



White Paper: Housing Losses in the 2010s

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This research was made possible through the generous support of JPMorgan Chase & Co. Unless otherwise specifically stated, the views and opinions expressed in the report are solely those of the report's author and do not necessarily reflect the views and opinions of JPMorgan Chase & Co. or its affiliates.

Introduction

The 2010s was a remarkable decade for housing in the United States. Coming on the heels of a foreclosure crisis that plunged the housing and residential finance markets into chaos, the decade was most notable for the slow pace of construction that followed, leaving only a 6.9 percent net increase in housing units - the smallest percentage gain since this metric was first tracked in the 1940s. Though population growth over the decade was [similarly low](#), the lack of sufficient additions to housing supply to meet rising demand meant significant upward pressure on prices and a worsening of affordability challenges. Indeed, by some estimates the shortage of housing units relative to population growth as of 2020 topped [5 million units](#).

Such national-level details obscure, however, the varied dynamics of changes in the housing supply at the local level. While some parts of the country saw notable increases in their housing stocks, these were offset by the many areas that experienced a net loss of units. Indeed, when examined at the county level, more than half (1593 out of 3142) of all U.S. counties¹ had housing declines during the 2010s. This is substantially more than the 15 percent of counties that lost housing in the 2000s and 13 percent in the 1990s.

This dramatic increase in the number of places losing housing units is surprising for a few reasons. As a durable good, housing units are generally built for long-term use and not expected to be removed frequently, so purposeful reductions of large numbers of dwellings are typically rare. Moreover, many units lost to disaster or demolition are replaced by new construction; for a net decline in housing to occur, the number of removed units must exceed the number of new units built in the county over the decade. Even in places with declining populations, excess housing can still help attract new residents and provide an affordable alternative for households priced out of higher-demand markets.

So what then accounts for the high number of counties with net housing losses over the prior decade? This paper discusses some of the suspected causes by examining the characteristics of these counties, including their geography, population dynamics, housing market conditions, and recent experiences with economic or climate-induced shocks. It finds that, while nearly two-thirds of the counties with net losses of housing last decade were in non-metro areas with small and shrinking populations, a handful of larger and denser counties were also among those with declining housing stocks. Stagnant economies and aging housing supply were also common among many of these counties, while a handful had recently suffered major natural disasters from which they had not yet recovered.

¹ Includes county equivalent jurisdictions, such as parishes, boroughs, and independent cities. For more details, see <https://www.census.gov/programs-surveys/popest/guidance-geographies/terms-and-definitions.html>.

Following a brief discussion of what is already known about housing losses, this paper takes a deeper dive into this data, using analyses conducted with 2010 and 2020 Decennial Census redistricting data to categorize counties with net housing unit losses by their size and metro status. It then offers some implications for policymakers to consider in the current decade, which has already been marked by a pandemic that laid bare the essential need for suitable and affordable housing, as well as redefined many Americans' ideas of where and how they want to live. Their challenge now is to ensure the supply of housing in this country is not only sufficient to meet demand, but that it is adaptable and resilient to future changes in the needs of American households.

What We Know about Housing Losses

The largest and most detailed data on losses of housing units in the United States comes from the American Housing Survey (AHS), which surveys a longitudinal panel of units every other year to track changes in the supply of housing, including whether units are removed from the stock. The AHS classifies removals as either temporary (could be returned to the stock in the future) or permanent (dwelling no longer exists or has been irreparably damaged or changed).

An analysis of the 2015 and 2017 AHS by [Eggers and Moumen \(2020\)](#) finds that 1.6 percent of the inhabitable housing stock was lost during the two-year period. Half of these losses were considered temporary, including units that were converted to a non-residential purpose (13 percent of all losses), damaged units where occupancy was no longer permitted (12 percent), and mobile homes/boats/RVs that were removed from their prior locations (12 percent). The other half were permanent losses, which included units that were intentionally demolished or lost in a disaster (16 percent), eliminated through the consolidation of units within a structure (6 percent), or otherwise no longer inhabitable (5 percent). Both types of losses also included a considerable number of units removed for unknown reasons (accounting for 32 percent of all losses).

