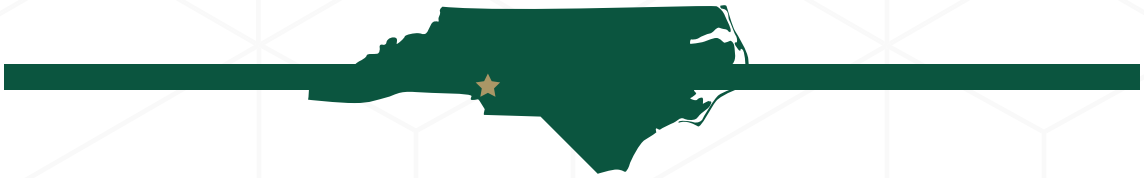

# STATE OF HOUSING 2023 REPORT

## CHARLOTTE

UNIVERSITY OF NORTH CAROLINA CHARLOTTE
CHILDRESS KLEIN CENTER FOR REAL ESTATE

**THE BELK COLLEGE OF BUSINESS AND THE CHILDRESS KLEIN CENTER FOR REAL ESTATE**
would like to gratefully acknowledge our resource and data partners,
whose generous support enables us to provide this crucial research
to the Charlotte community.

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# Contents

## Executive Summary

This is the fifth annual State of Housing in Charlotte Report issued by the Childress Klein Center for Real Estate (CKCRE) at UNC Charlotte. Our goal is to provide a comprehensive overview of the state of housing in Charlotte and the surrounding area since the last report was written. This report provides a complete overview of what happened in the region after the COVID-19 pandemic from January 2022 to September 2023. We also try to provide a long-term view of the dynamics of the housing market over the last two decades, that is, from 2001 to 2023. We summarize main findings as follows:

- **House price growth slowed significantly from the peak during COVID-19; however, the market started to rise again in 2023.** The median home prices in the Charlotte market increased from $376,000 in January 2022 to $415,000 in September 2023.

- **The disruption of housing supply due to COVID-19 continues.** Charlotte MSA underbuilt 10,000 housing units in 2022.

- **The housing market continues to be tight.** The median days on the market number is still less than 10 days.

- **Houses with affordable prices became extremely difficult to find.** Only 2.5% of houses were sold for under $150,000, and only about 22% of houses were sold for under $300,000 in 2023.

- **The affordability of middle-income housing is becoming a significant challenge for the region.** Rising interest rates and house prices have made housing quickly unaffordable in the Charlotte region. It would take a family income of $152,000 to afford a median-priced house in 2023.

- **Rent growth has moderated significantly since the middle of 2022.**

# I. Introduction

## A. The State of Housing in Charlotte

The Charlotte region continues to grow after the pandemic, even amid the slowdown of the national economy. Although population growth slowed during the pandemic from 2019 to 2021, it picked up pace immediately after the pandemic.

From 2021 to 2022, the Charlotte Metropolitan Statistical Area (MSA) population grew by 55,023 people from 2,701,046 to 2,756,069, or a rate of roughly 150 people per day, and probably more importantly, the number of households grew by 37,437.

Rapid growth inevitably leads to persistent and strong demand for housing, which combined with the disruption of the supply side during the pandemic, continues to put pressure on the housing market. Furthermore, the region is also experiencing a rapid shift in the distribution of house prices. In particular, prices at the lower end of the distribution have increased much faster than at the higher end, causing significant concerns about housing affordability in the region.

This is the fifth annual State of Housing in Charlotte Report issued by the Childress Klein Center for Real Estate. Our goal is to provide a comprehensive overview of the state of housing in Charlotte and the surrounding area and to examine how the markets have changed during the pandemic. We continue to make this report a data-driven endeavor. We use a wide variety of public and proprietary data sources to show the state of the housing markets. Throughout the report, we first present data and then, where appropriate, use those data to conclude what is happening in the marketplace.

## B. Geographic Scope

The scope of this report is broad. Geographically, our focus is the Charlotte MSA. When examining the microdata, we focus on Mecklenburg County and the seven physically adjacent counties, including Cabarrus, Gaston, Iredell, Lincoln and Union counties in North Carolina and Lancaster and York counties in South Carolina. Throughout the report, when we refer to the "Charlotte region," we refer to this set of counties. These eight counties are a subset of the Charlotte MSA. We focus on the eight counties in the Charlotte region primarily due to data availability. These counties have the wealthiest sets of data. Furthermore, these counties

represent most of the population and housing in the Charlotte MSA. At a more macro level, we use data for the entire MSA from the U.S. Census. We also use MSA-level data when comparing Charlotte's housing market with regional and national competitor cities. In all cases, we have tried to clarify the exact geographic area we are discussing.

**C. Data Sources**

This report uses six primary data sources.

1. The Canopy Realtor® Association (Canopy) Multiple Listing Service (MLS): The Canopy Realtor® Association has provided the Childress Klein Center for Real Estate with its MLS listings and sales database from 2001. These data are proprietary to Canopy, and the CKCRE can only provide the summary information included in this report. The CKCRE cannot provide the underlying data to the public. However, we will make the summary statistics presented in this report available on our website.
2. Metrostudy: The CKCRE uses data obtained under license from Metrostudy. These data are proprietary, and the CKCRE cannot provide the underlying data to the public.
3. CoStar: The CKCRE uses data obtained under license from CoStar to examine the apartment market. These data are proprietary, and the CKCRE cannot provide the underlying data to the public.
4. U.S. Census Bureau: The U.S. Census Bureau provides a wide variety of publicly available data related to the population and housing across the entire country. We use data from the American Community Survey (ACS) and the American Housing Survey. Unless otherwise noted, the data from the ACS come from the 1-year estimates. In most cases, we use data tabulated by the Census Bureau, which are available through the Census data portal, while in other cases we used data from the Public Use Micro Sample (PUMS), which are freely available from the various US Census Bureau data portals.
5. U.S. Department of Housing and Urban Development: We use two sets of data from the HUD website. The first is the income limits HUD uses when determining eligibility for certain housing subsidies. The second is a database of the region's Low Income Housing Tax Credit projects. These data are freely available to the public from the HUD portal.

6. Federal Reserve Data: We use data on inflation and mortgage interest rates obtained from the Federal Reserve Economic Data (FRED) portal maintained by the Federal Reserve Bank of St. Louis: https://fred.stlouisfed.org/. These data are freely available to the public from the FRED portal.

**D. Organization of the Report**

We organize this report into sections. **Section I** provides an introduction. **Section II** presents a macroscopic view of the housing market in the Charlotte MSA. The section begins by presenting basic facts related to the size of the housing market and the split between owner-occupied and rental housing. **Section III** presents a detailed micro view of the owner-occupied housing markets. **Section IV** presents a detailed micro view of the rental housing markets. In **Section V**, we compare the Charlotte housing market to those of seven regional and eleven national competitor cities. Finally, **Section V** summarizes the report.

**E. Sponsors**

This report has been made possible because of the financial support of a wide variety of interested housing participants. Those providing financial support include:

- Canopy Realtor® Association
- Faison Enterprises, Inc.
- TrueHomes

We also thank the Canopy Realtors® Association for their substantial data contribution. The project could not have been possible without the donation of data from the Canopy Realtors® Association Multiple Listing Service. Finally, the Childress Klein Center for Real Estate thanks several key experts, including Mark Boyce with TrueHomes, Anne Marie DeCatsye with Canopy Realtors® Association, Brenda Hayden with Keller Williams Realty, Fulton Meachem with Inlivian, Rob Nanfelt with the Real Estate Building and Industry Coalition, Tim Sittema with Crosland Southeast, and Landon Wyatt with Childress Klein Properties, who generously gave their time and energy to discuss this report and our analysis. The suggestions, counsel, and advice from this group have been invaluable. Any errors or omissions are purely those of the authors and the CKCRE.

## II. General Macroeconomic Overview

As in our previous report, we begin the analysis of the Charlotte region's housing market by first examining some broad macroeconomic trends that affect the market. Housing is one component of the larger economy and affects, and is affected by, the broader economy. In this section, we focus on three main issues in the macroeconomy – the growth in the local population, the growth in the income of that population and the growth in the aggregate supply of housing units. In Sections III and IV of the report, we go on to show how these broad macroeconomic trends contribute to the microtrends we observe, especially those related to housing prices.

### A. Data Sources

In this section of the report, we rely heavily on data from the U.S. Census Bureau's American Community Survey (ACS). This data set contains a wide range of data on households, housing and housing characteristics. The most recent data set available is the 2022 ACS "vintage," published in September 2023 by the Census Bureau.

The Census Bureau conducts the ACS on an annual basis. They then publish various statistics using the data they collected during one of three different periods. The "1-year" estimates are based solely on data collected within a single calendar year. The 2022 1-year estimates are based solely on data collected by the Census Bureau between Jan. 1, 2022 and Dec. 31, 2022. The Census Bureau did not publish the 2020 ACS "vintage" due to COVID-19. They also publish "one-year" estimates and "five-year" estimates. These estimates are based on data collected over 36- and 60-month periods, respectively.

In selecting between these three data sets, there are tradeoffs. The five-year estimates are based on the largest sample such that they are least affected by random variation and have the smallest "standard error" of the estimates. For many projects, these would be the most appropriate to use. The drawback to the five-year estimates, however, is that they mix data across years. The one-year estimates are based on a smaller sample and have the advantage of being comprised solely of data from a given year.[1]

[1] The one-year and five-year estimates are both statistically unbiased estimates – meaning that "on average" they will yield the same result. The smaller sample size of the one-year estimates just means that they are more likely to be affected by random variation than the five-year estimates.

**Figure II.1 Charlotte MSA Population and Population Growth 2001-2021**

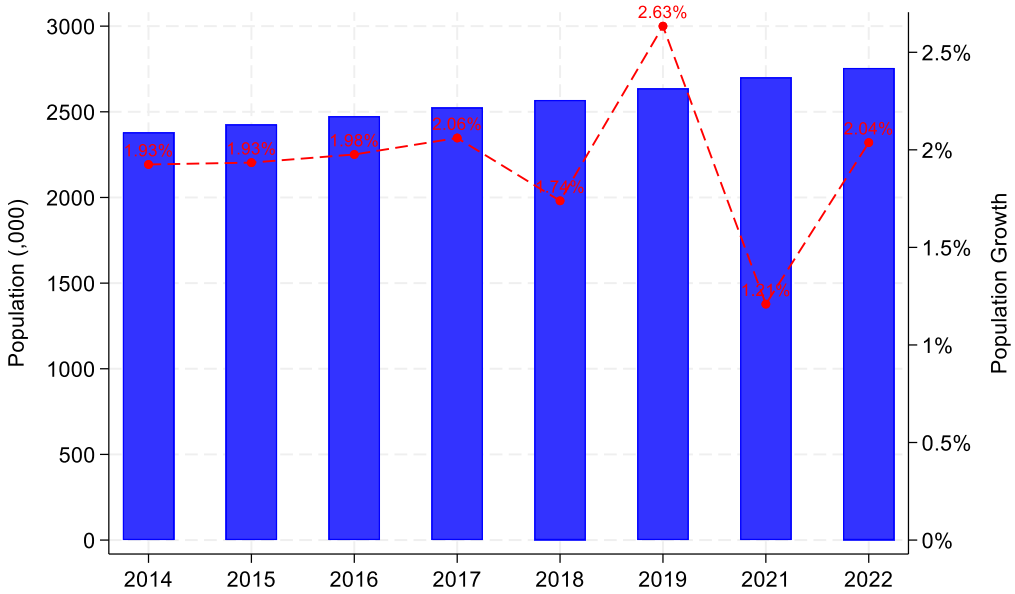
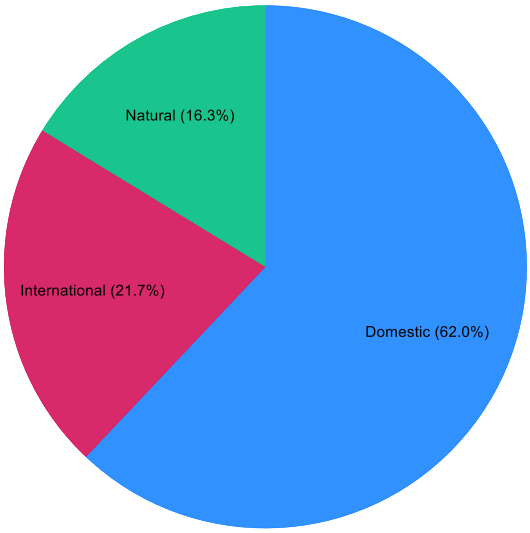



Figure II.2 Charlotte MSA Source of Population Growth 2021 to 2022




Since the primary objective of this study is to examine the evolution of the Charlotte housing environment over time, we have elected to use the ACS one-year estimates in the analysis unless otherwise noted. Starting from this report, we will provide the analysis at the Charlotte MSA level. Because the definition of the Charlotte MSA changed in 2013, we chose 2014 as our starting year in most of our analysis.

## B. Population

As illustrated in Figure II.1, the Charlotte MSA population has grown from 2,333,358 in 2014 to 2,756,069 in 2022. Although population growth slowed during COVID-19 in 2021, it accelerated in 2022 with an annual growth rate of 2%. Figure II.2 shows the distribution of the sources of population growth from 2021 to 2022. There are three sources of population growth. The first is the "natural increase" in population, the number of live births in the region less the number of deaths of residents. The second source is international migration, including both documented and undocumented immigrants. Finally, the third source of population increase is domestic migration, defined as migration from any location within the United States.

Domestic migration is the largest source of population growth in 2022, accounting for 62% of the population growth. The natural increase accounts for 16.3%, and international migration accounts for 21.7%. These numbers are very different from the population growth from 2020 to 2021, during which international migration accounted for less than 10% of the population growth. In fact, the number of international migrations increased from 4,040 in 2021 to 10,575 in 2022.

The COVID-19 pandemic has dramatically changed the sources of population growth in Charlotte MSA. In 2019, domestic migration only represented 61.7% of population growth, while international migration represented 14.2% and natural increase 24.1%, as shown in Figure II.4. Charlotte MSA has become one of the favorite places for domestic migration during and after the COVID-19 pandemic.

The total population view gives a broad sense of what is happening in the housing market. However, the rate of household formation is at least equally important. If the size of households is on average changing, the region may need to adjust its housing stock at a rate greater or less than the population growth. Figure II.5 shows the average household size in the Charlotte region over time. From 2014 to 2019, the average household size has been steady at approximately 2.66 people per household. However, the average household size has dramatically decreased to 2.5 people per household.

**Figure II.3 Charlotte MSA Source of Population Growth 2020 to 2021**

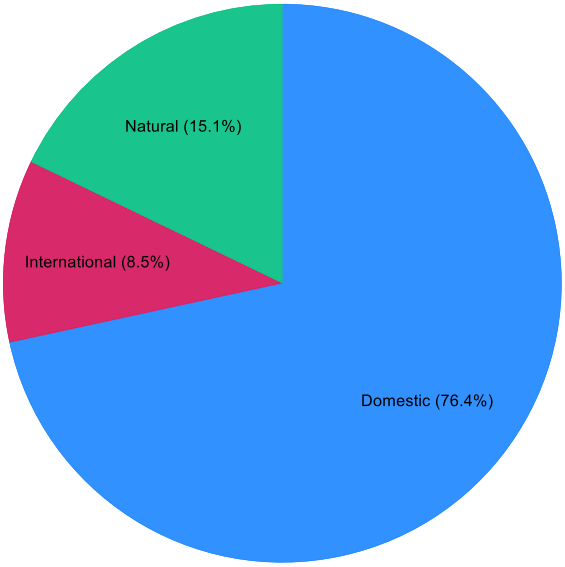



**Figure II.4 Charlotte MSA Source of Population Growth 2019 to 2020**

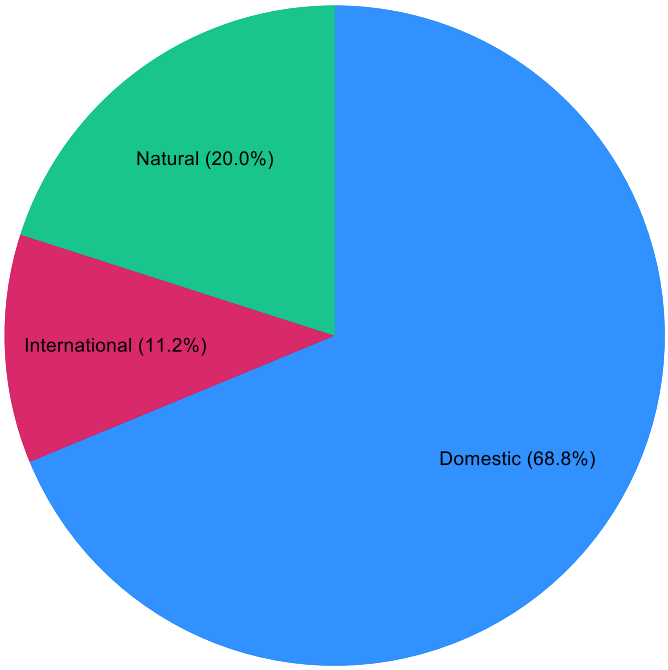


**Figure II.5 Charlotte MSA Household Size 2014-2021**

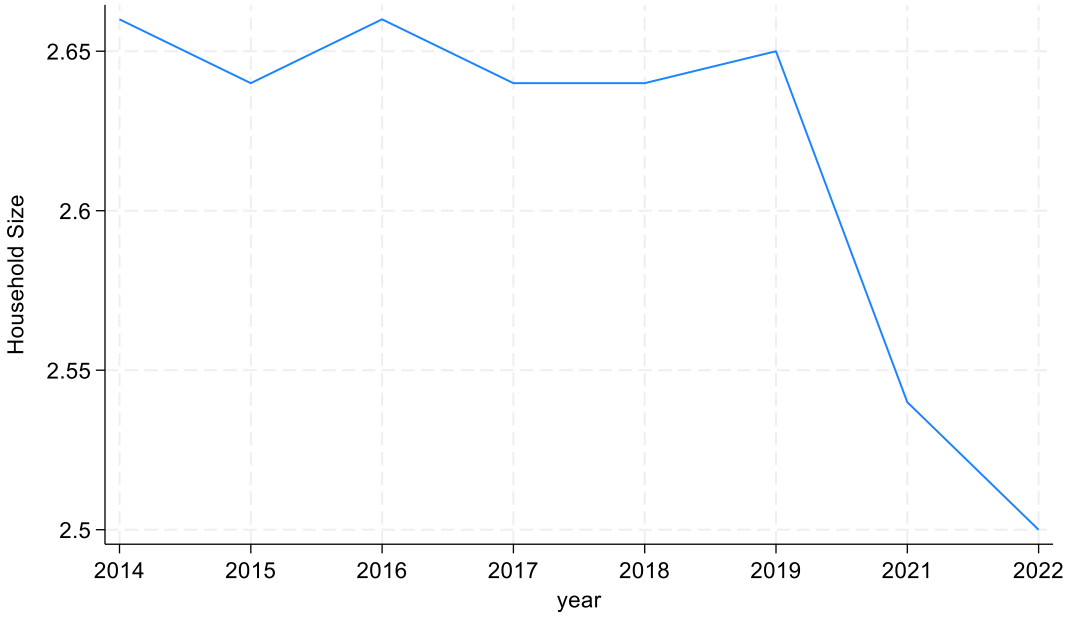



**Figure II.6 Charlotte MSA Number of Households 2014-2021**

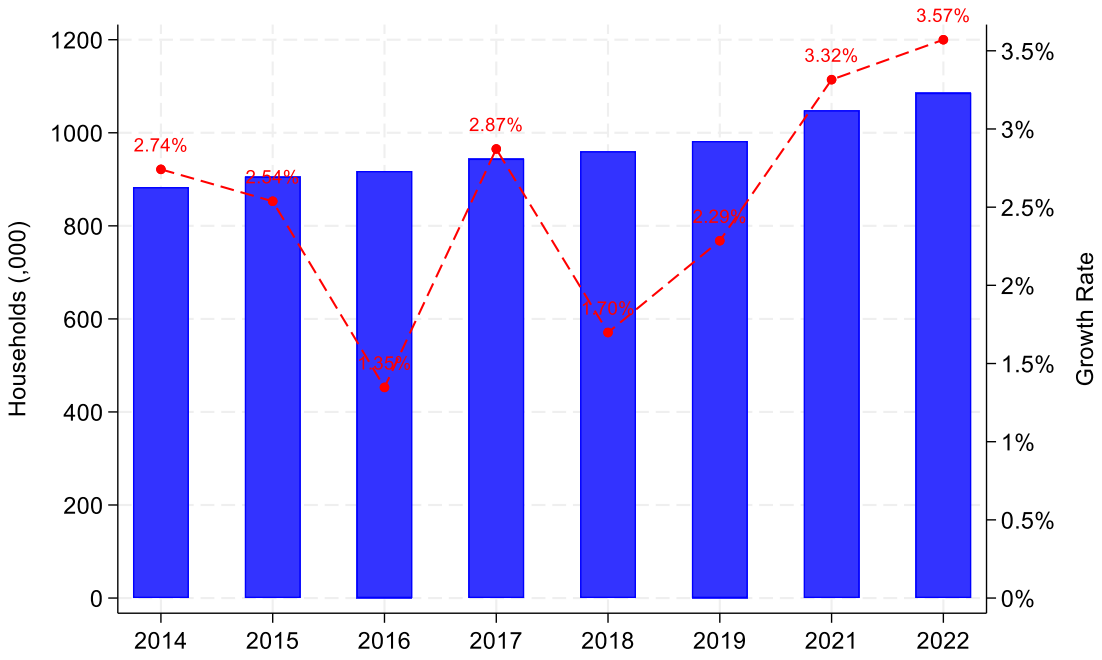


Figure II.6 shows the growth in the number of households in the Charlotte MSA. Since 2013, Charlotte MSA has added 226,180 households. In particular, from 2021 to 2022 alone, the MSA added 37,437 households. This figure is critical for understanding what is happening in the region's housing markets because it tells us the *minimum* number of housing units that must be built to meet growth.

## C. Income

The Charlotte MSA has experienced significant economic growth, and incomes have grown in real and nominal terms since 2014. As illustrated in Figure II.7, in 2022, the average income in the MSA was $109,366, an increase of 44% since 2014. The average annual nominal growth rate was 4.66%, and the average annual real growth rate was 1.92%.

While examining mean and median incomes is useful, it can also be informative to look at the evolution of the entire income distribution over time. Figure II.8 shows how the distribution of nominal household income has changed since 2014. In general terms, it is relatively easy to see that income has generally increased, and households with incomes above $100,000 per year have increased the most. However, it should be noted that about 12% of households earn an annual income of $25,000 or less.

## D. Housing Units

Figure II.9 shows that there has been significant growth in the number of housing units in Charlotte MSA. From 2014 to 2022, the number of housing units increased by 211,426 units from 973,099 to 1,1845,25 units. This works out to an annualized increase of 1.6%. Increases in the number of households represent the demand side of the housing market, and increases in the number of housing units represent the supply side. As shown in Figure II.6, over the same period, the number of households increased by 266,180, resulting in a shortage of 14,754 housing units over the nine years.

