



The 2020 State of Housing in Harris County and Houston

Photo by Josh Olalde on Unsplash



RICE | KINDER
INSTITUTE FOR URBAN RESEARCH

Building Better Cities
Building Better Lives

Funded in part by



Research on housing is a core priority area for the Kinder Institute. “The 2020 State of Housing in Harris County and Houston” was made possible, in part, by lead funding from Wells Fargo.

June 2020

Rice University Kinder Institute for Urban Research MS 208, 6100 Main St. Houston, Texas 77005 Telephone: 713-348-4132 kinder@rice.edu

For more information, contact kinder@rice.edu.

Copyright ©2020 by Rice University Kinder Institute for Urban Research. All rights reserved.

Sales price data included in this report is © Copyright 2020 Houston Realtors Information Service, Inc. This report includes information provided by the Houston Association of REALTORS®.

Contributors: Kyle Shelton, John Park, Carlos Villegas, Luis Guajardo, Chris Servidio, Zhiyan Zhang.

Suggested Citation: Shelton, Kyle, John Park, Carlos Villegas, Luis Guajardo, Chris Servidio, and Zhiyan Zhang, “The 2020 State of Housing in Harris County and Houston,” Report. Kinder Institute for Urban Research, Rice University. Houston, TX: Kinder Institute for Urban Research, 2020.

DOI: doi.org/10.25611/zm83-6070

Table of Contents

2	Executive Summary
6	Introduction
10	Section 1. Economic Trends
15	Section 2. Population Trends and the Demand for Housing
22	Section 3. Housing Supply
26	Section 4. Affordability and Access to Housing
37	Section 5. Cross-cutting Connections to Housing
42	Conclusion
43	Appendix A. Affordability Gap Calculations
44	Appendix B. Harris County and City of Houston Indicators

Executive Summary

The Kinder Institute's inaugural State of Housing in Harris County and Houston report provides a consistent and accessible baseline of information about housing-related issues to all Houstonians. This report will be updated annually to track shifts in how the housing system in our region is changing. The Kinder Institute will provide an updated report annually and make housing indicators available for all stakeholders to access. This first report establishes a baseline by comparing how dozens of key housing indicators have shifted between 2010 and 2018. Subsequent annual reports will add the latest year of data to the analysis and track trends over time.

This report also appears at an unprecedented time, one that is likely to both mirror and depart from the impacts of the 2008 economic crash. The COVID-19 pandemic and plummeting oil prices already have taken a devastating toll on Harris County and the city of Houston. The public health crisis is compounded by major economic struggles for individuals and society. In the housing sector, the dual crises have slowed home sales, disrupted the rental market and halted new development.¹ For residents, the loss of income has made rent and mortgages harder to pay and contributed to growing housing insecurity.² Despite these immediate impacts, the sustained, long-term shifts in individuals' lives and the area's housing system will not be clear for many years. This inaugural 2020 housing baseline, coupled with future annual reports, will provide a critical comparison from which to quantify and track the impacts of each of these major events. What is clear amidst the crises is that both the pandemic and the unstable economy have made the most-vulnerable members of our region even more vulnerable. Where possible, this report reflects on current data points that capture this instability.

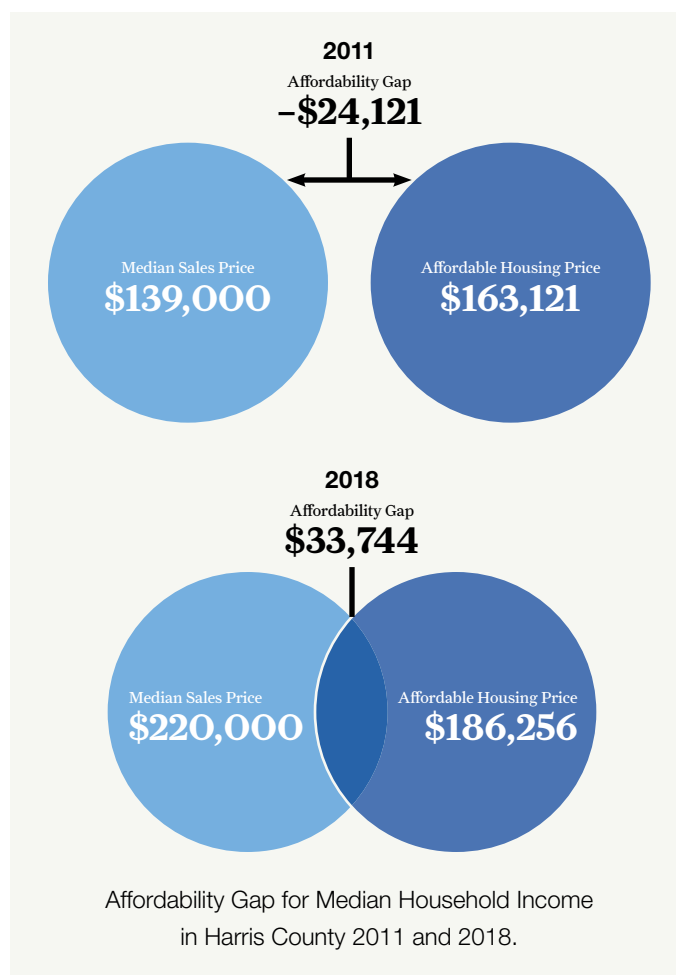
Harris County and Houston have a reputation for housing affordability, but many of the findings of this report show

that this affordability is disappearing. Current homeowners are somewhat cushioned from this shift as the values of homes have risen throughout the county, increasing the value of many households' biggest asset. The loss of affordability is falling heaviest on renters. Middle-income renters, those traditionally expected to enter into homeownership, are finding themselves without the financial resources to buy even a median-priced home in Houston or Harris County, thus forcing them to remain as renters. Low-income renters face quickly increasing rents across the county and are squeezed into the few areas where affordable rentals still exist. For low-income renters, homeownership is a near-impossibility without significant public subsidy.

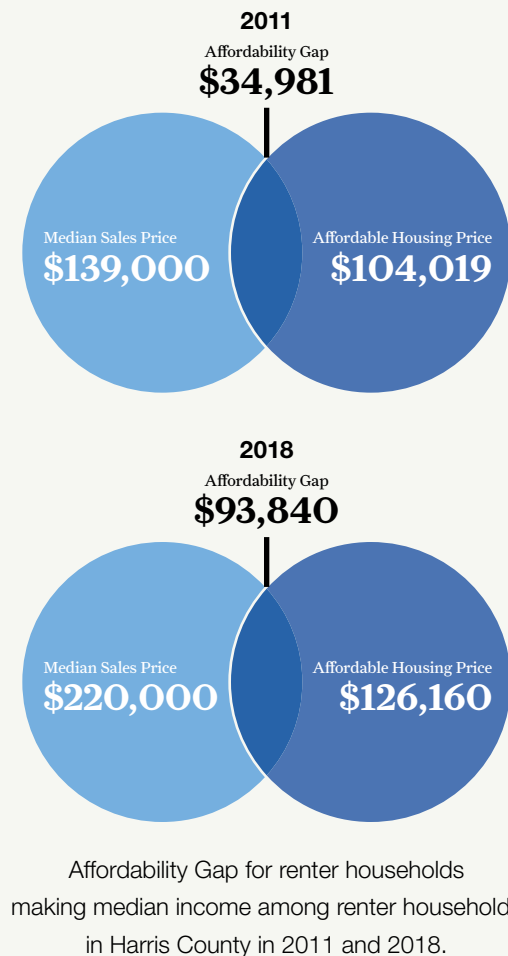
Throughout this report, when Harris County is listed as the geography, it includes the city of Houston, unless otherwise noted. This choice was made because Houston is a significant part of the county and to understand the scope of the housing challenge both jurisdictions face we have to understand how the challenges are intertwined. Information about the city of Houston alone is shared throughout because of the importance of the city to the overall housing sector.

Key Findings

- **There are more renters than homeowners in the city of Houston and renters are nearing a majority in all of Harris County.** In the city of Houston, renter households already comprise 57% of the population, up from 53% in 2010. In all of Harris County, the proportion of renters has grown to 45% in 2018, up from 42% in 2010.
- **Nearly half the renter households in Harris County are spending too much on housing.** In 2018, about 335,000 renter households (47% of the total renter households) in Harris County paid more than 30% of their income toward housing, classifying them as cost-burdened. Of that number, about 164,000 renter households (23% of all renter households in Harris County) paid rent that was greater than 50% of their income, classifying them as severely cost-burdened. The number of cost-burdened renters in Harris County grew between 2010 and 2018 by 24%.
- **Far fewer homeowners face affordability issues and the number has declined since 2010.** In 2018, 186,000 owner households (23% of the total owner households) in Harris County paid more than 30% of their income toward housing. Of that number, about 76,000 owner households (9.6% of total owner households) paid more than 50% of their income. The number of cost-burdened owners in Harris County declined between 2010 and 2018 by 18%.
- **Households making the median household income in Harris County have seen median sales prices grow above what they can sustainably afford.** The affordability gap—the difference between a home affordable to a household making the median income and the median home sales price—has grown. In 2011, a Harris County household with a median income of \$52,675 could afford a \$163,121 home without spending more than 30% of their income. That was comfortably above the median sales price of \$139,000 and created a surplus of \$24,121. By 2018, a household with a median income of \$60,146 could afford a \$186,256 home, but median home prices had jumped to \$220,000, creating a \$33,744 gap.



- **The affordability gap is even worse for renters, making it nearly impossible for the average renter to purchase a home without significant subsidy.** Median household income among renter households in Harris County is lower than the overall median income. Among renters in Harris County, the median household income was \$33,590 in 2011 and grew to \$40,740 in 2018. In 2011, a renter household making the median household income of \$33,590 could afford a home priced at \$104,019, but the median sales price was \$139,000, resulting in a \$34,981 gap. In 2018, a renter household making the renter median income of \$40,740 could afford a home of \$126,160, but the median sales price was \$220,000, resulting in a \$93,480 gap.



- **Houstonians must earn \$21.02 an hour to pay for an average two-bedroom, market-rate rental.** The minimum hourly wage in Texas is \$7.25 and a minimum-wage worker would have to work 115 hours a week to afford this rent—nearly three full-time jobs. Even at a slightly higher median hourly income for low-wage workers of \$10.92, this translates to working nearly 77 hours a week (or two full-time jobs). This is particularly problematic because of growth in single-parent households and people living alone, meaning more households are attempting to secure housing on one income.³
- **A quarter of homes face significant flood risk and the number is likely to grow as new maps expand mapped floodplains.** In 2018, 1 in 4 homes in Harris County was within the current 500-year floodplain, 100-year floodplain or floodway. As floodplain maps are updated in the future to account for higher risks, more homes will be added to the floodplains and many in existing floodplains will move to higher-risk categories.

- **Black homeownership dropped significantly in the Great Recession and lags far behind white, Hispanic, and Asian homeownership rates.** While all groups saw declines in homeownership between 2010 and 2018, black homeownership fell the most and to the lowest percentage overall. Black homeownership fell from 41% in 2010 to 37% in 2018 across Harris County, and from 36% to 31% in the city of Houston. White homeownership fell from 72% to 68%, while Asian homeownership fell from 63% to 62% and Hispanic homeownership fell from 50% to 49%.
- **Harris County is the center of the region's job and economic activity, but the population is growing at a faster rate outside of the county.** A range of factors such as lower home prices and perceptions about school quality may be driving the trend and it is creating a mismatch between where people work and live.
- **This spatial mismatch between work and home results in major transportation costs for Harris County households.** The addition of significant transportation costs that come from owning and using a car strains household incomes. The average Harris County household spends a combined 47% of their income on housing plus transportation. There is also a spatial mismatch in connecting existing affordable housing to quality, affordable transit. In the city of Houston, only 1 in 3 affordable units has access to quality transit.
- **Trends in the construction of new housing show growing multi-family supply.** While single-family housing made up 64% of the existing housing stock in 2018, large multi-family development accounted for almost 50% of all new residential development in Harris County and nearly 60% in Houston. This is in response to changing market demand and household composition trends, as well as public incentives such as the Downtown Living Initiative.
- **While many units are being built, they tend to be higher priced, and existing affordable units are declining.** The share of rental units below \$800 declined between 2010 and 2018. Median gross rents rose 8% in both Harris County and the city of Houston.

- **The makeup of households is trending away from the nuclear family of four as the overwhelming demographic.** Households consisting of people living alone, couples without children, single parents and unrelated housemates are all on the rise. These shifts are also leading to changes in housing needs and responses from the market.
- **Growth of people over the age of 65 and those with disabilities may present housing and service provision challenges to both Harris County and the city of Houston.** Rapidly aging populations are concentrated in the suburbs and outer edges of Houston.
- **Heads of households between the ages of 25 and 39 are settling equally between Harris County and the city of Houston, though families with children continue to locate outside of the city.** In both Harris County and the city of Houston, the number of residents between the ages of 25 and 39 grew by 15% between 2010 and 2018. In Houston, this growth was concentrated inside the 610 Loop in more walkable, multi-family heavy, amenity-rich neighborhoods. In Harris County, suburban areas saw massive growth in this population, especially farther-out places where home prices tend to be lower. In all of Harris County, 38% of households have children, compared to 33% within the city of Houston.
- **Both Harris County and Houston continue to be racially diverse overall.** The most diverse neighborhoods are attracting more diversity, while most racially segregated communities continue to lose diversity. Hispanics are integrating into several historically black neighborhoods. Black and white residents are declining in the city.
- **Both Harris County and the city of Houston are seeing more people of different income levels living in close proximity. At the same time, many predominantly high-income and low-income areas have seen income-based residential segregation intensify.** The neighborhoods with the most income diversity are situated within the city of Houston and especially inside the Loop, signaling that some income diversity may be coming as a result of gentrification and in the future income segregation could worsen. Many wealthier and low-income areas grew even more segregated by income.

Methodology

The word home is used interchangeably to describe all types of dwelling units, whether single-family homes, townhomes or apartments. This is done to give all homes—whether rented or owned—and all residents—whether renter or owner—equal value.

Throughout this report, residents are put into four racial and ethnic groups—white, Asian, black and Hispanic. The white, Asian and black populations referenced are those who identify as non-Hispanic in each group.

At the neighborhood scale, this report relies on the Kinder Institute's Community Tabulation Area (CTA) to define smaller, neighborhood-size areas. The CTAs are aligned with census boundaries to ensure the most accurate numbers. Information about how the CTAs were created and what exact boundaries are is available at the Kinder Institute's Houston Community Data Connections site: www.datahouston.org.

Data for the indicators included in this report is available in the appendix at the county and city level. Some community level data is available at the Kinder Institute's Houston Community Data Connections site: www.datahouston.org.

Introduction

For individuals and families, where and how we live greatly influences other elements of our lives—our health, our access to opportunities, our exposure to risk and our ability to create wealth. A stable housing situation is a critical foundation on which to build a life. For broader society, the housing sector is a critical part of our regional economy, representing a huge proportion of our spending and supporting thousands of jobs in construction, real estate and supply chains. The Kinder Institute’s State of Housing report aims to document shifts at both of these levels. The information contained in this report shows not only how the housing system is responding to major global shifts, but also how the existing system is working or not working for individual households.

Harris County and Houston have a reputation for housing affordability. A main reason for Houston’s decades-long growth is that it has been awash in inexpensive suburban single-family homes. Indeed, as the populations of both Harris County and Houston have grown significantly over the past 10 years (though Houston’s growth seems to have plateaued since 2016), many new residents have settled in suburban areas of the county dominated by single-family homes.

Many of the findings in this report show, however, that Harris County and Houston’s reputation for affordability belies the reality that many residents are struggling to find affordable and safe homes. This burden is falling most heavily on renters who cannot afford to enter the ranks of homeownership—the most important form of wealth creation in America—due to rising prices and stagnant incomes. Digging into the data provides a clearer picture of how and for whom the housing system is working and where it is faltering. Harris County and Houston are not alone in facing these challenges. Cities and counties across the United States face similar issues.⁴ These are national issues apparent in the local context.

The picture is slightly different for homeowners because home values and sales prices both have risen considerably since 2010. These increases are a boon to many homeowners looking to sell their homes or excited to see their assets grow. But even this growth is not without a negative. For homeowners on fixed incomes, increasing values can lead to higher property taxes and potential displacement. Homeownership rates have fallen across the county since 2010 but have declined the most for black residents and lower-income residents.

A similar picture emerges when we look closer at new construction. While the total units have kept pace with population growth, most new units are at higher price points, even though most of the demand is for more-affordable units. This mismatch arises mainly from the combination of rising land prices and stagnant wages.

Throughout the county, low-income households, people of color and renters are the most affected by these challenges, which often compound. For example, a household is evicted for failure to pay rent, then cannot find adequate housing, either because of low income, discriminatory



Photo by Random Sky on Unsplash

leasing practices or low availability, and instead secures a home in a high-risk area such as a flood zone or a location with poor access to public transit. This scenario compounds vulnerabilities for the least-stable households in the region, often placing pressures on other systems such as health care, education and social services.

The major components tracked in the State of Housing report are overall economic trends affecting the housing sector: demand, supply and affordability. This report will explore these components through five sections. First, we begin with macro *Economic Trends* at the national, state and local levels. Second, *Population Trends and the Demand for Housing* explores how demand and household characteristics are changing in our region and what that could mean for the market. Third, in *Housing Supply*, we explore the existing housing stock and its ability to meet demand. Fourth, in *Affordability and Access to Housing*, we document issues with affordability in the housing sector. Fifth and finally, in *Cross-cutting Connections to Housing*, we explore three issues that interlock with housing in critical ways—flooding, gentrification and transportation.

The data for our housing indicators included here are available in the appendices at the county and city levels. Data used for many of the indicators at the community level have been added to the community profiles of the Kinder Institute's Houston Community Data Connections website (www.datahouston.org).

COVID and Housing

The COVID-19 pandemic, of course, has disrupted every part of our lives. Beyond the dire public health threat, the response to the virus has led to millions of unemployed Americans, shuttered schools and recreation spaces and created instability in countless other realms. In Houston and Harris County, the collapse of the oil sector has produced a one-two punch and destabilized even more households. Nearly 350,000 individuals in Harris County have filed unemployment claims since March 2020, according to Texas 2036.⁵ Kinder Institute analysis of Texas Workforce Commission data also shows that job losses are affecting lower-income neighborhoods the most.⁶ The loss of income likely will compound pre-existing chal-

allenges around housing, food security and health care for many households.⁷

Because of the virus, most people are spending more time in their homes, a place that is supposed to be a respite from the stresses of the outside world. For essential workers who have worked on-site throughout the pandemic, fears of bringing the virus home have changed that dynamic. The same is true for the hundreds of thousands of residents in Houston and Harris County who find themselves living in unaffordable or unsafe homes and confronting household incomes stretched to breaking amidst the pandemic. In these cases, home is not a respite but a cause of anxiety. Uncertainties about whether households can pay their rent or mortgage or keep children and older relatives safe and healthy in their current home have become ever-present concerns.

Given the changing nature of the pandemic and the limitations on the underlying data, the 2020 State of Housing report does not capture the complete picture of the impacts that COVID-19 and the energy sector collapse have had on Houston and Harris County's housing sector. Many of the indicators through which long-term impacts can be tracked will not include data from the current situation until 2022. Much of the data underpinning this work, for example, is drawn from sources such as the U.S. Census Bureau's American Community Survey, for which the most recent data currently available is from 2018. This inaugural report provides a critical baseline to more accurately understand the impacts of COVID-19 when data becomes available in future years.

By comparing 2010 data to 2018 data, in fact, the 2020 State of Housing report provides an important example of how such a data baseline can help a region understand the impacts of a major disruption, whether a pandemic, an economic recession or both. Many of the trends discussed in this report reflect on the ways that Houstonians have recovered or not recovered from the Great Recession. In future reports, both the short and long-term impacts of COVID-19 will become more apparent.

