CONNECTICUT HOUSING FINANCE AUTHORITY

The Key To Affordable Housing

2023

CHFA Housing Needs Assessment

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Introduction

At the Connecticut Housing Finance Authority (CHFA) our vision is for all Connecticut residents to have a choice in where they live. CHFA helps to create these choices by financing safe, quality, and affordable housing in a way that creates environmentally sustainable and economically healthy communities. As a bridge between public and private investment, CHFA is uniquely positioned to help shape Connecticut's housing landscape. Since our founding in 1969, CHFA has helped over 150,000 families attain homeownership and has financed the construction and preservation of more than 60,000 affordable rental units statewide.

As a major industry partner, CHFA seeks to continuously respond to the housing needs of our residents. To do so, we must stay abreast of key market trends, world events, and economic conditions that impact Connecticut families. In this way, we better position ourselves to serve our communities by creating programs and solutions that address these challenges.

In 2019, CHFA published its first Housing Needs Assessment to better understand the landscape of our work. Through that assessment, long held assumptions of deficiencies in the market were confirmed. Simply put, there was just not enough safe, quality, and affordable housing in the state across all income levels. Now, four years later, CHFA feels strongly that the time to revisit the needs assessment has come. Since the original publication, Connecticut residents and the affordable housing community have faced a dramatic upheaval as a result of the COVID-19 pandemic that sent shockwaves through the economy and the housing market. In the following pages, we assess the gaps in Connecticut's housing stock and highlight the influencing factors that have shaped the state's housing market in recent years.

It is not our intention to offer policy recommendations within this assessment; rather, we seek to provide ourselves and our partners with high quality research as we all work towards addressing the abundant need for safe, quality, and affordable housing in our state.

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Executive Summary

In 2019, CHFA published its first Housing Needs Assessment. That report was modeled after works published by the American Planning Association around data-driven housing assessment and action plans. Utilizing a variety of data sources, including most prominently the Comprehensive Housing Affordability Strategy (CHAS) datasets published by the U.S Department of Housing, the following report seeks to provide an overview of Connecticut's current housing market, highlighting gaps where applicable.

Key Takeaways: Connecticut's Housing Stock & Demographics

An analysis of Connecticut's housing stock reveals its bifurcated nature. Much of the single-family residential housing in the state is in the suburbs, particularly along our major highway corridors. Conversely, multifamily units are predominately located in the state's urban centers. About 65% of all housing stock in the state consists of single-family residential properties. The remaining housing is multifamily with 2-4 units making up 17% and over 5+ units making up 18%. Homeownership rates follow this bifurcated nature, with rates markedly higher in suburban areas, following the location of single-family housing stock. It is also within suburban communities that we see lower rates of minority residents which, while not unique to Connecticut, calls attention to the racial wealth gap in the state. People of color in Connecticut are far less likely to own their own homes with households identifying as Black or African American having just a 41% homeownership rate compared to 73% for White Households.

This assessment also recognizes that a lack of new construction over the past twenty years has reduced Connecticut's ability to meet housing demand across income brackets. Since the financial crisis in the late 1980's Connecticut's annual building permit numbers have not recovered. The Great Recession saw a further decline in economic activity including new construction with the last peak in construction occurring in 2005. In 2022, Connecticut issued just 48% of the residential building permits that it did in 2005, lagging some nearby states including Massachusetts (72%), New Hampshire (55%) and the United States at large (80%). At the same time, household formation in Connecticut has been on the rise, necessitating additional housing options across income levels.

Key Takeaways: COVID-19 Implications

Historically low new construction and rising household formation coalesced with the onset of the COVID-19 pandemic in early 2020 to create a radical shift in Connecticut's housing market. Due to steep competition for low inventory, prices for both potential homebuyers and renters soared. Prior to 2020, the median annual sales price for a single-family home in Connecticut was $250,000; two years later that median sales price had risen to $340,000. Additionally, 2022 saw the most rapid increase in year over year interest rate growth since the 1980's. This rapid increase in home sale prices and associated costs resulted in boxing out potential homebuyers from the market, forcing some to remain in their rental units. As a result, vacancy rates for rental units dropped significantly below pre-pandemic levels. Consequently, rents rose at staggering rates, with year-over-year rent growth exceeding seven percent in certain markets, compared to averages around two percent historically.

Key Takeaways: Market Typologies

Connecticut's housing market is often discussed in terms of geography: million-dollar homes in Fairfield County and country farms to the east in Tolland and Windham Counties, for example. However, these generalizations do not paint an accurate picture of the complexities of the housing market in the state, nor do they provide a framework for potential programs. For this reason, CHFA developed an index that typifies census tracts by a number of factors, grouping together like areas irrespective of jurisdiction. Each census tract was assigned both an Opportunity Index score and Market Activity Index score which resulted in one of the following typologies for both the home ownership and rental market: 1) High Opportunity & Heating, 2) Low Opportunity & Heating, 3) High Opportunity & Cooling, 4) Low Opportunity & Cooling, and 5) Low Density. For an in-depth explanation of the methodology of these indices see the full section on Market Typologies.

About 30-35% of Connecticut's census tracts fall into the High Opportunity & Heating typology for both the sales and rental market, reflecting high quality of life and strong market activity throughout the state. These census tracts are located predominately in the suburbs and also saw the lowest inventory and vacancy rates in recent years, indicating strong consumer preference for housing in these areas. Low Opportunity & Heating markets as well as cooling markets tend to be clustered in the state's urban centers, particularly in the rental market. It is in these typologies that we see some of the oldest and lowest cost housing stock. The difference in median rent between High Opportunity & Heating markets and Low Opportunity & Cooling markets is over $400 a month. Across all markets, lower income households, particularly those earning under 50% Area Median Income (AMI), have faced the steepest housing costs as a percentage of their income.

Key Takeaways: Housing Affordability Gaps

An important finding of this needs assessment is the inadequate supply of affordable housing throughout the state in both the sales and rental markets. In particular, through analysis of the Comprehensive Housing Affordability Strategy (CHAS) data, CHFA finds an outright shortage of rental units affordable to households between 0-30% AMI and above 80% AMI. Outright shortages at the lower income end of the market cause a cascading effect to other income brackets as these extremely low income households are forced to rent at higher costs. This creates gaps for low and moderate income households and increasing competition for affordable units. Unsurprisingly, higher income renter households that can afford units priced over 80% AMI often seek lower cost housing by choice, further contributing to gaps for lower income households. Analysis of the CHAS data indicates a gap of approximately 92,560 units affordable to extremely low income renter households in Connecticut. This gap does not represent the number of new units that need to be built, but rather the number of units that would allow all extremely low income households to live in a unit that is affordable to them. This estimate is in line with recent projections from other organizations such as the National Low Income Housing Coalition and the State of Connecticut's Department of Housing.

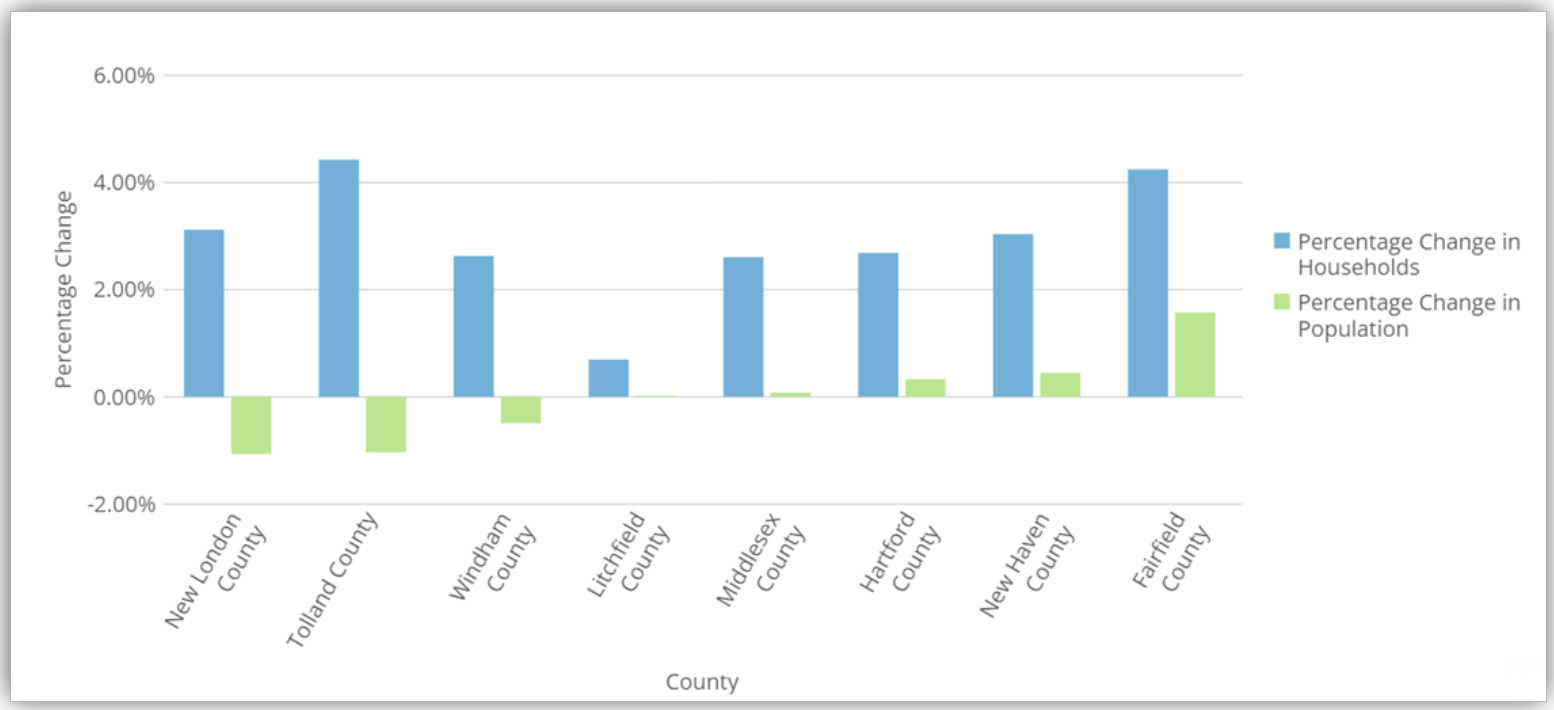
CHAS data reveals that most homeowners in the 0-50% AMI income bracket are cost burdened, primarily due to higher income households occupying homes affordable to extremely low income and low income households. Similarly, while the supply of homes affordable to those between 51-80% AMI is adequate in raw number, 75% of homes priced in this range are occupied by households outside of this income bracket. As with the rental market, this data reveals that households tend to search for the lowest cost housing available to them, which results in increased cost burdens for extremely low income and low income households who face increased competition for limited affordable units.

Section 1: Demographics & Housing Tenure

A. Population and Households

According to the 2021 Five Year American Community Survey (ACS) Estimates, Connecticut's total population is 3.57 million, a 0.47% increase from the 2016 Five Year Estimates. Litchfield, Middlesex, Hartford, New Haven, and Fairfield Counties saw positive population change over the last five years while New London, Tolland, and Windham Counties saw a decrease. While not every county in Connecticut saw population increases, they all experienced notable increases in levels of household formation.[1] Increasing household formation reflects movements of residents from place to place. For example, household formation occurs when a recent college graduate moves from their parent's house into a place of their own. Between the 2016 and 2021 Five Year ACS periods, Connecticut saw a 3.15% increase in the overall number of households. This was led by both Tolland and Fairfield Counties which saw a 4.43% and 4.25% increase respectively.

Figure 1: Change in Population and Households by County - 2016 to 2021

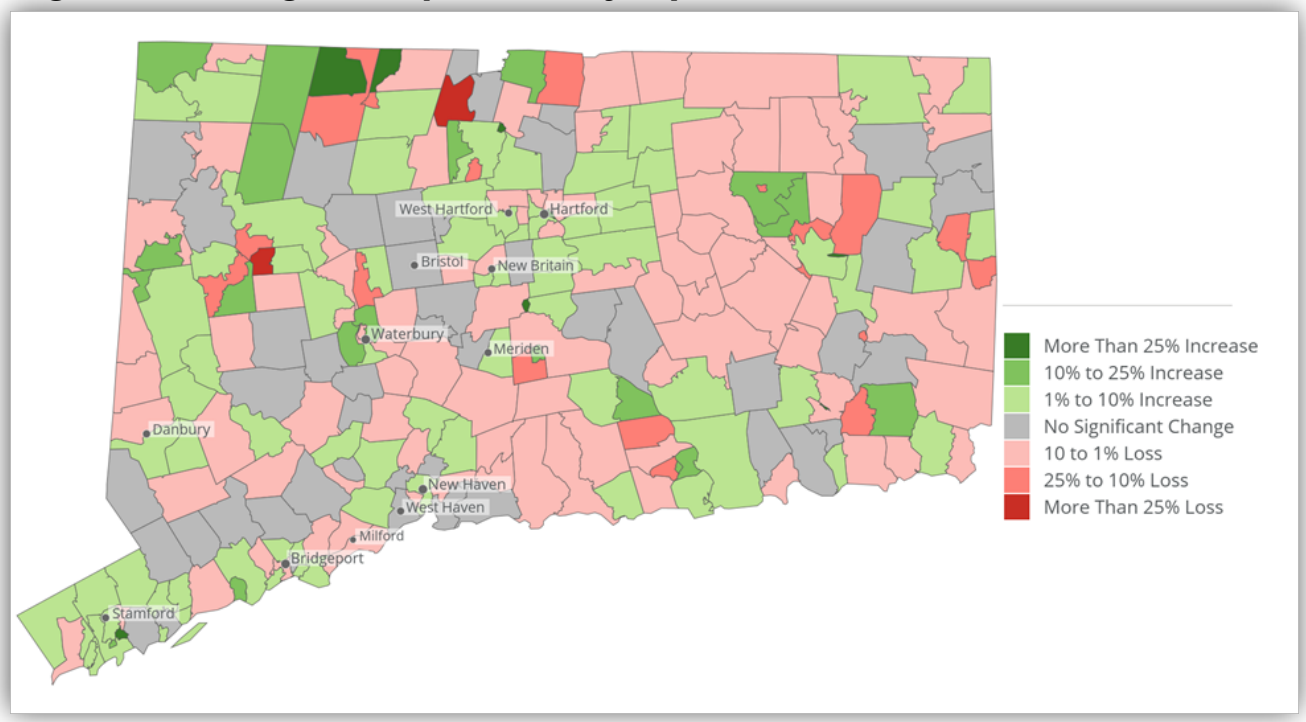


Source: 2016 & 2021 Five Year ACS Estimates

1. The Census Bureau defines a "household" as consisting "of all the people who occupy a housing unit. A house, an apartment or other group of rooms, or a single room, is regarded as a housing unit when it is occupied or intended for occupancy as separate living quarters; that is, when the occupants do not live with any other persons in the structure and there is direct access from the outside or through a common hall." – U.S. Census Bureau Subjection Definitions.

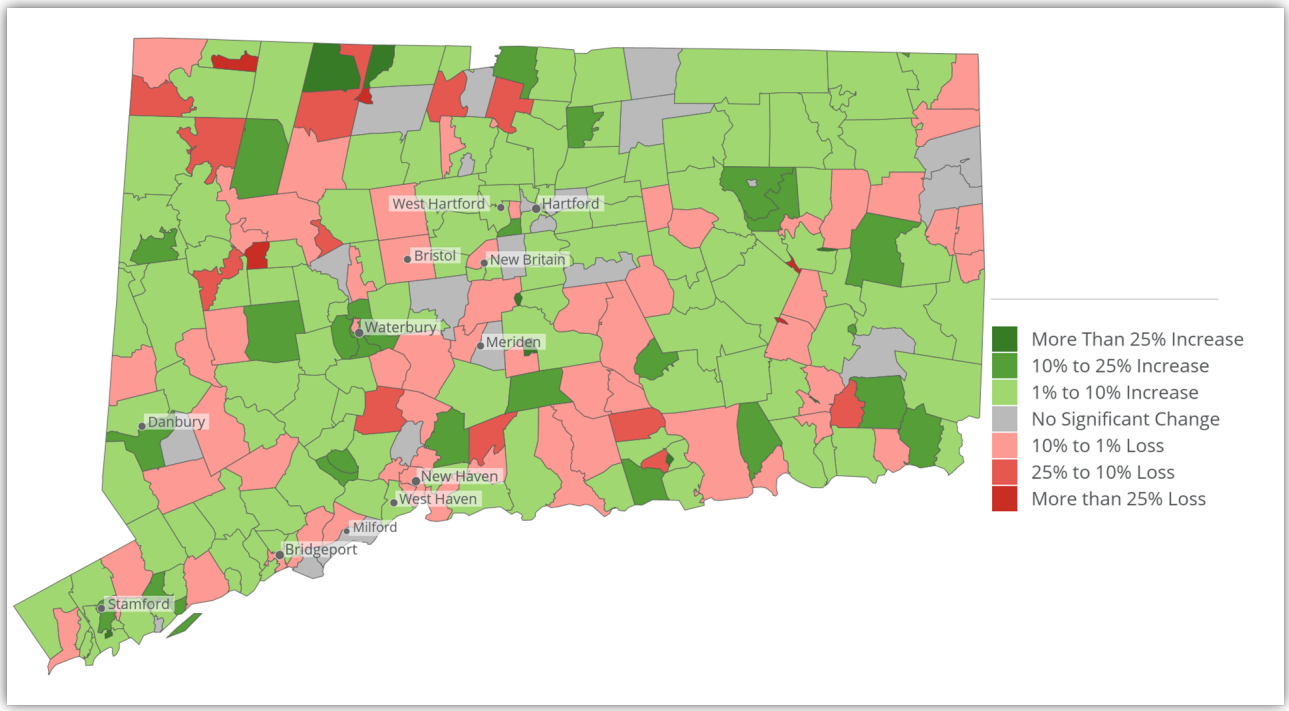
As shown in Figure 2, population loss in Connecticut was generally concentrated in rural areas, especially in the eastern part of the state. Areas in Fairfield County saw notable population growth. At the same time, as seen in Figure 3, household growth was widespread with decreases occurring primarily in the north-west corner and in some parts of Middlesex County.

Figure 2: Change in Population by Zip Code - 2016 to 2021



Source: 2016 & 2021 Five Year ACS Estimates

Figure 3: Change in Households by Zip Code - 2016 to 2021

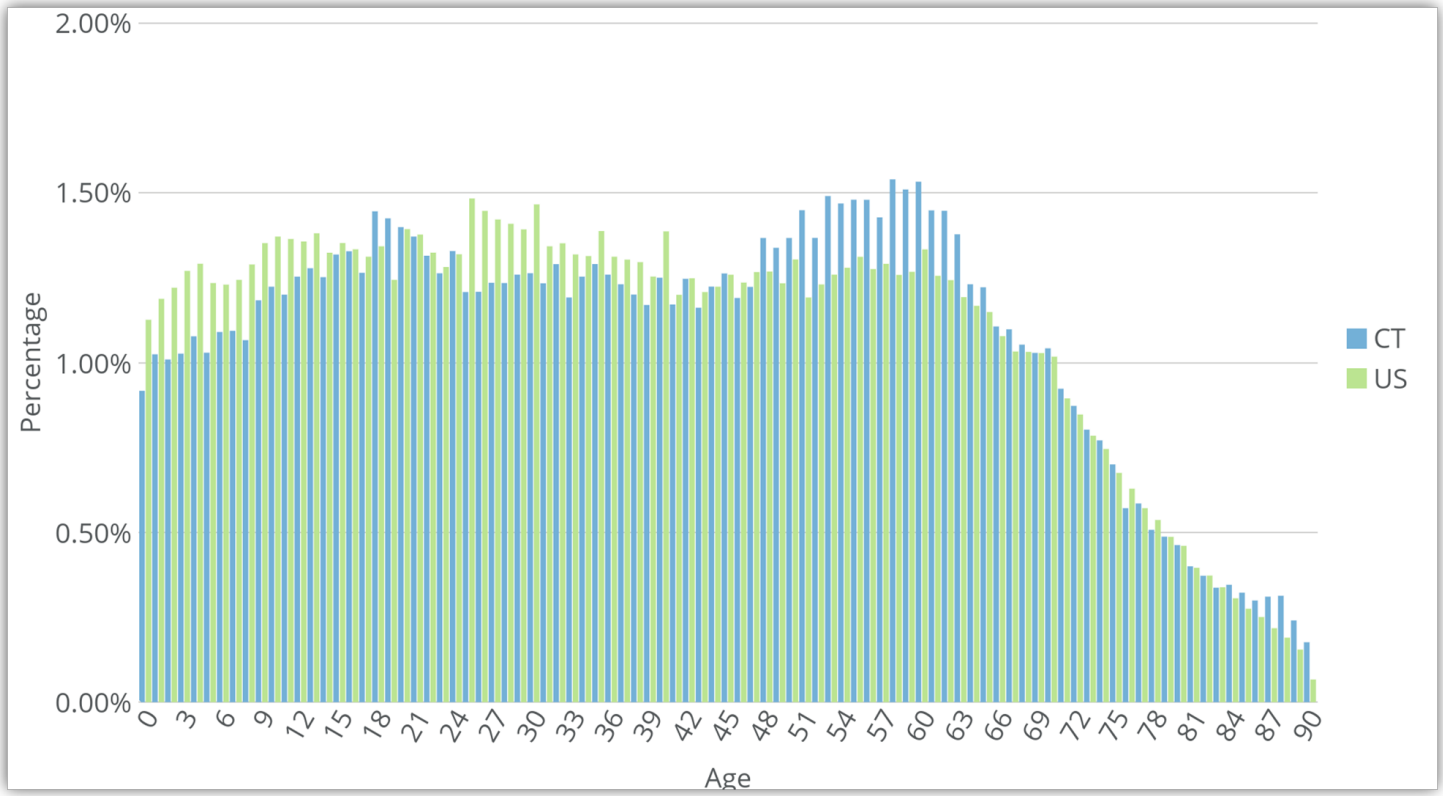


Source: 2016 & 2021 Five Year ACS Estimates

Compared to the United States at large, Connecticut is somewhat less diverse with 72% of residents identifying as White versus 68% nationally (ACS 2021). However, changes between the 2016 and 2021 five-year ACS periods show that Connecticut is becoming somewhat more diverse over time. The state saw slight population upticks for Black or African American households from 10.4% to 10.8%, representing just under 390,000 residents. The population of Asian residents also grew throughout this period by about 14,500 residents. The largest change in population demographics is seen in the Hispanic and Latino population, which grew by almost 2% during this period . Notably, the percentage of survey respondents who indicated that they identify as "Some Other Race" grew from 4.9% in the 2016 estimates to 6% in 2021. The rise in usage of this category reflects ongoing conversations around the intersection of race, ethnicity, and identity as well as changes in Census methodology.

Connecticut has an older population than the country at large. The state has a median age of 41 versus a national median of 38. This difference is driven by Connecticut's higher proportion of Baby Boomers, generally, those born between 1946 and 1964, than other states.[2] In Connecticut, this age cohort makes up 21.66% of the population compared to just 19.81% nationwide. Connecticut also has a slightly smaller millennial population than the country, 20.24% versus 21.94% respectively.

Figure 4: Population Distribution by Age in Connecticut and U.S.

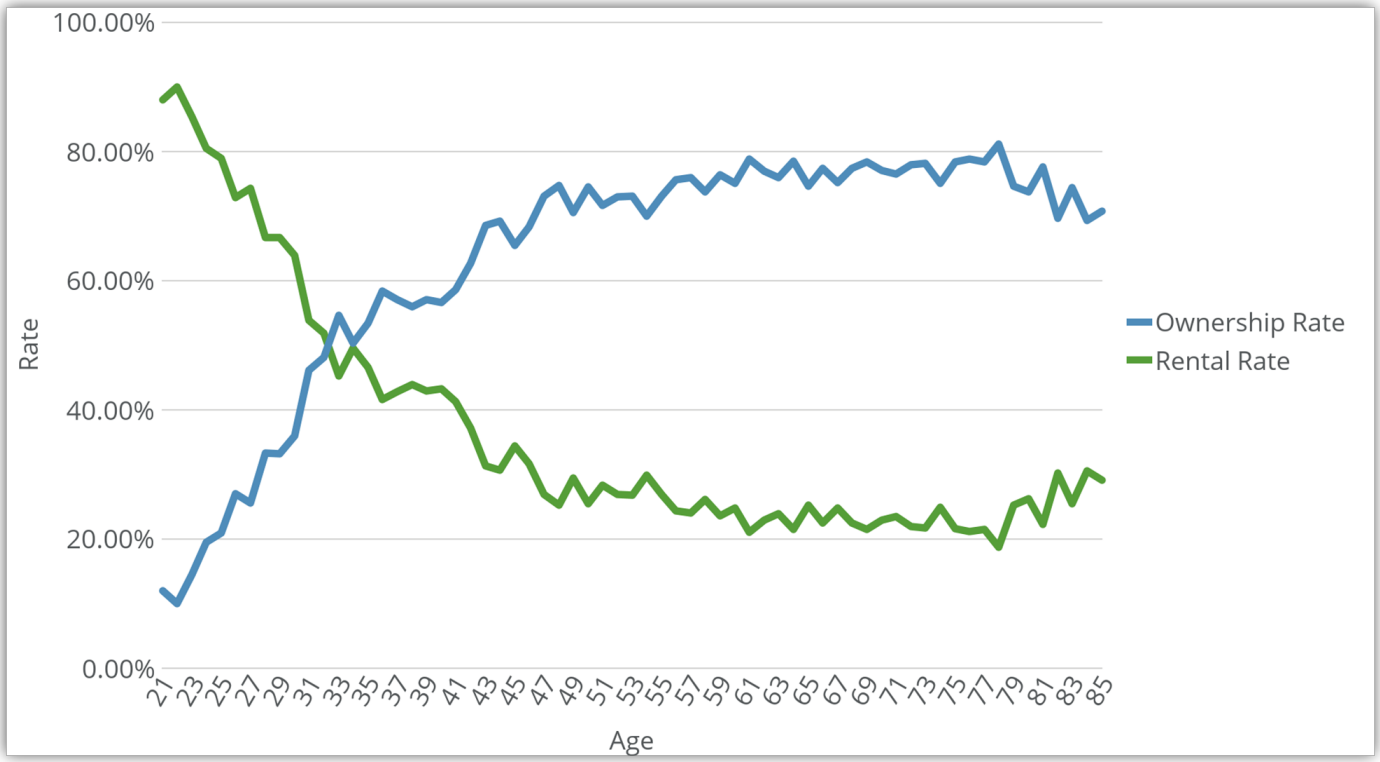


Source: 2021 Five Year ACS via IPUMS USA

2. Pew Research Center - Defining generations: Where Millennials end and Generation Z begins (2019), https://www.pewresearch.org/fact-tank/2019/01/17/where-millennials-end-and-generation-z-begins/

Housing tenure (whether a household owns or rents their home) naturally changes throughout the course of life. At younger ages, Connecticut residents are much more likely to rent than to own their home. Heads of household age 35 or younger represent 33% of renter households compared to just 8.4% of owners. The likelihood of renting declines dramatically after that age with those over 35 having a rental rate of just 28%. Rental and homeownership tenure begin to converge at around the age of 77, likely reflecting elderly populations downsizing, moving in with children, or into assisted living or nursing facilities. Based on Connecticut's population distribution (Figure 4), the state could see a wave of new potential homebuyers over the next ten years as Gen. Z (those born after 1996) comes into prime homebuying age.