**Figure II.7 Charlotte MSA Average Income 2014-2022**

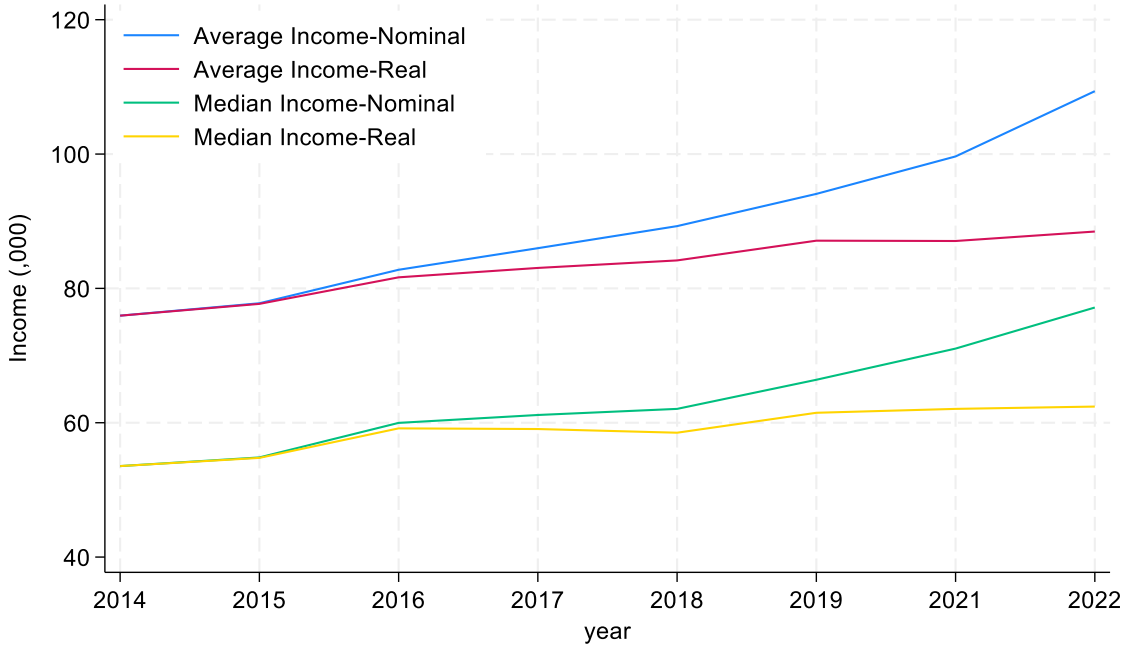



Figure II.8 Charlotte MSA Income Distribution 2014 and 2022

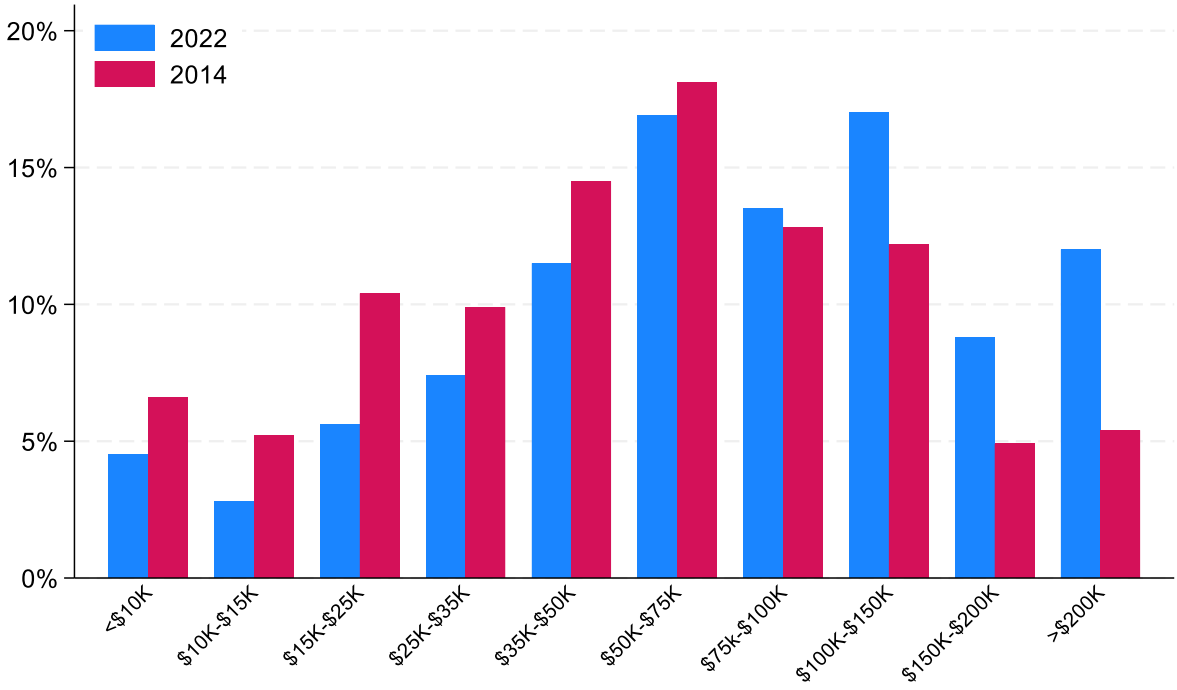


**Figure II.9 Charlotte MSA Housing Units 2014 to 2022**

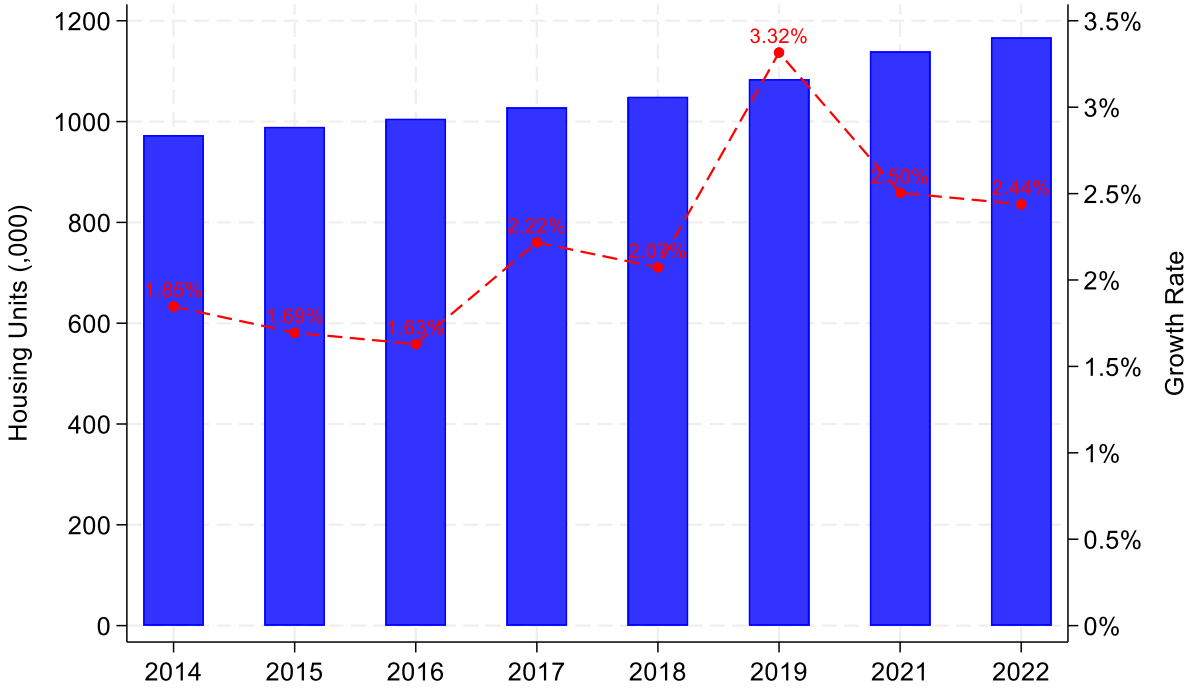



**Figure II.10 Charlotte MSA Annual Changes in Housing Units and Households 2014 to 2022**

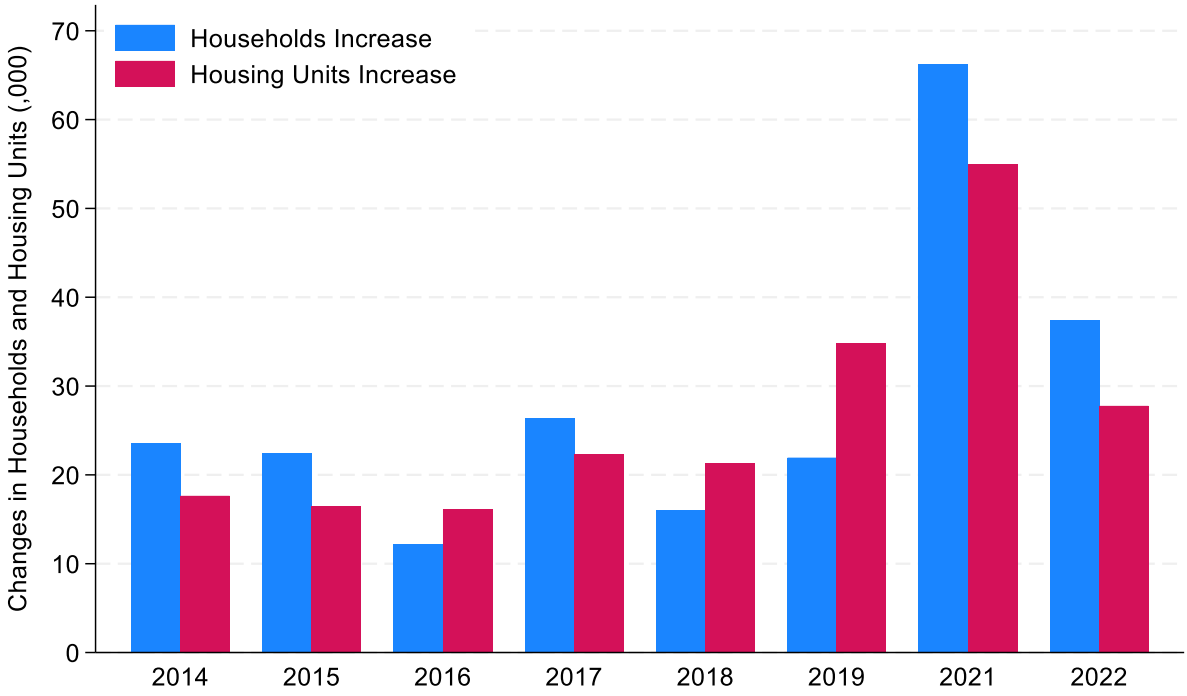
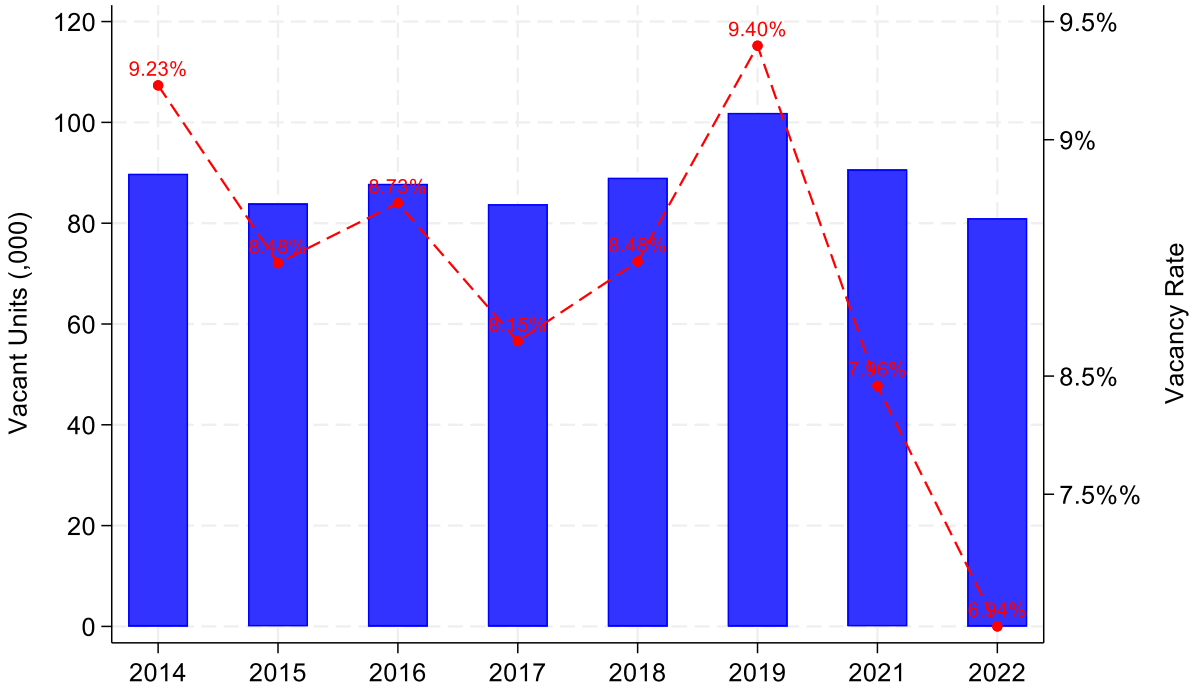


**Figure II.11 Charlotte MSA Vacant Units and Vacancy Rate 2014 to 2022**




In Figure II.10, we plot the demand and supply side in one figure. Although the early years (2014-2015) continued the trend of underbuilding since the Great Recession, supply caught up in 2018 and 2019. Unfortunately, however, the COVID-19 pandemic disrupted the trend. From 2020 to 2022, the Charlotte MSA underbuilt at least 20,000 housing units.

This, of course, begs the question of how the additional population was housed. The answer is that vacant housing in the region has now been taken up. As shown in Figure II.11, there were approximately 89,818 vacant housing units in the Charlotte region in 2014. In 2022, the number of vacant units was 80,000. The number of vacant units and the vacancy rate have dropped significantly since the COVID-19 pandemic.

## E. Key Conclusions

As we noted in the first edition of this report, the Charlotte MSA household growth exceeded its housing unit growth for most of the 2010s. In economic terms, demand has outpaced supply, resulting in quickly rising higher prices and rents. Although the supply side caught up in 2018 and 2019, the COVID-19 pandemic disrupted the trend. Home prices and rents will not moderate until the region begins to produce more new housing units.

## III. The Owner-Occupied Housing Market

We first examine the owner-occupied market, which consists of single-family detached homes and attached units such as townhomes or condominiums. Due to the significant differences between the single-family and other owner-occupied housing markets, we decided to separate these two markets in this report. Unless otherwise noted, we use the MLS data provided by the Canopy Realtors® Association for the analysis.

### A. The Single-Family Housing Market

We start our analysis with the prices of single-family houses from January 2022 to September 2023 to understand the changes in the dynamics of the housing market coming out of the COVID-19 pandemic. We first look at the average and median house prices in both the Charlotte region and Mecklenburg County, as shown in Figure III.1. The median house price in the region increased from $376,000 in January 2022 to $415,000 in September 2023, a 10% increase.

The annual growth from September 2022 to September 2023 is almost flat with an annual growth rate of -1.1%. To put this into perspective, the average annual growth rate from September 2021 to September 2022 was 14.2%. The rising interest rates in the post-COVID-19 era have significantly cooled the housing market. However, there is no sign that house prices will decrease significantly. The decline in house prices in recent months is likely due to seasonality. The average price is higher than the median price due to the skewness of the house prices. The dynamics of the average price show a similar trend to the median price, although it recorded an annual growth rate of 5.3% from September 2022 to September 2023.

Although prices remained relatively flat over the last year, there are significant changes on both sides of the market. To better understand the supply side, we plot the monthly listings and the monthly sales in Figure III.4. Listings and sales have decreased significantly from the peak during COVID-19. However, the number of listings each month barely catches up with the number of sales during most months in 2023 until very recently, suggesting that the supply side was very tight. To put this into perspective, we again plot the annual listings and sales from 2001 to 2023 in Figure III.4. Compared to the previous year, the gap between listings and sales is very narrow in 2023, meaning the market is still very tight from a historical perspective.

**Figure III.1 Charlotte Region and Mecklenburg County Average and Median House Price January 2022 – September 2023**

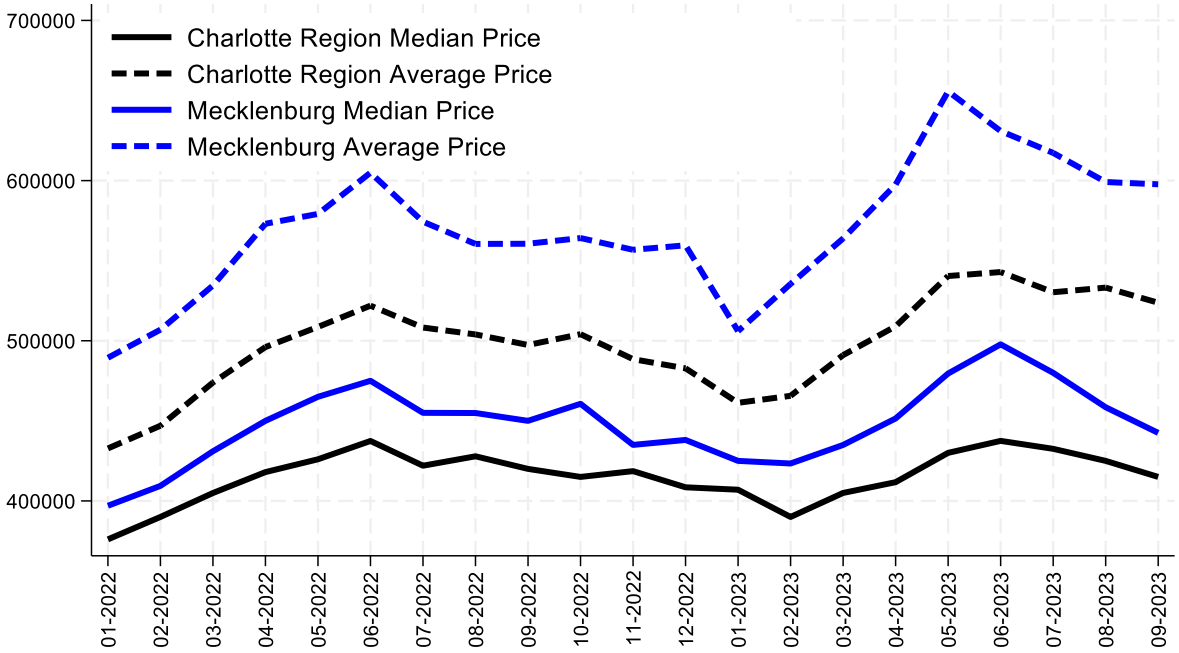



**Figure III.2 Charlotte Region and Mecklenburg County Average and Median House Price 2001-2023**

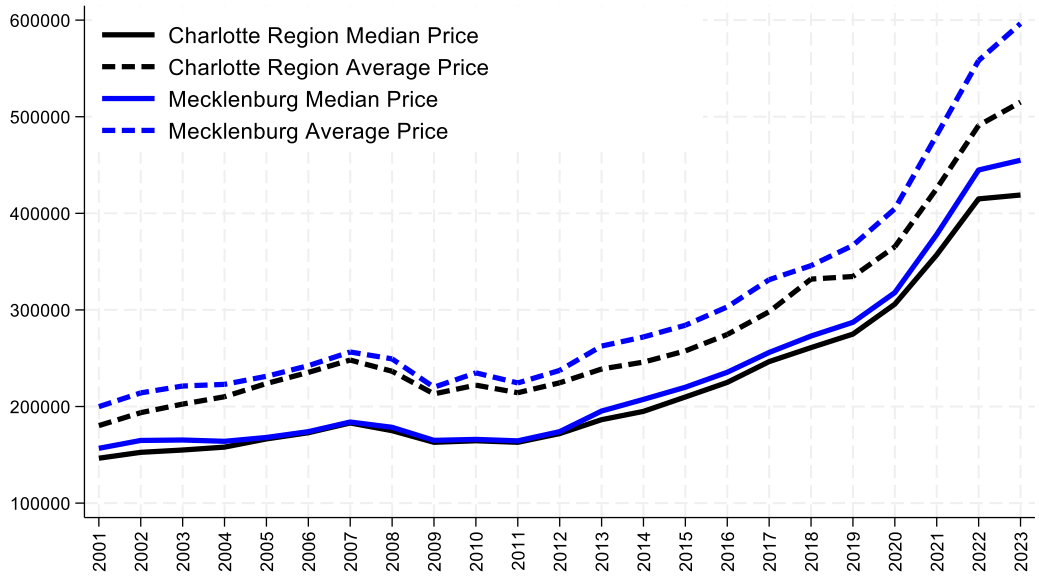


**Figure III.3 Listings and Sales**
**January 2022 - September 2023**

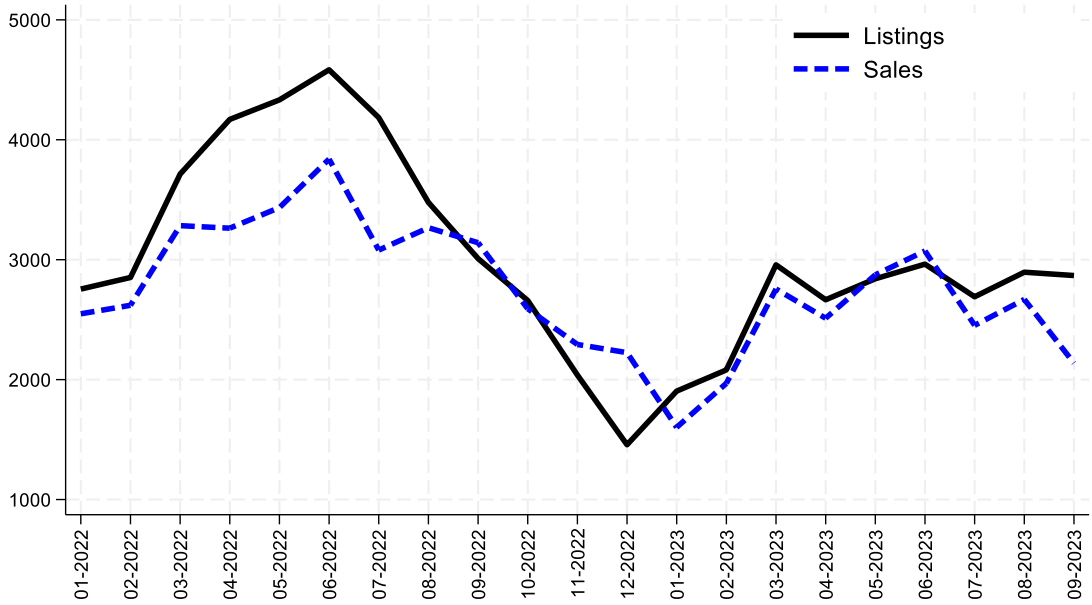
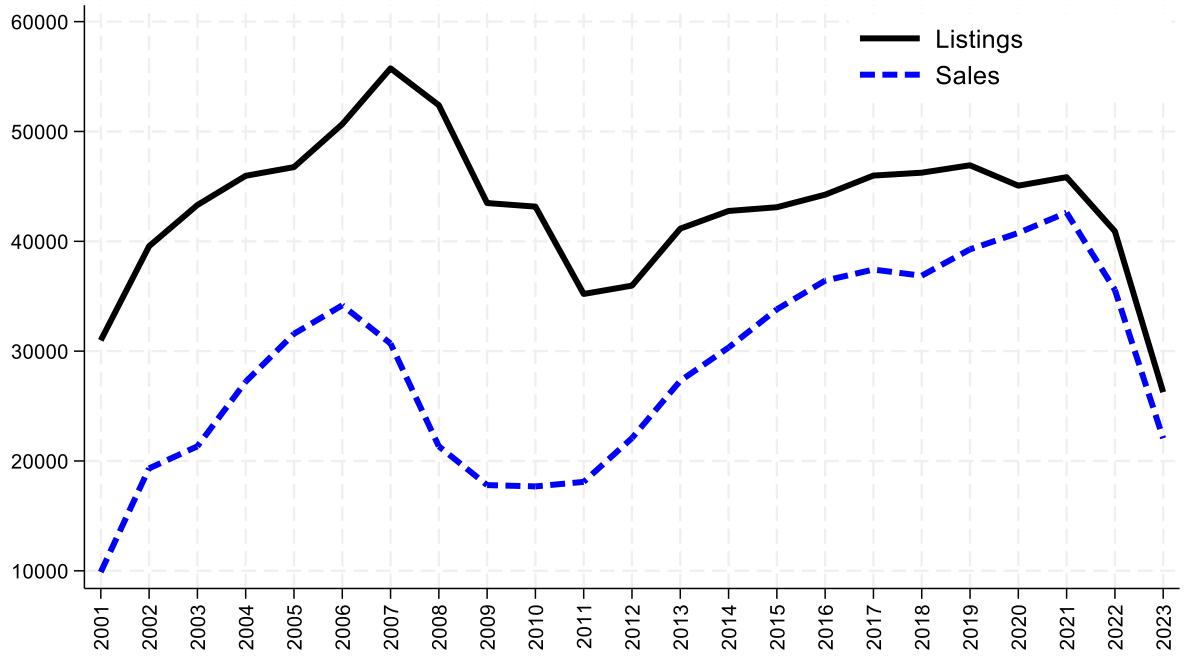


**Figure III.4 Listings and Sales**
**2001- 2023**




To further gauge the tightness, we turn to the number of days on the market, the number of days from when a house is listed to when the house is under contract. We plot the monthly median days on the market in Figure III.5. The market has significantly softened in late 2022 and early 2023 with median days on the market increasing from fewer than 10 days in early 2022 to almost a month in early 2023. However, the market has tightened significantly in recent months, with days on the market again fewer than 10 days. To put this into historical perspective, we plot the annual days on the market from 2001-2023 in Figure III.6. It is clear that the current days on the market remain at a very low level by historical standards.