That being said, the impact of COVID-19 on Houstonians and the housing sector writ large is clear. In areas where vulnerabilities already existed, such as a large number of households spending an unsustainable amount of their income on housing, COVID-19's impacts will only deepen the challenge. For many, the challenges created by COVID-19 compound those already laid bare by Hurricane Harvey. This report documents a number of overlapping challenges facing Houstonians, particularly

for those with lower incomes and for households that rent. While most data points compare 2010 to 2018, where possible the State of Housing does mark data points that are beginning to show the disruptions of the pandemic in the housing system. In the coming years, we will keep a close eye on how incomes, affordability and access to housing change in response to COVID-19.

There are huge inequities in both health impacts and ongoing economic impacts of COVID-19. Black and brown communities are hit hardest by the virus itself as well as feeling many of the economic impacts most directly.⁸ Further, recovery is complicated by decades of unequal public policy and underinvestment in low-income, non-white communities, which can be traced to the origins of federal housing policy in the United States. These inequities have their roots in the redlining practices of the Home Owners Loan Corporation and, later, the Federal Housing Administration, which helped entrench segregation and affected the amount of public and private investment in lower-income, non-white communities.⁹ Many of the groups highlighted in this report as facing major challenges in the housing sector before COVID-19 are also likely to see those housing issues worsened by the impacts of the pandemic. Even in cases where public dollars will assist those with significant housing stability issues, such as renters falling behind on their monthly payments, the gap between the need and the funding available is huge. The City of Houston, for example, created the Houston Rental Assistance fund using \$15 million of its CARES act funding. The \$14.4 million of the \$15 million will directly assist households that make less than 80% of the median household income with rent (at up to \$1,056 per household). The program aims to provide assistance to more than 8,000 households.¹⁰ When the program opened to renter applicants, its funds were exhausted in a matter of hours. Harris County and private philanthropy have each set up similar fund to support low-income families that likely will face a similar surge in demand.¹¹

It is clear that the need for assistance far outstrips what such a program can provide. Using the city program as an example, data shows that before COVID-19 there were 298,800 renter households in the city of Houston making less than 80% of the median household income and spending more than 30% of their income on housing, meaning that even with the program in place, at least 290,000 qualifying households will not be assisted at the current funding levels.¹²

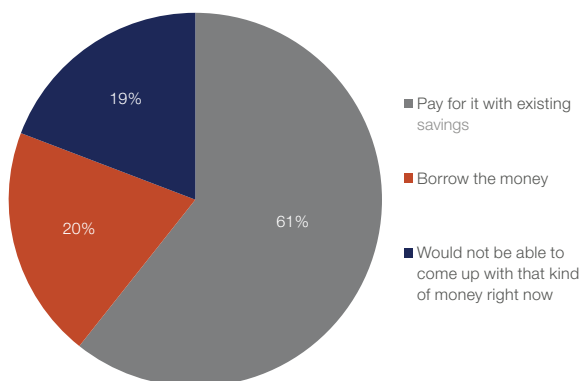
Kinder Houston Area Survey Housing Topics

The Kinder Houston Area Survey (KHAS) — now in its 39th year — sheds light on Houstonians' evolving housing preferences and decision-making. Several pieces of KHAS connect directly to the state of the housing system and residents. In 2020, for example, nearly 40% of Harris County respondents indicated not having enough money saved to afford a \$400 emergency payment, which is a reminder of how pervasive economic vulnerabilities are in our community (Figure 1). This figure is more pronounced among black and Hispanic

residents (Figure 2). In addition, 31% of Harris County respondents either moved or considered moving in the past year. Of those saying they considered moving, the need for more space or a bigger house and affordability concerns were the main motivators. (Figure 3). One stark shift the survey has tracked since the recession is the growing preference for smaller homes in a more urbanized area relative to larger yards in single-family neighborhoods (Figure 4).

FIGURE 1

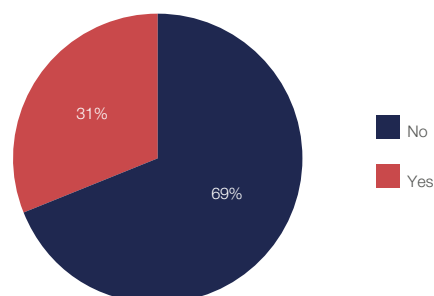
Could Not Come up With \$400 for an Unexpected Emergency



Source: Kinder Houston Area Survey, 2020.

FIGURE 3

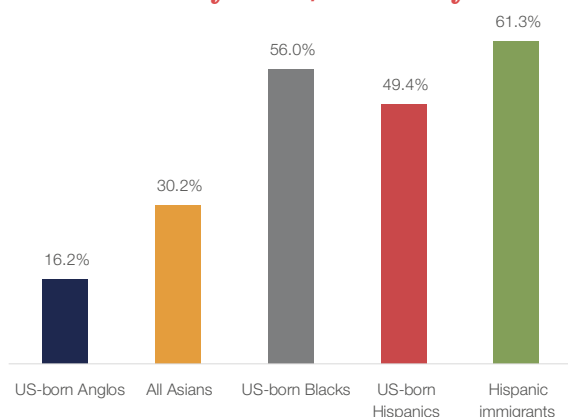
During the Past 12 Months, Have You or Your Family Ever Seriously Considered Moving to a Different Neighborhood in the Houston area



Source: Kinder Houston Area Survey, 2020.

FIGURE 2

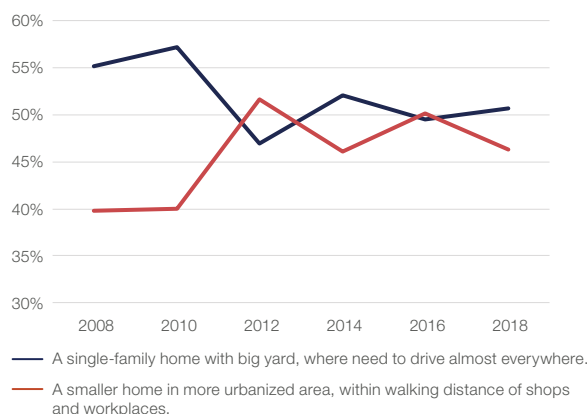
Could Not Come up With \$400 to deal with an Unexpected Emergency by Race/Ethnicity



Source: Kinder Houston Area Survey, 2020.

FIGURE 4

If You Could Choose Where to Live in the Houston Area, Would You Prefer:



Source: Kinder Houston Area Survey, 2008–2018.

Section 1. Economic Trends

Without a doubt, the COVID-19 crisis and government responses aimed at reducing transmission have altered the reality and expectations of economic growth. This section does not include an in-depth look at post-COVID-19 impacts; rather, it looks at the economic trends influencing the housing markets in Harris County and Houston in the pre-COVID-19 era.

Overall, national and state trends affirm the relative strength of the housing sector and parallel what has been seen at the local level. In general, Texas and the Houston Metropolitan Statistical Area have been more robust than the nation as a whole—despite an economic decline between 2015 and 2016.

Much of that growth has been directly tied to the housing sector, with overall construction and residential construction spending having outpaced the nation. However, the pace of growth in residential construction spending, as well as the growth in new single-family homes, has been slower every year since 2010. This signals a response to the major population growth of the period, but also a recognition that the housing supply caught up with demand in many places.

Despite low interest rates for much of the past decade, Americans have taken on declining levels of debt and liabilities related to housing. This is a response to the long-term impacts of the Great Recession and the instability it created for many households. Nationally, between 2008 and 2014, there was a general trend in declining mortgage liabilities as people recovered from the Great Recession, though in the past four years that has slowly grown again. Similarly, home equity loans have seen a more substantive decline, signaling that fewer homeowners are taking out loans to improve, repair or remodel homes. These trends are somewhat surprising given low interest rates.

In addition to looking at national trends, a summary of local housing prices is included in this section. The values and prices of for-sale homes and the median gross rent paid by renters are two foundational pieces to understanding the entire housing system.

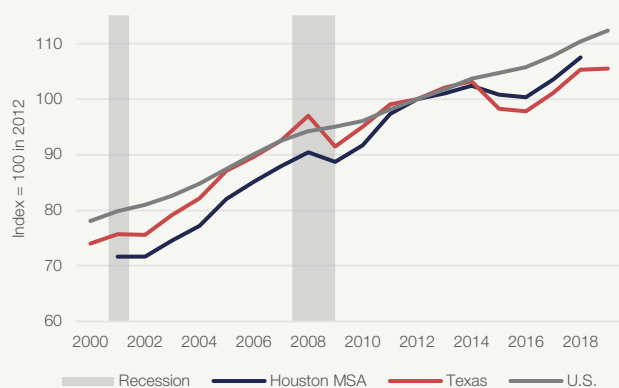
Texas and the Houston metropolitan area have seen moderate growth rates since the Great Recession, growing an average of 1.6% and 2.2%, respectively, every year, despite a considerable decline in economic activity between 2015 and 2016.

The last decade saw the longest ever bull market and the robust economic activity carried over to Houston and Texas, despite some local declines in economic activity related to the oil sector slowdown of 2015 and 2016 (Figure 5). The levels of economic activity of the U.S., Texas, and the Houston MSA were compared using a GDP price index of the current dollar to real GDP output.¹³ Growth in economic activity since the Great Recession has been moderate, averaging an annual growth of 1.7% nationally, 1.6% in Texas and 2.2% in the Houston metropolitan area. Houston and Texas have had higher economic growth rates outside of the decline in economic activity between the 2015 and 2016 oil bust.¹⁴

Growth in total and residential construction expenditures in the Houston metro outpaced growth nationally between 2010 and 2018.

FIGURE 5

GDP Price Index in the United States, Texas, and Houston Metro



Nationally, total construction and total residential construction spending have increased every year since 2011. Total construction spending grew 62% since 2010, while residential construction expenditures grew by 116%—more than doubling in the period between 2010 and 2018. However, growth has slowed for both measures, stagnating after 2013. Locally, overall construction spending has seen steady growth throughout the 2010–18 period, with a sharp increase during 2014 and 2015 due to a building boom, and a big drop during the oil sector bust in 2015 and 2016. Across the whole decade, spending increased by 157%.

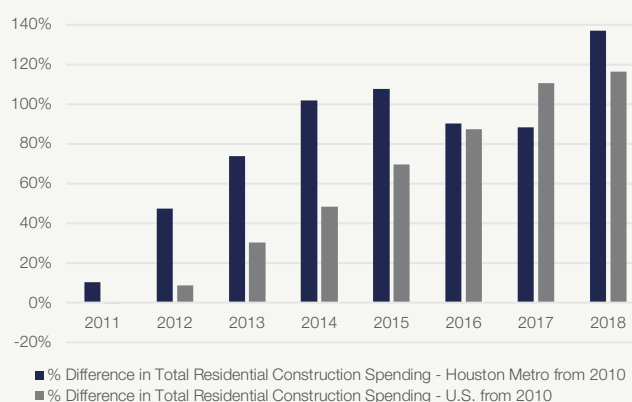
Houston-area residential construction spending did not see the same sharp increase in 2014 as the overall construction industry. But residential construction spending has outpaced the growth of national expenditures every year except for 2017. Across that period, local residential construction spending averaged yearly growth of 12%, though the pace of growth slowed between 2015 and 2017, before picking back up in 2018. (Figure 6)

Nationally, single-family and multi-family (five or more units) construction each saw steady growth between 2010 and 2018 (Figure 7). Single-family homes still represent the clear majority of new units across the nation, but multi-family housing starts increased by more than 200% between 2010 and 2014. The development of multi-family units slowed after 2015, before a slight uptick in 2018. After an 8% decline in 2011, single-family new starts saw an average 10% yearly growth.

Single-family starts in Houston and Texas have closely followed national trends. The Houston MSA saw the most growth in single-family units between 2010 and 2014 before seeing a dip between 2015 and 2016. The growth of

FIGURE 6

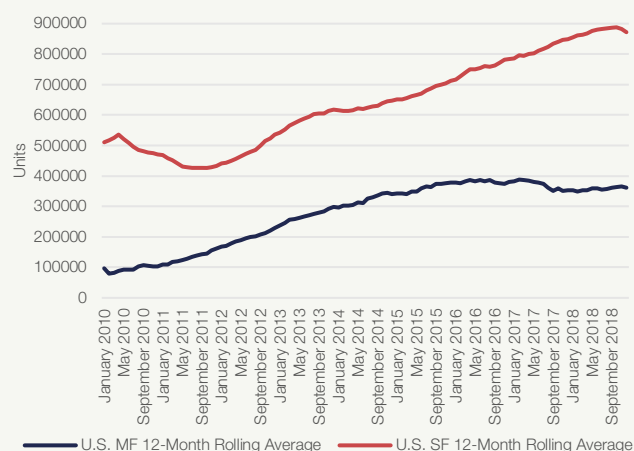
Total Residential Spending for the U.S. and Houston MSA, Percent Difference from 2010



Source: Houston Metro Construction Spending: Dodge Data & Analytics retrieved from GHP
National Construction Spending: U.S. Census Bureau, Construction Spending

FIGURE 7

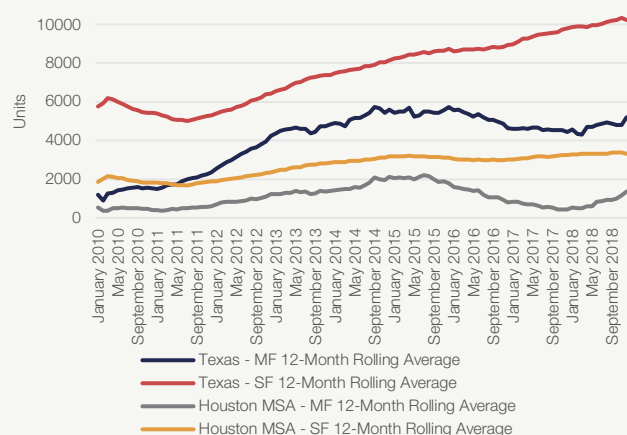
U.S. Housing Starts by Type



Source: Housing Starts: U.S. Census Bureau and U.S. Department of Housing and Urban Development.
Retrieved from FRED, Federal Reserve Bank of St. Louis.

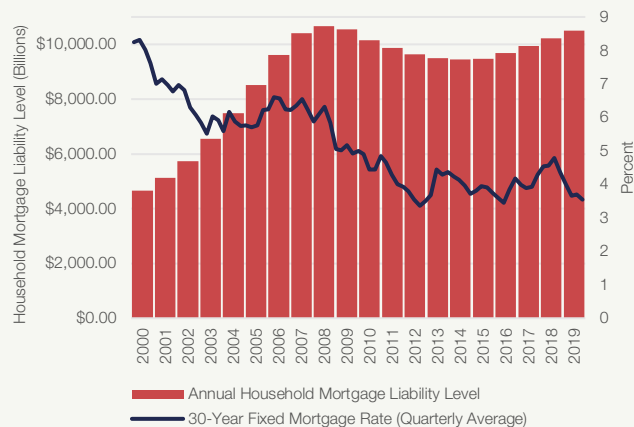
FIGURE 8

Texas and Houston MSA New Housing Starts by Type



Source: Housing Starts: U.S. Census Bureau and U.S. Department of Housing and Urban Development.
Retrieved from FRED, Federal Reserve Bank of St. Louis.

FIGURE 9 Mortgage Rate and Household Mortgage Liabilities in the United States



Source: FRED, Federal Reserve Bank of St. Louis; <https://fred.stlouisfed.org/>

multi-family projects in Texas have closely mirrored the national trend while the Houston MSA saw the highest growth rate in multi-family new starts — four times as many in 2014 compared to 2010 — before a decline in new constructions between 2015 and 2017. (Figure 8)

National interest rates have remained near zero in the previous decade, while mortgage rates have averaged 3% to 4%. Despite the favorable market conditions, mortgage liabilities continued to decline through the third quarter of 2014.

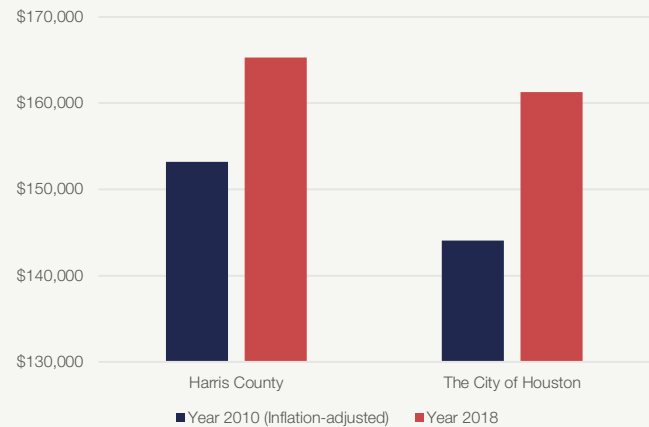
National interest rates have generally declined in the previous decade compared to the 2000s. While the effective federal funds rate has been virtually zero for much of the preceding decade, the low-interest-rate environment did not influence home mortgage rates much between 2010 and 2018.

Household mortgage liabilities decreased from the first quarter of 2010 through the third quarter of 2014 before growing every quarter since, once again reaching 2010 levels by the first quarter of 2018. Similarly, revolving home equity loans from all commercial banks have decreased from a peak in mid-2009, falling from \$600 billion in January 2010 to \$349 billion in December 2018. (Figure 9)

Each of these indicators shows the long-term chilling effects of the Great Recession, with mortgages and home equity loans declining even though the general economy returned to prosperity during the 2010s.

Home values have steadily increased in the county and city, with the steepest increases within the city. Home sales prices have also increased. Both show how the housing sector's recovery

FIGURE 10 Change in Median Home Value, Harris County and Houston 2010–2018



Source: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2010 and 2018.

since the Great Recession has been a boon for homeowners. In 2018, homes sales in all of Harris County totaled just over \$15 billion in value, more than doubling the amount from 2011.15

Median Home Value

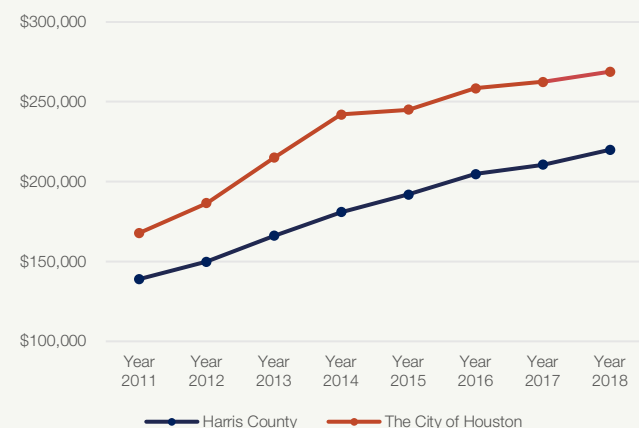
Across both Harris County and Houston, the median home value increased between 2010 and 2018. In all of Harris County, the median value rose from \$153,238 (inflation-adjusted) in 2010 to \$165,300 in 2018 — an increase of 8%. The city of Houston's median home value also increased, from \$144,046 (inflation-adjusted) in 2010 to \$161,300 in 2018 — an increase of 12%. (Figure 10)

The city's slightly higher increase reflects the growth in value for homes in traditionally high-demand areas, such as the Heights, and in quickly redeveloping parts of the city, such as Oak Forest, which each saw value increases of more than 80%. There are also large increases in communities that have experienced significant redevelopment and gentrification pressures, such as Independence Heights, where home values increased by more than 60%, or the Near Northside, where values increased by more than 20%.

There are some exceptions to the growth in value, though. Nine lower-income CTAs with predominately non-white residents have seen values fall between 2010 and 2018. Settegast, for example, saw home values drop 18%, and East Little York saw a decline of just over 8%. The communities where values have dropped experienced fewer redevelopment pressures, though the decreasing values could open the door to speculative purchases in some cases. Decreasing values also represent a significant loss in the biggest asset of many households.

