



**ULI TERWILLIGER CENTER 2022
HOME ATTAINABILITY INDEX**

DURABLE CHALLENGES REMAIN
DESPITE CHANGE AND UNCERTAINTY



Summary Report

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Recommended bibliographic listing:

Urban Land Institute. *ULI Terwilliger Center 2022 Home Attainability Index Summary Report: Durable Challenges Remain Despite Change and Uncertainty*. Washington, DC: Urban Land Institute, 2022.

About the Urban Land Institute

The Urban Land Institute is a global, member-driven organization comprising more than 45,000 real estate and urban development professionals dedicated to advancing the Institute's mission of shaping the future of the built environment for transformative impact in communities worldwide.

ULI's interdisciplinary membership represents all aspects of the industry, including developers, property owners, investors, architects, urban planners, public officials, real estate brokers, appraisers, attorneys, engineers, financiers, and academics. Established in 1936, the Institute has a presence in the Americas, Europe, and Asia Pacific regions, with members in 80 countries.

The extraordinary impact that ULI makes on land use decision-making is based on its members sharing

expertise on a variety of factors affecting the built environment, including urbanization, demographic and population changes, new economic drivers, technology advancements, and environmental concerns.

Peer-to-peer learning is achieved through the knowledge shared by members at thousands of convenings each year that reinforce ULI's position as a global authority on land use and real estate. In 2021 alone, more than 2,700 events were held in cities around the world. Drawing on the work of its members, the Institute recognizes and shares best practices in urban design and development for the benefit of communities around the globe.

More information is available at uli.org. Follow ULI on [Twitter](#), [Facebook](#), [LinkedIn](#), and [Instagram](#).

About the Terwilliger Center for Housing

The goal of the Urban Land Institute Terwilliger Center for Housing is to advance best practices in residential development and public policy and to support ULI members and local communities in creating and sustaining a full spectrum of housing opportunities, particularly for low- and moderate-income households.

Established in 2007 with a gift from longtime member and former ULI chairman J. Ronald Terwilliger, the center integrates ULI's wide-ranging housing activities into a program of work with three objectives: to catalyze the production of housing, provide thought leadership on the housing industry, and inspire a broader commitment to

housing. Terwilliger Center activities include developing practical tools to help developers of affordable housing, engagement with members and housing industry leaders, research and publications, a housing awards program, and an annual housing conference.



Acknowledgments

Funding for this research was provided through gifts to ULI by Carolyn and Preston Butcher and by Ralph Rosenberg. The views expressed in this publication are those of the authors and do not necessarily reflect those of any supporter of this project.

Research support for this initiative was provided by the National Housing Conference (NHC) and the National Low Income Housing Coalition (NLIHC).

NHC has been defending the American home since 1931. Its core belief is that everyone in America should have equal opportunity to live in a quality, affordable home in a thriving community. NHC convenes and collaborates with its diverse membership within broader housing and community development sectors to advance policy, research, and communications initiatives to effect positive change at the federal, state, and local levels. Politically diverse and



nonpartisan, NHC is a 501(c)(3) nonprofit organization.

The NLIHC is a national nonprofit dedicated solely to achieving socially just public policy that ensures that people with the lowest incomes in the United States have decent, accessible, affordable homes. Its aim is to end homelessness and housing poverty in America. Its main areas of activity include affordable housing research; policy analysis and advocacy; organizing, mobilization, and capacity building of NLIHC members and partners around the country; and communications and education to build public and policymaker awareness of the issues and solutions.



In addition, the Terwilliger Center thanks the following experts in housing research, finance, policy, planning, and development for participating on the 2022 Home Attainability Index Advisory Committee. The views expressed in this publication do not necessarily reflect those of the Advisory Committee participants or their employers.

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Executive Summary: The Big Picture

The ULI Terwilliger Center’s 2022 Home Attainability Index provides practitioners with an easily accessible resource that can set a data-informed foundation for regional discussions of housing needs and solutions. Specifically, the Index provides a high-level snapshot of the extent to which a housing market provides a range of housing choices attainable to the regional workforce, with an intentional focus on issues related to racial, socioeconomic, and intraregional disparities and inequities.

