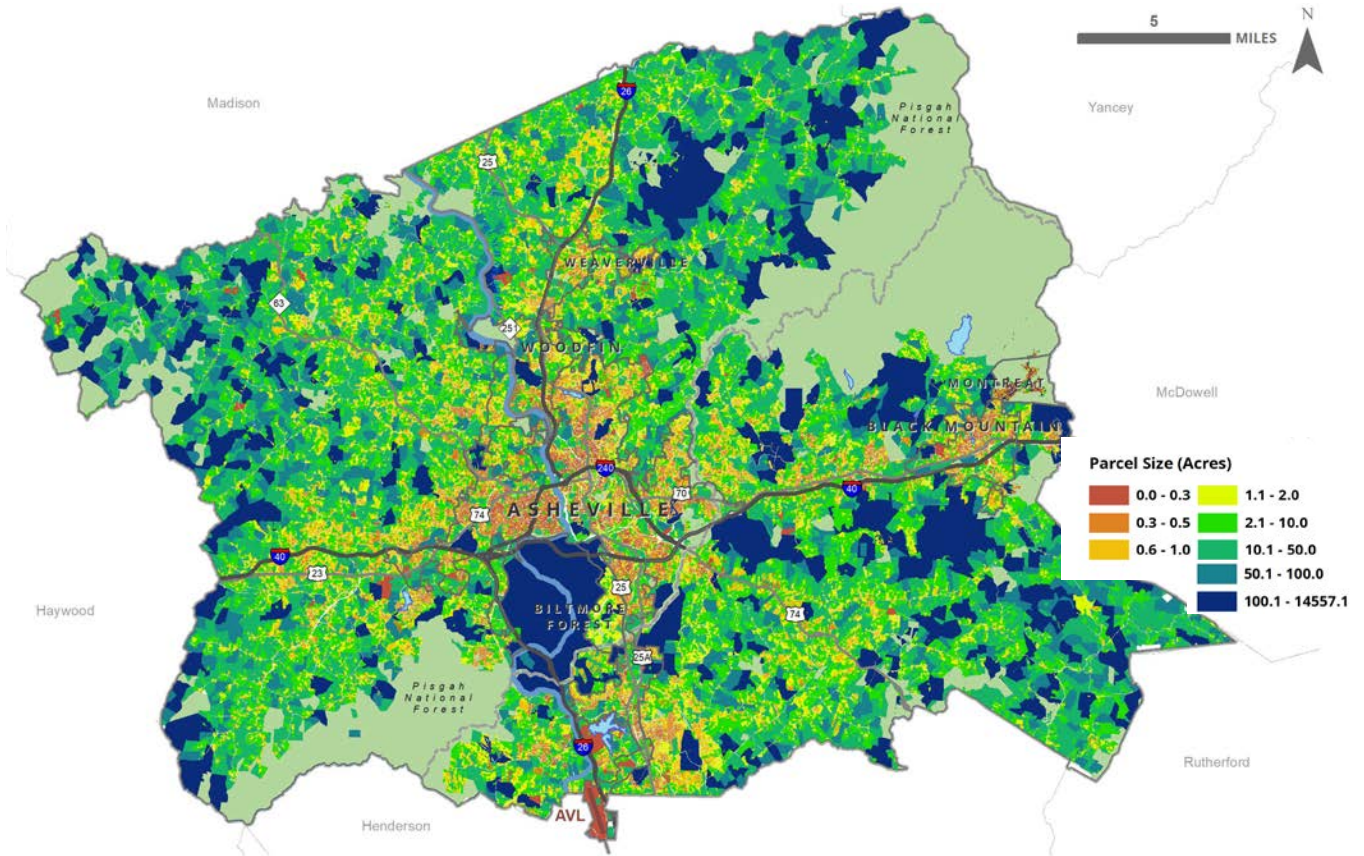
Buncombe County encompasses five towns and the City of Asheville within its borders, yet the Buncombe County government only has control over planning and zoning decisions within its jurisdictional areas, which are the areas outside of these legally incorporated municipalities. The County jurisdiction is thus generally referred to as the unincorporated area of the county. Each of the local municipalities has its own government, and regulatory structure, and each is in control of planning and zoning decisions within its boundaries. Montreat is the only municipality in Buncombe County with an Extraterritorial jurisdiction (ETJ), an area outside of the town limits that is subject to Montreat zoning regulations.

Buncombe County Planning and Zoning Jurisdictions



Data Source: Buncombe County

Parcel Size

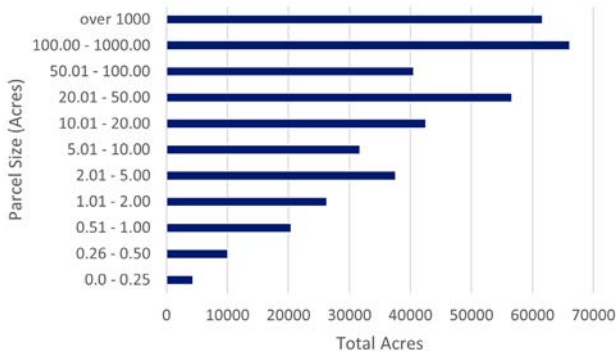


Parcel Size

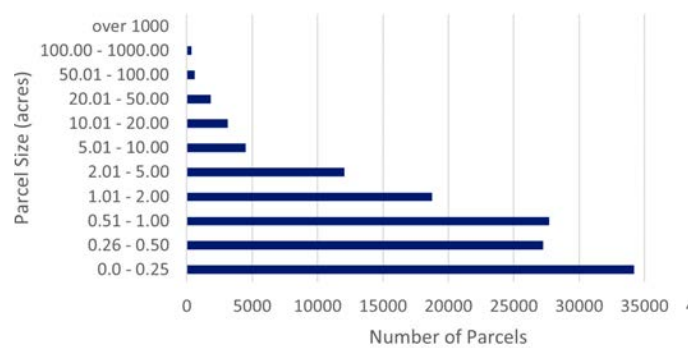
As of late 2021, Buncombe County has 130,434 total parcels, and a total land area of around 398,113 acres. The average parcel size is just over 3 acres—although there are 13 parcels that are each over 1,000 acres, and these outliers artificially inflate the average size. Within the municipalities, there are 52,000 parcels, averaging just 0.77 acres.

Data Source: Buncombe County

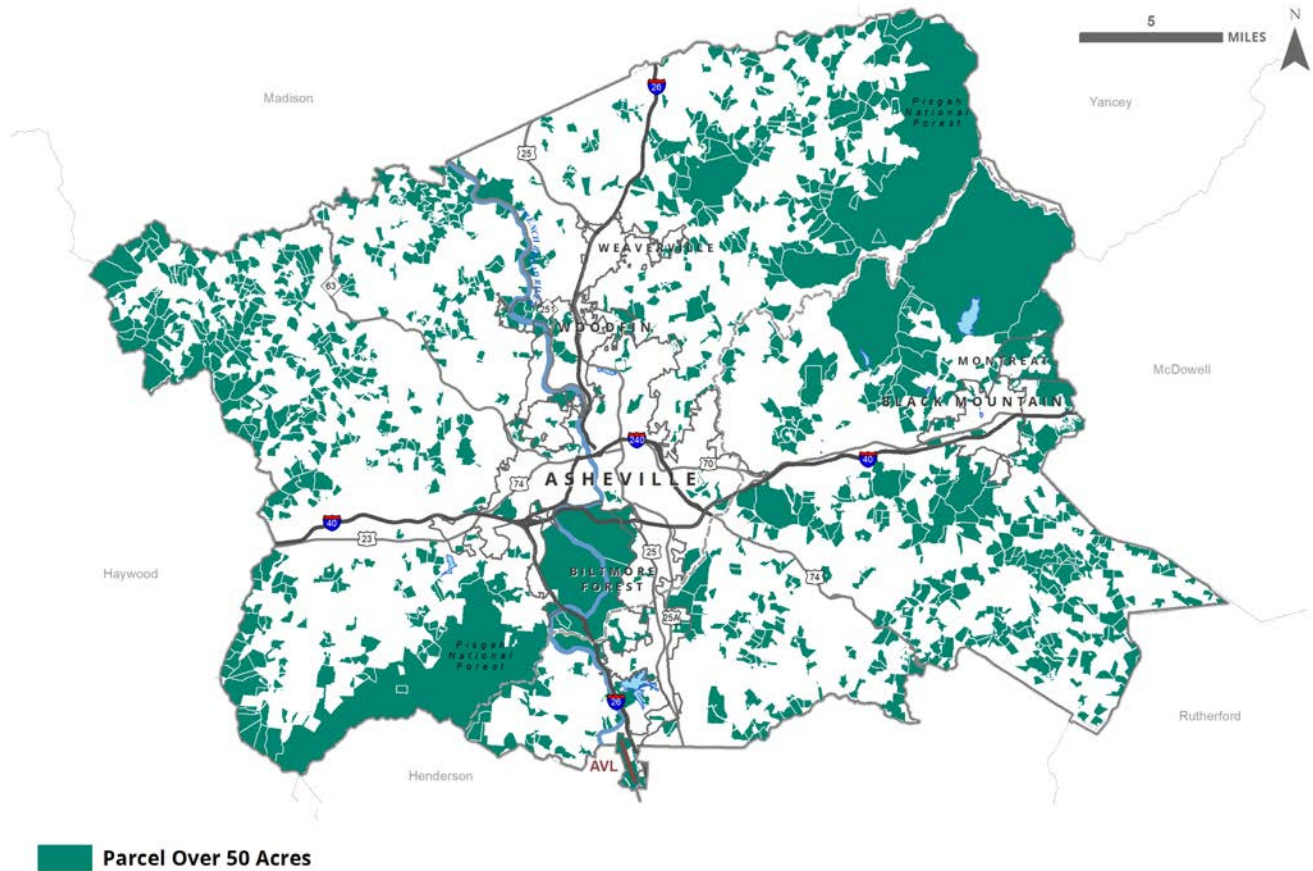
Total Acres of County by Parcel Size



Number of Parcels in County by Parcel Size



Parcels over 50 Acres

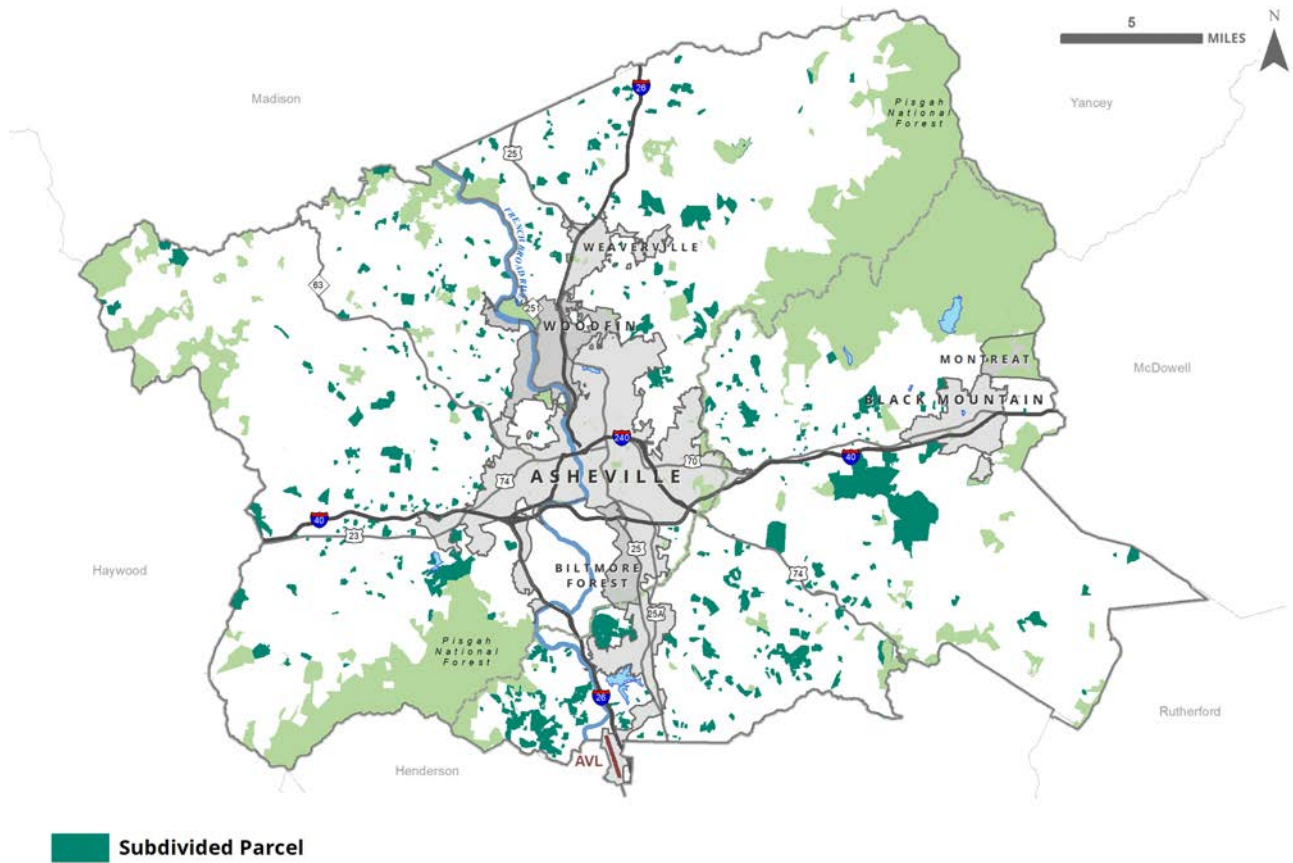


Parcels Over 50 Acres

Buncombe County has over 950 parcels that are comprised of more than 50 acres each, and in total these parcels account for 168,455 acres—which is close to half of all the land in the county. Roughly one third of this land is comprised of parcels that are owned by various government entities or public institutions and utilities, and the majority is owned privately by individuals or corporations. Following an expected pattern of development, most of these larger lots are located farthest away from the municipal centers, and are located in the more rural parts of the county.