FIGURE 11

Annual Median Sales Price, Harris County and Houston, 2010–2018



Source: Houston Association of Realtors

Median Sales Price¹⁶

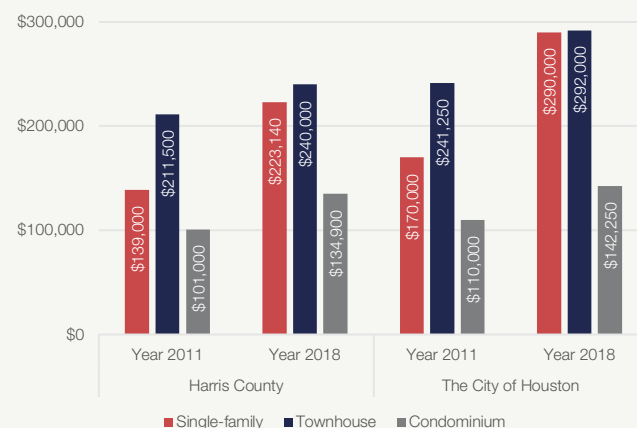
The median home sales price adds an even more nuanced reflection of the market than the value, as it captures the actual price at the time of sale, which is often higher than assessed value or median values captured by the U.S. Census. A caveat about the available sales price data is that it only applies to places where closed sales are recorded, so this indicator is limited in places with few sales. In both Harris County and the city of Houston, sales prices increased in step with the median value between 2011 and 2018. The county's median sales price increased from \$139,000 to \$220,000, a 37% increase, and the city's median sales price also increased, from \$167,900 to \$268,900, a 38% increase. (Figure 11)

Both county and city have median home sales prices well above the median value, indicating a strong, competitive home-buying market in both jurisdictions. This also highlights growing issues with affordability and access to homeownership for lower- and middle-income residents. Median sales prices in both jurisdictions are above the level that many potential homeowners can sustainably afford, particularly in high-demand areas. As section 4 — *Affordability and Access to Housing* — will show, first-time homeowners increasingly are only able to find homes in distant areas of Harris County or in city communities undergoing significant neighborhood change.

The fact that sales prices inside the city of Houston's were much higher than the county's, and that the gap grew between 2011 and 2018, reflects the demand for homes in high-amenity, in-demand areas in particular. CTAs with the highest median prices included several higher-income areas such as Memorial Villages, where prices increased

FIGURE 12

Median Sales Value by Home type, Harris County and Houston, 2011 and 2018



Source: Houston Association of Realtors

by 36%, from \$950,000 to \$1,480,500. Even areas where the median sales price is well below the county median, prices increased greatly. In East Houston, for example, the median sales price increased from \$33,000 in 2010 to \$95,000 in 2018.

Single-family homes saw the largest consistent gains in both the county and city, but townhomes and condominiums also saw increases in the median sales price. Again, prices within the city of Houston were higher compared to all of Harris County, with townhomes, which tend to be newer builds in high-demand neighborhoods, having the highest median sales price (Figure 12).

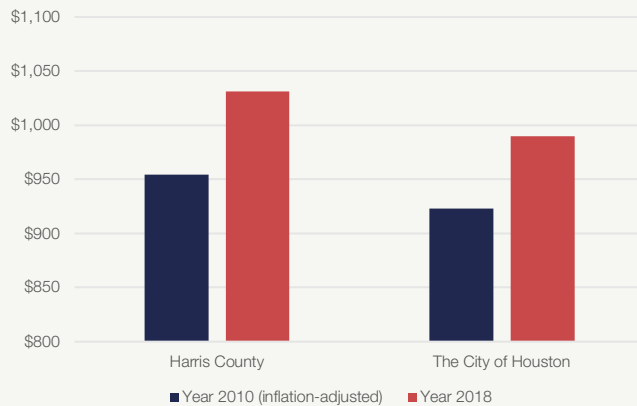
Median gross rent has increased since 2010 across all rental units and represents almost exactly 30% of the median renter household income, the edge of affordability. This belies the fact that in 2018, 164,182 renter households paid rent that was greater than 50% of their income.

Across Harris County, median gross rent increased from \$954 to \$1,031, or 8%, between 2010 and 2018. The city of Houston's median gross rent increased from \$923 to \$990, or 7%, in the same time period. The increase in median gross rent in the county is attributable to the fact that most newer and larger rental units are available outside of the city. (Figure 13)

Median gross rent grew fastest in areas with high rental demand and many amenities, such as East Downtown, where median rent rose by 221% from 2010 to 2018. Other CTAs fitting this pattern are Fourth Ward, Washington Avenue and Downtown. Some areas facing redevelopment pressure, such as Settegast, saw gross rents increase

FIGURE 13

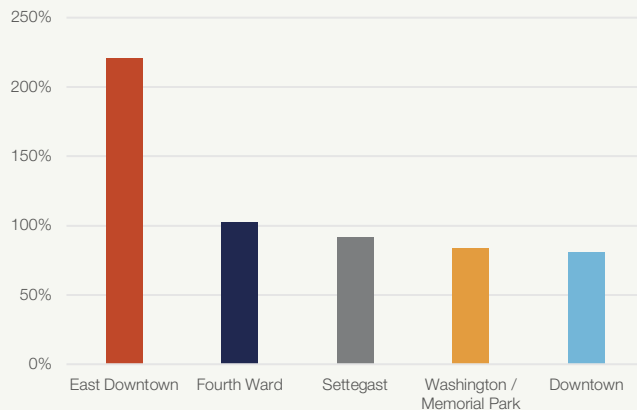
Change in Median Gross Rent, Harris County and Houston, 2010–2018



Source: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2010 and 2018.

FIGURE 14

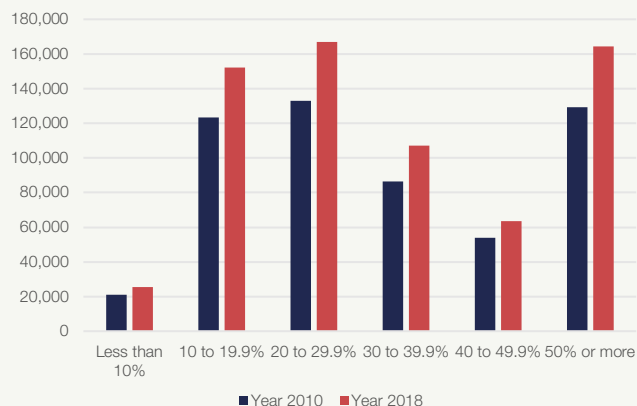
Change in Median Gross Rent in the Five Fastest-growing CTAs, 2010–2018



Source: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2010 and 2018.

FIGURE 15

Gross Rent as a Percentage of Household Income, Harris County, 2010–2018



Source: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2010 and 2018.



Photo by Demond Henderson/flickr

greatly, but at much lower overall levels than many of the hottest rental markets. (Figure 14) Rent increases in lower-income or gentrifying communities, though, raise concerns about the displacement of long-term residents as communities change.

With the rise in gross rents, the percentage that a median renter household pays toward rent ticked up slightly between 2010 and 2018 and hovers at the 30% threshold considered affordable in both Harris County and Houston. Overall, a small majority of renting households in Harris County pay about 30% of their income in rent. However, the 30% figure hints at the precariousness of many renting households' situations. As Figure 15 shows, about 23% of renter households in the county paid greater than 50% of their income on rent in 2018. And nearly that many again paid more than 30% of their income toward rent. If rents continue to rise or if incomes remain flat, significantly more renter households could become cost-burdened.

Additional issues around affordability for both homeowners and renters are explored in Section 4, *Affordability and Access to Housing*.

Section 2. Population Trends and the Demand for Housing

Demand is a critical element of the housing sector. This section provides findings related to population dynamics and household characteristics. These components help shape housing demand in Harris County and the city of Houston — including where people live, socioeconomic conditions of the population and household size — and suggest what shifts in those indicators might mean for the market in the future.

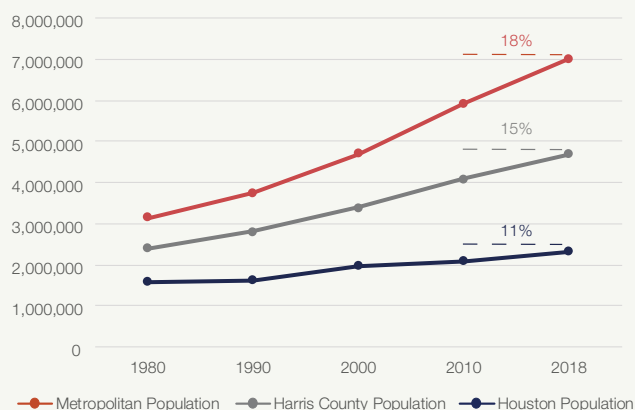
Jobs and economic activity continue to concentrate in Harris County even though the population is growing at a faster pace beyond the county.

Between 2010 and 2018, the population of Harris County increased by 15%, from 4,092,459 in 2010 to 4,698,619 in 2018. Similarly, although at a slower rate, the city of Houston saw a population increase of 11% — from 2,068,026 in 2010 to 2,295,982 in 2018. The city's growth rate has slowed since 2016 and may continue at that pace in the coming years due to the rapid decline in immigration, particularly refugee resettlement. Before 2017, Houston was the country's leading city in resettling refugees.¹⁷ However, since 2017, federal immigration policies have drastically cut international immigration and refugee resettlement in the United States, slowing population growth in areas that usually absorb those groups.¹⁸

The broader metropolitan area's population growth of 18% continues to outpace both the county and city. Many residents are settling in suburban counties such as Fort Bend and Montgomery even though most of the jobs and economic activity remain in Harris County and Houston. (Figure 16 and 17)

FIGURE 16

Population Growth in Metropolitan Houston, 1980–2018

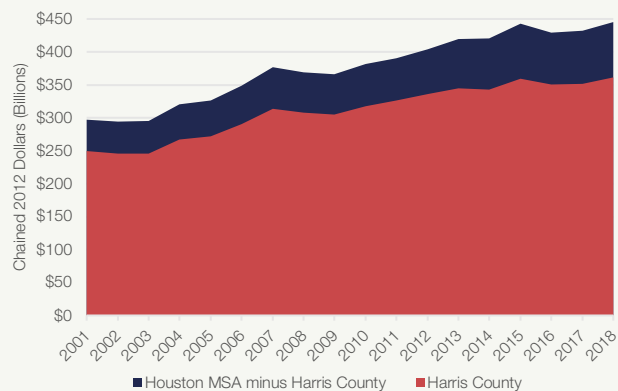


Source: Population of the 100 Largest cities and other urban places in the United States: 1790 TO 1990 (<https://www.census.gov/population/www/documentation/twps0027/twps0027.html>); The Census Bureau's Population Estimates Program (<https://www.census.gov/programs-surveys/popest.html>); Population of States and Counties of the United States: 1790 to 1990 (<https://www.census.gov/population/www/censusdata/pop1790-1990.html>)

Harris County accounted for over 80% of all gross domestic product in the metropolitan statistical area in 2018¹⁹. Though still dominant, this was a decline from 84% in 2001. (Figure 17)

FIGURE 17

Real Gross Domestic Product Share, Harris County and Houston MSA, 2001–2018



Source: U.S. Bureau of Economic Analysis, Gross Domestic Product (GDP) by County, Metro, and other Areas.

There are more renters than homeowners in the city of Houston, and renters are nearing a majority in all of Harris County.

In the city of Houston, renter households already constitute 57% of the population, up from 53% in 2010. In all of Harris County, the proportion of renters grew to 45% in 2018, up from 42% in 2010. More than 70% of renter households in Harris County have an income of less than \$50,000, creating a growing need to make homes affordable and available to this group. As the *Housing Supply* section will show, though, the county and city both are lagging in the production of housing for this group.

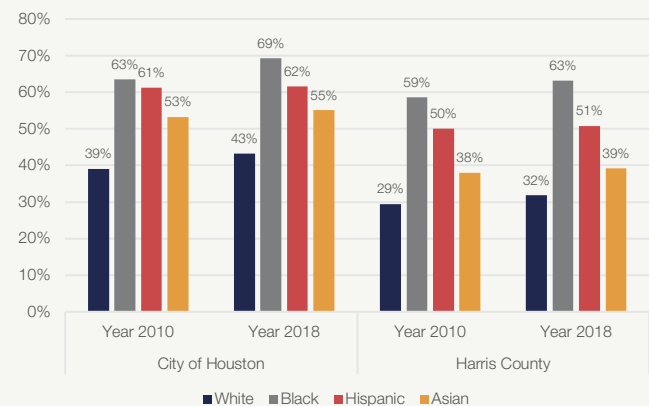
Across all races and ethnicities, the rate of households that are renters increased between 2010 and 2018 in both Houston and Harris County—in line with population growth and the corresponding decline in homeownership rates seen in previous analyses (Figure 18). This, again, may be indicative of a higher propensity among residents to rent due to the rising costs associated with purchasing a home.

The percentage of households renting is highest among black households in both Houston and Harris County. As of 2018, just under two-thirds of all black households in Harris County were renters, compared to only one-third of all white households. In Houston, the percentage of white residents that were renters was slightly higher, accounting for younger and older residents living in apartment rentals in dense, walkable neighborhoods.

The percentage of Hispanic households renting held relatively steady between 2010 and 2018. Among Asian households, the percentage of households renting in

FIGURE 18

Renter Households by Race/Ethnicity, Harris County and Houston, 2010 and 2018



Source: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2010 and 2018.

Harris County was close to that of white households. However, the Asian renter rate is much higher in Houston (Gulfton, Sharpstown and other areas with large Asian immigrant populations in rental apartments are all in the city of Houston).

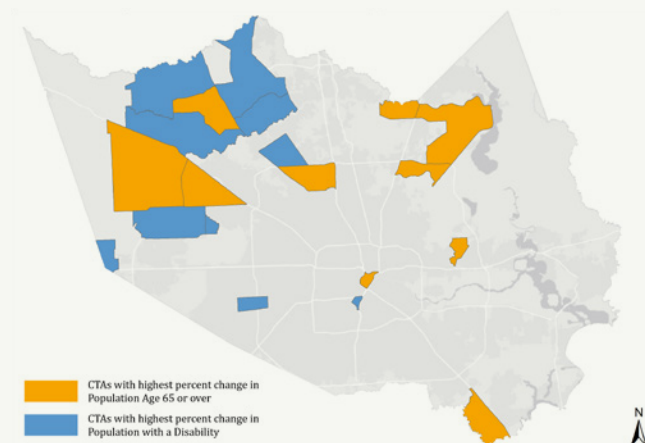
Rapidly aging residents and populations with a disability status are concentrated in inner suburban communities, which may present future challenges for local governments.

The share of the population over the age of 65 grew significantly in both Harris County and the city of Houston between 2010 and 2018. Overall, this group grew by 45% in Harris County and 27% within Houston. The neighborhoods with the highest growth and the overall number of people who are 65 or over predominantly are located in suburban communities on the perimeter of Beltway 8—suggesting many older Houstonians are aging in place. Given Houston's low-density, car-dependent neighborhoods, meeting the needs of this aging population may be a challenge, as driving becomes a barrier to many as they age.²⁰

Similarly, between 2012 (when the Census began collecting data on disability status in the ACS) and 2018, the population of residents living with a disability grew by 14% in Harris County and by 5% in Houston. Again, the majority of the neighborhoods that saw the fastest growth among people living with disabilities are located in the suburbs. Residents living with disabilities often have particular needs when it comes to housing—wider hallways, accessible bathrooms and sloped sidewalks—which may be achievable in newer housing units but can be difficult to retrofit in older homes.

FIGURE 19

Neighborhoods with the Fastest Growth of Persons over 65 Years of Age and People with Disabilities, 2010–2018



Source: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2010 and 2018.

Figure 19 shows the areas with the fastest growing populations of older residents and residents with disabilities.

Though suburban growth remains strong among all age groups, Inner Loop communities near Downtown are experiencing a surge in young adults (ages 25–39). Households with children continue to locate at greater rates outside of the city of Houston.

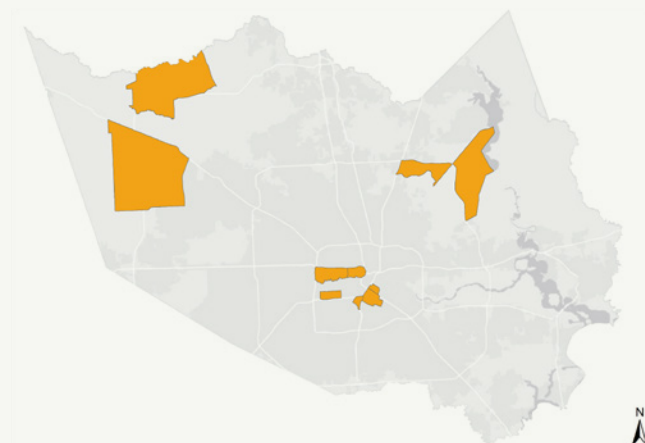
Although the rate of growth among those over 65 is much higher for Houston and Harris County, the growth in the region's young adult population (ages 25–39) is another trend the housing industry is and will continue to consider. Between 2010 and 2018, both Harris County and Houston saw an increase of roughly 15% among those between the ages of 25 and 39.

The suburbs continue to grow and remain strong contenders for new residents regardless of age in Houston and Harris County. Within the top 10 neighborhoods, Humble South, Lake Houston, Cypress South and Tomball Southwest saw substantial growth among young adults 25–39, many of these CTAs also have low home prices.

Unsurprisingly, given the propensity for millennials to prefer dense, walkable neighborhoods, communities closest to downtown Houston also saw notable growth among young adults—particularly areas such as the Washington Corridor, Upper Kirby / Greenway Museum Park, East Downtown and Third Ward. (Figure 20)

FIGURE 20

Neighborhoods with the Fastest Growth of Young Adults (Aged 25–39), 2010–2018



Source: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2010 and 2018.

Households with children continue to locate outside of the city of Houston. Across the county, 38% of households had children in 2018, compared to only 33% in the city of Houston. Both jurisdictions experienced a slight decrease since 2010, attributable both to aging populations and the movement of households with children to outside of Harris County.

Both Harris County and Houston continue to be racially diverse overall. The most diverse neighborhoods are attracting more diversity, while most racially segregated communities continue to lose diversity. Hispanics are integrating into several historically black neighborhoods. The number of black and white residents are declining in the city.

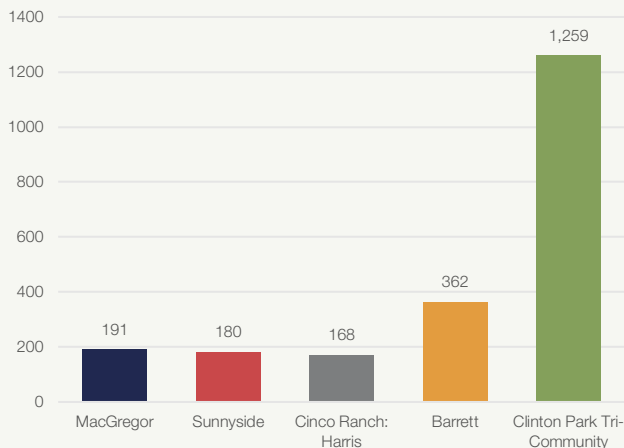
The Racial Diversity Index (RDI) measures the probability that two randomly chosen people in a given geographic area will be of a different race. A higher number indicates a more racially diverse population.²¹

As expected, both the city of Houston and Harris County are racially diverse, with an RDI value of 0.69 in both 2010 and 2018.

The region's most diverse neighborhoods tend to cluster on the west side of the city, with some diverse neighborhoods close to the city center or within Loop 610 (East Downtown, Museum Park and Astrodome). Notably, a few of Harris County's growing outer suburbs are among the region's most diverse (Cypress South, 1960 / Cypress Creek North).

FIGURE 21

Percent Change in Hispanic Population in Select CTAs, 2010–2018



Source: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2010 and 2018.