We then look at the percentage of houses sold above list prices, with results presented in Figure III.7. In May 2022, more than 60% of the houses were sold above their listing prices. However, the percentage decreased significantly in the second half of 2022 to only about 10% in January 2023. However, the percentage increased significantly in much of 2023 to the current level of almost 30%. As shown in Figure III.8, the percentage of houses sold above listing prices was mostly above 20% before 2020, even during early 2000s boom years, except for 2017.

Next, we examine the full distribution of prices to gain a deeper understanding of how dramatic increases in house prices may have severely impacted housing affordability in the region. We first plot the house price distribution for houses sold from January 1, 2023 to September 30, 2023 in Figure III.9.

Several observations stand out. The percentage of houses sold for less than $150,000, often considered a reasonable price point for a starter home, is only 2.5%. Even considering a much higher price point of $300,000, the percentage of houses sold beneath that price point is only about 22%. On the other hand, houses sold for more than $1,000,000 account for 6.5%. The distribution is similar to that of 2022, shown in Figure III.10. However, compared with 2021, the changes are dramatic. In 2021, the percent of houses sold under $150,000 was 4.75%, and the percent of houses sold under $300,000 was 35.7%. Dramatic decreases in housing supply at the low end of the distribution raise serious concerns about housing affordability.

**Figure III.5 Days on the Market**
**January 2022 - September 2023**

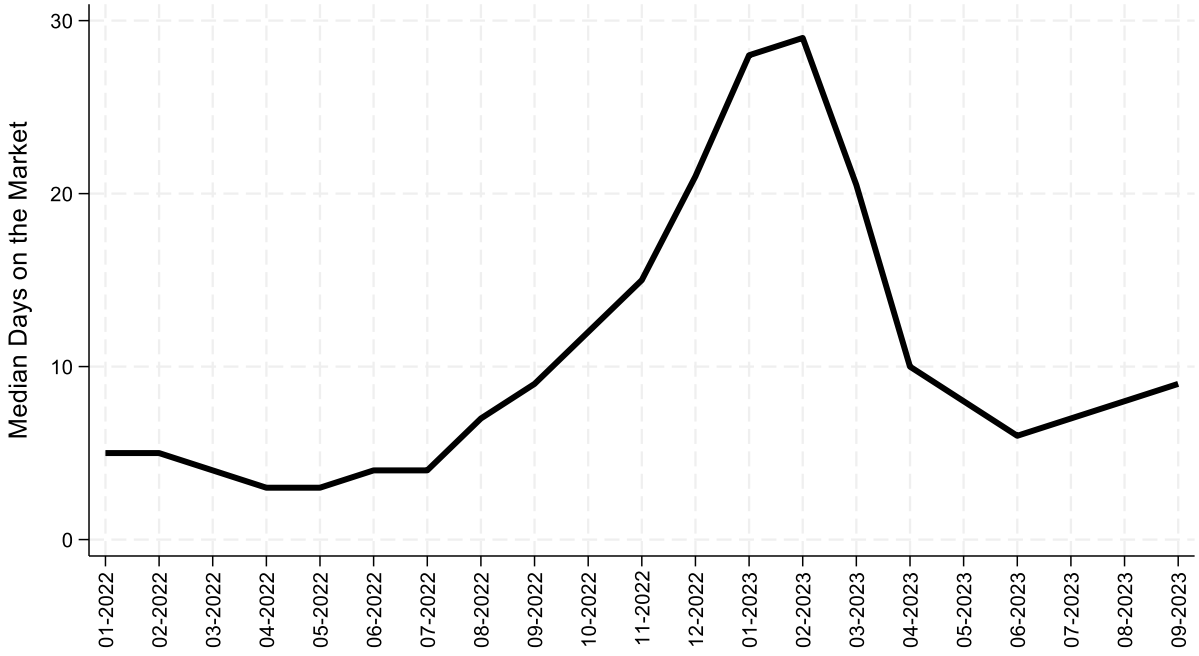


**Figure III.6 Days on the Market**
**2001- 2023**


Taking a longer-term perspective, the change in house price distribution is even more dramatic. We first show the distribution in 2014 in Figure III.11. It is evident that the distribution shifts much to the left. In particular, houses sold under $150,000 account for almost 34.5% of all houses sold in 2014, and houses under $300,000 account for almost 75%.

To better understand the shift in the distribution over time, we plot the 10$^{th}$, 75$^{th}$, and 90$^{th}$ percentile of the prices from 2001 to 2021 in Figure III.12. Focusing first on the lower end, the 10$^{th}$ percentile did not increase at all from 2001 to 2011. If anything, the 10$^{th}$ percentile actually decreased at an annual rate of -1.51% during that period and even decreased during the booming years of the early 2000s. However, the dynamics completely changed in the second half of the sample period. The 10$^{th}$ percentile increased at an annual rate of 14% from $49,000 in 2011 to $237,00 in 2023. The 25$^{th}$ percentile shows a similar trend during this period. On the other hand, the dynamics at the high end are very different. The 90$^{th}$ percentile increased dramatically during the boom years of the early 2000s. After the decline during the Great Recession, the high ends continued increasing, but at a slower rate than before the recession. The trend changed its course over the last three years, during which prices at the high end increased at a faster pace than prices at the lower end.

To emphasize the different dynamics during different periods, we summarize the results in Table III.1. Although the Great Recession, which hit the lower end of the market especially hard, can explain some of the dynamics, it cannot explain all of them. Even during the booming years before the Great Recession, the growth rates at the lower end were still much lower than the growth rates during the 2010-2021 period.

It is very difficult, if not impossible, for a potential homebuyer to purchase a home for less than $150,000 in the current market. These are profound changes in the pricing of the Charlotte region's home market and have significant implications for the ability of first-time homebuyers to enter the market. Before 2011, it was reasonable for a household transitioning to first-time homeownership to assume that it would be possible to find a home priced under $150,000, the typical "starter home" price. By 2023, however, that same household would realistically need to assume that starter homes are those with prices of $350,000 or higher. As we will show later in this section, this directly affects the affordability of housing and the ability of people to transition to housing.

**Figure III.7 Percent Sold above Listing Priced**
**January 2022 - September 2023**

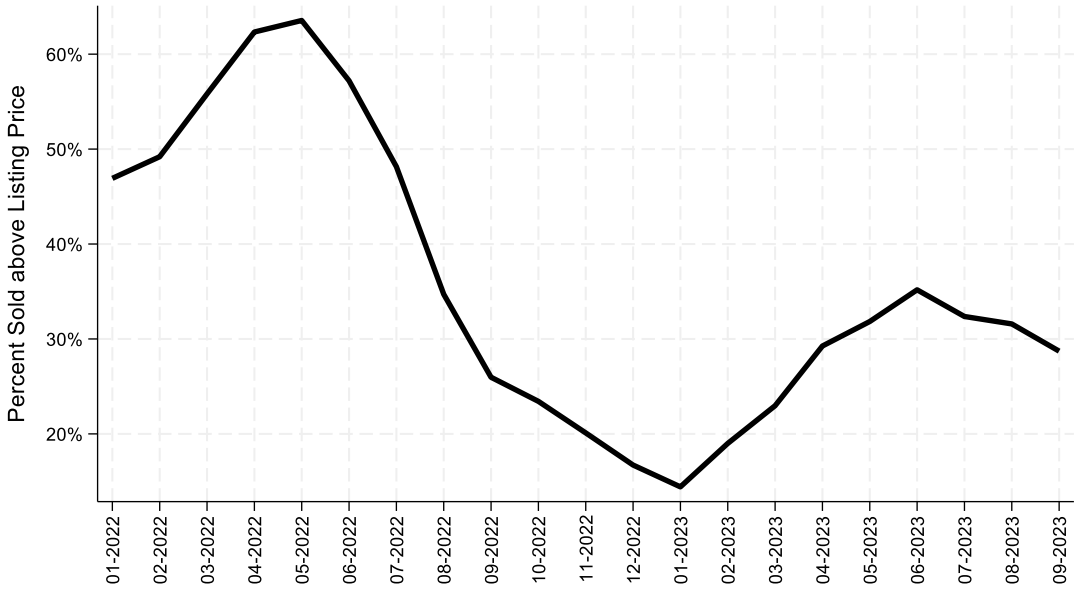


**Figure III.8 Percent Sold at above Listing Price**
**2001-2021**

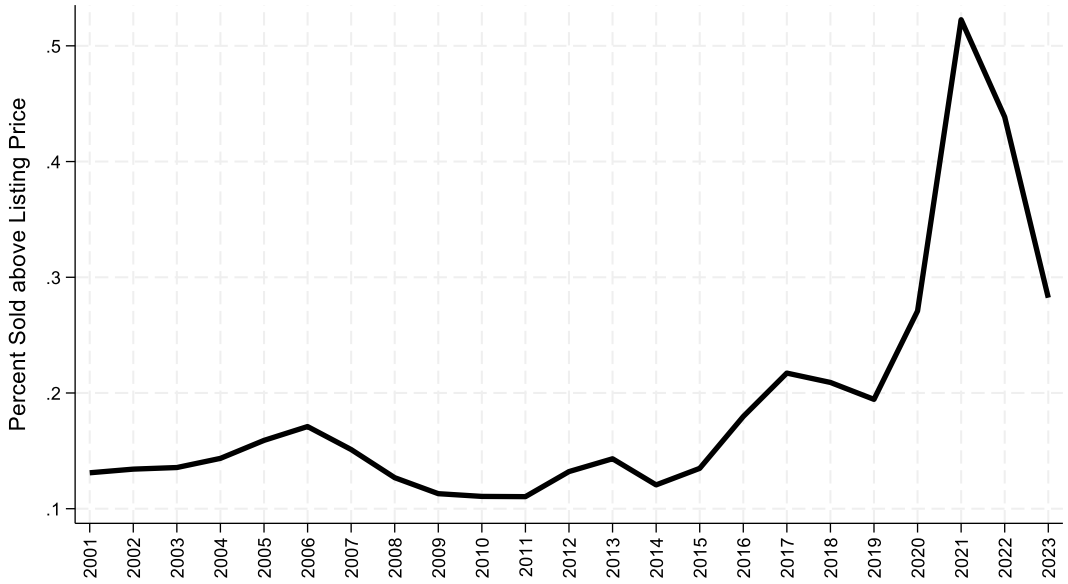



**Figure III.9 House Price Distribution 2023**

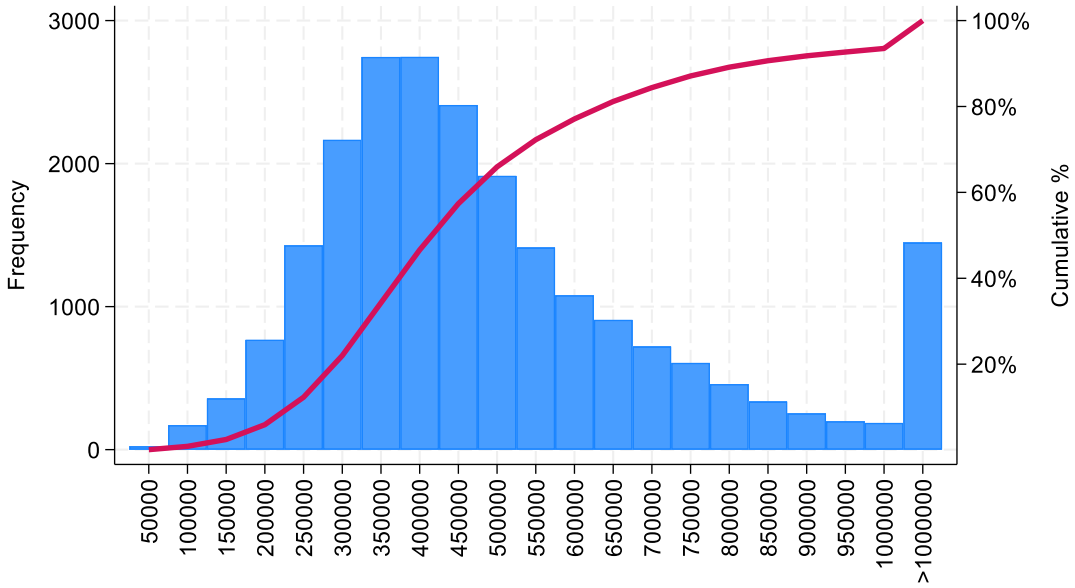


**Figure III.10 House Price Distribution 2022**

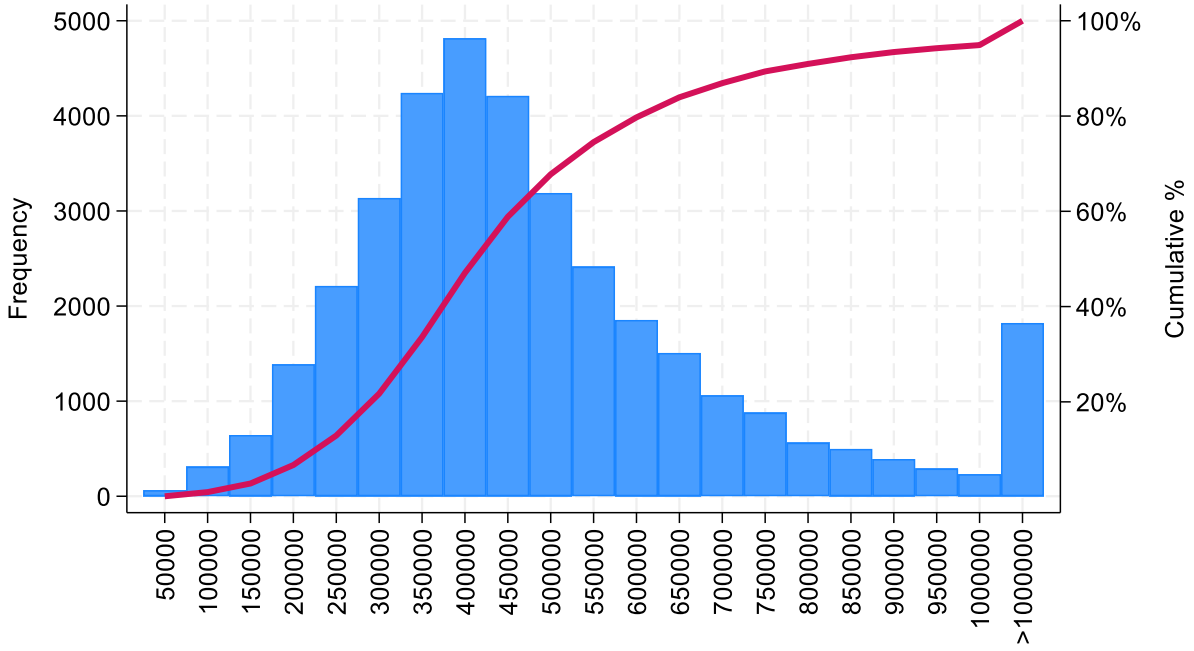



**Figure III.11 House Price Distribution 2014**

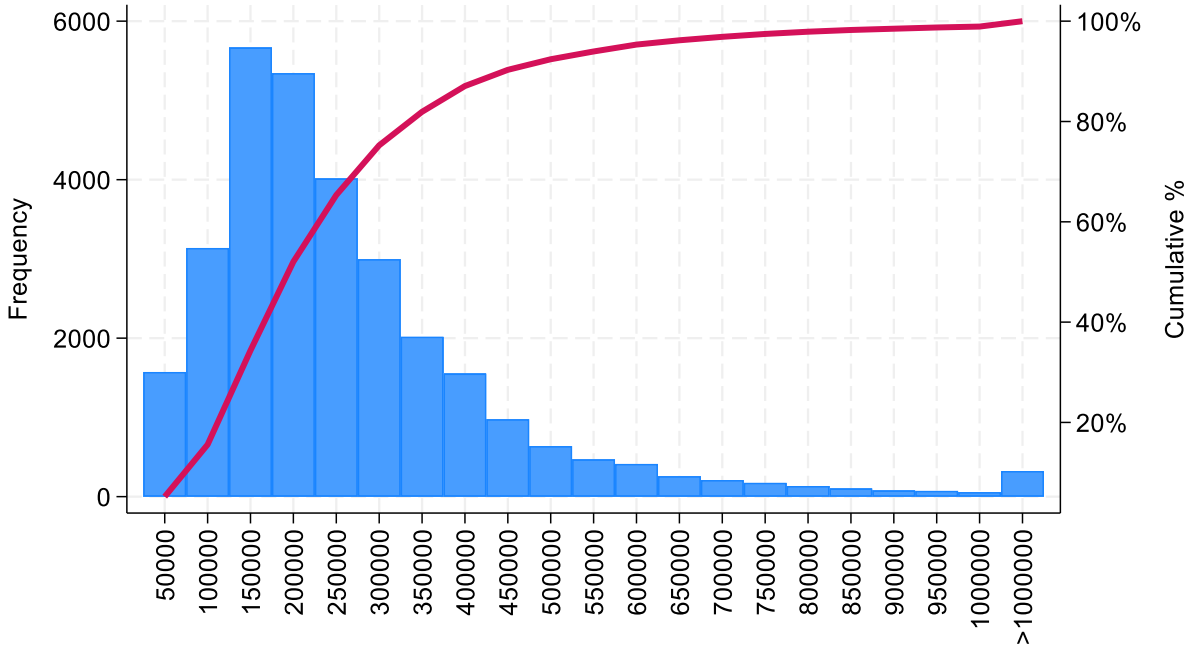


**Figure III.12 Dynamics of House Price Distribution 2001-2023**

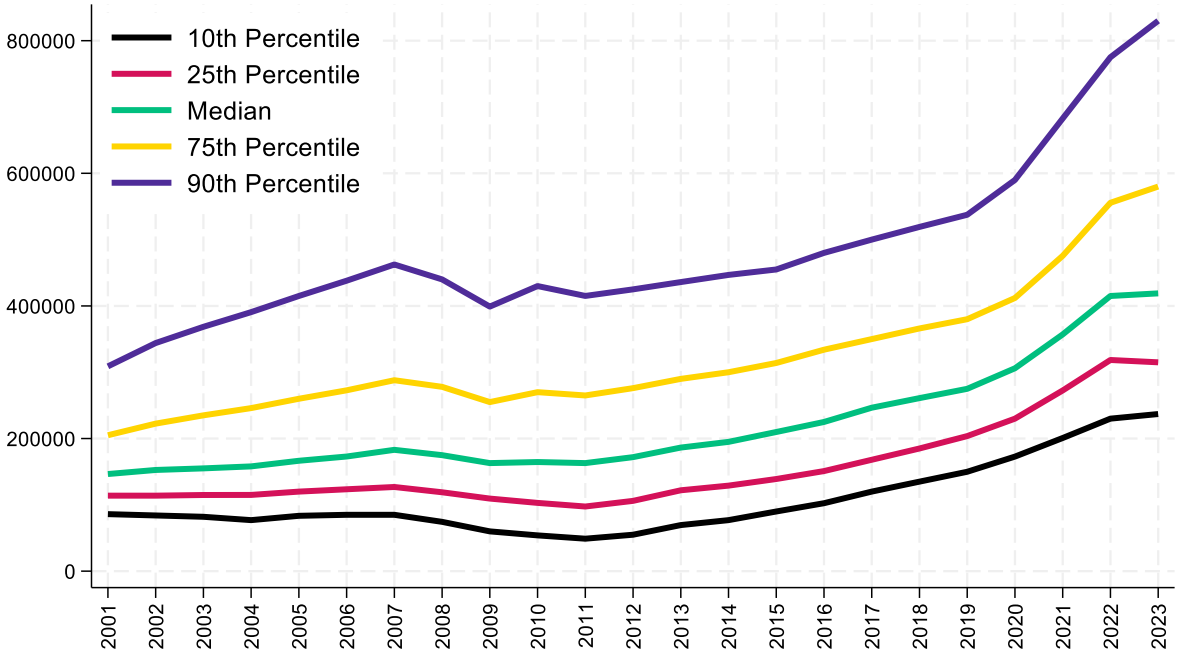



**Table III.1 Annual Growth along the Housing Price Distribution**

| | 2002-201 | 2011-2021 | 2021-2023 |
|---|---|---|---|
| 10th Percentile | -1.54% | 15.13% | 8.65% |
| 25th Percentile | 2.60% | 10.82% | 7.52% |
| Median | 1.75% | 8.15% | 8.33% |
| 75th Percentile | 3.00% | 6.02% | 10.44% |
| 90th Percentile | 6.23% | 5.10% | 10.27% |

The dramatic rise in interest rates in recent months has made housing affordability much worse. The 30-year fixed mortgage interest rate rose from 2.96% in January 2021 to almost 7.8% in September 2023. We illustrate affordability challenges in two ways. First, we examine how much income it would take to qualify for a mortgage each year for percentages of the housing sales distribution. That is, for each year, we show the amount of income that one would need to be able to purchase the 10th percentile home, the 25th percentile home, and the median-priced home. We do this for each year of our study from 2005 until 2023. Second, we flip this around, and for 2023 demonstrate the median income for various professions and the prices of the homes that could be purchased.

Following the commonly used criteria for affordable housing, we consider that housing is affordable if the total cost related to housing is less than 30% of the total gross income. We include the following items in housing-related costs: mortgage payments, property taxes, property insurance, mortgage insurance and utilities. We also make assumptions. First, the homeowner uses a 30-year, 95% loan-to-value (LTV) fixed-rate mortgage at the prevailing rate. Second, we assume that the property tax rate is 1.05%. Third, we consider that private mortgage insurance is 0.5% of the initial mortgage balance. Fourth, we rely on the census data for typical utilities and property insurance expenditure.

**Table III.2. Income Required to Afford Values Percentiles of the Housing Distribution by Year**

Home prices for various percentiles are presented in Table III.2. Mortgage rates are from the Federal Reserve Bank of St. Louis site, median utilities and property insurance are as reported by the U.S. Census Bureau for the Southern United States in 2013, inflated or deflated by inflation as reported by the U.S. Bureau of Labor Statistics. Homeowners are assumed to use a 30-year, 95% mortgage. Property taxes are assumed to be 1.05% annually, and PMI is assumed to be 0.5% of the initial mortgage balance.

| Year | 10th Percentile Price | 25th Percentile Price | Median Price |
|---|---|---|---|
| 2005 | $32,244 | $42,300 | $55,110 |
| 2006 | $34,146 | $45,264 | $59,529 |
| 2007 | $34,198 | $46,253 | $62,327 |
| 2008 | $30,987 | $43,448 | $59,094 |
| 2009 | $25,545 | $38,205 | $51,888 |
| 2010 | $23,855 | $35,992 | $51,241 |
| 2011 | $22,550 | $34,299 | $50,166 |
| 2012 | $23,369 | $34,838 | $49,680 |
| 2013 | $27,351 | $39,521 | $54,415 |
| 2014 | $29,652 | $41,923 | $57,499 |
| 2015 | $32,288 | $43,508 | $59,743 |
| 2016 | $34,708 | $45,605 | $62,230 |
| 2017 | $39,644 | $50,781 | $68,996 |
| 2018 | $45,138 | $57,351 | $75,917 |
| 2019 | $46,778 | $59,205 | $75,668 |
| 2020 | $50,617 | $62,860 | $79,014 |
| 2021 | $57,180 | $72,331 | $90,181 |
| 2022 | $83,815 | $110,014 | $138,582 |
| 2023 | $93,187 | $118,489 | $152,218 |

Table III.2 shows several facts about affordability in the Charlotte region's owner-occupied housing market. In particular, the minimum income to afford the 10th percentile home increased from $50,617 in 2020 to $93,187 in 2023, an 84% increase. As one moves to higher-priced homes, these effects are still present. For example, the income required to purchase the 25th percentile home increased from $62,860 in 2020 to $118,489 in 2023, an 88% increase. For the median-priced home, the required income has increased from $79,014 in 2020 to $152,218 in 2023, a 93% increase.