When disaggregated by various unit characteristics, Eggers and Moumen found higher annual shares of lost units among those that were vacant at the beginning of the study period (2.8 percent vs. 0.5 percent for occupied units), in multi-unit structures (1.1 percent vs. 0.5 percent of single-family units), former rental units (0.8 percent vs. 0.3 percent of previously owner-occupied units), smaller units (7.0 percent among those with one room vs. 0.4 percent for those with at least six rooms), those with severely inadequate living conditions (6.0 percent vs. 0.6 percent of adequate quality units), and those with lower housing costs and/or previously occupied by lower-income households.

[Schuetz and Murray \(2018\)](#) also analyzed housing losses using the AHS, though over a longer time frame (between 1985 and 2013) and broken out by region and metropolitan status. Their analysis found that an average of 1.1 percent of all housing units were removed from the stock during each year of this period, compared to 1.9 percent average annual gross additions. Average annual losses were greatest in rural (1.6 percent) and Southern (1.4 percent) areas, and smallest in suburban (0.9 percent) and Western (0.9 percent) locations. Loss rates also declined over this period, from high of 1.6 percent annually in the early 1990s to a low of 0.6 percent by 2013.

Using a condensed set of categories (and excluding those with unknown reasons), Schuetz and Murray also looked at the sources of housing losses, which varied by location. For

example, in urban and Northeastern locations, more than 40 percent of removals were attributed to reconfigurations of existing housing to consolidate and reduce the number of units in a structure (e.g. conversion of a duplex into a single-family home). In contrast, the more than a third of losses in rural and Southern areas were from removals of mobile homes from their sites. Demolitions of units were fairly steady at around one-fifth of removals across regions and metro status, while losses due to damage (e.g. uninhabitable units temporarily taken out of service but not fully demolished) ranged from 10 to 25 percent of all removals.

The AHS data, however, only track gross removals from the housing stock without indication of which lost units were ultimately replaced by new construction. The causes of net losses are likely to differ and reflect more idiosyncratic trends relating to geography-specific dynamics. To our knowledge, there have been no studies that have examined net losses of housing at the county level using Decennial Census data. The following analysis thus fills this gap, while also offering some implications of such losses for policy and practice in the face of a nationwide housing shortage.

Data Details

The primary data sources used for this analysis are county-level counts from the 2010 and 2020 Decennial Census redistricting data. The 2020 redistricting data are the first geographically-detailed data released from the 2020 Decennial Census, for the purpose of drawing congressional districts based on population counts and composition at the sub-county level. This data also includes the number and occupancy status of housing units, which is compared to similar data from the 2010 Census to identify counties with net declines in housing over the decade.

We use county-level data rather than a smaller unit of geography to better identify places dealing with systemic changes in their housing supply. Analyses at the Census tract or block level would be more likely to capture idiosyncratic causes of housing loss, such as the removal of a large development due to disaster or intentional demolition. Data collected at the subcounty level are also more prone to errors from missing or interpolated information, and thus less reliable for tracking changes in small area counts over time.

Along with straight-line comparisons of housing unit counts at the county level between Decennial Censuses, the analysis below also incorporates information from redistricting files about changes in population counts and racial/ethnic composition within counties that lost housing. Other supplemental data used includes details on counties that experienced natural disasters between 2010 and 2020, as per the Federal Emergency Management Agency's OpenFEMA data base.

Types of Counties with Net Housing Unit Losses

The counties and equivalents that lost housing units last decade cover a wide range of locations and characteristics. They are located in 44 states from coast to coast and include a mix of urban, suburban and rural areas. Though representing more than half of all counties nationwide, their cumulative population accounts for less than 12 percent of all residents as of 2020, suggesting more small-population counties among this group.

The quantity and variety of counties with losses indicates there are likely many different reasons for observed declines. To better understand these, it is helpful to categorize net

housing loss counties by some common characteristics, through which we may better identify some trends in housing and other dynamics.

For this analysis, the 1593 counties that had net losses of housing units between 2010 and 2020 are categorized according to their association with different-sized metro areas. **Table 1** describes these groupings and the number of counties and housing units within each of them, while **Figure 1** (at end of document) maps their geographic distribution.

