



# ANALYSIS OF BUNCOMBE COUNTY, NORTH CAROLINA

## ECONOMIC IMPACT, JOBS, AND HOUSING ANALYSIS Fall 2021



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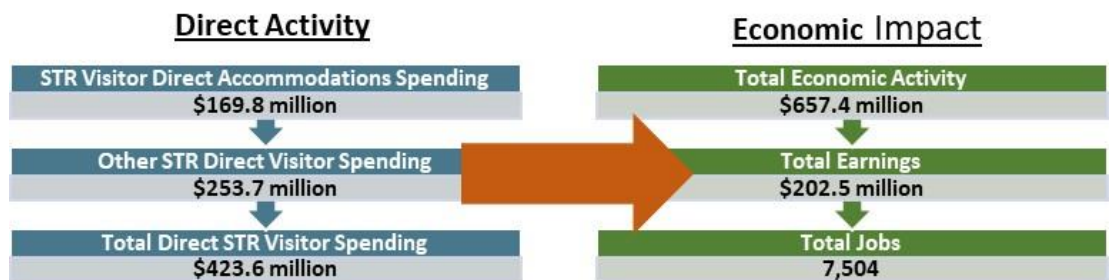
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## Economic Impact Study Overview/Summary

The popularity of short-term rentals (STRs) has surged as a lodging choice for travelers in almost all communities in the United States, allowing greater consumer choice as to the range and nature of travel accommodations. As the North Carolina tourism and travel industry continues to grow, STRs have become an important part of the lodging market in communities such as Asheville/Buncombe County (Asheville), especially in light of the COVID-19 pandemic.

This study calculates the economic impact of STRs on Asheville using information based on the most recently available data provide by the Vacation Rental Management Association (VRMA). To set the context, the report provides a discussion of recent trends in tourism in Asheville as well as the specific characteristics of the regions's STR market. Estimates are then produced of the additional spending in the local economy by visitors who stay in STRs. The analysis then calculates the total economic impacts.

### Major Findings



The direct spending by STR guests in Asheville/Buncombe County yielded a total impact of over \$657 million in economic activity, value-added of just under \$950 million, over \$400 million in annual earnings, and almost 18,000 jobs last year. To put these figures in context, the economic activity attributable to STRs is the equivalent of about 20 percent of the reported aggregate impact of travel to the region during 2019. As would be expected, the lion's share of the activity

tends to be found in consumer-driven segments of the economy such as food services, retail trade, and arts & entertainment.

It is increasingly clear that in Asheville, as in other areas of the country, STR activity is serving to expand the lodging market by providing a complementary good. STRs serve a specific market - the casual leisure traveler. This traveler typically is interested in lodging options with amenities and geographic locations not fully satisfied by more traditional choices, a point especially emphasized during the pandemic. As a result, a region's overall travel and tourism industry activity, and the resulting local economic impact, today more than ever is increased by including STRs in the available lodging options.

## Asheville Tourism

### Overall Travel & Tourism Impact

The Buncombe County Tourism Development Authority (BCTDA) reports that the total economic impact of local tourism reached \$3.3 billion during 2019, the most-recently available data. Tourism Economics, the firm engaged by BCTDA to develop the analysis, found that:

- Visitors to Asheville spent \$2.2 billion in 2019, which generated \$3.3 billion in total business sales, including indirect and induced impacts.
- Tourism-sustained jobs generated total income of \$881 million in 2019 up from \$840 million in 2017.
- A total of 27,938 jobs (14.6% of total County employment) were sustained by visitors to Asheville in 2019. This included 18,890 direct and 9,048 indirect and induced jobs.
- Tourism in Asheville generated \$392 million in tax revenues in 2019, with \$213 million accruing to state and local governments.

Visitor spending increased 10.2% between 2017 and 2019 to reach \$2.2 billion. Over the past five years, spending has cumulatively increased 23%. The number of visits to Asheville increased from 10.3 million visits in 2015 to just under 11.9 million visits in

2019, resulting in cumulative growth of 15%, while direct employment generated by visitors has expanded 8% since 2015. Taken together, it is evident that Tourism Economics conclusion that “the visitor economy is an engine for economic growth” is correct.

### **Trends in the Lodging Sector**

As the local tourism sector in general has expanded in recent years, the lodging industry component of travel also has seen strong revenue growth, growing at a 6 percent compound annual rate from May 2015 to May 2021. The impact of the pandemic obviously was severe, but recent indicators suggest that local travel activity (at least as of the beginning of Summer 2021) was largely back to pre-pandemic levels.

*Figures in this Section are Data from the Month of May*

**Figure 1: Hotel Occupancy in Buncombe County**



Source: Smith Travel; TXP, Inc.

**Figure 2: Total Monthly Lodging Revenue (\$Millions)**



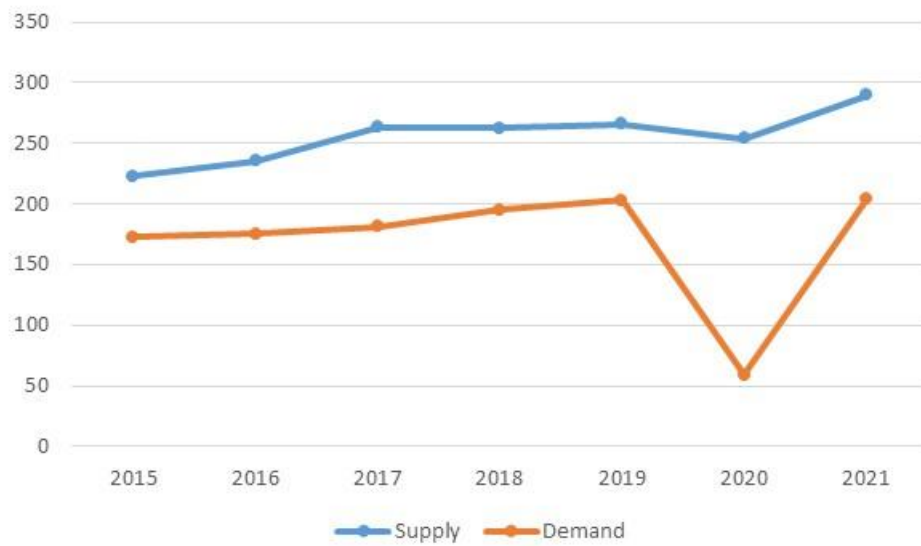
Source: Smith Travel; TXP, Inc.

**Figure 3: Revenue per Available Room (RevPAR)**



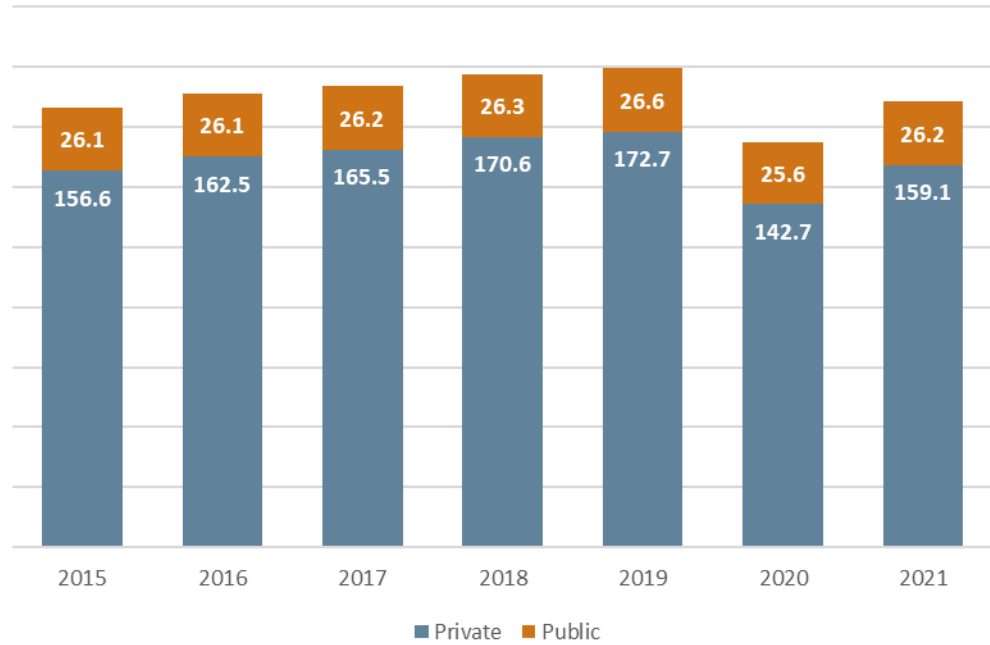
Source: Smith Travel; TXP, Inc.