By contrast, neighborhoods that are the least diverse tend to reflect historically segregated neighborhoods clustered closer to the center of the city within Loop 610 and points east, southeast and northeast (Magnolia Park, Pecan Park, Denver Harbor). Many of these neighborhoods are predominantly composed of minorities and tend to be lower income. In a few cases, Hispanic populations are moving into black neighborhoods such as Clinton Park Tri-Community, Sunnyside and McGregor. (Figure 21)

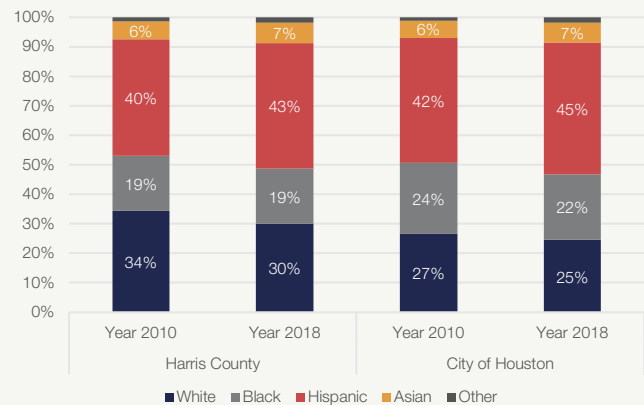
Overall, shifts in the racial makeup of residents in the county and city reflect these trends in RDI. White residents have declined slightly in the city of Houston (from 27% in 2010 to 25% in 2018) and in Harris County (from 34% in 2010 to 30% in 2018). Between 2010 and 2018, the share of the population identified as black in the city of Houston decreased from 24% to 22%, but held steady in Harris County at 19%. In contrast, the share of the population identified as Hispanic increased within the city of Houston and Harris County (roughly 3 percentage points for both, up to the mid-40s), while the share of the population identified as Asian held steady at about 7%. (Figure 22)

Houston and Harris County remained hubs for new immigrants in the United States, with five neighborhoods housing nearly 20% of all immigrants (Alief, Sharpstown, Pasadena, Bear Creek and Gulfton).

Between 2010 and 2018, Houston and Harris County's foreign-born population (a proxy for immigration) grew by 16% and 21%, respectively.

FIGURE 22

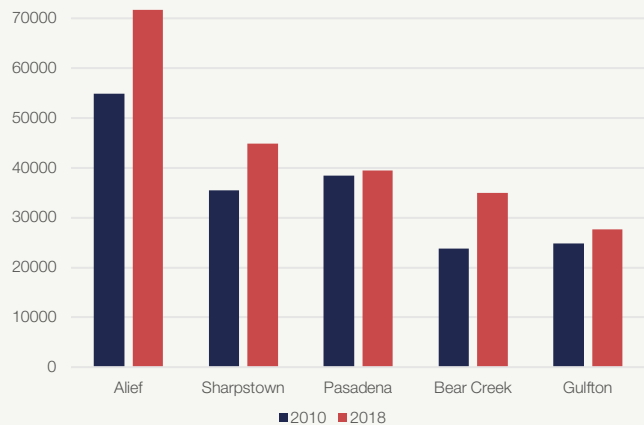
Population Distribution by Race and Ethnicity, Harris County and Houston, 2010–2018



Source: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2010 and 2018.

FIGURE 23

CTAs with largest foreign-born population, 2010–2018



Source: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2010 and 2018.

Alief, Sharpstown, Pasadena, Bear Creek and Gulfton were the Harris County CTAs with the highest number of foreign-born residents in 2018. These neighborhoods account for nearly 20% of all of the foreign-born population in Harris County and housed a significant share of immigrants during this time period. (Figure 23)

Notably, a couple of suburban areas, including Barrett and Humble South, saw the largest increase of foreign-born residents between 2010 and 2018, recording 370% and 185% increases respectively. (Figure 24)

Since 2017, federal immigration policies have drastically cut international immigration and refugee resettlement to the United States, slowing population growth in areas that usually absorb those groups. This is an indicator worth tracking over time to evaluate how federal policies are affecting local population patterns and housing needs.

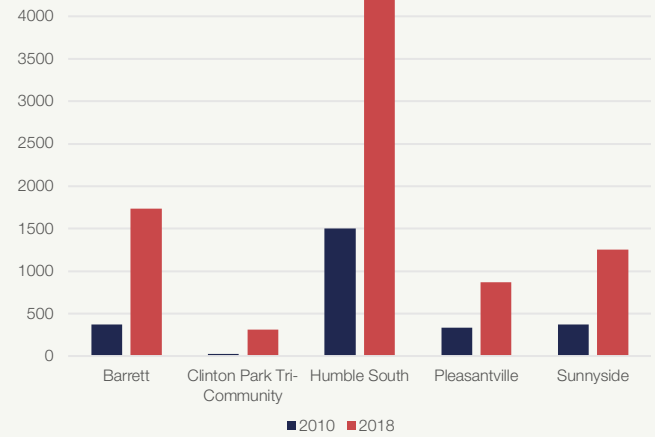
Both Harris County and Houston are economically integrating overall, but trends suggest that we are observing an increase in residential segregation by income in the area's wealthiest and lowest-income neighborhoods. This segregation may increase in gentrifying communities.

Income diversity is another indicator of the ways that neighborhoods are changing. Using a methodology adapted from the Furman Center for Real Estate and Urban Policy, the following charts reflect upon the income diversity present within the neighborhoods comprising Houston and Harris County. The income diversity index is generated by dividing the income earned by the 80th percentile household by the income earned by the 20th percentile household in a given geography. A ratio closer to 10 means there is greater diversity in incomes. A ratio closer to 1 means there is less of a range of incomes.

Both Harris County and the city of Houston as a whole are slightly above the average drawn from individual

FIGURE 24

CTAs with largest percentage change in foreign-born population, 2010–2018



Source: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2010 and 2018.

neighborhoods in the county in terms of income diversity (roughly 4.95 in Harris County and 5.39 in Houston as of 2018). This indicates that there is more economic inequality in many neighborhoods at the smaller geography level than the county and the city overall. Both county and city also became more diverse between 2010 and 2018, increasing about 3% in Harris County and 6% in the city of Houston.

FIGURE 25 Most Income Diverse CTAs, 2018

Neighborhood	Income Diversity Index 2010	Income Diversity Index 2018	Percentage Change 2010–2018
Harris County	4.82	4.95	2.74
City of Houston	5.07	5.39	6.35
Fourth Ward	9.42	7.81	-17.08
MacGregor	7.68	7.80	1.60
Tomball	4.79	6.63	38.35
Museum Park	4.72	6.30	33.42
Settegast	5.96	6.18	3.66
Second Ward	5.21	5.80	11.42
Medical Center	6.15	5.79	-5.87
University Place	5.59	5.78	3.38
Spring Branch East	4.89	5.42	10.83
Lazybrook / Timbergrove	4.05	5.31	31.00

Source: Income Diversity Index calculations completed with data from U.S. Census Bureau, American Community Survey 5-Year Estimates, 2010 and 2018.

FIGURE 26 Least Income Diverse CTAs, 2018

Neighborhood	Income Diversity Index 2010	Income Diversity Index 2018	Percentage Change 2010-2018
Memorial Villages	3.51	2.88	-18.05
Cypress South	3.30	3.00	-9.27
East Downtown	6.92	3.00	-56.63
Tomball South	3.20	3.04	-4.81
Bellaire	3.98	3.05	-23.28
Langwood	3.08	3.06	-0.68
Katy: Harris	3.52	3.07	-12.77
Northwest Houston	2.86	3.09	7.86
West University / Southside	4.27	3.12	-26.92
Copperfield	2.96	3.19	7.62

Source: Income Diversity Index calculations completed with data from U.S. Census Bureau, American Community Survey 5-Year Estimates, 2010 and 2018.

The majority of Houston's most income-diverse neighborhoods are located within Loop 610 (Fourth Ward, MacGregor, Museum Park, Second Ward). All are areas that have undergone significant growth and redevelopment. Within the top 10, all neighborhoods are above average in terms of income diversity. And, with the exception of Fourth Ward and the Medical Center (two neighborhoods where gentrification has led to a loss in low-income residents), all neighborhoods in the top 10 have become more diverse between 2010 and 2018 (growing between 2% and 39% during that time).

By contrast, Houston's least income-diverse neighborhoods run the full spectrum. From high-income enclaves (Memorial Villages, Bellaire), to low-income, minority and/or gentrifying neighborhoods (East Downtown, Langwood), the region's least diverse neighborhoods can be found in pockets all across the region. Notably, with the exception of Northwest Houston and Copperfield, the least income-diverse neighborhoods in Houston and Harris County have grown less diverse between 2010 and 2018—decreasing in income diversity by 1% to an astounding 57%. (Figure 26)

Among the neighborhoods that have grown more economically diverse at the fastest rate between 2010 and 2018, the majority are located on the outskirts of Houston and in the surrounding suburbs—with the exception of Museum Park. Those neighborhoods that have grown less diverse the fastest between 2010 and 2018 are those already identified as gentrified or gentrifying (Montrose,

East Downtown, Fourth Ward, Fifth Ward) or those already identified as high-income (Bellaire, West University, Memorial Villages).

Household compositions are evolving from the traditional, nuclear family to more single-parent, living-alone and unrelated occupants, indicating the demand for different housing types is shifting.

More than half of the new households in Harris County between 2010 and 2018 consisted of non-traditional household types. There was, however, a sharp increase in married households in suburbs such as Cypress and Tomball, where many new single-family subdivisions were developed. Overall, the share of households with



Photo by Jose Losada on Unsplash

FIGURE 27

CTAs with the Highest Percentage of Households Living Alone, 2010–2018

Neighborhood	Living Alone 2010	Living Alone 2010 (%)	Living Alone 2018	Living Alone 2018 (%)	Living Alone Change between 2010 and 2018 (%)
Harris County	353,588	26	413,167	26	17
City of Houston	242,201	32	272,351	32	12
Downtown	1,106	79	1,770	68	60
Midtown	2,122	59	2,531	56	19
Fourth Ward	926	49	1,405	54	52
Montrose	9,620	57	10,120	54	5
Upper Kirby/Greenway	4,210	58	5,148	53	22

Source: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2010 and 2018.

FIGURE 28

CTAs with the Highest Percentage of Households of Unrelated, Non-Family Occupants, 2010–2018

Neighborhood	Non-Family 2010	Non-Family 2010 (%)	Non-Family 2018	Non-Family 2018 (%)	Non-Family Change between 2010 and 2018 (%)
Harris County	75,182	5	88,717	6	18
City of Houston	49,953	7	58,626	7	17
East Downtown	194	26	197	22	2
Midtown	598	17	919	20	54
Fourth Ward	163	9	519	20	218
Washington East	429	12	872	19	103
Museum Park	400	16	707	19	77

Source: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2010 and 2018.

children fell from 41% to 38%.

Between 2010 and 2018, the county's household types evolved as the county saw a large increase in single-parent households (a 19% increase since 2010), householders living alone (a 17% increase) and households with unrelated or non-family occupants (an increase of 18%).

Several areas in the Inner Loop saw the largest increase in the number of householders living alone. Figure 27 shows that Downtown, Fourth Ward and Upper Kirby have the largest percentage of living-alone households. These are also areas where multiple condominiums and higher-end apartment homes have come on the market in the past several years.

There were also relatively large increases in the number of households with unrelated household members or room-mates. Again, those areas with the highest percentage change are mostly inside the Loop and centered on places where high-rent apartments have been built in recent years. (Figure 28)

In addition, the number of non-white households also grew rapidly. Both Harris County and Houston experienced rapid growth in Asian households (33% and 29%, respectively) and Hispanic households (28% and 20%, respectively) between 2010 and 2018. All of these trends indicate that the county's housing stock will have to continue to change to absorb non-traditional housing demand.

Section 3. Housing Supply

This section provides findings related to both the inventory of the existing housing stock and housing in the pipeline between 2010 and 2018. Analyzing the supply of housing helps us understand the relationship between demand and supply at distinct income levels and in communities throughout Harris County and the city of Houston.

Despite a slow start in construction permits coming out of the Great Recession, overall housing supply appears to have kept pace with household growth in the city of Houston between 2010 and 2018. However, the units built in the rest of the county fell behind household growth.

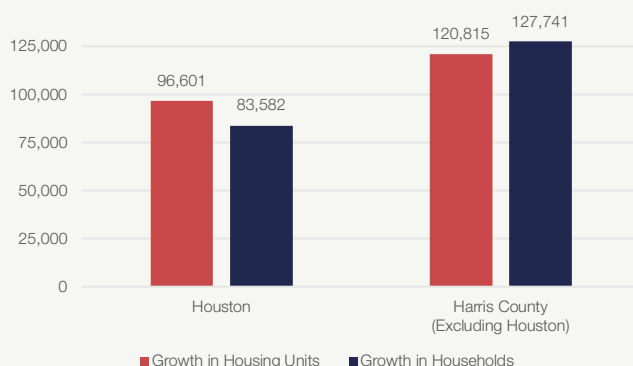
The city recorded more new units than the increase in the number of households between 2010 and 2018. The city added 96,601 new residential units, keeping up with the 83,582 new households. The smaller cities and unincorporated Harris County added 120,815 units between 2010 and 2018 but grew by 127,741 households. Put another way, the

city constructed 116 units for every 100 new households, whereas the rest of the county built only 95 new units per 100 new households. (Figure 29)

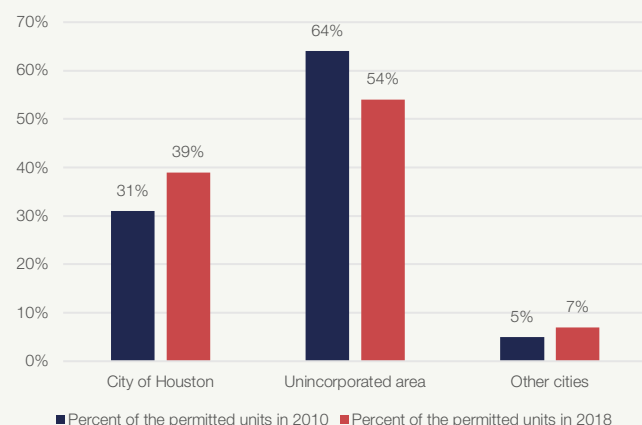
Single-family detached houses provide the overwhelming majority of housing stock in the county for both owners and renters. Trends in the construction of new housing, though, indicate that future housing stock will be more evenly split between multi-family and single-family. Houston, in particular, has seen increased permitting in multi-family units.

The population growth in unincorporated Harris County has been outpacing Houston, and the raw number of building permits in unincorporated Harris County remains higher than in the city. As noted above, however, the pace of development of residential units has struggled to keep up with household growth. At the same time, the city's share of building permits grew noticeably between 2010 to 2018, reflecting a housing building boom that has taken place in Houston during the period. For instance, in 2010, of all building permits in Harris County, only 31% were in Houston, compared to 64% in unincorporated Harris County. By 2018, Houston's share of building permits rose to 39%, compared to 54% in unincorporated Harris County. (Figure 30) The overall growth in permits in both Houston and unincorporated Harris County suggests the post-recession real estate market has rebounded in both locations.

FIGURE 29 Growth in Housing Units and Households between 2010 and 2018



Source: US Census Bureau, Building Permits Survey and American Community Survey 5-Year Estimates, 2010 and 2018.

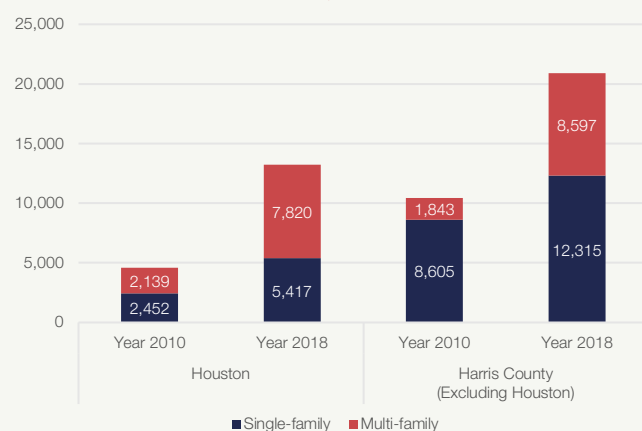
FIGURE 30 Permitted residential units in 2010 and 2018

Source: US Census Bureau, Building Permits Survey.

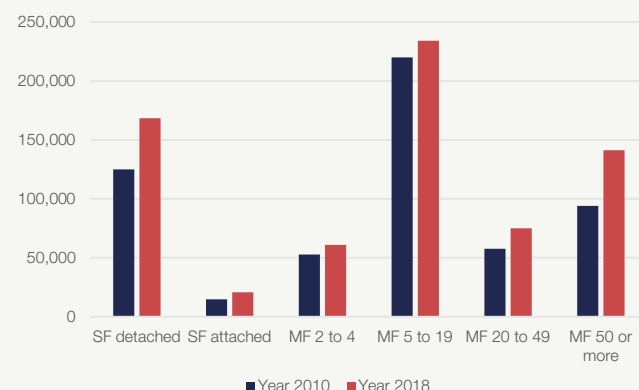
The permits pulled in Houston and unincorporated Harris County, see Figure 31, show a major shift in the type of homes for which builders were seeking permits between 2010 and 2018, with substantial increases in the number of multi-family units permitted.

In Harris County, excluding Houston, multi-family structures increased significantly in 2018 compared to 2010, indicating that multi-family homes in the suburbs are making a range of living arrangements available in areas traditionally associated only with single-family homes.

Inside the city of Houston, six multi-family units were built for every four single-family units in 2018, suggesting that the housing market in the city is responding to market demand for more rental housing options, even if most of these units are at higher price points.

FIGURE 31 Authorized Residential Units, Harris County and Houston, 2010 and 2018

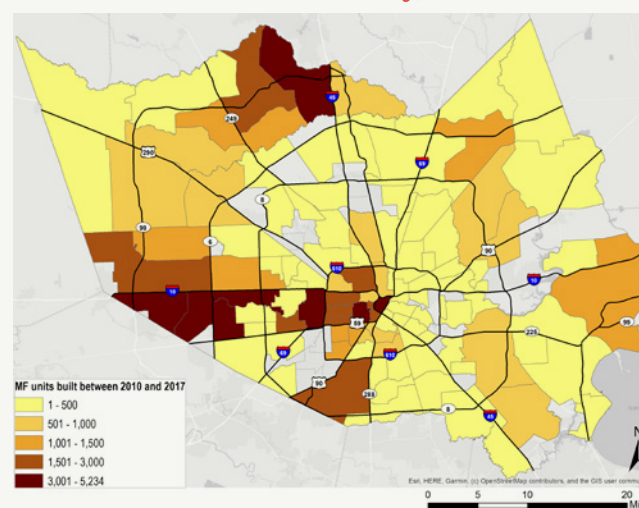
Source: US Census Bureau, Building Permits Survey.

FIGURE 32 Renter-Occupied Units by Property Type, Harris County, 2010 and 2018

Source: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2010 and 2018.

As Figure 32 shows, there were far more renter households in single-family homes in 2018 than in 2010. The number of renters living in single-family detached structures in Harris County sharply increased from 125,000 homes in 2010 to 168,000 in 2018. But, multi-family units remained popular for the county's renters, and especially multi-family units in structures with 50 or more units, which had a sharp increase of 47,000 units.

Geographically, the growth of multi-family units has occurred across both the city and county. There has been a large addition of multi-family homes in the so-called "arrow" running from downtown west along I-10 and Westpark tollway. These are very wealthy communities and the multi-family units built here have been predominantly higher-priced units.

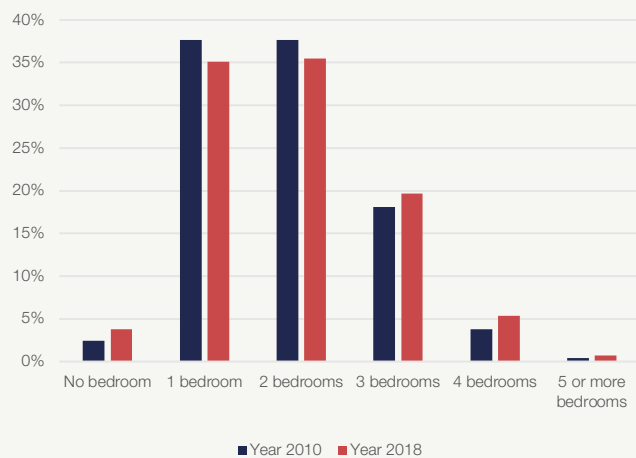
FIGURE 33 New Multi-family units in Harris County, 2010-2017

The majority of owners live in homes with three or more bedrooms. But the majority of renters live in mainly one- or two-bedroom units, leading to some crowding issues among renters.