Figure 5: Housing Tenure by Age in Connecticut



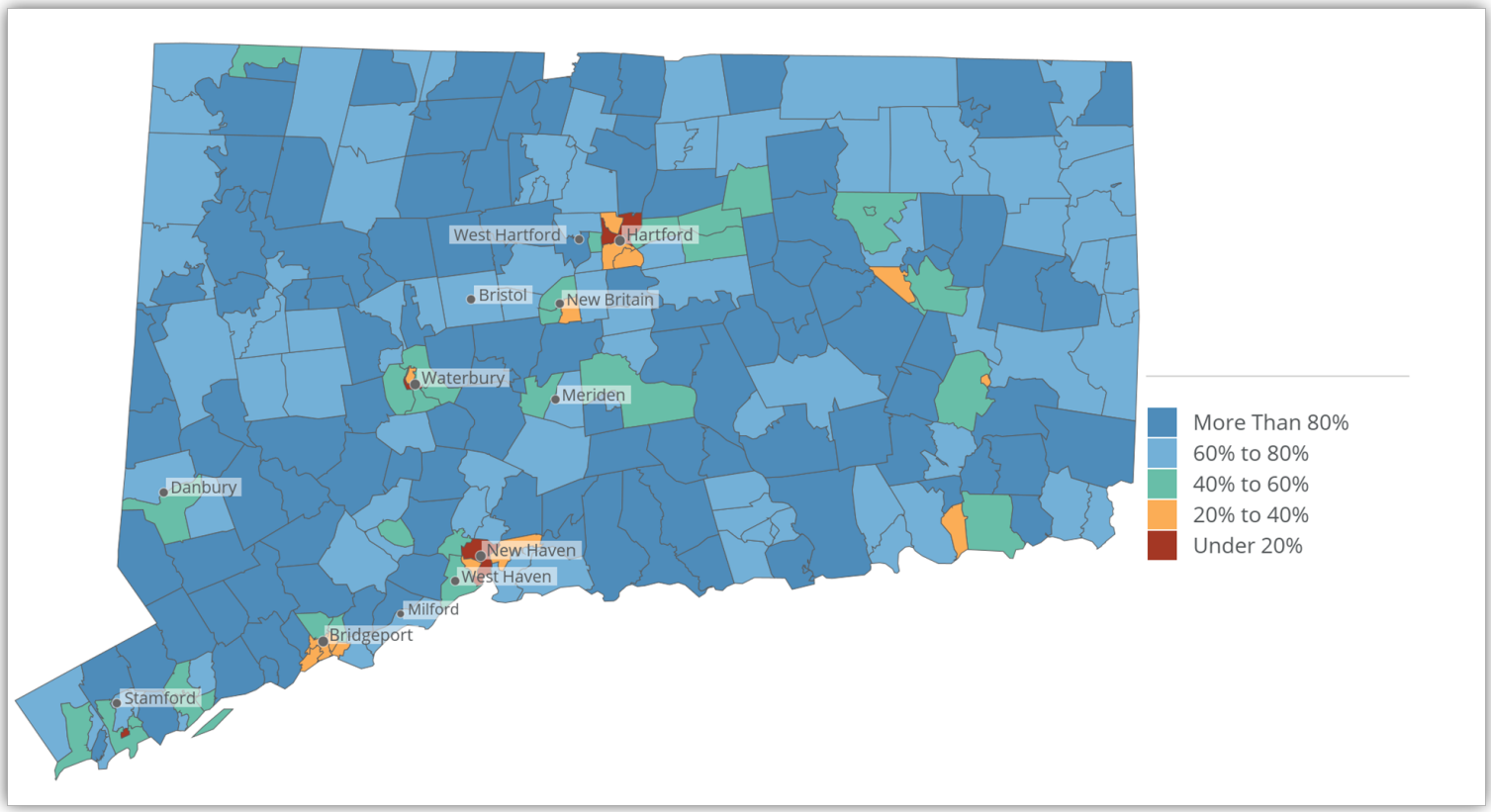
Source: 2021 Five Year ACS via IPUMS USA

B. Housing Tenure

Of the roughly 1.4 million households in Connecticut, 66% are homeowners. As seen in Figure 5, rates of homeownership vary significantly between communities. Rental rates are generally higher in more populous and urban communities such as Hartford (74.49%), New Haven (71.99%), and Bridgeport (57.31%) while homeownership rates are highest in Connecticut's suburban and rural areas. While there are many factors that impact a town's (or "community's") homeownership rate, availability of housing stock is a primary influence. Urban areas with the lowest rates of homeownership correlate with a lack of single-family housing supply in these municipalities. For prospective buyers who are interested in owning a detached single-family property, options are slightly more limited.

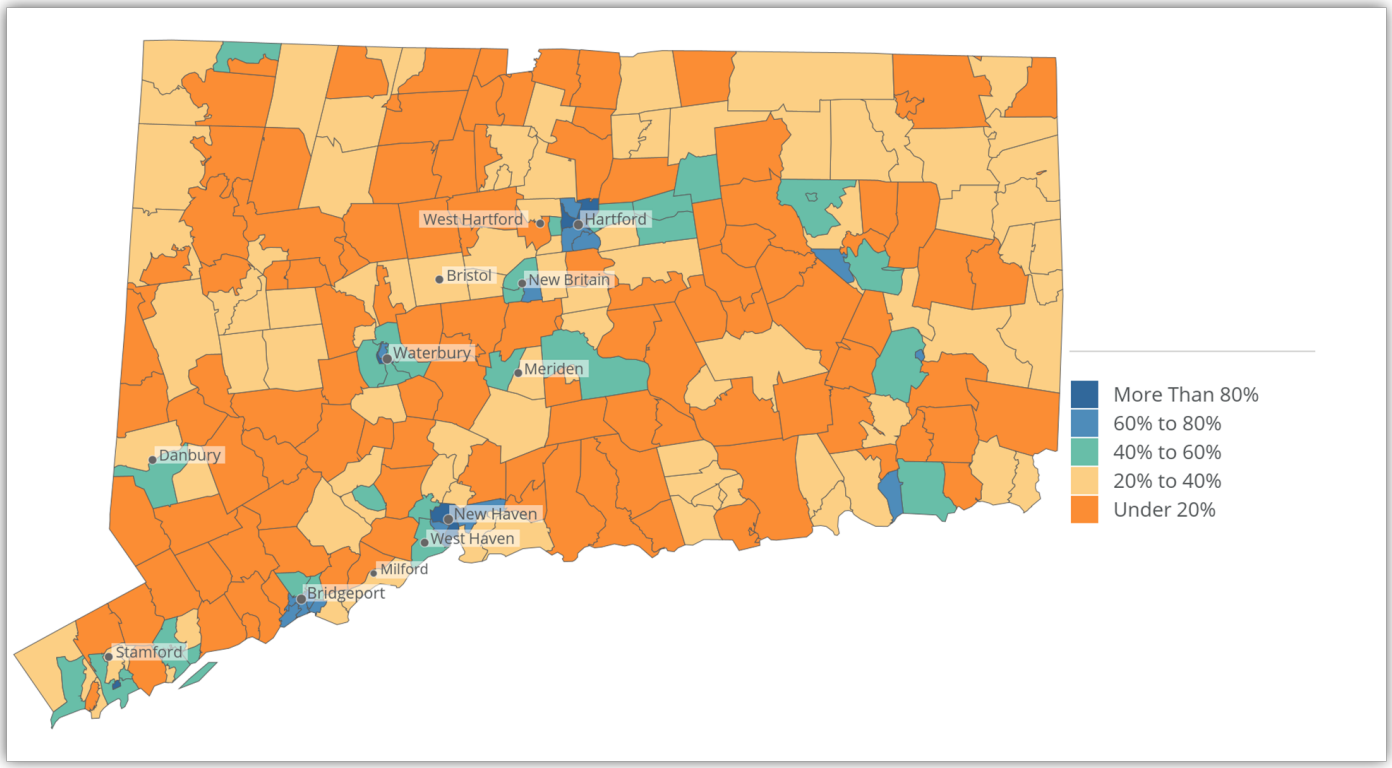
It would be remiss not to mention that urban centers where homeownership rates are lower are also where many communities of color in Connecticut are centered (Figure 8). For example, more than 70% of households in Hartford identify as people of color and the city's homeownership rate is 25.5%. Conversely, minority populations in the suburban towns surrounding Hartford drop significantly (to around 10-30%), while homeownership rates exceed 80%. Statewide, 73% of households identifying as White are homeowners, compared to 41% of Black or African American households and 37% for Hispanic and Latino households. This disparity in homeownership rates, which is far from a unique problem in the state, does represent the continued work that must be done to assist in closing the wealth gap for people of color.

Figure 6: Home Ownership Rates by Zip Code



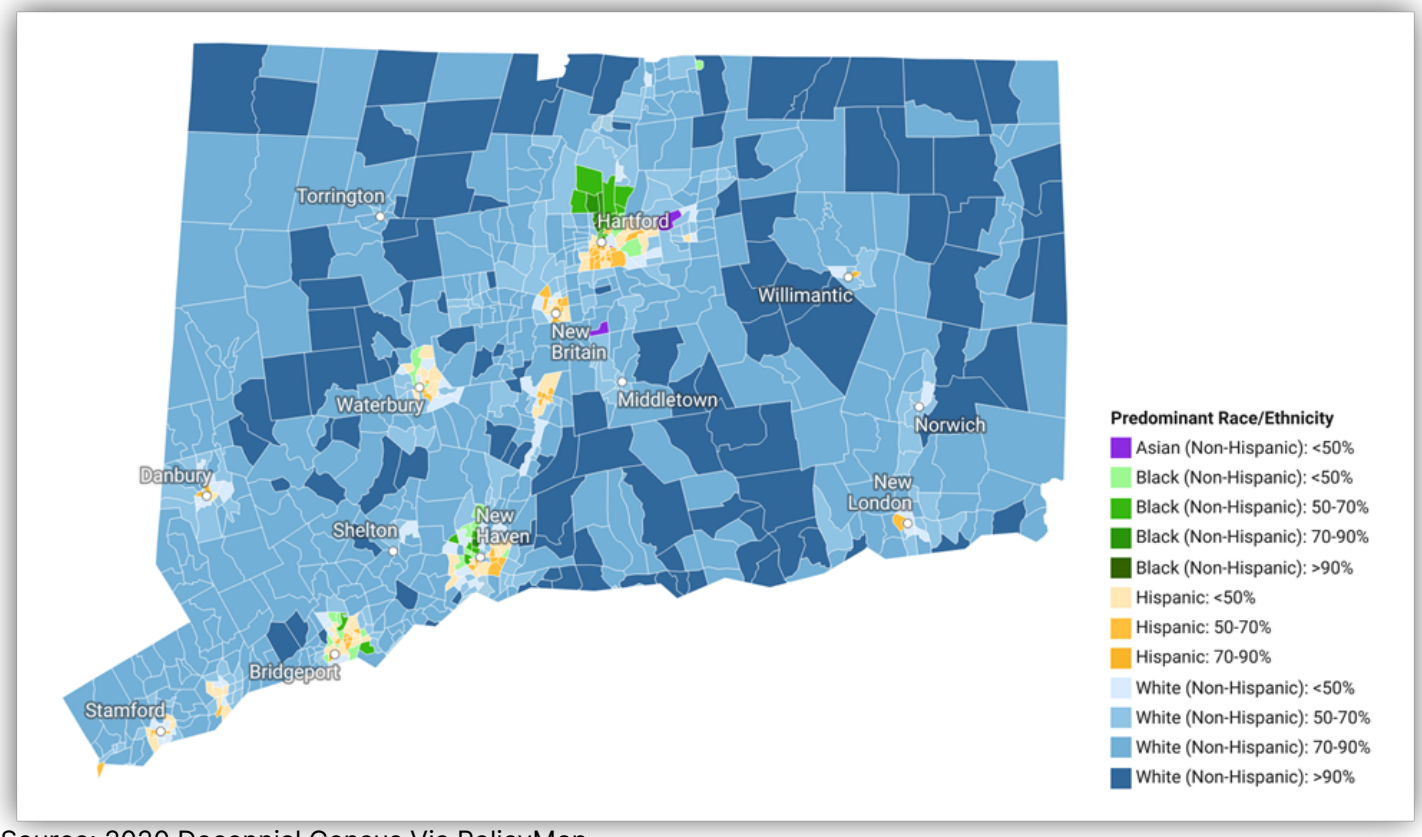
Source: 2021 Five Year ACS Estimates

Figure 7: Rental Rates by Zip Code



Source: 2021 Five Year ACS Estimates

Figure 8: Predominant Race and Ethnicity by Census Tract

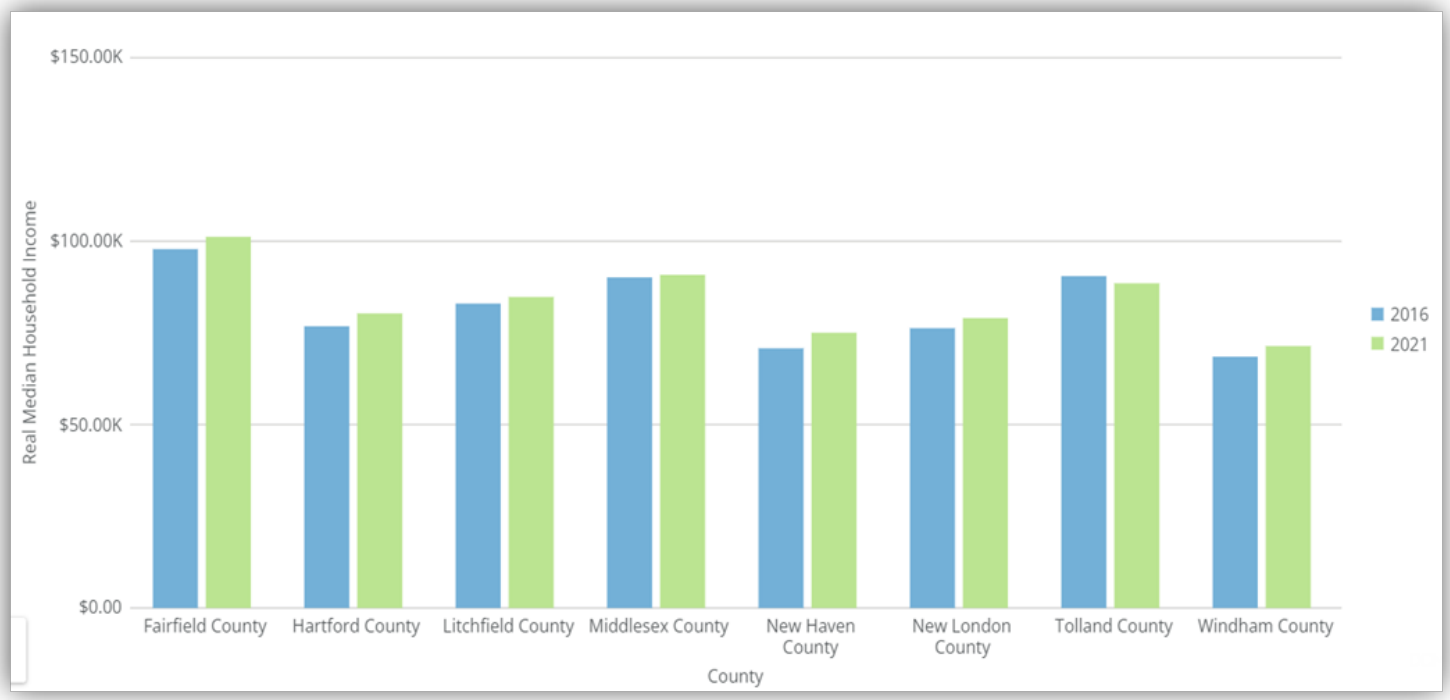


Source: 2020 Decennial Census Via PolicyMap

C. Incomes

According to the 2021 Five Year ACS estimates, the median household income in Connecticut was $83,572. Between 2016 and 2021, nominal household incomes in Connecticut grew by 14.14% while inflation-adjusted incomes grew by 3.06%. Real median household incomes grew slightly in all Connecticut counties, with the exception of Tolland County which saw a 2.15% decrease after adjusting for inflation.

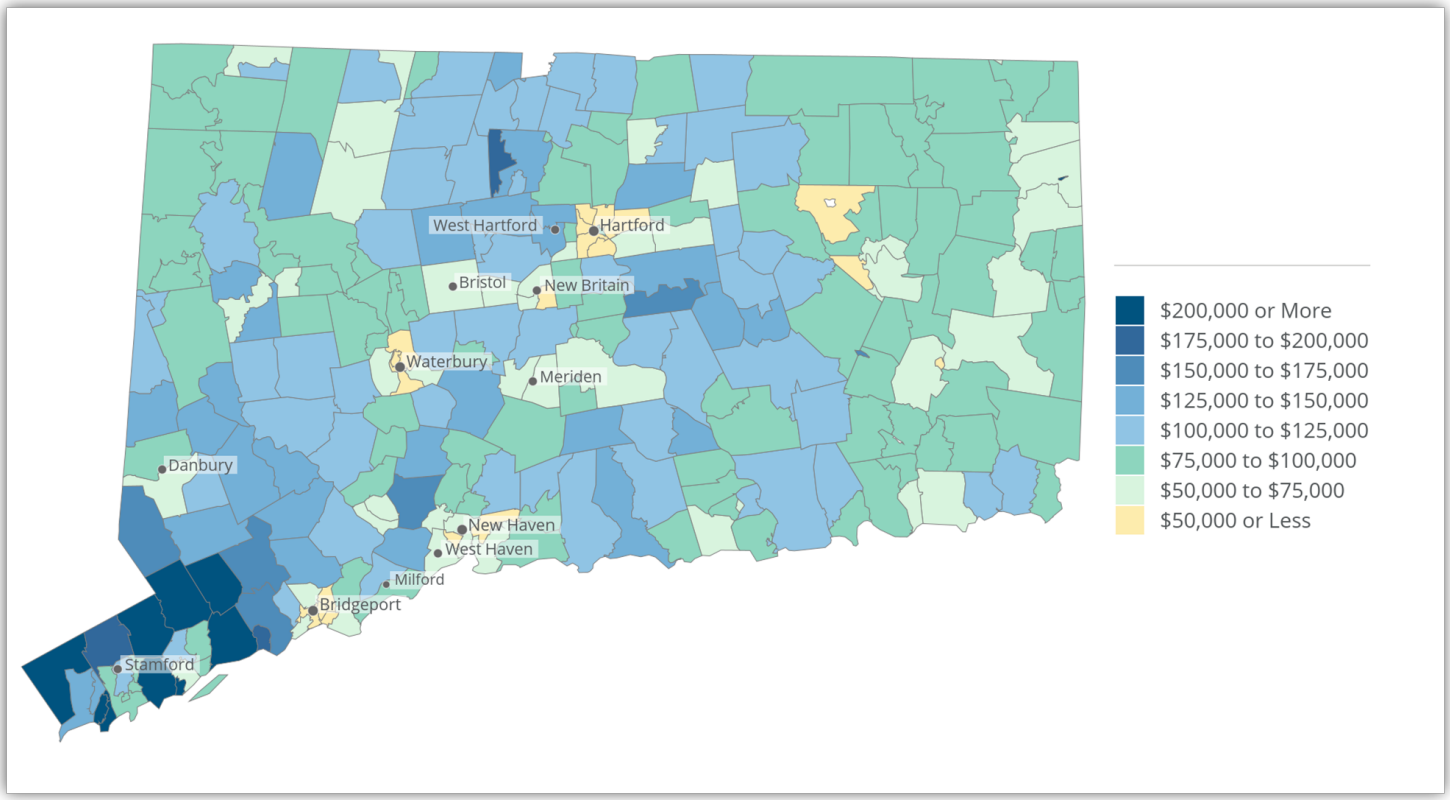
Figure 9: Real 2016 & 2021 Median Household Incomes by County



Source: 2021 & 2016 Five Year American Community Survey Estimates, U.S. Bureau of Labor Statistics, Consumer Price Index for All Urban Consumers: All Items in U.S. City Average [CPIAUCSL], retrieved from FRED, Federal Reserve Bank of St. Louis

Median incomes vary widely by zip code throughout the state. In general, the lowest income zip codes are located in urban centers; including Hartford, New Haven, Bridgeport and Waterbury. These are zip codes in which the median household income is less than $50,000. Middle income zip codes are commonly located in more sparsely populated areas while highest income zip codes are located in suburbs near urban employment centers like Hartford, New Haven, and particularly in Fairfield County given its proximity to New York City.

Figure 10: 2021 Median Household Incomes by Zip Code

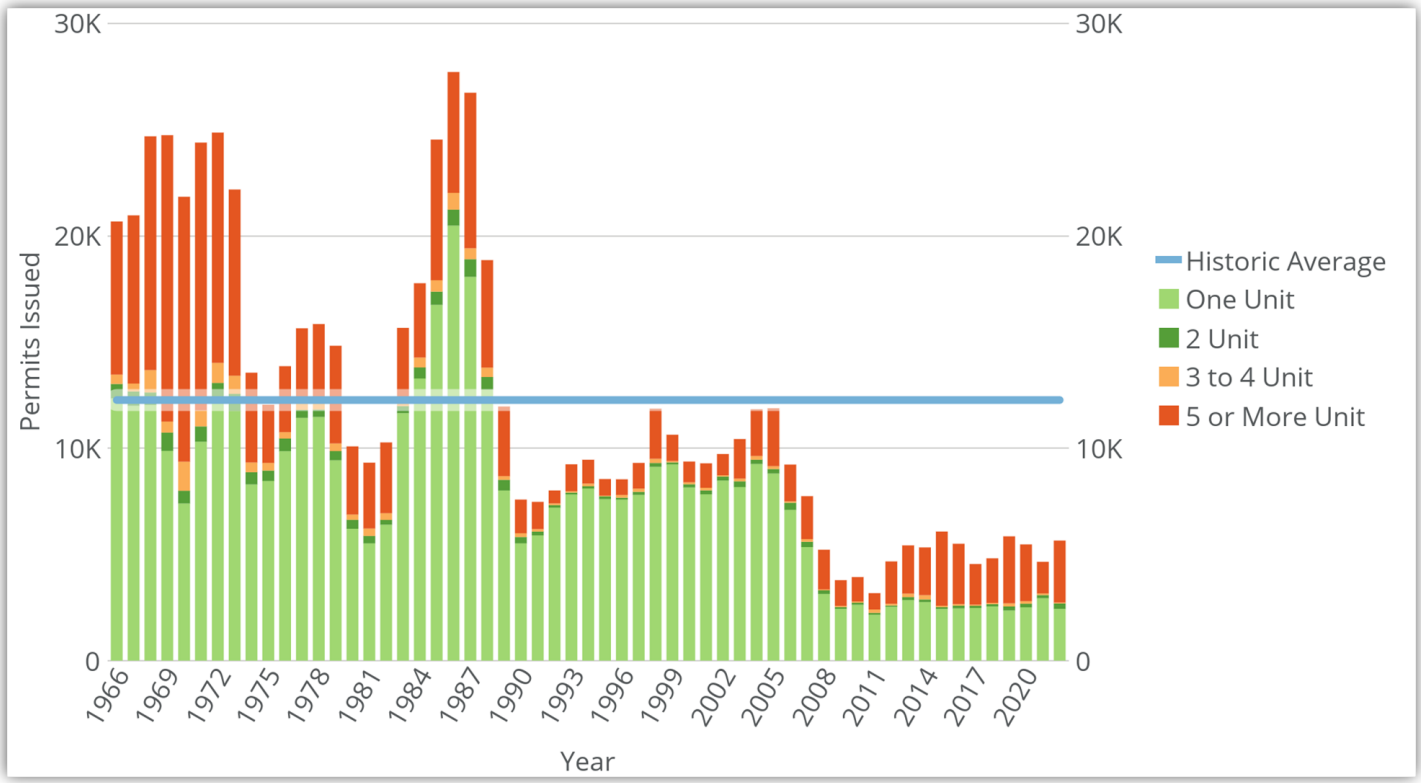


Source: 2021 Five Year American Community Survey Estimates

Section 2: Housing Stock

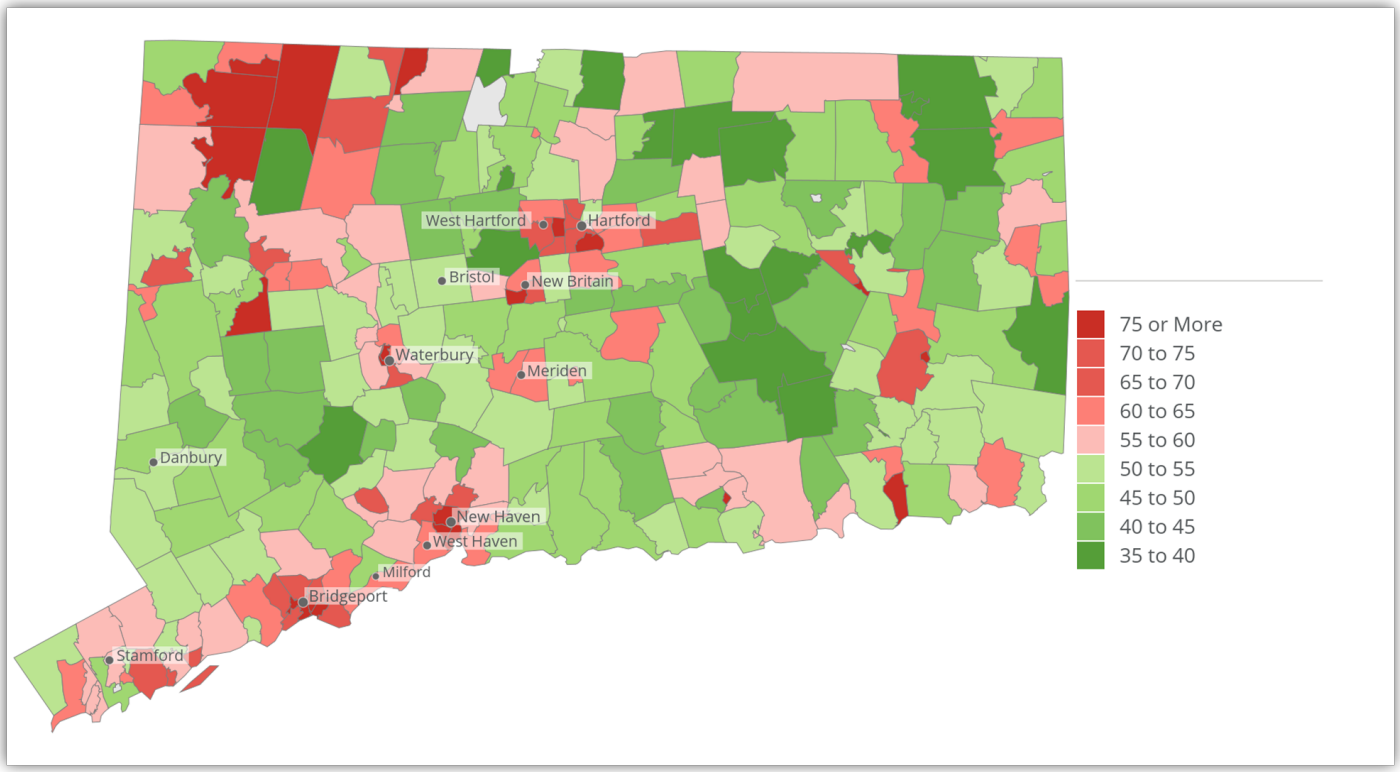
Connecticut has the sixth oldest housing of any state (including Washington DC) with a median year built of 1966 compared to 1980 for the rest of the country. This is driven by the fact that Connecticut has been well below the historic average for newly issued building permits in recent years. Between 1990 and 2005, Connecticut towns issued an annual average of roughly 9,500 permits for new privately owned housing. After 2005, that average dropped to 5,400. As a result, the median age of Connecticut's housing stock according to 2021 Five Year ACS estimates is 55 years old, compared to 41 years nationwide. Connecticut's housing stock is particularly old in major cities and in the northwestern part of the state (Figure 12).