**Figure 4: Supply and Demand (000s of Room Nights)**



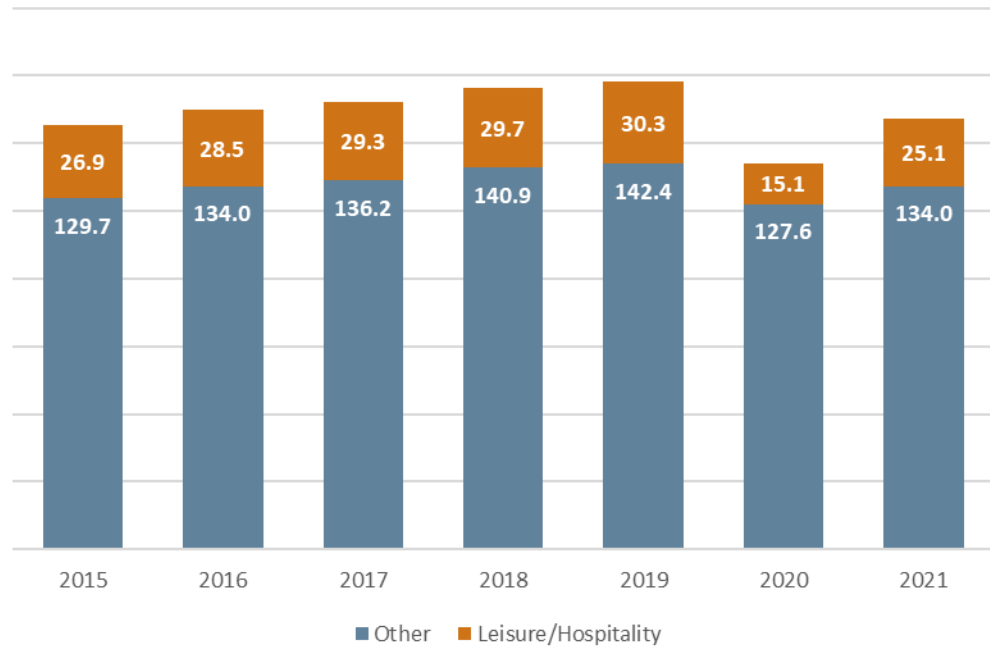
Source: Smith Travel; TXP, Inc.

**Figure 5: MSA Employment: Public Sector vs. Private (000s)**



Source: Bureau of Labor Statistics; TXP, Inc.

**Figure 6: MSA Employment: Leisure/Hospitality vs. Other Sector (000s)**



Source: Bureau of Labor Statistics; TXP, Inc.



## Short Term Rentals in Asheville

Vacation rental properties have been part of the accommodations market for decades in some of North Carolina's most popular tourism destinations, especially in the Asheville region. Identifying the exact number of unique STR properties in the state at any given point is a challenge, given the ability of hosts to market their properties on multiple sites, the use of primary residences as part-time STRs, and the use of STR websites by more traditional lodging accommodations. As a result, the focus of the direct impact of STRs for this report is on dollars generated – in other words, how much was spent by overall by visitors who stay in STRs

### Economic Impact Calculations

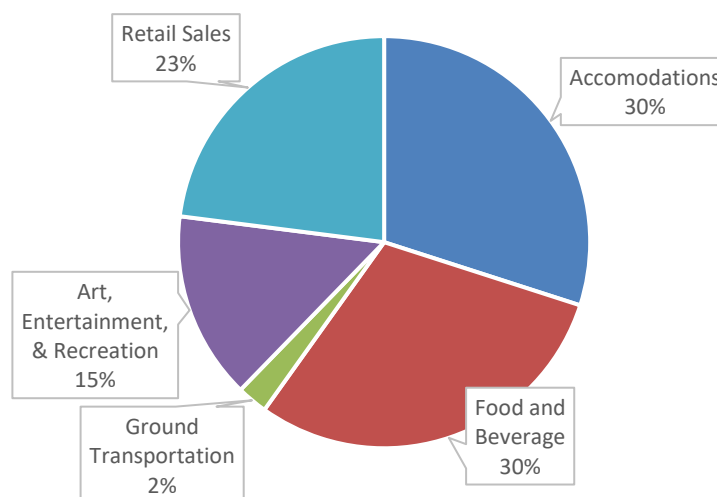
The 2020 economic impact of STRs in Asheville was calculated as follows. First, aggregate direct accommodations spending of visitors using STRs (not including studios or one-bedrooms), totaled \$169.8 million being spent last year.<sup>1</sup> Next, this spending figure was used as the basis of calculating the STR guest spending on other tourism purchase categories, such as entertainment and food.<sup>2</sup> In other words, for every dollar spent on lodging at an STR, a traveler might spend an equivalent amount on food and beverage. The result was total direct spending attributable to STRs of \$423.6 million last year. This direct spending was used to estimate the ripple effects, i.e., the induced and indirect impacts, with the total economic impact the combination of all three.

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<sup>1</sup> Data was provided by the Vacation Rental Management Association (VRMA).

<sup>2</sup> *The Economic Impact of Visitors in Asheville 2019* by Tourism Economics provides a breakdown of direct visitor spending by category. TXP used state and national ratios to narrow transportation spending to that which occurs locally, removing air transportation spending.

**Figure 7: 2020 Estimated Direct STR Visitor Spending by Category (\$millions)**



Source: Buncombe County TDA, TXP, Inc.

### **Economic Impact Methodology**

The second step in the process is to translate the direct impact into the total economic impact through an input-output model of the Asheville MAS economy and each of the subregions that allows measurement of the secondary, or “ripple” effects.

Economists use a number of statistics to describe regional economic activity. Four common measures are:

- Output (also known as Economic Activity and equivalent to top-line revenue), which describes total economic activity and is equivalent to a firm’s gross sales or top-line;
- Value Added which equals gross output of an industry or a sector less its intermediate inputs or purchases from other firms used in the production process;
- Labor Income which corresponds to wages and benefits; and
- Employment which refers to jobs that have been created in the local economy.

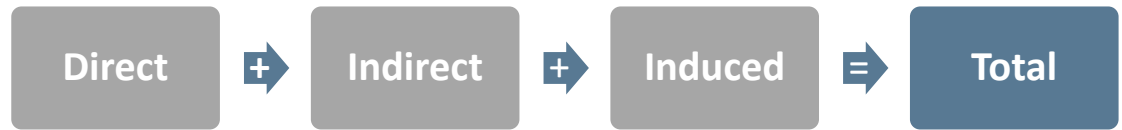
The economic impacts extend beyond the direct activity outlined above. In an input-output analysis of new economic activity, it is useful to distinguish three types of expenditure effects: direct, indirect, and induced.

**Direct effects** are production changes associated with the immediate effects or final demand changes. The payments made by a visitor to a hotel operator or taxi driver are examples of a direct effect.

**Indirect effects** are production changes in backward-linked industries caused by the changing input needs of directly affected industries – typically, additional purchases to produce additional output. Satisfying the demand for an overnight stay will require the hotel operator to purchase additional cleaning supplies and services, for example, and the taxi driver will have to replace the gasoline consumed during the trip from the airport. These downstream purchases affect the economic status of other local merchants and workers.

**Induced effects** are the changes in regional household spending patterns caused by changes in household income generated from the direct and indirect effects. Both the hotel operator and taxi driver experience increased income from the visitor's stay, for example, as do the cleaning supplies outlet and the gas station proprietor. Induced effects capture the way in which this increased income is spent in the local economy.

**Figure 8: The Flow of Economic Impacts**



The interdependence between different sectors of the economy is reflected in the concept of a “multiplier.” An output multiplier of 2.5 for example, means that for every \$1,000 injected into the economy, all other sectors produce an additional \$1,500 in output. The larger the multiplier, the greater the economic impact. In this analysis, TXP used the RIMS II input-output multipliers produced by the U.S. Bureau of Economic Analysis for the Asheville MSA.