Approximately 88% of Harris County's owners reside in residential units that have more than three bedrooms. Three-bedroom units are the most frequently found form of owner-occupied housing stock in the county — around 50% of the owner-occupied units. As older heads of households downsize to smaller homes, there could be a growing supply of three- and four-bedroom homes for sale or rent.

In contrast, one- or two-bedroom units were dominant in the rental market. Seven of every 10 renter households occupied units with either one or two bedrooms. However, the most significant change in renter units is a move toward larger units. Whereas the percentage of renters in one- to two-bedroom units in 2010 was 75%, it declined to 71% in 2018. Most of that decline was captured by the number of renters of three-, four- and five-bedroom homes, as shown in Figure 34.

FIGURE 34 Renter-Occupied Housing Unit Percentages by the Number of Bedrooms, Harris County, 2010–2018



Source: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2010 and 2018.

FIGURE 35

Severely Crowded CTAs Among Renters (1.51 occupants or more per room), 2010–2018

Neighborhood	Severely Crowded Renters (2010)	Severely Crowded Renters (2018)	Percentage Change—Severely Crowded Renters (2010–2018)
Galena Park	0%	9%	
Cloverleaf	7%	8%	28%
Park Place	3%	8%	145%
El Dorado / Oates Prairie	10%	7%	–31%
Second Ward	6%	6%	15%
Northshore	4%	6%	80%
Sharpstown	5%	6%	13%
Westwood	12%	6%	–51%
Inwood	5%	6%	27%
Hobby	2%	6%	188%

U.S. Census Bureau, American Community Survey 5-Year Estimates, 2010 and 2018.

The push toward larger units for rentals is also driven by the fact that there is more crowding in rental units. While not a huge overall percentage, renters are more likely to be severely crowded (1.51 occupants or more per room) than homeowners. While only 3% of all renter-occupied households in Harris County and 2% of all renter-occupied households in the city of Houston are severely crowded, in some places, the crowding rate is more severe. For example, 9% of renting households in Galena Park are overcrowded, as are 8% in Park Place. Figure 35 shows the most severely crowded CTAs among renters.

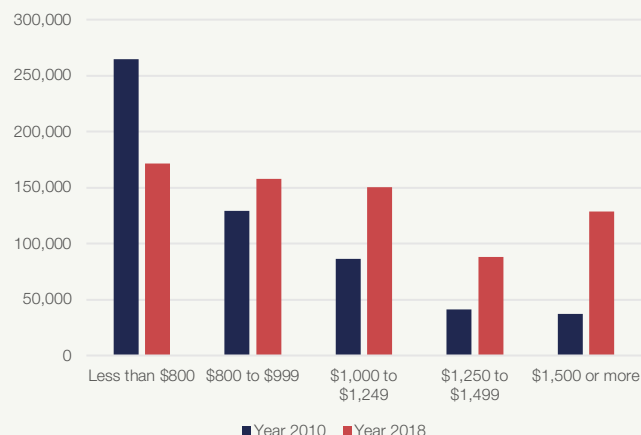
While there is a clear demand for larger units, especially for renter households, the availability and price for larger units likely are keeping many renter households in smaller homes.

Despite construction of new units, affordable rental supply for low- or moderate-income households is rapidly being replaced by unaffordable units.

In 2018, rising gross rent made it much more difficult for lower-income renters to find affordable units. As Figure 36 shows, between 2010 and 2018, there was a significant loss in the number of rental units charging \$800 or less. Meanwhile, the number of units renting at higher than \$1,000 doubled during that time. Many inexpensive rental

FIGURE 36

Renter-occupied Housing Units by Gross Rent, Harris County, 2010 and 2018



Source: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2010 and 2018.

units were replaced with expensive rental units between 2010 and 2018, which shows the county's rental market gradually became unaffordable. These local trends mesh closely with national patterns.²²

"Missing middle" housing stock is stagnant in the city of Houston and limited beyond the city.

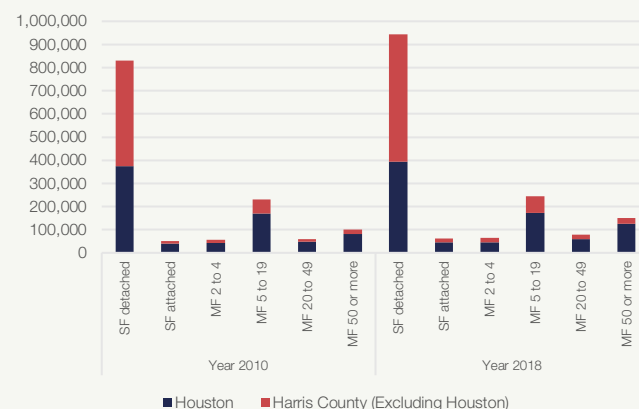
The number of single-family detached and large multi-family homes with more than 50 units sharply increased between 2010 and 2018, as Figures 37 shows. However, most other property types were slow to grow from 2010 to 2018. In both the county and city, the supply of midsize rental units, such as multi-family properties with between two and 20 units, was stagnant. Many of these types, whether duplexes, triplexes or other small multi-family homes can provide an important supply of affordable units. Small gains in the categories between single-family and large multi-family limit options. This is especially true outside of the city of Houston because, as the figure shows, a majority of the smaller-unit buildings are inside the city.

Renter-occupied homes are more likely to be older and face maintenance issues than owner-occupied homes. As the share of homeownership decreases and the share of renters grows, this means many households are moving into aging apartments.

Homes built since 2000 are much more likely to be occupied by owners than renters. About 31% of all owner-occupied single-family homes were built since 2000 in all of Harris County. Renter-occupied homes, conversely, are older, with just over 20% built since 2000. The largest num-

FIGURE 37

Occupied Units by Property Type, Houston and Unincorporated area, 2010–2018



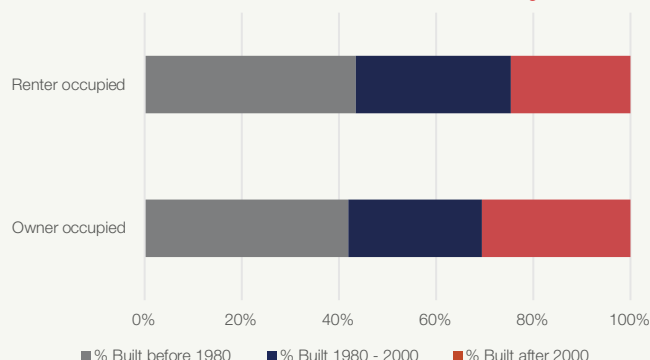
Source: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2010 and 2018.

ber of renter-occupied homes were built in the 1970s, with this stock still making up about 44% of the total. (Figure 38)

This aging stock faces the risk of falling into disrepair or remaining in poor condition.²³ The economic collapse of the oil industry and the convulsions caused by the fallout around COVID-19 could limit upkeep and improvements of aging rental properties. A study from Harvard's Joint Center for Housing Studies found that rental properties equal less than 22% of the home remodeling market during a strong economy and only about 10% during a down economy. In dire economic times, it is likely that landlords will pursue fewer repairs or improvements and many renter households will have to deal with homes in poor condition.²⁴ This is a particularly daunting challenge because there is major growth in renter households across the county and many of these households will be living in older stock.

FIGURE 38

Age of Housing Stock by Tenure, Harris County



Source: U.S. Census Bureau, American Community Survey 5-Year Estimates 2014–2018.

Section 4. Affordability and Access to Housing

The housing system works quite differently for homeowners and renters. Issues of affordability are most stark for low-income renter households, with rising prices stretching household budgets. Middle-income renters are mostly priced out of the ownership market and also face rising rents. The issues of affordability and access to housing are particularly critical around renter households because most households in both the city and the county will soon be renters.

Many homeowners, on the other hand, have benefitted from rising prices. However, access to these benefits is not shared by all homeowners, especially younger households and non-white homeowners, who have seen homeownership rates fall and costs rise.

Renters earn about half as much as homeowners, and incomes of non-white groups fell precipitously for those living in the lowest-income communities, between 2010 and 2018.

The median household income of owner-occupied households is approximately twice that of renter-occupied households in Harris County and the city of Houston. In 2018, the county's median household income for homeowners was \$83,515. In contrast, the county's median household income for renters was \$40,740. The median household income among owner-occupied households in the county was stable between 2010 and 2018, whereas renters' median household income went up by 7%. This trend suggests that even with higher incomes, renter households are either choosing to rent or not able to access homeownership because of rising prices.

Several non-white, low-income communities saw incomes go down between 2010 and 2018. The median household income among black and Hispanic households in the county's lowest-income CTAs fell from 2010 to 2018. (Figures 39 and 40)

Nearly half of all renters are cost-burdened and this figure held steady in both Harris County and Houston between 2010 and 2018. But cost-burdened homeowner households dropped from 29% to 22% during this time.

The widening gap between homeowners and renters is well-known nationally and is playing out locally in unique ways. Those with the means are reaping the benefits of historically low homeownership costs and high home values, while young adults, low-income residents and racial minorities face mounting rental costs and are locked out of home ownership.²⁵ For instance, from 2010 to 2018, the number of rental households spending more than 30% of their income on housing rose 24% — reaching 47% in 2018 — in Harris County while the number of homeowners fell by 18%.

In 2018, close to half of all renters in Harris County were considered *cost-burdened*, meaning they spent more than 30% of their income on housing. Additionally, as Figure 41 shows, nearly half of all cost-burdened renters spent more than 50% of their income on housing, and were considered *severely cost-burdened*. These figures held steady in the county from 2010 through 2018 and rose slightly in the city.

Meanwhile, the share of homeowners spending more than 30% of their income on housing fell sharply in both the county and city during the same time period, from 29% to

FIGURE 39

CTAs with Lowest Household Income among Black Households, 2010–2018

Neighborhood	Black HH—Median Household Income (2018\$) (2010)	Black HH—Median Household Income (2018\$) (2018)	Black HH—Percentage Change (2010–2018)
Gulfgate Riverview / Pine Valley	\$42,505	\$6,696	–84
Lawndale / Wayside	N/A	\$10,855	N/A
Jacinto City	\$25,395	\$14,048	–45
Magnolia Park	\$49,924	\$15,163	–70
Northside / Northline	\$14,112	\$18,704	33
Fourth Ward	\$23,093	\$20,192	–13
Eastex / Jensen	\$22,166	\$20,371	–8
Fifth Ward	\$19,145	\$20,706	8
Settegast	\$21,148	\$21,161	0
Sunnyside	\$26,868	\$22,669	–16

Source: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2010 and 2018.

FIGURE 40

CTAs with the Lowest Household Income Among Hispanic Households, 2010–2018

Neighborhood	Hispanic HH—Median Household Income (2018\$) (2010)	Hispanic HH—Median Household Income (2018\$) (2018)	Hispanic HH—Percentage Change (2010–2018)
Settegast	\$49,415	\$24,922	–50
Gulfton	\$28,927	\$26,484	–8
Pleasantville	\$58,506	\$26,844	–54
Third Ward	\$31,933	\$27,045	–15
Westwood	\$25,183	\$27,230	8
Fifth Ward	\$36,702	\$29,524	–20
Sharpstown	\$33,508	\$31,134	–7
Clinton Park Tri-Community	\$20,021	\$31,287	56
Magnolia Park	\$34,149	\$31,349	–8
Greenspoint	\$34,291	\$31,505	–8

Source: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2010 and 2018.

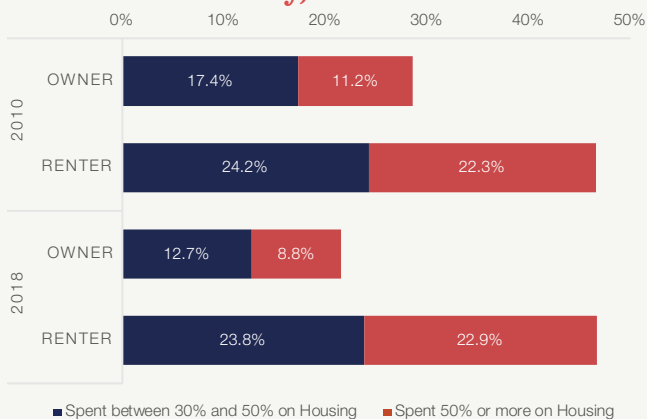
22%—primarily due to low-interest-rate refinancing and gradual recovery from the Great Recession.

Cost burden is particularly problematic for lower-income renters, as Figure 42 shows.²⁶ But affordability issues exist for low-income homeowners as well. For example, in 2018, 72% of renter households and 53% of owner households making less than \$50,000 a year were cost-burdened.

The supply of high-value homes is increasing while the supply of more affordable housing is declining.

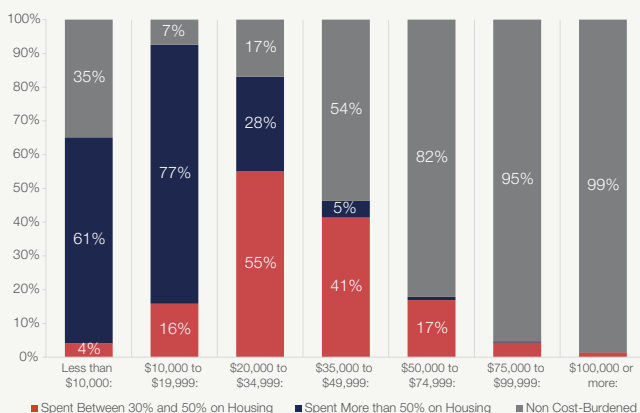
As Figure 43 shows, the number of homes valued below \$150,000 dropped between 2010 and 2018, while the number of homes valued above \$150,000 increased. The declining supply of lower-value homes pinches supply

FIGURE 41 Cost Burden among Renters and Homeowners, Harris County, 2010–2018



U.S. Census Bureau, American Community Survey 5-year Estimates, 2010 and 2018

FIGURE 42 Cost-Burdened Renter Households by Income Level, Harris County, 2018



Source: U.S. Census Bureau, American Community Survey 5-Year Estimates 2014–2018

and makes it more difficult for first-time and lower-income homebuyers to find homes they can afford without significant subsidy.

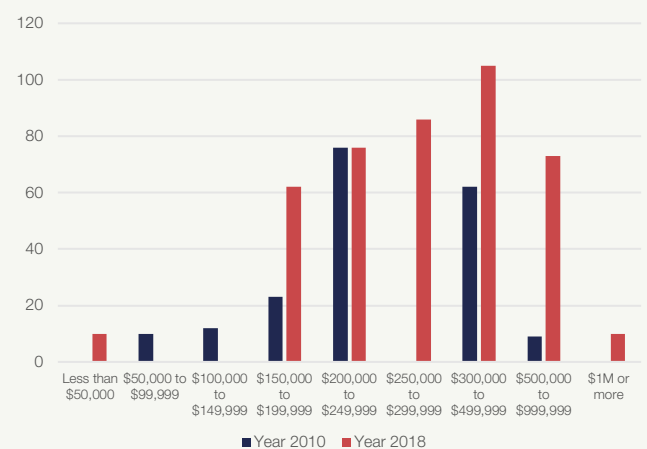
The experience of individual neighborhoods highlights this trend. In 2018, the Downtown CTA saw most homes valued above \$150,000, with the majority of homes assessed at more than \$250,000, as Figure 44 shows. Downtown's numbers reflect a unique situation in that the units primarily are the result of the City of Houston's downtown living initiative, which incentivized developers to build condominiums and apartments in the central business district in the mid-2010s. However, there were almost no requirements for the inclusion of affordable homes, and the value distribution clearly reflects that policy choice.

FIGURE 43 Home Value Distribution, Harris County, 2010–2018



Source: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2010 and 2018

FIGURE 44 Home Value Distribution, Downtown CTA, 2010–2018



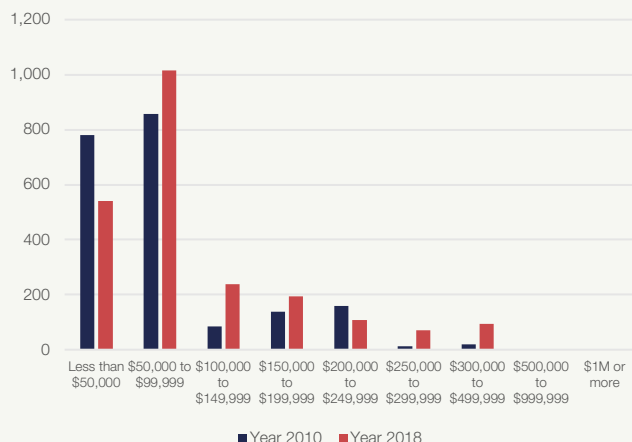
Source: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2010 and 2018

In the Fifth Ward, which is one of the CTAs facing significant gentrification pressures, the value distribution captures the ways that redevelopment pressure can shift a neighborhood's housing situation. In 2010, as Figure 45 shows, the bulk of homes in the CTA were valued at less than \$100,000. By 2018, there appears to have been natural value growth, with many homes' values filtering up, but there were also large jumps in the number of units at significantly higher prices as redevelopment took place throughout the community.

The gap between the median sales price of homes and the median household income is growing, illustrating the struggle that many residents face when trying to purchase a home. The gap is especially exacerbated for renters and within the city of Houston.

FIGURE 45

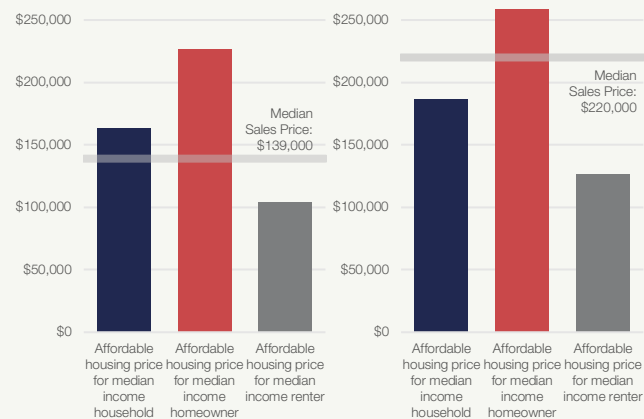
Home Value Distribution, Fifth Ward CTA, 2010–2018



Source: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2010 and 2018

FIGURE 46

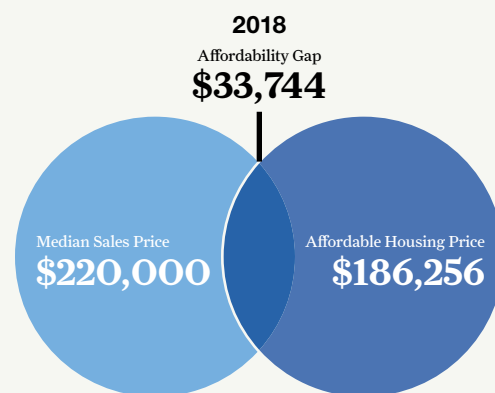
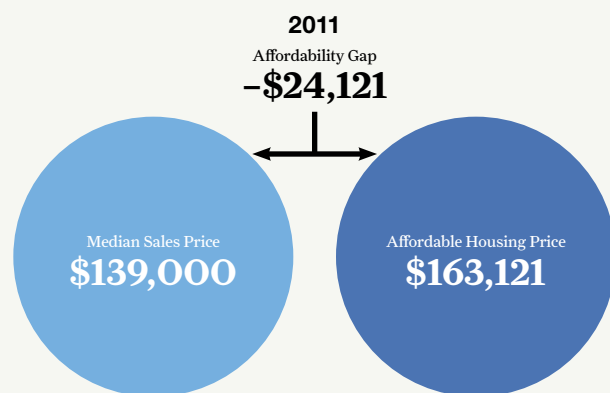
Affordability Gaps, Harris County, 2011 and 2018



Source: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2011 and 2018, and Houston Association of Realtors

FIGURE 47

Affordability Gap for All Households Making Median Household Income in Harris County, 2011 and 2018



Source: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2011 and 2018, and Houston Association of Realtors

The affordability gap — the difference between the median sales price and median income — widened in both the county and the city between 2011 and 2018.