Using the income distribution for 2022 as shown in Figure II.8 (adjusted for an inflation rate of 4%), more than 55% of households cannot afford a house priced at the 10th percentile of the distribution, and more than 75% of households cannot afford a median-priced house in the Charlotte region.

**B. Other Owner-Occupied Markets**

Besides single-family houses, there are other owner-occupied houses in the market, such as condos, townhomes and apartments. Therefore, we conduct a similar analysis to the single-family market to gain more insight into this market. We first plotted the median and average prices for the region and Mecklenburg County in Figure III.13. The prices of other owner-occupied houses are lower than those of single-family houses. In September 2023, the median price of other owner-occupied houses was $365,000, while the median price of single-family houses was $376,000. The growth rate of the median price from September 2022 to September 2023 is 10%, which is much higher than the -1% growth rate of the single-family median house over the same period. The other interesting thing to look at is the composition of the owner-occupied housing markets. To this end, the percentage of sales of other owner-occupied housing has increased from 18% in January 2022 to 20% in September 2023.

We also try to gain more insight into the supply side of this market. We first compare the listings and sales in Figure III.14. Although this market is also fairly tight, it is not as bad as the single-family market. For most months, the number of listings was greater than the number of sales. We then continued to assess the tightness of this market by looking at the median days on the market (Figure III.15) and the percentage of homes sold above listing prices (Figure III.16). Both figures are remarkably similar to those of the single-family market. In particular, the

median days on the market increased significantly during the second half of 2022, and then decreased to only about 10 days. Similarly, the percentage of homes sold above listing prices decreased significantly during the second half of 2022 and then increased to about 25% in September 2023.

**Figure III.13 Prices of Other Owner-Occupied Houses**
**January 2022- September 2023**

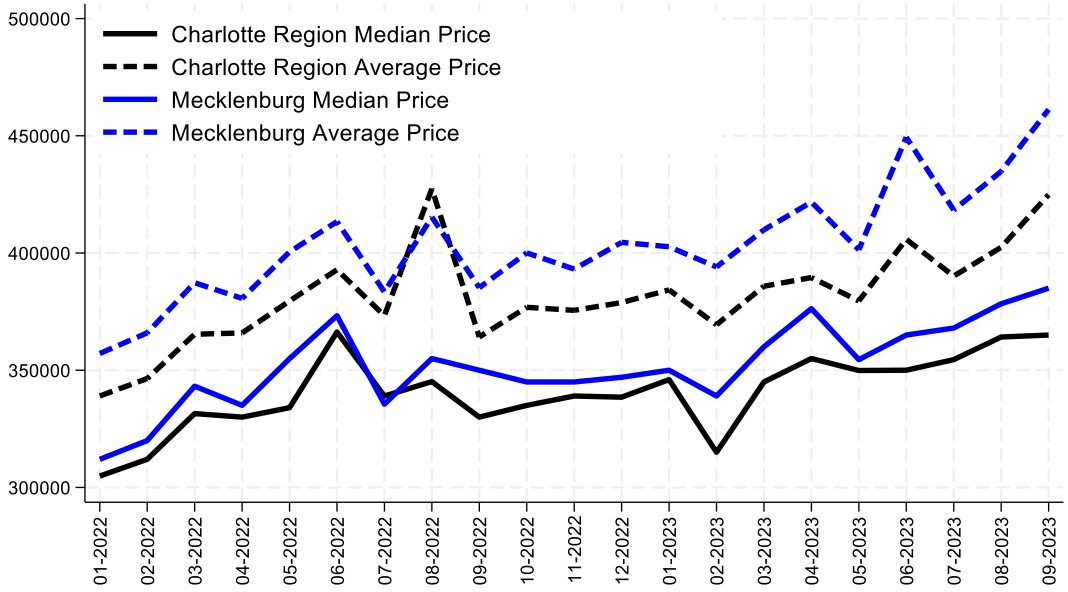


**Figure III.14 Listings and Sales of Other Owner-Occupied Houses**
**January 2022 - September 2023**

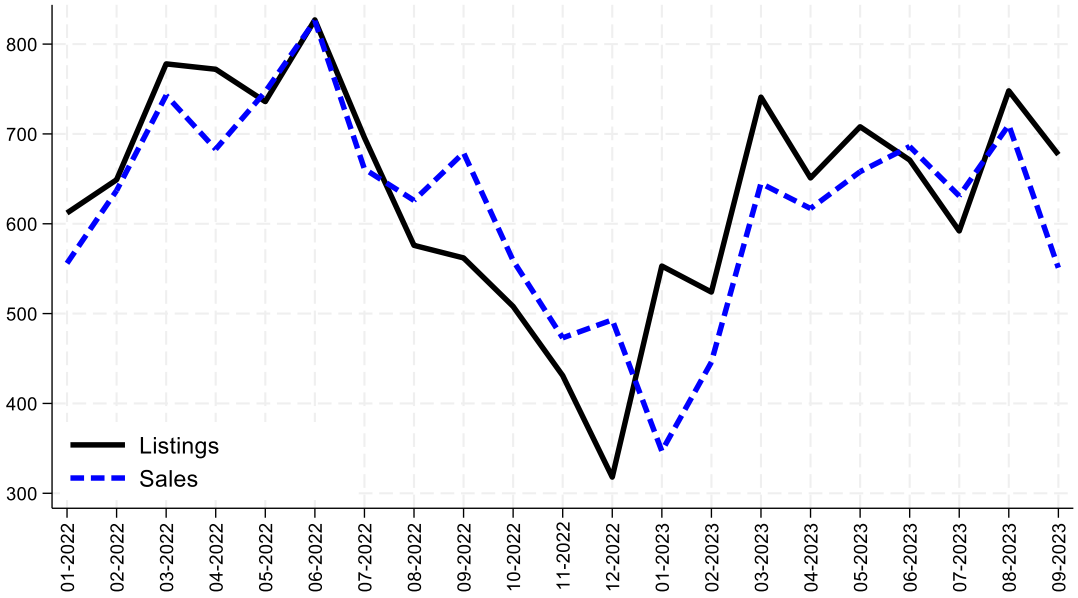



**Figure III.15 Median Days on the Market of Other Owner-Occupied Houses**
**January 2022 - September 2023**

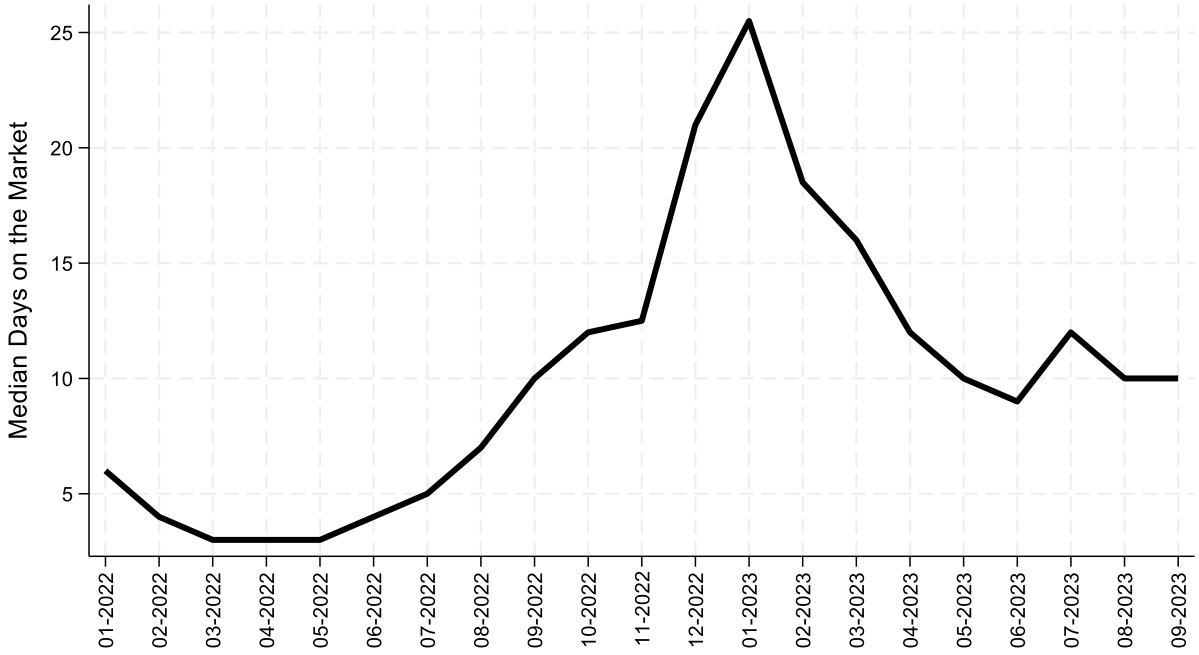


**Figure III.16 Percent of Other Owner-Occupied Homes Sold Above Listing Prices**
**January 2022 - September 2023**

# IV. Rental Housing Market

Traditionally, the rental housing market is dominated by multifamily apartments. However, in recent years, many single-family houses also entered the rental market. Therefore, we will provide analysis both for the multifamily apartment market and the single-family rental market.

## A. The Multifamily Apartment Rental Market

Although single-family homes are a large proportion of the rental market, apartments are another major source. In this analysis, we feel it important to address data and data limitations. Commercial data suppliers such as CoStar provide significant data on rents, occupancies, and other characteristics, and for the analysis, we relied primarily on CoStar data. CoStar collects data on virtually the entire universe of large-scale complexes, typically those with 40 or more units. They also provide data on some smaller-scale complexes but do not have the same universality of coverage. Therefore, the smaller complexes are underrepresented in these data.

It is also important to note that the CoStar data changes over time, as properties with historical operations can be added to the CoStar database, be redeveloped (which would change property quality), or may simply stop providing data. Accordingly, all data (historical and current) are updated in this report with the latest CoStar data, which may not correspond exactly to the data presented in previous versions of this report. Furthermore, all references to "2023 Q3" and "2023 YTD" are data reported in CoStar as of the month ending September 2023.

The apartment market has grown dramatically in the Charlotte region. Figure IV.1 shows the number of units tracked by CoStar each quarter from 2000 to 2023. During this timeframe, supply has grown from 103,154 units in the third quarter of 2000 to 236,210 units in the third quarter of 2023. This represents an addition of 133,056 units, or an increase of 129%. The growth rate since 2010 has been particularly noticeable, with 97,782 units added. This is an increase of 70.6%, or an annualized growth rate of 4.2%.

Most of the apartment units in the region are located in Mecklenburg County. Figure IV.2 shows the distributions of apartment units by county. Although there are significant numbers of apartment units in Cabarrus, Gaston, Iredell and York counties, approximately 73% of all apartment units in the region are in Mecklenburg County.

It is also useful to understand how the apartment market is divided along different dimensions. In Figure IV.3 we present the breakdown of units by the number of bedrooms in the unit. We categorize them as studio, one-bedroom, two-bedroom, three-bedroom, and more-than-three-bedroom. By far, the one- and two-bedroom units are the most common, comprising 83% of the entire apartment stock.

Understanding the relative quality of the apartment stock of the region is helpful. Figure IV.4 presents the distribution of apartments by CoStar's quality rankings. Each apartment complex is rated as A, B, ' or other quality. Quality apartments rated A are typically new construction with high levels of amenities and prime locations, while units B and C tend to be relatively older, have fewer amenities and are in less desirable locations.

Looking at the rental rates for apartments over time is also instructive. Again, we use data provided by CoStar. In Figure IV.5 we plot the average effective rent over time. Effective rent is the net rent paid by the tenant once any concessions, such as a month of free rent, are considered. Figure IV.5 presents the data in two formats. The solid line represents the average effective rent per unit, and the scale is on the left side vertical axis. The dashed line represents the average rent per square foot and is tied to the right vertical axis. While these show the same basic trend, the per-square-foot measure provides the clearest measure, since it considers differences in unit size.

**Figure IV.1 Number of Apartment Units in the Charlotte Region**

**2000-2023**

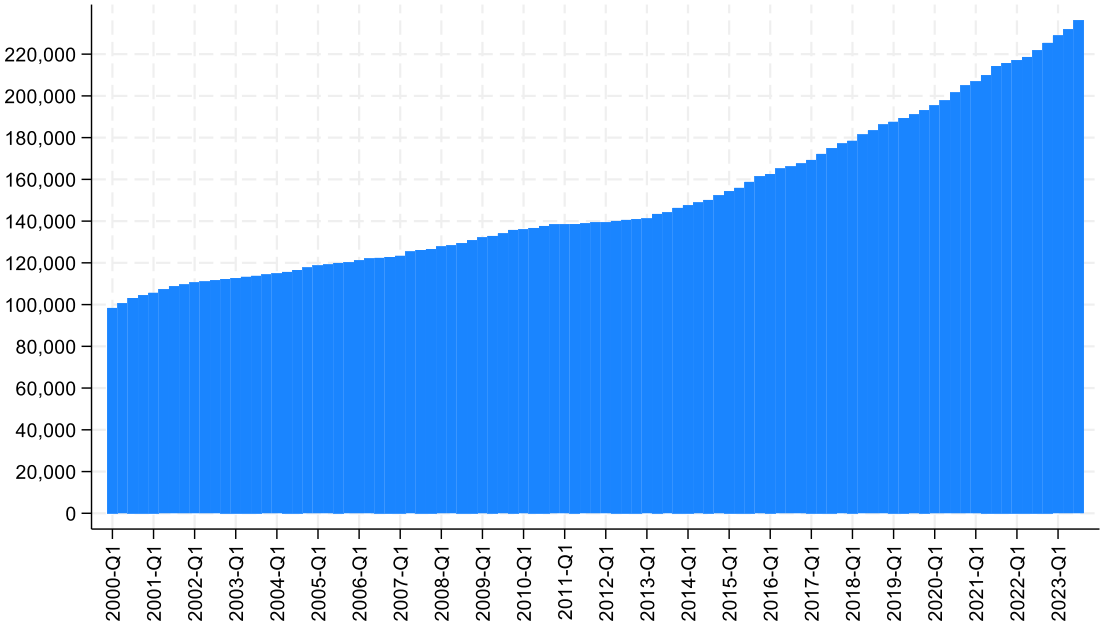



**Figure IV.2 Distribution of Apartment Units in the Charlotte Region**

**2023**

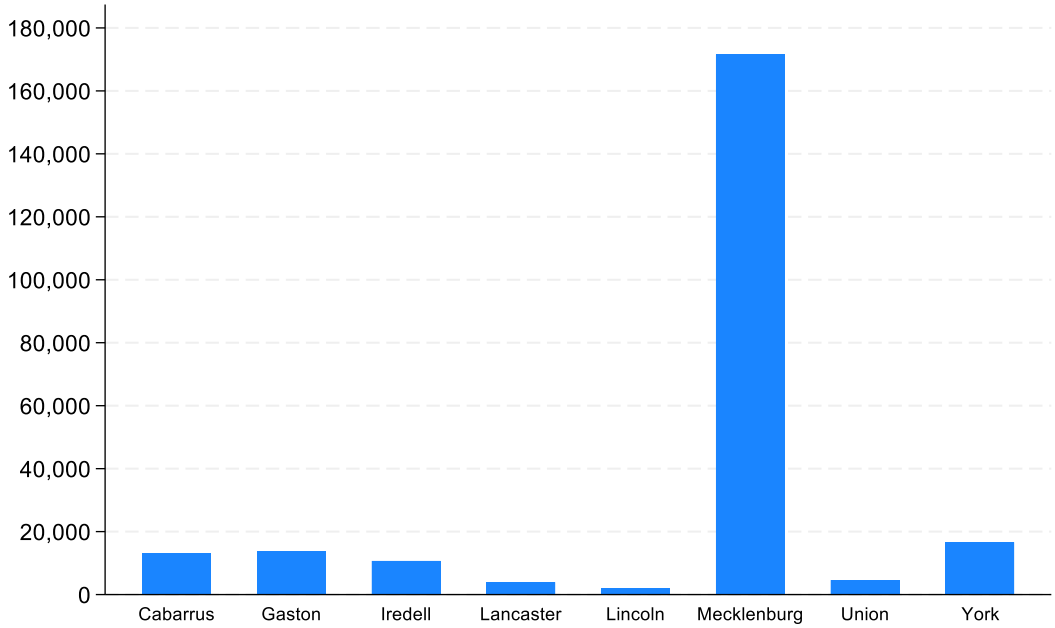


**Figure IV.3 Charlotte Region Distribution of Apartment Size**

**2023**

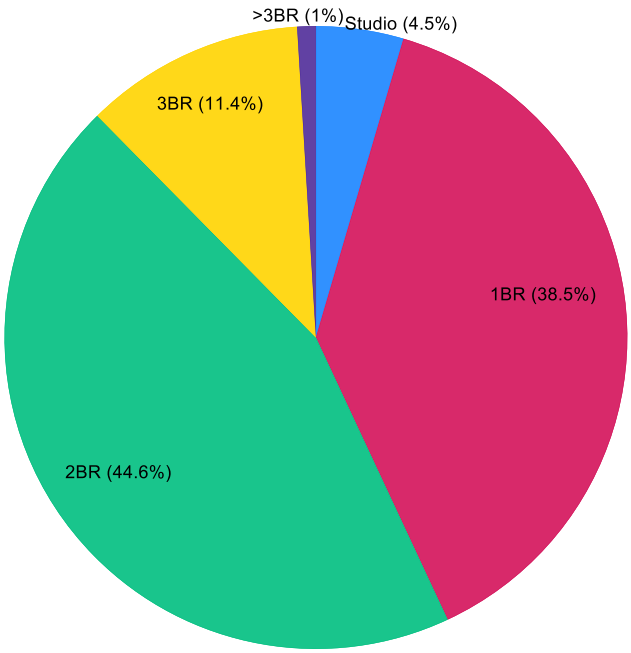
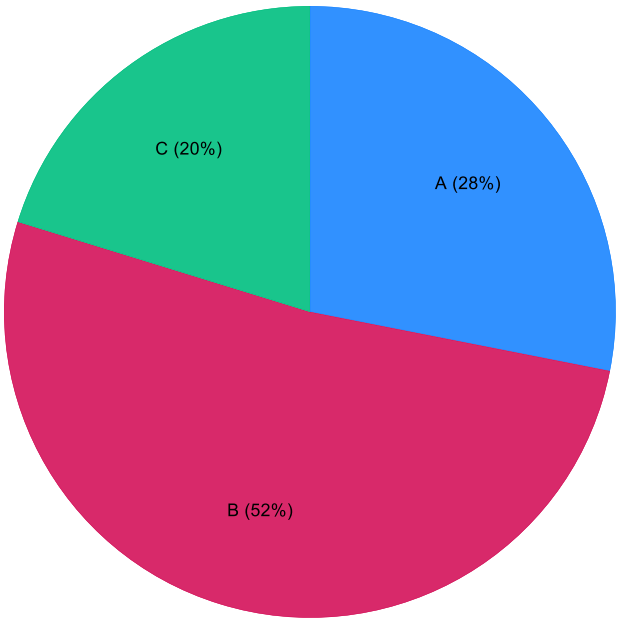



**Figure IV.4 Charlotte Region Distribution of Apartment Quality**

**2023**

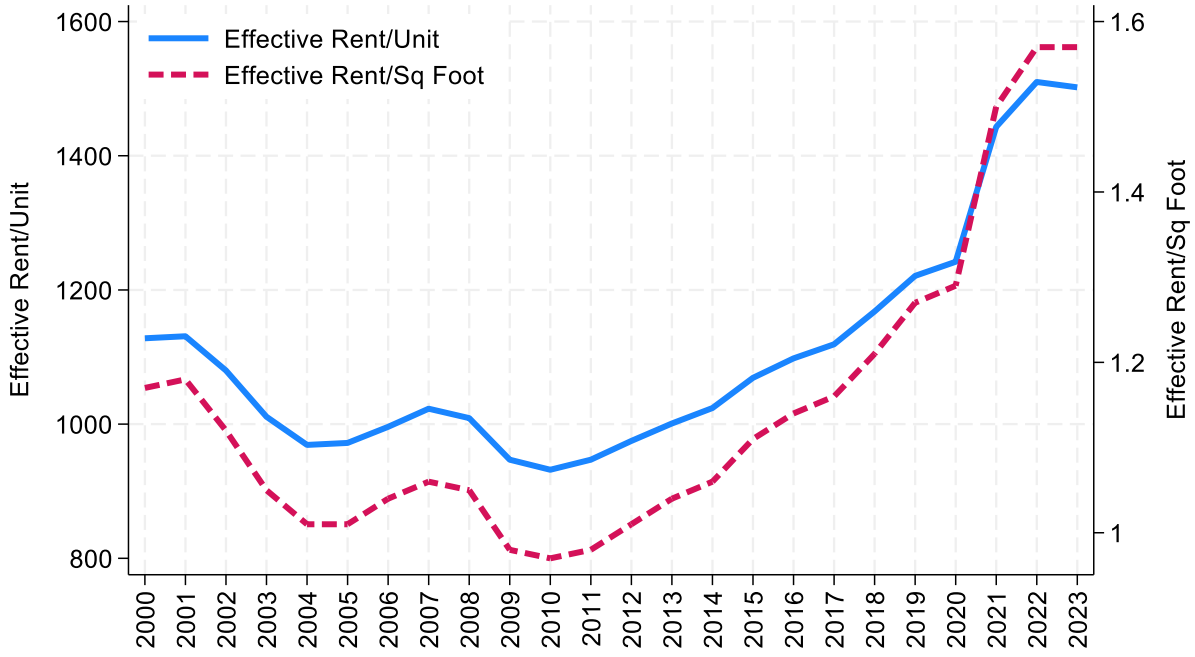


The data in Figure IV.5 show that rents have increased in the region over time, with the sharpest rent increases occurring since 2010. In that time, the average rent per unit has increased from $932 to $1,502, a 61.2% increase. This is an annualized rate of growth of 3.7%. On a square-foot basis, the average rent has increased from $0.97 per square foot to $1.57 per square foot, a 61.9% increase or a 3.8% growth rate.

Furthermore, the graph reveals a rapid acceleration in rents corresponding to the COVID-19 pandemic. From the end of 2019 to 2023 year to date, average monthly effective rents increased by $281 per unit. This represents a total growth rate of 23% during these three years, which equates to an annual growth rate of 7.1%. In other words, approximately 38% of the total rent growth from 2010 to 2023 occurred during the past four years alone. However, the rapid increases appear to have abated, as effective rents decreased slightly from 2022 to 2023, representing the first decrease in effective rents since 2010.