Figure 11: Connecticut Building Permits - New Privately-Owned Housing



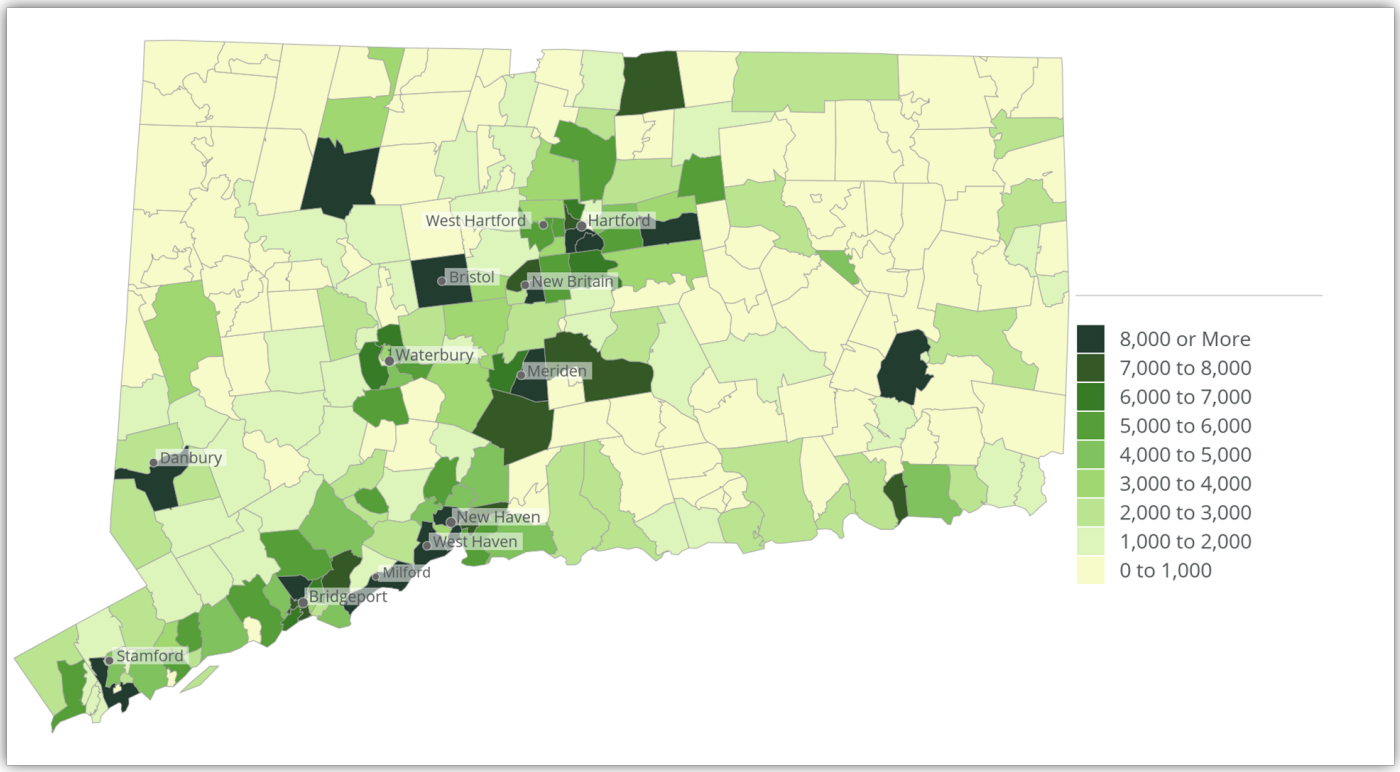
Source: Census Bureau - Building Permits Survey

Figure 12: Median Age of Housing Stock by Zip Code (In Years)



Source: 2021 Five Year American Community Survey Estimates

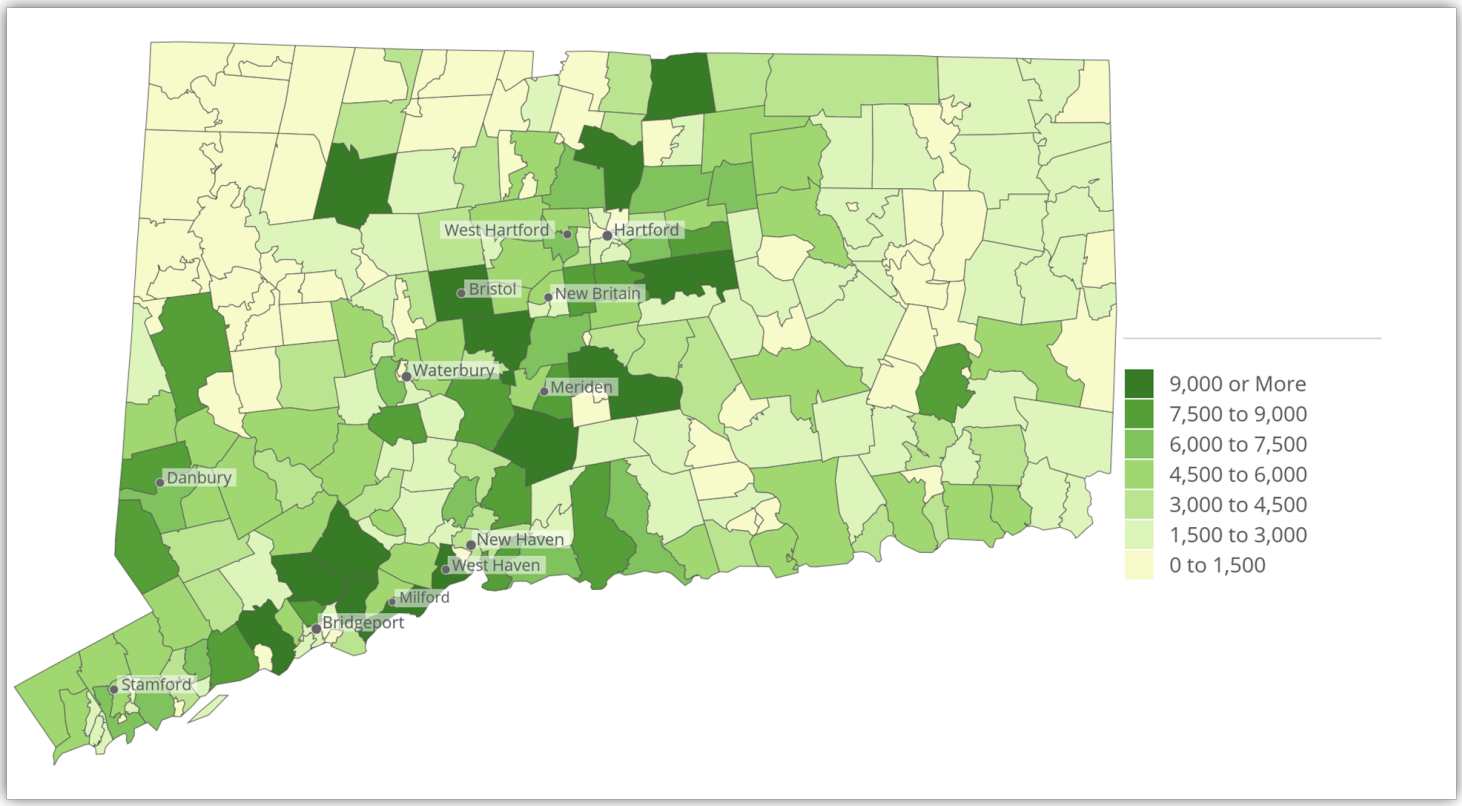
Figure 13: Total Units Built Before 1960 by Zip Code



Source: 2021 Five Year American Community Survey Estimates

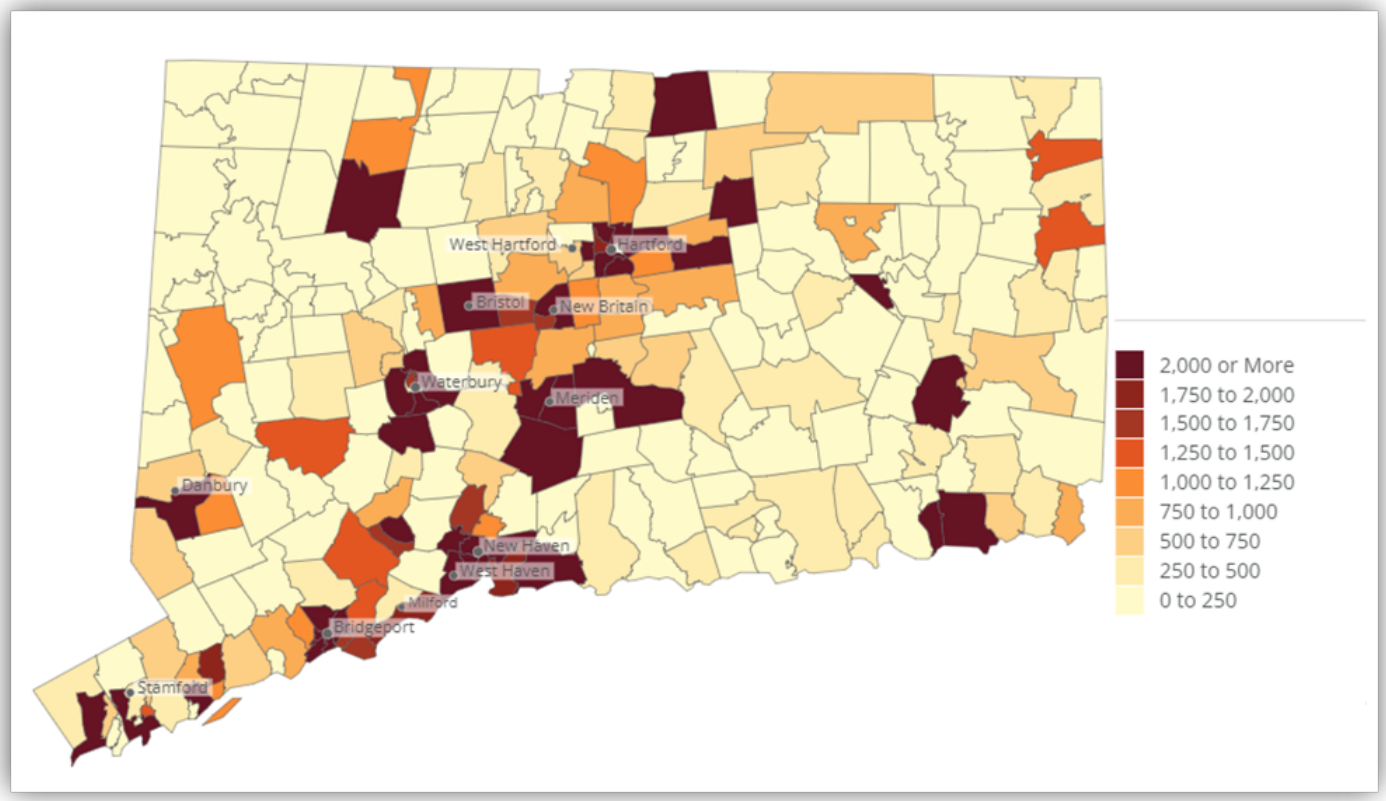
The majority of Connecticut's housing stock is made up of single-family detached units, or what is typically thought of as traditional single-family homes. Roughly 59% of the stock is single-family detached with an additional six percent representing single-family attached units. Generally, these units can be found in the suburbs of the state's major cities. Alternatively, units in structures with two to four and five or more units make up 16.40% and 18% of Connecticut's housing stock respectively. These units are located primarily in Connecticut's major cities and in the suburbs along the I95 and I91 highway corridors (Figures 15 and 16). Given these demographics, it follows that homeownership rates in the state's urban centers are lower than in rural or suburban areas. The lack of single-family housing stock in these areas provides less opportunity for homeownership for families not looking to take on the responsibility of serving as landlords to tenants in a 2-4 family or larger multifamily property.

Figure 14: One Unit Detached by Zip Code



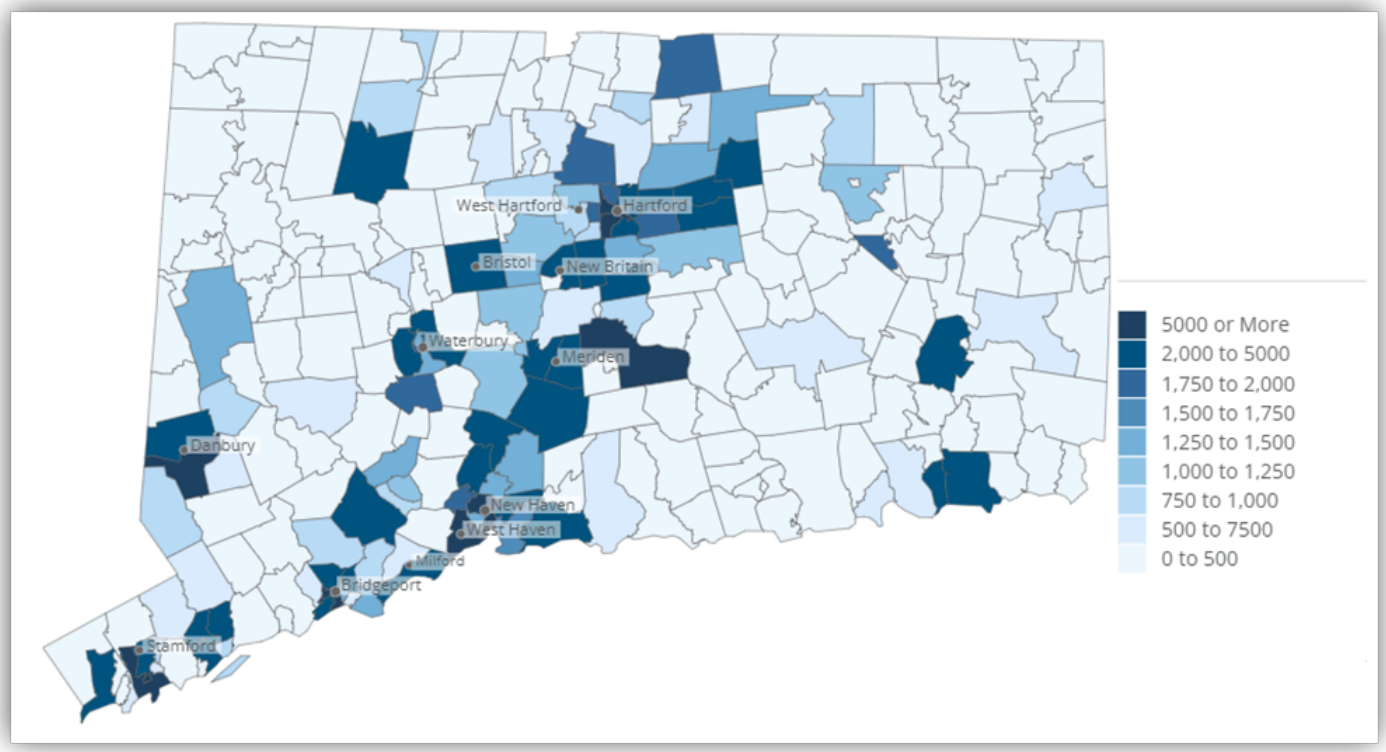
Source: 2021 Five Year American Community Survey Estimates

Figure 15: Units in Structures with Two to Four Units by Zip Code



Source: 2021 Five Year American Community Survey Estimates

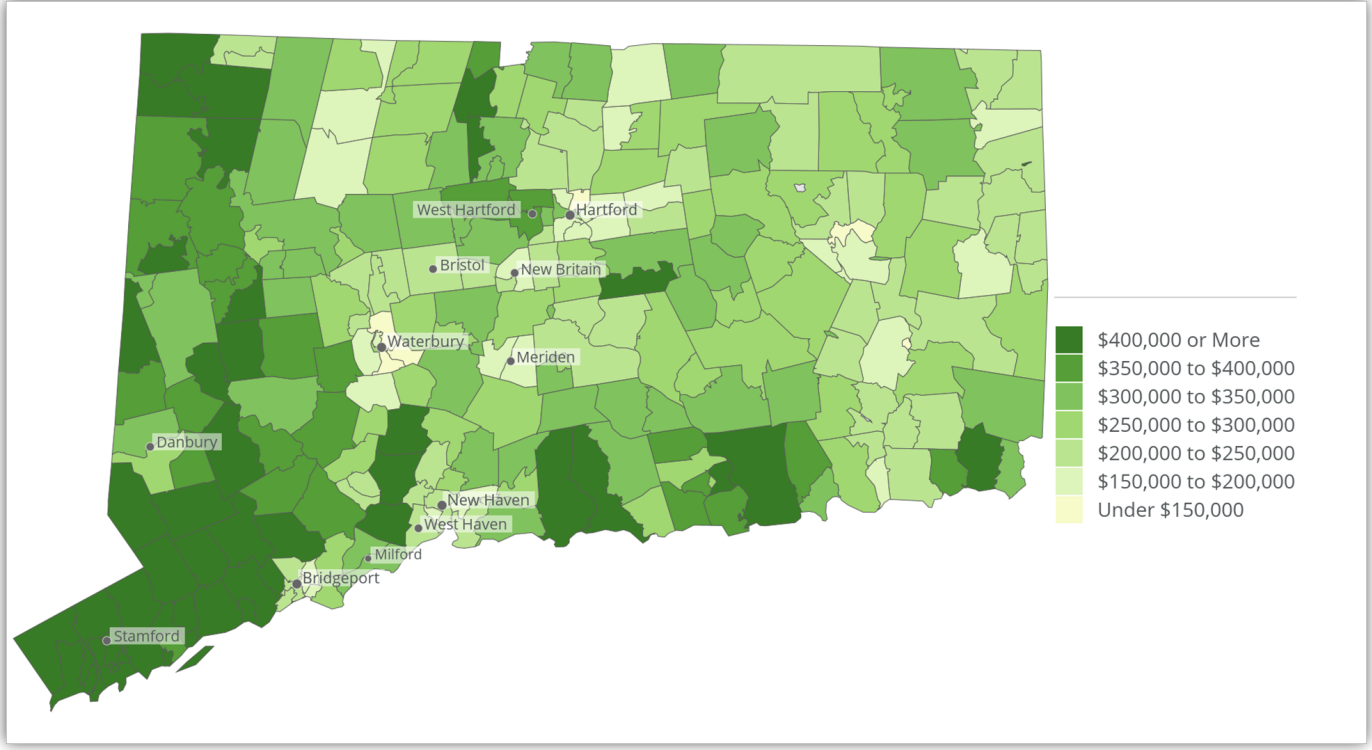
Figure 16: Units in Structures with Five or More Units by Zip Code



Source: 2021 Five Year American Community Survey Estimates

According to the ACS, the median home value of an owner-occupied home in Connecticut in 2021 was $286,700, up from $269,300 five years earlier. Home values are generally consistent across the state with the exception of areas in the southwestern and southern part of the state. In 2021, the median home value in Fairfield County was $443,100, significantly higher than the statewide median.

Figure 17: Median Home Value by Zip Code



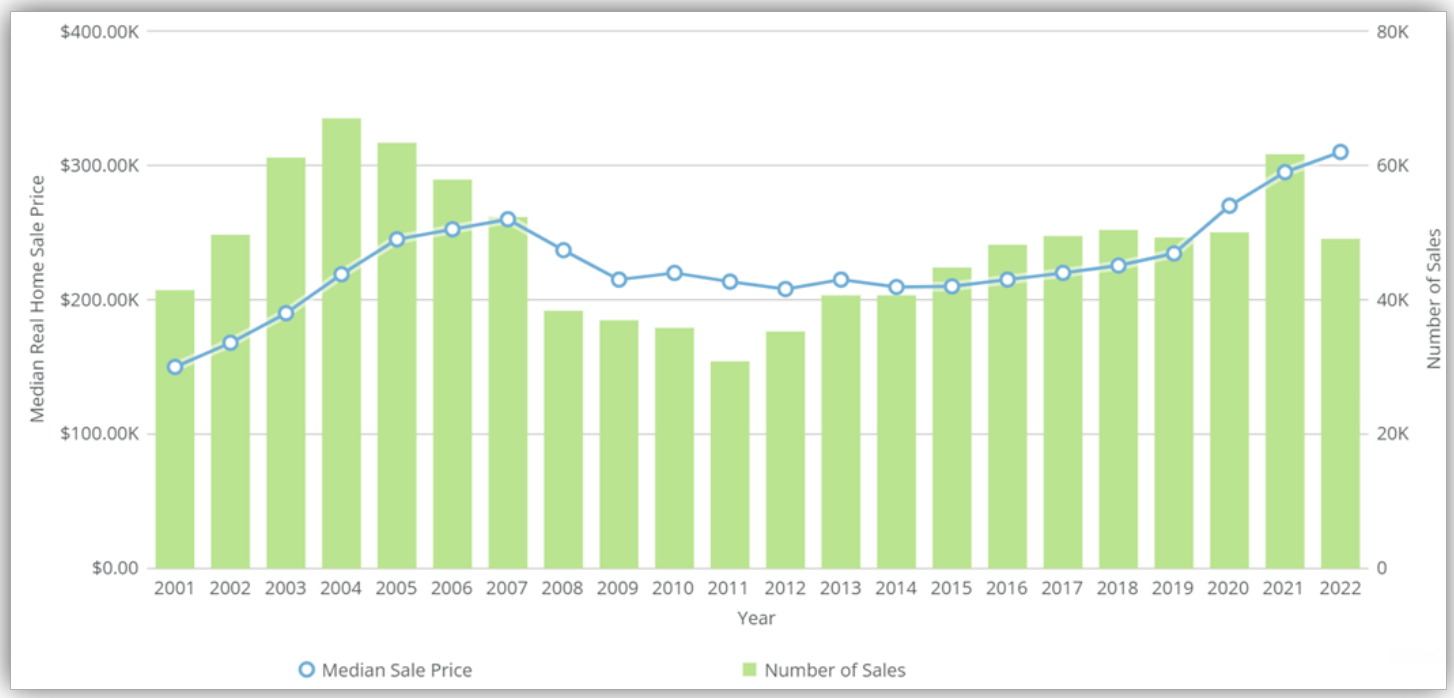
Source: 2021 Five Year American Community Survey Estimates

Section 3: COVID-19 and Inflation Impact

The onset of the COVID-19 pandemic in early 2020 had dramatic effects on the housing market in Connecticut and nationwide. The pandemic led many, especially millennials, to enter the home purchase market for the first time. In 2021, Connecticut saw over 61,000 single-family home (1 to 4 units) sales, the highest number since the start of the Great Recession beginning in 2008. Correspondingly the median sale price in Connecticut jumped from $234,500 in 2019 to $310,000 in 2022, an increase of 32%.

Every year, for-sale inventory levels operate in a cyclical nature, growing in early spring, peaking in summer, and ebbing in the fall and winter months when the school year and holidays dissuade people from moving. With the onset of the pandemic, Connecticut did not see the same seasonal increase in inventory as seen in previous years (Figure 19). As of May 2023, Connecticut had roughly 5,900 homes listed for sale, just 30 percent of the for-sale inventory in May of 2019.