Data Source: Buncombe County

Subdivisions

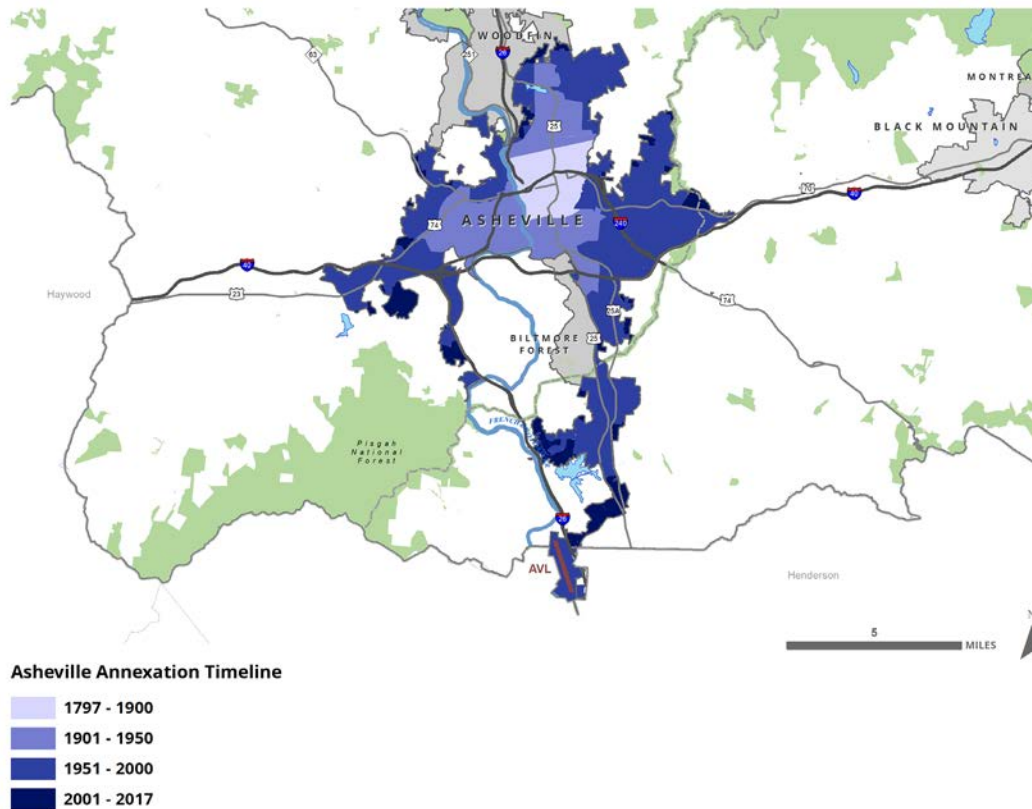


Major and Minor Subdivisions

The above map shows the 705 “parent” parcels (in County jurisdiction only), which have been subdivided into major and minor subdivisions since 1999. Major and minor subdivisions are developments where the total number of lots in the development is more than four. Most of these sites were subdivided for the creation of single-family home neighborhoods and are distributed geographically throughout the county.

Data Source: Buncombe County–“Subdivisions” shapefile

Asheville Annexation History



Asheville's Annexation History

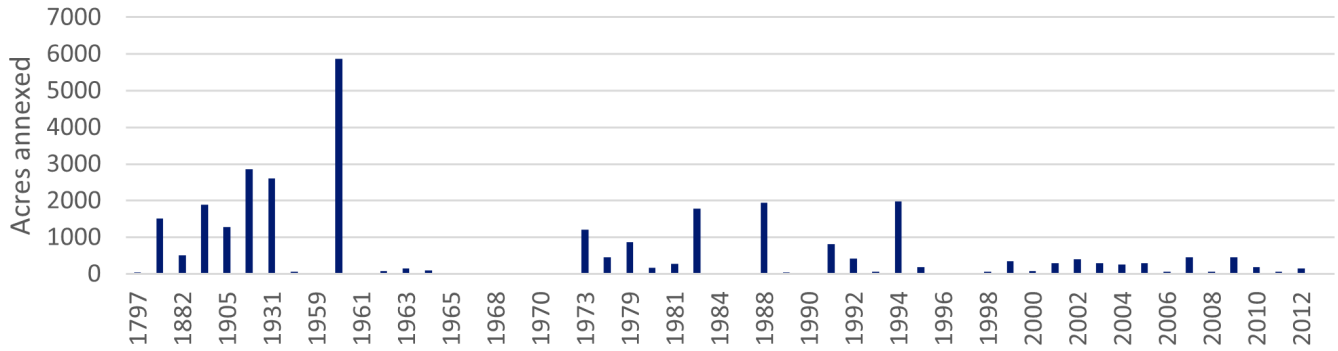
Annexation is the process by which a municipality incorporates new land into its existing limits. Voluntary annexation occurs when residents of an area petition that their land be annexed into a municipality, whereas involuntary annexation is initiated by the local government.

The City of Asheville underwent a significant period of annexation during the latter half of the 20th century, annexing 93 occasions and more than doubling in size during that 50-year period with the addition of ~17,000 acres. Since 2000, the City of Asheville has annexed an additional 85 times, for a total of ~3,000 new acres added. These recent annexations have all been contiguous with the previous city limits and have occurred in an evenly distributed pattern around the periphery of the city limits. There have been no major annexations to the City of Asheville since 2017. (See the timeline for Asheville's annexations on the following page.)

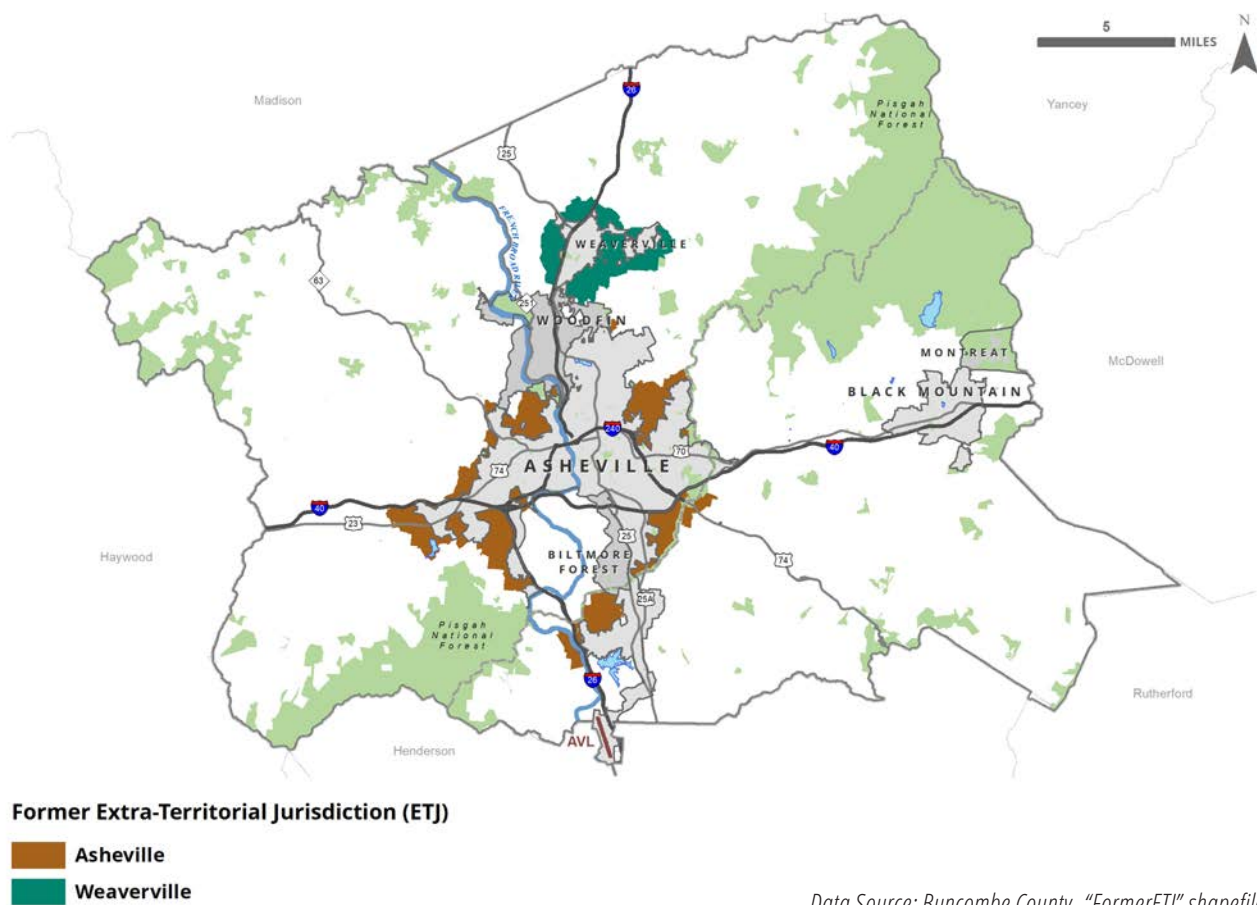
The North Carolina General statute limits property annexations to the voluntary actions of willing property owners. Given the fact that water and sewer utilities are available in some areas around the municipalities and the same utility rates are applied both inside and outside Asheville city limits, there is less incentive for a property owner to annex into the City. This may suggest that much of the new greenfield development in the county, development on undeveloped lands, may occur within the unincorporated portions of the county and be maintained within the County's jurisdiction. The provision of municipal water has a long, storied history in Buncombe County – specifically, public water that is supplied by the City of Asheville. In most areas of North Carolina, if a property owner would like to connect to a municipal system, they must ask to be annexed into the supplying municipality or pay a differential rate. This is not the case for Asheville's system, which extends well beyond the corporate limits of Asheville in multiple directions. Asheville cannot charge differential water rates, and the history regarding this procedure dates back to the 1920's through a series of acts spanning multiple decades passed by the North Carolina General Assembly, called the Sullivan Acts.

Data Source: Buncombe County–Asheville Annexation History shapefile -2021

Asheville Annexation Timeline



Former ETJ



Former ETJ Areas

Where granted by the NC General Assembly, an ETJ (Extra-Territorial Jurisdiction) in North Carolina allows for a municipality to exert some of its regulatory authority beyond the city limits. In general, this allows towns and cities to have planning and zoning control over land use and related decisions that occur within the defined ETJ area. The state legislature establishes the criteria for the geographic area potentially covered by the ETJ—most of which are on the order of a 1-mile extension around the city.

In 2013 and 2014, the NCGA exercised its authority, and removed the ETJs that had previously been granted to both Asheville and Weaverville—ceding authority over those areas back to Buncombe County. Weaverville lost 4,918 acres of ETJ, and Asheville lost 11,118 acres. This occurrence presents a rather rare circumstance in which the County has gained more land under its direct jurisdiction—typically the flow of land is in the other direction as cities grow and annex more county land into their own jurisdictions.

The map on the previous page shows where those areas were, which are now again entirely within the authority of Buncombe County. Some of these areas had begun to be developed under the ordinances of these two municipalities. Since that time, the County's land development ordinances has been applied to new development, using a different set of zoning and development standards than originally applied in these areas.