### **Economic Impact Results**

The direct spending by STR guests Asheville in 2020 yielded a total impact of over \$657 million in economic activity, value-added above \$376 million, over \$202 million in annual earnings, and about 7,500 full-time, permanent jobs. To put these figures in context, the economic activity attributable to STRs is the equivalent of about 20 percent of the reported aggregate impact of travel to the region during 2019.

The table that follows details the total impacts statewide and for the submarkets, both summarized and detailed by industry sector. As would be expected, the lion’s share of the activity tends to be found in consumer-driven segments of the economy such as food services, retail trade, and arts & entertainment. Of note is the fact that direct STR lodging spending is allocated to the household sector, rather than the accommodations sector, since revenue flows to private homeowners.

Further benefits accrue to state and local governments in the form of taxes assessed on direct spending by STR guests, as well as revenues generated by the ripple effects of that spending. Tourism tends to generate a high proportion of tax revenue compared to other industries. Most goods and services purchased by visitors are taxed, and many at a higher rate than other goods.

**Figure 9: Total 2020 STR Asheville MSA Economic Impact of STRs (\$millions)**

	Output	Value-Added	Earnings	Jobs
Agriculture, etc.	\$1.7	\$0.7	\$0.6	19
Mining	\$0.1	\$0.1	\$0.0	0
Utilities	\$17.1	\$10.0	\$2.5	21
Construction	\$4.9	\$2.5	\$1.8	34
Durable Manufacturing	\$8.5	\$3.4	\$1.8	34
Non-Durable Manufacturing	\$20.6	\$6.0	\$3.4	71
Wholesale Trade	\$15.4	\$9.2	\$3.8	50
Retail Trade	\$93.9	\$59.8	\$32.3	1,233
Transportation & Warehousing	\$27.5	\$11.4	\$8.8	418
Information	\$11.3	\$6.1	\$2.3	35
Finance & Insurance	\$13.7	\$7.4	\$3.5	65
Real Estate	\$56.8	\$41.7	\$8.7	390
Professional Services	\$13.5	\$8.9	\$6.8	98
Management of Firms	\$4.7	\$2.9	\$2.1	20
Administrative & Waste Services	\$12.5	\$7.9	\$5.1	154
Educational Services	\$4.6	\$3.2	\$2.1	56
Health Services	\$52.4	\$32.0	\$22.6	436
Arts/Entertainment/Recreation	\$87.0	\$50.9	\$28.7	1,505
Accommodation	\$5.6	\$3.3	\$1.5	47
Food Services	\$186.1	\$97.5	\$56.4	2,570
Other Services	\$19.6	\$10.8	\$7.3	209
Households	N.A.	N.A.	\$0.4	38
<b>Total Annual</b>	<b>\$657.5</b>	<b>\$376.3</b>	<b>\$202.5</b>	<b>7,504</b>

Source: TXP, Inc.

## Conclusions

STRs are an important and growing part of the North Carolina's tourism industry, especially in smaller markets that cater to leisure travelers. It is increasingly clear that in Asheville, as in other areas of the country, STR activity is serving to expand the lodging market by providing a complementary good: as STR revenues have climbed dramatically in the past few years, hotel occupancy rates and revenues (prior to the pandemic) have also continued to increase in the vast majority of local markets in North Carolina and across the nation. STRs serve a specific market - the casual leisure traveler. This traveler typically is interested in lodging options with amenities and geographic locations not fully satisfied by more traditional choices, a point especially emphasized during the pandemic. As a result, a region's overall travel and tourism industry activity, and the resulting

local economic impact, today more than ever is increased by including STRs in the available lodging options.

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## Housing Study

### About RCLCO

Since 1967, RCLCO has been the “first call” for real estate developers, investors, the public sector, and non-real estate companies and organizations seeking strategic and tactical advice regarding property investment, planning, and development.

RCLCO leverages quantitative analytics and a strategic planning framework to provide end-to-end business planning and implementation solutions at an entity, portfolio, or project level. With the insights and experience gained over 50 years and thousands of projects—touching over \$5B of real estate activity each year—RCLCO brings success to all product types across the United States and around the world.

Learn more about RCLCO at [www.RCLCO.com](http://www.RCLCO.com).

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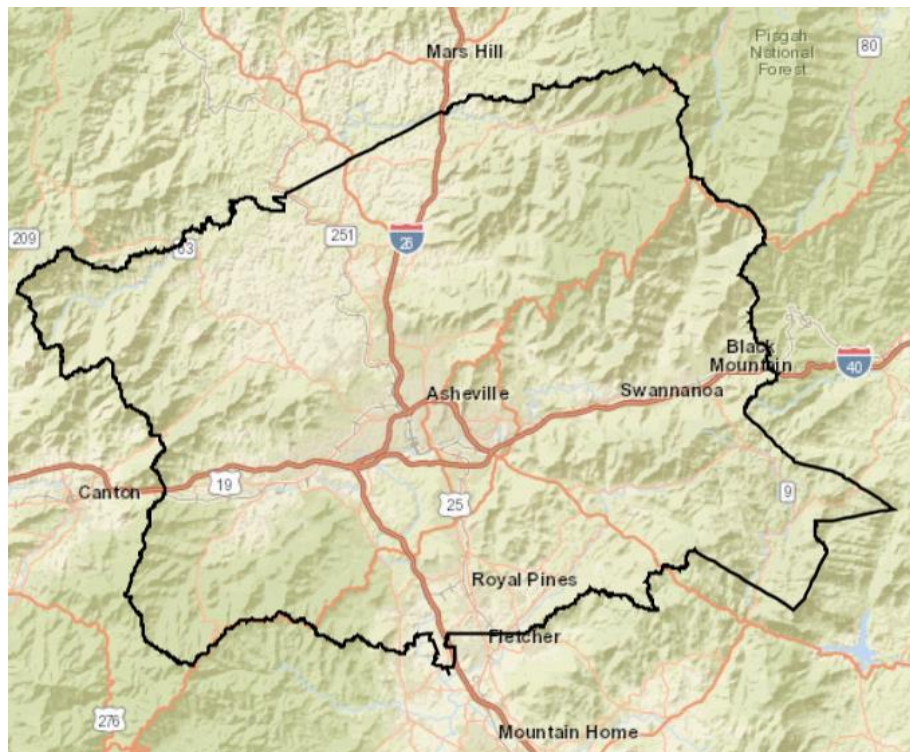


## Housing Study Objectives

Smart City Policy Group has engaged RCLCO to complete a third-party analysis of the impact of short-term rentals (STRs) on the housing supply in Buncombe County, North Carolina. Given the introduction of STRs to the market in 2014 and corresponding rise in total listings, the specific objectives of this effort are as follows:

- ▶ Identify tourism trends and tax revenue in Buncombe County
- ▶ Assess housing supply statistics by tenure (including owner-occupied versus renter-occupied, as well as vacant units)
- ▶ Evaluate STR supply characteristics, including occupancy and average daily rate trends
- ▶ Regarding how the STR market is impacting the housing supply, analyze concurrent rent increases and home price appreciation, and compare the STR supply (number of bedrooms) to the dominant household types to get a sense of whether STRs are reducing housing supply for primary residences and contributing to rising prices/rents.

### Map of Subject Area; Buncombe County, NC





## Key Findings

### **SHORT-TERM RENTALS ACCOUNT FOR A MINOR SHARE OF THE COUNTY'S OVERALL HOUSING STOCK, WITH NO SIGNIFICANT CORRELATION BETWEEN STRS AND COUNTY HOME PRICES OR HOUSING INVENTORY**

- ▶ Buncombe County, NC, heavily relies on tourism to sustain the local economy, workforce, and tax revenue, with Buncombe County Tourism Development Authority estimating that tourism supports one in seven jobs. The regional economy has experienced a severe downturn during the COVID-19 pandemic due to a decline in tourism, impacting employment and local tax generation. Moving forward, the region is projected to experience a slower rebound than the United States as a whole, given the region's employment distribution.
- ▶ Before the COVID-19 pandemic, Asheville MSA and Buncombe County experienced robust growth throughout the 2010s, with solid employment and household growth. The area's appealing quality of life; access to education, healthcare, entertainment, recreation, and employment; and proximity to multiple large East Coast markets.
- ▶ Despite the robust household growth over the past decade, single-family and multifamily permitting for new construction have been muted, contributing to the rapid appreciation of homes. The Buncombe County housing market is complex, with numerous variables contributing to the rise in home prices, though few variables substantially influence the overall housing market.
- ▶ The nation has experienced one of the longest bull markets in history, contributing to growth and appreciation across many assets and sectors of the economy, including for-sale housing and tourism. Though many components of the national economy have increased over this period, few are significantly correlated.
- ▶ Short-term rentals represent a small fraction of Buncombe County's housing stock, representing less than 3% of total housing units. The small share of housing limits the significance and impact STRs have on the region's housing supply.
- ▶ To help understand the impact that STRs have had on the local housing market, RCLCO conducted a detailed regression analysis of 17 variables, including demographic, economic, housing, and STR data points over the past four years.