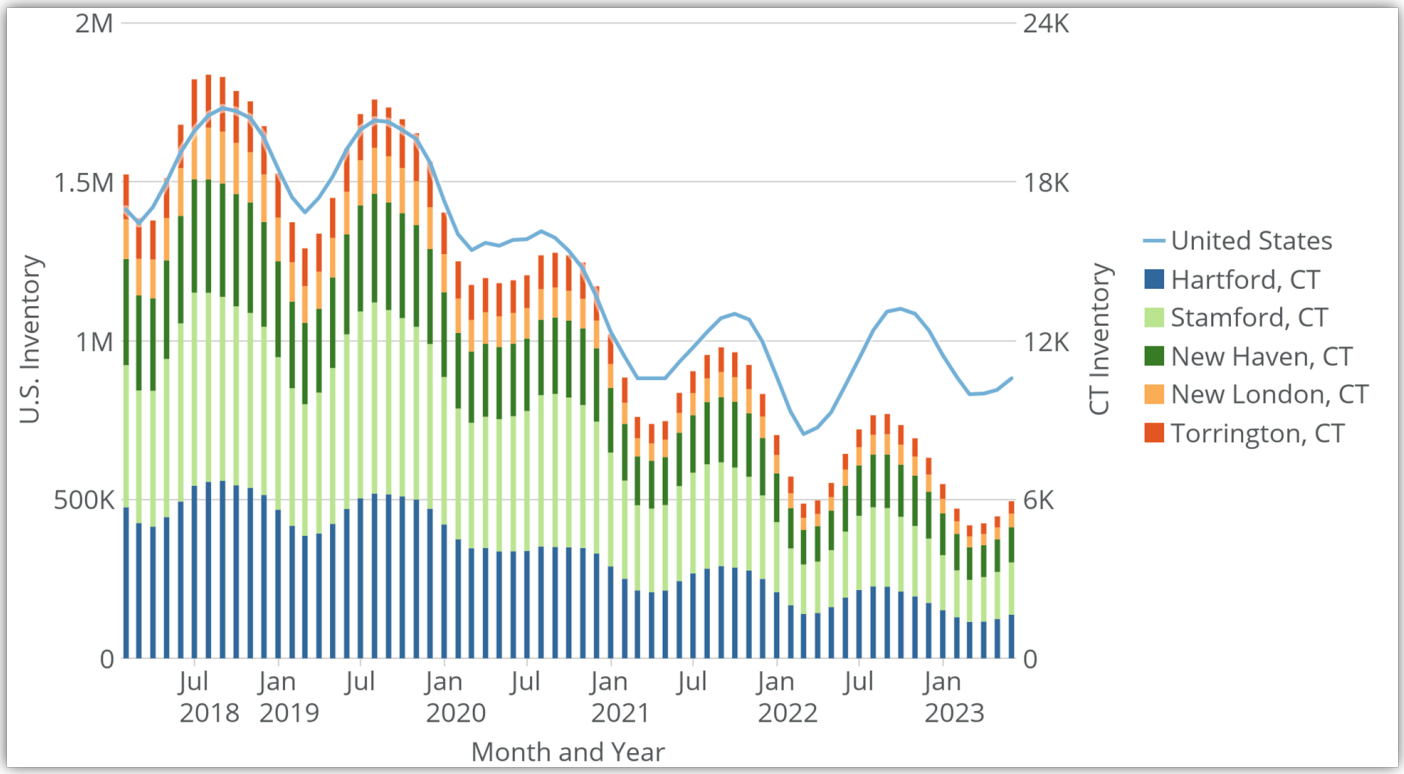
Figure 18: Single-Family (1-4 Unit) Home Sales by Year in Connecticut



Source: Warren Group

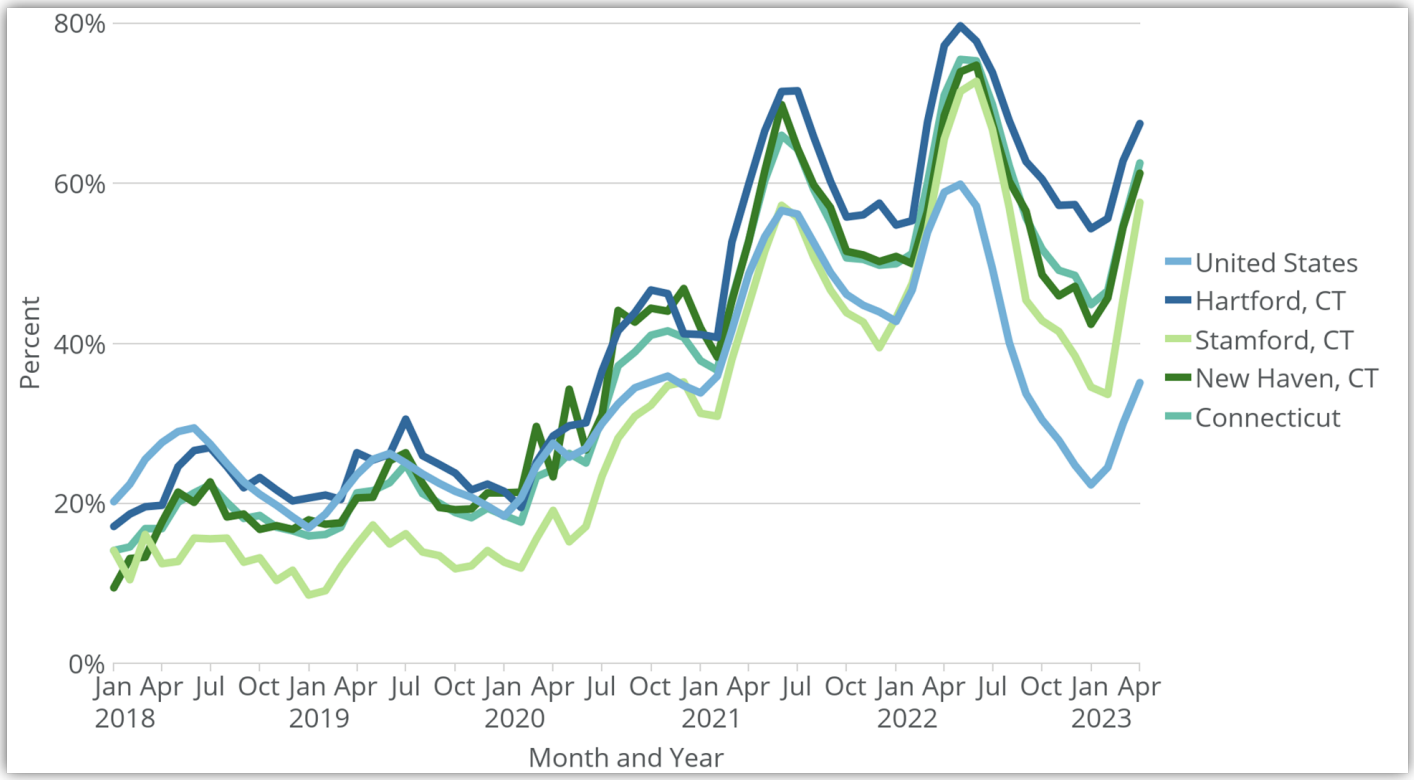
Decreased inventory, combined with increased household formation and homeownership demand among millennials, resulted in a dramatic uptick in the percentage of listings sold above their asking price. Prior to March 2020, only about 20% of home listings sold above their original asking price on average across all counties (Figure 20). During the pandemic period, that number grew to 50% on average, with some markets in Connecticut reaching above 70% depending on the month and market. As demonstrated in Figure 21, this phenomenon is also reflected in the Federal Housing Finance Agency's (FHFA) purchase-only House Price Index (HPI). Between Q1 2020 and Q3 2022, the HPI for Connecticut increased by 37%. Interestingly, despite cooling across U.S. markets, Connecticut's share of listings sold above asking price has remained higher than the U.S., indicating the state's market has remained hotter than the country at large. As of April 2023, about 35% of all U.S. home sales sold above list price compared to 63% in Connecticut.

Figure 19: For-Sale Inventory by Month and Metro-area



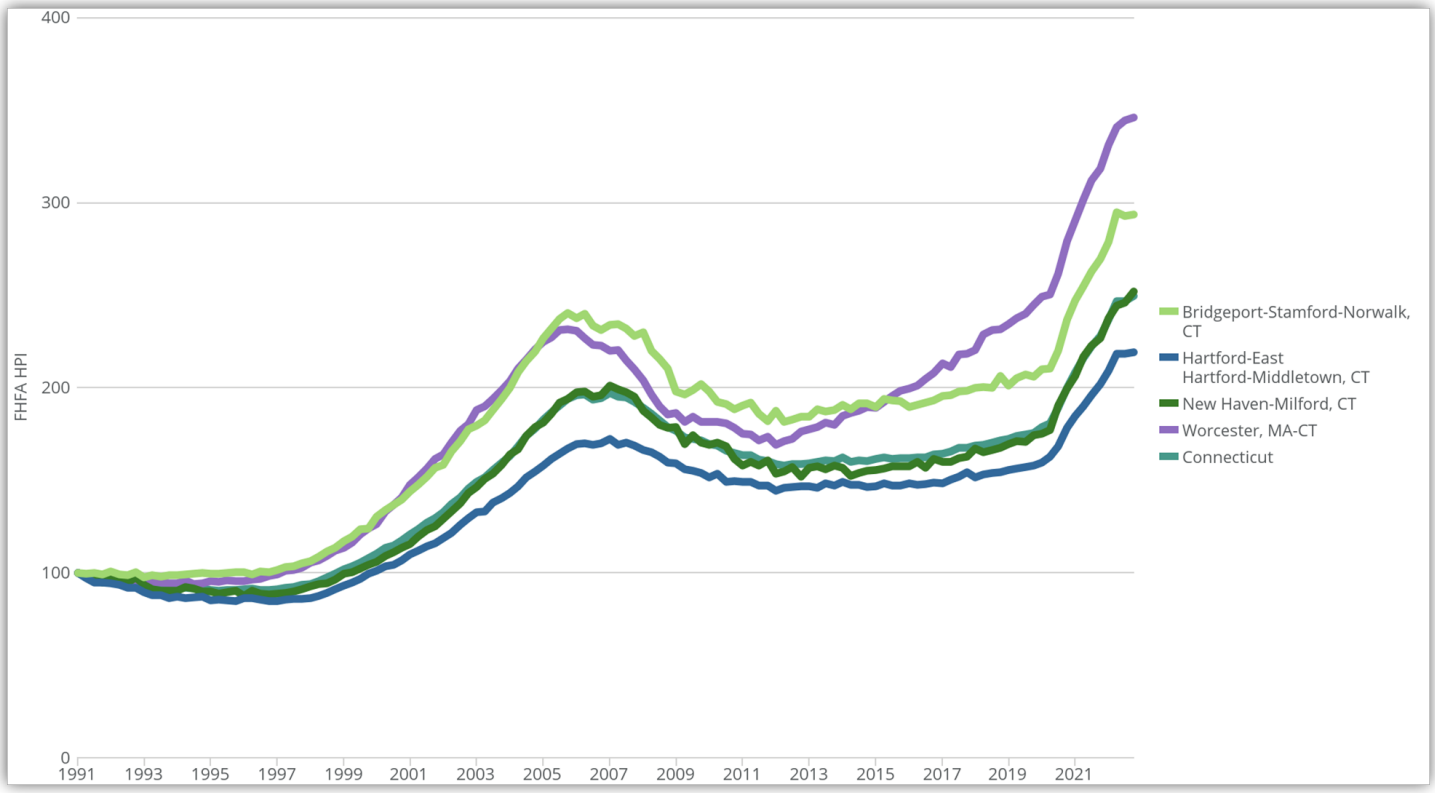
Source: Zillow For-Sale Inventory (Smooth, All Homes, Monthly)

Figure 20: Percent of Listings Sold Above Listing Price by Month and Metro-area



Source: Zillow - Percent of Homes Sold Above List Price (Raw, All Homes, Monthly)

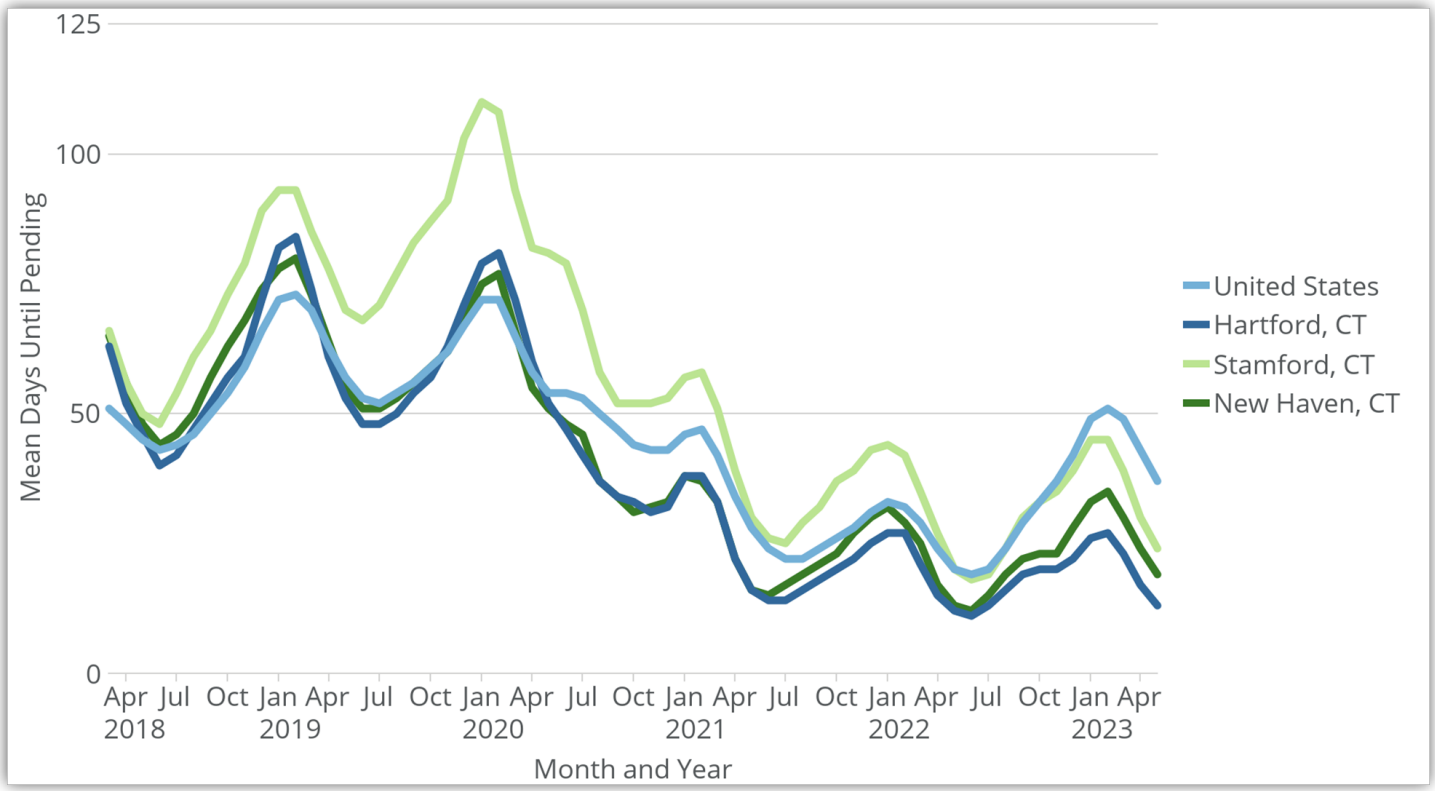
Figure 21: FHFA House Price Index by Metro-area



Source: Federal Housing Finance Agency – Seasonally Adjusted Purchase Only House Price Index

While home values and sales prices have increased over the course of the pandemic, so has the competition for listings. Across all of Connecticut's markets, the average number of days a home is listed has decreased significantly. For example, in the Hartford Metro-Statistical Area (MSA), the average number of days between list date and sale pending date was 13 days in May 2023, down from an average of 53 days in May 2019.

Figure 22: Mean Number of Days Until Pending by Metro-area

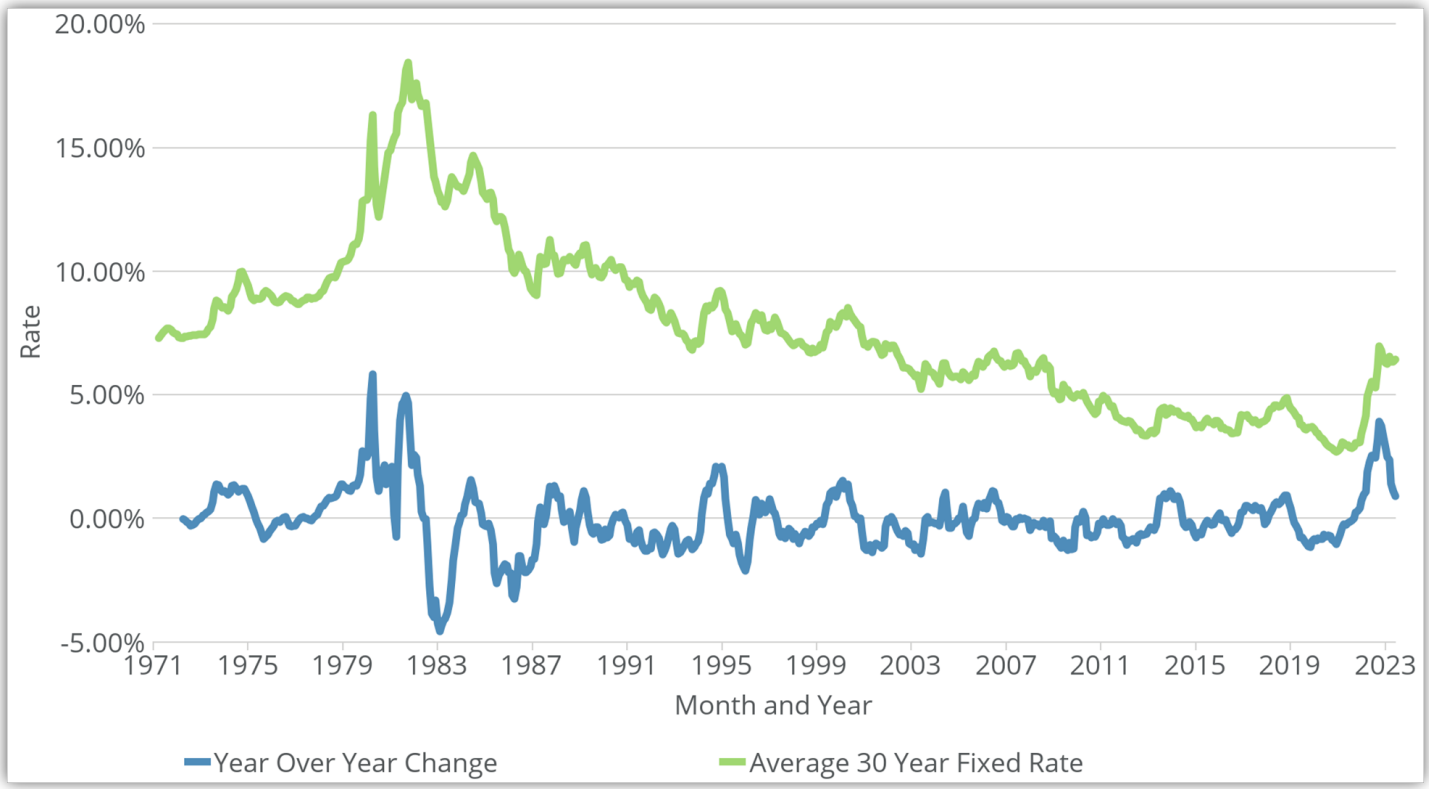


Source: Zillow - Mean Days to Pending (Smooth, All Homes, Monthly)

Additionally, as the Federal Reserve attempts to combat inflation, higher interest rates have further limited options for homebuyers. Between October 2021 and October 2022, the average 30-year fixed rate mortgage rate increased by 3.91 percentage points according to Freddie Mac. This increase represents the largest year-over-year increase in mortgage interest rates since 1981 and is creating further affordability challenges for homebuyers. According to Harvard's Joint Center for Housing Studies (JCHS), nationwide "In April 2021, a household had to earn at least $79,600 a year to afford payments on the median priced home of $340,700. One year later, the income requirement stood at $107,600."[3]

The pandemic also had dramatic effects on the rental market. Driven by strong demand for units and a competitive home sales market, rental vacancy rates in every Connecticut metro area dropped significantly in 2020. For example, in the Norwich metro-area the rental vacancy rate dropped from 5.71% in the Q2 2020 to 2.44% in Q3 2022. Consequently, this scarcity pushed rents higher as households competed for fewer available units; Norwich Metro-area rents were up nearly 12% year-over-year in Q2 2022 according to CoStar (Figures 24 & 25).

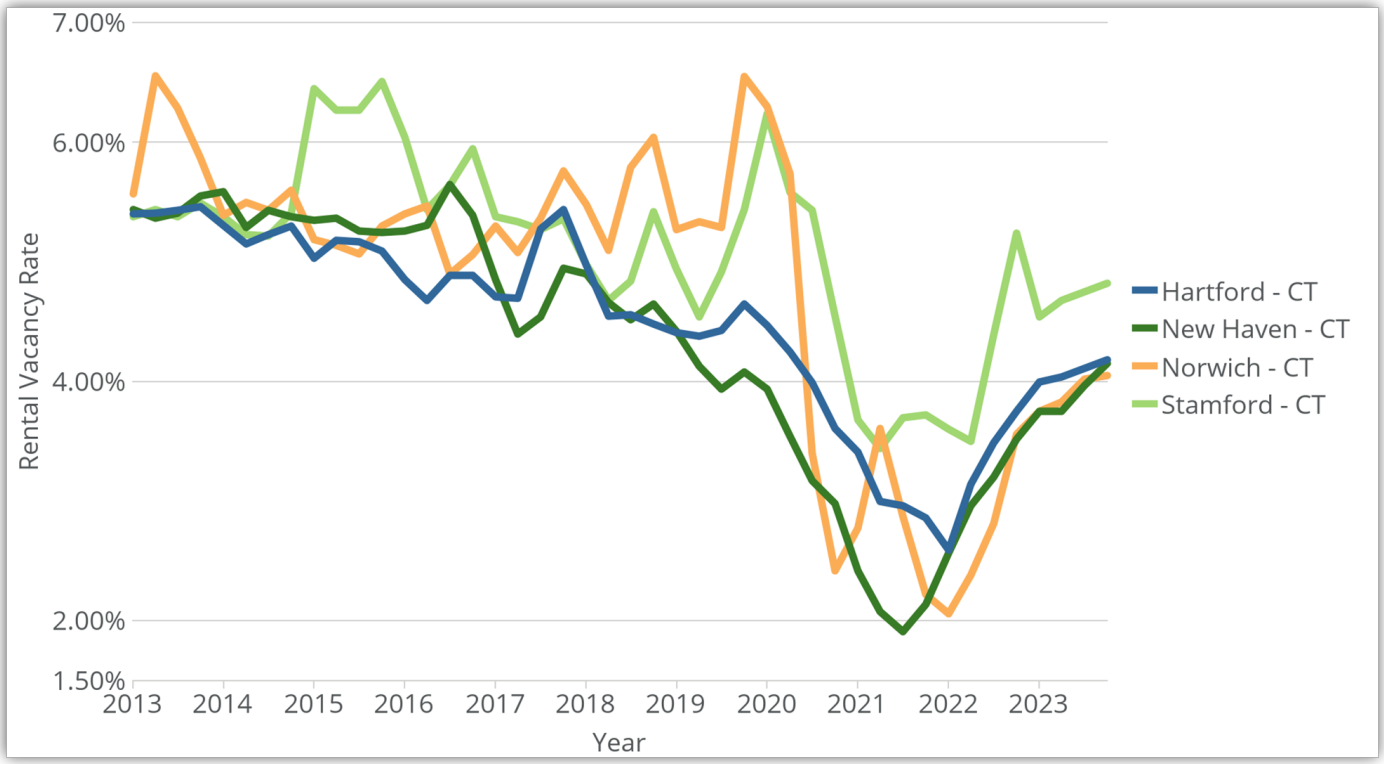
Figure 23: Average 30 Year Fixed Rate Mortgage by Month



Source: Freddie Mac

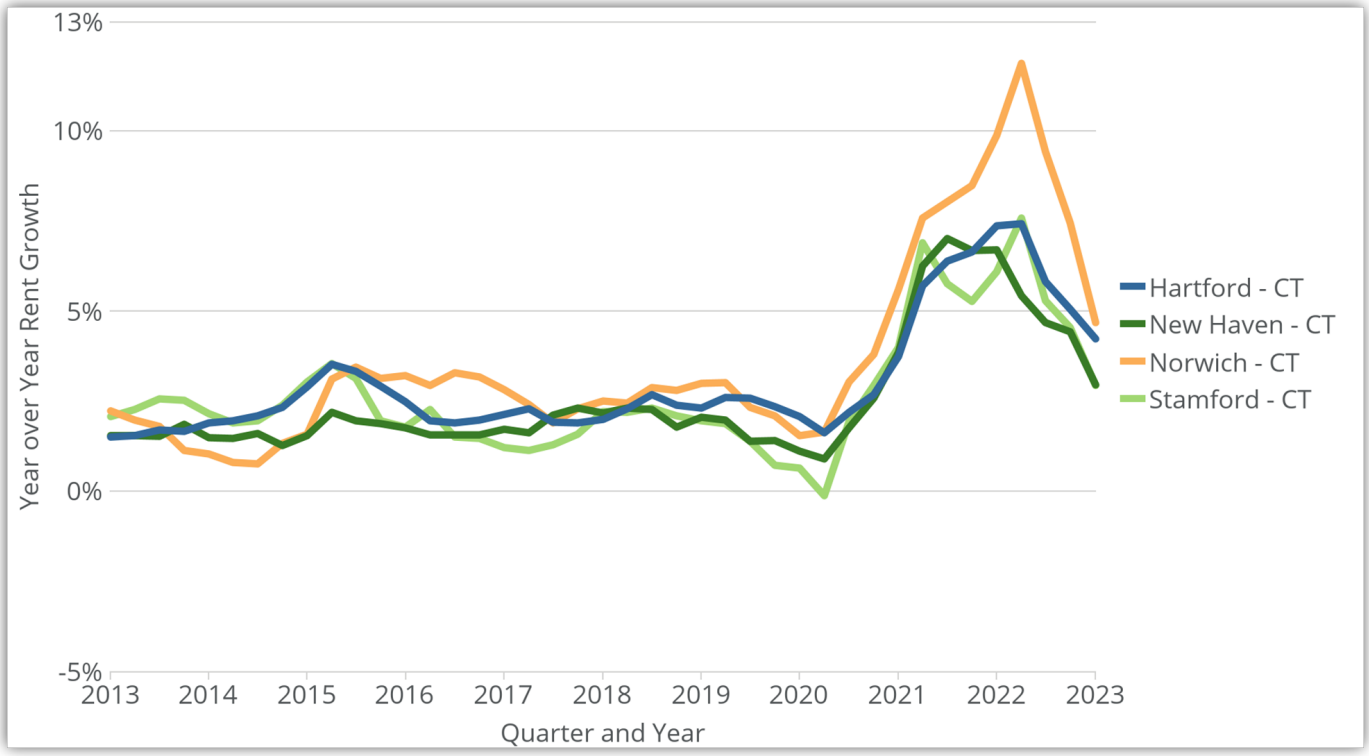
3. Joint Center for Housing Studies - 2022 State of the Nation's Housing Report, https://www.jchs.harvard.edu/sites/default/files/reports/files/Harvard_JCHS_State_Nations_Housing_2022.pdf

Figure 24: Rental Vacancy Rate by Quarter and Metro-area



Source: CoStar

Figure 25: Year over Year Rent Growth by Quarter and Metro-area



Source: CoStar

Section 4: Connecticut Housing Markets

A. Market Typology Overview

The following sections introduce market typologies created for the purpose of analyzing census tract data across the state. This approach is intended to provide a broad view of the housing stock and market activity to allow for market-driven policy prescriptions that can still be applied at the local level.
Rather than analyze the housing stock and affordability in Connecticut by a jurisdictional unit of analysis, data has been aggregated based on a market typology. The state's census tracts were categorized into two of eight possible market typologies, one of four for the rental market and sales market respectively, based on their scores derived from the Opportunity Index and Market Activity Index. An additional Low Density market type serves to classify census tracts where population density was not large enough to make statistically significant estimates. Census tracts in the Low Density category are those with less than 150 residents per square mile.

The Opportunity Index differentiates areas throughout Connecticut based on neighborhood resources and outcomes such as school quality, poverty concentration, safety and more. This index is based on the Opportunity Map hosted by the Open Communities Alliance which is utilized by both CHFA and the state Department of Housing.

The Market Activity Index classifies census tracts based on the amount of market activity that has taken place over the decade based on available data, sorting between heating or cooling markets. Different variables are used for both the rental and homeowner markets. Variables were chosen based on their representation of single- and multi-family development activity. Market typologies are not mutually exclusive i.e., a specific census tract can be in differing rental and homeownership typologies depending on differences between the sales and rental markets in those areas. The full methodology can be found in the Appendix. The following classifications are used:

- High Opportunity & Heating
- Low Opportunity & Heating
- High Opportunity & Cooling
- Low Opportunity & Cooling
- Low Density

Using these market types as the unit of analysis, rather than geographic attributes like city or county, provides a greater understanding of local market conditions and allows for a richer analysis which puts aside geographic stereotypes in certain regions. As such, in assessing the landscape via market typologies, policy prescriptions may be targeted to address the obstacles each one is facing in addressing affordable housing solutions.