Affordable housing prices were calculated assuming that a sustainable amount of household income to spend on housing is 30%, which is a commonly accepted definition of affordability. Monthly payments that meet that threshold were calculated for median income levels among all households, among owners and among renters. These were then used to determine the threshold home prices that households with a median income in each group could meet while spending a sustainable amount on housing.²⁷ The median household income among renters is lower than that of both homeowners and all households.

Figure 46 shows that the affordability gap grew worse for households making the median household income in Harris

County between 2011 and 2018. For homeowners, homes remained affordable and attainable. For renters, however, homeownership grew further out of reach during this time.

Most significantly, by 2018, a household with the median income could not afford a median-priced house.

For a full description of how these numbers were reached, see Appendix A.

A closer look shows just how much the gaps have grown. As Figure 47 shows, in 2011, a Harris County household with a median income of \$52,675 could afford a home of \$163,121 without spending more than 30% of their income. That was comfortably above the median sales price of \$139,000, and created a surplus of \$24,121. By 2018, a household with a median income of \$60,146 could afford a home of \$186,256, but the median sales price had jumped to \$220,000, creating a \$33,744 gap.

FIGURE 48

Affordability Gap for Renter Households Making Median Household Income among Renter Households in Harris County, 2011 and 2018



Source: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2011 and 2018, and Houston Association of Realtors

FIGURE 49

Affordability Gap for All Households Making Median Household Income in the City of Houston, 2011 and 2018



Source: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2011 and 2018, and Houston Association of Realtors

FIGURE 50

Affordability Gap for Renter Households Making Median Household Income among Renter Households in the City of Houston, 2011 and 2018



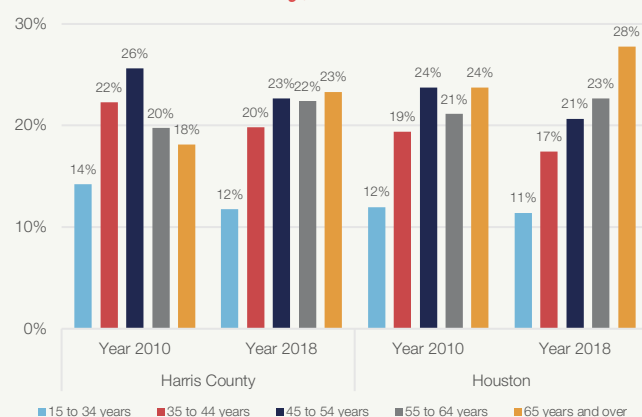
Source: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2011 and 2018, and Houston Association of Realtors

FIGURE 51

Owner-Occupied Households in Houston and Harris County, 2010–2018

	Owner-Occupied HHs (2010)	Homeownership Rate (2010)	Owner-Occupied HHs (2018)	Homeownership Rate (2018)
Harris County	793,400	58%	865,645	55%
City of Houston	356,601	47%	364,153	43%

FIGURE 52

Homeowners by Householder Age, Harris County, 2010 and 2018

Source: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2010 and 2018

Median household income among renter households in Harris County is lower than the overall median income. As Figure 48 shows, among renters in Harris County, the median household income was \$33,590 in 2011 and grew to \$40,740 in 2018.

At that median income, a renter in 2011 could afford a home priced at \$104,019, but the median sales price was \$139,000, resulting in a \$34,981 gap. In 2018, a renter household making the renter median income could afford a home of \$126,160, but the median sales price was \$220,000, resulting in a \$93,480 gap. This growing gap has put homeownership out of reach even for median-income renters.

As Figure 49 shows, from 2011–2018, the affordability gap for households in Houston became greater regardless of whether one was an owner or a renter. For all households, the Houston median household income grew from \$44,124 in 2011 to \$51,140 in 2018. A median-income household in 2011 could afford a \$136,639 home, but median sales prices were already \$167,900, a gap of \$31,261. By 2018, the affordable price for a median-income household in Houston had risen to \$158,365, but median sales prices had risen to \$268,900, resulting in a \$110,535 gap.

The gap for renters in the city is even starker, as Figure 50 illustrates. Renter households in Houston had a median household income of \$32,171 in 2011, and it rose to \$38,106 by 2018. At that median income, a renter household in 2011 could afford a home priced at \$99,625, but with the median sales price at \$167,900, there was an affordability gap of \$68,275. By 2018, a renter household making the median household income among renters could afford a home of \$118,004, but median sales prices had risen to \$268,900, resulting in a gap of more than \$150,000. There were 223,000 renter households in Houston in 2018 that made less than the median income and faced a major affordability gap if they wanted to purchase a home.

Homeownership rates are decreasing in the County and City.

Both Houston and Harris County saw a decrease in the proportion of homeowners, confirming that the cost of homeownership is a growing challenge for residents looking to purchase a home. The county's homeownership rate in 2018 was about 55%, down from 58% in 2010. The city of Houston's homeownership rate was even lower than the county's in 2010, at 47%, and fell to 43% by 2018. (Figure 51)

Upon closer examination, we find that low-income households, those headed by young adults (under 44), those headed by middle-aged homeowners (45–54), and black households have seen declines in homeownership.

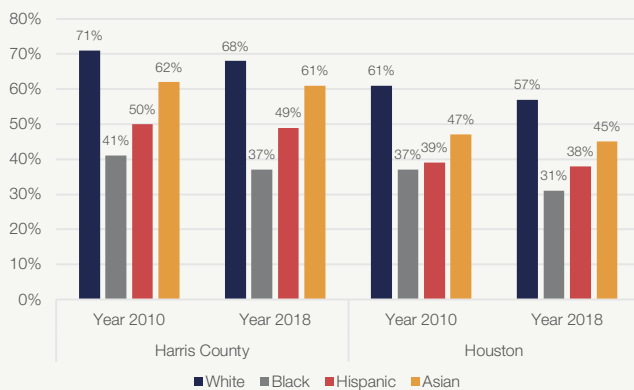
As Figure 52 shows, the number of homeowners under 54 declined from 2010–2018.

In addition, between 2010 and 2018, the share of low-income homeowners — especially those making \$20,000–\$49,999 — declined from 24% to 13% of all homeowners in Harris County. Moderate to low-income households increasingly are unable to afford homes in Harris County, relying instead on the rental market.

Black households did not experience the same economic recovery in the past decade compared to white, Hispanic and Asian households. Many of

FIGURE 53

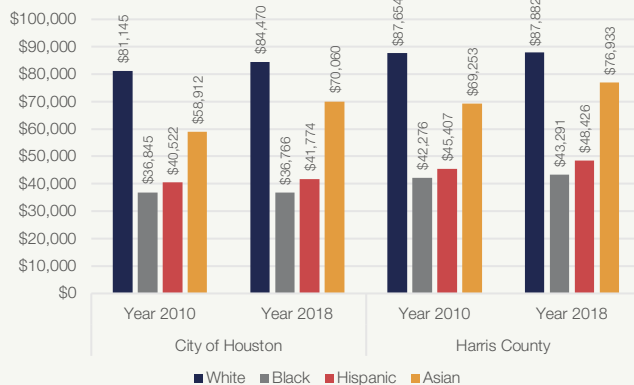
Homeownership Rates by Race and Ethnicity, Harris County and Houston, 2010 and 2018



Source: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2010 and 2018

FIGURE 54

Median Income by Race and Ethnicity, Harris County and Houston, 2010–2018



Source: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2010 and 2018

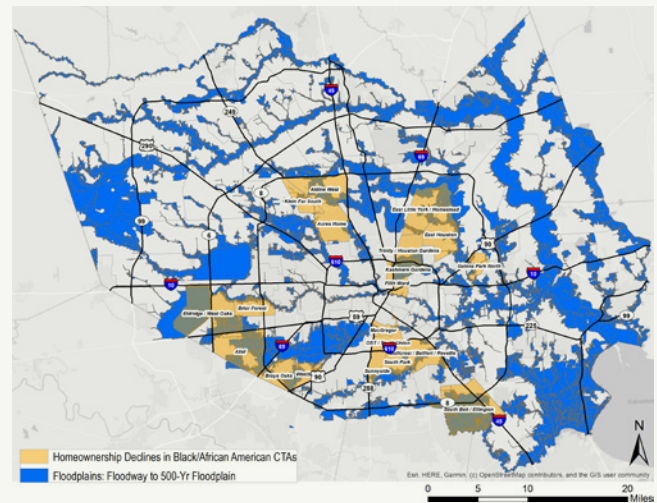
the neighborhoods where black homeownership rates fell most are in areas that were hit hard by major flooding.

While all groups saw declines in homeownership between 2010 and 2018, black homeownership fell the most and to the lowest percentage overall. Black homeownership fell from 41% in 2010 to 37% in 2018 across Harris County, and from 36% to 31% in the city of Houston. White homeownership fell from 72% to 68%, Asian homeownership fell from 63% to 62% and Hispanic homeownership fell from 50% to 49%. (Figure 53)

Likewise, black households' median household income continued to trail behind other racial and ethnic groups. In 2018, the median household income of black

FIGURE 55

Overlap between floodplains and CTAs with declining rates of black homeownership



households was the lowest among all racial and ethnic groups — \$43,291 in the county as a whole and \$36,766 in the city. Both numbers essentially were unchanged between 2010 and 2018. The median household income of black households was about \$5,000 less than that of Hispanic households and far less than that of Asian (\$34,000) and White households (\$45,000) in Harris County in 2018. (Figure 54)

Importantly, we observed that predominantly black neighborhoods where black homeownership rates declined between 2010 and 2018 were also neighborhoods facing repeated flood risk. (Figure 55) Neighborhoods such as Kashmere Gardens, Trinity, Brays Oaks, Sunnyside, Alief, Eldridge-West Oaks, South Belt-Ellington, East Little York and Galena Park North (North Shore) all had a precipitous drop in black homeownership and were hit hard by major storms in the past decade—indicating black households disproportionately face devastating impacts of natural disasters that are wiping out wealth-building potential among black families. (See Figure 56)

Houstonians must earn \$21.02 an hour to pay for an average two-bedroom market-rate apartment.

While faring slightly better than the national average (Figure 57), low-wage workers in Harris County face a formidable challenge in securing a home at an affordable price.

The median rent for a two-bedroom home in Harris County is \$1,093 a month. A typical minimum-wage worker makes about \$1,200 a month. In order to reach a level where

FIGURE 56

CTAs with Largest Declines in Black Homeowners, 2010–2018

Neighborhood	Black Homeowners (2010)	Black Homeownership Rate (2010)	Black Homeowners (2018)	Black Homeownership Rate (2018)	Percentage Change - Black Homeowners (2010-2018)
Kashmere Gardens	1,384	45%	922	36%	-33
Golfcrest / Bellfort / Reveille	1,959	45%	1,362	31%	-30
Trinity / Houston Gardens	3,236	63%	2,287	52%	-29
Fifth Ward	1,491	36%	1,115	31%	-25
Briar Forest	224	6%	176	4%	-21
Klein Far South	1,490	55%	1,188	45%	-20
Alief	3,307	26%	2,672	22%	-19
Galena Park North	1,218	41%	987	28%	-19
South Belt / Ellington	2,415	46%	1,963	32%	-19
Brays Oaks	3,627	48%	3,013	37%	-17
South Park	4,858	64%	4,103	58%	-16
OST / South Union	3,014	47%	2,584	39%	-14
East Houston	2,520	57%	2,183	52%	-13
East Little York / Homestead	4,428	75%	3,925	67%	-11
Eldridge / West Oaks	833	15%	750	10%	-10
Aldine West	1,597	47%	1,462	44%	-8
MacGregor	1,931	42%	1,787	45%	-7
Acres Home	5,159	58%	4,869	57%	-6
Sunnyside	2,096	43%	2,035	40%	-3
Westbury	1,301	23%	1,282	23%	-1

Source: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2010 and 2018

FIGURE 57

	Median Rent for 2 BR	Median Hourly Wage Needed to Pay for Median Rent	Median Hourly Wage of Low-Wage Workers	Minimum Wage Hours Needed for Low-Wage Workers to Pay for Median Rent
US	\$1,194	\$22.96	\$10.22	89 hrs
Harris County	\$1,093	\$21.02	\$10.92	77 hrs

the median rent is not more than 30% of their income, a minimum-wage worker would have to work 115 hours a week — nearly three full-time jobs — to afford this rent.

Even at a slightly higher median hourly income for low-wage workers, which equates to about \$1,800 a month, a worker would have to log nearly 77 hours a week (equal to two full-time jobs).²⁸ The median hourly rate was calculated by using the Bureau of Labor Statistics data for wages in the most commonly held low-wage jobs in Houston.

Many households do have two or more wage earners and the gaps may be smaller or nonexistent. However, with the rising number of single-parent and single-person households, there is a real concern that a number of single-earner households face a challenge in finding enough work to afford their home.

There is a lack of rental homes available to extremely low-income households.



Photo by Paul Sablman/flickr

Compounding this affordability challenge, according to the National Low-income Housing Coalition (NLIHC), the Houston Metropolitan Area confronts one of the most severe shortages in affordable rental housing for extremely low-income (ELI) households (those earning less than 30% of area median family income, or \$22,170 in the Houston metro area), which is 9% of the households in the metro area. Only 19 affordable homes exist and are available for every 100 ELI renter households in the metro region.²⁹ The “available” part of NLIHC’s number is critical. Their methodology identifies the number of affordable units overall, but then subtracts the units that are currently held by households with incomes above ELI households. So, while the raw number of affordable homes may be higher, a smaller percentage is available to ELI households due to competition for units from households across income levels.

The small number of publicly subsidized units and limited housing choice vouchers fail to make up for gaps in market-rate housing for extremely low-income households.

The gap in market-rate affordable units for ELI households is not closed by publicly subsidized homes or hous-

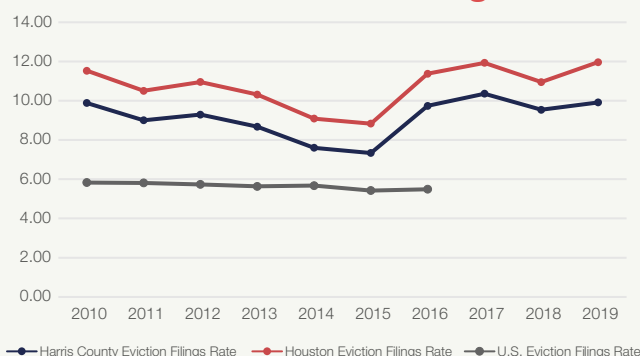
ing choice vouchers (HCVs). Subsidized homes usually are provided through a range of federal programs such as the Low Income Housing Tax Credits, project-based rental assistance or traditional public housing. While these programs typically are targeted at households making 0–60% of median income, they also include units available to households making up to 80% median income. Again, this means that not all subsidized units are available to ELI households. The HCV program is another major source of subsidy and can be used on the private market to allow recipients to rent a home they otherwise couldn’t afford.

Across both major subsidy groups, there are approximately 76,954 subsidized units in Harris County.

The American Community Survey shows that there are 216,699 ELI households in Harris County and only 61,578 market-rate apartments affordable to these households. This leaves 155,121 ELI households in need of access to affordable units. Subtracting the 76,954 subsidized units leaves a gap of 78,167 ELI households with no access to a subsidized unit or affordable market home.³⁰ Again, however, not all of the HCVs, subsidized and market-rate affordable units are held by ELI households. So, it’s likely the gap is much larger.

FIGURE 58

Harris County Eviction Filings Rate Compared to U.S. Eviction Filings Rate



Source: Harris County Justice Courts for Harris County and Houston Eviction Filings Rate from data collected and shared by January Advisors. The Eviction Lab at Princeton University for U.S. Eviction Filings Rate.

Furthermore, increases in subsidies are not keeping up with demand. Traditionally subsidized housing units in Harris County have increased by 20% across all jurisdictions since 2010. About 73% of this increase was located in the city of Houston. (Some 80% of all non-voucher subsidized units in Harris County are in the city.)

Meanwhile, the total number of HCVs in Harris County increased by just 8% between 2010 and 2019. Every area housing authority has a waitlist.

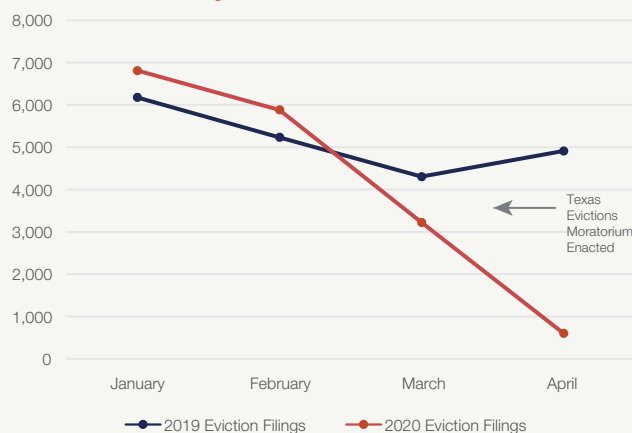
The number of evictions in Harris County has steadily risen since 2010.

Eviction leaves already-vulnerable families in an even more precarious position. It can lead to high levels of mobility, homelessness and has profound financial and economic impacts. January Advisors, a data science firm in Houston, has done a close analysis of more than 20 years of evictions data using Harris County court records. In 2019, there were 72,811 eviction filings, according to court records, and at least 35,335 evictions conducted in Harris County. Another 10,856 eviction filings had no reported outcome, but some portion of that number is likely de facto evictions in which tenants moved out, rather than contesting the claim. The Kinder Institute's own analysis of these records indicates Harris County's eviction filings rate (the number of eviction filings divided by total renter households) is hovering just below 10% and those in Houston are just under 12%, well above the national average of less than 6% (Figure 58). These numbers put Harris County among the leading counties in the nation for evictions.³¹

Evictions are one of the areas in which COVID-19 is likely to have one of its largest impacts. With thousands of

FIGURE 59

Harris County Eviction Filings by Month, 2019 and 2020



Source: Harris County Justice Courts from data compiled and shared by January Advisors.

Houstonians out of work and losing income, the danger of losing one's home because of unpaid rent is a major concern for many. While Texas, among other states, instituted an eviction moratorium at the beginning of the response to the pandemic, it did not prevent filings. The order expired in late May 2020. According to Harris County Court records, there was a huge drop in eviction filings during the first two months of the pandemic compared to the prior year (Figure 59). Between when the eviction moratorium was put in place in mid-March 2020 and May 19, 2020, there were 1,465 filings made. How the filings and evictions jump in the months after the state moratorium expires will be a critical impact of the coronavirus pandemic to track.

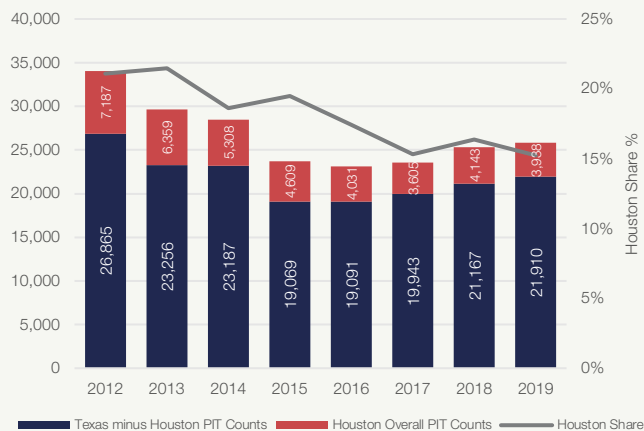
Homeless Point-in-Time Counts have decreased every year, with the exception of a surge in 2018, largely due to Hurricane Harvey.