**Figure IV.5 Charlotte Region Average Effect Rent Per Unit and Per Square Foot**

**2000-2023**



It is worth noting that the increase in rental rates is broadly consistent with changes in single-family homes in the owner-occupied market, in that the largest increases have occurred in the lower-priced segment of the market. To see this, consider Table IV.1 presented below. In this table, we compare changes in the asking rents of both A, B and C apartments in the region since 2010 along with the change in the average home price in the region. During this time period, the average A rent has increased by 47%, or at an annual rate of 3%. The average B rent has increased by 65.4%, or 3.9% per year. Finally, the average C rent has highest growth rates as rents have increased by 88.8%, or 5% per year.[2]

**Table IV.1. Asking Rents for "A," "B," and "C" Apartments and Average Home Price for the Charlotte Region by Year, and Annualized Rent/Price Growth.** Rental data come from CoStar. Average home price is from CKCRE tabulations of Canopy Realtor© Association Multiple Listing Service data.

| | "A" Effective Rents | Annual Percentage Change | "B" Effective Rents | Annual Percentage Change | "C" Effective Rents | Annual Percentage Change | Average Home Price | Annual Percentage Change |
|---|---|---|---|---|---|---|---|---|
| 2010 | $1,195 | | $892 | | $623 | | $222,144 | |
| 2011 | $1,220 | 2.09% | $906 | 1.57% | $628 | 0.80% | $214,326 | -3.52% |
| 2012 | $1,259 | 3.20% | $932 | 2.87% | $648 | 3.18% | $224,550 | 4.77% |
| 2013 | $1,286 | 2.14% | $958 | 2.79% | $668 | 3.09% | $238,840 | 6.36% |
| 2014 | $1,304 | 1.40% | $982 | 2.51% | $697 | 4.34% | $245,928 | 2.97% |
| 2015 | $1,342 | 2.91% | $1,033 | 5.19% | $738 | 5.88% | $257,569 | 4.73% |
| 2016 | $1,360 | 1.34% | $1,062 | 2.81% | $781 | 5.83% | $274,632 | 6.62% |
| 2017 | $1,371 | 0.81% | $1,084 | 2.07% | $815 | 4.35% | $298,182 | 8.57% |
| 2018 | $1,425 | 3.94% | $1,135 | 4.70% | $852 | 4.54% | $331,988 | 11.34% |
| 2019 | $1,483 | 4.07% | $1,188 | 4.67% | $897 | 5.28% | $334,616 | 0.79% |
| 2020 | $1,469 | -0.94% | $1,218 | 2.53% | $948 | 5.69% | $365,401 | 9.20% |
| 2021 | $1,714 | 16.68% | $1,418 | 16.42% | $1,083 | 14.24% | $425,638 | 16.49% |
| 2022 | $1,778 | 3.73% | $1,483 | 4.58% | $1,163 | 7.39% | $491,044 | 15.37% |
| 2023 | $1,757 | -1.18% | $1,475 | -0.54% | $1,176 | 1.12% | $515,138 | 4.91% |

These rental rates are presented in nominal dollars. Since 2010, overall inflation has been relatively low by historical standards (with the notable exception of rapid inflation in the last couple of years). From 2010 to 2023 the cumulative inflation rate was 40% (2.6% per year on average), meaning that from 2010 to 2023 the A, B and C apartment rents, as well as the average home price, have all grown at a rate faster than inflation.[3] In fact, since 2010 the real growth rate

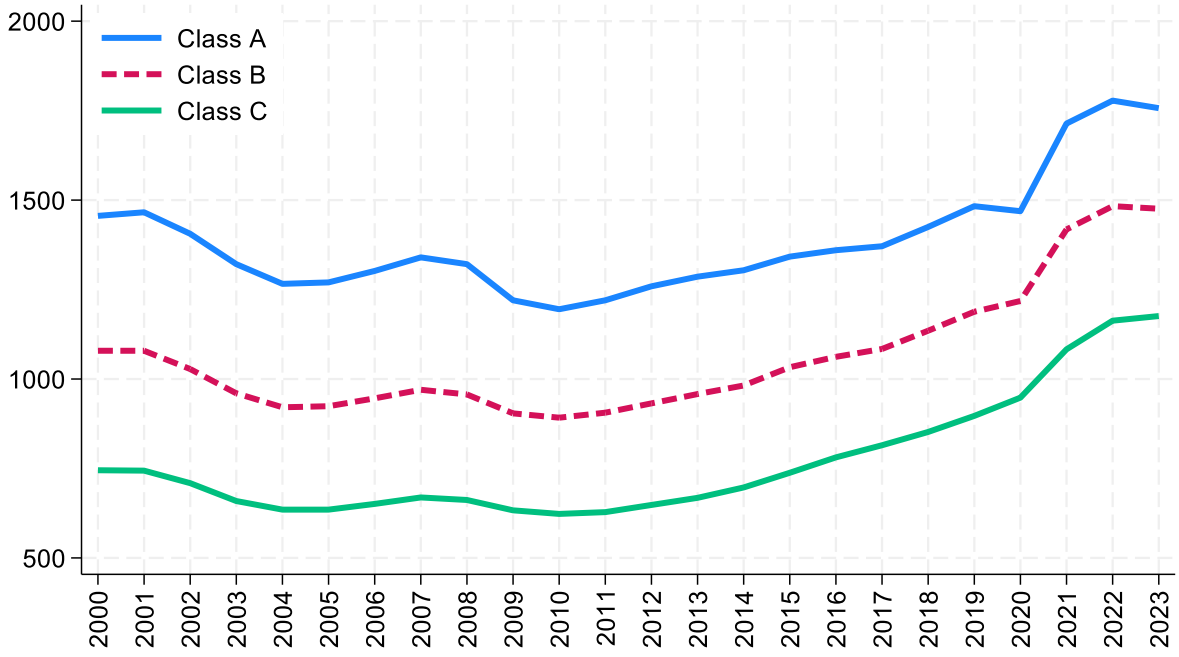
[2] We note that the average rent growth in the entire market (Figure III.39) was approximately the same as the average rent growth for the "B" quality apartments during 2010-2023. This is a result of the market being dominated by more "B" units (52% of supply) relative to "A" and "C" units.

[3] From the Bureau of Labor Statistics web site: https://www.bls.gov/data/inflation_calculator.htm.

(i.e. inflation-adjusted growth rate) for A, B, and C apartment rents has been 0.4%, 1.3% and 2.4%, respectively. The annual growth rate in the average owner-occupied home in the region over that same time was 6.7%, or 4%, when adjusted for inflation.

It is worth noting, however, that over a longer period of time, the price of apartments in the Charlotte region has actually gotten cheaper in real terms. To see this, consider Figure IV.6. Figure IV.6 plots the average rent for A, B and C apartment units since 2000. In 2000, the average A unit effective rent was $1,456. In 2023 dollars, this would be $2,577, and compared with the actual average A unit rent in 2023 of $1,757 means that the real rent *decreased* by 31.8% since 2000. Similar results hold for both B and C quality units (which have real rent decreases of 22.7% and 10.8% respectively).

**Figure IV.6 Charlotte Region Average Effective Rent for Apartments by Quality 2000-2023**




We are also interested in understanding how apartment rental rates vary across the region. Figure IV.7 shows that Mecklenburg County ($1,543) has the highest average effective rent in the

region, while Gaston County ($1,258) has the lowest effective rent as of 2023 year to date. The average effective rent in the region is $1,514.

Figure IV.8 shows that all but three counties have single-digit vacancy rates. Vacancy averages 9.8% across those counties as of 2023 year to date. Lancaster County currently has by far the highest vacancy rate at 20.10%. However, this is the result of a significant number of newly open complexes that are still in an initial "lease up" phase, which temporarily inflates vacancy from its recent average of 6.1% over the prior two years. Consequently, this outlier helps push the average vacancy rate across all counties in the region up to 10.1%. This is quite a bit higher than the 7.05% average vacancy in this region during the four prior years during and since COVID-19, which also explains the softening in rents discussed previously.

**Figure IV.7 Effective Rent by County**

**2023**

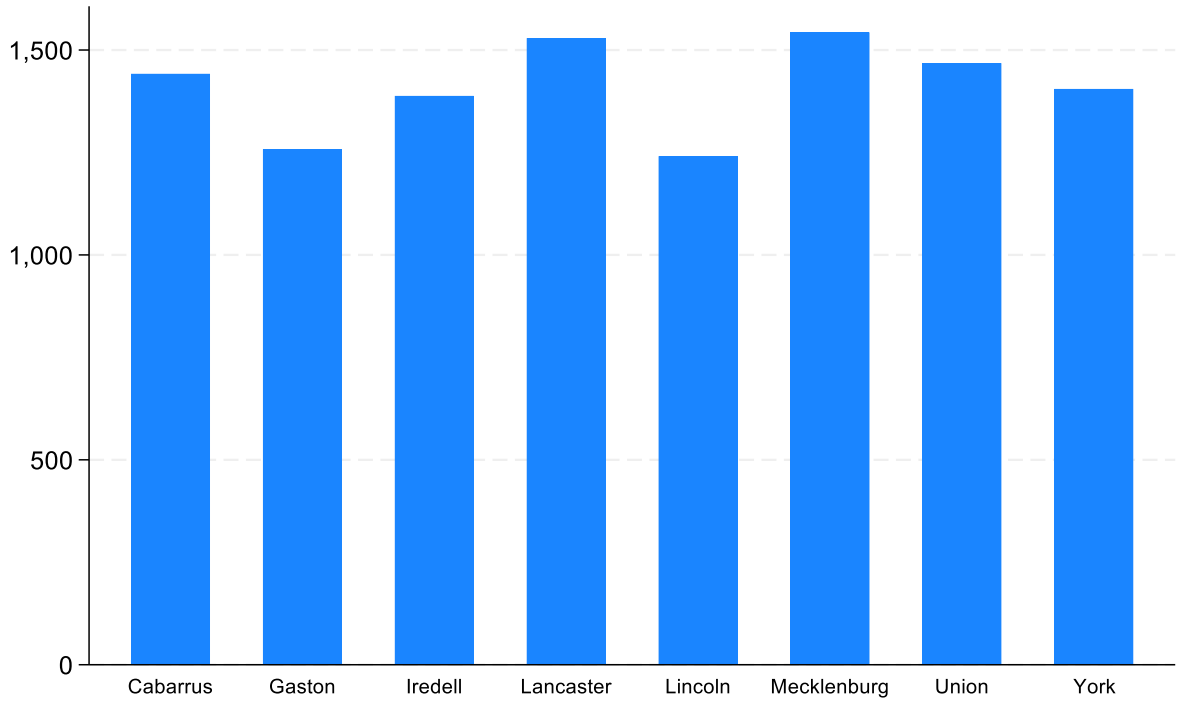
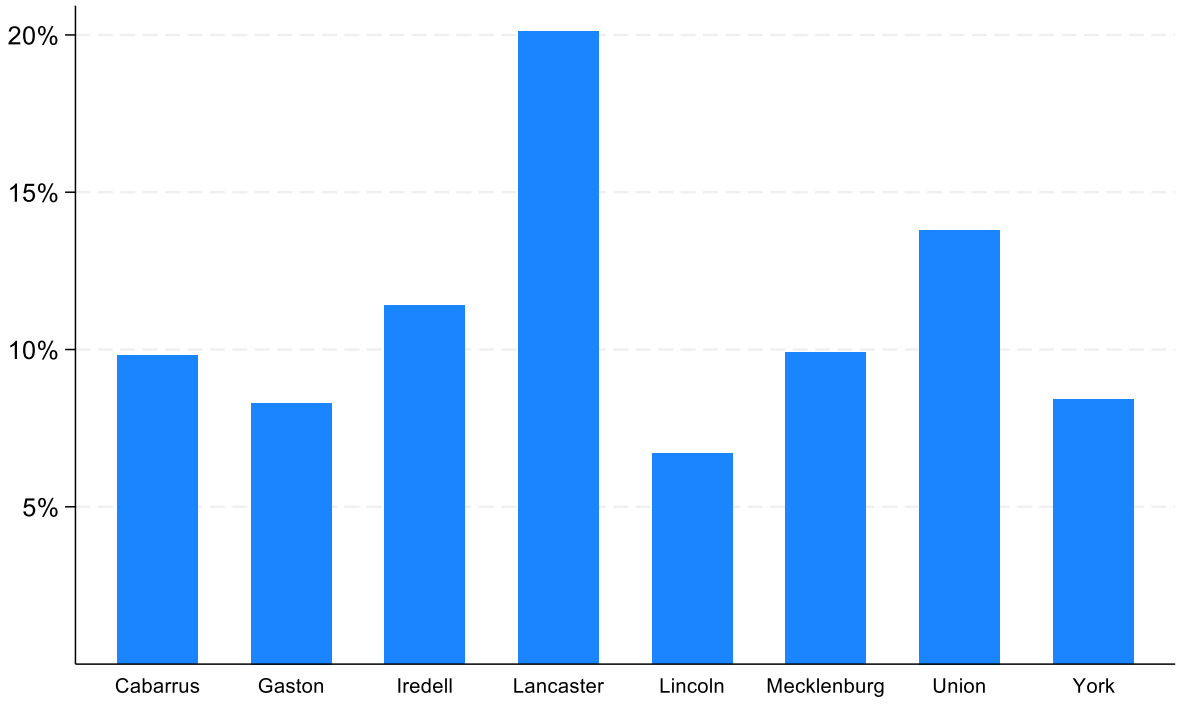


**Figure IV.8 Vacancy Rate by County**

**2023**




## B. The Subsidized and Public Rental Markets

This section demonstrates that a segment of the population lacks the income to buy or rent housing at current market prices. This segment of the population relies on subsidized private housing or public housing to have a place to live. The need for subsidized or public housing is often thought of as an "urban" problem, but a significant need exists throughout the entire region as we will show.

We begin this analysis with a focus on housing affordability. More specifically, we compare the all-in cost of owning or renting to household income. Table IV.1 reports that as of 2023 the average C grade apartment in the Charlotte area rents for $1,176/month. The US Census Bureau reports average household utilities in the region in 2023 as being $385 (when adjusted for one

year of inflation).[4] This means the total housing cost for the household renting the average C unit would be $1,561/month. To meet the normal definition of being affordable, the homeowner must be able to pay their rent and utilities with no more than 30% of their gross income. This implies a monthly household income of $5,202/month, or $62,420 annually for the average C level apartment to be considered affordable.

Large segments of the regional population cannot meet this financial hurdle. Recall that Figure II.8 shows that for the entire eight-county Charlotte region in 2022, approximately 345,313 households (31.8% of all households) had incomes of less than $50,000. Every one of those households would be considered cost-burdened renting the average C level apartment. Consider that Figure II.8 also shows that nearly 79,270 households (7.3% of all households) in the region have an annual household income of less than $15,000. Basically, renting a C grade apartment and paying utilities would use up their entire income.

Therefore, there are a substantial number of households who need some type of housing assistance. Before we begin our discussion of subsidized or public housing, it is worth clarifying a few terms. Every year, the U.S. Department of Housing and Urban Development works in conjunction with the U.S. Census Bureau to determine the Area Median Income (AMI) for a family of four in the region. When a household applies for housing assistance, the level of assistance for which they are eligible is a function of the number of people in the household and the income of the household relative to the AMI. Typically, families become eligible for some assistance at 80% levels of AMI, but the highest levels of assistance occur at the low-income (50% of AMI) and very low-income (30% of AMI) levels. Table IV.2 reports the Charlotte region AMI and the 50% and 30% AMI levels for 2005 through 2023.

[4] Utilities rates are from the U.S. Census Bureau Table 1800. Region of residence: Annual expenditure means, shares, standard errors, and coefficients of variation, Consumer Expenditure Surveys, 2022 PDF (bls.gov) for the Southern United States in 2022.

**Table IV.2. Annual Incomes and Maximum Amount Households Can Devote to Housing Without Being Cost-Burdened for Various Percentages of the Charlotte AMI by Year 2005-2023.** Data are from the U.S. Department of Housing and Urban Development web site: http://huduser.gov.

| | 100% of Charlotte Region AMI | | 50% of Charlotte Region AMI | | 30% of Charlotte Region AMI | |
|---|---|---|---|---|---|---|
| | Annual Income | Monthly Housing | Annual Income | Monthly Housing | Annual Income | Monthly Housing |
| 2005 | $61,800 | $1,545 | $30,900 | $773 | $18,540 | $464 |
| 2006 | $64,400 | $1,610 | $32,200 | $805 | $19,320 | $483 |
| 2007 | $60,200 | $1,505 | $30,100 | $753 | $18,060 | $452 |
| 2008 | $64,300 | $1,608 | $32,150 | $804 | $19,290 | $482 |
| 2009 | $66,500 | $1,663 | $33,250 | $831 | $19,950 | $499 |
| 2010 | $67,200 | $1,680 | $33,600 | $840 | $20,160 | $504 |
| 2011 | $67,500 | $1,688 | $33,750 | $844 | $20,250 | $506 |
| 2012 | $68,500 | $1,713 | $34,250 | $856 | $20,550 | $514 |
| 2013 | $64,100 | $1,603 | $32,050 | $801 | $19,230 | $481 |
| 2014 | $64,200 | $1,605 | $32,100 | $803 | $19,260 | $482 |
| 2015 | $67,200 | $1,680 | $33,600 | $840 | $20,160 | $504 |
| 2016 | $67,000 | $1,675 | $33,500 | $838 | $20,100 | $503 |
| 2017 | $70,700 | $1,768 | $35,350 | $884 | $21,210 | $530 |
| 2018 | $74,100 | $1,853 | $37,050 | $926 | $22,230 | $556 |
| 2019 | $79,000 | $1,975 | $39,500 | $988 | $23,700 | $593 |
| 2020 | $83,500 | $2,088 | $41,750 | $1,044 | $25,050 | $626 |
| 2021 | $84,200 | $2,105 | $42,100 | $1,053 | $25,260 | $632 |
| 2022 | $96,300 | $2,408 | $48,150 | $1,204 | $28,890 | $722 |
| 2023 | $102,800 | $2,570 | $51,400 | $1,285 | $30,840 | $771 |

Recall that the amounts in the "Monthly Housing" column include both the actual housing payment *and* utilities. Therefore, a household with 100% AMI for the Charlotte region could afford to pay $2,570 for rent and utilities in 2023. Again, assuming an average utility burden of $385, this means that the household could pay as much as $2,185 in rent. This places the household well in the private rental market. Unfortunately, utilities do not scale with rent or income, so a person at 50% of AMI would probably still spend around $385 for utilities. This leaves them with $900 to pay rent. This places them approximately 31% below the average rent for a C class apartment in the region. This will make it very difficult for them to afford private apartments in the Charlotte region. For people at 30% of AMI, the $771/month they can devote toward all housing costs would be split $385 toward utilities and $386/month toward rent. There are virtually no units available in the private market at that price level. Households at the 50% and 30% levels will have to rely on subsidies to find private apartments or public housing.

Within the subsidized and public housing markets, there are three main programs: the Low-Income Housing Tax Credit program (LIHTC), the Section 8 rental assistance program, and publicly owned housing units. The following sections briefly discuss and analyze the first two of these programs within the Charlotte region.

The Low-Income Housing Tax Credit is a federal program designed to encourage private investment in affordable rental housing for low-income households. The tax credits are created through the IRS and allocated to state housing credit agencies based on the population of the state. Project sponsors (developers) receive a tax credit in exchange for making a certain percentage of the units in the development available to low-income renters. The credit can be transferred to investors and is typically used to attract equity financing for the deal. These affordable units are rent-restricted in that the maximum amount of rent that can be charged is equal to 30% of the relevant AMI, less utilities. The rent restrictions are required to stay in place for 30 years (although owners can leave the program after the first 15 years if granted regulatory relief), and the tax credits can be recaptured if the restrictions are not honored during the first 15 years. The U.S. Department of Housing and Urban Development is involved in determining the AMI annually and adjusting it based on the number of people in each household.

The program has been used extensively throughout the country, including in the Charlotte region. Figure IV.9 shows the distribution of LIHTC units by county, noting that although the vast majority of LIHTC units are in Mecklenburg County, some counties have a higher proportion of LIHTC units relative to Mecklenburg than they do of general apartments. For example, Gaston County has 2,020 LIHTC units, which is 16.7% of the 12,073 LIHTC units that Mecklenburg has. As shown in Figure IV.9, CoStar reports that Gaston County has 13,791 total apartment units, or only 8% of the 171,564 units that Mecklenburg has. A similar result holds in Cabarrus County.

**Figure IV.9 LIHTC Units by County**

**2021**

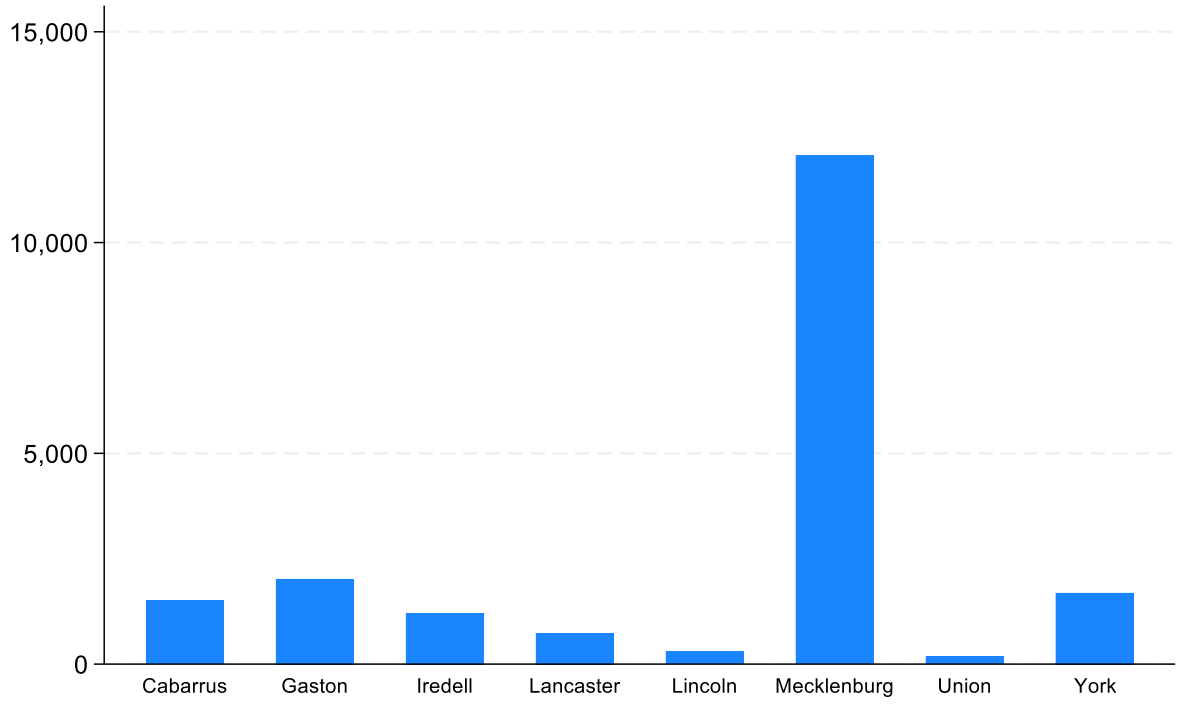



Figure IV.10 shows the distribution of unit sizes in each county. This distribution is essentially the same as the distribution CoStar reports for non-subsidized units, although the subsidized market is skewed towards having more bedrooms, as it has 9.7% fewer one-bedroom units while having 11.1% more three-bedroom units on average.

The Section 8 program is another program that seeks to leverage the private market to provide affordable housing to low-income residents. Section 8 is a federal housing assistance program that provides direct assistance to certain low-income tenants. Although ultimately funded through HUD, Section 8 programs are administered at the local level by public housing authorities. The aid is given to the tenant in the form of a voucher which the landlord then redeems for cash. The amount of aid given is enough to allow the tenant to spend no more than 30% of their income on rent plus utilities. Vouchers may be based on the individual tenant; in which case their voucher follows them should they move. These are known as Housing Choice Vouchers. Alternatively, vouchers may be tied to the property and not to the tenant. This essentially means that the voucher does not follow the tenant should they leave. These are

referred to as project-based vouchers. HUD maintains a database of projects across the country that have contracts with HUD or with public housing authorities for project-based vouchers.

Figure IV.10 shows the distribution of those projects within the Charlotte region (current as of Oct. 4, 2023). This distribution shows again that the need for low-income housing is spread throughout the region. Although Mecklenburg County has the highest absolute number of these project-based voucher contracts, all other counties such as Cabarrus, Gaston, Iredell, and York also have a significant inventory.