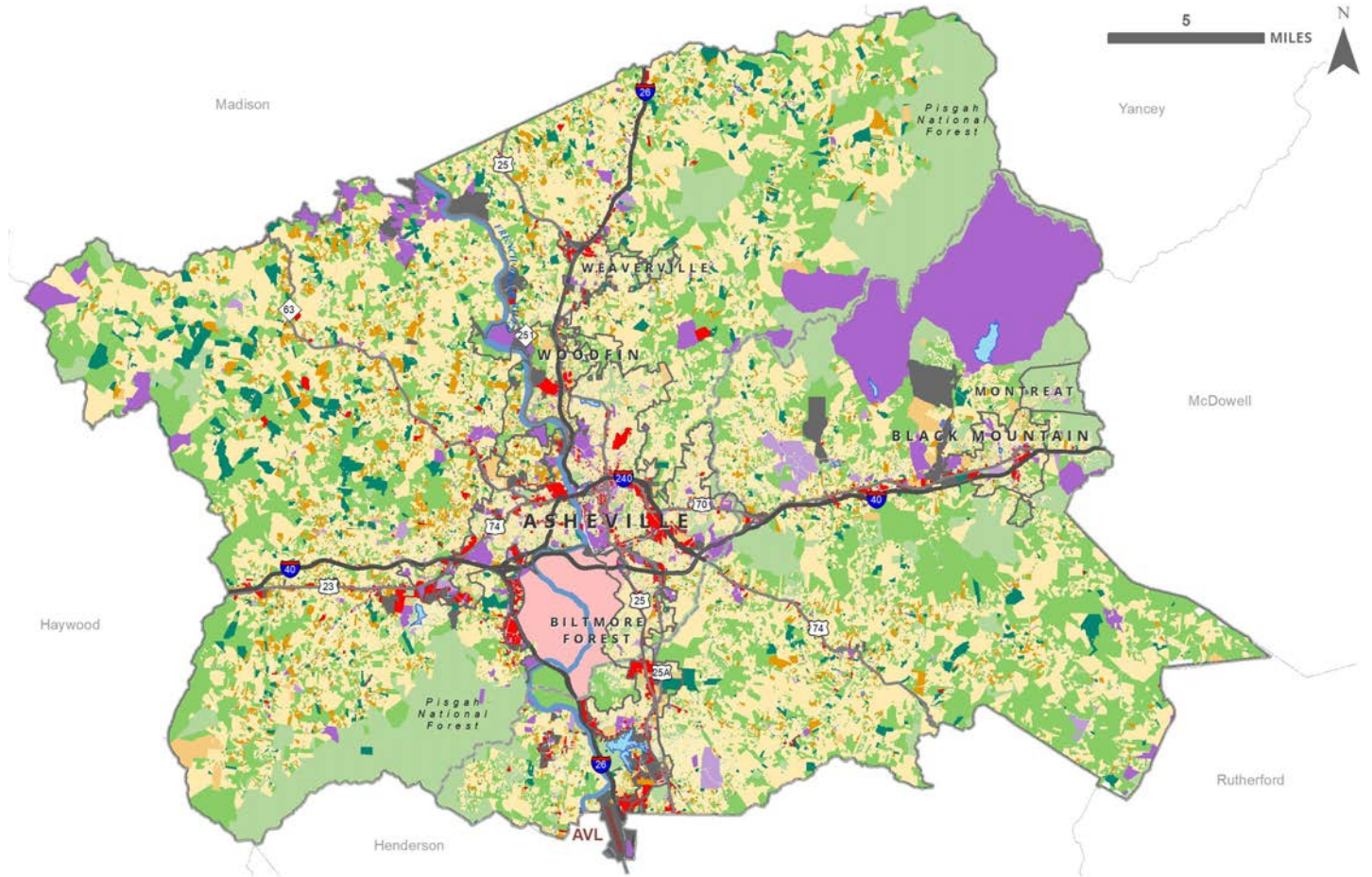
Existing Land Use and Zoning

The single largest land use category in Buncombe County is single-family residential properties, which account for over one third of all the land in the county. Following this category is unimproved land, which accounts for 25% of all land in the county, and upon which the most future development is likely to occur. Protected lands also account for a significant portion of all property in the county—these are lands that are permanently protected from any future development, and they are protected primarily through of Federal, State, and Local government ownership, or through conservation easements on privately held land. The Pisgah National Forest is the largest of these protected lands, and huge tracts exist on both sides of the county. Similarly, several very large tracts of land are owned and operated by the local water utilities, and these lands are managed to protect and preserve the quality of the drinking water that they provide.

Other conventional land uses such as commercial, retail, office, or industrial lands account for a small percentage of the overall land in the county, and these uses are concentrated primarily around Asheville and the other municipalities or clustered near the transportation corridors.

Land Use Acreage by Category		
<i>Land Use</i>	<i>Acreage</i>	<i>Percentage</i>
Single Family Residential	155,556	39.2%
Unimproved Land	102,377	25.8%
Open Space, Parks, and Recreation	47,285	11.9%
Public Institutional	29,627	7.4%
Manufactured Home Residential	16,055	4.0%
Miscellaneous	14,641	3.7%
Utilities and Industrial	8,018	2.0%
Commercial, Retail, Office	7,581	1.9%
Biltmore Estate	6,714	1.7%
Multi-Family Residential	4,838	1.2%
Private Institutional	4,573	1.1%
Water*	83	0.0%
TOTAL	398,113	100%
<p><i>*Does not include reservoirs in protected watershed areas, which are part of the Public Institutional Lands</i></p>		

Existing Land Use



Existing Land Use

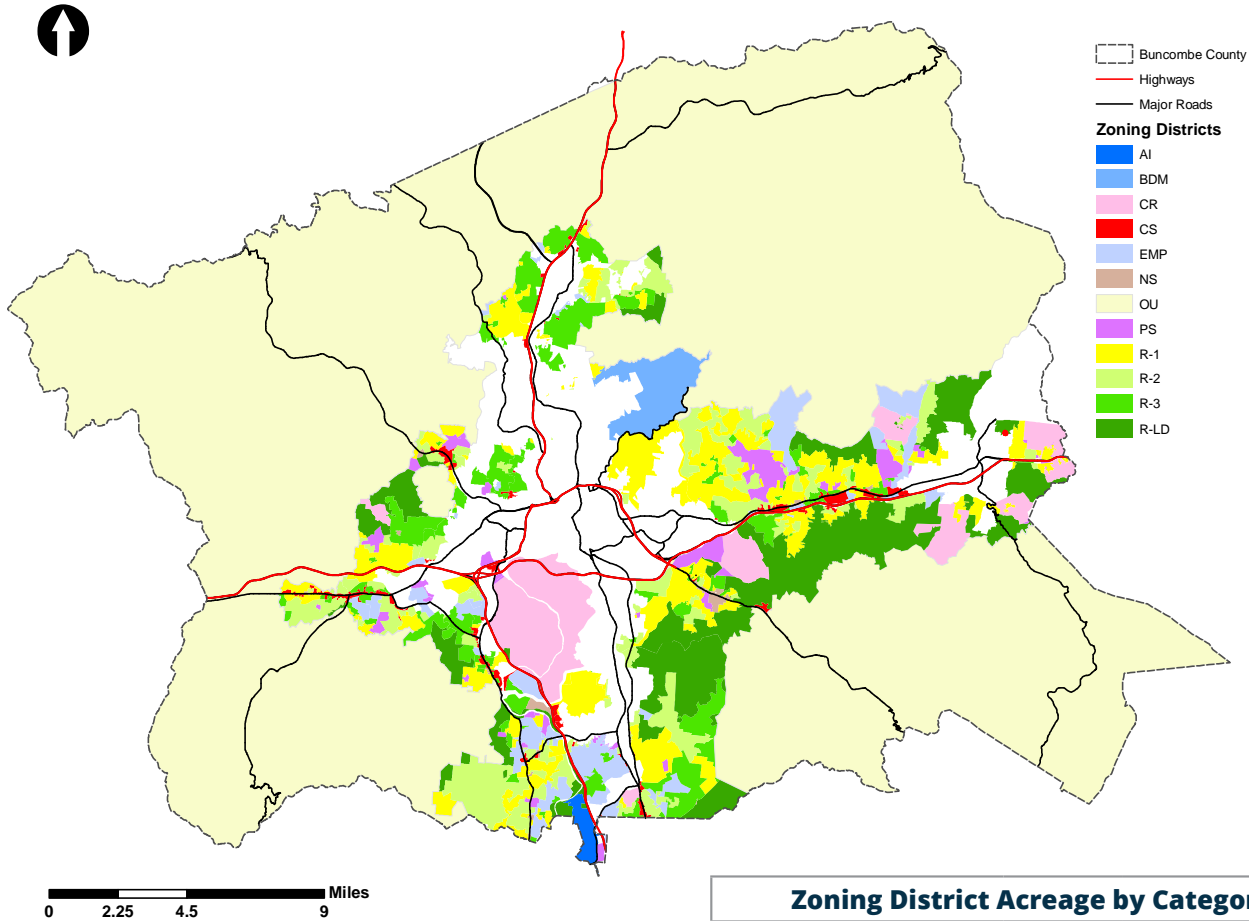


Data Source: Buncombe County—"PropertyLandUse" shapelfile

Biltmore Estate

One of the largest properties in Buncombe County is the Biltmore Estate property, which is comprised of several parcels totaling thousands of acres and has a deeply entrenched history within the region dating back to the beginning of the 20th century. The Estate is no longer a private residence and is currently run as a commercial enterprise, showcasing the mansion and grounds, and playing host to a variety of ancillary services and businesses that derive from the original uses of the property.

Zoning Districts



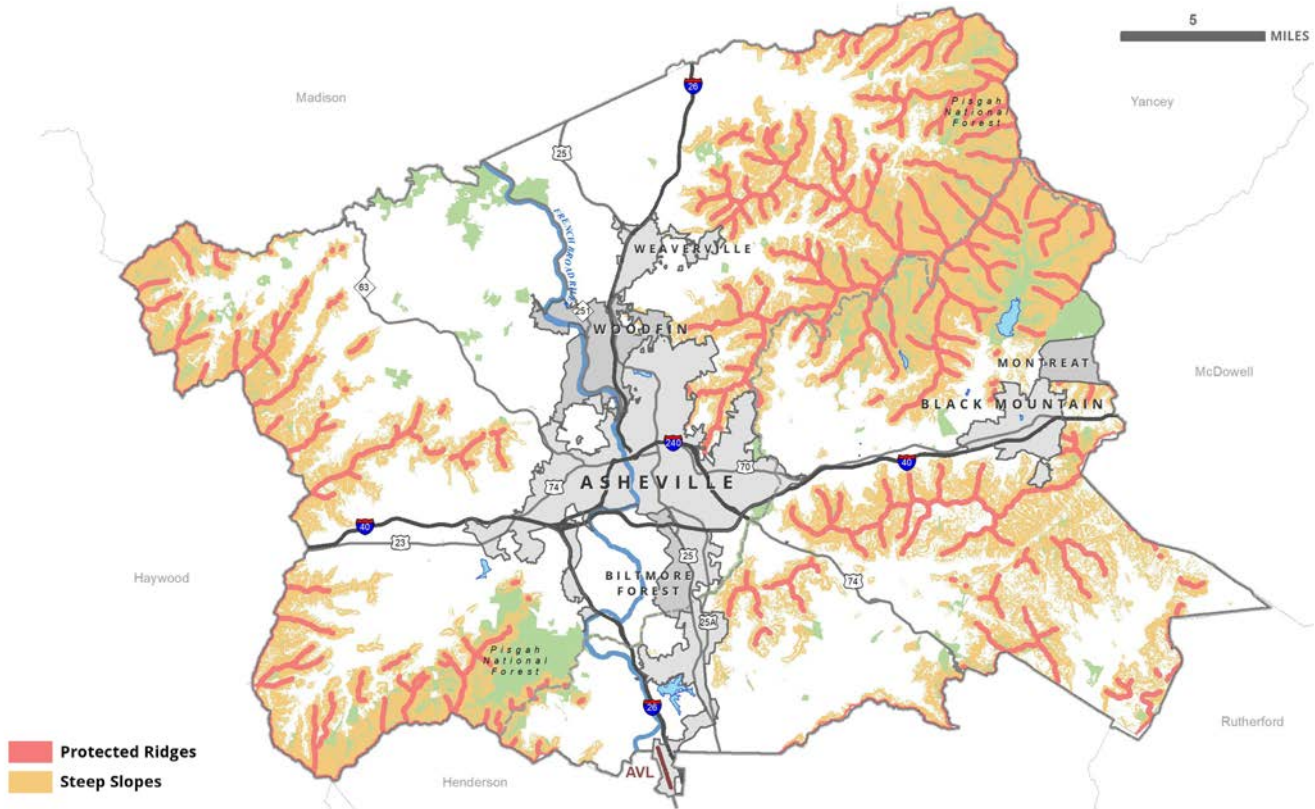
Buncombe County Zoning

Buncombe County zoning provides a variety of by-right land uses to property owners. The largest single category is the Open Use District, which accounts for nearly 280,000 acres, or roughly 75% of the entire County's jurisdiction. The Open Use district allows for many different types of development, including single and multi-family residential, commercial, or industrial uses. In general, the Open Use District does not apply to parcels adjacent to the municipalities. Instead, in those places, specific zones are applied within the intended direction of land use in the county. The majority of the Open Use District is characterized by a lack of public utilities, which limits development potential. However, certain more intense uses require a special use permit within this district; for example, noxious uses require a special use permit. In general, this district does not apply to parcels that have access to public sewer and/or water or are directly adjacent to municipalities.