This year’s Index summary report is being released during a time of uncertainty. While the most acute phase of the COVID-19 pandemic seems to be in the past, variants of the virus continue to affect millions of households, taking an ongoing health and economic toll. Inflation is roiling the economy and adding financial stress, especially for lower-income households. Interventions to curb inflation—such as raising the Federal Reserve’s baseline interest rates—may take time to produce results and in the short-term may raise the cost of financing for building and buying homes. It is still too soon to know the full impact of people working from home on both employer and employee location decisions and the extent to which changes in location and commuting patterns are permanent. Concerns about the reliability of U.S. Census Bureau data (decennial census, American Community Survey) caused by lower response rates and other pandemic-related challenges further complicate analysis of the current state of the housing market and home attainability.

Amid these challenges, the Terwilliger Center approached the 2022 Home Attainability Index research process with two objectives:

- Separate the signal from the noise, with analysis focusing on issues less subject to short-term fluctuations and where solid data are available.
- Consider the potential implications of various market-shift scenarios, using market sentiment insights from ULI’s *Emerging Trends in Real Estate® 2022* report.

Based on this analysis, the Terwilliger Center identified the following high-level findings:

- Few available housing units of any kind, even modest rental units, exist that are affordable to many low-wage workers in most regions. High cost burdens leave less residual income. In the current high-inflation environment, many households will face heightened economic insecurity, particularly when these factors are combined with high energy costs, which affect utilities and commuting expenses. Left unchecked, these factors could raise the risk of homelessness for many households.

- Long-term housing underproduction is a primary driver of national housing challenges, and current market conditions—economic uncertainty, rising inflation, high costs of materials, high labor costs and limited worker availability—are likely to further restrain the market from “catching up” to meet demand. Anecdotal evidence suggests some builders are already pulling back in response to these pressures.
- While the national housing production shortage matters, shortfalls at the regional level are even more important. A lack of attainable housing in established markets is a contributing factor in some employers and households deciding to relocate to lower-cost markets.
- While still offering a larger supply of attainable housing, many of these growing regions have not demonstrated that they can produce enough housing of the right type in the right locations (the “dimensions of supply”) to keep these markets—or submarkets therein—from following the trajectory of more established, high-cost markets. Staying ahead of the curve is crucial: regions falling behind can lead to other market distortions that raise the cost of developing new housing and further exacerbate the challenge.

Access the full suite of 2022 Home Attainability Index resources at: knowledge.uli.org/reports/research-reports/2022/2022-terwilliger-center-home-attainability-index



Home Attainability Index Purpose and Description

Since 2007, the ULI Terwilliger Center for Housing has conducted research and analysis to integrate ULI's wide-ranging housing activities into a program of work that furthers the development of mixed-income communities with a range of housing options. In February 2020, the center released the pilot edition of the Home Attainability Index, with the goal of collecting, analyzing, and disseminating housing-related metrics to support municipalities and members of the development community working to address longstanding home affordability challenges. Specifically, the Index:

- Provides a high-level snapshot of the extent to which a housing market provides a range of choices attainable to the regional workforce;
- Identifies gaps in home attainability and provides better context to understand residential markets;
- Provides context by connecting housing costs to the wages earned by specific occupations in a region through an Occupational Analysis (based on data from the National Housing Conference's Paycheck to Paycheck database);
- Explicitly identifies and highlights racial, socioeconomic, and intraregional disparities and inequities; and
- Enables national and regional comparisons to inform housing production, policy, and financing decisions.

Building on the 2020 pilot and [2021 update focused on the COVID-19 pandemic's implications for housing](#), the 2022 edition of the Index explores the attainability implications of shifts in housing demand and regional competitiveness due to demographic changes, pandemic-influenced employer and employee location decisions, and the high-cost of both building and finding homes in the largest and most economically vibrant regions. To inform this analysis, Index data was analyzed by population cohorts and using market sentiment insights from ULI's [Emerging Trends in Real Estate® 2022](#) report.

What Does Home Attainability Mean?