Table 1: Net Housing Unit Loss Counties by Metro Status

Category	Definition	Total counties	Counties with net housing unit losses		Counties with net housing unit gains	
			Number	Net change in housing units	Number	Net change in housing units
Center cities	The largest county within each large/medium metropolitan area (i.e. with populations of at least 250,000 as of 2010)	189	11	-65,421	178	4,390,365
Large metro suburbs	All other counties within large/medium metropolitan areas	631	134	-51,734	497	3,834,395
Small metro counties	All counties within small metro/micropolitan areas (i.e. with populations less than 250,000 as of 2010)	1,021	433	-210,558	588	1,153,614
All non-metro	All counties not associated with a defined metro/micropolitan area	1,301	1,015	-350,301	286	93,646
Total		3,142	1,593	-678,014	1,549	9,472,020

This categorization shows that almost 64 percent of counties that experienced net housing losses between 2010 and 2020 were in non-metropolitan areas, and another 27 percent were in smaller metro areas with populations under 250,000. This aligns with [recent analyses](#) of 2010-2020 population changes at the county level, which were similarly concentrated in rural and low-density counties. In contrast only 145 of the 821 counties or equivalents located in the 189 metro areas with populations of at least 250,000 lost housing stock over the decade.

It is important to note that each of these categories also includes counties that experienced net gains in housing units, and the overall net change in housing units was positive in all but

the non-metro category. This information is included in Table 1 above for reference, though the discussion that follows concerns only those counties within each category that experienced net losses.

Center Cities

Though only 11 of the largest metro areas saw net declines in housing units in their largest county, these high-density and high population places account for almost 10 percent of the reduction in housing units among all net loss counties. These 11 counties are geographically concentrated in just six states within the Midwest and Mid-Atlantic regions of the country, mostly in former industrial hubs that have experienced economic challenges over the last few decades, including Cleveland, St. Louis, and Baltimore (**Table 2**). The largest is Wayne County, Michigan in the Detroit metro area, which also lost the largest number of units of any county, over three times more than the next-largest loss county (which was also in Michigan).

Table 2: Central Counties of Large Metro Areas with Net Housing Unit Losses 2010-2020

County	Metro Area	2010 housing units	2020 housing units	Change in units	Percent change
Wayne County, MI	Detroit-Warren-Dearborn, MI	821,693	790,191	-31,502	-3.8%
Genesee County, MI	Flint, MI	192,180	183,087	-9,093	-4.7%
Cuyahoga County, OH	Cleveland-Elyria, OH	621,763	615,825	-5,938	-1.0%
Mahoning County, OH	Youngstown-Warren, OH-PA	111,833	107,989	-3,844	-3.4%
Baltimore city, MD	Baltimore-Columbia-Towson, MD	296,685	293,249	-3,436	-1.2%
Montgomery County, OH	Dayton-Kettering, OH	254,775	251,523	-3,252	-1.3%
St. Louis city, MO	St. Louis, MO-IL	176,002	173,479	-2,523	-1.4%
Lucas County, OH	Toledo, OH	202,630	200,147	-2,483	-1.2%
Kanawha County, WV	Charleston, WV	92,618	90,294	-2,324	-2.5%
Winnebago County, IL	Rockford, IL	125,965	124,983	-982	-0.8%
Cabell County, WV	Huntington-Ashland, WV-KY-OH	46,169	46,125	-44	-0.1%
All Central Counties with Net Housing Unit Losses		2,942,313	2,876,892	-65,421	-2.2%

Despite the high numbers of units lost in these 11 counties, the percentage reduction in their housing stocks were all less than 5 percent, and cumulatively represented only a 2.2 percent drop for the category. Ten of these 11 counties also saw net population declines ranging from -1.2% to -6.4% (-2.5% cumulatively). The one exception was Montgomery County in the Dayton, OH metro area, which saw a 0.4% increase in population despite a loss of housing units.

Besides geographic concentration, large metro central counties that lost housing units also share some similarities in their population dynamics. Except for the two West Virginia counties, the share of Black, Indigenous, and other People of Color (BIPOC) within the

populations of these counties were all over 25%, and more than 50% of the populations in St. Louis and Baltimore.

For some of these counties, the net loss of housing units in the 2010s continues a trend observed in prior decades, with Wayne County, Baltimore and St. Louis, also experiencing declines in the 1990s and 2000s. Vacancy rates in these counties were also the highest within the set, which averaged 13.2% at the start of the decade. In such places, removal of units is often an intentional strategy to reduce blight in neighborhoods that no longer have the populations to sustain and maintain older housing. For example, the state of Ohio (home to four of the top 11 large metro central counties with net housing losses) recently dedicated [\\$75 million](#) to demolish nearly 15,000 abandoned homes in high-vacancy communities. Both [Detroit](#) and [Baltimore](#) likewise created programs in the latter half of the last decade specifically to purchase and demolish long-vacant buildings, using land banks and other public resources to encourage alternative uses of those properties.