Data Source: Buncombe County–Zoning Map

Zoning District Acreage by Category		
Zone District	Acreage	Percentage
R-LD Low-Density Residential District	21,221	5.7%
R-1 Residential District	18,814	5.0%
R-2 Residential District	14,041	3.8%
R-3 Residential District	11,964	3.2%
CS Commercial Service District	1,684	0.5%
EMP Employment District	7,267	1.9%
PS Public Service District	3,709	1.0%
CR Conference Center/Resort District	11,222	3.0%
NS Neighborhood Service District	552	0.1%
BDM Beaverdam Low-Density Residential District	3,356	0.9%
OU Open Use District	278,790	74.7%
AI Airport Industry District	740	0.2%
TOTAL	373,360	100%

Steep Slopes Zoning Overlay



Steep Slope and High Ridges Regulations

Buncombe County is a place blessed with mountains and valleys, typifying its location in the Blue Ridge Mountains. The highest point in the state, Mount Mitchell, is just next door in neighboring Yancey County. This topography affords many advantages to the county, yet also creates obvious complications for building and development generally. While development is not explicitly disallowed in these areas with steep slopes and high ridges, Buncombe County has regulations which tend to discourage it, and to ensure that where it does occur, protections are in place. The above map shows the locations where these steep slopes exist.

Data Source: Buncombe County

Development Trends in Unincorporated Buncombe County

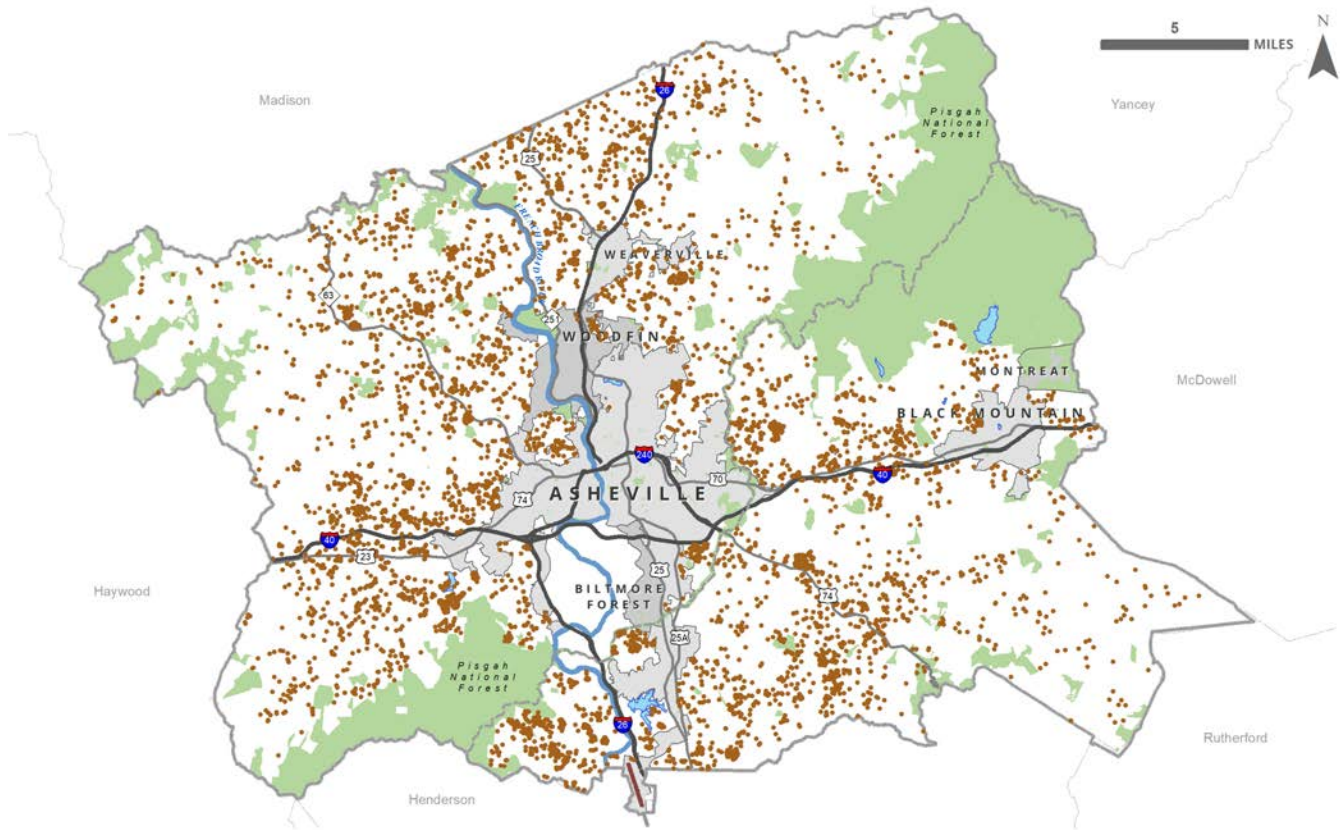
Single-Family Development

Between 2013 and 2021, nearly 7,000 new homes were constructed in Buncombe County, excluding multi-family developments and anything constructed in the municipalities.

RESIDENTIAL DEVELOPMENT AT A GLANCE (2013-2021)

4,511	<i>single-family homes</i>
358	<i>townhouses</i>
1,511	<i>manufactured homes</i>
575	<i>modular homes/ duplexes</i>

Single Family Development



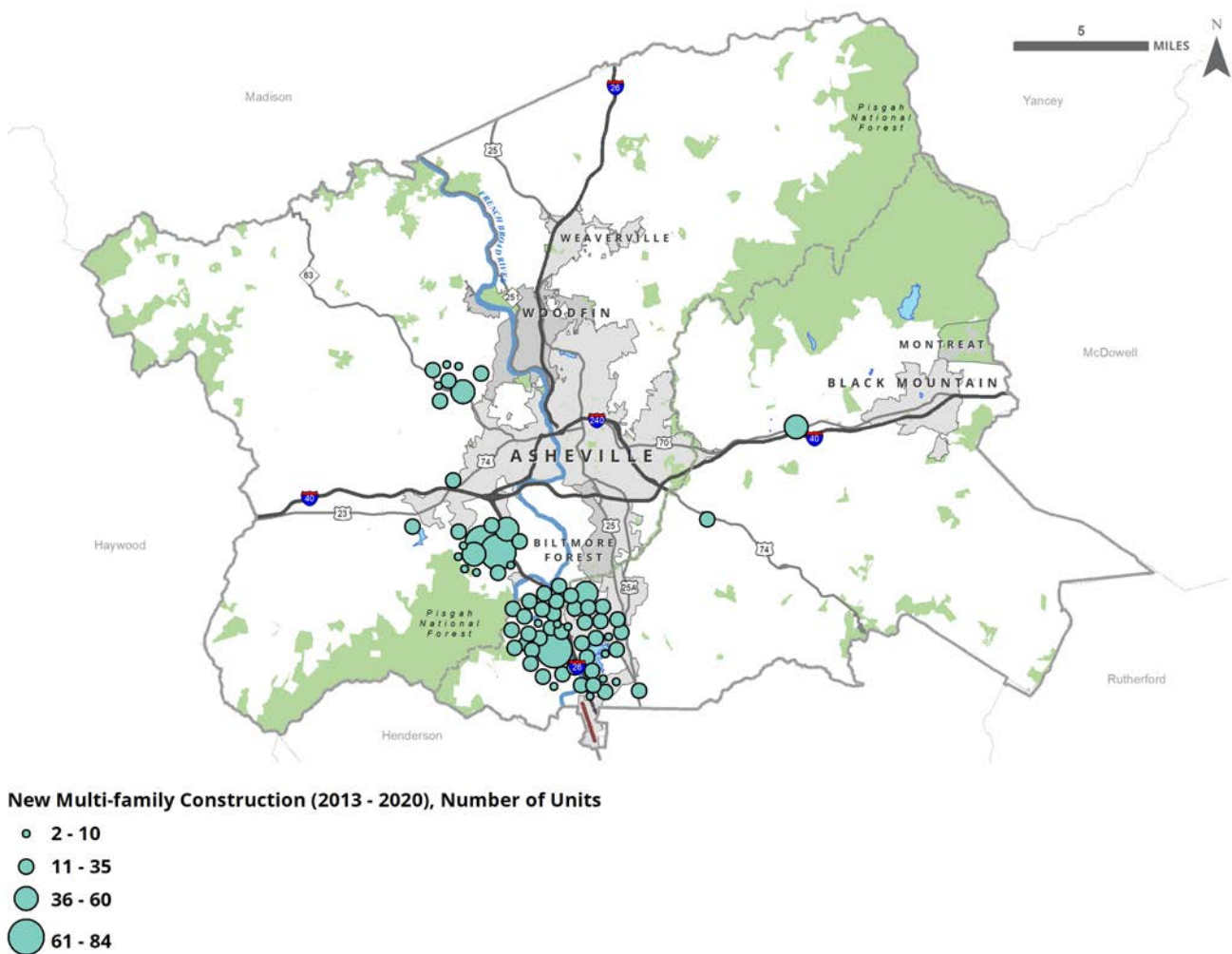
• **New Residence (2013-2020)**

Source: Buncombe County Building Permit Data, permits issued and certificate of occupancy issued, reported through November 16, 2021. Unincorporated areas only.

Multi-Family Development

The past decade has seen a clear development pattern of multi-family residential construction, and 2,688 housing units have been established during this period on 121 different properties. For the most part, this construction has occurred to the southwest of Asheville, centered around the French Broad River and adjacent to the Pisgah National Forest. Another smaller pocket of development occurred along Highway 63 northwest of Asheville. On average, each of these multi-family developments has 22 housing units, with an 84-unit development being the largest multi-family development built during this time. Additionally, prior to 2013, another pocket of multi-family development was centered around the town of Weaverville.

Multi-Family Residential Development

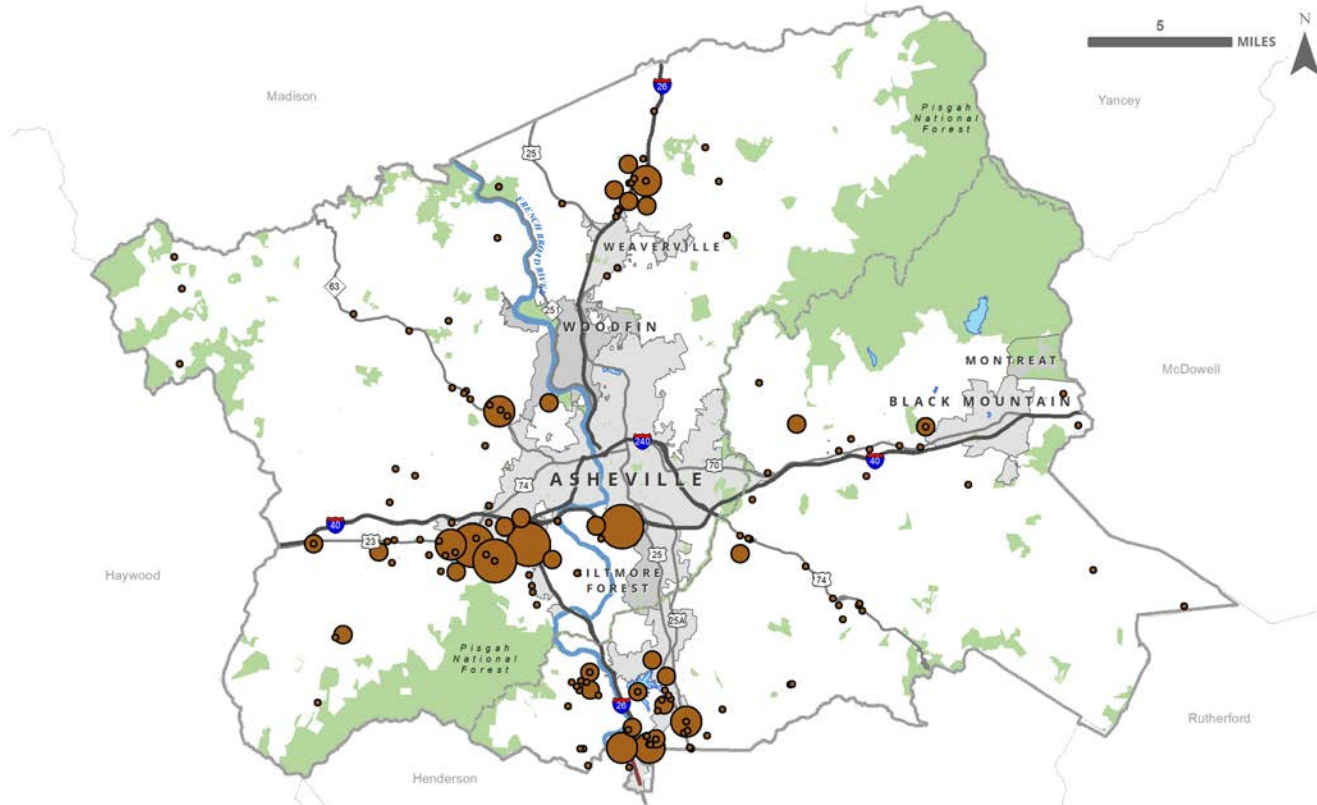


Source: Buncombe County Building Permit Data, permits issued and certificate of occupancy issued, reported through November 16, 2021. Unincorporated areas only. Note that some of these circles have been manually distributed such that all are visible—the exact location is approximate.

Commercial Development

The development of new commercial space—which is measured as the total heated square footage of new buildings on commercial properties—largely follows a similar pattern as the multi-family residential development over the past decade. In general, most of this development occurred to the south and west of Asheville, focused around the I-26 and I-40 corridors. In total, approximately 2.45 million square feet of heated commercial space have been constructed during this time across 338 permits.