The focus of the Index is the effectiveness of the broader housing market in providing robust and affordable housing options. Though subsidized, income-restricted affordable housing (hereafter, affordable housing) plays a critical

role in expanding housing choice, such homes generally constitute a relatively small portion of the region's overall housing stock. As such, the Index largely reflects the affordability of market-rate homes.

Throughout this report, the terms *attainability*, *affordability*, *home attainability*, and *attainable homes* refer to the relative affordability of the overall housing stock. This focus on home attainability reflects the Terwilliger Center's mission to address the "full spectrum of housing opportunities." It is also an acknowledgment of existing, high-quality research projects that highlight the housing needs of those the market is least able to serve—especially extremely low-income households—such as the National Low Income Housing Coalition's Out-of-Reach and The Gap.



2022 Index Methodology and Data Updates

As with previous editions, this research effort includes two core components: the Home Attainability Index and the Occupational Analysis. Data is available for both components for more than 300 metropolitan statistical areas (MSAs). The analysis in this report is based on the 110 MSAs with a population over 500,000, as well as two smaller regions (Tallahassee and Gainesville, Florida) that were included in the 2022 *Emerging Trends* report.

Metrics were primarily derived from the U.S. Census Bureau's 2016–2020 American Community Survey data. The 2022 Index incorporates several changes to adjust to data availability, address emerging issues, or both. A full list of metrics and methodology notes is found on page 24.



MATTHEW NIEMANN

Index Data Partners

To produce the 2022 Index, the center partnered with [PolicyMap](#) and [RCLCO](#) for data collection, aggregation, and analysis. In addition, the following organizations directly provided data for inclusion in the Index:

NATIONAL HOUSING CONFERENCE: PAYCHECK TO PAYCHECK

Data for the Index and Occupational Analysis were provided by the National Housing Conference (NHC), whose quarterly Paycheck to Paycheck (P2P) data tool (March 2022 update) illustrates the ability—or lack thereof—of working families to afford typical housing in metropolitan areas across the country by comparing wage data and housing costs. The database incorporates regional median wage data from the U.S. Bureau of Labor Statistics, median home values from the Zillow Home Value Index, and Fair Market Rent levels from the U.S. Department of Housing and Urban Development.

To explore the Paycheck to Paycheck data tool and learn more about NHC's methodology, visit www.nhc.org/paycheck-to-paycheck/.

NATIONAL LOW INCOME HOUSING COALITION: THE GAP

Data on affordable and available rental units were provided by the National Low Income Housing Coalition through its research and analysis on gaps in rental housing affordability and availability, with a focus on extremely low-income households. Updated annually, The Gap “presents data on the affordable housing supply and housing cost burdens at the national, state, and metropolitan levels. The report also examines the demographics, disability and work status, and other characteristics of extremely low-income households most impacted by the national shortage of affordable and available rental homes.”

To explore data and analysis from The Gap and learn more about NLIHC's methodology, visit <https://reports.nlihc.org/gap>.



CHERYL MCINTOSH, ANKROM MOISAN ARCHITECTS

2022 Index Findings and Analysis

The 2022 Index explores the attainability implications of shifts in housing demand and regional competitiveness caused by demographic changes, pandemic-influenced employer and employee location decisions, and the high-cost of both building and finding homes in the largest and most economically vibrant regions.

Though a common perspective is that demand is shifting, conflicting data and perspectives exist on the magnitude of shifts and the extent to which they are durable or temporary responses to the chaos of the past several years. This uncertainty is compounded by questions regarding the reliability of census data collected during the pandemic. With this context in mind, a review of literature as part of the Index research process identified several trends, themes, and questions (see Resources at the end of this document for works cited):