Large Metro Suburbs

Among large metro suburban counties, about one in five (134 out of 631) experienced net housing losses last decade. Most suburban counties with net housing losses were located on the fringes of metro areas, and have lower residential density and population counts – with all but six home to fewer than 50,000 people in 2020 – relative to other suburban counties with net housing increases. With small housing stocks to begin with, some of these net-loss suburban counties experienced declines of over 10 percent of their supply (**Table 3**).

Table 3: Suburban Metro Counties with at Least 10 Percent Net Loss of Housing Units, 2010-2020

County	Metro Area	2010 housing units	2020 housing units	Change in units	Percent change
Hudspeth County, TX	El Paso, TX	1,527	1,107	-420	-27.5%
Calhoun County, IL	St. Louis, MO-IL	2,835	2,282	-553	-19.5%
Marion County, GA	Columbus, GA-AL	4,156	3,497	-659	-15.9%
Anson County, NC	Charlotte-Concord-Gastonia, NC-SC	11,576	9,834	-1,742	-15.0%
Clay County, West VA	Charleston, WV	4,572	3,907	-665	-14.5%
Oldham County, TX	Amarillo, TX	841	732	-109	-13.0%
Stewart County, GA	Columbus, GA-AL	2,383	2,103	-280	-11.7%
Holmes County, MS	Jackson, MS	8,415	7,485	-930	-11.1%
Talbot County, GA	Columbus, GA-AL	3,399	3,042	-357	-10.5%

In addition to being smaller and lower-density, suburban counties with housing losses are also more prevalent in the Midwest and South, with a few notable clusters around cities that also lost housing in their central counties, such as St. Louis MO, Huntington WV, Charleston WV, and Youngstown OH.

Only four of these counties have experienced multi-decade losses in housing units, suggesting that shrinking housing stocks are a relatively recent phenomenon in most of these places. Nor were natural disasters likely a large contributing factor; just one quarter

had a major disaster declaration during the decade, most of which were floods not associated with a named tropical storm or hurricane.²

Rather, high population losses appear to be driving declines in housing, as the total number of residents in these counties fell by -3.8% over the decade. Most (84%) counties in this group also had BIPOC shares of their populations that were below the national average in 2020, while their collective share (19.6%) was the lowest of any subset of counties that lost housing last decade.

Small Metro Counties

The next category of counties with housing losses are those in smaller metro and micropolitan areas with populations under 250,000, representing over 40% (433 out of 1,021) of all such counties nationwide. Given that most (553 of 742) of these small metro areas comprise only one county, no distinction is made between central and suburban counties. No regional clustering is visible among these counties.

With small housing unit counts at the start of the decade, large numerical losses of housing are not required for these counties to register a dramatic percentage decrease in their housing stocks. Indeed, five of these counties lost more than 20 percent of their housing and another 29 lost between 10 and 20 percent between 2010 and 2020. The largest numerical loss was recorded in Butte County, CA, where the devastating 2018 Camp wildfire destroyed several thousand properties. Beyond this and a few other isolated cases, however, disasters did not appear to be a major factor in driving housing losses in these counties, with only 22% of them receiving a major disaster declaration during the decade.

Population declines outpaced housing losses in these small metro counties, cumulatively falling by -4.2 and -2.8 percent, respectively, over the decade. This net decline was entirely among white residents, whose numbers fell by 9 percent, the most among any category of housing loss counties.

Non-Metro Counties

The largest category of housing loss counties is non-metro counties, which comprise almost two-thirds of all such places. This set of counties also lost the most housing percentage-wise, with their number of housing units declining by over 5 percent cumulatively, matched by a similar decrease in population. The largest percent decline (40%) was observed in Edwards County, Texas, where the number of housing units fell from 1,606 to 963 over the decade. Other high percentage losses were recorded elsewhere in rural Texas, as well as in counties in West Virginia, Nevada, and Georgia.

Overall, non-metro counties with net housing losses had small shares of BIPOC residents, as well as the smallest increase in those residents over the decade, from 19.4% to 22.3%, relative to the other subsets of net-loss counties. Vacancy rates were also highest in these counties cumulatively, at over one-fifth of all housing units – perhaps linked to communities with large numbers of second and seasonal homes. Once again, disasters do not appear to have been a major factor, with only 19% of these counties receiving a major disaster declaration.