Commercial Development

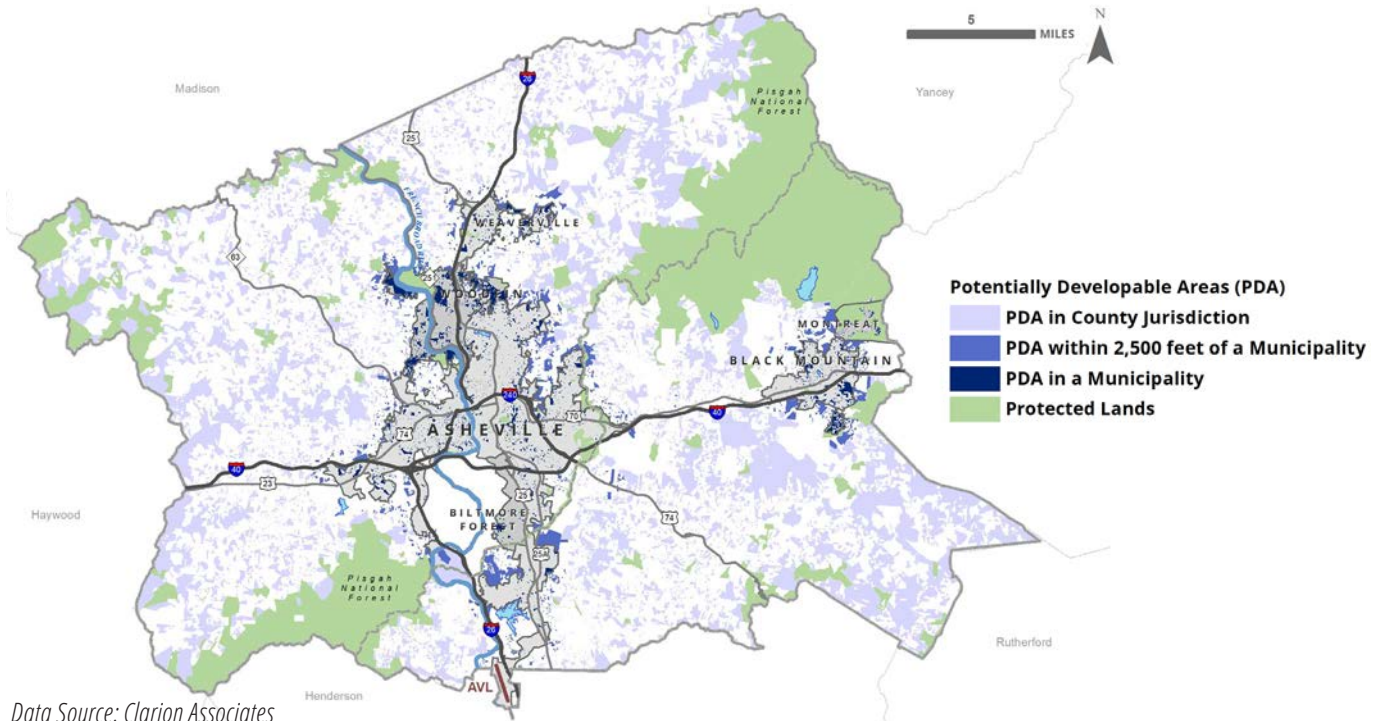


New Commercial Building (2013-2020), Heated sq. ft

- 0 - 10,000
- 10,001 - 50,000
- 50,001 - 100,000
- 100,001 - 135,000

Source: Buncombe County Building Permit Data, permits issued and certificate of occupancy issued, reported through November 16, 2021. Unincorporated areas only. Note that some of these circles have been manually distributed such that all are visible—the exact location is approximate.

Potentially Developable Areas (PDA) in County Jurisdiction



Potential Areas for Development

Evaluating the development potential of a large and geographically complex community relies on a complicated set of objective and subjective parameters and assumptions. Ownership, site specific land conditions, zoning regulations, access to infrastructure and utilities, finances, timing, scale, and type of development are some of the main determinants of what might be built on a given piece of land. This set of possible conditions can produce a wide range of possible outcomes, and thus a wide range of development implications. When considered across the entirety of a county, these predictions become more complex.

As of late 2021, there were around 21,355 unimproved parcels within Buncombe County that are considered Potentially Developable Areas (PDA). Of those, 5,264 parcels are within one of the municipalities, and another 2,606 are within 2,500 feet of a municipal border. The following table breaks down the land area within each of these geographic areas.

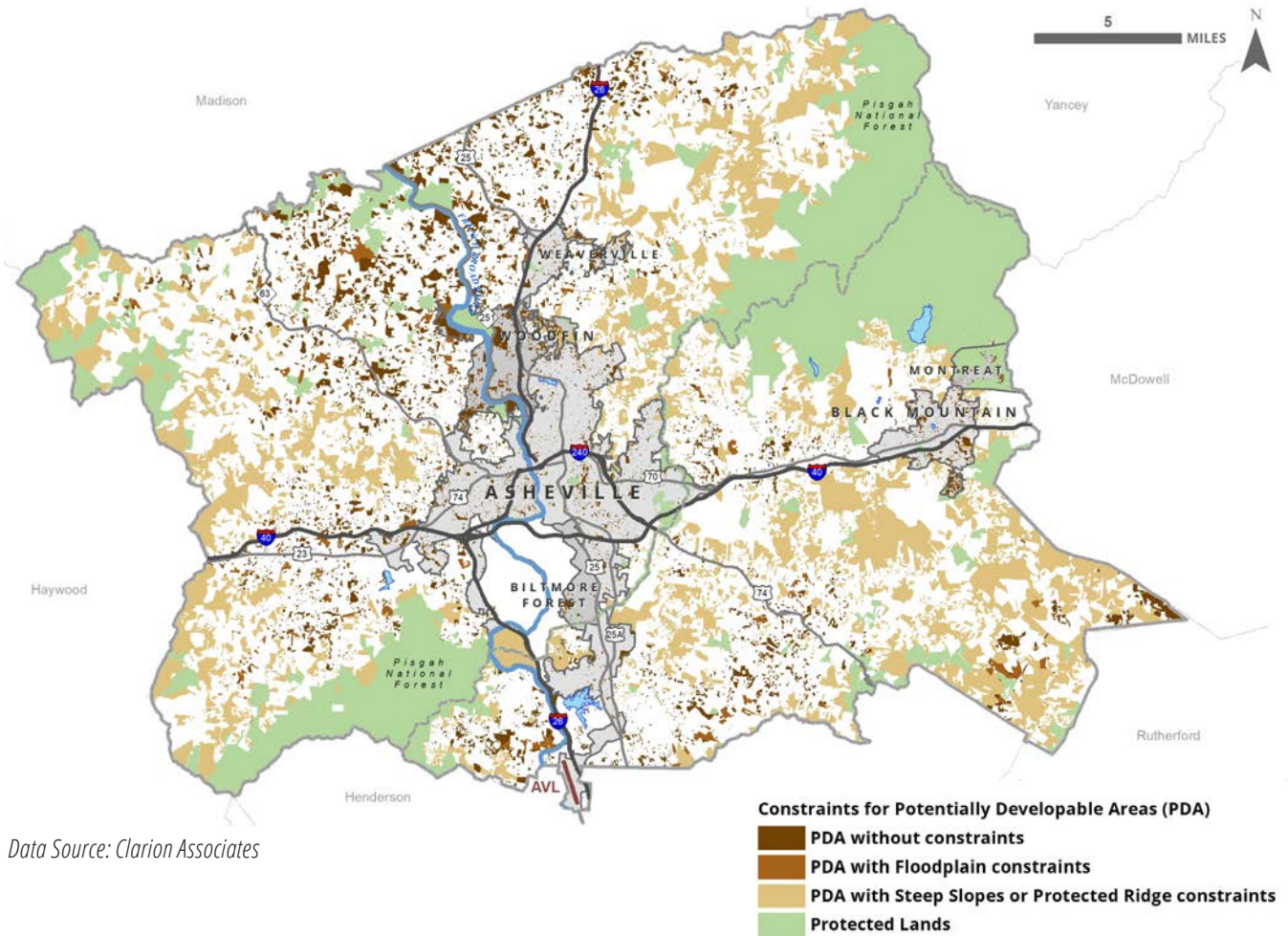
The map shown above does not suggest that any development either should or will occur in any of the areas shown as having development potential. Likewise, areas that are currently developed in one way or another can certainly be redeveloped in an

equally complex number of ways. With the passage of time, some areas may become more or less likely to be developed based on these complex factors. The above map and table on the next page consider two naturally occurring constraints that are

Buncombe County Potentially Developable Areas (PDA) by Jurisdiction			
<i>Jurisdiction</i>	<i>Number of Parcels</i>	<i>Sum of Acreage</i>	<i>% of Total Acreage</i>
County Jurisdiction	13,485	87,422	88.7%
Within 2,500 of Municipal Jurisdiction	2,606	6,742	6.8%
Municipal Jurisdiction	5,264	4,436	4.5%
Grand Total	21,355	98,600	100%

Source: Clarion Associates.

Potentially Developable Areas (PDA) with Constraints



Data Source: Clarion Associates

accompanied by regulatory limitations to development. These are 1) location in a floodplain or 2) location on a steep slope or a protected ridge. (See Our Environment, Recreation and Community Health for more information about steep slopes and protected ridges, and Our Resiliency and Hazard Mitigation for more information about flooding.) In general, by-right development or improvement in those areas is limited beyond what would otherwise be possible.

It should be noted that the degree to which these natural constraints exist varies from parcel to parcel, as does the size of every parcel. In some instances, an entire parcel is constrained by virtue of being on a steep slope. In other cases, only a tiny fraction of a parcel is constrained. Of the 7,731 parcels, totaling 72,565 acres, that are at least partially constrained by a steep slope or a protected ridge, only 45,611 of those acres are completely covered by steep slopes or protected ridges. In other words, roughly 62% of the land area encompassed by the PDAs with steep slopes or protected ridges is encumbered by them. This suggests that the remaining 38% of land on those parcels could be developed with limited additional regulatory hurdles.

When discussing Potentially Developable Areas, the preservation of farmland is an important consideration. Working lands are under threat from housing and commercial developments. For more information, see Our Working Lands.

Buncombe County Potentially Developable Areas (PDA) by Constraints			
<i>Constraints</i>	<i>Number of Parcels</i>	<i>Sum of Acreage</i>	<i>% of Total Acreage</i>
PDA without constraints	13,040	21,588	21.9%
PDA with floodplain constraints	584	4,447	4.5%
PDA with steep slopes or protected ridge constraints	7,731	72,565	73.6%
Totals	21,355	98,600	100.0%

Source: Clarion Associates.



Image courtesy of Clarion Associates

Housing

Housing Unit Types, Tenure, and Occupancy

In 2019, there were over 123,000 households in Buncombe County, accounting for all housing unit types. The majority of housing units in the county are either single-family (or 1 unit) detached housing (62%) or manufactured homes (14%). Collectively these two categories comprise 76% of the housing stock in the county. The remainder of the housing stock is fairly evenly divided among single-family attached (or 1 unit attached) housing and multi-unit housing as shown in the table below. The vast majority of multi-unit housing are located within the City of Asheville, although this is increasing elsewhere in Buncombe County. The 2021 Housing Needs Assessment from Bowen National Research projected demand for rental and owner-occupied housing, as well as continued demand for small housing units.