Eviction and other housing instability threatens to increase the number of Houstonians experiencing homelessness. The Houston region's concerted efforts since the early 2000s to address homelessness through the local Continuum of Care (CoC), known as The Way Home, have helped decrease the overall homeless population and add units to support this population on a more sustainable basis. The CoC coordinates services across agencies and jurisdictions to improve response.

The latest point-in-time homeless count in 2019 shows nearly 4,000 people experiencing homelessness at any given moment in the Houston Metro area, which is approximately 15% of the overall homeless count in Texas. Despite an increase in point-in-time count results in 2017 after Hurricane Harvey, the overall point-in-time count

FIGURE 60

Homeless Point-in-Time Counts, Texas and Houston Region, 2012–2018



in Houston has decreased by an average of 13% annually, while the overall homeless count in Texas has only reduced by 3.5% each year. Overall, the Houston numbers settled at a 45% decline in homeless counts between 2012 and the latest available count in 2019. This decrease is an indicator of success in a community's housing programs and homeless services. (Figure 60)

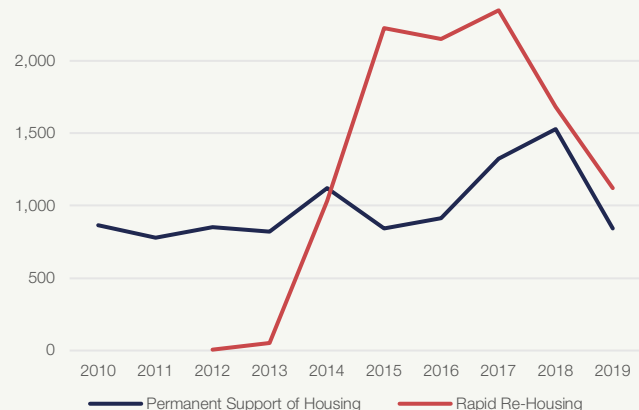
Permanent supportive housing and rapid re-housing programs have become critical pieces of homelessness response in Houston and Harris County. Both programs are considered to be effective in moving people out of homelessness and are likely contributors to the city's success against homelessness compared to the aggregate success in Texas.



Photo by Patrick Feller/flickr

FIGURE 61

New People Housed through PSH and RRH, yearly. Houston Region, 2010–2019



Permanent supportive housing (PSH) is a model combining affordable housing and supportive services to help individuals and families live stable lives. This is generally accepted as a critical method to alleviate homelessness. In the Houston area, the PSH program has increased the number of new people it serves by an average of 3.5% each year, as units come online.

A relatively new model in the fight against homelessness is rapid re-housing (RRH), which provides short-term rental assistance and services to help people remain housed and increase self-sufficiency. The program has shown empirical evidence of shorter periods of homelessness than those assisted with shelter or transitional housing.³² The RRH program in Houston's CoC was launched in 2012 and quickly took off between 2013 and 2015 before seeing a drop in new people housed as the system reached capacity. These numbers are unduplicated, meaning they only count each individual client once, even if they come into and out of the system. Therefore, there could be an undercount. (Figure 61)

Despite the declines in new people served, the overall number of people served by PSH has continued to grow, while the number of total people served in the RRH program has declined because of no new RRH projects and limited housing vouchers.

Despite the gains in addressing homelessness, there is significant concern that COVID-19 may greatly increase the number of residents experiencing homelessness. With evictions likely to increase and people losing income, many more residents are vulnerable.

Section 5. Cross-cutting Connections to Housing

Three elements that foundationally impact the housing sector and the lives of residents in cross-cutting ways are transportation, flooding and gentrification pressures. These topics don't fit neatly into any of the preceding sections but instead touch on elements of each piece. Therefore, they are called out here.

When combined, housing and transportation costs are at the edge of affordability for the average Harris County household. For lower-income homes, the combined costs quickly become unsustainable.

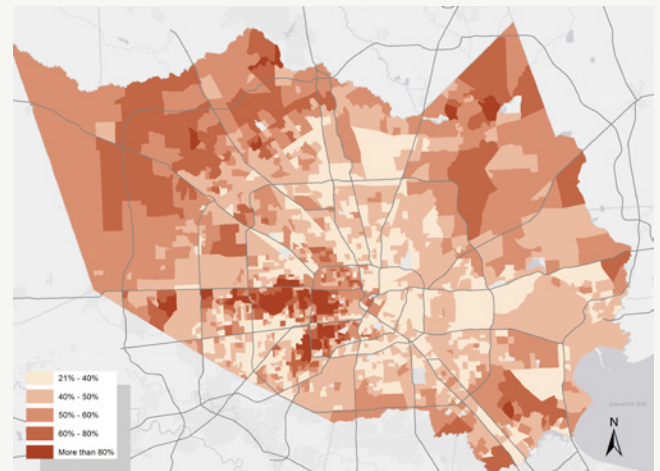
Houston's spread out, car-centric design has led to higher than average transportation costs for most residents.³³ In many cases, the financial benefits of cheaper homes farther outside of the core are lost by higher transportation costs. The average Houston resident spends 45% of their income on housing and transportation expenses. For the entire county, the average household spends 47%, a slight uptick tied to longer, more costly commutes.³⁴ As incomes decline, though, the combined costs of housing and transportation grow, with moderate-income households (between 80% and 120% median income) spending 53% on both costs.³⁵

The percentages also vary greatly depending on location. Figure 62 shows that in the western portions of the Inner Loop and along Buffalo Bayou, higher housing costs are driving up the overall housing-plus-transportation costs. Similarly, more suburban areas have higher costs, primarily due to higher transportation expenses.

What is clear is that households often face a difficult choice: Either find cheaper living arrangements on the edges of the city of Houston that require costly transportation or pay higher prices for housing in exchange for lower transportation costs. For lower-income workers trying to strike that balance, this decision is particularly

FIGURE 62

Housing and Transportation Costs as a Percent of Median Household Income, Harris County, 2018



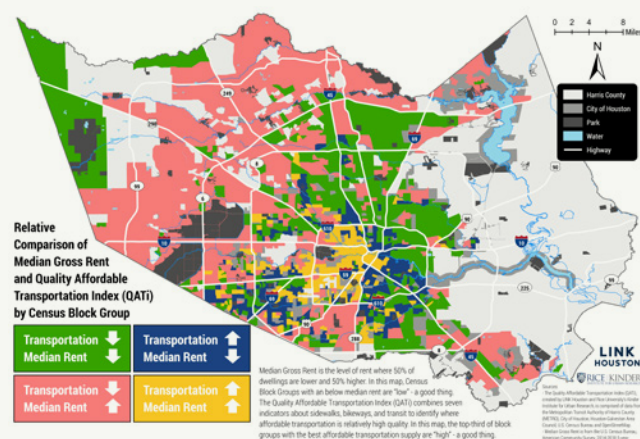
Source: Center for Neighborhood Technology, H+T Index, 2018

hard because in many areas where housing is affordable, access to public transit is poor.

LINK Houston and the Kinder Institute for Urban Research recently conducted a study entitled “Where Affordable Housing and Transportation Meet in Houston,” which illustrates the difficulty of balancing housing and transportation. The report found that only 44% of rental units in Houston were affordable to moderate-income households (defined as a family of four in

FIGURE 63

Quality Transportation and Median Rent, Harris County 2018



LINK Houston and Kinder Institute, "Where Affordable Housing and Transportation Meet in Houston"

Houston in 2019 spending no more than \$1,907 per month on housing plus utilities) and that only one out of three of those affordable dwellings was near high-quality, affordable transportation.

Figure 63 shows areas in green where housing costs are low, but access to public transportation is poor. In these areas, low-income residents lose the benefit of lower housing prices through longer and more costly commutes. On the flip side, yellow areas have great access to affordable, quality transit, but housing prices are often too high for lower-wage workers. Finding a balance between housing and transportation costs becomes a harder needle to thread as rents rise throughout the county and households are pushed into areas with limited transit access. The report highlighted broad policy goals to reduce those challenges by improving access to both affordable housing and transit.

There is a growing mismatch between home locations and jobs. This is particularly problematic for low-wage workers who have long

commutes. Mid-wage and high-wage workers have jobs throughout the county and have greater flexibility in where they live. High-wage workers, in particular, live across the county and can afford longer commutes without taxing household incomes.

The Census Longitudinal Employer-Household Dynamics (LEHD) dataset explores the work/home locations of different income groups — low-wage, medium-wage and high-wage, see Figure 64.³⁶

For all workers, the largest job centers remain Downtown, the Medical Center, both airports and other areas such as the Energy Corridor and Uptown. However, when looking at percent change for both work locations and homes, interesting trends emerge.

For low-wage workers in Harris County, job and home locations have remained remarkably consistent from 2010 to 2017. The top two home locations for low-wage workers (Alief and Pasadena) have remained the same between 2010 and 2017, but areas of growth for low-wage worker's home locations have been outside of the urban core of Houston and are concentrated in the suburbs. At the same time, the top job locations have not changed much, though there are signs of growth in some more suburban areas. (Figure 65)



Photo by Random Sky on Unsplash

FIGURE 64

LEHD Income Definitions

	Monthly	Annual	Hourly (full-time)
Low-wage	\$1,250 or less	\$15,000 or less	\$7.81 or less
Medium-wage	\$1,251-\$3,333	\$15,000-\$40,000	\$7.81-\$20.83
High-wage	More than \$3,333	More than \$40,000	More than \$20.83

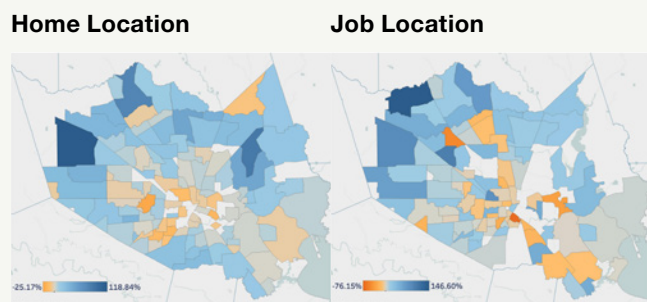
FIGURE 65

LEHD Low-wage Worker Home and Job Locations by CTA, 2010 and 2017

Home Locations (2010)		Home Locations (2017)	
Alief	14,254	Alief	15,233
Pasadena	12,834	Pasadena	13,083
Baytown	7,951	Bear Creek	9,603
South Belt / Ellington	7,371	Katy North	9,072
Bear Creek	7,113	South Belt / Ellington	8,344
Katy North	7,094	Baytown	8,337
Sharpstown	6,774	Five Corners	8,064
Copperfield	6,640	Spring Southwest	7,623
Five Corners	6,628	Copperfield	7,511
Spring Southwest	6,038	Cypress North	7,108
Job Locations (2010)		Job Locations (2017)	
Uptown	19,032	Downtown	17,377
Sharpstown	15,924	Uptown	16,912
Downtown	14,765	Sharpstown	16,713
Pasadena	13,614	Pasadena	13,597
Upper Kirby / Greenway	13,194	Upper Kirby / Greenway	11,293
Memorial	9,413	Memorial	10,931
Alief	8,373	Alief	9,392
IAH	8,028	IAH	9,131
Baytown	7,358	Katy North	8,234
Westchase	7,239	Astrodome	7,663

Source: U.S. Census Bureau, 2010 and 2017 Longitudinal Employer-Household Dynamics Origin-Destination Employment Statistics

FIGURE 66

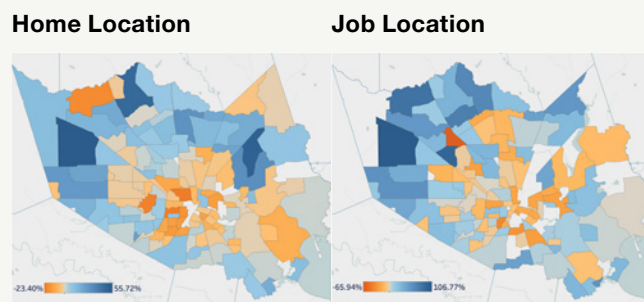
Growth in Low-Wage Workers' Home and Job Location by CTA, 2010–2017

Source: U.S. Census Bureau, 2010 and 2017 LEHD Origin-Destination Employment Statistics Residence Area Characteristics and Workplace Area Characteristics, calculations by Kinder Institute staff. Only CTAs with 1000 or more home or job records in 2017 are shown.

For medium-wage workers, home location growth has almost completely been outside of Beltway 8, and mid-wage job growth also has been outside of the Beltway.

For high-wage workers, home and work locations are spread throughout the county, demonstrating that those with the highest incomes have the most flexibility in choosing where to live and work.

FIGURE 67

Growth in Mid-Wage Workers' Home and Job Location by CTA, 2010–2017

Source: U.S. Census Bureau, 2010 and 2017 LEHD Origin-Destination Employment Statistics Residence Area Characteristics and Workplace Area Characteristics, calculations by Kinder Institute staff. Only CTAs with 1000 or more home or job records in 2017 are shown.

A quarter of homes face significant flood risk and the number is likely to grow as new maps expand mapped floodplains.

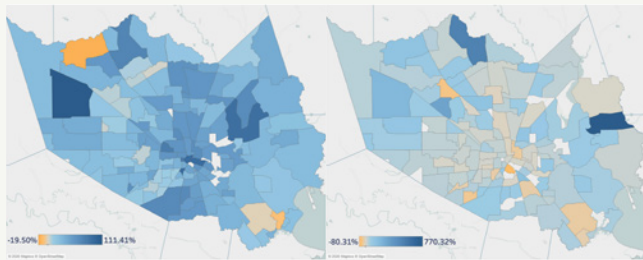
Flooding represents a constant risk to every resident in Houston and Harris County. As Hurricane Harvey and the other major flooding events of the past five years have shown, the lives of everyone in the region can be disrupt-

FIGURE 68

Growth in High-wage Workers' Home and Job Location by CTA, 2010–2017

Home Location

Job Location



Source: U.S. Census Bureau, 2010 and 2017 LEHD Origin-Destination Employment Statistics Residence Area Characteristics and Workplace Area Characteristics, calculations by Kinder Institute staff. Only CTAs with 1000 or more home or job records in 2017 are shown.

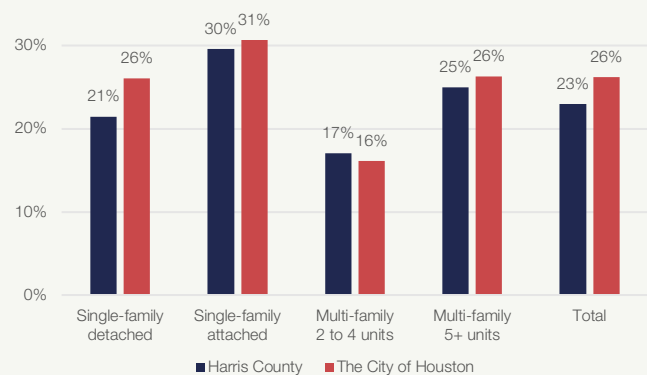
ed significantly by storms. While economic disruptions and infrastructure damage resulting from storms impact all residents, those whose homes are damaged or whose homes are located in areas at the highest risk of future storms are impacted the most.

The number of homes located in floodplains in Houston and Harris County is staggering. This is partly a result of topography. The county is very flat and huge swathes of developable land sit in floodplains. That low-lying land, though, has also been almost completely developed in the past 80 years. And for most of the region's period of rapid growth, almost no floodplain building restrictions were in place. Even into the early 2000s, both the county and city regularly permitted structures in some of the highest-risk areas. While both jurisdictions began significant regulatory shifts in the 2000s and 2010s, which were cemented after Harvey, the legacy of decades of less regulated building has left hundreds of thousands of homes and residents at risk.

A total of 402,976 homes are located within the 500-year floodplain in Harris County, 23% of the total residential units in Harris County.³⁷ This number includes the homes within the 100-year floodplain and floodways as well. Updated rainfall modeling is likely to expand the boundaries of the next version of the 100-year floodplain out to the current 500-year boundary, and both county and city regulations reflect this reality. This change will identify more homes as at-risk and elevate the risk categories of those already in the floodplains. As Figure 69 shows, approximately one in every four residential units is at risk for flooding and this risk stretches across homes of all types. In general, the number of homes within the 500-year floodplain in the city of Houston was slightly higher than Harris County overall.

FIGURE 69

Percentages of Units in the 500-year Floodplain, Harris County and the city of Houston, 2018



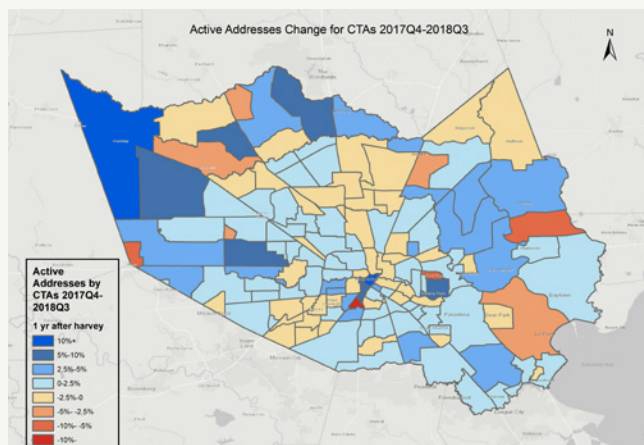
Source: Federal Emergency Management Agency (FEMA) Flood Map Service Center, 2019, and Harris County Appraisal District, 2018 Public Data

Previous research by the Kinder Institute, the University of Houston's Community Design Resource Center and Houston Local Initiatives Support Corporation has shown that the risk to affordable rental units is particularly acute due to flood risk and because of how that risk overlaps with other vulnerabilities that confront low-income renters. There are 165,000 multi-family units in the 500-year floodplain, housing approximately 465,000 people. The most pressing challenge are homes in the floodway. More than 6,800 units are in the floodway, with nearly 5,800 in the city of Houston. The majority of these are located in the Greenspoint CTA, one of the communities with the most vulnerable homes as well as one of the largest supplies of affordable rental units.³⁸

The ways that flooding can impact a community and the broader housing system are visible in many ways—including lost lives, lost homes and vacated homes. At a macro level, many of these shifts can be viewed through active address information from the United States Postal Service. The statistic is used as a proxy for vacancies. Looking at how active addresses in Harris County CTAs changed in the year after Hurricane Harvey provides one view of the impacts that flooding and recovery can create. Figure 70 shows that multiple CTAs that experienced both significant impact and have had issues with accessing recovery resources since the storm saw declines in active addresses of up to 2.5%. These included CTAs along Cypress Creek, Greens, Brays, White Oak and Buffalo bayous, and up near the San Jacinto River and Lake Houston. As communities with resources to navigate recovery rebound and recover, lower-income and non-white communities

FIGURE 70

Change in active addresses one year after Harvey for CTAs (2017Q4–2018Q3)



hit hard by storms struggle to rebuild, and the issues of vacancies and displaced residents linger for longer.³⁹

The solutions to solving the issue of flood-vulnerable homes will require decades of work to remove homes from areas in the most immediate danger and to make plans about how to build resilience and reduce risk in areas, where possible. Since Hurricane Harvey, both Harris County and Houston have accelerated existing, successful buyout programs and installed several new regulations and funding streams intended to support efforts to minimize risk.⁴⁰ The City of Houston's *Resilient Houston* strategy also identifies the removal of residential structures from the floodway among its top goals.