**Figure IV.10 Distribution LIHTC Units by Size**

**2021**

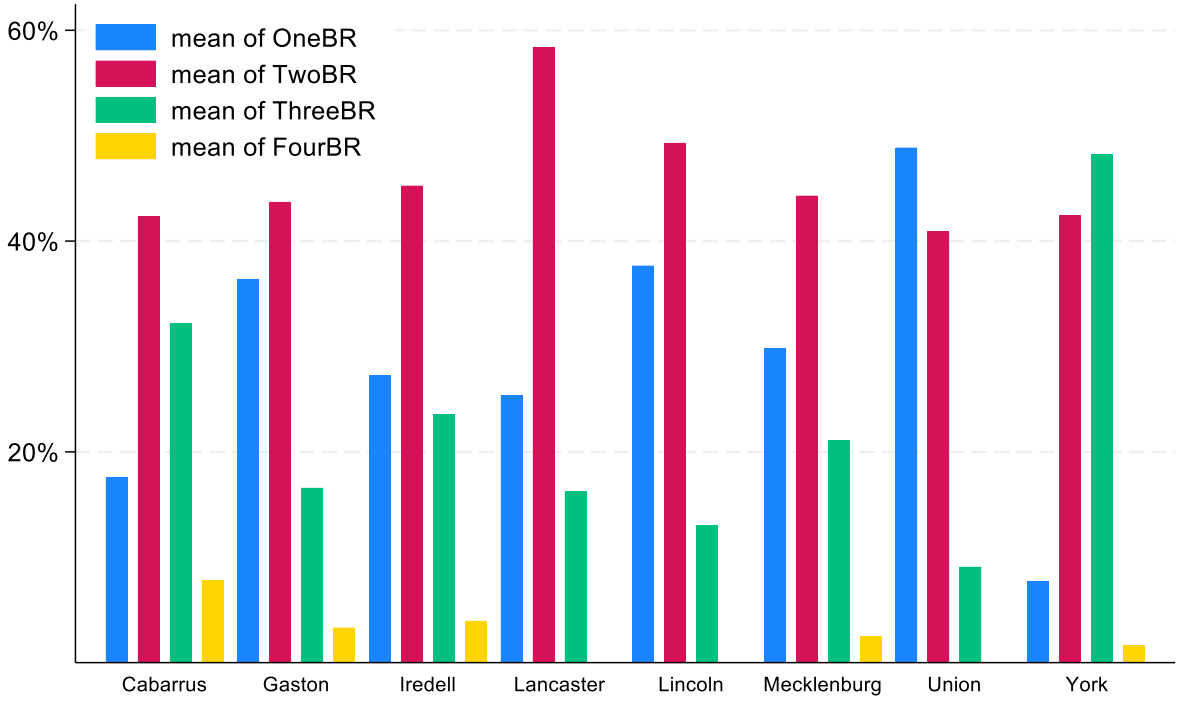
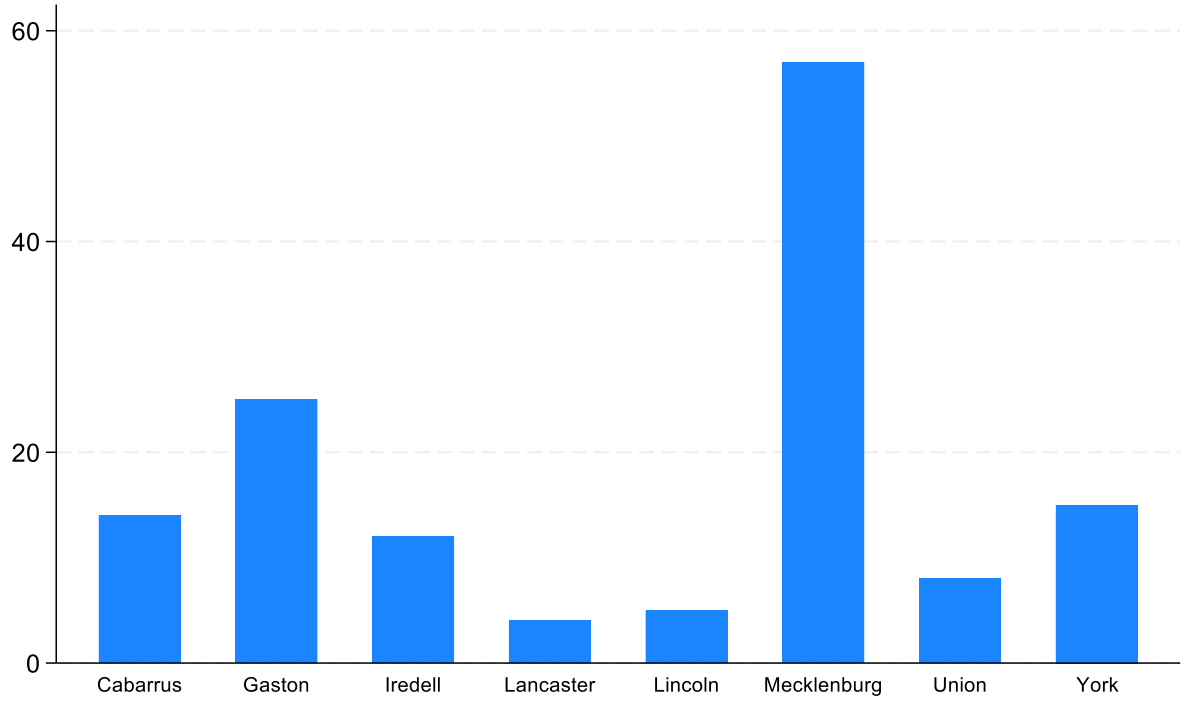


**Figure IV.11 Charlotte Region Housing Voucher Contracts by County**

**2023**




## C. The Single-Family Rental Markets

Next, we turn to the single-family rental markets. Because many single-family rental properties are owned and managed by individual investors, it is very difficult to obtain comprehensive data on the single-family rental markets. In this part of the analysis, we again rely on the MLS data provided by Canopy Realtors. Some individual real estate investors use real estate agents to list their rental properties, and these listings are covered by the MLS. We want to emphasize that it is very difficult to assess what percentage of single-family rental properties are listed on the MLS. However, we can still gain some insight into the general trends of the market by simply looking at the MLS data.

We first present the median and average single-family house rents from January 2022 to September 2023 in Figure IV.12. Single-family rents increased from $1,800 in January 2022 to $2,000 in September 2023. However, rents have remained flat since the middle of 2022.

**Figure IV.12 Median and Average Single-Family House Rent**
**January 2022-September 2023**

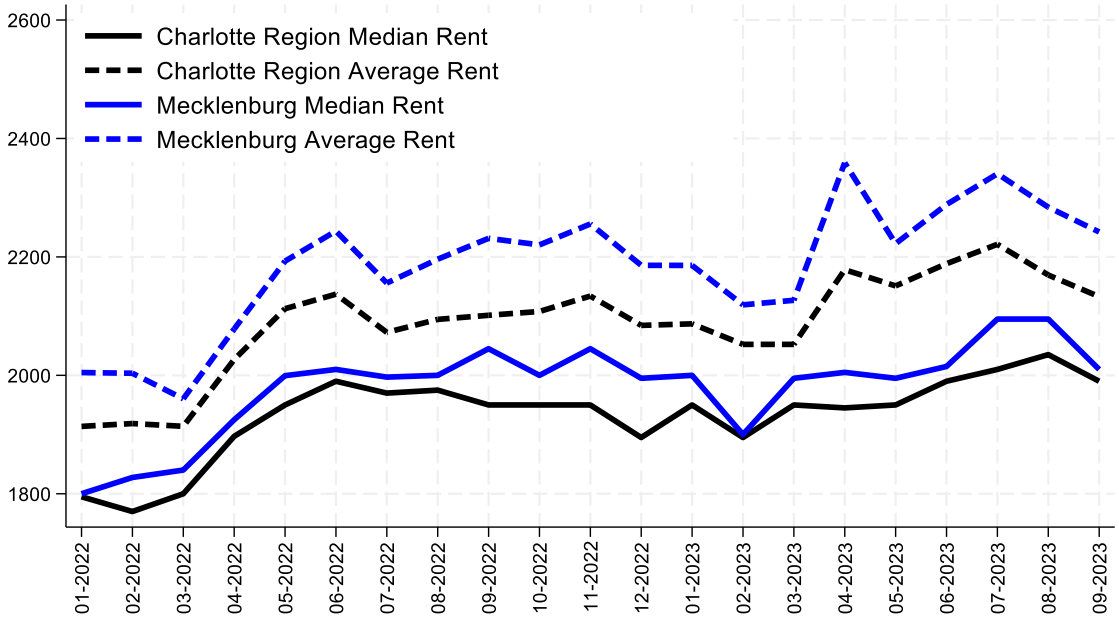
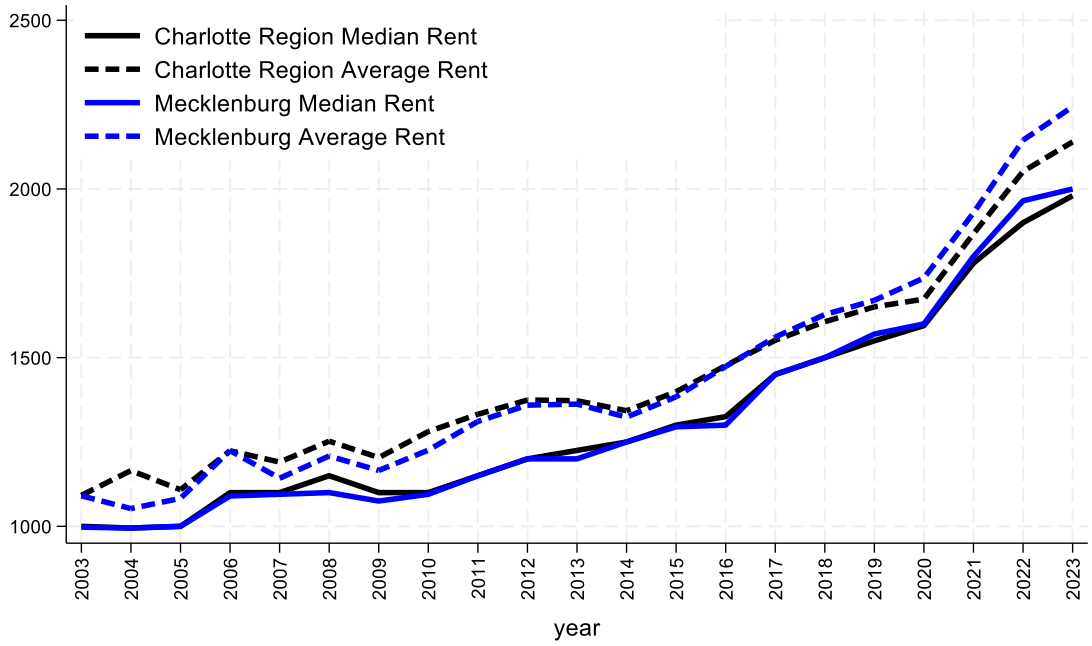
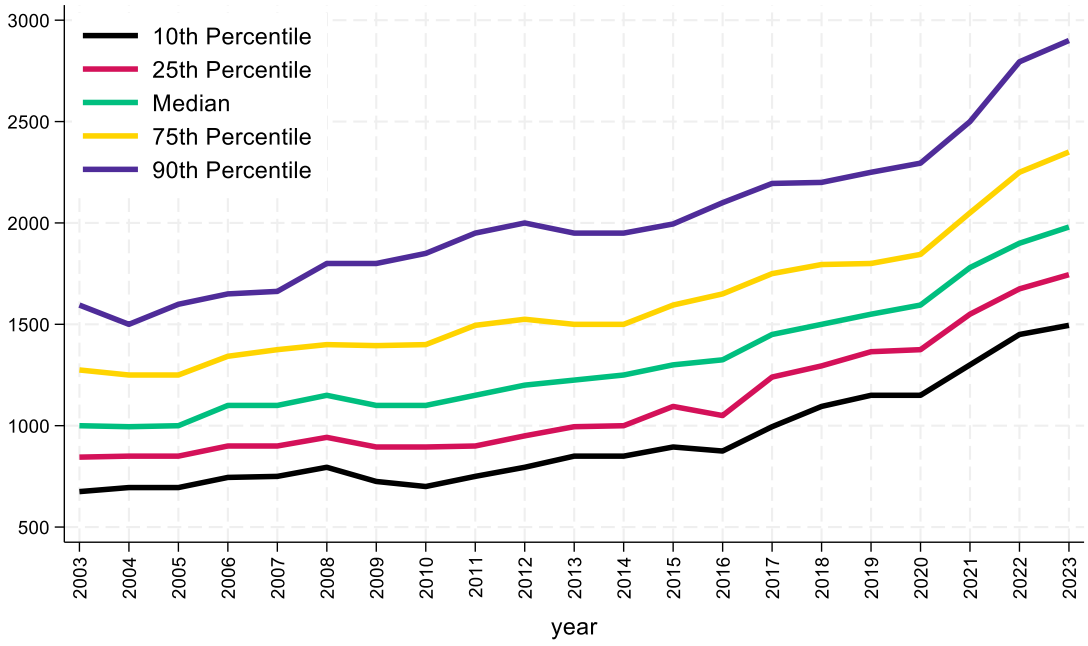


**Figure IV.13 Median and Average Single-Family House Rent 2003-2023**




Then again, we take a long-term perspective and look at single-family rents from 2003 to 2023. The Canopy MLS data started to cover rental listings in 2003, which is why we started the analysis in 2003 as well. We plot the annual median and average rents in Figure IV.13. From 2003 to 2023, the median single-family rent went from $1,000 per month to $2,000 per month, a 100% increase. However, the average annual growth rate is 3.52%, much lower than the 5%-6% single-family price growth rate over the same period.

**Figure IV.14 Dynamics of the Single-Family Rent Distribution 2003-2023**




We then also try to understand whether there is also a shift in the distribution by looking at the 10th, 25th, 75th, and 90th percentile of the monthly rents. Similar to single-family house prices, single-family rents at the lower end also increase at a faster rate than rents at the higher end until very recently. From 2011 to 2021, the annual growth rate is 5.65% for the 10th percentile, 5.59% for the 25th percentile, 3.21% for the 75th percentile, and 2.52% for the 90th percentile. However, from 2021 to 2023, the annual growth rate is 7.23% for the 10th percentile, 6.10% for the 25th percentile, 7.60% for the 75th percentile, and 7.70% for the 90th percentile. Although the overall growth rates for single-family rentals with different numbers of bedrooms are similar, the growth rate for rentals of three and four bedrooms has a much higher growth rate since 2020, that is, during the COVID-19-19 pandemic.

The above results clearly suggest that the demand for single-family rental housing is getting stronger. We next turn to the supply side by first looking at the number of listings and closings. We first plot the monthly listings and closings during the COVID-19 pandemic from January 2022 to September 2023 in Figure IV.16. Similar to single-family listings and sales, in most months, the number of closings is close to the number of listings, suggesting that the supply of

single-family rental is also tight. We then also take a longer-term perspective and plot the listings and closings from 2003 to 2023 in Figure IV.17.

We then look at the median days on the market for single-family rentals first during the pandemic, as shown in Figure IV.18. The median days on the market increased significantly during the second half of 2022 to 29 days in January 2023. However, in the first half of 2023, it decreased to 13 days in July 2023 before it increased again in August and September of 2023.

**Figure IV.15 Single-Family House Rents by Size**
**2003-2023**

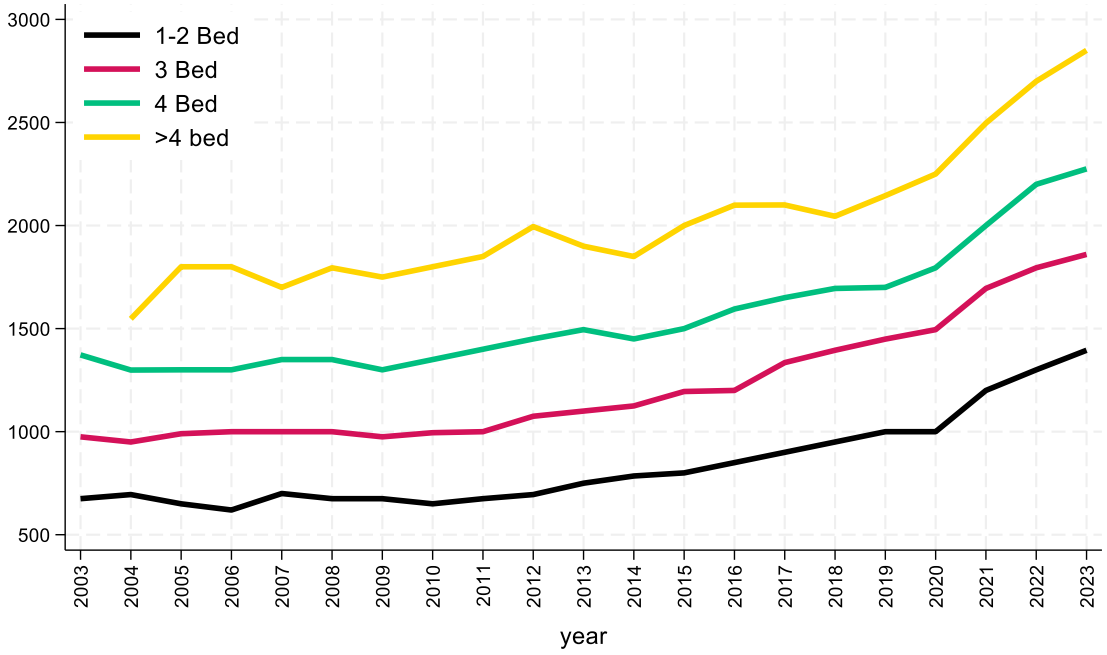


**Figure IV.16 Single-Family Rental Listings and Closings**
**January 2022-September 2023**

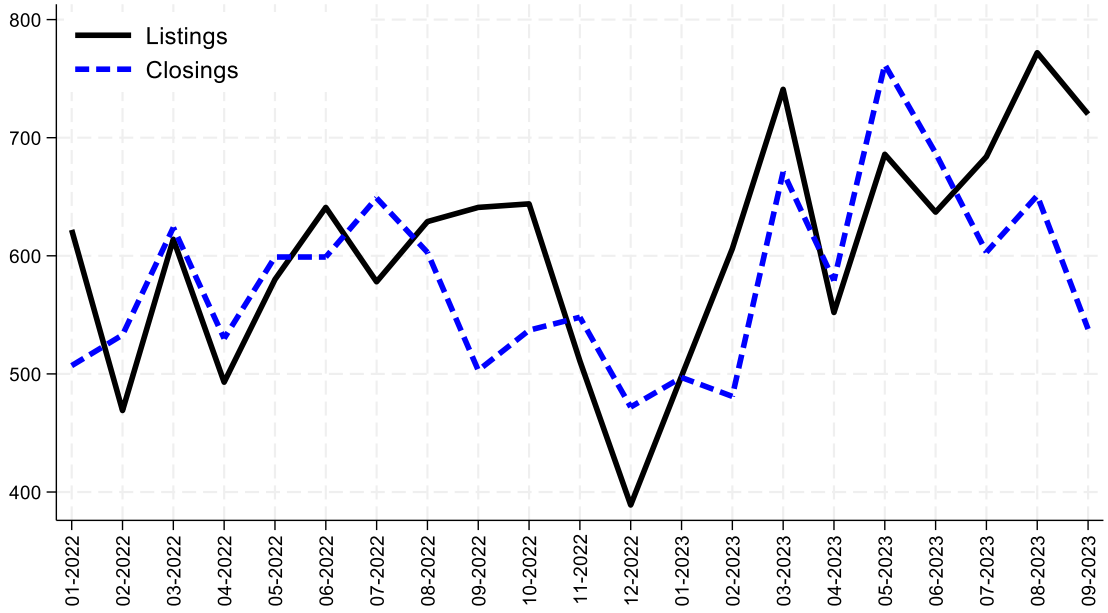



**Figure IV.17 Single-Family Rental Listings and Closings**
**2003-2023**

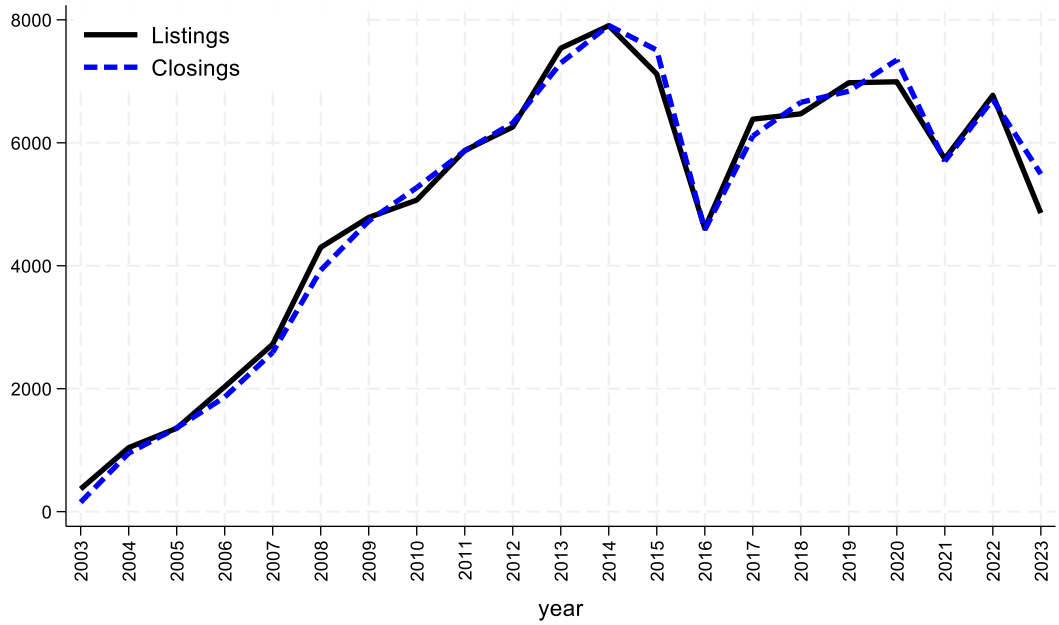


**Figure IV.18 Median Days on the Market for Single-Family Rentals January 2022-September 2023**

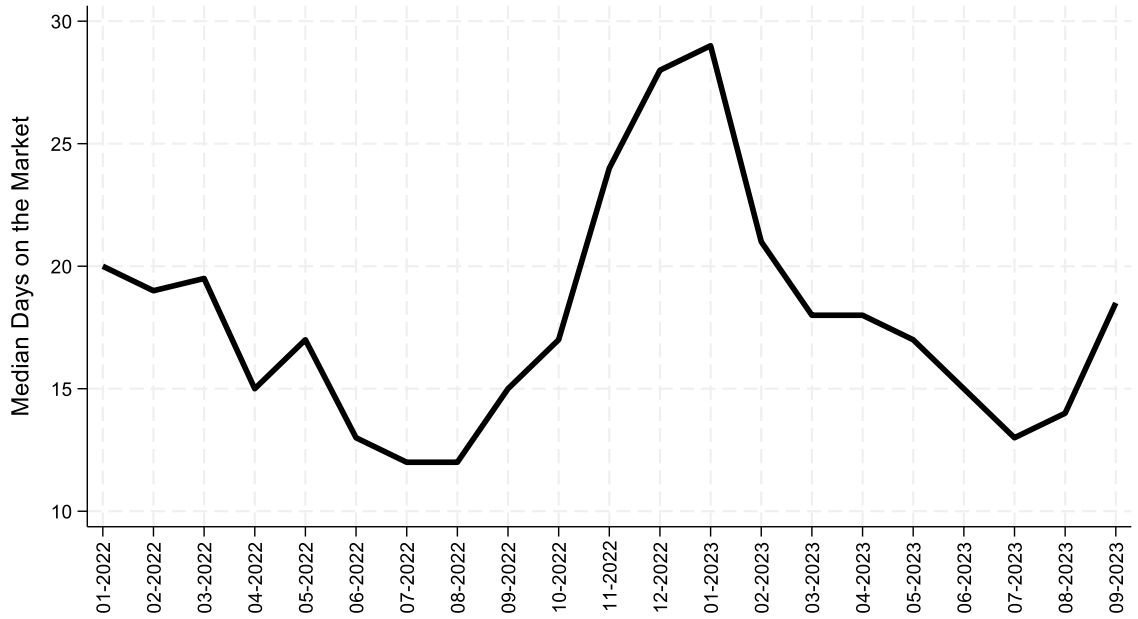
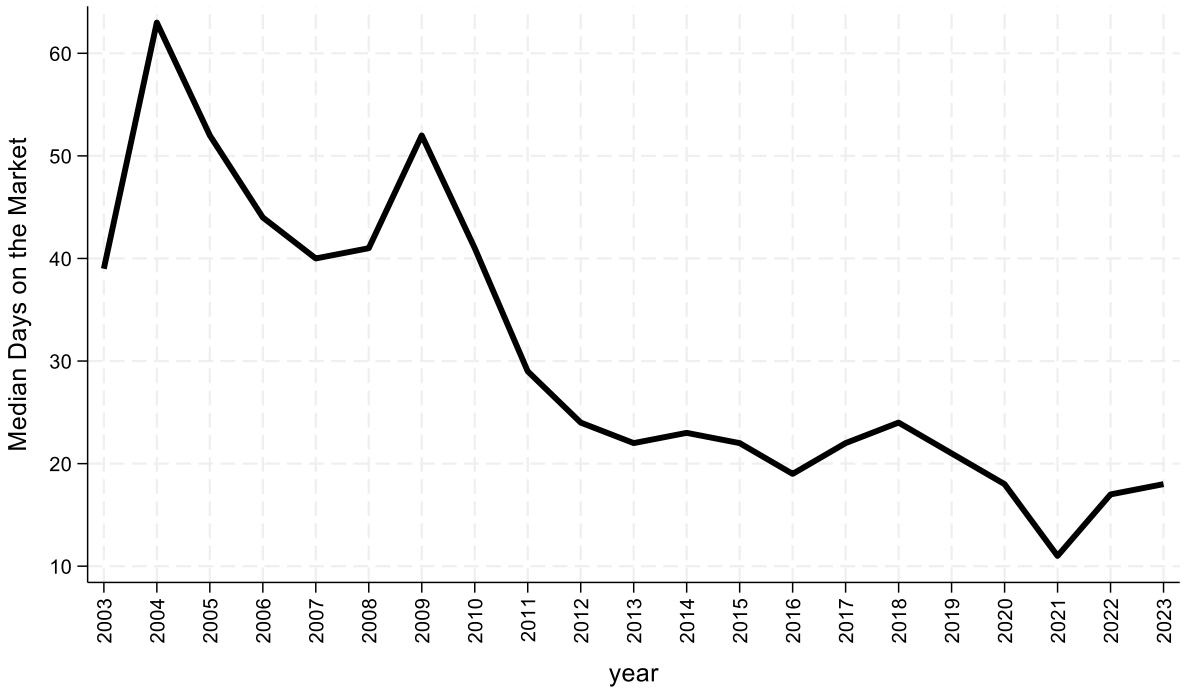