- ▶ Through the analysis, RCLCO discovered no correlation between the rise of STRs and local housing prices or housing availability in Buncombe County. Instead, population growth, interest rates, monthly housing inventory, and the expansion of the national housing market (i.e., the general expansion of the national economy and housing markets) have the highest correlation to home price increases across Buncombe County.
- ▶ Like many popular and high-growth markets, new housing supply has not kept pace with housing demand; however, there is no significant correlation between the growing STR market (representing less than 3% of total housing stock) and the County's housing market. Instead, STRs have helped accommodate the expansion of the region's economy, contributing to employment, wage growth, and additional tax revenue.

## Regional Employment Dynamics

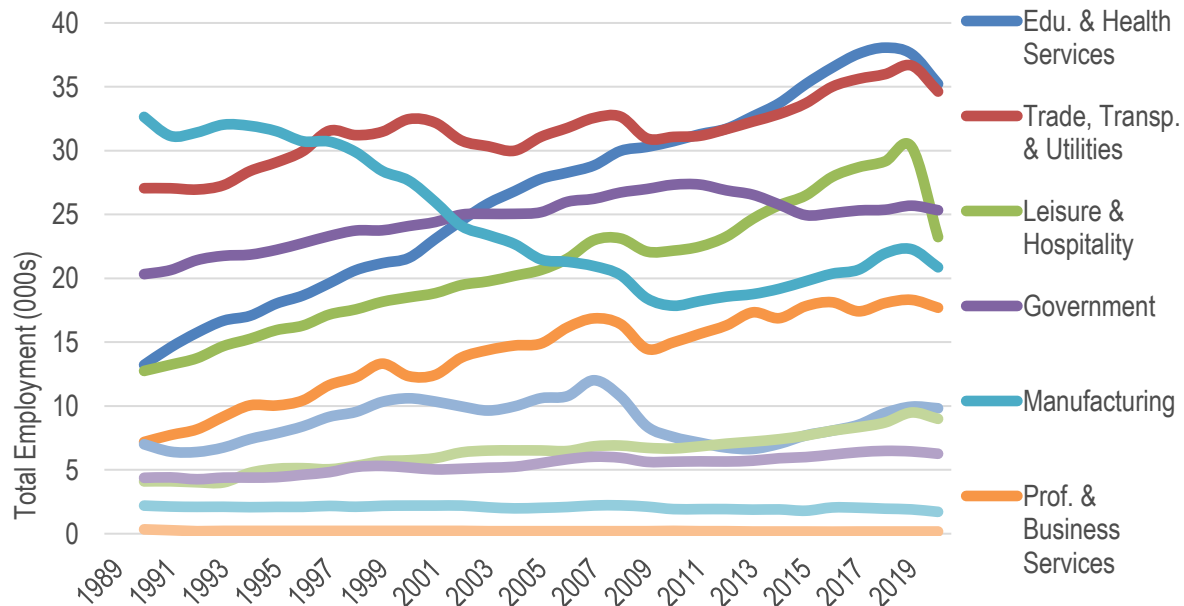
### **STRONG ECONOMIC GROWTH OVER THE PAST DECADE, BUT COVID-19-INDUCED CONTRACTION EXPECTED TO HAVE LASTING IMPACTS ON THE REGIONAL ECONOMY**

The Asheville MSA, including Buncombe County, experienced robust employment growth between 2010 and 2019, adding 3,600 new jobs annually, with growth fueled by the expansion of the region's leisure & hospitality industry, and education & health services sector. The rapid expansion of employment during this period elevated household growth and contributed to healthy wage increases. Unfortunately, the COVID-19 pandemic caused disproportionate disruption in the region's vital employment sectors of tourism & hospitality and education & health services, causing significant job losses. Moving forward, Moody's Analytics projects a comparatively slow recovery relative to the nation as a whole. However, given the dynamic nature of the recovery, the region could outperform existing projections, especially if tourism demonstrates a rapid recovery.

INDUSTRY	TOTAL GROWTH		AVG. ANNUAL		DISTRIB. TOTAL
	#	%	#	%	
Leisure & Hospitality	8,127	36.7%	903	3.5%	15.2%
Edu. & Health Services	6,836	22.2%	760	2.3%	18.9%
Trade, Transp. & Utilities	5,587	18.0%	621	1.9%	18.4%
Manufacturing	4,426	24.8%	492	2.5%	11.2%
Prof. & Business Services	3,328	22.2%	370	2.3%	9.2%
Other Services	2,820	42.3%	313	4.0%	4.8%
Construction	2,376	31.4%	264	3.1%	5.0%
Financial Activities	804	14.3%	89	1.5%	3.2%
Information	-24	-1.2%	-3	-0.1%	1.0%
Natural Resources	-32	-15.3%	-4	-1.8%	0.1%
Government	-1,643	-6.0%	-183	-0.7%	12.9%
<b>TOTAL</b>	<b>32,605</b>	<b>19.6%</b>	<b>3,623</b>	<b>2.0%</b>	<b>100.0%</b>

### Total Employment by Sector

Asheville, NC MSA; 2010-2020



Source: Moody's Analytics; Bureau of Labor Statistics

## Population & Income

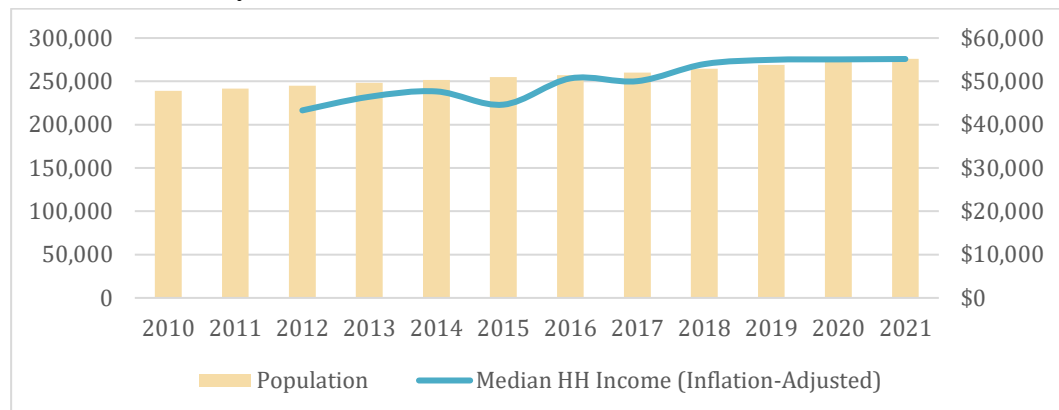
### POPULATION AND TOTAL HOUSING UNITS IN BUNCOMBE COUNTY HAVE GROWN STEADILY

Buncombe County has experienced consistent population growth over the past decade, increasing its share of total Asheville, NC MSA population (including Buncombe, Haywood, Henderson, and Madison counties) from 56% in 2010 to 59% in 2021, with this share expected to continue increasing. Between 2010 and 2021, Buncombe County averaged approximately 3,400 new people annually, with peak population growth in 2019 with nearly 4,800 new people. The area's attractive quality of life and access to employment and healthcare have contributed to the increasing appeal of the region.

Buncombe County residents have experienced healthy wage increases over the past decade, averaging 2.7% annually (adjusted for inflation). Esri currently estimates median household incomes in Buncombe County of \$55,150, up from \$43,300 in 2012. Economic growth between 2010 and 2019 and the in-migration of more affluent households are critical factors in the increase in household incomes.