Figure 26: Sales Market Typologies

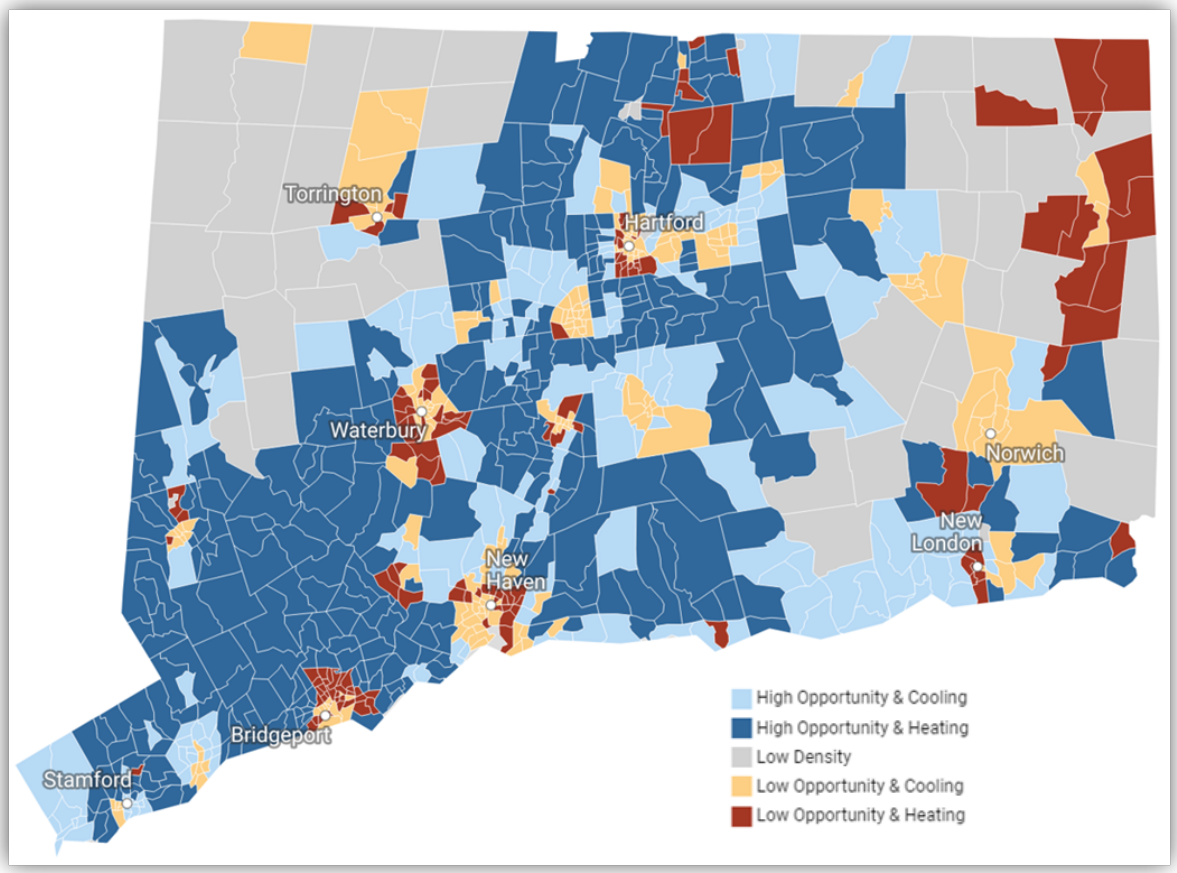
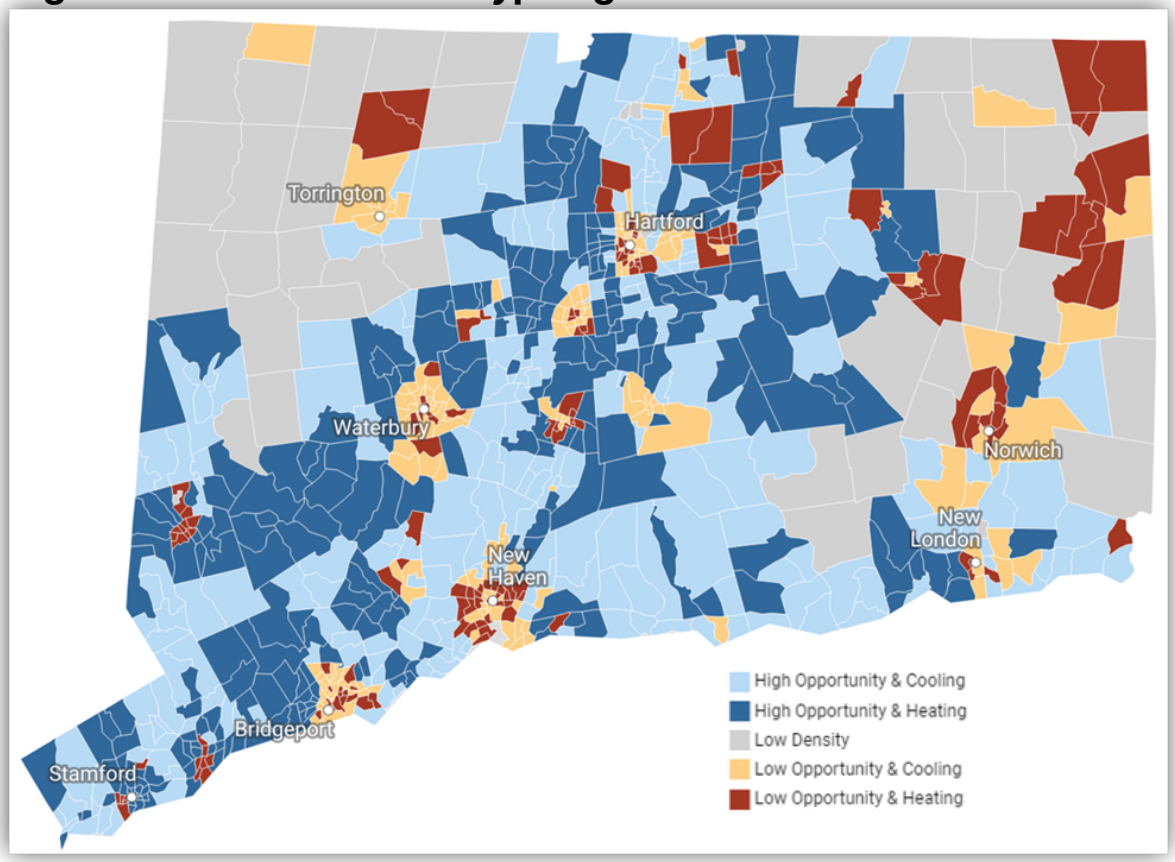


Figure 27: Rental Market Typologies



The maps shown in Figures 26 and 27 illustrate the rental and sales market types. These maps and analysis in this section show the following trends, among others, by market type:

Figure 28: Key Market Typology Trends

	Cooling Market	Heating Market
Low Opportunity	• Older Housing Stock • Higher Proportion of Buildings with 2 to 9 Units • Highest Rental Vacancy • Higher Housing Costs as a percent of Median Household Income Notable Home Price appreciation since 2012	• Older Housing Stock • Higher Proportion of Buildings with 2 to 9 Units • Higher Housing Costs as a percent of Median Household Income • Notable Home Price appreciation since 2012
High Opportunity	• Higher Household Incomes • Higher Owner and Renter Housing Costs • Significant Home Sales Volume	• Lowest Rental Vacancy Rates • Higher Household Incomes • Higher Owner and Renter Housing Costs • Largest Volume of Home Sales and Highest Median Home Prices

These trends point to different program solutions for practitioners to consider depending on the market type. For example, given the low vacancy and high rent costs in High Opportunity & Heating markets, one solution may be encouraging the development of more deeply affordable units in those areas. Additionally, with the older housing stock and prevalence of smaller rental properties, both Low Opportunity markets might benefit from a rehabilitation program aimed at these properties. Again, it is not our intention to offer policy recommendations within this assessment; rather, we seek to provide ourselves and our partners with high quality research and tools needed to address the housing needs of Connecticut.

The High Opportunity & Heating market contains the most census tracts in each tenure. This is in part due to some outlier census tracts where incomes and home prices are extremely high compared to all others. The number of census tracts in each low opportunity market type are the same for each tenure; however, they are not always the same census tracts.

Figure 29: Number of Census Tracts by Market Type

Market Types	Sales		Rent	
	Count	Percent	Count	Percent
High Opportunity & Heating	317	35.98%	267	30.31%
High Opportunity & Cooling	178	20.32%	229	25.99%
Low Opportunity & Heating	133	15.10%	159	18.05%
Low Opportunity & Cooling	204	23.16%	178	20.20%
Low Density	48	5.45%	48	5.45%

B. Age of Housing Structures

Roughly 26% of renters live in housing that is at least 80 years old compared to 17% of homeowners. Renters in Low Opportunity markets are more likely to live in older housing than those in High Opportunity markets, particularly in Low Opportunity & Heating markets, where 35.37% of renters live in housing that was built before 1939. Renters in the High Opportunity & Heating market have the newest housing stock available with 42.98% occupying housing built after 1980.

Homeowners in both Low Opportunity markets have the oldest housing stock within their tenure type. Roughly 77% of residents in Low Opportunity areas live in housing that is at least 40 years old. Homeowners in High Opportunity markets are more likely to live in newer housing relative to those in lower opportunity markets. The High Opportunity & Heating markets contain over half of the state's owner-occupied housing under ten years old.

Figure 30: Housing Units by Age and Market Typology

Owner-Occupied									
	Built after 2010		Built 1980 to 2009		Built 1940 to 1979		Built 1939 or Earlier		Total
Sales Market Types	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count
High Opportunity & Heating	13,240	2.92%	142,767	31.48%	244,597	53.94%	52,851	11.66%	453,455
High Opportunity & Cooling	5,459	2.73%	62,343	31.12%	102,855	51.35%	29,664	14.81%	200,321
Low Opportunity & Heating	1,808	1.57%	25,808	22.42%	55,577	48.29%	31,901	27.72%	115,094
Low Opportunity & Cooling	2,000	1.72%	24,548	21.06%	57,918	48.70%	34,450	28.97%	118,916
Low Density	1,173	3.11%	15,732	41.71%	13,268	35.18%	7,544	20.00%	37,717
Connecticut	23,680	2.56%	271,198	29.30%	474,215	51.24%	156,410	16.90%	925,503
Renter-Occupied									
	Built after 2010		Built 1980 to 2009		Built 1940 to 1979		Built 1939 or Earlier		Total
Rental Market Types	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count
High Opportunity & Heating	11,764	10.54%	36,225	32.44%	47,315	42.38%	16,347	14.64%	111,651
High Opportunity & Cooling	2,933	4.39%	18,924	28.35%	32,339	48.44%	12,561	18.82%	66,757
Low Opportunity & Heating	5,936	3.79%	30,086	19.22%	65,174	41.63%	55,376	35.37%	156,572
Low Opportunity & Cooling	4,508	3.47%	28,381	21.86%	60,435	46.56%	36,485	28.11%	129,809
Low Density	281	4.00%	2,338	33.25%	2,490	35.41%	1,923	27.35%	7,032
Connecticut	25,422	5.39%	115,954	24.58%	207,753	44.03%	122,692	26.00%	471,821

Source: 2021 Five Year American Community Survey Estimates

C. Units in Structure

Renters are more likely to live in multifamily housing by a wide margin. Almost 90% of all homeowners in Connecticut live in single-family housing, while only 21.22% of renters live in the same type. Renters in High Opportunity markets tend to rent single-family homes, while most multifamily units across all rental markets are structures with 2- to 9-units. Homeowners in Low Opportunity typologies are more likely than those in High Opportunity ones to live in multifamily units, however, roughly 80% still live in single-family homes. Nearly all homeowners and nearly 60% of renters in the Low Density market live in single-family homes.

Figure 31: Housing Units by Number of Units and Market Typology

	Single Family		2-9 Units		10-19 Units		20-49 Units		50 or More Units		Mobile Home, Boat, RV		Total
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count
Renter-Occupied													
High Opportunity & Heating	31,727	28.42%	39,551	35.42%	9,398	8.42%	9,812	8.79%	20,661	18.50%	502	0.45%	111,651
High Opportunity & Cooling	23,144	34.67%	26,070	39.05%	5,870	8.79%	4,549	6.81%	6,493	9.73%	631	0.95%	66,757
Low Opportunity & Heating	20,295	12.96%	87,644	55.98%	13,105	8.37%	12,813	8.18%	22,190	14.17%	525	0.34%	156,572
Low Opportunity & Cooling	20,792	16.02%	64,911	50.01%	11,092	8.54%	12,334	9.50%	20,366	15.69%	314	0.24%	129,809
Low Density	4,156	59.10%	2,008	28.56%	242	3.44%	419	5.96%	121	1.72%	86	1.22%	7,032
Connecticut	100,114	21.22%	220,184	46.67%	39,707	8.42%	39,927	8.46%	69,831	14.80%	2,058	0.44%	471,821
Owner-Occupied													
High Opportunity & Heating	426,076	93.96%	16,297	3.59%	2,808	0.62%	2,172	0.48%	3,135	0.69%	2,967	0.65%	453,455
High Opportunity & Cooling	178,768	89.24%	12,119	6.05%	2,959	1.48%	2,201	1.10%	2,386	1.19%	1,888	0.94%	200,321
Low Opportunity & Heating	92,746	80.58%	16,843	14.63%	1,804	1.57%	922	0.80%	1,486	1.29%	1,293	1.12%	115,094
Low Opportunity & Cooling	90,675	76.25%	21,623	18.18%	1,630	1.37%	1,647	1.39%	1,879	1.58%	1,462	1.23%	118,916
Low Density	36,814	97.61%	591	1.57%	63	0.17%	11	0.03%	12	0.03%	226	0.60%	37,717
Connecticut	825,079	89.15%	67,473	7.29%	9,264	1.00%	6,953	0.75%	8,898	0.96%	7,836	0.85%	925,503

Source: 2021 Five Year American Community Survey Estimates

D. Bedrooms

Renters are disproportionally living in efficiencies and one-bedroom units compared to owners; however, a majority of renters have two- or three-bedroom units. There is little difference in the distribution of housing size across the renter typologies. According to the 2021 Five Year ACS, 41.78% of renters are non-family households or living alone. Considering this fact, the rental market may not be supplied with enough efficiency and one-bedroom rental units. Given the stock of available units, some renters will inevitably have no other option than to live in units that are larger and more costly than they desire or can afford. In doing so, they also occupy midsized units that could otherwise be rented to larger households, thus reducing the availability of appropriately sized units to these renters.

The majority of homeowners live in units with between two-and three-bedrooms and a significant proportion live in four-bedroom units. Owners in High Opportunity markets are more likely to live in four- and five-bedroom units, than those in the cooling typologies.

Figure 32: Units by Number of Bedrooms and Market Type

	0-1 Bedrooms		2-3 Bedrooms		4 Bedrooms		5 or More Bedrooms		Total
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count
Renter-Occupied									
High Opportunity & Heating	39,977	35.81%	64,500	57.77%	5,644	5.06%	1,530	1.37%	111,651
High Opportunity & Cooling	23,911	35.82%	38,261	57.31%	3,711	5.56%	874	1.31%	66,757
Low Opportunity & Heating	58,372	37.28%	91,540	58.47%	5,182	3.31%	1,478	0.94%	156,572
Low Opportunity & Cooling	45,139	34.77%	77,934	60.04%	5,076	3.91%	1,660	1.28%	129,809
Low Density	2,158	30.69%	3,958	56.29%	742	10.55%	174	2.47%	7,032
Connecticut	169,557	35.94%	276,193	58.54%	20,355	4.31%	5,716	1.21%	471,821
Owner-Occupied									
High Opportunity & Heating	10,338	2.28%	271,351	59.84%	135,947	29.98%	35,819	7.90%	453,455
High Opportunity & Cooling	6,946	3.47%	134,425	67.10%	47,296	23.61%	11,654	5.82%	200,321
Low Opportunity & Heating	4,491	3.90%	86,314	74.99%	19,075	16.57%	5,214	4.53%	115,094
Low Opportunity & Cooling	6,470	5.44%	89,254	75.06%	18,640	15.67%	4,552	3.83%	118,916
Low Density	1,074	2.85%	25,719	68.19%	8,756	23.21%	2,168	5.75%	37,717
Connecticut	29,319	3.17%	607,063	65.59%	229,714	24.82%	59,407	6.42%	925,503

Source: 2021 Five Year American Community Survey Estimates

E. Size of Households and the Size of Existing Housing Stock

An often overlooked aspect of the housing market is the extent to which the existing stock is right-sized for household occupants. One way of considering if housing is right-sized is to compare the size of households to the size of units in the market using the number of bedrooms. Figure 33 below portrays the mismatch by subtracting the number of households of a certain size from the number of units that would be appropriate for that sized household. This analysis is based on the number of bedrooms and does not take into consideration the square footage of the units. For example, in High Opportunity & Heating markets there appears to be 40,281 fewer studio and one-bedroom rental units than there are one to two person households who could potentially occupy those units. Due to the shortage of appropriately sized units, some of these smaller households may then rent a larger, more expensive unit.

The largest mismatch in rental units is found in household sizes between one and two persons. There is a large surplus of two-to-three-bedroom units and a lack of smaller units for one to two persons. There is also a large surplus of owner housing with four bedrooms across all market types as well as for housing with five or more bedrooms, particularly in the High Opportunity typologies.

Figure 33: Appropriateness of Unit Size by Market Type

Housing Unit Size	0 - 1 Bedrooms	2 - 3 Bedrooms	4 Bedrooms	5 or More Bedrooms
Households Size	1 - 2 Persons	3 - 4 Persons	5 Persons	6 or More Persons
Renter-Occupied				
High Opportunity & Heating	(40,281)	39,454	799	28
High Opportunity & Cooling	(24,456)	22,947	1,722	(213)
Low Opportunity & Heating	(43,978)	49,680	(2,365)	(3,337)
Low Opportunity & Cooling	(41,764)	45,607	(1,621)	(2,222)
Low Density	(3,002)	2,366	524	112
Connecticut	(153,481)	160,054	(941)	(5,632)
Owner-Occupied				
High Opportunity & Heating	(247,658)	115,089	107,232	25,337
High Opportunity & Cooling	(115,672)	71,020	37,507	7,145
Low Opportunity & Heating	(64,193)	50,295	12,791	1,107
Low Opportunity & Cooling	(65,172)	52,740	11,814	618
Low Density	(22,602)	14,017	6,991	1,594
Connecticut	(515,297)	303,161	176,335	35,801

Source: 2021 Five Year American Community Survey Estimates

F. Vacancy

The highest rental vacancies are experienced by cooling markets where rental vacancies reach as high as 8.09% in the Low Opportunity & Cooling market. Low Opportunity markets have the highest overall number of vacant rental units. Vacancies are lower across the board among homeowners, reaching as low as just over one percent in all markets.

Figure 34: Vacancy by Market Type

	Occupied	Vacant*	Vacancy Rate
Rental Units			
High Opportunity & Heating	111,651	6,315	5.66%
High Opportunity & Cooling	66,757	4,653	6.97%
Low Opportunity & Heating	156,572	9,585	6.12%
Low Opportunity & Cooling	129,809	10,506	8.09%
Low Density	7,032	434	6.17%
Connecticut	471,821	31,493	6.67%
Owner Units			
High Opportunity & Heating	541,727	7,230	1.33%
High Opportunity & Cooling	290,457	3,924	1.35%
Low Opportunity & Heating	216,047	2,702	1.25%
Low Opportunity & Cooling	304,344	3,543	1.16%
Low Density	44,749	762	1.70%
Connecticut	1,397,324	18,161	1.30%

**Includes vacant for sale, for rent, and vacant sold or rented not yet occupied*

Source: 2021 Five Year American Community Survey Estimates

Section 5: Affordability Analysis

A. Incomes

After adjusting for inflation, the median household income rose across the state from 2011 – 2021. Incomes rose the most in Lower Opportunity markets, especially among owners. Renters in most typologies appear to have seen a drop in their incomes since 2011, led by renters in High Opportunity & Cooling markets which saw an 18.05% drop. Household income is highest in High Opportunity markets particularly among owners, which makes sense given that these typologies are located in proximity to ample job opportunities and require higher incomes to afford homes. Median household income in 2021 was $126,932 among owner households in the High Opportunity & Heating owner markets and $103,100 among all homeowners statewide. Homeowner income grew fastest in Low Opportunity markets, but incomes are still about 20 to 30% lower than in High Opportunity ones.

Figure 35: Owner and Renter Incomes by Market Type*

Owner Market						
Sales Typology	Median Income 2011	Median Income 2021	Median Income Percent Change	Owner Median Income 2011	Owner Median Income 2021	Percent Change in Median Owner Income
High Opportunity & Heating	$ 112,651	$ 115,296	2.35%	$ 120,981	$ 126,932	4.92%
High Opportunity & Cooling	$ 95,083	$ 96,053	1.02%	$ 108,985	$ 110,573	1.46%
Low Opportunity & Heating	$ 59,799	$ 61,820	3.38%	$ 81,494	$ 83,954	3.02%
Low Opportunity & Cooling	$ 49,423	$ 52,669	6.57%	$ 76,140	$ 78,099	2.57%
Low Density	$ 91,879	$ 90,596	-1.40%	$ 100,724	$ 103,955	3.21%
Connecticut	$ 85,493	$ 86,607	1.30%	$ 98,858	$ 103,100	4.29%

Rental Market						
Rental Typology	Median Income 2011	Median Income 2021	Median Income Percent Change	Renter Median Income 2011	Renter Median Income 2021	Percent Change in Median Renter Income
High Opportunity & Heating	$ 104,601	$ 106,118	1.45%	$ 54,886	$ 55,647	1.39%
High Opportunity & Cooling	$ 106,348	$ 107,917	1.48%	$ 58,603	$ 48,023	-18.05%
Low Opportunity & Heating	$ 54,648	$ 56,454	3.31%	$ 37,879	$ 38,375	1.31%
Low Opportunity & Cooling	$ 52,677	$ 54,398	3.27%	$ 35,640	$ 35,360	-0.79%
Low Density	$ 91,879	$ 90,596	-1.40%	$ 52,425	$ 45,843	-12.56%
Connecticut	$ 85,493	$ 86,607	1.30%	$ 46,637	$ 43,851	-5.97%

*Without the actual survey responses, it is impossible to calculate dollar figures such as the median household income in a market typology. This analysis uses the median of all median household incomes for each census tract in a typology as a way to calculate a close proxy. All values are inflation adjusted to 2021 dollars

Source: 2021 & 2011 Five Year American Community Survey Estimates

B. Housing Costs

Due in part to rising incomes and the ability to refinance, homeownership was generally affordable across all market areas at or above the median income during the subject years. The median selected monthly owners' costs (SMOC) as a percent of income for homeowners with a mortgage in 2021 was 19.81%, down from 24.32% in 2011 adjusted for inflation. There was little variation across market types with only the Low Opportunity markets paying more than a fifth of household income.

The statewide median annual gross rent adjusted for inflation increased 2% from 2011 to 2021 compared to a 13% increase in the High Opportunity & Heating market and a 2% increase in the Low Opportunity & Heating market. Despite rents being higher and increasing faster than income in the High Opportunity & Heating markets, they remain relatively affordable to renters – with just over 30% of income spent on rent. This affordability is likely due, in part, to the rising incomes renters enjoyed during this time, and because rent has increased faster than income in this market but has not yet become unaffordable. The impact of stagnant incomes among renters was kept in check by falling inflation-adjusted rents that have kept High Opportunity & Cooling markets broadly affordable to renters as well. Due in part to lower household incomes, Low Opportunity markets are generally less affordable for renters with far more than 30% of income spent on rent.

Figure 36: Owner and Renter Housing Costs by Market Type

Owner Market

Sales Typology	Median SMOC 2011	Median SMOC 2021	Median Percent Change in Owner Cost	Annual Median SMOC as % of Median Income 2011	Annual Median SMOC as % of Median Income 2021
High Opportunity & Heating	$ 2,334	$ 1,946	-17%	23.15%	18.40%
High Opportunity & Cooling	$ 2,121	$ 1,765	-17%	23.35%	19.15%
Low Opportunity & Heating	$ 1,850	$ 1,509	-18%	27.24%	21.57%
Low Opportunity & Cooling	$ 1,790	$ 1,489	-17%	28.22%	22.88%
Low Density	$ 1,883	$ 1,571	-17%	22.43%	18.13%
Connecticut	$ 2,004	$ 1,702	-15%	24.32%	19.81%

*All Values are inflation adjusted to 2021 dollars

Rental Market

Rental Typology	Median Rent 2011	Median Rent 2021	Median Percent Rent Change	Annual Median Rent as % of Median Income 2011	Annual Median Rent as % of Median Income 2021
High Opportunity & Heating	$ 1,373	$ 1,546	13%	30.02%	33.34%
High Opportunity & Cooling	$ 1,428	$ 1,375	-4%	29.25%	34.36%
Low Opportunity & Heating	$ 1,152	$ 1,169	2%	36.48%	36.56%
Low Opportunity & Cooling	$ 1,134	$ 1,125	-1%	38.19%	38.18%
Low Density	$ 1,144	$ 1,124	-2%	26.18%	29.42%
Connecticut	$ 1,264	$ 1,295	2%	32.53%	35.44%

*All Values are inflation adjusted to 2021 dollars

Source: 2021 & 2011 Five Year American Community Survey Estimates

Statewide home prices rose 20.58% since 2012. This increase was led by Low Opportunity Markets as they both saw increases of over 50% adjusted for inflation. These markets also saw the fastest pace of income growth among homeowners. The median sales price for single-family properties is highest in High Opportunity typologies where incomes are also the highest. The High Opportunity & Heating markets experienced a 14.42% increase in sales prices from 2012 to 2021 and had the highest sales volume over this period with 47.60% of the state's home sales; it also contains 51.64% of the state's owner-occupied housing units. However, each typology's proportion of total home sales is nearly equal to its proportion of the state's owner-occupied housing units, which suggests that no market type is experiencing a boom in sales compared to the others.

Figure 37: Home Sales Volume and Price by Market Type

Sales Typology	Sales Volume 2012 - 2021	Percent of Total Sales 2012 - 2021	Median Sale Price 2012	Median Sale Price 2021	Percent Median Sale Price Change
High Opportunity & Heating	225,139	47.60%	$332,903.75	$380,921.09	14.42%
High Opportunity & Cooling	106,887	22.60%	$290,431.98	$319,639.26	10.06%
Low Opportunity & Heating	59,413	12.56%	$149,900.38	$239,200.24	59.57%
Low Opportunity & Cooling	65,998	13.95%	$143,654.53	$222,794.91	55.09%
Low Density	15,529	3.28%	$232,657.87	$307,308.80	32.09%
Connecticut	472,966	100%	$243,588.11	$293,708.26	20.58%

*2012 was used to ensure sales were being recorded in the 2010 census period

Source: Warren Group Sales 2012 - 2021

C. Cost Burden

By HUD standards a household is considered cost burdened if it spends more than 30% of its income on housing costs. Households are considered extremely cost burdened if they are spending more than 50% of their income on housing related costs. For this analysis, census tract level Comprehensive Housing Affordability Strategy (CHAS) data was aggregated to the market typology to determine cost burden by income level. While updated annually, the CHAS data is several years behind the American Community Survey data in part because the CHAS data is a custom tabulation of ACS data. Renter data was aggregated to rental market typologies and homeowner data was aggregated to homeowner market typologies to clarify the level of cost burden within each market.