Housing Unit Types in Buncombe County (2019 ACS)		
<i>Unit Type</i>	<i># units</i>	<i>Percentage of total</i>
1 Unit, Detached	76,790	62%
Mobile Home	17,624	14%
1 Unit, Attached	3,303	3%
2 Units	3,310	3%
3 or 4 Units	4,729	4%
5 - 9 Units	6,729	5%
10 - 19 Units	4,508	4%
20 + Units	6,484	5%
Total Housing Units	123,477	100%

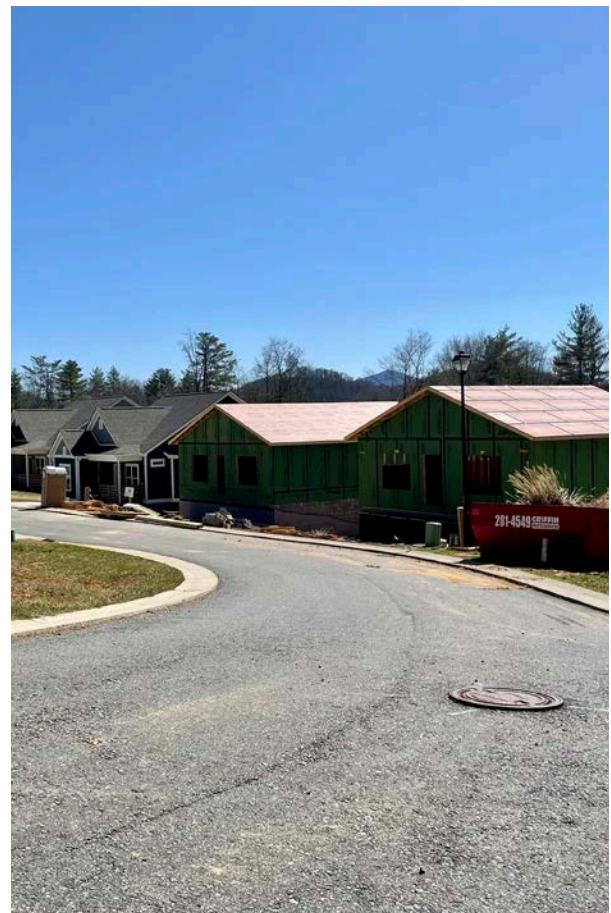
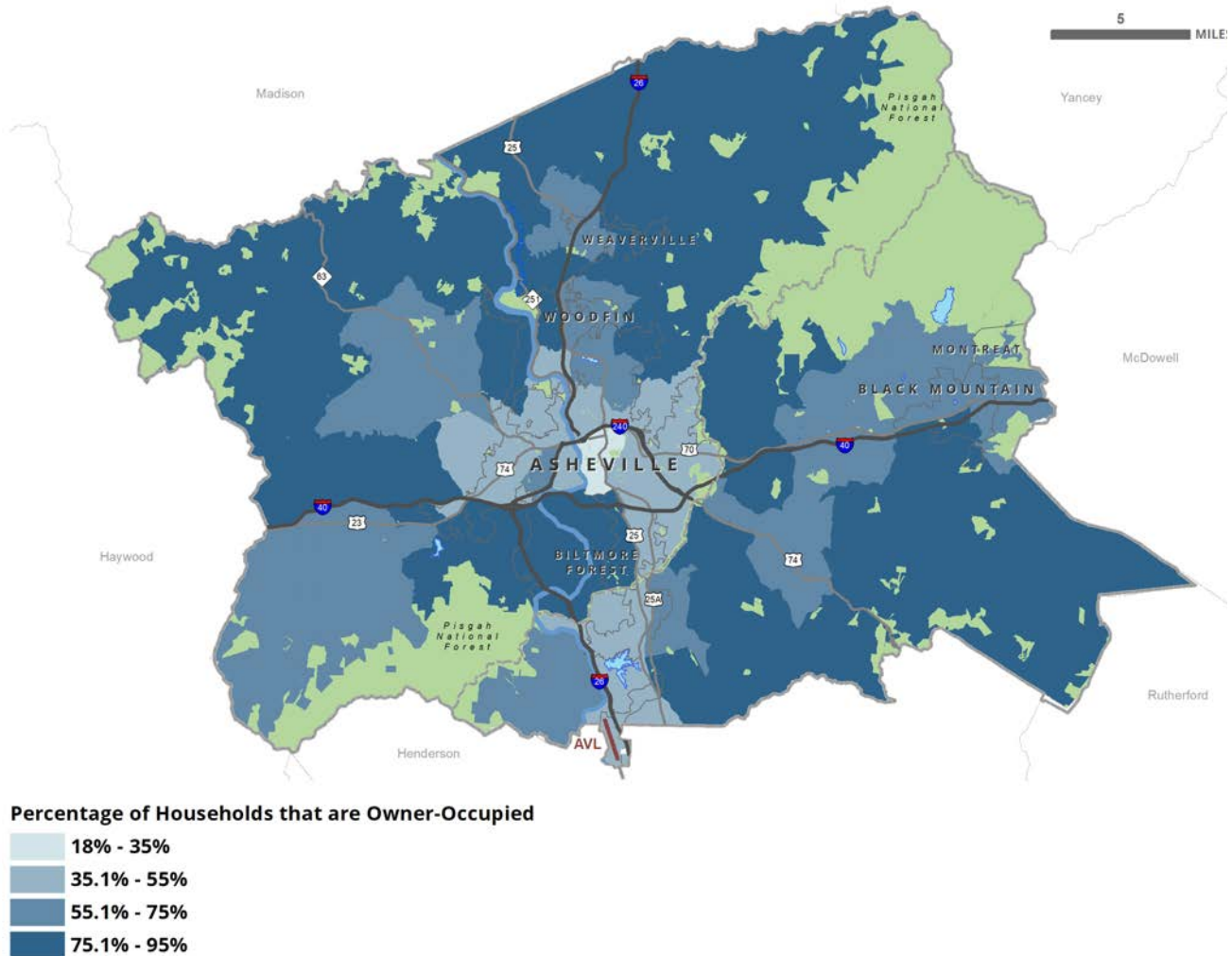


Image courtesy of Buncombe County. Image shows new housing development in Fairview.

Household Tenure

In 2019, approximately 55% of the 123,477 units in Buncombe County were owner-occupied, 30% were renter occupied, and the remainder were seasonally vacant or otherwise unoccupied (see section on next page on Unit Occupancy). The map below shows that in general, owner-occupancy is higher in the County's jurisdiction, and lower within the municipalities where a greater percentage of homes are renter-occupied.

Household Tenure by Census Tract

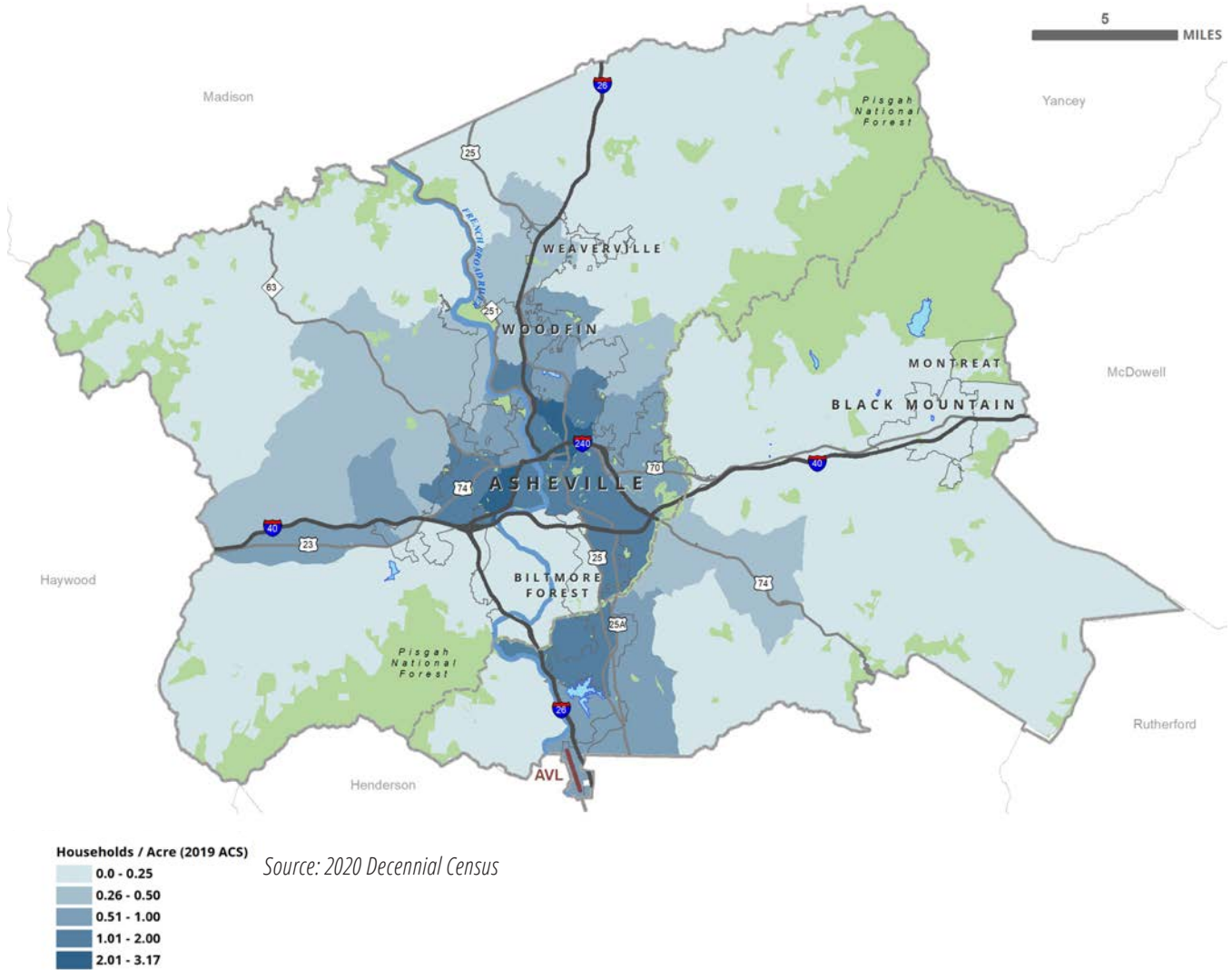


Data Source: ACS 5-year estimates (2019), DP04

Household Density by Census Tract

Household density is highest in and around the municipalities and is highest in Asheville, where the average residential lot sizes are smallest and where the most multi-family residential housing exists. This density gradient is generally expected and correlates with the availability of utilities such as public water or sewer services and tends to follow the major transportation corridors of I-26 to the south and I-40 to the west.

Household Density by Census Tract

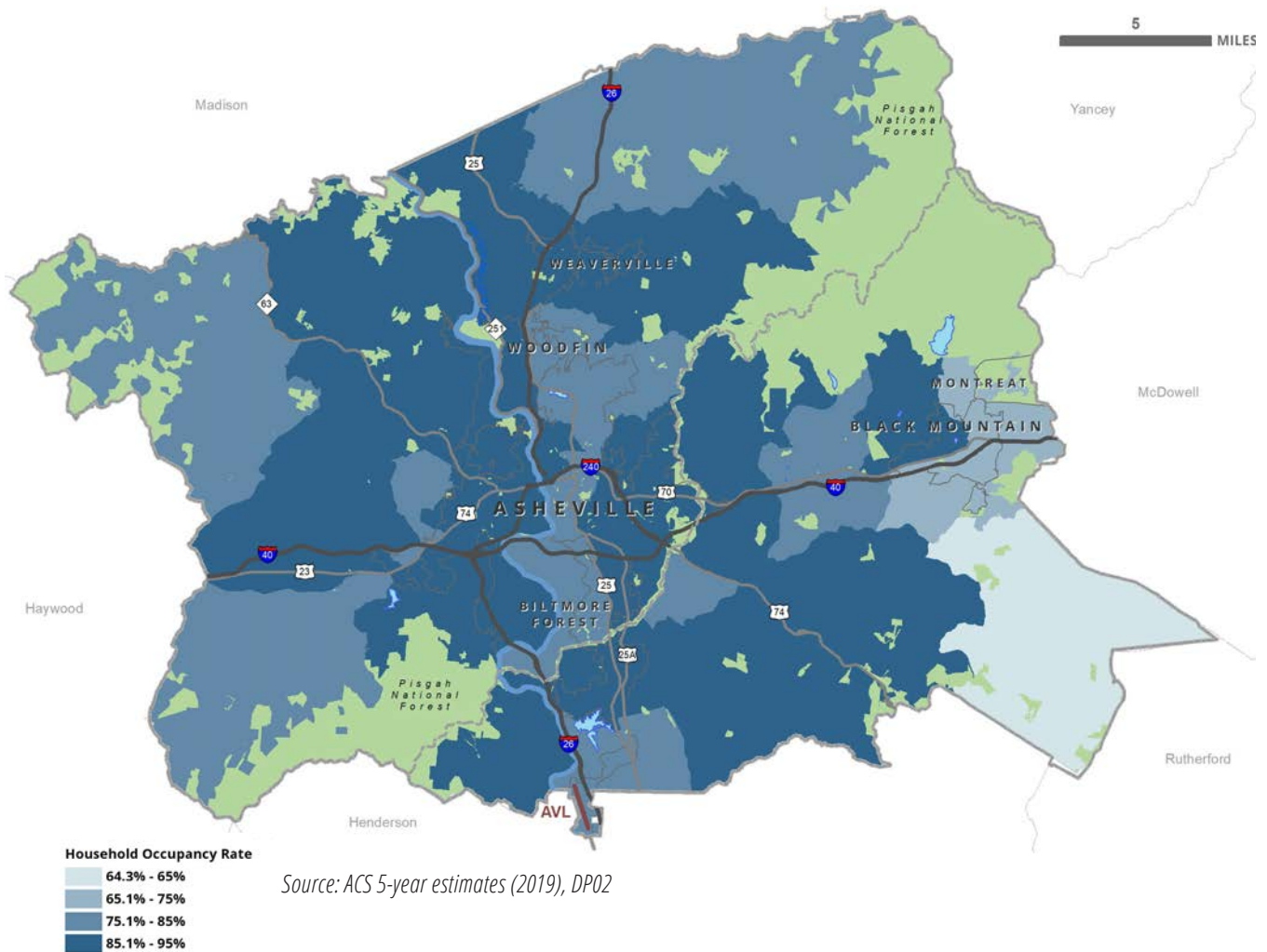


Unit Occupancy Rate

In 2019, Buncombe County's occupancy rate averaged 86.9% compared to 85.7% for the state. Accounting for both rental properties and owner-occupied properties in the County, household occupancy rates varied between 75% and 95% across all census tracts, except for one tract in the southeast portion of the county, which in 2019 was around 65% occupied. Occupancy is defined as being occupied year-round, and many of the "unoccupied" or vacant units are short-term rentals.