### Population and Median Household Income

Buncombe County, NC; 2012-2021



Source: Esri; ACS 1-Year Estimates; RCLCO

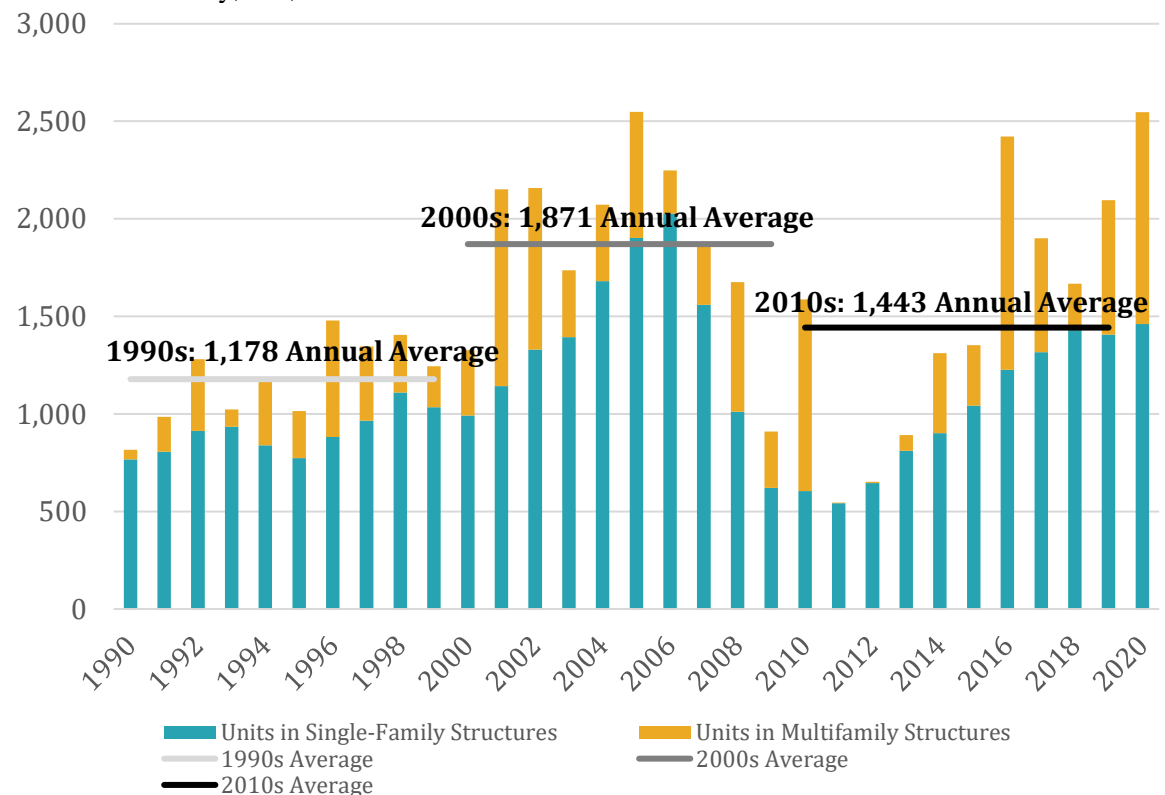
## Permitting & Household Growth

### DESPITE SIMILAR HOUSEHOLD GROWTH IN THE 2010S AS THE 2000S, BUNCOMBE COUNTY IS BUILDING NEARLY 25% FEWER HOUSING UNITS, ANNUALLY

Similar to other high growth regions across the United States, permitting activity and new housing construction in Buncombe County has lagged household growth. Despite relatively comparable annual household growth rates in the 2000s and 2010s, the County issued approximately 25% fewer total housing permits, including single-family and multifamily properties. This underbuilding of housing has contributed to significant property and rent appreciation over the past 10 years. As the area has become less affordable due partly to the shortage of new construction, multifamily properties have accounted for an increasing share of permitting activity, growing from 23% of total permits in the 1990s to 31% in the 2010s. Currently, approximately 63% of the County's housing stock is comprised of owner households, with the share of owner households slightly declining with the growing affordability concerns.

#### Residential Permitting Activity

Buncombe County, NC; 1990-2020



Source: U.S. Bureau for Housing and Urban Development

## For-Sale Housing Trends

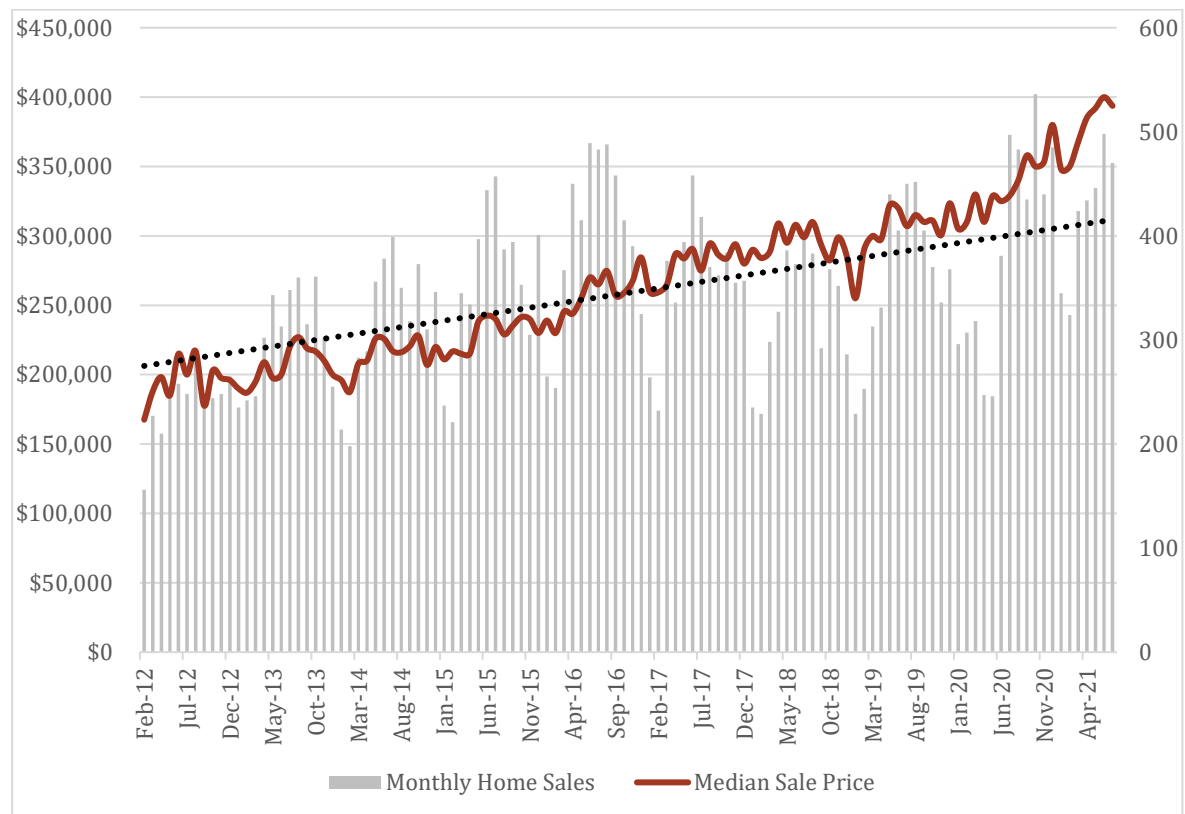
### **SINCE 2012, EXISTING HOMES IN BUNCOMBE COUNTY HAVE APPRECIATED BY APPROXIMATELY 8%, ANNUALLY**

As referenced on the previous pages, strong household growth, wage growth, and limited new housing permits have contributed to appreciating home values across the County. Since 2012, existing homes have appreciated at a compound annual growth rate of 7.9%. The County has a median sale price year-to-date in 2021 of approximately \$380,000 compared to approximately \$200,000 in 2012.

While home sales increased between 2012 and 2015, annual home sales remained relatively flat between 2015 and 2020, with annual sales generally within 10% of the average over that period.