- Though the rate was slower than in previous decades, regions with a population above 1 million grew faster than smaller regions in the past decade, led by regions in Texas and Florida. All these larger regions became more racially diverse over the past decade. Trends in neighborhood-level segregation varied widely, with a modest decline in segregation for Black and Latino or Hispanic Americans overall (Frey, “Growth, Diversity, Segregation, and Aging”).
- Some analysts have documented migration toward regions with lower housing costs and to more suburban locations, which could accelerate if trends toward employees working from home are durable and provide households with a greater opportunity to relocate to areas with lower costs, larger homes with more space, or both (Urban Reform Institute).
- Some evidence exists that urban cores and larger regions are rebounding, as evidenced by reduced retail vacancy rates (Byerly-Duke and Berube) and rising prices and rents. Though rising interest rates may dampen the impact on home purchase prices, that could have spillover effects on the rental market.
- If the “flight to affordability” continues, it is unclear whether “receiving” housing markets are ready to absorb this new growth. How much slack is in the market, and does the necessary production capacity to scale up exist? Do markets that are receiving middle- and higher-income households have sufficient housing options for middle- and lower-income workers that provide the services and amenities that make these communities desirable places to live?

NOTE ON DATA INTERPRETATION

The ULI Terwilliger Center has not conducted advanced statistical analyses based on the Index data, so any inferences on correlation/causation would be speculative. Several factors that were not directly included in the analysis may contribute to a region scoring particularly well, or poorly, on a given metric. These factors include, but are not limited to, a region’s population, its geographic location and scale, the level of economic growth, and the level of household diversity. The 2022 Index data can serve as the foundation for deeper analysis at the local level to identify the relevant issues for that region.

A Closer Look at Regional Conditions by Cohort

The Home Attainability Index cannot provide a definitive answer to these questions, and several can only be answered over time. The Terwilliger Center’s analysis of the 2022 Index data focused on considering the potential implications of various market-shift scenarios based on the more longstanding housing market conditions that the Index captures.

As part of this analysis, the center grouped regions into cohorts, based first on size (25 largest regions, and regions with a population of 1 million, and 500,000 to 1 million) and then according to market characteristics. For the market characteristic comparisons, Index regions were grouped into cohorts based on ULI’s *Emerging Trends in Real Estate® 2022* report. These cohorts (see table below) are based on market data and practitioner perspectives on a region’s current economic conditions, growth prospects (across real estate sectors), and homebuilding prospects.

Though developed separately from the Index research process, these cohorts largely correspond with groupings commonly found in other analyses of the housing market: a set of core, high-cost housing markets that are generally considered to be the country’s economic engine

TABLE 1 Regional Conditions by Cohort

Cohort	Summary Description from <i>Emerging Trends</i>	Examples of Regions in Cohort	Median Population for Cohort
Establishment	Long the nation’s economic leaders, these regions offer tremendous opportunities but appeal has waned in recent years as growth has slowed and challenges increased.	New York City, Boston, Chicago, San Francisco (9 total)	4,854,808
Magnets	Migration destination for both people and companies, and most are growing more quickly than the U.S. average in terms of both population and jobs.	Atlanta, Nashville, Boise, Phoenix (18 total)	2,761,732
Niche	Generally smaller or less economically diverse but have a dominant economic driver that supports stable economic growth.	Baltimore, Columbus, Las Vegas, Orlando (23 total)	940,163
Backbone	Variety of interesting and enjoyable places to live and work; slower growing but benefit from moderate housing and business costs.	Albuquerque, Cleveland, Indianapolis, Sacramento (17 total)	1,576,525

(“Establishment” markets); a series of rapidly growing (often southern/Sun Belt) markets that are converging with the first group in terms both economic potential and housing costs (“Magnet” and, to a lesser extent, “Niche” markets); and other markets (of a mix of sizes) experiencing less “breakneck” growth for a variety of reasons (certain “Niche” and “Backbone” markets).

Finally, not all Index regions are included in the *Emerging Trends* analysis. Those regions have not been assigned to any cohort (other than those based on population).

EMERGING TRENDS IN REAL ESTATE® 2022

Emerging Trends is an annual series of trends and forecast publications that reflect the views of leading real estate executives. Undertaken jointly by PwC and ULI, *Emerging Trends* provides an outlook on real estate investment and development trends, real estate finance and capital markets, property sectors, metropolitan areas, and other real estate issues.

Emerging Trends assesses market prospects predominantly at the regional level. However, not all market designations align with the Index’s MSA boundaries. *Emerging Trends* splits up certain larger markets into smaller submarkets. For the purposes of the Index analysis, the Terwilliger Center assigned the core city cohort designation (Los Angeles, Miami, New York City, San Francisco, Seattle, and Washington, D.C.) to the entire region.