Seasonal occupation is a potential concern for the county as an increasing number of units are converted into short-term rentals—particularly in and around the municipalities. Between 2006 and 2010, the seasonal vacancy rate for Buncombe County increased by 33% from 29.3% of vacant units to 39.6%. This reduces the housing stock available for year-round residents. A reduced supply of housing results in an increase in housing values that make it difficult for many households to afford rents or mortgages within the county.

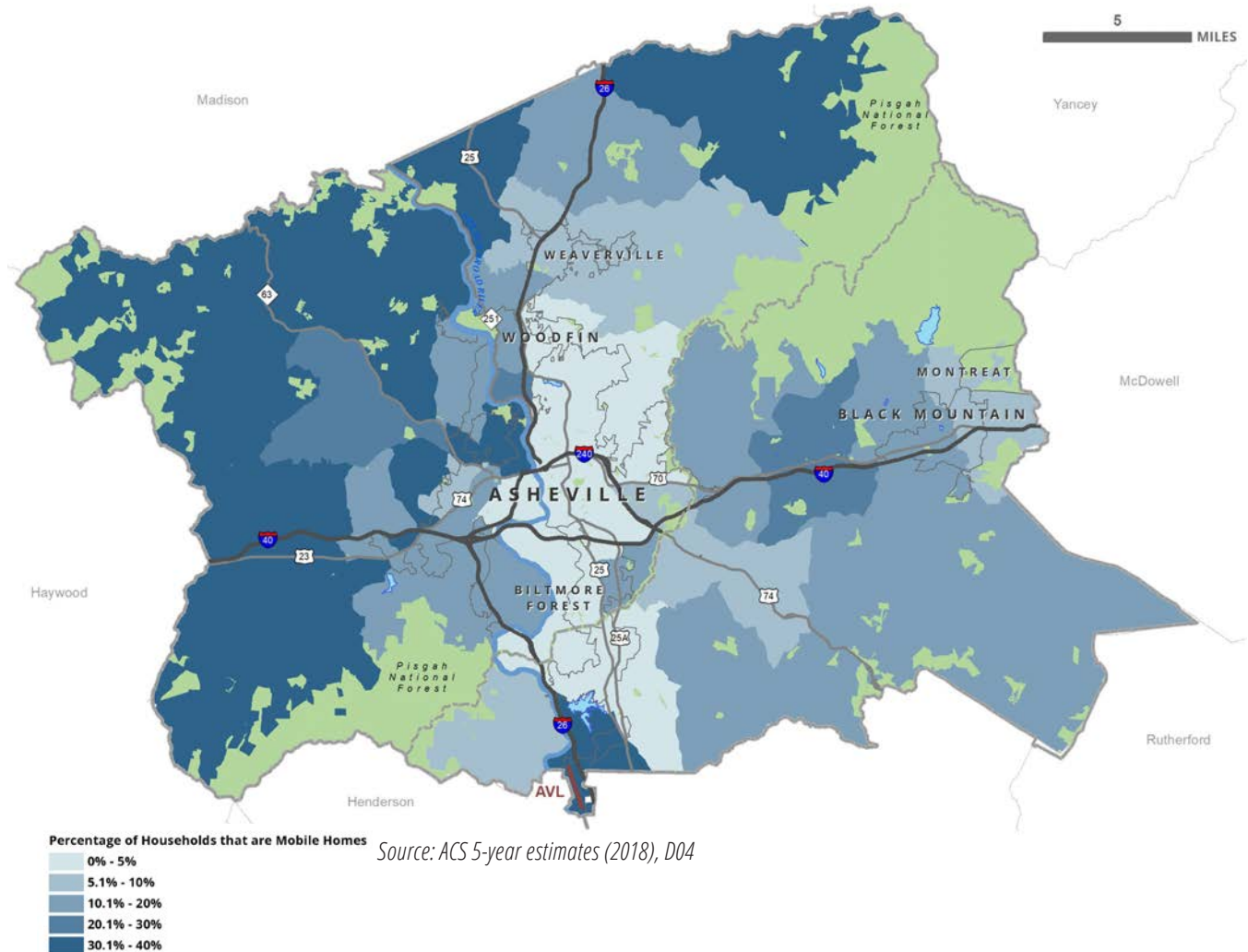
Unit Occupancy Rate by Census Tract



Manufactured Homes

Manufactured homes and manufactured home parks are common in Buncombe County, and in some areas account for a significant percentage of the total households. The highest concentrations occur in the western and northern parts of the county, where rates are as high as 40% in some census tracts. Conversely, within the city limits of Asheville and Biltmore Forest, manufactured homes account for less than 5% of total households.

Manufactured Homes by Census Tract



Housing Values and Trends

Tax Value Per Acre

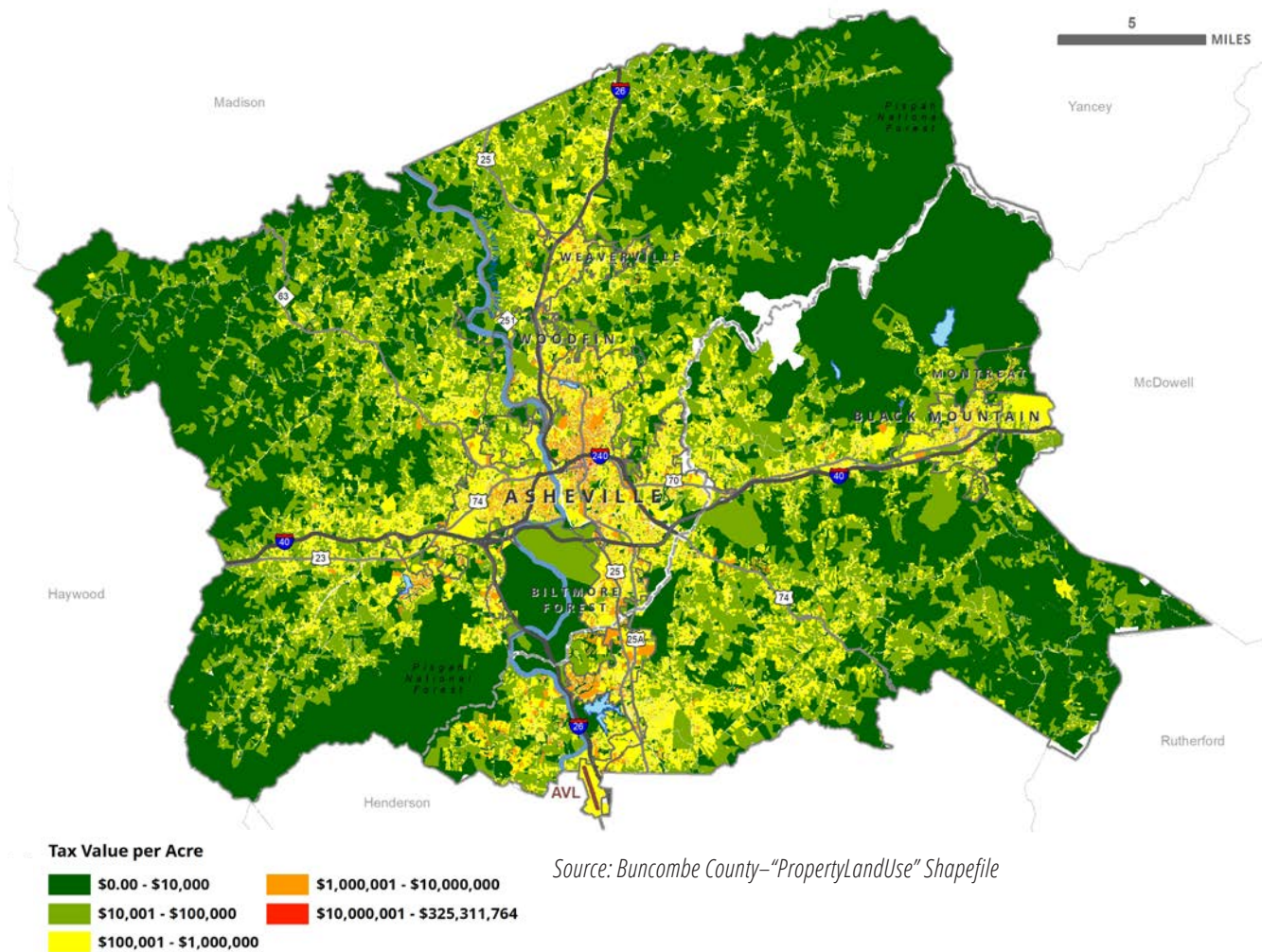
The map below shows the total taxed value of properties on a per-acre, per-parcel basis, accounting for the value of the land plus any improvements. The distribution of higher values is in the heart of the largest and oldest municipalities, becoming less valuable per-acre outside the city limits and into the further reaches of the rural parts of the county.

COUNTY AVERAGE TAX VALUES FOR 1 ACRE OF LAND IN 2021

\$117,715 with improvements

\$32,228 without improvements

Tax Value Per Acre

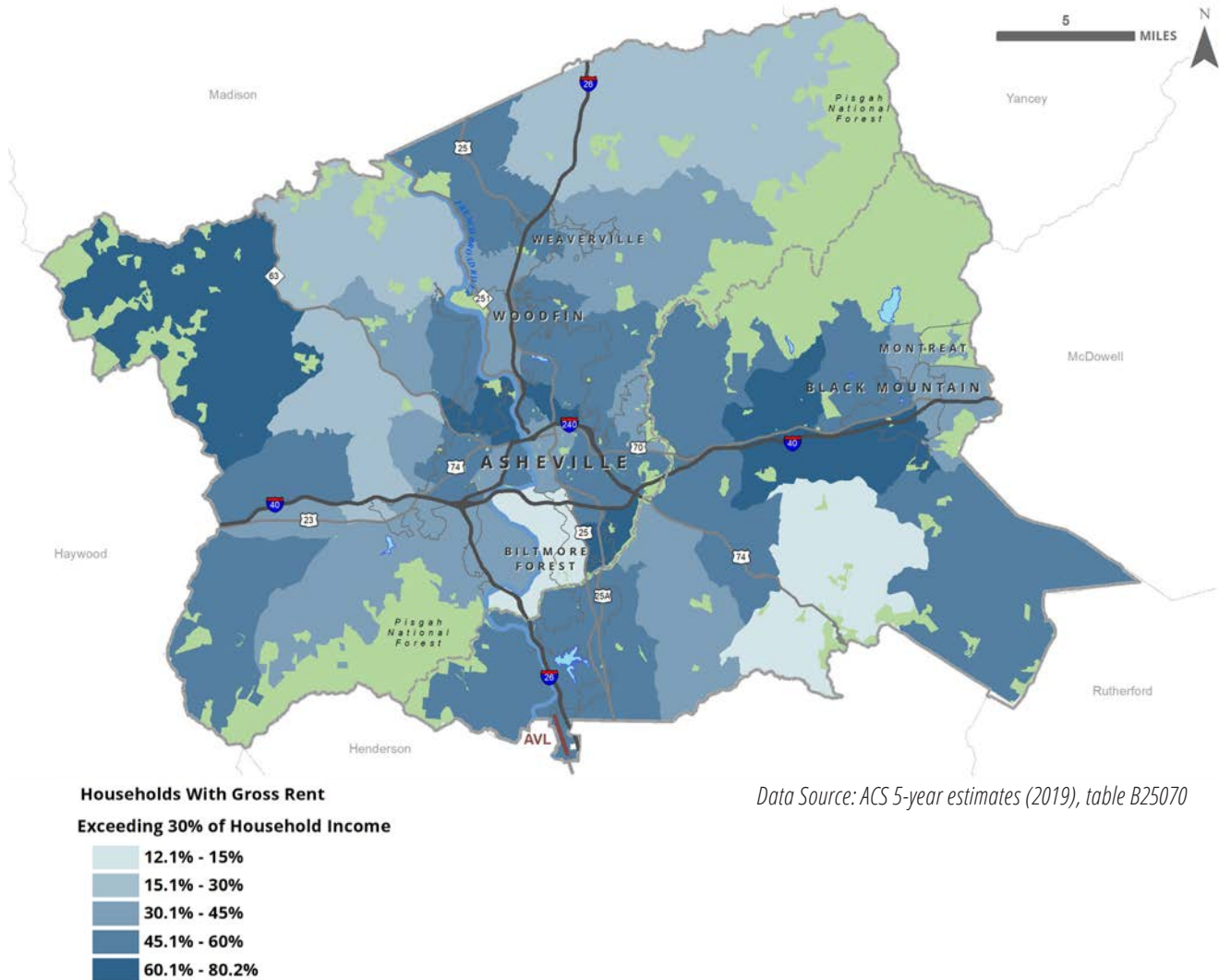


Cost Burdened Households

Households that spend more than 30% of their total annual household income on rent or mortgage are considered to be cost-burdened. The percentage of households with rents greater than 30% of household income have been rising in Buncombe County. Between 2006-2010, it was 52.9%, then raised to 54.7% between 2010-2014, and most recently increased to 56.6% between 2015-2019. This trend is slightly different from the overall state housing cost burdened trend that declined between time periods 2010-2014 and 2015-2019.