### **Existing Home Sales and Median Sale Price**

Buncombe County, NC; 1990-2020



Source: Association of Realtors; Redfin

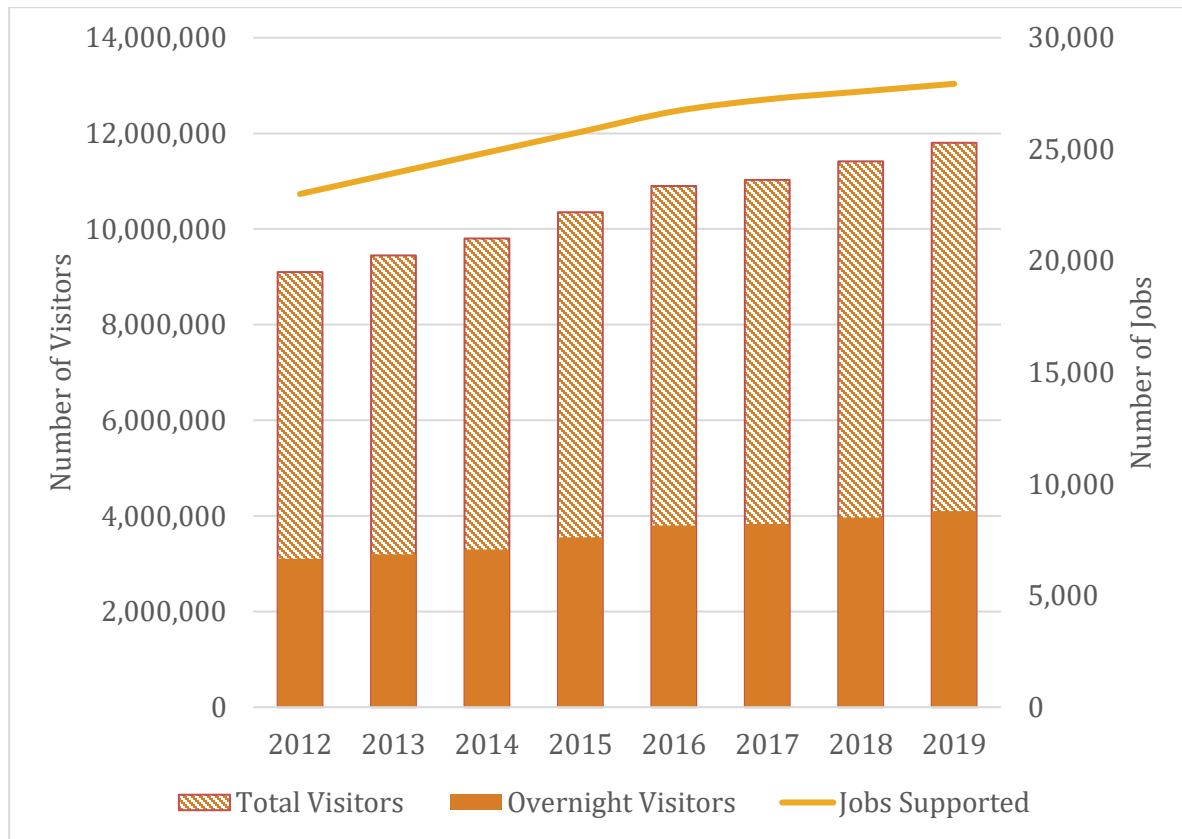
## Tourism Trends

### TOURISM HAS PLAYED AN INCREASINGLY CENTRAL ROLE IN THE ASHEVILLE ECONOMY

Since 2015, over 10 million people have visited the Asheville area each year. These visitors have spent around \$2 billion dollars, helping to generate one in seven of every job in Asheville and over \$3 billion in total economic impact. The economic activity from tourism produced over \$300 million in state and local tax revenue in 2017, 2018, and 2019. These data illustrate the importance tourism plays within Buncombe County and the greater Asheville market, driving employment growth, household incomes, and tax revenue.

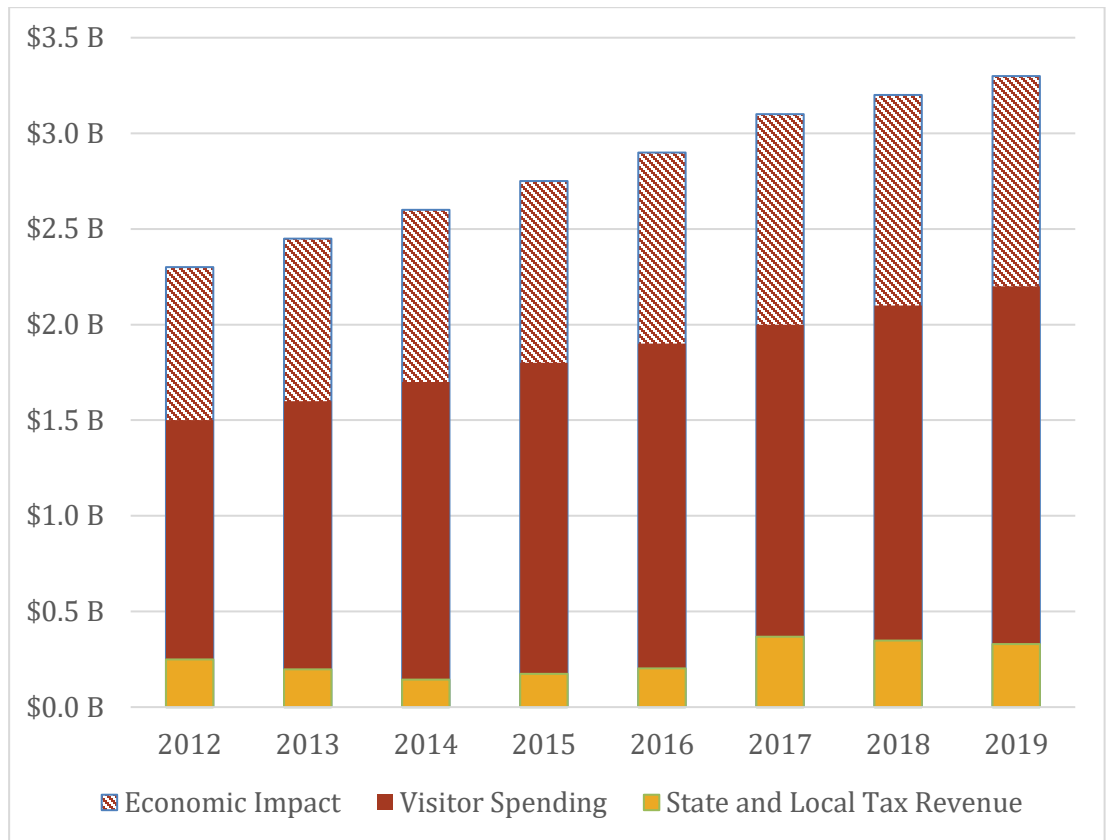
#### Annual Tourism Visitors

Buncombe County, NC; 2012-2019



Source: Explore Asheville Convention & Visitors Bureau; Buncombe County Tourism Development Authority Annual Reports & Visitor Profile Reports (2012-2020); RCLCO

### Annual Tourism Economic Impact Buncombe County, NC; 2012-2019



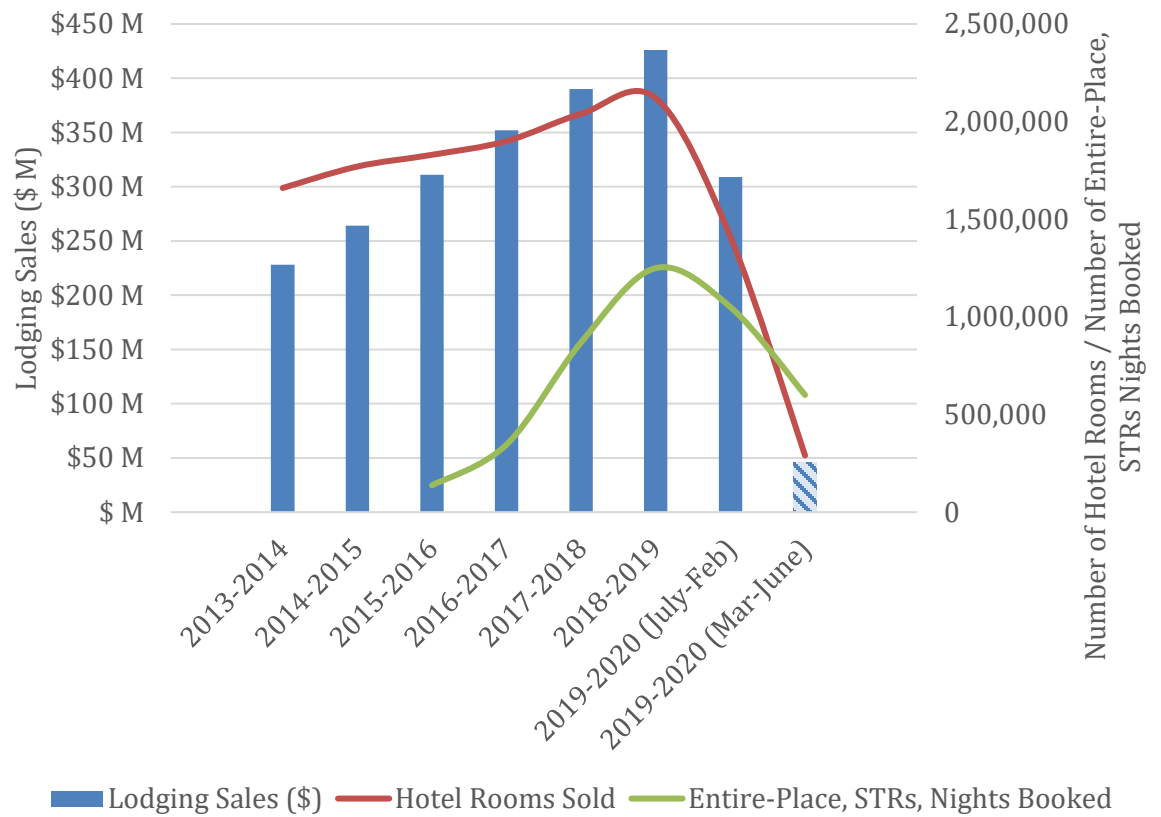
Source: Explore Asheville Convention & Visitors Bureau; Buncombe County Tourism Development Authority Annual Reports & Visitor Profile Reports (2012-2020); RCLCO