**Figure IV.19 Median Days on the Market for Single-Family Rentals 2003-2023**



## V. Comparative Analysis

We have focused on the housing dynamics within the Charlotte MSA, particularly the region's various challenges. Without context, it can appear that the challenges and difficulties the region faces are unique or out of proportion to what other regions face. In this section, we expand our analysis and compare the Charlotte region to other regional and national competitor cities. All data in this section comes from the from the American Community Survey one-year estimates from 2014-2022 produced by the U.S. Census Bureau unless stated otherwise. Because the Census did not release the one-year estimates for 2020, we calculate the growth rates of various measures based on the annualized growth from 2019 to 2021.

We compare Charlotte's performance in several key metrics with our competitor cities. These metrics include:

- Population and population growth
- Land prices
- Median home prices
- Median multiple
- Median rents
- Median price to rent ratio
- Cost-burden of housing

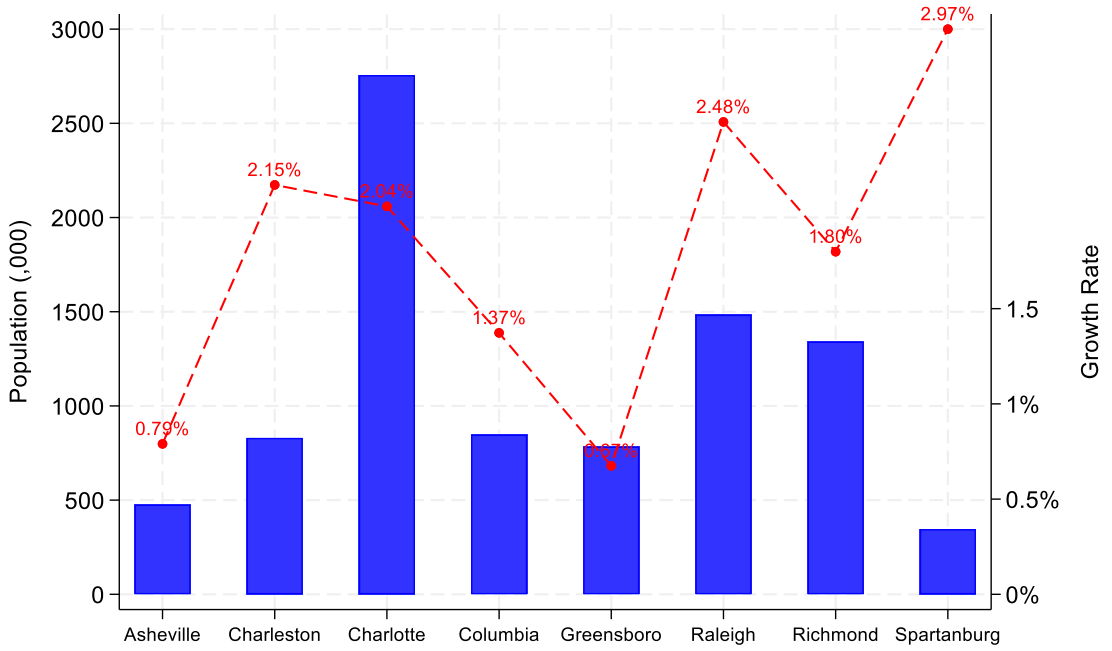
We selected seven regional and 11 national competitor cities for this analysis. The seven regional cities are Asheville, Greensboro and Raleigh in North Carolina; Charleston, Columbia and Spartanburg in South Carolina; and Richmond in Virginia. Our objective is to examine the major economic centers in North Carolina and South Carolina. We included Richmond because it is closer in size to these regional cities than the set of national competitors. The national comparison set includes Atlanta; Austin, Texas; Cincinnati; Denver; Indianapolis; Memphis, Tenn.; Nashville; Portland, Ore.; Sacramento, Calif.; San Antonio; and Tampa, Fla. We choose the cities of national competitors based on one of two criteria. First, we chose cities with populations similar to those of Charlotte, which led us to choose Austin, Cincinnati, Denver, Indianapolis, Portland, Sacramento, San Antonio and Tampa. Second, we chose Atlanta, Nashville, and Memphis, because of their proximity to Charlotte and because Charlotte frequently competes with them for economic development.

## A. Population and Population Growth

We begin by showing each city's population and population growth rate in our regional and national comparison set in Figure V.1 and Figure V.2.

**Figure V.1 Regional Competitor MSAs**

**Population 2022 and Population Growth 2021 to 2022**

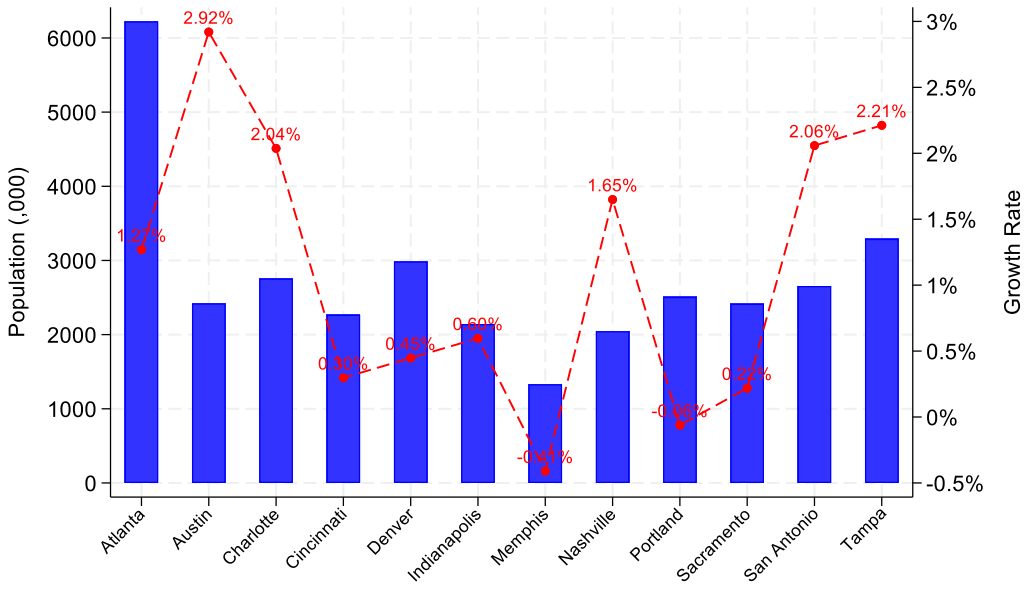



From Figure V.1, we note that the Charlotte MSA has the largest population and one of the fastest growing populations in the region, behind Charleston, Raleigh and Spartanburg.[5] Figure V.2 shows that the Charlotte MSA population is similar to the other comparison MSAs. The exception, of course, is the Atlanta MSA, which has more than twice the Charlotte MSA population. Atlanta is included because of its geographic proximity and because it is a frequent competitor for economic development. Figure V.2 shows that the Charlotte MSA has one of the highest population growth rates among the national competitor cities, with only Austin and Tampa growing faster.

[5] Note that the Raleigh MSA does not include Durham and Chapel Hill. Those cities are included in the Raleigh Combined Statistical Area (CSA) and bring the total population to a little over 2 million. We have elected to work with the MSA for consistency throughout the report.

**Figure V.2 National Competitor MSAs**

**Population 2022 and Population Growth 2021 to 2022**




## B. Median Home Prices

Figure V.3 presents the median home price for each regional competitor MSA in 2022 and the growth rate from 2021 to 2022. The Charlotte MSA has the third highest median home price among these regional MSAs. The Charlotte MSA also has the highest growth rate. Across all these regional cities, the house price growth rates are at historical highs during this period.

Figure V.4 presents the median home price for the MSAs of the national competitors. There are stark differences in median home prices across these cities. Of the 12 MSAs, the Charlotte MSA has the fifth lowest median home price. Sacramento and Denver have median home prices almost double the median home price in the Charlotte MSA. However, Charlotte has one of the highest home price growth rates from 2021 to 2022.

**Figure V.3 Regional Competitor MSAs**

**Median House Price 2022 and Growth 2021 to 2022**

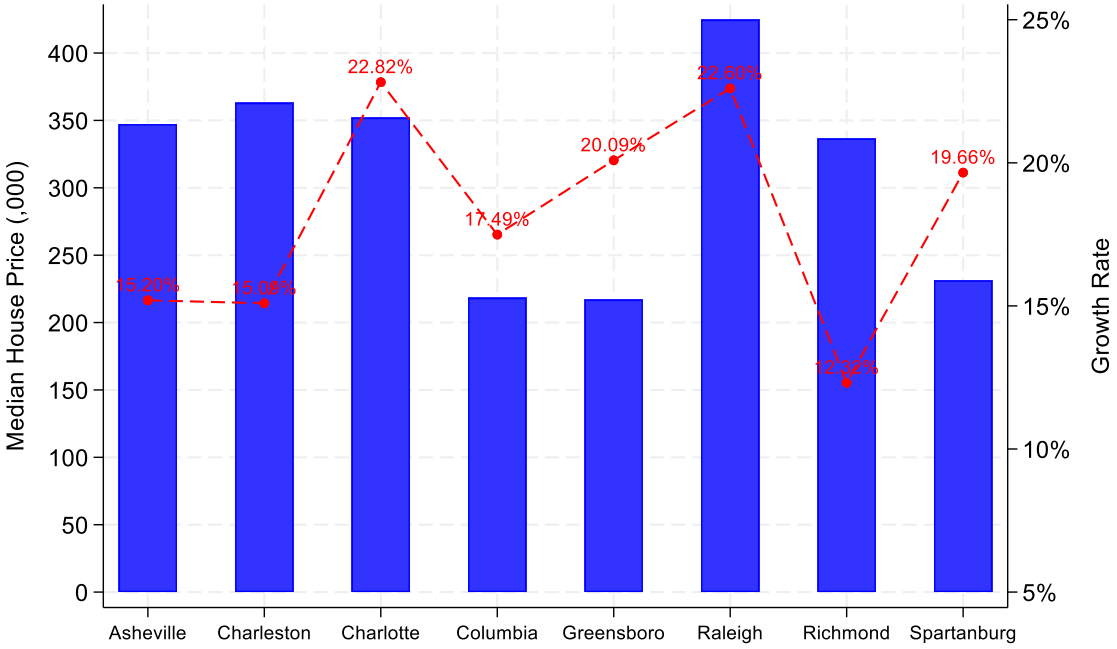
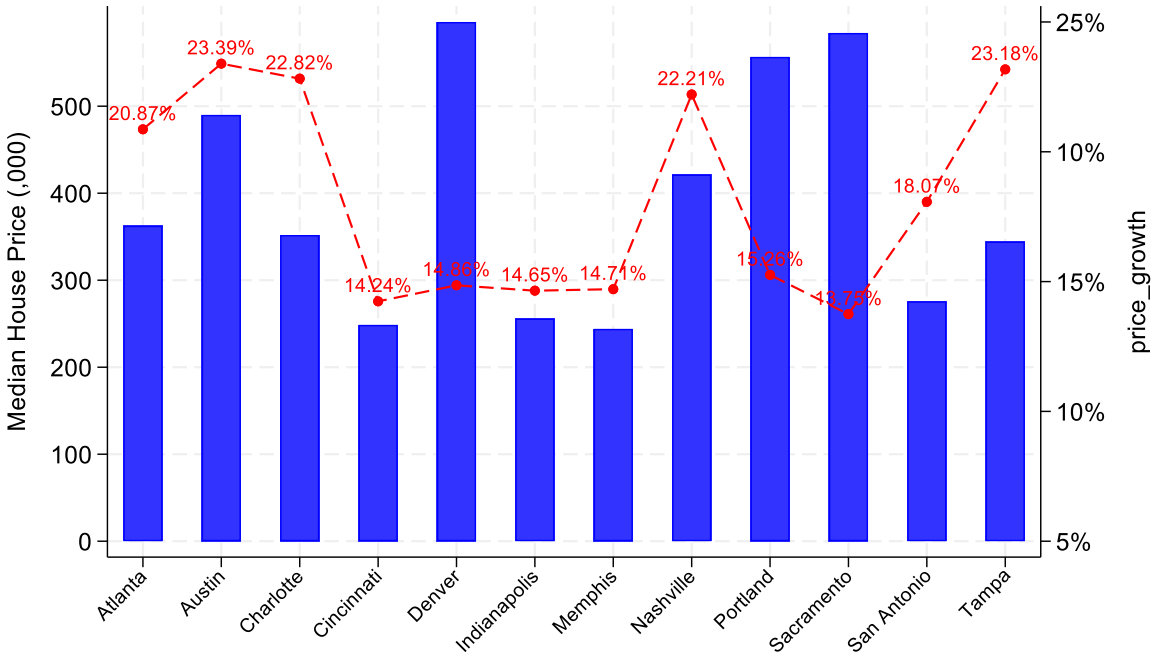



**Figure V.4 National Competitor MSAs**

**Median House Price 2022 and Growth 2021 to 2022**



## C. Median Multiple Analysis

The median home price in each MSA tells only half the story. It gives us relative information on the price of a home, but it does not consider that there can also be very significant income differences across cities. Since our concern is around the relative cost of housing and the general economic competitiveness of the region, we next use a measure of housing affordability that incorporates both prices and income.

One of the most commonly used measures of housing affordability is the so-called median multiple. This multiple is defined to be the ratio of the median home price to the median income that is:

$$Median\ Multiple\ = \frac{Median\ House\ Price}{Median\ Income}$$

The median multiple measures how many years of income the median earner in a region would have to use to buy the median house. By convention, a median multiple below three is considered "affordable," a median multiple between three and four is considered "moderately unaffordable," and a median multiple above four is considered "unaffordable."

Figure V.5 plots the median multiple for the regional competitor MSAs in 2022 and the growth rates of the multiple from 2021 to 2022. The Charlotte MSA was above the "unaffordable" level of 4 in 2021 for the first time and the median multiple reached 4.5 in 2022. Among the eight MSAs in the chart, Charlotte's median multiple is similar to Charleston and Raleigh and is only lower than Asheville. Asheville has the highest median multiple among the eight MSAs. The median multiple in Charlotte continues to increase rapidly. From 2021 to 2022, the median multiple increased at an annual rate of 13%, and the growth rate is among the highest across regional competitor cities.

Figure V.6 shows the median multiple for the national competitor MSAs. Compared with other national competitor cities, Charlotte appears to be in the middle regarding the median multiple. All MSAs have seen an increase in the median multiple from 2021 to 2022. However, Charlotte has the highest level of growth of the median multiple.

## D. Median Rents

All the previous comparisons focus on owner-occupied markets. Rental markets are an important component of the housing market in every city and are another helpful metric for comparing housing markets across regions. Figure V.7 plots the median rent for each of the regional competitive MSAs in 2022 and the growth rate in rents from 2021 to 2022. Note that the U.S. Census Bureau tabulates these median rents for all renters, so this includes households renting single-family homes and duplexes as well as those renting apartments. The Charlotte MSA has the third-highest median rent of the regional competitors. Only Charleston and Raleigh were higher. Furthermore, Charlotte has the second-highest median rent growth rate from 2021 to 2022.