Overall Affordability

Consistent with findings from previous years, severe cost burdens are not particularly widespread for middle-income households. However, the aggregate data masks considerable variation by region.

The highest levels of severe cost burden are found in the West. All of the markets where more than a third of households earning \$35,000 to \$50,000 per year (the lower bound of this category is slightly more than twice the federal minimum wage) are severely cost burdened are located in the Pacific time zone (or farther west): Los Angeles, San Diego, Oxnard-Thousand Oaks-Ventura, Urban Honolulu, San Francisco, and San Jose.

- Rates of severe cost burden are higher in the larger-population cohorts.
- All but the Backbone markets have severe cost burden rates higher than the data set median, but rates in Establishment markets are dramatically higher than in all other cohort groupings.
- Homeownership is disproportionately costly compared with renting in Establishment and Magnet markets in particular

It may not be surprising that some of the most economically productive markets have elevated levels of severe cost burden in terms of specific income brackets (in real dollars) that are not adjusted for local conditions (for example, as a percentage of area median income [AMI]). It is difficult to know for sure the extent to which higher housing costs in more expensive markets are compensated for by higher wages. However, there is considerable evidence that suggests that in many markets, wages are not keeping up.

- Of the 18 occupation/household types considered in the Index Occupational Analysis, six could not afford housing of any type in at least 90 percent of the markets examined. Twelve household types could afford a two-bedroom rental in less than half of the regions.
- This is consistent with recent research from the American Enterprise Institute, which found that noncollege workers face a “housing inclusive urban wage penalty” (that is, increased income is not sufficient to compensate for increased cost of living) in high-density, high-productivity markets (Shoag, Veuger, and Hoxie).
- These disparities have implications for racial and socioeconomic equity. As addressed in the 2021 Index publications, Black and Hispanic households were more likely to work in high-contact jobs (such as many of those included in the Occupational Analysis) that paid lower wages and were more likely to lose income during the pandemic (Harvard Joint Center for Housing Studies, 2020).
- Many critical occupations considered in this analysis typically earn less than \$35,000 per year, the lower threshold for the Index’s severe cost burden metrics. Rates of severe cost burden—and by extension, housing instability—for these households are likely even higher.

TABLE 2 Overall Affordability

Overall Affordability	Dataset Median	Occupations with Wages Typically in This Income Category	Dataset Median Regional Wage					
Percentage of severely cost-burdened households with incomes between \$35-50,000/year	6.96%	Emergency Medical Technicians and Paramedics Bus Drivers, Transit, and Intercity Automotive Service Technicians and Mechanics Heavy and Tractor-Trailer Truck Drivers	\$37,280 \$41,110 \$44,530 \$47,560					
Percentage of severely cost-burdened households with incomes between \$50-75,000/year	2.29%	Two-Income Household (janitor, security guard) Middle School Teachers, Except Special and Career/Technical Education Registered Nurses Two-Income Household (truck driver, home health aide)	\$56,950 \$59,410 \$71,060 \$72,260					
Occupations < \$35,000		Waiters and Waitresses Childcare Workers Maids and Housekeeping Cleaners Home Health and Personal Care Aides Retail Salespersons Janitors and Cleaners, Except Maids and Housekeeping Cleaners Nursing Assistants Security Guards Laborers and Freight, Stock, and Material Movers, Hand	\$20,530 \$23,990 \$24,440 \$24,700 \$25,620 \$27,610 \$30,130 \$30,390 \$30,770					
Occupations > \$75,000		Two-Income Household (childcare worker, middle school teacher)	\$83,530					
		<i>Emerging Trends Cohorts</i>	<i>Population Cohorts</i>					
		Establishment	Magnets	Niche	Backbone	Top 25	>1MM	500K-1MM
Overall Affordability	Dataset Median							
Percentage of severely cost-burdened households with incomes between \$35-50,000/year	6.96%	29.36%	9.85%	7.31%	4.86%	14.05%	9.83%	5.31%
Percentage of severely cost-burdened households with income between \$50-75,000/year	2.29%	11.69%	2.76%	2.30%	1.87%	4.88%	2.72%	1.68%
Tenure cost proportion (own/rent)	1.03	1.16	1.21	1.01	0.98	1.04	1.02	1.04