### THE PANDEMIC HAS REDUCED HOTEL BOOKINGS AND LODGING SALES

Both hotel rooms sold and total lodging sales had steadily increased between 2013 and 2019, though the COVID-19 pandemic significantly reduced the number of hotel rooms booked and overall lodging sales for the area. On the other hand, short-term rentals experienced similar declines during COVID-19, but proved to be more resilient than traditional hotel operators, which helped soften some of the adverse effects on the local service industry.



**Annual Tourism Lodging**  
 Buncombe County, NC; 2013-2020



Source: Explore Asheville Convention & Visitors Bureau; Buncombe County Tourism Development Authority Annual Reports & Visitor Profile Reports (2012-2020); RCLCO

## Short-Term Rental Trends

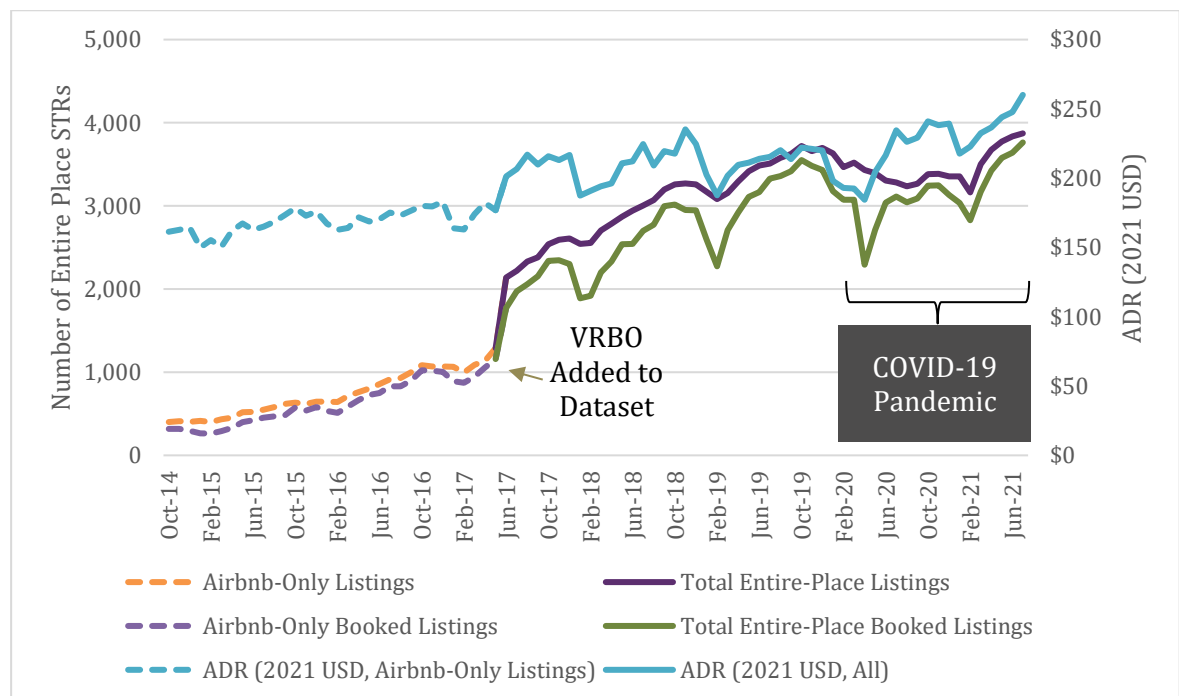
### SHORT-TERM RENTAL LISTINGS HAVE GROWN SINCE 2014 WITH AN INCREASE IN TOURISM

The inventory of short-term rentals has increased over the past seven years, with growing tourism in Buncombe County and the rise of multiple STR platforms. Despite the increase in STR inventory, STRs account for less than 3% of the total housing stock in the County, a relatively minor component. Furthermore, many STRs are larger and more expensive homes that may otherwise sit vacant on the market as vacation homes.

Average daily rates for STRs remained relatively flat between 2017 and 2019, but experienced noticeable increases during the COVID-19 pandemic, as demand for short-term rental homes increased and home prices rapidly appreciated.

#### Short-Term Rental Listings and ADRs

Buncombe County, NC; 2014-2021

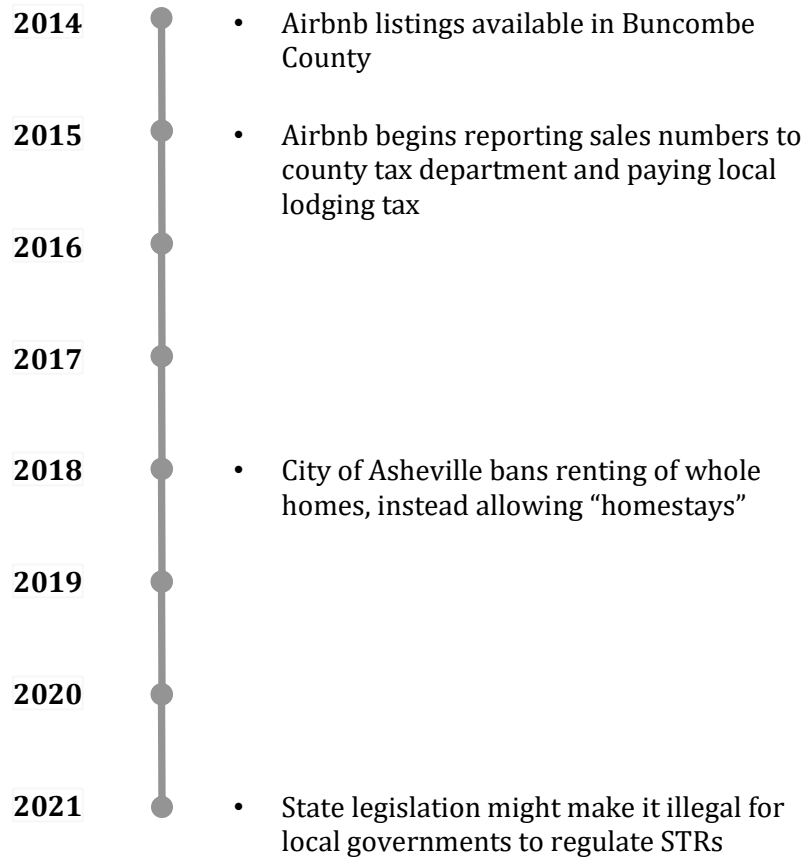


Note: All dollar figures have been adjusted to 2021 USD.