Figure 38: Owner and Renter Cost Burden by AMI and Market Type

Owner Market

Sales Typology	0-30% AMI			31-50% AMI			51-80% AMI			81-100% AMI			100%+ AMI		
	Total Owners	Cost Burdened	Percent Burdened	Total Owners	Cost Burdened	Percent Burdened	Total Owners	Cost Burdened	Percent Burdened	Total Owners	Cost Burdened	Percent Burdened	Total Owners	Cost Burdened	Percent Burdened
High Opportunity & Heating	24,702	21,670	87.73%	31,418	22,814	72.61%	48,048	23,572	49.06%	34,515	9,708	28.13%	209,372	15,797	7.54%
High Opportunity & Cooling	13,369	11,481	85.88%	15,942	11,204	70.28%	23,165	9,420	40.66%	17,980	4,849	26.97%	101,364	7,232	7.13%
Low Opportunity & Heating	8,720	7,557	86.66%	11,645	8,698	74.69%	20,069	9,732	48.49%	13,824	3,932	28.44%	80,630	5,621	6.97%
Low Opportunity & Cooling	15,804	13,667	86.48%	19,933	14,724	73.87%	32,570	15,039	46.17%	24,088	6,325	26.26%	132,750	8,067	6.08%
Low Density	2,464	2,021	82.02%	2,520	1,585	62.90%	4,514	1,708	37.84%	3,103	688	22.17%	13,269	724	5.46%
Connecticut	65,059	56,396	86.68%	81,458	59,025	72.46%	128,366	59,471	46.33%	93,510	25,502	27.27%	537,385	37,441	6.97%

Rental Market

Rental Typology	0-30% AMI			31-50% AMI			51-80% AMI			81-100% AMI			100%+ AMI		
	Total Renters	Cost Burdened	Percent Burdened	Total Renters	Cost Burdened	Percent Burdened	Total Renters	Cost Burdened	Percent Burdened	Total Renters	Cost Burdened	Percent Burdened	Total Renters	Cost Burdened	Percent Burdened
High Opportunity & Heating	53,099	40,037	75.40%	31,602	23,325	73.81%	29,076	8,768	30.16%	15,548	1,847	11.88%	35,173	1,320	3.75%
High Opportunity & Cooling	38,838	28,298	72.86%	23,138	17,352	74.99%	22,168	7,616	34.36%	10,306	1,174	11.39%	25,774	556	2.16%
Low Opportunity & Heating	23,311	18,352	78.73%	14,810	11,310	76.37%	14,866	5,430	36.53%	7,270	648	8.91%	16,032	612	3.82%
Low Opportunity & Cooling	25,299	18,647	73.71%	15,930	12,374	77.68%	16,976	6,644	39.14%	7,934	799	10.07%	15,454	612	3.96%
Low Density	9,190	6,478	70.49%	4,325	2,643	61.11%	4,255	893	20.99%	1,974	25	1.27%	2,640	30	1.14%
Connecticut	149,737	111,812	74.67%	89,805	67,004	74.61%	87,341	29,351	33.61%	43,032	4,493	10.44%	95,073	3,130	3.29%

Source: 2015 – 2019 Comprehensive Housing Affordability Strategy Data

Statewide, just 6.97% of homeowners earning more than the area median income (AMI) were cost burdened with a larger share of households being cost burdened for each step down in income level. There is little variation between the proportion of cost burdened homeowners within each market type and the proportion of cost burdened homeowners statewide across income levels. Roughly half of all households earning between 51-80% AMI and over one-fourth of households 81-100% AMI are cost burdened, compared to just over 10% of owners above 100% AMI. This suggests that the for-sale inventory becomes increasingly unaffordable the further below the regional median income a household falls.

Across all markets, the median income appears to be a major affordability tipping point – less than 4% of renters earning more than the median income are cost burdened, with a larger share of households being cost burdened with each step down in income bracket. For renters earning up to 50% AMI, there is little variation between the proportion that are cost burdened in each market typology. Among all renters earning less than 50% AMI, 74.6% are cost burdened. This suggests a lack of affordable rental options available for households below the median income in certain markets and especially for households at 80% AMI and below. The phenomenon is driven both by a lack of available units and by higher AMI households occupying units that are otherwise priced for lower income households. This concept will be further explored in Section 6: Gap Analysis.

D. Home Mortgage Disclosure Act Lending

The Consumer Financial Protection Bureau releases mortgage application information via Home Mortgage Disclosure Act (HMDA) data at the census tract level. This analysis studies loan originations and denials from 2010-2021 by income and market type to find where homeownership is unaffordable, or unattainable, due to denials by banks and non-depository residential mortgage lenders. The following types of mortgage applications were included in the analysis and the data is aggregated by sales typology:

- Loans to be secured by a first lien;
- Loans for units that were to be the primary residence of the applicant;
- Applications for which the applicant completed the application; and
- Applications that were either originated or denied.

Figure 39: Connecticut HMDA Applications by Market Type From 2010 to 2020

Sales Typology	Total Applications	Low Income		High Income	
		Count	Percent	Count	Percent
High Opportunity & Heating	188,176	59,029	31.37%	129,147	68.63%
High Opportunity & Cooling	89,992	34,855	38.73%	55,137	61.27%
Low Opportunity & Heating	46,688	27,885	59.73%	18,803	40.27%
Low Opportunity & Cooling	67,859	39,216	57.79%	28,643	42.21%
Low Density	18,774	7,970	42.45%	10,804	57.55%
Connecticut	411,489	168,955	41.06%	242,534	58.94%

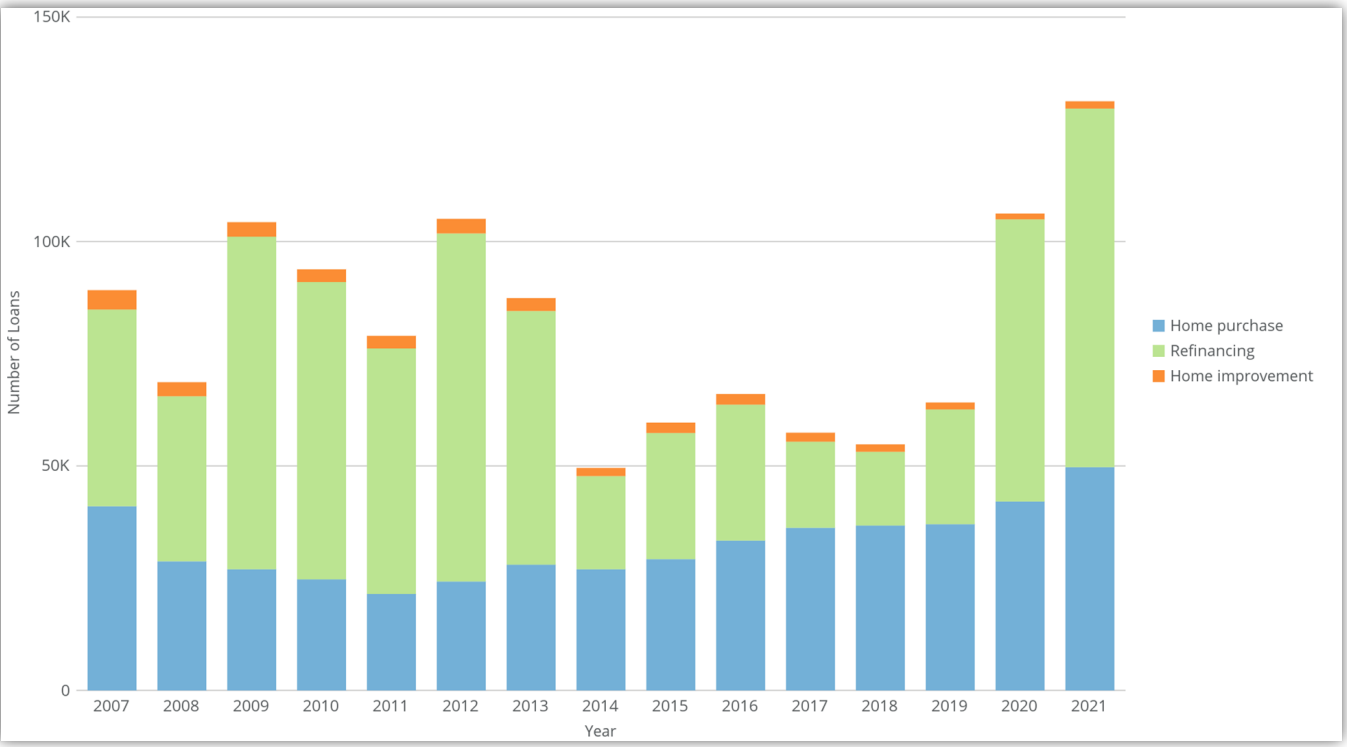
Source: 2010 to 2020 HMDA Data – Owner Occupied, 1 to 4 Unit, Secured by 1st Lien

Of the state's 411,489 applications considered in the analysis, 45.73% came from the High Opportunity & Heating market. Statewide, mortgage applications are more likely to come from high income households or those earning over 80% AMI. This trend is more pronounced in the High Opportunity typology; however in Low Opportunity markets, applications are more likely to come from households earning under 80% AMI.

Mortgage origination trends in Connecticut strongly resemble trends in home sales. Among eligible properties, home purchase originations after the Great Recession fell notably until 2011. Since that time, originations grew at a steady pace until 2020 and 2021 when the number of home purchase originations finally exceeded their 2007 levels. Connecticut had the highest number of successful originations per 1,000 residents in both 2020 and 2021 compared with the surrounding states. In 2021, Connecticut saw 15.62 home purchase originations per 1000 residents compared to 9.43, 13.99, and 15.13 for New York, Massachusetts, and Rhode Island respectively.

Originations for home refinance were especially prevalent between 2007 and 2013 and more recently in 2020 and 2021. Both periods saw especially low interest rates, making it attractive for homeowners to refinance. In 2021, Connecticut saw roughly 80,000 refinance originations, the largest number on record, likely due to historically low interest rates. As a result, roughly 84 percent of homeowners with a mortgage in Connecticut now have mortgage rates under five percent according to RedFin.[4] Home improvement originations in this stock are far less common, only averaging roughly 2,400 originations per year. Low originations levels in the home improvement sector is not unique to Connecticut. Between 2018 and 2021, 48 states saw less than four originations of home improvement loans per 1,000 residents, with Idaho and Utah seeing 4.62 and 5.01 loans per 1,000 residents respectively.[5]

Figure 40: Connecticut HMDA Originations by Loan Purpose



Source: 2010 to 2021 HMDA Data – Owner Occupied, 1 to 4 Unit, Secured by 1st Lien

4. Redfin: *85% Of Homeowners With Mortgages Have A Rate Far Below Today's Level, A Factor Prompting Many To Stay Put* - https://www.redfin.com/news/homeowners-locked-into-low-mortgage-rates/
5. FFIEC HMDA Data Browser: 2021, All Loan Purpose, Loan Originated - https://ffiec.cfpb.gov/data-browser/

Loans are denied at their highest rates in Low Opportunity markets, but only to low-income applicants defined as having incomes below the median income for the census tract. These markets have the lowest denial rates among upper income applicants defined as having income above the median income for the census tract. High Opportunity markets have denial rates lower than the state rate but slightly more than the state for high income applicants. Cooling markets have higher denial rates among low-income applicants than heating markets of the same opportunity level. Denial rates among upper income applicants were nearly equal between heating and cooling markets. Finally, the highest loan values were unsurprisingly in High Opportunity typologies. Among the High Opportunity areas, loan values are roughly 60 percent higher than in Low Opportunity ones. Connecticut as a whole has loan denial rates on par with the rest of New England and New York.

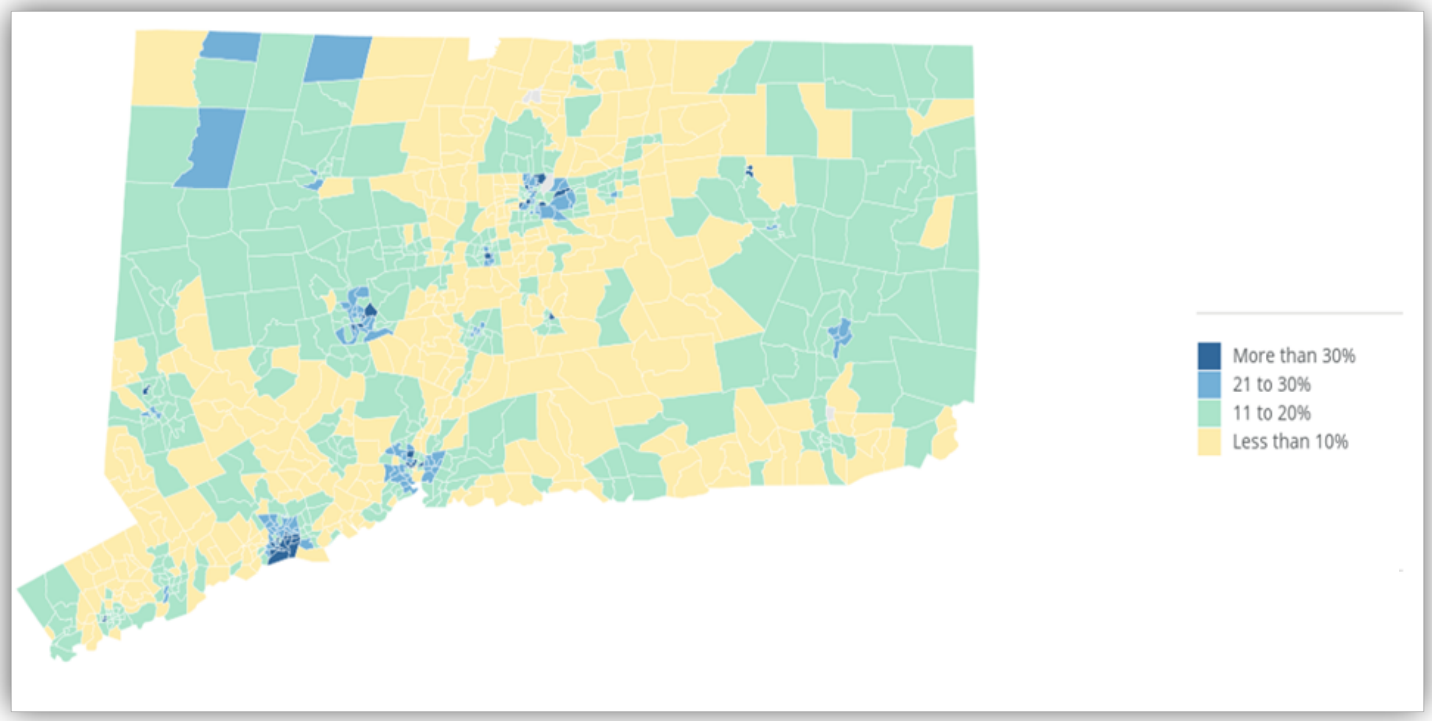
Figure 41: Connecticut HMDA Denials and Loan Amounts by Market Type

Sales Typology	Total Applications	Total Denied	Total Denial Rate	Low-Income Denial Rate	High-Income Denial Rate	Median Loan Amount
High Opportunity & Heating	188,176	18,601	9.88%	13.62%	8.18%	$ 264,000
High Opportunity & Cooling	89,992	9,903	11.00%	14.30%	8.92%	$ 230,000
Low Opportunity & Heating	46,688	8,071	17.29%	21.41%	11.18%	$ 165,000
Low Opportunity & Cooling	67,859	8,766	12.92%	16.72%	7.71%	$ 155,000
Low Density	18,774	1,568	8.35%	9.69%	7.37%	$ 209,750
Connecticut	411,489	46,909	11.40%	15.58%	8.49%	$ 205,000

Source: 2010 to 2020 HMDA Data – Home Purchase, Owner Occupied, 1 to 4 Unit, Secured by 1st Lien

In Connecticut, denial rates for home purchase applications are generally the highest in major cities and Lower Opportunity areas. Denials rates appear to be lower in suburban communities just outside of Connecticut's major cities. This tracks with higher rates of denial seen by applicants of color, the population of which resides predominately in the state's urban centers and suburbs just outside them.

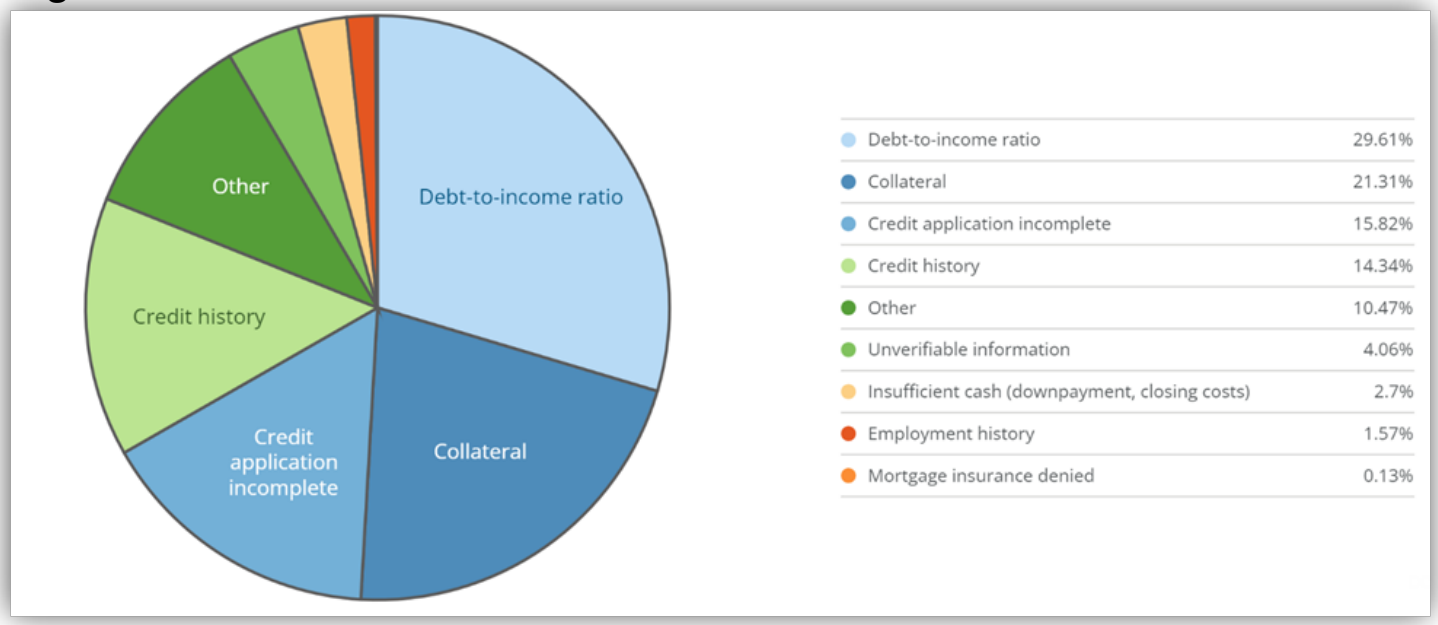
Figure 42: Connecticut HMDA Denial Rate by Census Tract – 2010 to 2021



Source: 2010 to 2021 HMDA Data – Home Purchase, Owner Occupied, 1 to 4 Unit, Secured by 1st Lien

The most common denial reasons for a home purchase mortgage application since 2010 have been the applicant's debt-to-income ratio (the ratio of the monthly debt payment to monthly income), collateral, and credit history. Denial reasons remain consistent regardless of applicant race and ethnicity, indicating that these top denial reason reasons are widespread issues that affect most communities. Debt-to-Income ratio remains the primary reason for loan denial, indicating that sizable debt remains the largest obstacle to accessing mortgage services. Collateral, which is HMDA's terminology for appraisal gaps, is the second most common reason for denial among mortgage seekers. Insufficient cash for down payment and closings costs represents only 2.49% of loan denials in the state, which may be influenced by the following two factors. First, Connecticut has many robust down payment assistance programs which enable homebuyers to come to the table with more cash than they may have saved. The second, often overlooked but compelling reason is that households who have insufficient down payment funds may never apply for a mortgage to begin with, and thus are not represented in the dataset.

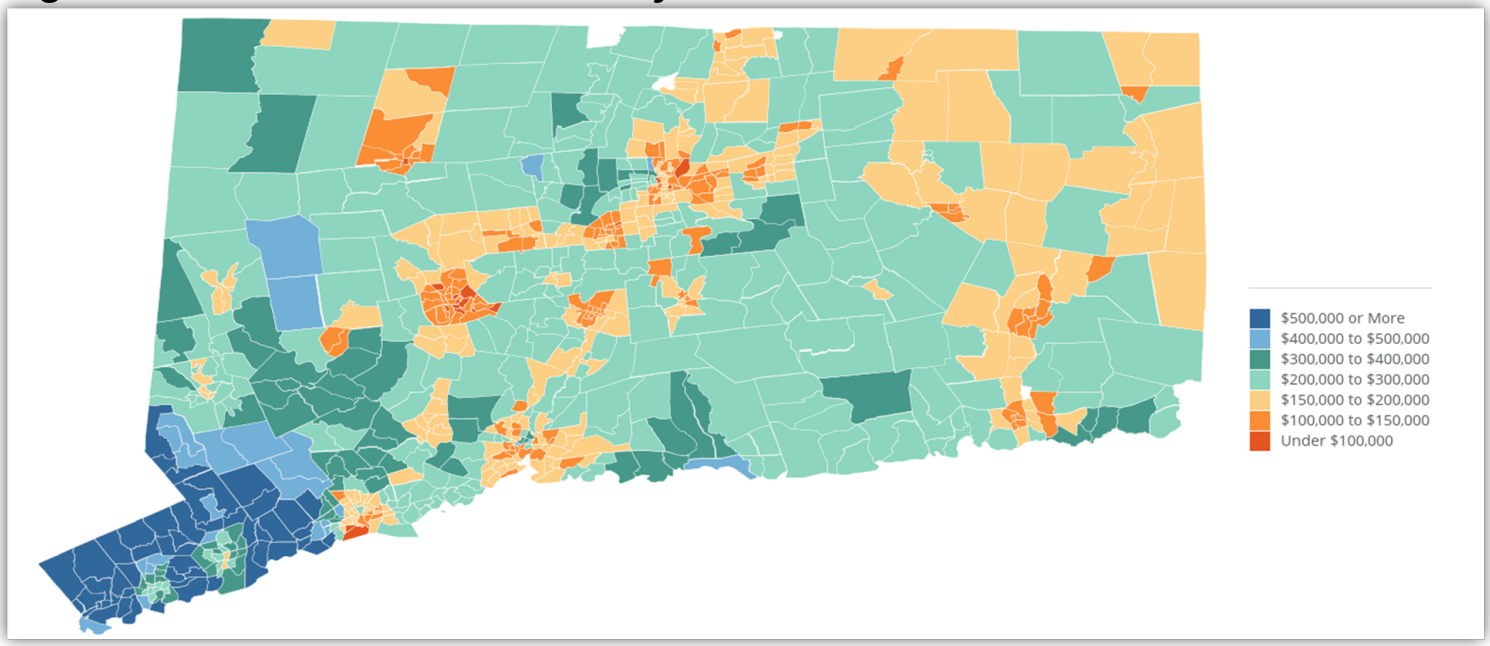
Figure 43: Connecticut HMDA Denials Reasons – 2010 to 2021



Source: 2010 to 2021 HMDA Data – Home Purchase, Owner Occupied, 1 to 4 Unit, Secured by 1st Lien

Median loan amounts for home purchase originations strongly resemble trends in home values as shown in Figure 18. Loan amounts are higher in the southwestern part of the state, consistent generally throughout the more suburban areas, and notably lower in the major cities and eastern part of the state.

Figure 44: Median Loan Amounts by Census Tract – 2010 to 2021



Source: 2010 to 2021 HMDA Data – Home Purchase, Owner Occupied, 1 to 4 Unit, Secured by 1st Lien

Section 6: Housing Gap Analysis

It is generally accepted that a household is said to be "cost burdened" when it pays more than 30% of its income on housing. Thus, anything over this 30% marker is considered unaffordable. The following Housing Gap Analysis indicates the number of additional housing units by tenure and affordability that are needed for the housing inventory to match the number of households at their respective incomes bracket based on Area Median Income (AMI) established by HUD. For the gap to be equal to zero in any given bracket, all households in a group must occupy a unit that is affordable at their income (e.g., a 30% AMI household lives in a unit affordable to a 30% AMI household). Factors that contribute to the gaps caused by a mismatch between households and units include:

1. Having more households than units in a particular bracket (e.g., 1,000 households but only 500 affordable units available); and/or
2. Having households outside of a particular income bracket residing in units meant to be affordable for that particular bracket (e.g., 1,000 households and 1,000 units for a particular bracket but 500 of the units are occupied by households outside the bracket leading to only 500 units available to the 1,000 households).

Comprehensive Housing Affordability (CHAS) data, which is a custom tabulation of ACS data for use by HUD, was used in the analysis. CHAS data provides a count of units and households by income bracket and tenure including occupancy data in a given geographic area. Due to the constraints of the dataset, renters and owners in this analysis are separated into the following income brackets:

Renters:

- 0-30% AMI
- 31-50% AMI
- 51-80% AMI
- Greater than 80% AMI

Owners:

- 0-50% AMI
- 51-80% AMI
- 81-100% AMI
- Greater than 100% AMI

To determine the gap at the county level, the number of households and housing units (both occupied and vacant) were counted within each income bracket by tenure. Units occupied by households outside of the income bracket were subtracted out of the total because these units are not available to households in the specified bracket. The difference in the number of households in a bracket and the number of units occupied by households in that bracket is referred to as the gap. The gap represents the mismatch in households and units based on both the number of units in the AMI bracket and/or households outside the AMI bracket residing in the units as described above. The gap columns found in figures 46 through 61 do not represent the number of units that need to be built. Rather they demonstrate a need for available and affordable units across all AMI brackets and all counties.

Within each income bracket, it is possible for a household to be cost burdened despite residing in a unit that is affordable within that bracket. For example, a 60% AMI household residing in a unit affordable to a household earning 75% AMI is cost burdened but both the household and the unit "match" in that they both are categorized in the 51-80% AMI bracket.