**Figure V.5 Regional Competitor MSAs**
**Median Multiple 2022 and Growth 2021 to 2022**

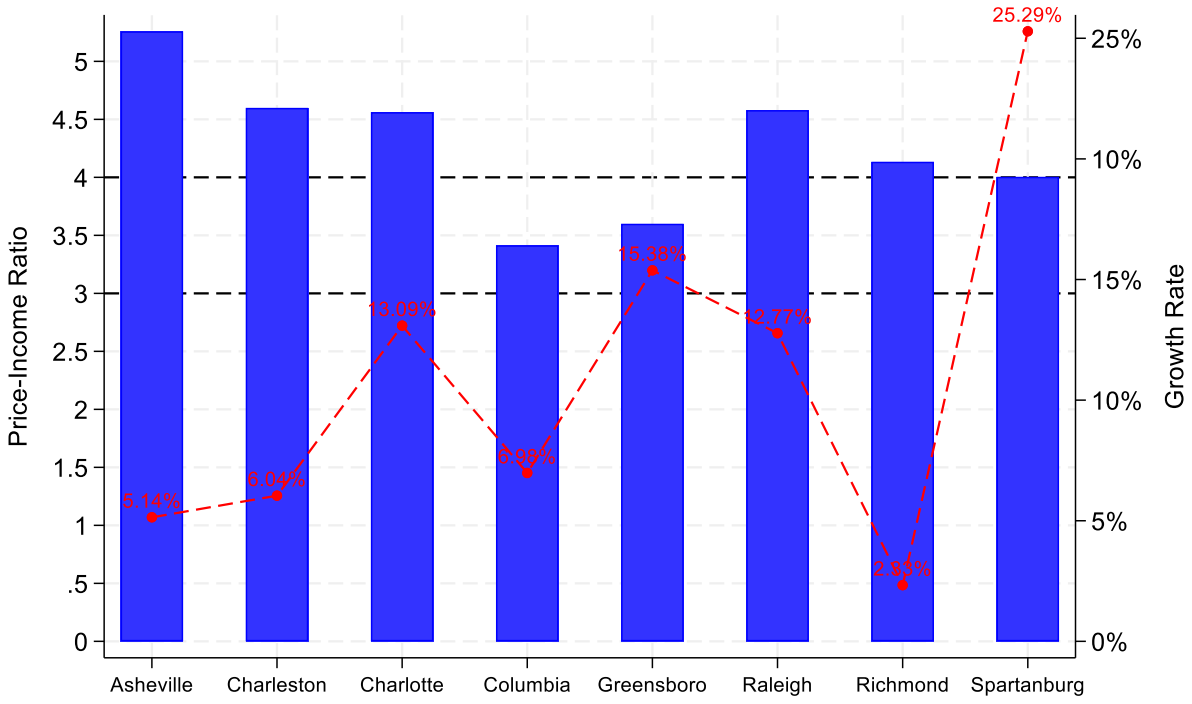


**Figure V.6 National Competitor MSAs**

**Median Multiple 2022 and Growth 2021 to 2022**

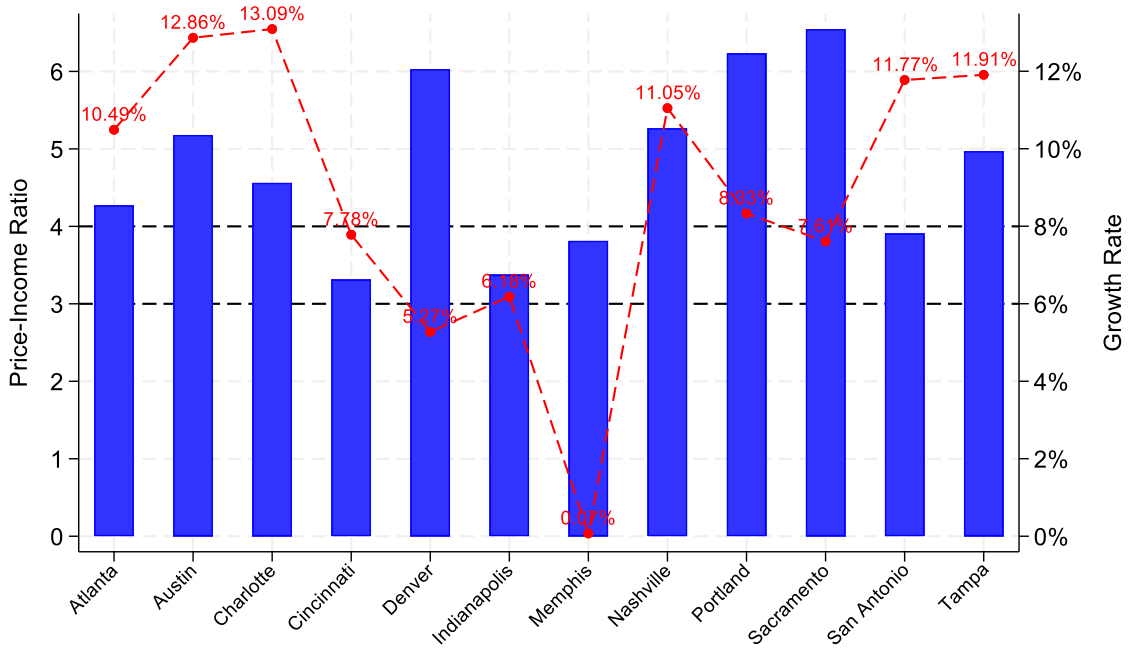



**Figure V.7 Regional Competitor MSAs**

**Median Rent 2022 and Growth 2021 to 2022**

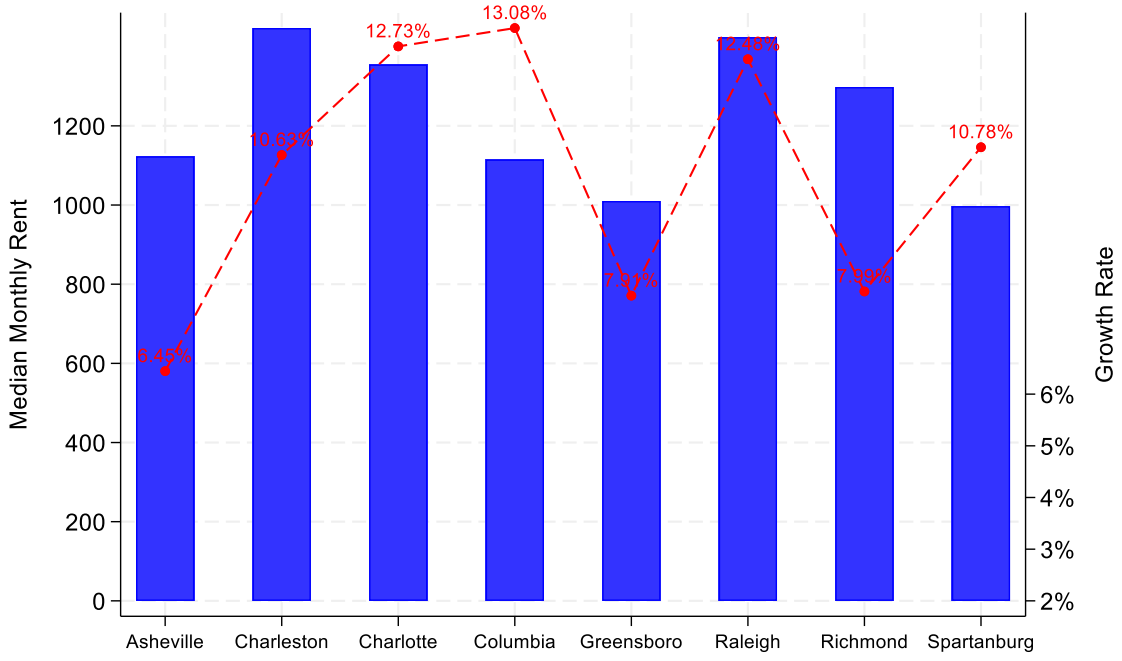


**Figure V.8 National Competitor MSAs**

**Median Rent 2022 and Growth 2021 to 2022**

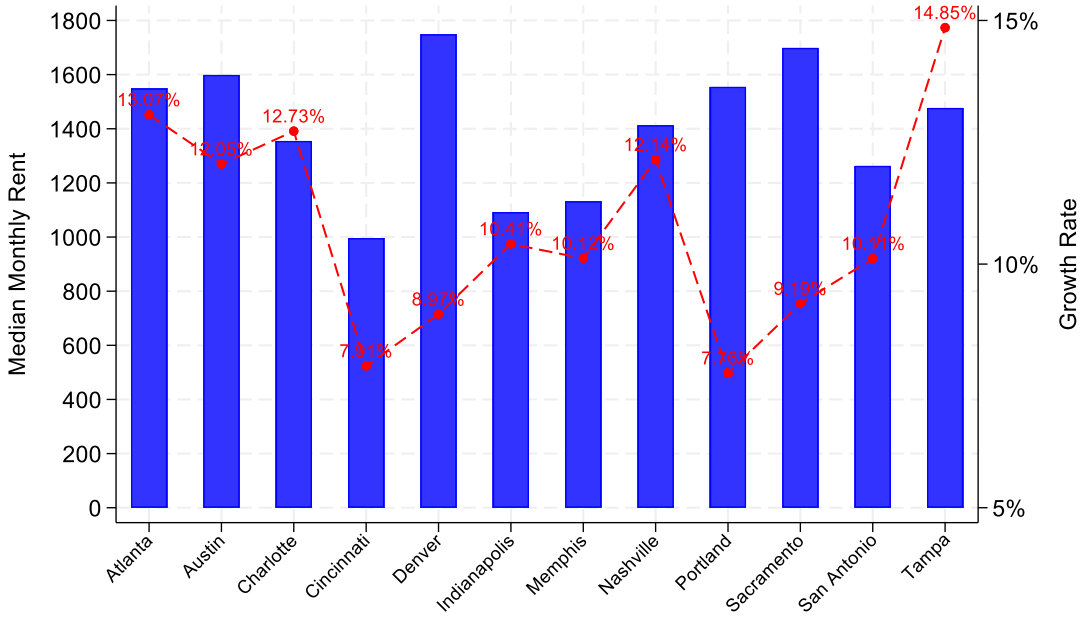



Figure V.8 plots the median rents relative to the national competitor cities. On the median rent on the national stage, the Charlotte MSA is moderate. Among the 12 MSAs, the Charlotte MSA has the fifth-lowest median rent. However, its median rental growth rate of 12.73% is among the highest.

## E. Price-to-Rent Ratio

A common metric used to measure the *relative* value of buying versus renting a home is the Price-to-Rent Ratio, which is the ratio of the median home price in a region to the median annual rent in the region. That is:

$$Price\ to\ Rent\ Ratio = \frac{Median\ Home\ Price}{Median\ Annual\ Rent}$$

A higher ratio means that home prices are high relative to rents, and a low ratio means that home prices are low relative to rents. A higher ratio means that a region is more favorable for renting, and when it is low, it is more favorable for home buying. Comparing regions gives a relative sense of whether renting or buying is more favorable.

**Figure V.9 Regional Competitor MSAs**

**Price-Rent Ratio 2022 and Growth 2021 to 2022**

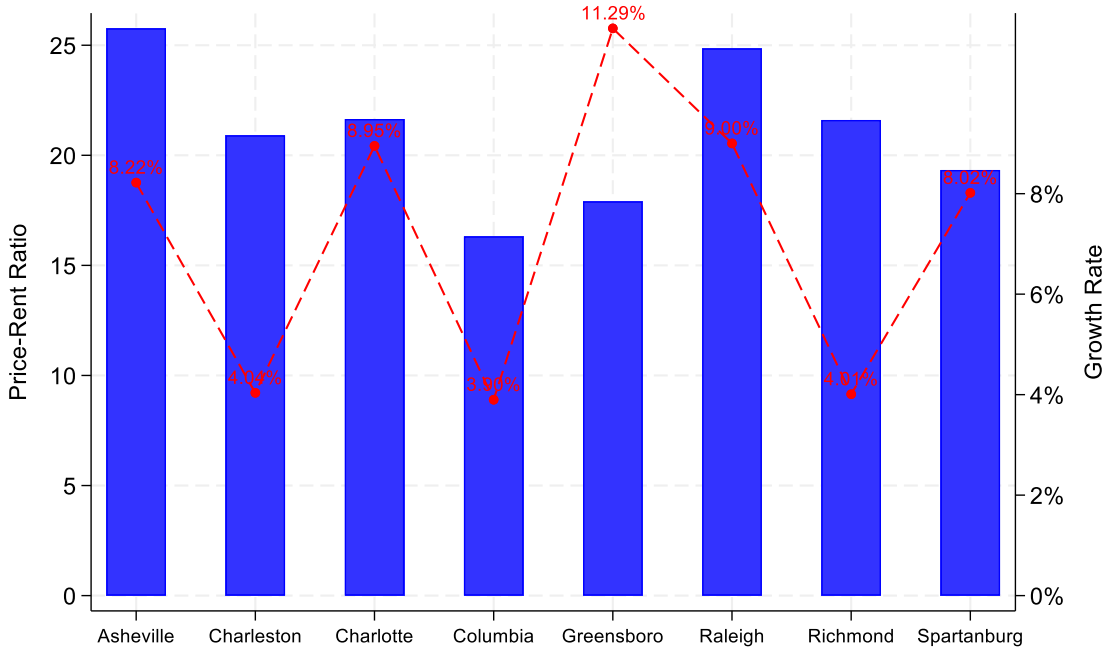



**Figure V.10 National Competitor MSAs**

**Price-Rent Ratio 2022 and Growth 2021 to 2022**

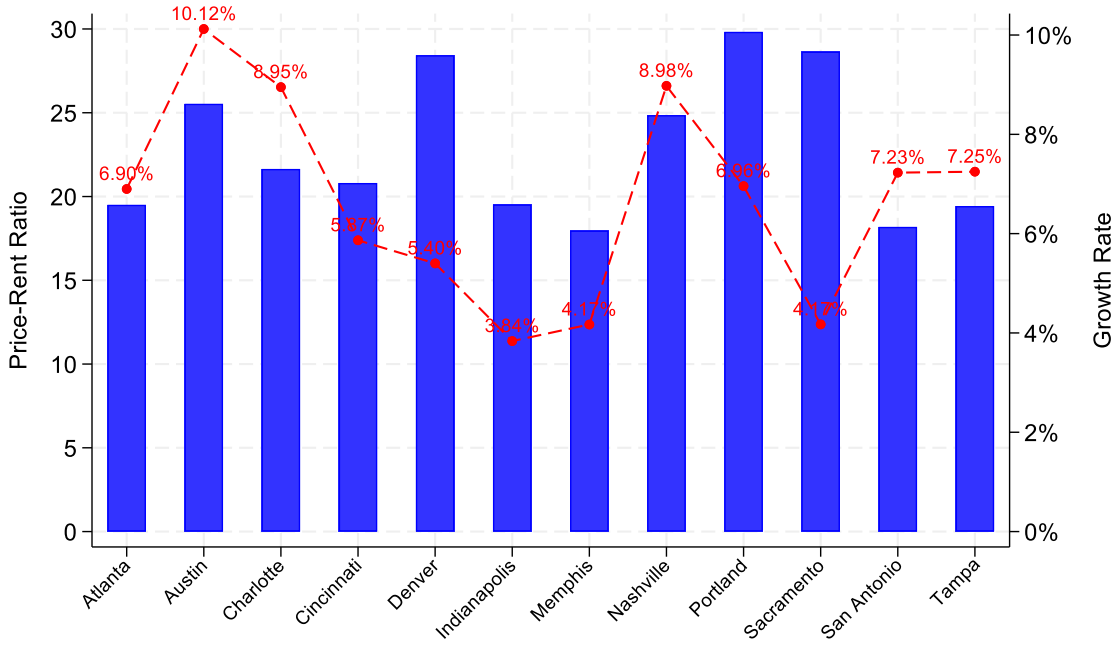


Figure V.9 shows the Price-to-Rent Ratio for regional competitor cities in 2022. The ratio for Charlotte is lower than that for Asheville and Raleigh. In contrast, Columbia, Greensboro and Spartanburg all have lower Price-to-Rent Ratios than the Charlotte MSA, indicating that, in those MSAs, buying is more favorable as compared to Charlotte. However, Charlotte has a high growth rate of the Price-to-Rent Ratio of 8.95%.

At the national level, the results are more dramatic. Figure V.10 plots the ratios for each of the national competitor MSAs. The Denver, Portland and Sacramento MSAs have much higher ratios than Charlotte, indicating that renting is significantly more favorable relative to purchasing a home in those locations than in Charlotte. In contrast, San Antonio and Tampa have ratios lower than Charlotte, indicating a more favorable environment for home buying there than in Charlotte. Again, keep in mind that these are just *relative* measures. As shown in Figures V.4 and V.8, both median home prices and median rents are more expensive in Denver, for example, than in Charlotte. The Price-to-Rent Ratio tells us that given rents and prices in both Charlotte and Denver, the environment for renting in Denver is more favorable than in Charlotte.

## F. Cost-Burdens

One of the challenges facing any region is the degree to which its residents are cost-burdened when obtaining housing. As discussed in Section III, the standard definition of being cost-burdened is spending more than 30% of one's gross income on housing costs, including utilities.

We begin by considering the proportion of renters in each region that are cost-burdened. Figure V.11 shows the percentage of cost-burdened renters for regional competitor MSAs. For the Charlotte MSA, about 46.7% of all renters are cost-burdened. Charlotte experienced a modest growth rate in the percentage of cost-burdened renters from 2021 to 2022.

Figure V.12 shows the same measure for the national MSA competitor set. Again, relative to most of its peer cities, the Charlotte MSA has one of the lower cost-burdened rates, although it is still high in absolute terms. Atlanta, Sacramento and Tampa have more than 50% of their

renters meeting the definition of being cost-burdened. Only Austin and Cincinnati have lower percentages of cost-burdened renters than the Charlotte MSA.

It is also possible to construct a similar measure for homeowners, that is, to determine which percentage of homeowners pay more than 30% of their gross income toward housing expenses. One would expect this number to be relatively low because most lenders will not originate mortgages where the monthly payment is more than 28% of the borrower's income. However, conditions can change over time, especially with respect to income. Furthermore, a household could take on a second mortgage after the origination of the first loan, increasing their total housing expense above the 30% cost burden level.

Figure V.13 presents the percentage of cost-burdened homeowners for the regional competitor MSAs. The percentages are much lower than those of renters. Charlotte MSA's percentage of cost-burdened homeowners is in the middle among regional cities.

**Figure V.11 Regional Competitor MSAs**

**Cost-Burdened Renters 2022 and Growth 2021 to 2022**

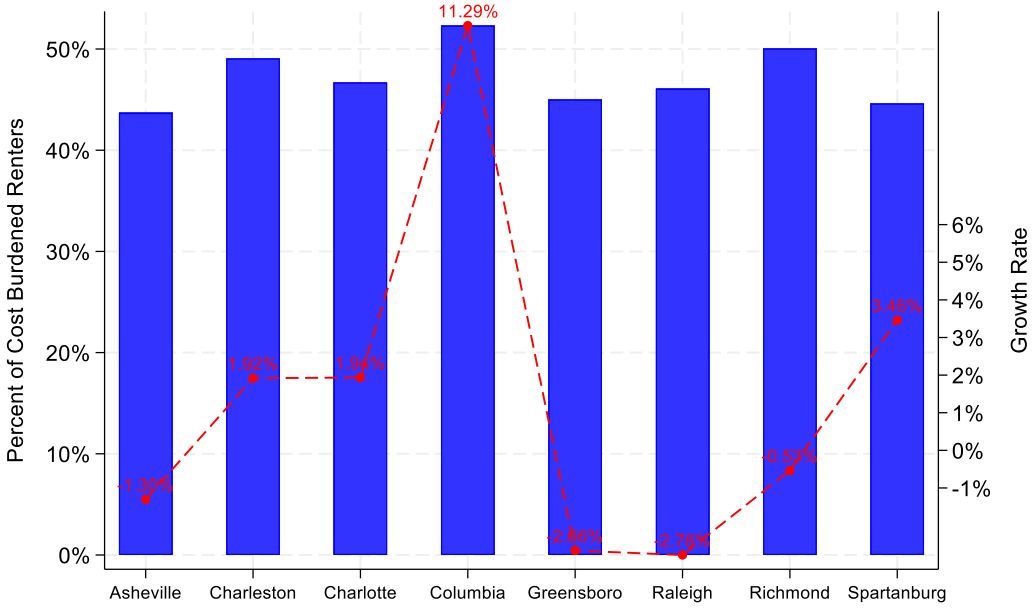


**Figure V.12 National Competitor MSAs**

**Cost-Burdened Renters 2021 and Growth 2021 to 2022**

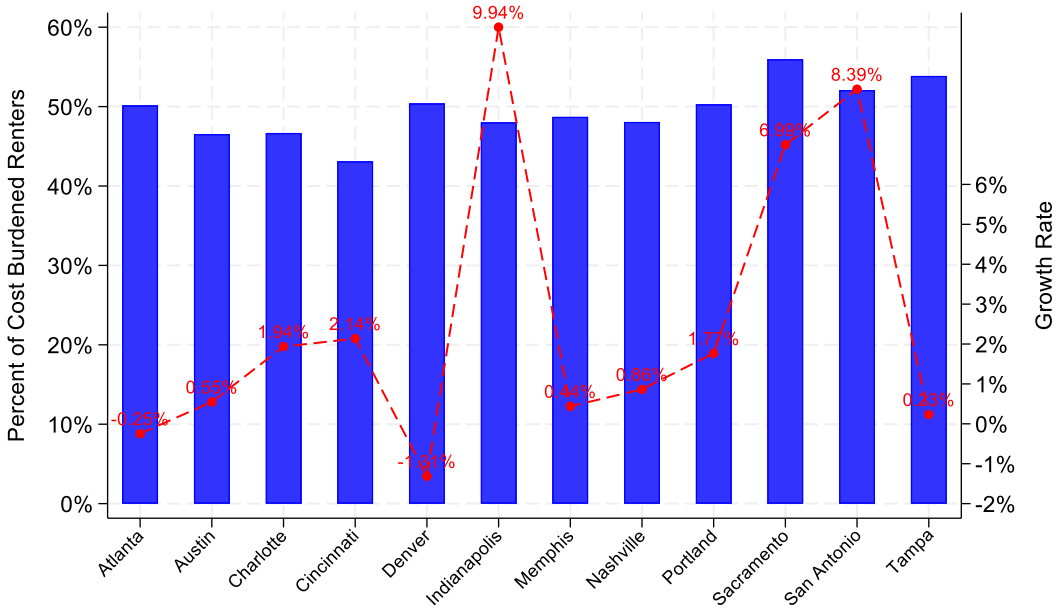



**Figure V.13 Regional Competitor MSAs**

**Cost-Burdened Homeowners 2022 and Growth 2021 to 2022**

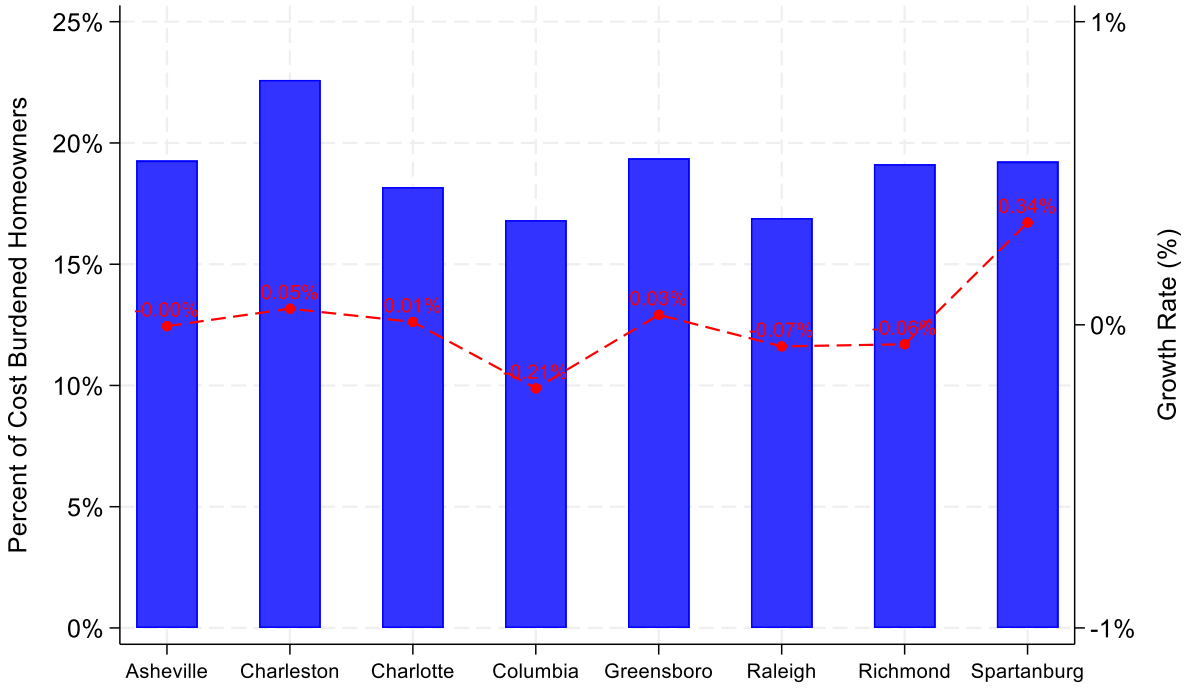



**Figure IV.14 National Competitor MSAs**

**Cost-Burdened Homeowners 2021 and Growth 2019 to 2021**

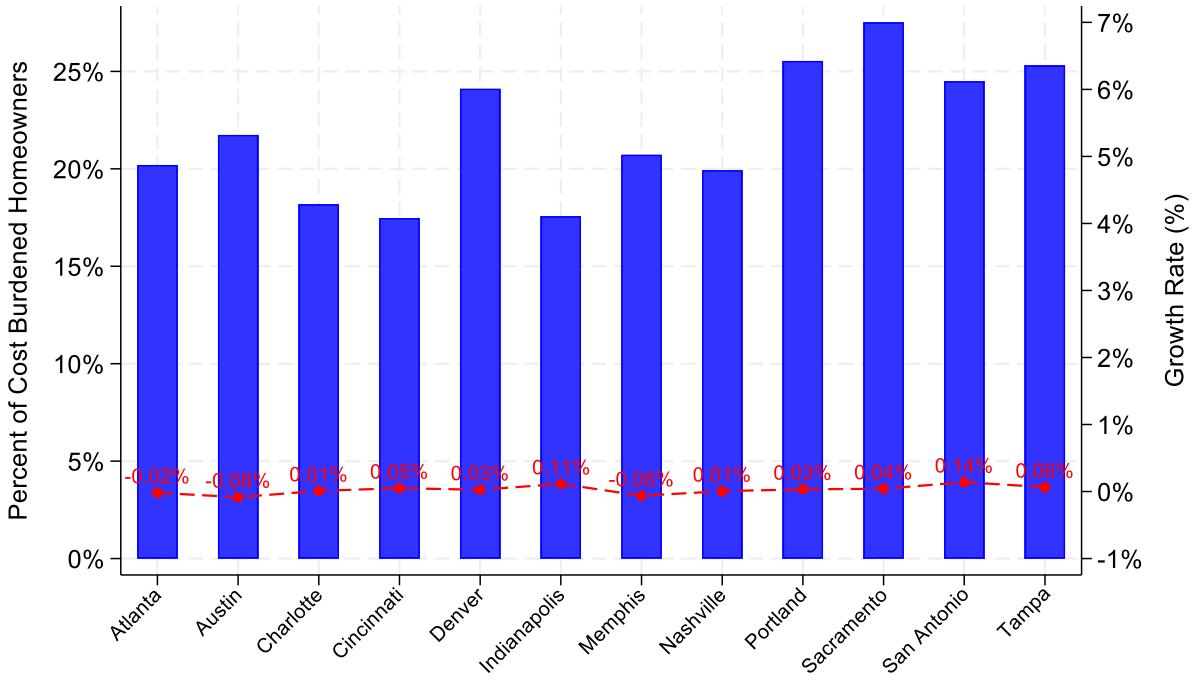


Figure V.14 presents the same metric for national competitor cities. As was the case with the regional competitor MSAs, the percentage of cost-burdened homeowners is lower in every other MSA. Charlotte has one of the lowest percentages, with only Cincinnati and Indianapolis having lower percentages. Perhaps not surprisingly, Denver, Portland, Sacramento and San Antonio have the highest percentages. Sacramento has the highest rate, with nearly one-third of all homeowners meeting the criteria for being cost-burdened.

### G. Summary

Comparing the performance of the Charlotte MSA against competitive regional and national MSAs helps to put in perspective many of the challenges that Charlotte faces. It is clear, for example, that housing prices and rents are growing everywhere. There are national trends toward higher housing prices, which manifest in Charlotte.

The Charlotte MSA is a growing region with one of the highest growth rates in the national and regional comparison sets. Prices are already high in Charlotte, and they are growing significantly higher than prices are in most regional and national competitor cities. Charlotte is quickly becoming unaffordable if this trend continues.

## VI. Conclusion

As we stated at the beginning of this report, our goal with the *State of Housing in Charlotte* is to provide a comprehensive, data-driven analysis of the state of housing in Charlotte and the surrounding area. We hope that this report will be useful to policymakers, market participants and residents of the region as they make decisions regarding the housing markets.

The fundamental conclusion of this report is that house prices have increased very quickly in Charlotte in recent years, making Charlotte housing increasingly unaffordable. While the market has cooled significantly since COVID-19, there are no signs of significant price declines in the near future.

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