Source: Citizen Times; AirDNA; RCLCO

### Timeline of Short-Term Rental Market

Buncombe County, NC; 2014-2021



*Source: Citizen Times; AirDNA; RCLCO*

## Correlation Analysis Methodology

RCLCO utilized regression analyses to assess how STRs have impacted median home sale prices within Buncombe County. The research includes data from the following sources:

- ▶ **Redfin:** Including monthly data on the median sale price, home sales, inventory, months supply, days on the market, and sales-to-list ratio.
- ▶ **Esri and American Community Survey:** Demographic data regarding population, total housing units, tenure, employment, and median household income. Much of this data is provided in annual terms; therefore, RCLCO converted the annual data into monthly data using linear growth rates.
- ▶ **Federal Reserve of St. Louis:** Case-Shiller US National Home Price Index, 30-Year Fixed Rate Mortgage Monthly Average, and Consumer Price Index.
- ▶ **AirDNA:** Data on entire-place STRs in Buncombe County (including total available and booked rentals, room/listing nights, average daily rates, occupancy, average days lead time, and average days stay) between October 2014 and July 2021. Data before June 2017 accounts for only Airbnb listings, whereas data from June 2017 on accounts for total listings across Airbnb and VRBO/Homeaway.

Due to discrepancies in the AirDNA data, the resulting regression analysis evaluates data between June 2017 through July 2021 to ensure data accuracy and consistency. Given the limited availability of historical data, the analysis spans approximately four years, which RCLCO believes to be sufficient for the study.

To better understand the potential impact STRs have had on Buncombe County's for-sale housing market, RCLCO utilized a regression analysis, with all dollar variables adjusted for inflation. Then, RCLCO developed a correlation matrix to identify possible collinearity among the variables.

## Correlation Matrix

### A FEW VARIABLES HAVE HIGH COLLINEARITY WITH HOME PRICES AND INVENTORY; NO STR VARIABLES HAVE SIGNIFICANT CORRELATIONS WITH REGIONAL HOUSING

The Buncombe County for-sale housing market is complex and few variables have high correlations. STRs have no significant correlation with home values, with national home prices, population, mortgage rates, and months of supply having the highest correlations, though most of these correlations are not significant. There are no significant correlations between inventory or months of housing inventory and any other variable.

### Correlation Matrix

Buncombe County, NC; 2017-2021

VARIABLE	Median Sale Price (2021 USD)	Home Sales	Inventory	Months Supply	Days on Market	Population	Total Housing Units	% Owner	Median HH Income	Total Employed Population	Case-Shiller US National Home Price Index	30-Year Fixed Rate Mortgage	Total Entire Place Listings	Total Entire Place Booked Listings	Entire Place Listing Nights Available	Entire Place Occupancy	ADR (2021 USD)
Median Sale Price (2021 USD)	1.00																
Home Sales	0.56	1.00															
Inventory	-0.53	0.01	1.00														
Months Supply	-0.75	-0.81	0.53	1.00													
Days on Market	-0.46	-0.60	0.11	0.57	1.00												
Population	0.76	0.30	-0.49	-0.50	-0.03	1.00											
Total Housing Units	0.76	0.30	-0.50	-0.50	-0.03	1.00	1.00										
% Owner	-0.59	-0.29	0.44	0.48	0.13	-0.73	-0.73	1.00									
Median HH Income	0.52	0.19	-0.20	-0.25	0.20	0.91	0.91	-0.54	1.00								
Total Employed Population	-0.52	-0.40	0.45	0.59	0.37	-0.50	-0.50	0.84	-0.30	1.00							
Case-Shiller US National Home Price Index	0.87	0.38	-0.60	-0.63	-0.24	0.93	0.93	-0.58	0.76	-0.44	1.00						
30-Year Fixed Rate Mortgage	-0.78	-0.44	0.64	0.70	0.33	-0.79	-0.80	0.87	-0.54	0.83	-0.77	1.00					
Total Entire Place Listings	0.46	0.15	-0.06	-0.16	0.22	0.82	0.81	-0.47	0.93	-0.16	0.68	-0.39	1.00				
Total Entire Place Booked Listings	0.51	0.41	0.00	-0.36	0.05	0.76	0.76	-0.45	0.84	-0.21	0.68	-0.42	0.92	1.00			
Entire Place Listing Nights Available	0.41	0.40	0.08	-0.31	0.09	0.65	0.64	-0.35	0.75	-0.11	0.56	-0.30	0.88	0.98	1.00		
Entire Place Occupancy	0.57	0.84	0.05	-0.63	-0.56	0.42	0.42	-0.33	0.31	-0.33	0.49	-0.46	0.27	0.49	0.43	1.00	
ADR (2021 USD)	0.60	0.72	-0.17	-0.68	-0.47	0.47	0.47	-0.20	0.35	-0.20	0.60	-0.42	0.36	0.61	0.57	0.79	1.00

Source: Redfin, Esri; ACS 1-Year Estimates; FRED; AirDNA; RCLCO

## Disclaimers

### Critical Assumptions

Our conclusions are based on our analysis of the information available from our own sources and from the client as of the date of this report. We assume that the information is correct, complete, and reliable.

We made certain assumptions about the future performance of the global, national, and local economy and real estate market, and on other factors similarly outside either our control or that of the client. We analyzed trends and the information available to us in drawing these conclusions. However, given the fluid and dynamic nature of the economy and real estate markets, as well as the uncertainty surrounding particularly the near-term future, it is critical to monitor the economy and real estate markets continuously and to revisit the aforementioned conclusions periodically to ensure that they are reflective of changing market conditions.

It has become increasingly clear that the U.S. economy is in a recession, and yet the extent of the damage to the economy and the ability to rebound from a still unfolding disruption are unknown. These events underscore the notion that stable and moderate growth patterns are historically not sustainable over extended periods of time, the economy is cyclical, and real estate markets are typically highly sensitive to business cycles. Further, it is particularly difficult to predict inflection points, including when economic and real estate expansions will end, and when downturn conditions return to expansion.

Our analysis and recommendations are based on information available to us at the time of the writing of this report, including the likelihood of a downturn, length and duration, but it does not consider the potential impact of additional/future shocks on the national and/or local economy, and does not consider the potential benefits from major "booms" that may occur. Similarly, the analysis does not reflect the residual impact on the real estate market and the competitive environment of such a shock or boom. Also, it is important to note that it is difficult to predict changing consumer and market psychology. As such, we recommend the close monitoring of the economy and the marketplace, and updating this analysis as appropriate.

Further, any project and investment economics included in our analysis and reports should be "stress tested" to ensure that potential fluctuations in revenue and cost assumptions resulting from alternative scenarios regarding the economy and real estate market conditions will not cause unacceptable levels of risk or failure.

In addition, and unless stated otherwise in our analysis and reports, we assume that the following will occur in accordance with current expectations by market participants:

- ▶ Tax laws (i.e., property and income tax rates, deductibility of mortgage interest, and so forth)
- ▶ Availability and cost of capital and mortgage financing for real estate developers, owners and buyers
- ▶ Competitive supply (both active and future) will be delivered to the market as planned, and that a reasonable stream of supply offerings will satisfy real estate demand
- ▶ Major public works projects occur and are completed as planned

Should any of the above change, this analysis should be updated, with the conclusions reviewed accordingly (and possibly revised).

### **General Limiting Conditions**

Reasonable efforts have been made to ensure that the data contained in this study reflect accurate and timely information and are believed to be reliable. This study is based on estimates, assumptions, and other information developed by RCLCO from its independent research effort, general knowledge of the industry, and consultations with the client and its representatives. No responsibility is assumed for inaccuracies in reporting by the client, its agent, and representatives or in any other data source used in preparing or presenting this study. This report is based on information that to our knowledge was current as of the date of this report, and RCLCO has not undertaken any update of its research effort since such date.

Our report may contain prospective financial information, estimates, or opinions that represent our view of reasonable expectations at a particular time, but such information, estimates, or opinions are not offered as predictions or assurances that a particular level of income or profit will be achieved, that particular events will occur, or that a particular price will be offered or accepted. Actual results achieved during the period covered by our prospective financial analysis may vary from those described in our report, and the variations may be material. Therefore, no warranty or representation is made by RCLCO that any of the projected values or results contained in this study will be achieved.

Possession of this study does not carry with it the right of publication thereof or to use the name of "Robert Charles Lesser & Co." or "RCLCO" in any manner without first obtaining the prior written consent of RCLCO. No abstracting,

excerpting, or summarization of this study may be made without first obtaining the prior written consent of RCLCO. This report is not to be used in conjunction with any public or private offering of securities or other similar purpose where it may be relied upon to any degree by any person other than the client without first obtaining the prior written consent of RCLCO. This study may not be used for any purpose other than that for which it is prepared or for which prior written consent has first been obtained from RCLCO.