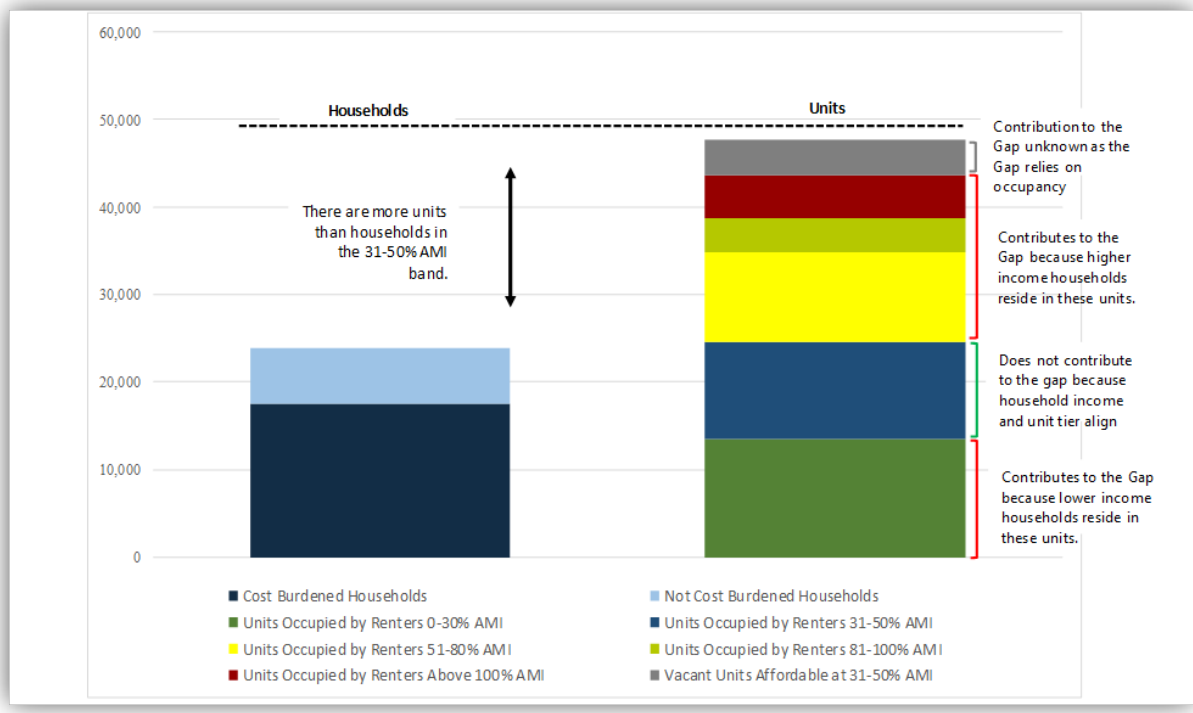
The bar graphs that follow comprise a pair of bars for each county by income bracket and tenure. The graphs illustrate several key concepts listed below and depicted in Figure 45:

1. The number of households within an income bracket (shown as the height of the blue bar at the left within each pair of bars);
2. The number of cost burdened households (in dark blue on the left) and not cost burdened households (in light blue on the left) within that bracket;
3. The number of units affordable to households within a particular income bracket/ (the cumulative height of the multicolored bar at the right);
4. The occupancy patterns by income bracket within a particular bracket (green for 0-30% AMI, blue for 31-50% AMI, etc.);
5. The number of vacant units within that income bracket and tenure (the grey segment of the multicolored bar). Vacancy data is graphed for reference but is not included in the gap calculations because the gap calculation is based on the alignment/misalignment of households and unit. Additionally, the data does not indicate whether a vacant unit is habitable.

As illustrated in Figure 45, while there are more units than households in this bracket and tenure in Hartford County (the right hand bar is taller than the blue left hand bar), many of the units are occupied by households with lower incomes (in this case, by 0-30% AMI households shown in green) or by households with incomes above the bracket (yellow, orange and red segments representing 51-80% AMI, 81-100% AMI and above 100% AMI, respectively). For the 31-50% AMI income bracket, the gap is visually the difference between the height of the blue bar at left and the blue segment at right.

Because the AMI brackets for renters and homeowners are different, the analysis will examine gaps within and between AMI brackets separately, first for renters, then for homeowners.

Figure 45: Households and Units Among 31-50% AMI Renters in Hartford County



Source: 2015 – 2019 Comprehensive Housing Affordability Strategy Data

A. Renters 0-30% AMI

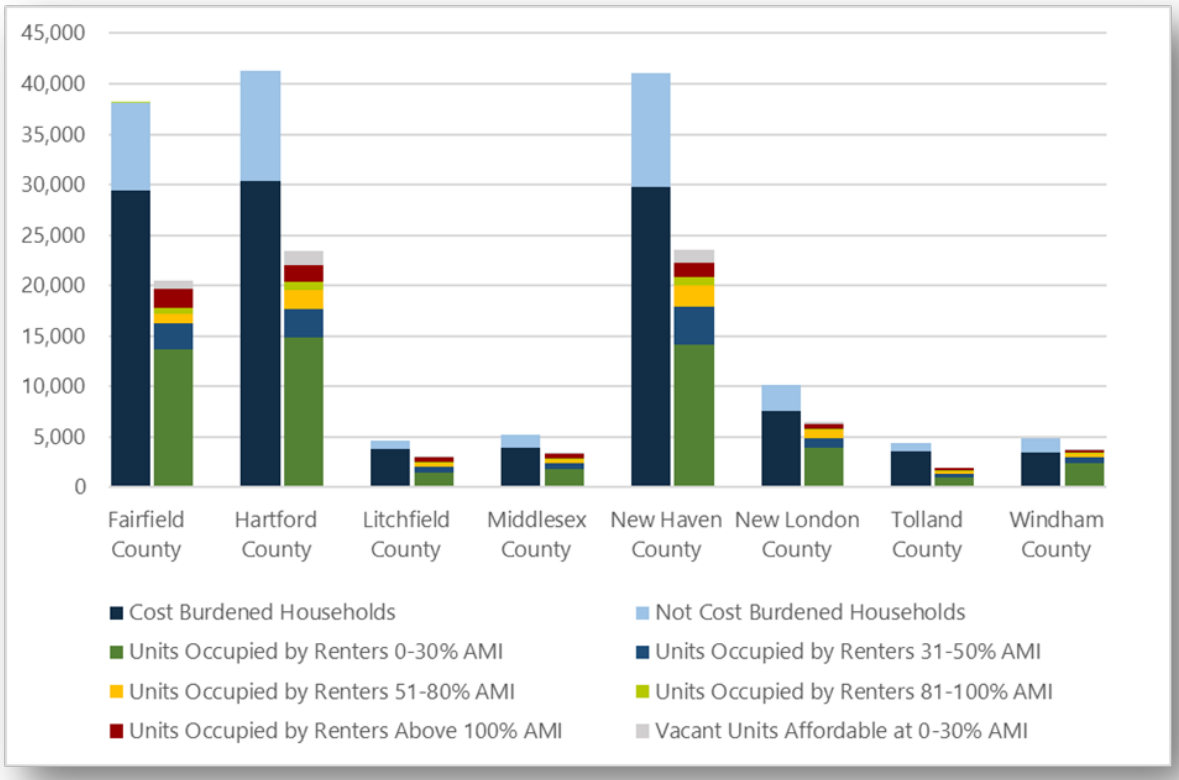
Renters between 0-30% AMI have a high gap relative to the number of households. This analysis estimates that 92,560 units statewide would need to be accessible to this income bracket to close the gap. As the most populous counties in the state, Fairfield, Hartford, and New Haven Counties have the largest gaps of around 25,000 units each. These counties have the most low-income renters by a wide margin, consequently the gap is proportionally large. In addition to a shortage of units affordable to the lowest income renter households, many units that are affordable are occupied by households with incomes above 30% AMI. This lack of available units necessitates households in this income bracket to find housing at higher prices, thus explaining why this income bracket sees the highest rates of cost burden.

Figure 46: Renter 0-30% AMI Gap

0-30% AMI Renters				
	Households	Affordable Housing Units	Units Occupied by Upper Income Households	Gap
Fairfield County	38,090	20,455	6,040	**23,675**
Hartford County	41,270	23,430	7,120	**24,960**
Litchfield County	4,595	3,040	1,510	**3,065**
Middlesex County	5,255	3,370	1,465	**3,350**
New Haven County	41,045	23,495	8,180	**25,730**
New London County	10,190	6,505	2,360	**6,045**
Tolland County	4,410	1,855	840	**3,395**
Windham County	4,870	3,800	1,270	**2,340**

Source: 2015 – 2019 Comprehensive Housing Affordability Strategy Data

Figure 47: Renter 0-30% AMI Households and Units



Source: 2015 – 2019 Comprehensive Housing Affordability Strategy Data

B. Renters 31-50%

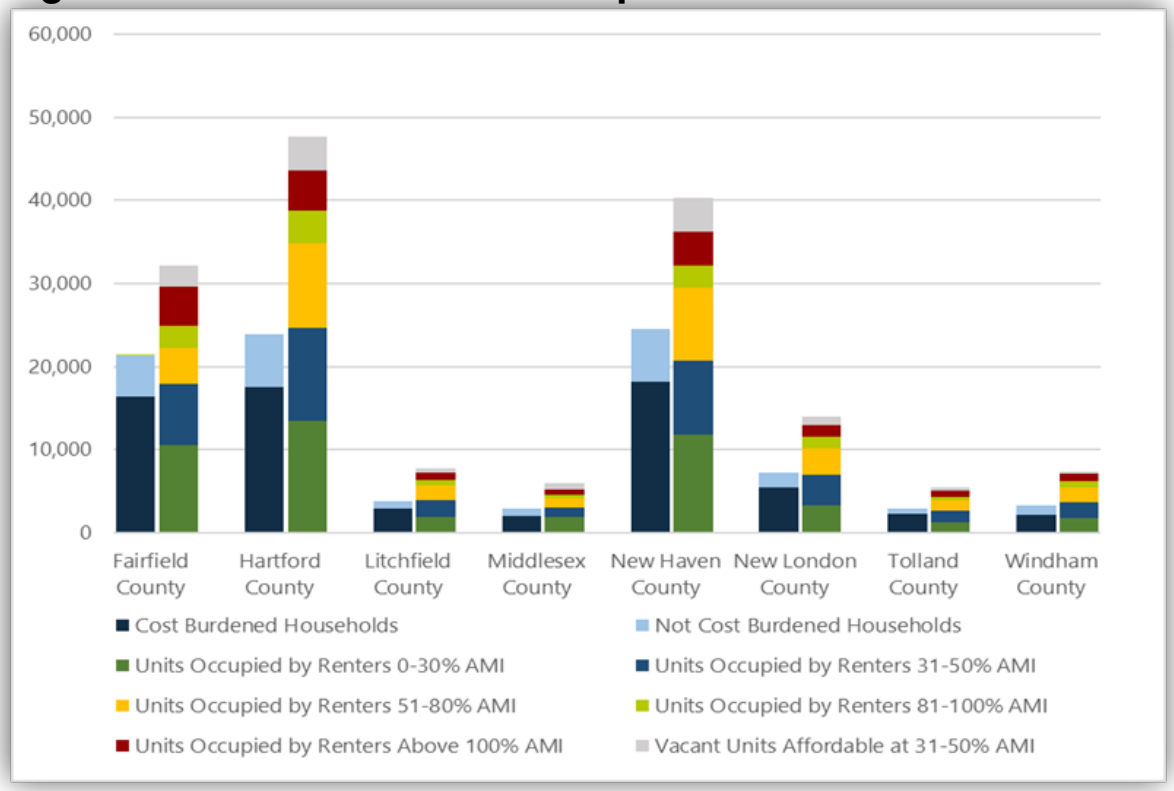
The housing gap for renters between 31-50% AMI is narrower than for renters at 0-30% AMI. This is in part due to the number of affordable housing units at this income bracket. All counties have more units affordable in this income bracket than there are households, however, a gap still exists. A significant number of the housing units affordable to this bracket are occupied by lower and higher income households. There are more housing units affordable to households earning 31-50% AMI, but the majority are occupied by residents with incomes outside of this income bracket, reducing the number of housing units available to households earning 31-50% AMI. Thus, many households in this income bracket must necessarily find housing at either lower or higher costs, exacerbating gaps for others.

Figure 48: Renter 31-50% AMI Gap

31-50% AMI Renters				
	Households	Affordable Housing Units	Units Occupied by Upper and Lower Income Households	Gap
Fairfield County	21,305	32,160	22,225	**11,370**
Hartford County	23,930	47,705	32,475	**8,700**
Litchfield County	3,850	7,760	5,270	**1,360**
Middlesex County	2,855	6,020	4,105	**940**
New Haven County	24,480	40,285	27,295	**11,490**
New London County	7,175	14,015	9,340	**2,500**
Tolland County	2,965	5,415	3,670	**1,220**
Windham County	3,230	7,310	5,205	**1,125**

Source: 2015 – 2019 Comprehensive Housing Affordability Strategy Data

Figure 49: Renter 31-50% AMI Gap



Source: 2015 – 2019 Comprehensive Housing Affordability Strategy Data

C. Renters 51-80% AMI

Renters earning 51-80% AMI have similar sized gaps to renters earning 31-50% AMI, although there is some variation across counties. The differences are more impactful in counties with lower populations. For example, in Litchfield County the gap between 31-50% and 51-80% households grew by 580 units which represents a 42.65% larger gap compared to New Haven County where the gap is smaller by 1,805 units or a difference of 15.7%.

There are fewer cost burdened households in the 51-80% AMI income bracket due to the availability of more affordable housing units. Households in this income bracket also have a wider variety of housing options because they can choose to live in units which are affordable at lower income brackets to reduce their cost burden. In fact, many households in this income bracket choose to do so as evidenced in Figures 47 and 49.

Figure 50: Renter 51-80% AMI Gap

51-80% AMI Renters				
	Households	Affordable Housing Units	Units Occupied by Upper and Lower Income Households	Gap
Fairfield County	13,670	34,750	27,375	**6,295**
Hartford County	24,900	53,000	39,575	**11,475**
Litchfield County	4,055	6,335	4,220	**1,940**
Middlesex County	3,945	8,455	5,845	**1,335**
New Haven County	26,690	57,810	40,805	**9,685**
New London County	8,185	15,070	10,930	**4,045**
Tolland County	3,090	7,085	5,625	**1,630**
Windham County	2,845	3,045	2,200	**2,000**

Source: 2015 – 2019 Comprehensive Housing Affordability Strategy Data

Figure 51: Renter 51-80% AMI Households and Units

Source: 2015 – 2019 Comprehensive Housing Affordability Strategy Data

D. Renters Greater than 80% AMI

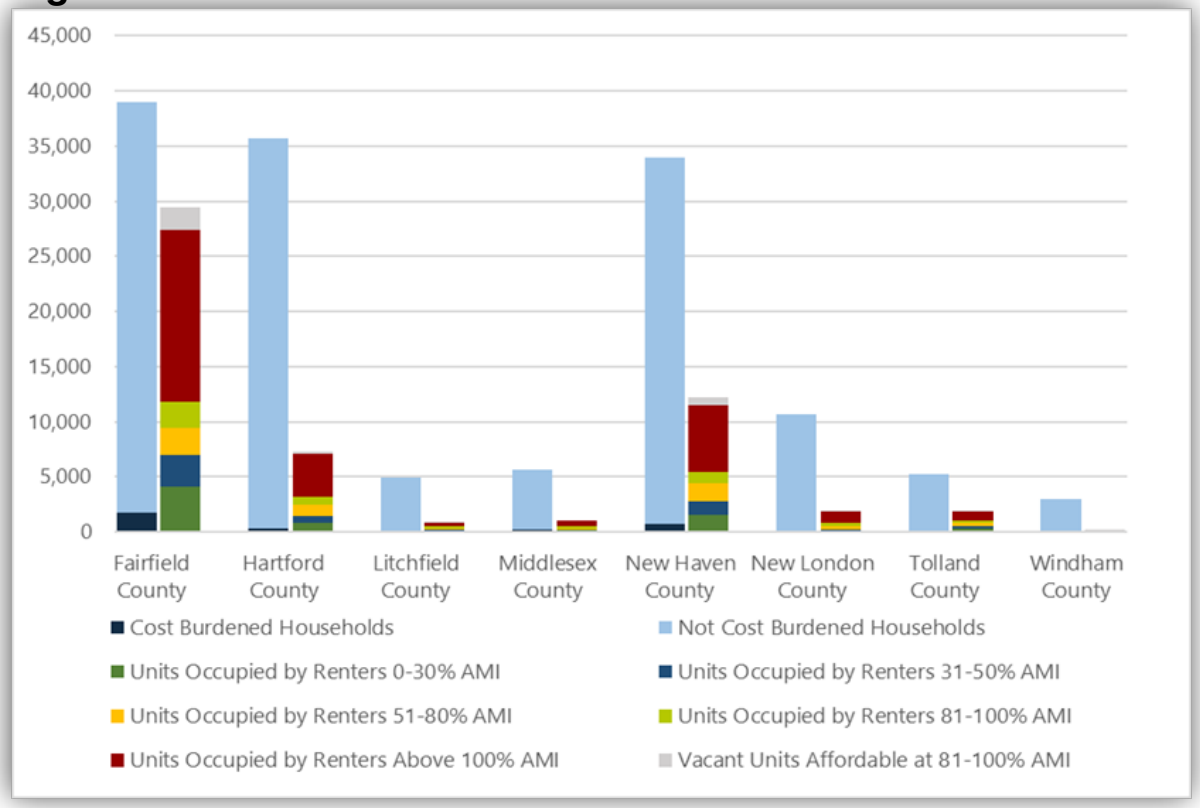
Renters earning more than 80% AMI have a large gap mostly driven by an outright shortage of units. Within this bracket there are a large number of households earning less than 80% AMI occupying housing that is unaffordable to them, thus reducing the number of units available to those earning above 80% AMI. In Hartford and New Haven Counties in particular, the gap is driven by a significant shortage of units affordable to households with incomes above 80% AMI. The lack of units for this income bracket could be driving these renters to reside in units affordable to lower income households, particularly units affordable in the 51-80% AMI range making few renters in this bracket cost burdened. Alternatively, given the rising cost of living in other areas, such as transportation and grocery expenses, many households earning more than 80% AMI may intentionally seek out lower cost housing in order to increase their financial stability.

Figure 52: Renter 81% AMI or Greater Gap

81% or Greater AMI Renters				
	Households	Affordable Housing Units	Units Occupied by Lower Income Households	Gap
Fairfield County	39,015	29,430	9,400	**18,985**
Hartford County	35,665	7,310	2,515	**30,870**
Litchfield County	4,925	890	330	**4,365**
Middlesex County	5,680	1,070	320	**4,930**
New Haven County	33,910	12,235	4,455	**26,130**
New London County	10,710	1,925	485	**9,270**
Tolland County	5,255	1,890	775	**4,140**
Windham County	3,000	159	65	**2,906**

Source: 2015 – 2019 Comprehensive Housing Affordability Strategy Data

Figure 53: Renter 81% AMI or Greater Households and Units



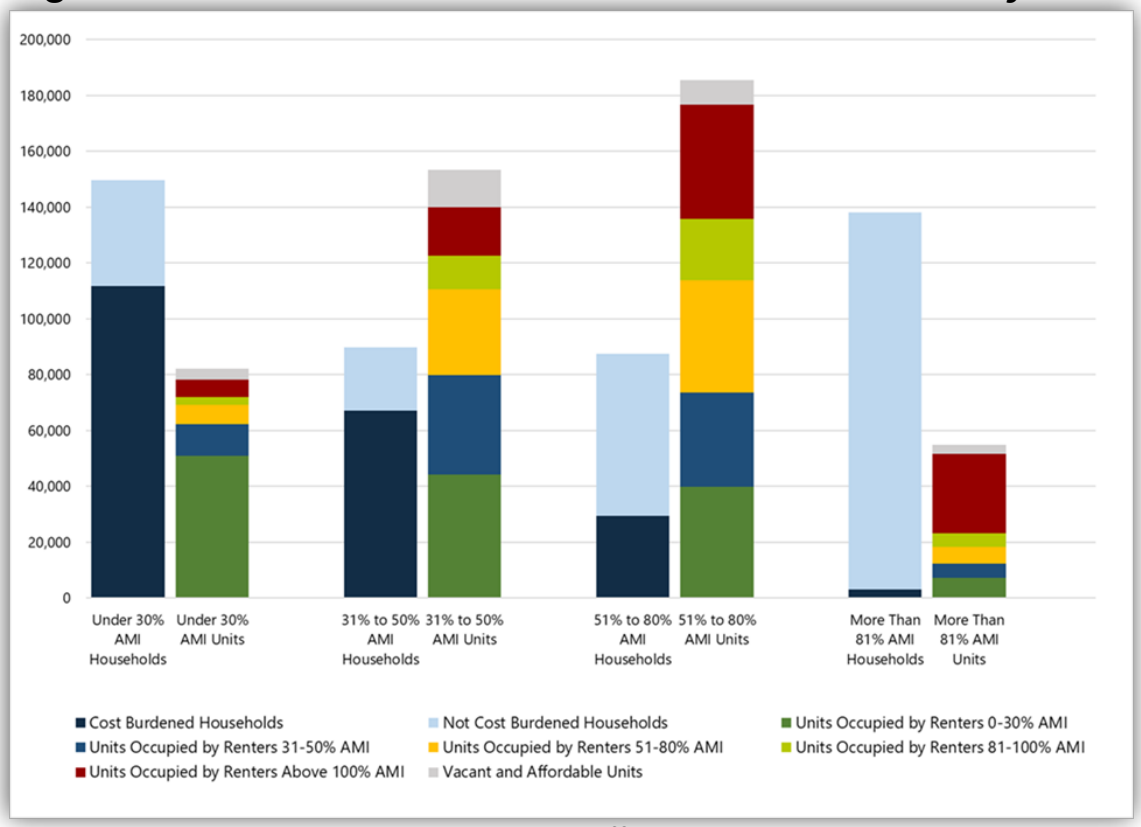
Source: 2015 – 2019 Comprehensive Housing Affordability Strategy Data

E. Renter Gap Summary

The Affordability gap is most intense for the lowest income renters. Renters at the 0-30% income bracket do not have an adequate supply of affordable units so many households reside in units affordable to higher income brackets. This leads to high rates of cost burden and greater competition for housing among households in the 31-50% income bracket. Renters in the 31-50% income bracket have more than adequate affordable units in the stock, but households from both lower and higher income brackets occupy a large proportion of these units. The majority of renters earning 31-50% AMI are cost burdened, which suggests these renters are seeking unaffordable housing at higher income brackets.

Middle- and upper-income renters are least likely to be cost burdened. Renters in the 51-80% income bracket are less likely to be cost burdened than those at lower incomes despite most of the housing stock in their income bracket being occupied by lower- and upper-income households. They are frequently avoiding cost burden by occupying lower cost housing. Renters earning greater than 80% of AMI are the least likely to be cost burdened. There are more renters in this income bracket than units so many are likely choosing rental units that are also affordable to households at the lower income brackets. Building more units affordable to renters earning between 51-100% AMI would provide more appropriate and affordable housing units to these households while opening up housing opportunities for lower income households. However, due to this, incentives for households in these income brackets to voluntarily pay more for their housing would need to be strong. Such incentives might include better on-site amenities, access to quality public transit, and proximity to jobs.

Figure 54: Connecticut Renter Households and Units by AMI



Source: 2015 – 2019 Comprehensive Housing Affordability Strategy Data

F. Owners 0-50% AMI

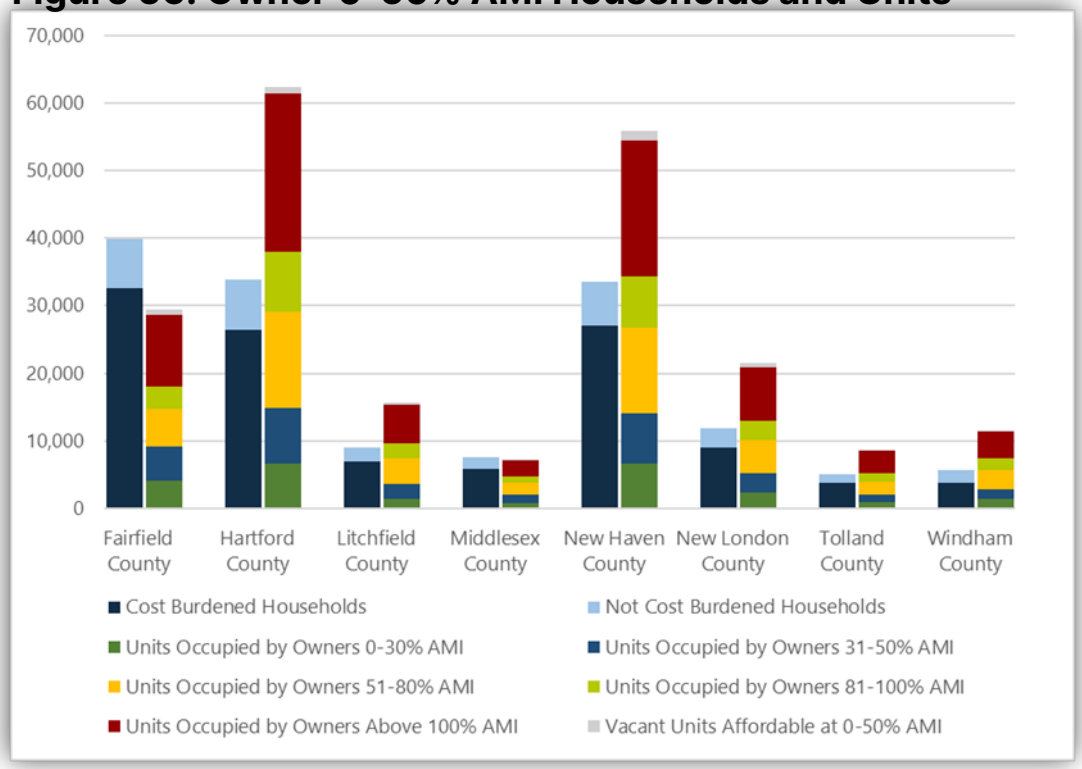
With the exceptions of Fairfield and Middlesex Counties, there are more units affordable to homeowners earning 0-50% AMI than there are households in this income bracket. The primary driver of the gap among the remaining counties is the large proportion of housing units that are occupied by households from higher income brackets. Statewide 87,690 units would need to be accessible to households earning 0-50% AMI in order to close this gap. With only a small proportion of the housing units in this income bracket matched with households earning 0-50% AMI, most homeowners in this income bracket are cost burdened. Particularly in the homeownership tenure it is unsurprising to see larger swaths of lower cost housing going to higher income owners, given that households with higher incomes are more likely to be competitive candidates for homes for sale. Furthermore, as with the rental tenure, higher income owners may elect to purchase homes at lower prices that will enable them to use their leftover income in other areas.