TABLE 3 Occupational Affordability

	Median Annual Wage	% of Regions Affordable – 10% Down	% of Regions Affordable – 3% Down	% of Regions Affordable FMR 1 BR	% of Regions Affordable FMR 2 BR	% of Regions Affordable FMR 3 BR
Two-Income Household (childcare worker, middle school teacher)	\$83,530	54.05%	52.25%	100.00%	98.20%	93.69%
Two-Income Household (truck driver, home health aide)	\$72,260	39.64%	35.14%	98.20%	92.79%	79.28%
Two-Income Household (janitor, security guard)	\$56,950	17.12%	13.51%	94.59%	84.68%	40.54%
Automotive Service Technicians and Mechanics	\$44,530	3.60%	3.60%	79.28%	45.95%	2.70%
Bus Drivers, Transit and Intercity	\$41,110	6.32%	5.26%	54.74%	27.37%	6.32%
Childcare Workers	\$23,990	0.90%	0.90%	0.00%	0.00%	0.00%
Emergency Medical Technicians and Paramedics	\$37,280	1.90%	1.90%	47.62%	13.33%	0.00%
Heavy and Tractor-Trailer Truck Drivers	\$47,560	7.21%	4.50%	81.98%	52.25%	12.61%
Home Health and Personal Care Aides	\$24,700	0.90%	0.90%	0.00%	0.00%	0.00%
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	\$27,610	0.90%	0.90%	7.21%	0.00%	0.00%
Laborers and Freight, Stock, and Material Movers, Hand	\$30,770	1.80%	0.90%	20.72%	0.00%	0.00%
Maids and Housekeeping Cleaners	\$24,440	0.90%	0.90%	0.90%	0.00%	0.00%
Middle School Teachers, Except Special and Career/Technical Education	\$59,410	21.62%	17.12%	96.40%	86.49%	53.15%
Nursing Assistants	\$30,130	0.90%	0.90%	16.22%	0.00%	0.00%
Registered Nurses	\$71,060	42.34%	32.43%	100.00%	100.00%	85.59%
Retail Salespersons	\$25,620	0.90%	0.90%	3.60%	0.00%	0.00%
Security Guards	\$30,390	1.80%	0.90%	18.02%	3.60%	0.00%
Waiters and Waitresses	\$20,530	0.90%	0.90%	2.70%	0.00%	0.00%

Homeownership Attainability

Specific to homeownership, 2022 Index data show considerable gaps in homeownership attainability by cohort. Gaps are considerably more pronounced between *Emerging Trends* cohorts when compared to the population size cohorts.

- Households at 80 percent of AMI are nearly locked out of Establishment markets and can afford fewer than a third of the inventory in Magnet and Niche markets. Backbone markets are the most affordable. This affordability hierarchy holds for households at 120 percent of AMI as well, although it is less pronounced.
- Patterns related to gaps by race and ethnicity are less discernable. Disparities are large across all market cohorts.
- Occupational Analysis data show considerable barriers for various segments of the workforce. Only four of 18 household types analyzed could afford homeownership (10 percent downpayment) in more than one-fifth of the regions in the data set.

Moving forward, homeownership may become even more challenging for those who do not already own a home. Data used in the Index consider monthly payments, which are rising in response to Federal Reserve monetary policy and market conditions.

Furthermore, these data do not consider downpayments, which are already out of reach for many households. The Harvard Joint Center for Housing Studies recently found that 92 percent of renters lack the savings to afford the downpayment a first-time buyer would need to purchase a median-priced home. Nor are such savings likely to be achieved soon. In the regions where much of the country's jobs are located and/or new job creation is occurring (Establishment and Magnet cohorts), Index data suggest that the median time needed for an 80 percent AMI household to save for a downpayment is more than 20 years. Among specific occupations, the median years to save range from 14 (a two-income household including a child care worker and middle school teacher) to 54 (waiters and waitresses).