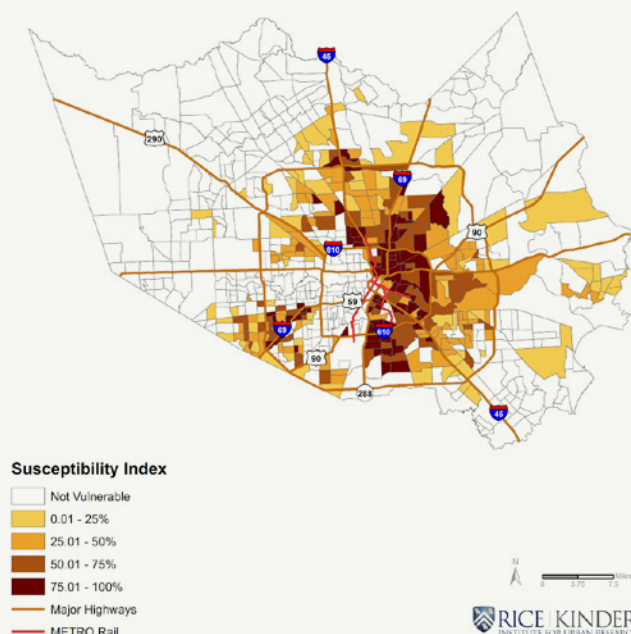
Gentrification and pressure for redevelopment is likely to happen on much of the eastside of the Inner Loop in the coming years.

Another underlying issue faced by many communities across Harris County is the pressure that intense redevelopment is placing on established communities. In these instances, housing prices and rents are rising, putting pressure on lower- and moderate-income residents who often are also the longest-tenured residents. In most cases, neighborhood change manifests in socio-demographic shifts in racial composition, income level and educational attainment. The process of generally wealthier and more white residents coming into communities that previously were majority non-white is called gentrification.

In the 2018 report titled *Neighborhood Gentrification Across Harris County: 1990–2016*, the Kinder Institute found that

FIGURE 71

Gentrification Susceptibility at the Census Tract Level



Source: Kinder Institute's *Neighborhood Gentrification Across Harris County: 1990–2016*

many communities had already experienced a great deal of neighborhood transition since 1990. Further, it found that areas east of downtown Houston are highly susceptible to future gentrification. Beyond the Inner Loop, neighborhoods such as Sunnyside, South Park, Independence Heights, Sharpstown and Trinity are also highly susceptible to future gentrification.

Similar to flooding, the significant challenge of gentrification is one that reaches into many parts of the county, and one that will grow as prices continue to rise for both homes and rentals. An outcome of gentrification and broader neighborhood transition is displacement or the forced departure of residents who otherwise would prefer to stay. There is currently not an easy measure of displacement, a critical hole in the understanding of how residents are responding to pressures and trends affecting many throughout the community.

Conclusion

The data explored in this inaugural State of Housing report makes it clear that Harris County and Houston both face a major challenge when it comes to ensuring that all residents can live in safe, affordable homes in close proximity to opportunities.

The situation for low-income renters and homeowners is particularly acute. Without significant support for these groups, whether in the form of additional government assistance or a general increase in wages, home prices are likely to remain well out of range for many residents. The limited supply of affordable homes pushes low-income residents into less desirable locations farther from jobs or exposed to greater risk of flooding.

Finally, the impacts of COVID-19 are only just becoming apparent. As the longer-term issues arising from the pandemic become clear in the housing system, new issues will emerge and existing ones will be compounded.

Creating an annual State of Housing report enables the Kinder Institute to track these issues and to work with a range of stakeholders to use this information to inform policies and necessary steps to address gaps.



Photo by Randall Pugh/lickr

Appendix A. Affordability Gap Calculations

Geography	Harris County		City of Houston	
Affordability	Year 2011	Year 2018	Year 2011	Year 2018
MHI of all households	52,675	60,146	44,124	51,140
MHI of owner-occupied households	73,263	83,515	65,697	76,643
MHI of renter-occupied households	33,590	40,740	32,171	38,106
Affordable housing price for all households	163,121	186,256	136,639	158,365
Affordable housing price for owners	226,875	258,623	203,446	237,343
Affordable housing price for renters	104,019	126,160	99,625	118,004
Median sales price	139,000	220,000	167,900	268,900
Affordability gap for all households	-24,121	33,744	31,261	110,535
Affordability gap for owners	-87,875	-38,623	-35,546	31,557
Affordability gap for renters	34,981	93,840	68,275	150,896

Source: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2011 and 2018, and Houston Association of Realtors

The following assumptions are included in the estimate, so some exceptions will apply: monthly payments with a down payment of 3.50%, a mortgage interest rate of 4.50% for 30 years, mortgage insurance of .85%, Additionally, we assumed property tax rate of 2.00%, property insurance of 1.00%. The affordable price is calculated with monthly payments of 30% of the median household income in each category. This estimate was informed by both the San Antonio Mayor's Housing Taskforce, Housing Policy Framework, 2018, and by Harvard University's Joint Center for Housing Studies, State of the Nation's Housing 2019 Report.

Appendix B. Harris County and City of Houston Indicators

Geography	Harris County			the City of Houston			Data Source
Indicators	Year 2010	Year 2018	Percent Change	Year 2010	Year 2018	Percent Change	
Population	4,092,459	4,698,619	14.81%	2,099,451	2,325,502	10.77%	ACS 2010 & 2018
Median Gross Rent	\$820	\$1,031	25.73%	\$793	\$990	24.84%	ACS 2010 & 2018
Median Gross Rent (2018 \$)	\$954	\$1,031	8.07%	\$923	\$990	7.26%	ACS 2010 & 2018
Median Household Income	\$51,444	\$60,146	16.92%	\$42,962	\$51,140	19.04%	ACS 2010 & 2018
Median Household Income (2018 \$)	\$60,024	\$60,146	0.20%	\$50,127	\$51,140	2.02%	ACS 2010 & 2018
Poverty Rate	16.78%	16.22%	-3.33%	21.00%	20.57%	-2.05%	ACS 2010 & 2018
White population	1,356,404	1,384,032	2.04%	550,002	565,112	2.75%	ACS 2010 & 2018
Hispanic population	1,563,194	1,958,963	25.32%	877,655	1,027,693	17.10%	ACS 2010 & 2018
Asian population	240,381	317,911	32.25%	120,448	157,001	30.35%	ACS 2010 & 2018
Black population	739,423	855,008	15.63%	497,477	506,508	1.82%	ACS 2010 & 2018
Other population	51,597	86,609	67.86%	22,444	39,668	76.74%	ACS 2010 & 2018
Foreign-born population	987,697	1,199,771	21.47%	585,384	676,325	15.54%	ACS 2010 & 2018
Population with a disability (Year 2012 & Year 2018)	368,869	419,247	13.66%	205,866	215,309	4.59%	ACS 2012 & 2018
Population density per square mile	2,303	2,644	14.81%	3,138	3,476	10.77%	ACS 2010 & 2018, US Census Bureau TIGER/Line Shape Files
Population over 65 years of age	312,563	452,327	44.72%	185,178	235,544	27.20%	ACS 2010 & 2018
Racial Diversity Index	0.69	0.69	0.30%	0.69	0.69	-0.34%	ACS 2010 & 2018
Income Diversity Index	5.07	5.39	6.35%	4.82	4.95	2.74%	ACS 2010 & 2018
Cost-burdened Renters (spent more than 30% on housing)	269,604	335,014	24.26%	190,739	230,367	20.78%	ACS 2010 & 2018
Severely Cost-burdened Renters (spent more than 50% on housing)	129,276	164,182	27.00%	93,171	115,890	24.38%	ACS 2010 & 2018
Cost-burdened Homeowners (spent more than 30% on housing)	226,552	186,555	-17.65%	101,874	80,146	-21.33%	ACS 2010 & 2018

Geography	Harris County			the City of Houston			Data Source
Indicators	Year 2010	Year 2018	Percent Change	Year 2010	Year 2018	Percent Change	
Severely Cost-burdened Homeowners (spent more than 50% on housing)	88,745	76,339	-13.98%	41,789	34,048	-18.52%	ACS 2010 & 2018
Homeownership rate	58%	55%	-5.45%	47%	43%	-7.94%	ACS 2010 & 2018
White Homeownership Rate	71%	68%	-4.23%	61%	57%	-6.56%	ACS 2010 & 2018
Black Homeownership Rate	41%	37%	-9.76%	37%	31%	-16.22%	ACS 2010 & 2018
Hispanic Homeownership Rate	50%	49%	-2.00%	39%	38%	-2.56%	ACS 2010 & 2018
Asian Homeownership Rate	62%	61%	-1.61%	47%	45%	-4.26%	ACS 2010 & 2018
Median Sales Price (Year 2011 & Year 2018)	139,000	220,000	58.27%	167,900	268,900	60.15%	HAR 2011 & 2018
Homes in 500 year floodplain	NA	402,976	—	NA	242,333	—	HCAD 2018 & FEMA 2019
Total occupied-units	1,372,163	1,583,486	15.40%	764,758	848,340	10.93%	ACS 2010 & 2018
Home type: single-family	883,132	1,005,822	13.89%	412,559	437,408	6.02%	ACS 2010 & 2018
Home type: multi-family	449,692	536,537	19.31%	343,729	402,891	17.21%	ACS 2010 & 2018
Home type: mobile home	37,936	39,928	5.25%	7,864	7,592	-3.46%	ACS 2010 & 2018
Home type: other (Boat, RV, van, etc.)	1,403	1,199	-14.54%	606	449	-25.91%	ACS 2010 & 2018
Severe Crowding rate (Owners)	0.62%	0.63%	1.61%	0.64%	0.71%	10.94%	ACS 2010 & 2018
Severe Crowding rate (Renters)	2.92%	2.50%	-14.38%	3.22%	2.69%	-16.46%	ACS 2010 & 2018
Subsidized units (HCV and all other HUD programs)	65,857	76,710	16.48%	48,836	56,765	16.24%	HUD USER (2010, 2012, & 2018); NHPD 2010 & 2018
Subsidized units (HCV only) — County—Year 2010 & 2018; City—Year 2012 & 2018	21,290	22,848	7.32%	12,728	13,841	8.74%	HUD USER 2010 (County), 2012 (City), & 2018 (County & City)
Subsidized units (all other HUD programs)	44,567	53,862	20.86%	36,108	42,924	18.88%	NHPD 2010 & 2018
Renter rate	42%	45%	7.48%	53%	57%	6.94%	ACS 2010 & 2018

Endnotes

- 1 Nancy Sarnoff, "Houston real estate market posts another big decline," *Houston Chronicle*, May 27, 2020. Nancy Sarnoff, "Apartment market suffers coronavirus setback as evictions concerns mount," *Houston Chronicle*, May 29, 2020.
- 2 Sarah Smith, "They can't leave a Houston motel because of coronavirus. Worse, they might not be able to stay," *Houston Chronicle*, April 25, 2020; Sarah Smith, "I wanted to wait till the end of corona: Evictions begin, slowly, in Harris County," *Houston Chronicle*, June 1, 2020.
- 3 Median low wage was calculated by using Bureau of Labor Statistics data for wages in the most commonly held low-wage jobs in Harris County.
- 4 Harvard University's Joint Center for Housing Studies, "State of the Nation's Housing 2019."
- 5 https://texas2036.shinyapps.io/covid_tracker/
- 6 Kinder Institute for Urban Research "Where Jobs Are Being Lost or At-Risk due to COVID-19 in Harris County, TX," <https://www.hcdc.datahouston.org/covid19job>.
- 7 Sophia Weedon, Nearly a quarter of major metros are precariously positioned for COVID-19 job losses," Joint Center for Housing Studies at Harvard University, May 18, 2020. <https://www.jchs.harvard.edu/blog/nearly-a-quarter-of-major-metros-are-precariouly-positioned-for-covid-19-job-losses/>
- 8 Roni Caryn Rabin, "Black Coronavirus Patients Land in Hospitals More Often, Study Finds," *New York Times*, May 23, 2020. Rice University's COVID-19 Registry has found that black and brown communities are reporting larger economic impacts due to the virus fallout in the Houston region. For more visit https://registry.rice.edu/covid19_dashboard#
- 9 Richard Rothstein, *The Color of Law: A Forgotten History of How Our Government Segregated America* (Liveright, 2017).
- 10 https://hhcommunity.force.com/tenant/s/?language=en_US
- 11 Zach Despart, "Harris County doubles COVID-19 relief fund to \$30 million," *Houston Chronicle*, May 19, 2020, <https://www.houstonchronicle.com/politics/houston/article/Harris-County-doubles-COVID-relief-fund-to-30-15281010.php#photo-19430854>; Greater Houston Community Foundation COVID-19 Recovery Fund, <https://www.greaterhoustonrecovery.org/>
- 12 CHAS data, City of Houston 2016 Cost-burdened rental households by income.
- 13 The GDP Index we use is known as the GDP Price Deflator in economics. It corrects for price changes and allows for a comparison of economic output across years by indexing nominal GDP to real GDP.
- 14 U.S. Bureau of Economic Analysis, Gross Domestic Product [GDP], retrieved from FRED, Federal Reserve Bank of St. Louis; <https://fred.stlouisfed.org/series/GDP>; U.S. Bureau of Economic Analysis, Total Gross Domestic Product for Texas [TXNGSP], retrieved from FRED, Federal Reserve Bank of St. Louis; <https://fred.stlouisfed.org/series/TXNGSP>; U.S. Bureau of Economic Analysis, Total Gross Domestic Product for Houston-The Woodlands-Sugar Land, TX (MSA) [NGMP26420], retrieved from FRED, Federal Reserve Bank of St. Louis; <https://fred.stlouisfed.org/series/NGMP26420>; U.S. Bureau of Economic Analysis, Real Gross Domestic Product [GDPCA], retrieved from FRED, Federal Reserve Bank of St. Louis; <https://fred.stlouisfed.org/series/GDPCA>; U.S. Bureau of Economic Analysis, Real Total Gross Domestic Product for Texas [TXRGSP], retrieved from FRED, Federal Reserve Bank of St. Louis; <https://fred.stlouisfed.org/series/TXRGSP>; U.S. Bureau of Economic Analysis, Total Real Gross Domestic Product for Houston-The Woodlands-Sugar Land, TX (MSA) [RGMP26420], retrieved from FRED, Federal Reserve Bank of St. Louis; <https://fred.stlouisfed.org/series/RGMP26420>.
- 15 Total sales volume is drawn from the Houston Association of Realtors data.
- 16 Median Sales Price data is from the Houston Realtors Information Services, Inc., used with permission. The sales data is the property of the Houston Association of Realtors.
- 17 Greater Houston resettles more refugees than any other American city. *Houston Chronicle*. 2015. <https://www.houstonchronicle.com/news/houston-texas/houston/article/Greater-Houston-resettles-more-refugees-than-any-6502351.php>
- 18 Key Facts about refugees to the U.S. Pew Research Center. 2019. <https://www.pewresearch.org/fact-tank/2019/10/07/key-facts-about-refugees-to-the-u-s/>
- 19 U.S. Bureau of Economic Analysis, Total Real Gross Domestic Product for Houston-The Woodlands-Sugar Land, TX (MSA) [RGMP26420], retrieved from FRED, Federal Reserve Bank of St. Louis; <https://fred.stlouisfed.org/series/RGMP26420>; U.S. Bureau of Economic Analysis, Real Gross Domestic Product: All Industries in Harris County, TX [REALGDPALL48201], retrieved from FRED, Federal Reserve Bank of St. Louis; <https://fred.stlouisfed.org/series/REALGDPALL48201>
- 20 Communities grapple with the needs of aging suburbanites. Association of Health Care Journalists. <https://healthjournalism.org/blog/2017/08/communities-grapple-with-the-needs-of-aging-suburbanites/>
- 21 The racial diversity index was developed by the New York University Furman Center for Real Estate and Urban Policy. If a given geography is inhabited by a single racial/ethnic group, its RDI would be zero. If the population of a neighborhood is evenly distributed among the five groups (20% white, 20% black, 20% Asian, 20% Hispanic, and 20% other), its RDI would be 0.8. However, it's more likely given the small proportion of residents who fall into the Other category that an evenly distributed neighborhood would have an RDI around 0.75 (roughly 25% for each of the major race/ethnic groups).

- 22 Alexander Hermann, "The Continuing Decline Of Low-cost Rentals." Joint Center for Housing Studies of Harvard University. May 11, 2020. Found in Housing Perspectives: Research, trends, and perspectives from the Harvard Joint Center for Housing Studies. <https://www.jchs.harvard.edu/blog/the-continuing-decline-of-low-cost-rentals/>
- 23 Heather Way, et. al, "Out of Order: Houston's Dangerous Apartment Epidemic," University of Texas, School of Law. 2018.
- 24 Improving America's Housing 2019. Joint Center for Housing Studies of Harvard University. https://www.jchs.harvard.edu/sites/default/files/Harvard_JCHS_Improving_Americas_Housing_2019.pdf
- 25 Homeowners and renters – a widening gap. Apartments List. August 11, 2016. <https://www.apartmentlist.com/rentonomics/widening-gap-between-owners-renters/>
- 26 We relied on the U.S. Census Bureau's American Community Survey (ACS) 2014-2018 estimates though also factored in HUD's Comprehensive Housing Affordability Strategy (CHAS) to validate ACS findings as it is a more comprehensive dataset measuring household needs for HUD eligible income levels. CHAS data is only available up to 2016 at the moment and we used it in an effort to confirm the trends discovered through the ACS.
- 27 The following assumptions are included in the estimate, so some exceptions will apply: monthly payments with a down payment of 3.50%, a mortgage interest rate of 4.50% for 30 years, mortgage insurance of .85%, Additionally, we assumed property tax rate of 2.00%, property insurance 1.00%. The affordable price is calculated with monthly payments of 30% of the median household income. This estimate was informed by both the San Antonio Mayor's Housing Taskforce, Housing Policy Framework, 2018, and by Harvard University's Joint Center for Housing Studies, State of the Nation's Housing 2019 Report.
- 28 To identify the median low-wage hourly pay in Harris County, the Bureau of Labor Statistics data was used to define the sectors with the highest proportion of low-wage workers in Harris County. BLS identified Retail sales workers (\$12.51); cooks and food preparation workers (\$10.20); building cleaning and pest control workers (\$11.81); food and beverage serving workers (\$10.36); other personal care and service workers (\$9.74) as the largest low-wage sectors.
- 29 National Low Income Housing Coalition. *The Gap: A Shortage of Affordable Homes*. March 2020. https://reports.nlihc.org/sites/default/files/gap/Gap-Report_2020.pdf
- 30 U.S. Census Bureau, American Community Survey 5-Year Estimates, 2010 and 2018.
American Community Survey, Affordable Housing Units (B25063) to Extremely and Very Low-Income Renter Households (B25118)
- 31 Jeff Reichman, "Why Houston Should Care about Evictions." March 2020. <https://www.januaryadvisors.com/why-houston-should-care-about-evictions/>
- 32 U.S. Department of Housing and Urban Development. "Homelessness Prevention and Rapid Re-Housing Program (HPRP): 2 Year Summary." February 2013. https://files.hudexchange.info/resources/documents/HPRP_Year2Summary.pdf
- 33 Houston is the third most expensive city in the nation in transportation costs alone, averaging 20% of median incomes. See first table in this 2016 report from the Citizens Budget Commission which added up H+T, <https://cbcny.org/research/rent-and-ride>.
- 34 Center for Neighborhood Technology, Housing + Transportation Affordability Index.
- 35 LINK Houston and the Kinder Institute for Urban Research, "Where Affordable Housing and Transportation Meet in Houston," 2020.
- 36 Jie Wu, Yujie Hu, Mingming Zhang, Grant Patterson, "Accessing Opportunity: Employment and Commuting Patterns among Low-, Medium- and High-Wage Workers in Houston," Kinder Institute for Urban Research, 2018.
- 37 These numbers are based on the 2019 FEMA floodplains and the 2018 Harris County Appraisal District housing data.
- 38 Greater Houston Flood Mitigation Consortium "Affordable Multi-Family Housing: Challenges and Opportunities," April 2019.
- 39 U.S. Housing and Urban Development. HUD Aggregated USPS Administrative Data.
- 40 Both Harris County and Houston dedicated significant amounts of Community Development Block Grant-Disaster Recovery dollars to buyouts. Harris County voters approved a \$2.3 billion dollar bond in August 2018.

Mission

The Kinder Institute for Urban Research builds better cities and improves people's lives by bringing together data, research, engagement and action.



RICE | KINDER
INSTITUTE FOR URBAN RESEARCH