Figure 55: Owner 0-50% AMI Gap

0-50% AMI Owners				
	Households	Affordable Housing Units	Units Occupied by Upper Income Households	Gap
Fairfield County	39,915	29,505	19,455	**29,865**
Hartford County	33,860	62,400	46,485	**17,945**
Litchfield County	8,955	15,745	11,785	**4,995**
Middlesex County	7,650	7,160	4,975	**5,465**
New Haven County	33,480	55,845	40,230	**17,865**
New London County	11,900	21,475	15,670	**6,095**
Tolland County	5,030	8,770	6,565	**2,825**
Windham County	5,650	11,615	8,600	**2,635**

Source: 2015 – 2019 Comprehensive Housing Affordability Strategy Data

Figure 56: Owner 0-50% AMI Households and Units



Source: 2015 – 2019 Comprehensive Housing Affordability Strategy Data

G. Owners 51-80% AMI

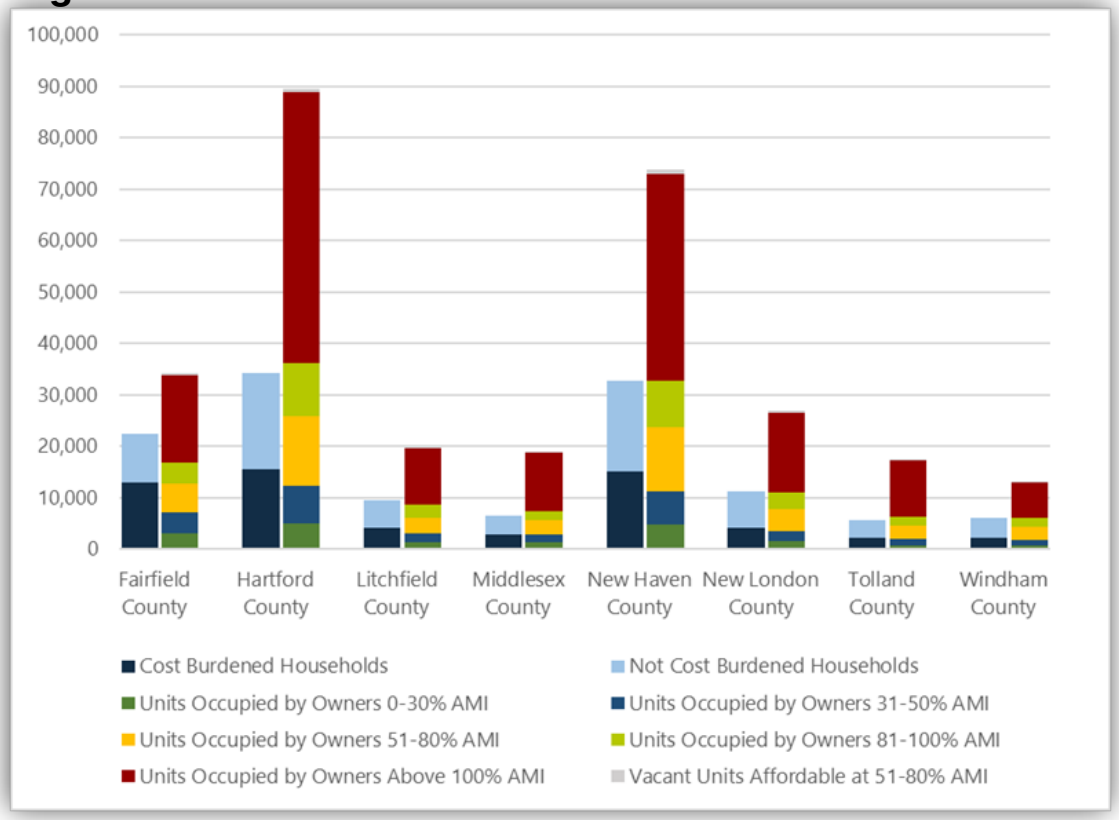
There are sufficient units affordable to homeowners earning 51-80% AMI to house every household in this income bracket. However, over three-quarters of all units in this income bracket are occupied by a household from a lower or higher income bracket, which is the primary source for this gap across the state. About half of homeowners in this income bracket are cost burdened due to the large share of units that are occupied by households earning more than 80% AMI. The loss of affordable housing for this income bracket will also lead to some households seeking more affordable housing at the expense of those in a lower income bracket.

Figure 57: Owner 51-80% AMI Gap

51-80% AMI Owners				
	Households	Affordable Housing Units	Units Occupied by Upper and Lower Income Households	Gap
Fairfield County	22,450	34,365	28,225	**16,310**
Hartford County	34,270	89,560	75,100	**19,810**
Litchfield County	9,475	19,850	16,575	**6,200**
Middlesex County	6,575	19,095	16,115	**3,595**
New Haven County	32,675	73,725	60,540	**19,490**
New London County	11,235	27,010	22,320	**6,545**
Tolland County	5,690	17,510	14,725	**2,905**
Windham County	6,020	13,115	10,635	**3,540**

Source: 2015 – 2019 Comprehensive Housing Affordability Strategy Data

Figure 58: Owner 51-80% AMI Households and Units



Source: 2015 – 2019 Comprehensive Housing Affordability Strategy Data

H. Owners 81-100% AMI

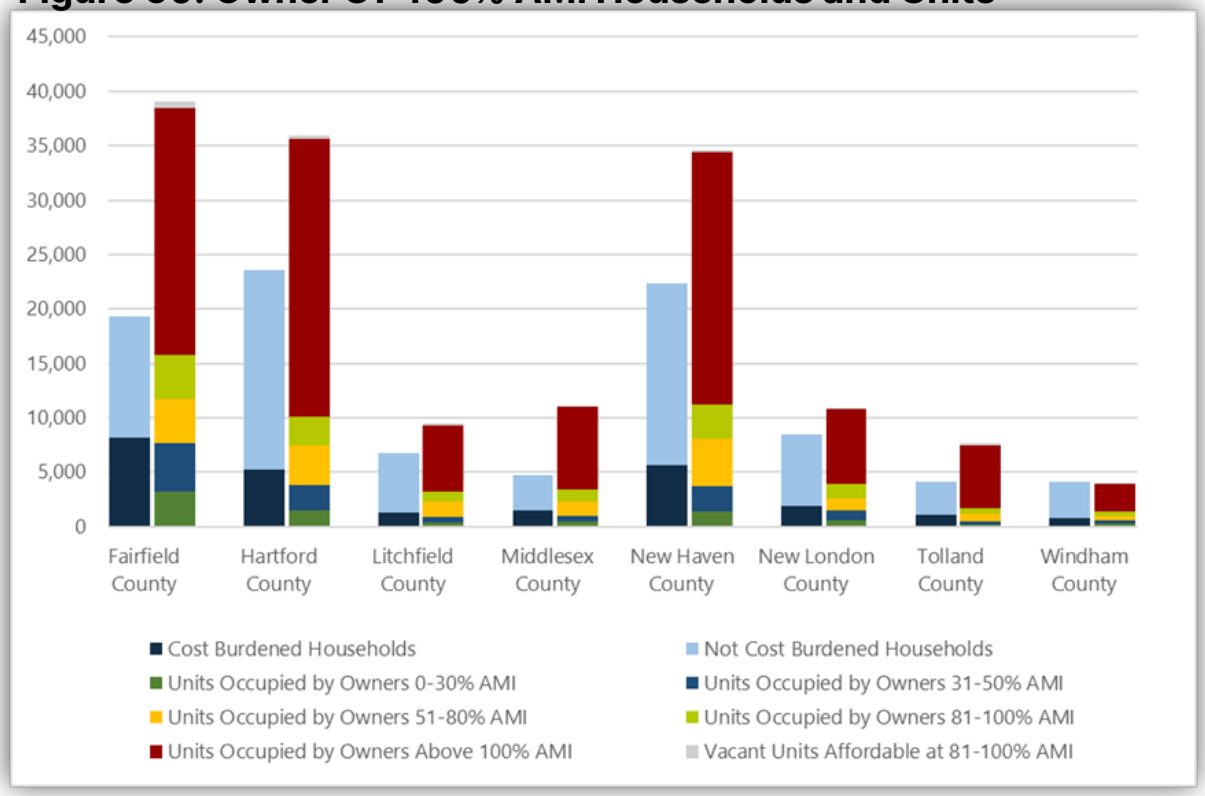
There are more units affordable at the 81-100% income bracket than there are households; however, the majority are occupied by households outside of this income bracket. The gap is of a similar size to the 51-80% bracket. The majority of homeowner units in this income bracket are occupied by households earning more than 100% AMI. Only 37.88% of all households across the state in this income bracket are cost burdened despite only a small proportion of these units being occupied by homeowners earning 81-100% AMI, which indicates that many of these households are seeking housing that is affordable to lower income brackets.

Figure 59: Owner 81-100% AMI Gap

81-100% AMI Owners				
	Households	Affordable Housing Units	Units Occupied by Upper and Lower Income Households	Gap
Fairfield County	19,270	39,085	34,335	**14,520**
Hartford County	23,590	35,925	32,985	**20,650**
Litchfield County	6,750	9,465	8,385	**5,670**
Middlesex County	4,740	11,065	9,875	**3,550**
New Haven County	22,395	34,560	31,235	**19,070**
New London County	8,450	10,875	9,510	**7,085**
Tolland County	4,100	7,705	7,025	**3,420**
Windham County	4,135	3,920	3,525	**3,740**

Source: 2015 – 2019 Comprehensive Housing Affordability Strategy Data

Figure 60: Owner 81-100% AMI Households and Units



Source: 2015 – 2019 Comprehensive Housing Affordability Strategy Data

I. Owners 101% or Greater AMI

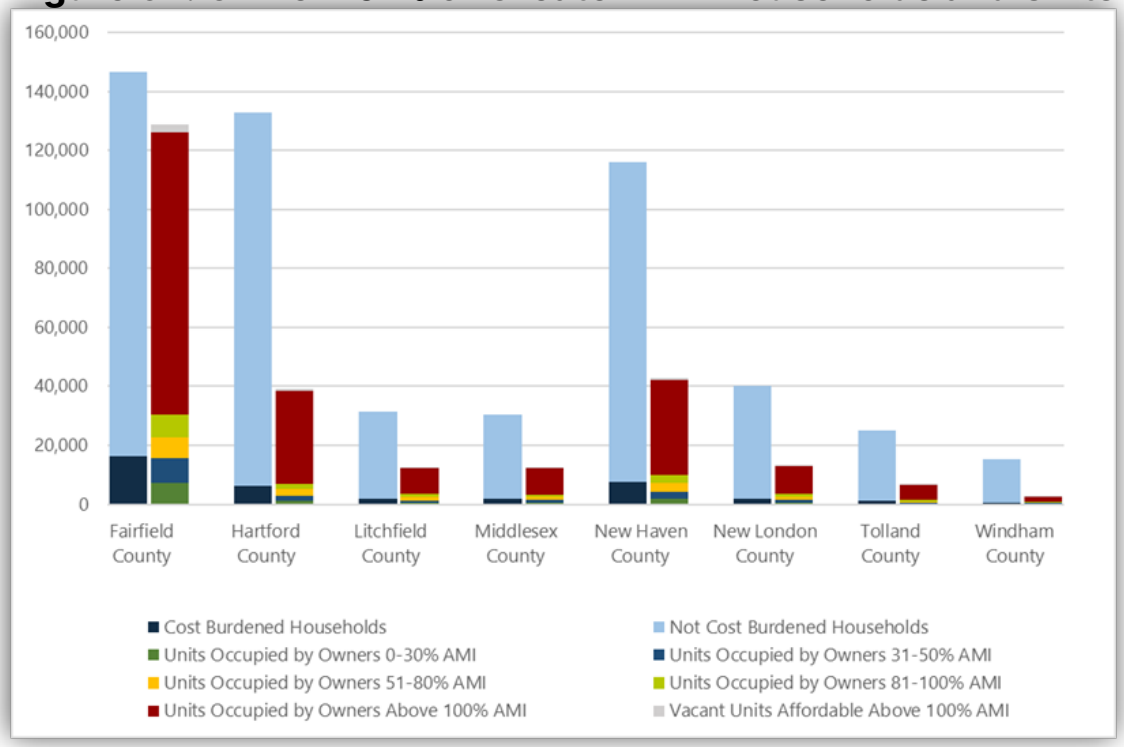
There are more households earning greater than 100% AMI than owner units that are appropriate to this income bracket. This gap in appropriate units leads these households to occupy units affordable to lower income households. The mismatch varies by county with Fairfield County having the smallest mismatch and Hartford County the largest. Despite the misalignment between housing units and households, homeowners in this income bracket are the least likely to be cost burdened due to their higher incomes. As with other brackets, households at this income are likely seeking more affordable housing rather than maxing out their housing costs with more expensive mortgages on higher priced properties. Additionally, homeowners in this income bracket that occupy homes at lower price points may have purchased their home when they themselves were earning less. Homeowners in this scenario are enjoying the advantage of having purchased a home that has become more affordable over time as household income has grown, reducing overall housing cost burden in this bracket. This is the only homeowner group where the majority of housing units are matched with households in the same income bracket.

Figure 61: Owner 101% or Greater AMI Gap

101% or Greater AMI Owners				
	Households	Affordable Housing Units	Units Occupied by Lower Income Households	Gap
Fairfield County	146,475	128,875	30,400	**48,000**
Hartford County	132,920	39,035	7,030	**100,915**
Litchfield County	31,530	12,610	3,530	**22,450**
Middlesex County	30,275	12,635	3,195	**20,835**
New Haven County	115,900	42,745	9,925	**83,080**
New London County	39,985	13,130	3,490	**30,345**
Tolland County	25,140	6,450	1,430	**20,120**
Windham County	15,200	2,595	840	**13,445**

Source: 2015 – 2019 Comprehensive Housing Affordability Strategy Data

Figure 62: Owner 101% or Greater AMI Households and Units



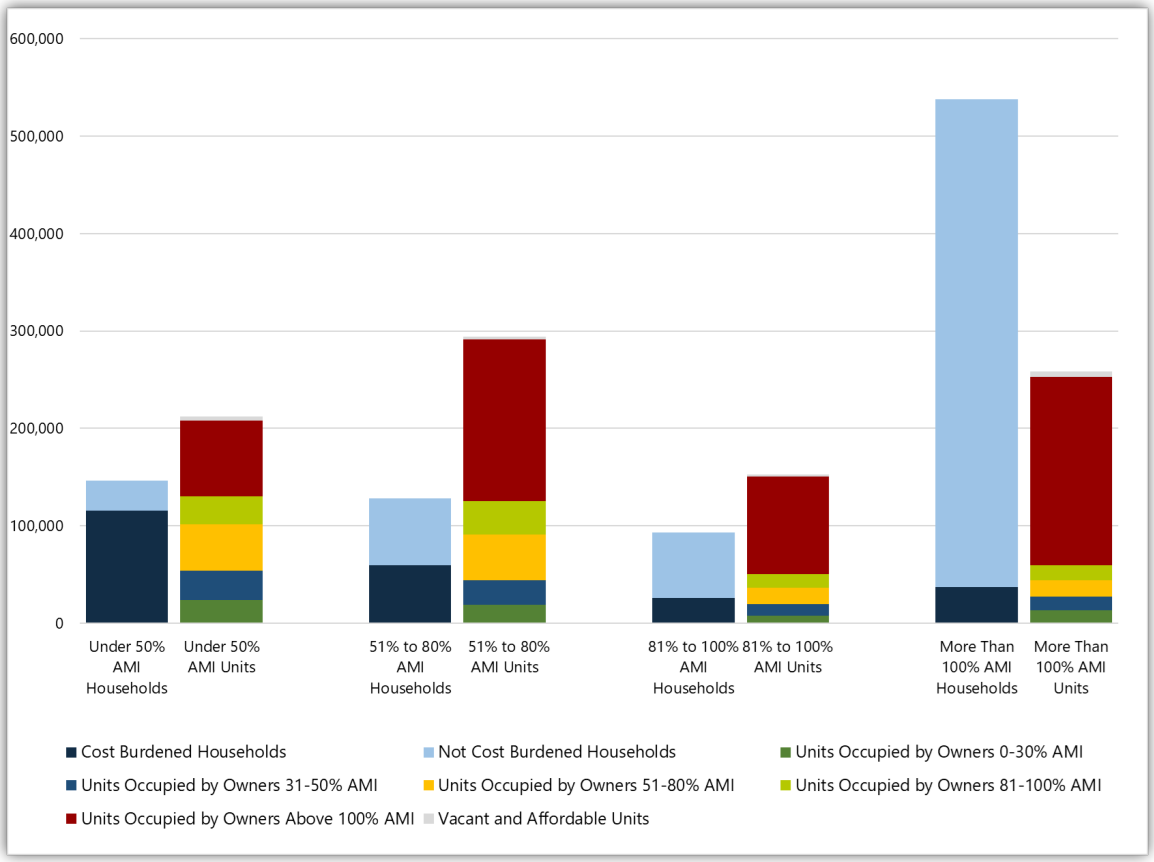
Source: 2015 – 2019 Comprehensive Housing Affordability Strategy Data

J. Owner Gap Summary

There are more units affordable at 0-50% AMI than there are homeowners within this income bracket, except in Fairfield and Middlesex Counties. The majority of homeowners in this income bracket are cost burdened likely due to the large proportion of stock occupied by homeowners at higher incomes. Homeowners earning 51-80% AMI are less likely to be cost burdened, but also face steep competition for affordable housing from residents in higher income brackets – leading them to seek more affordable housing in the 0-50% income bracket.

There are more units than households in the 81-100% AMI bracket, however, a large share of this stock is occupied by households earning more than 100% AMI. There are less units affordable in the 100% AMI or greater bracket than households. The largest mismatches are found in Hartford and New Haven Counties. Building more housing affordable to households earning 81-120% AMI, in addition to increasing options for lower income homebuyers, would likely provide more appropriate and affordable housing units to these households while opening up housing opportunities for lower income households as 81-120% AMI households move out of units affordable to 0-80% AMI households.

Figure 63: Connecticut Owner Households and Units by AMI

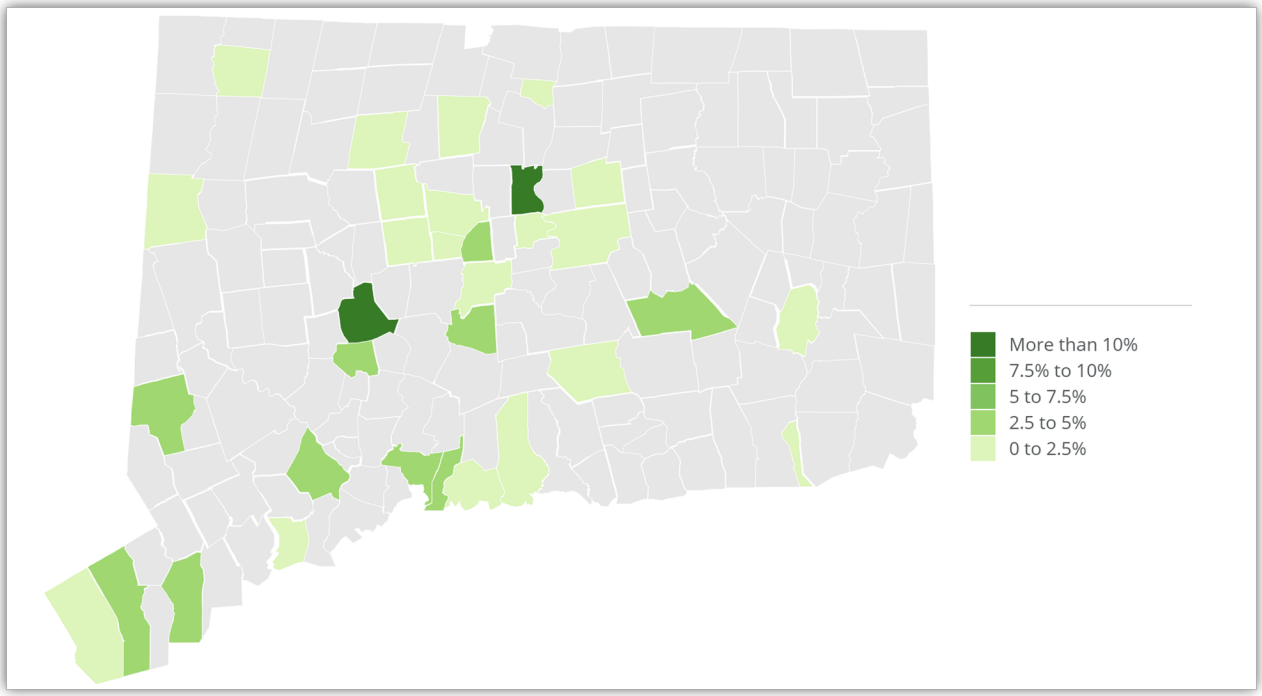


Source: 2015 – 2019 Comprehensive Housing Affordability Strategy Data

Section 7: Preservation of Existing Units

The National Housing Preservation Database (NHPD) catalogs all federally assisted rental housing developments in the United States which includes, but is not limited to, such programs as the Low-Income Housing Tax Credit and HUD Project Based Vouchers. Based on the most recent data available from 2022[6], Connecticut is expected to see expired affordability on just over 5,000 units of subsidized housing over the next five years and over 10,000 in the next decade, indicating a strong need for preservation and continued investment. Unsurprisingly, a large portion affordability expirations are located in Connecticut's urban centers where population, as well as need, is the greatest. Of the units with the potential for expiration over the next five years, 49% are located in Hartford, Waterbury, New Haven, Stamford, and Bridgeport.

Figure 64: Expiring Units over the Next 10 Years by Town



Source: National Housing Preservation Database

6. National Housing Preservation Database - 2022 Preservation Profile: Connecticut - https://preservationdatabase.org/wp-content/uploads/2022/10/PD-Profile_2022_CT.pdf

Of the subsidized units expected to expire in the next five years, the vast majority are those utilizing the Section 8 (Housing Choice Voucher) and LIHTC units. Roughly 1,000 LIHTC funded units will reach the end of their affordability periods in the next five years. According to the NHPD, about a third of all potentially expiring units are restricted to extremely low income households. These are units which are affordable to those households at the poverty line or who earn less than 30% of the area median income. To put this in perspective, an extremely low income Hartford household of four would be making a maximum of $33,800 per year.[7] These units are especially critical to prioritize for preservation considering the overall gap in units affordable to extremely low income households, particularly in the unsubsidized housing market. As demonstrated in the gap analysis, there is an outright shortage of units available to extremely low income households (0-30% AMI). Expiration of units currently restricted to this income bracket would further exacerbate this gap. Furthermore, given that many households outside of this income bracket occupy non-deed restricted properties affordable at extremely low incomes, preservations of deed restricted units become ever more important.

Of course, these expirations are not set in stone. Again, according to the NHPD, about a fourth of the subsidized developments are owned and operated by non-profit organizations whose priority is continued affordability. Given their mission driven work, it is likely that units owned by these organizations will be re-invested in and continue to remain affordable. Of the remaining developments, continued affordability is a strong likelihood given that the process of owning and operating affordable housing is a specialized skill. For developers with affordable portfolios, their organization's structure and staffing is built around the processes required to successfully own and maintain properties that utilize federal funding. Converting their properties to market rate as soon as affordability restrictions expire is simply not in their business models. Still, active partnership and relationship building between developments, municipalities, and state housing agencies will be necessary to preserve both the affordability and quality of these expiring units.

7. U.S. Department of Housing and Urban Development - FY 2022 Income Limits: Hartford-West Hartford-East Hartford, CT HUD Metro FMR Area - https://www.huduser.gov/portal/datasets/il/il2022/2022summary.odn?states=9.0&data=2022&inputname=METRO25540M25540*0900337070%2BHartford+town&stname=Connecticut&statefp=09&year=2022&selection_type=county

Opportunity Index

The opportunity index was determined using the State of Connecticut's Opportunity Map. For the purposes of this Needs Assessment, tract designated as moderate, high, and very high were assigned a "High" opportunity designation while low and very low tracts we assigned a "Low" designation. As the Connecticut Opportunity map was created during the 2010 census period, tracts scores were cross walked to the 2020 census period. For example, 2010 tract number 5141.02 was designated moderate opportunity by the State of Connecticut and was later divided into tracts 5141.04 and 5141.03 in 2020. Therefore, in this methodology, both of the new 2020 tracts were also given a moderate designation.

Market Activity Index

The market activity was calculated using data from the American Community Survey and the Warren Group to gain an understanding of the market conditions.

1. *Sales Market Activity*

Data and Sources

Household Growth: Percent change in Households from 2010 to 2020 at the town level.

- Census Bureau, 2006 - 2010 and 2016 – 2020 American Community Survey (S1101)

Change in Sales Price: Percent change in real sales price from 2010 to 2021 at the town level

- The Warren Group home sales

Sales to Household Ratio: The ratio of tract level sales in 2020 to 2019 households. These years were chosen to account for changes in census tract level boundaries. This estimate was then cross walked to the 2020 tract boundaries.

- The Warren Group home sales and 2015 – 2019 American Community Survey Estimates (S1101)

Homeownership Rates: The percentage change in the town level homeownership rate from 2010 to 2020.

- Census Bureau, 2006 - 2010 and 2016 – 2020 American Community Survey Estimates (S2502)

Occupancy Rate

- Census Bureau, 2016 – 2020 American Community Survey (B25002)

A sales market score is then determined by weighting the above equally and averaging the Z-score given by the STANDARDIZE function.

When the above data is used to determine a sales market score, there are discrepancies between the mathematical model and what is observed by professionals on the ground, likely because a small number of home sales in an area with few units can cause a large relative change making that census tract appear as though the market is more robust than it is. To account for these discrepancies, another variable was introduced: population density.

- **Population density**, in persons per square mile, was determined using ArcGIS. Population data was joined with a census tract shapefile and a calculation was performed inside of ArcGIS to determine the population density. The values were exported to Excel and rounded to integer values. The population densities are included on the Density tab and brought into the Market Health tab as well.

- To determine ***a final Sales Market Score***, an IF statement was used in Excel: If the population density of a tract is less than 150 people per square mile, then set the score to 0. If not, then standardize the intermediate sales market score from above. The final Sales Market Score is combined with the Opportunity Index Scores to determine the final sales market type for each census tract.
  - ***Based on whether a census tract's final score was positive or negative, it was classified as a Heating Market or Cooling Market tract, respectively.***

2. Rental Market Activity

The Rental Market Activity score uses data available through the Census Bureau and CoStar. The score consists of four data points: population growth between 2013-2017, percent change in median gross rent from 2013-2018, capitalization rate (or percentage of renters where the cap rate is unavailable), and vacancy.

Data and Sources

Household Growth: Percent change in Households from 2010 to 2020 at the town level.
- Census Bureau, 2006 - 2010 and 2016 – 2020 American Community Survey (S1101)

Change in Rent: Percent change in tract level median gross rent from 2010 to 2020.
- Census Bureau, 2010 – 2020 5 Year American Community Survey Estimates (B25063). 2010 estimates were cross walked to the 2020 boundaries.

Percentage Change in the town level Rental Rate
- Census Bureau, 2016 – 2020 American Community Survey (B25003)

Occupancy Rate
- Census Bureau, 2016 – 2020 American Community Survey (B25002)

Multifamily Sales Volume: Number of Sales of properties with 5 or more units since 2010.
- The Warren Group home sales

Methodology

The following variables were used in the calculations:

- Household data was pulled at the town level from the census bureau (2006-2010 and 2016-2022 estimates). The ***percent change in households*** from 2010-2020 was calculated. The percent change in households was standardized using the STANDARDIZE function in Excel.

- The percent change in median gross rent was determined by pulling census data for 2006-2010 and 2016-2020. The final value was standardized using the STANDARDIZE function in Excel.

- The occupancy rate was pulled from the census and standardized using the STANDARDIZE function in Excel.

A sales market score is then determined by weighting the above equally and averaging the Z-score given by the STANDARDIZE function.

Census tracts with fewer than 150 people per square mile were classified in the same manner as within the sales market:

- **Population density** in persons per square mile was determined using ArcGIS. Population data was joined with a census tract shapefile and a calculation was performed inside of ArcGIS to determine the population density. The values were exported to Excel and rounded to integer values. The population densities are included on the Density tab and brought into the Market Health tab as well.

- To determine **a final Rental Market Score**, an IF statement was used in Excel: If the population density of a tract is less than 150 people per square mile, then set the score to 0. If not, then standardize the intermediate sales market score from above. The final Sales Market Score is what will be combined with the Opportunity Index Scores to determine the final sales market type for each census tract.
  - If a census tract's final score was positive or negative then it is classified as a Heating Market or Cooling Market tract, respectively.