² A large disaster declaration is defined here as a Presidentially declared major disaster that was not for a severe storm alone, for which individual and housing assistance funds were made available. See details at <https://www.fema.gov/disaster/how-declared>.

Implications for Housing Policy

Given the idiosyncrasy of counties that lost housing units between 2010 and 2020, even as housing shortages increased affordability challenges in other parts of the country, it is difficult to pinpoint a standard set of recommendations for how to address the future of housing supplies in these counties. In places with long term and persistent declines in populations, housing removals may be a logical choice; even if some population growth returns, new residents would likely demand newer, larger and more efficient housing, which in many cases is easier to build new on vacant land than to create through retrofits of existing structures. Meanwhile, in communities that are prone to severe natural disasters, the desire to rebuild may not materialize, especially as insurance costs adjust to reflect the real risk of future housing destruction.

At the same time, having an excess supply of housing is vital to meeting the overall need for housing in a growing nation. Many lost units tend to be lower cost, whether due to their age, condition, location or lack of modern amenities. These units provide an important source of affordable housing for lower-income households; their removal, therefore, only exacerbates existing gaps in the supply of affordable housing. This is especially true for units located in central and suburban counties of larger cities, where proximity to employment and transportation options can offer some opportunity for economic mobility among lower-income families that are able to find affordable housing. Even in smaller metro and non-metro areas, meanwhile, affordable housing options are needed to serve their low-income populations, as well as to provide a release valve from demand in higher-priced areas.

Communities that have lost substantial shares of their housing supply, therefore, should consider ways to encourage new development that can help meet these needs, while also remaining flexible and adaptable to future changes in supply and demand dynamics. Policymakers in these places thus will need to find ways to balance competing priorities, including:

- Maintaining housing quality to reduce losses to obsolescence – new construction should be developed that can withstand the need for heavy maintenance or high risk of falling into disrepair. Such units are not only more desirable to occupy, but even when vacant will be less likely to become blighted and bring down values of neighboring properties.
- Adjusting housing supply and conditions to account for resilience to disaster and climate impacts – especially in high-demand but disaster-prone areas, new construction needs to reflect the realities of future hazards - such as droughts, wildfires, tropical storms and floods – that will only increase with a warming climate. Building for resilience can also offset higher insurance costs and reduce the risk of future housing instability.
- Ensuring new and existing housing meets the needs of modern households – as American families are changing, so too should their housing. Seniors living longer will need places that are equipped for their particular physical challenges, while multigenerational households will require larger homes with features that can accommodate their children and parents as they age. Attention should also be given

to the location of housing relative to local amenities, which are essential to attract and retain residents in areas undergoing economic and social changes.

- Being flexible to shifts in demand for housing in new locations – especially as the nation emerges from the recent pandemic, communities of all types should work to provide housing that can accommodate anticipated changes in employment, commuting, work-from-home, and other household needs.
- Looking to alternative building options to allow for maximum flexibility and adaptability – the durable nature of most housing constrains communities from making changes when sudden shifts in demand and supply needs occur. Alternatives to conventional site-built housing models – such as manufactured and modular homes, homes designed to accommodate multiple households or generations, and allowances for accessory-dwelling or in-law apartment additions where needed – can help entice households with uncertain or evolving housing needs.

To encourage these kinds of development – and the return of residents who will occupy them – will require policy actions at all levels of government. Local zoning codes and permitting processes should be liberalized to allow for more flexible housing types to accommodate changing living arrangements. State incentives can be helpful in promoting those changes, as well as funding the construction of more affordable housing options. And the Federal government can work to address supply shortages in construction labor and materials that are hampering new construction.

Conclusion

The loss of housing in half the nation's counties suggests a reconcentration of the population in places that are already struggling to provide suitable dwellings to all residents. Absent a sweeping change in construction and zoning patterns in these locations, it is unlikely they will be able to meet all that demand. Places that have recently lost housing, therefore, should be poised to respond to the need for more housing by considering the strategies discussed above – to prevent a greater mismatch in supply and demand for housing going forward and create conditions to foster affordability across the full range of household incomes.

Figure 1: Counties with Net Housing Losses 2010-2020