The map below considers rental households only and shows the percentage of households, by census tract, that spent more than 30% of their total annual household income on their total gross rent for that year. Several census tracts have a significant number of rental households that exceed this threshold, and in some instances, up to 80% of rental households in a given tract are in this category. The census tract with the lowest number of rental households in this category are in and around the Town of Biltmore Forest. The tracts with the greatest number are spread around the county, with some in the very rural areas of the county, and others in and around the municipalities.

Cost Burdened Rental Households by Census Tract

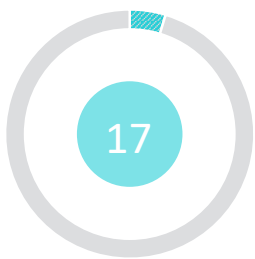
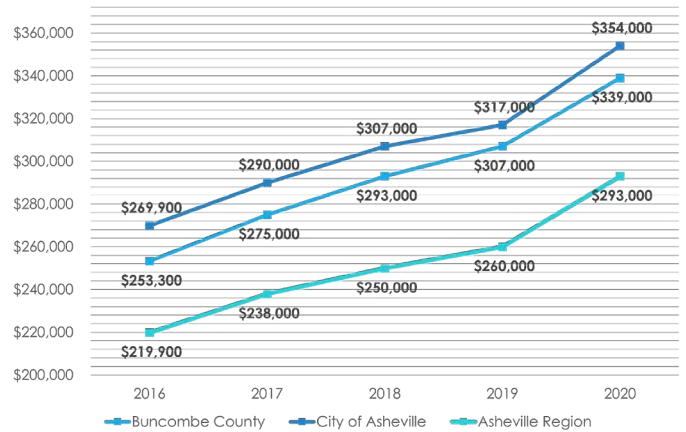


Asheville Area Median Home Sales & Fast Facts

The residential real estate market in Buncombe County has been persistently more expensive than that of the surrounding counties and is likely driven by higher prices in and around Asheville proper. Between 2016 and 2020, the median price of a home sold in the county increased by 33%. In addition to higher prices, the market has generally tightened up, and in 2020 the average house was only on the market for 17 days, 97% of houses sold for at or above the listed price, and more than 30% of closings were in cash.

Where a traditional residential market might hold 6 months of inventory, in Buncombe County in 2020, the market held about 2 months of inventory at a time. These trends combine to make it very difficult for first-time homebuyers to enter the market, or for current owners to move up from their existing homes. The real estate market is notoriously slow-moving due to the time and costs involved with new construction, and all evidence suggests that these trends will continue.

Asheville Area Median Home Sales



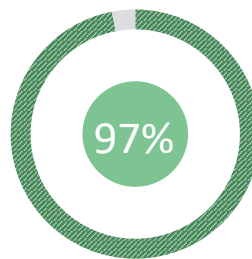
DAYS ON MARKET

Houses in Buncombe County are going under contract quickly.



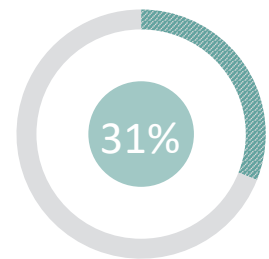
MONTHS OF INVENTORY

Average market has 5-6 months of inventory.



AT OR ABOVE LIST PRICE

Buyers need to be prepared to pay full, or above asking price.



CASH CLOSINGS

It can be harder for buyers to compete in a cash market.

CONSIDERATIONS FOR THE FUTURE

Overview

The physical environment is one of the main reasons residents and visitors are so drawn to Buncombe County. Where and how future development and infrastructure are incorporated into the community is a critical aspect of planning for the success of the county's future. The following planning policy and regulatory ideas are offered for discussion by the community as the plan's policy direction is being developed. They are organized under Transportation, Land Use, and Housing subsections.

Transportation

Address Roads at Capacity:

- Portions of Leicester Highway, Hendersonville Road, and Smokey Park Highway are near or over capacity.
- These roads are in the county's most developed areas, which means that increasing roadway capacity is a complex process and a long-range solution.
- Research indicates that increasing capacity does not always solve an area's congestion problems.¹⁹ Other solutions may need to be considered.

Create Better Integration Between Land Use & Transportation Planning:

- Although the County currently requires TIA submittal for larger subdivisions and projects, the County should look at additional land use policies that integrate development policies with the needs of the transportation system.
- This lack of planning coordination has resulted in congestion in areas intended to have a free-flowing traffic pattern.

- Many neighborhoods lack connectivity, meaning the one-way in/one-way out development pattern forces all drivers onto one road.

Where Development is Increasing, Safety Challenges Need to be Evaluated:

- Safety trends experienced today should be addressed when planning for new development in areas where safety is a challenge.
- For example, based on NCDOT's Planning Level Safety Scoring Data, Alexander Road (a collector street) has a very high score (88 out of 100). While Alexander Road is still a rural road, AADT has increased from 2,100 in 2014 to 2,500 in 2018, most likely due to increased development in the area. As more development comes to the area, safety should be an area of focus.

Plan for Continued Increases in Visitation and Commuting:

- These trends are expected to continue, particularly as Buncombe County's housing prices rise, as well as its popularity as a destination.
- A high amount of daily commuter traffic adds to roadway congestion and warrants the need for regional housing, employment, and transportation options.

Consider Adding Multimodal Options in Urbanizing Areas:

- While many areas in the County do not need dedicated Multimodal facilities, Buncombe County has urbanized areas where this type of infrastructure would provide an alternative to driving a vehicle for every trip, potentially reducing traffic congestion and adding more active and healthy travel options. Example Multimodal options include transit, biking paths, and sidewalks/trails.
- The South Bear Creek area in West Asheville is a good example of an urbanizing area that would benefit from planned bicycle and pedestrian infrastructure.

Planning Policies Should Address that New Transportation Projects are Costly & Take Significant Time:

- It is not likely that Buncombe County will remedy its congestion constraints solely through road development or road improvement projects.
- The County needs other solutions to mitigate existing concerns, and policies that prevent the types of congestion and constraints the County is currently experiencing.

Other Transportation Policy Topics to Consider:

- Planning for freight and rail service should be considered as technologies impact these and other modes of transportation.

Land Use

- For lands located in the Open Use zoning district likely to develop over the next 20 years, consider more strategic zoning or development to help achieve long-term land use goals.
- Coordinate land use planning in corridors and other areas on the edges of municipal jurisdictions to generate more consistent development patterns, protect and uphold the unique character of each place, and implement more consistent development regulations across jurisdictional boundaries. Consider joint small planning efforts for these areas.
- Review developmental ordinances to determine if BIPOC populations are disproportionately and harmfully impacted by their application.

Housing

- Given the projected demand for rental and owner-occupied housing projected for Buncombe County and the expected continuation of demand for smaller housing units identified in the 2021 Bowen National Research's Housing Needs Assessment,²⁰ consider identifying targeted growth areas to accommodate these housing needs.

- Consider opportunities for regional coordination and partnership for development of affordable housing. Consider important solutions like leveraging the local housing land trust and other tools.
- Review the County's affordable housing strategy in light of changing housing needs to address BIPOC population needs across all age groups and types of abilities.
- Consider providing BIPOC populations with improved access to affordable home repair and energy efficiency services.
- Consider methods to eliminate barriers to Fair Housing as defined by the U.S. Department of Housing and Urban Development.
- Consider including policies and strategies to address gaps in service in meeting the needs of the chronically homeless and those experiencing mental health conditions in BIPOC populations.

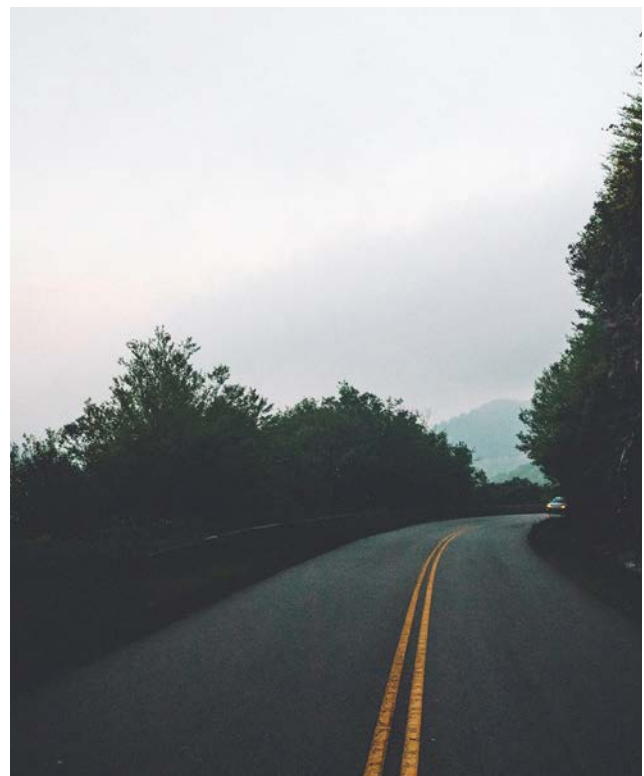


Photo by Wes Hicks on Unsplash - Blue Ridge Parkway, Asheville, NC, United States

Endnotes

- 1 Bowen National Research. *Housing Needs Assessment: Western North Carolina, 2021*. <https://dogwoodhealthtrust.org/wp-content/uploads/2021/10/Western-North-Carolina-Hsg-Needs-Assmt.pdf>
- 2 NCDOT (2021). *Planning Level Safety Score [Data Set]*. <https://ncdot.maps.arcgis.com/home/item.html?id=7415a4df4df1468585225bc74a77369bb>
- 3 Tefft, Brian C. *Impact speed and a pedestrian's risk of severe injury or death*. *Accident Analysis & Prevention*. 50. 2013.
- 4 National Highway Traffic Safety Administration, National Center for Statistics and Analysis. (2022, January). *2019 Data: Pedestrians*. *Traffic Safety Facts*. Report No. DOT HS 813 079.
- 5 Jacobsen, P.L., *Safety in numbers: more walkers and bicyclists, safety walking and bicycling*. *Injury Prevention*, 2003(9): p.205-209.
- 6 U.S. Census Bureau (2019). *Longitudinal Employer-Household Dynamics*. Retrieved from [<https://onthemap.ces.census.gov/>].
- 7 U.S. Census Bureau (2019). *American Community Survey 5-year estimates*. [Data set]. <https://data.census.gov>
- 8 French Broad River MPO. (2020). *Metropolitan Transportation Plan: 2045 Our Path to the Future*. http://frenchbroadrivermpo.org/wp-content/uploads/2020/07/MTP_2045_Web.pdf
- 9 French Broad River MPO. (2020). *Metropolitan Transportation Plan: 2045 Our Path to the Future*. http://frenchbroadrivermpo.org/wp-content/uploads/2020/07/MTP_2045_Web.pdf
- 10 According to NCDOT Division 13, the most up-to-date source for bicycle and pedestrian infrastructure along NCDOT roads is the PBIN database. The database does not differentiate between sidewalks that are private, public, or developed to serve a single apartment complex or shopping center. The total miles of sidewalk presented here includes all sidewalks in the database, with the exception of sidewalks in Biltmore Lake and The Ramble subdivisions, which have the largest concentrations of sidewalks in the County, but are all along private streets (The Ramble) or a combination of public and private streets (Biltmore Lake).
- 11 FBRMPO *Regional Transit Plan Final Report, August 2021*. <http://frenchbroadrivermpo.org/wp-content/uploads/2021/08/FBRMPO-Regional-Transit-Plan-Final-Report-August-2021.pdf>
- 12 <https://www.ncdot.gov/divisions/aviation/Documents/state-of-aviation.pdf>
- 13 This is a broad overview of the planning steps. The FBRMPO's website provides a detailed description of the planning process: <http://frenchbroadrivermpo.org/about-us/>
- 14 The SPOT process is directed by NCDOT's Strategic Prioritization Office of Transportation (SPOT).
- 15 U.S. Census Bureau (2019). *American Community Survey 5-year estimates*. [Data set]. <https://data.census.gov>
- 16 French Broad River MPO. (2020). *Metropolitan Transportation Plan: 2045 Our Path to the Future*. http://frenchbroadrivermpo.org/wp-content/uploads/2020/07/MTP_2045_Web.pdf
- 17 French Broad River MPO. (2020). *Metropolitan Transportation Plan: 2045 Our Path to the Future*. http://frenchbroadrivermpo.org/wp-content/uploads/2020/07/MTP_2045_Web.pdf
- 18 FBRMPO *Regional Transit Plan Final Report, August 2021*. <http://frenchbroadrivermpo.org/wp-content/uploads/2021/08/FBRMPO-Regional-Transit-Plan-Final-Report-August-2021.pdf>
- 19 Bowen National Research. *Housing Needs Assessment: Western North Carolina, 2021*. <https://dogwoodhealthtrust.org/wp-content/uploads/2021/10/Western-North-Carolina-Hsg-Needs-Assmt.pdf>
- 20 *Transportation for America (2020, March)*. *The Congestion Con: How More Lanes and More Money Equals More Traffic*. <https://t4america.org/wp-content/uploads/2020/03/Congestion-Report-2020-FINAL.pdf>