TABLE 4 2022 Home Attainability Index Summary Statistics – Homeownership Attainability

Homeownership Attainability	Dataset Median	Emerging Trends Cohorts				Population Cohorts		
		Establishment	Magnets	Niche	Backbone	Top 25	>1MM	500K-1MM
Estimated percent of all households that own a home	65.30%	60.21%	64.58%	66.60%	65.68%	63.91%	64.38%	67.09%
Estimated percent of all homes likely affordable to a four-person family earning 80% AMI	30.91%	7.63%	23.37%	28.86%	37.67%	23.19%	27.71%	31.66%
Estimated percent of all homes likely affordable to a four-person family earning 120% AMI	52.02%	30.87%	45.65%	48.98%	57.24%	41.47%	49.74%	55.88%
Non-Hispanic White–Black homeownership gap (percentage points)	32.37%	32.14%	29.57%	31.15%	36.85%	30.10%	31.21%	33.40%
Non-Hispanic White–Hispanic homeownership gap (percentage points)	23.71%	20.81%	20.55%	27.15%	26.12%	20.82%	23.58%	23.97%
Length of time in years to save for downpayment (80% AMI, four-person household; median-priced home)	16.61	25.66	20.86	16.10	13.41	20.36	17.97	15.83

Rental Attainability

Consistent with findings in previous years, rental housing is broadly attainable for middle-income households outside of the nation’s hottest housing markets, but lower-income households consistently struggle to find safe, decent, and affordable rental homes.

- Establishment markets are the outlier in terms of rental attainability for households earning 80 percent of AMI, with only about 40 percent of two-bedroom rentals affordable to a family of four at that income. Conversely, nearly 80 percent of inventory was affordable in Magnet markets (the second-least affordable cohort).
- According to the Occupational Analysis, eight occupation/households types could not afford a two-bedroom rental at fair market rent in any of the regions in the data set (child care workers; home health and personal care aids; janitors and cleaners; laborers and stock movers; housekeepers; nursing assistants; retail salespersons; and waiters and waitresses).
- Extremely low-income households (at or below 30 percent of AMI) struggle to find affordable homes anywhere. This demonstrates the need for subsidies and other programs to provide more deeply affordable housing.

Stability and choice are critical for lower-income households, but high costs present a barrier to that stability. The Index’s “months to save” statistic is an approximate measure of choice and stability; does the renter have the resources to cover the cost of a move (or a three-month interruption in income)? Of the 18 occupation/household types analyzed, “months-to-save” ranged from just under 15 months to nearly five years. Nine occupations would need more than three years to save enough to meet this benchmark, which assumes these households were not already cost burdened and able to save in the first place.

An insufficient financial buffer can contribute to instability. When a market becomes less affordable relative to income, research suggests that community-level homelessness rates increase, with an “inflection point” when median rents reach 31 percent of median income (Glynn, Byrne, and Culhane). Markets that meet or exceed this inflection point put pressure on vulnerable households and reduce their ability to “save for a rainy day.” The median region in the data set had a “buffer” before reaching the inflection point of about 6 percent. Put another way, rents could increase relative to income by about 6 percent before the market reached the inflection point. Establishment markets were the only cohort to exceed this threshold, with the median region in that cohort exceeding that 31 percent of income standard by nearly 10 percent.

TABLE 5 2022 Home Attainability Index Summary Statistics – Rental Attainability

Rental Attainability	Dataset Median	Emerging Trends Cohorts				Population Cohorts		
		Establishment	Magnets	Niche	Backbone	Top 25	>1MM	500K-1MM
Estimated percent of all households that rent a home	34.71%	39.79%	35.42%	33.40%	34.32%	36.09%	35.62%	32.91%
Estimated percent of two-bedroom rentals likely affordable to a four-person family earning 50% AMI	35.85%	32.70%	31.75%	33.54%	57.45%	31.85%	33.49%	39.43%
Estimated percent of two-bedroom rentals likely affordable to a four-person family earning 80% AMI	85.49%	40.99%	79.34%	85.74%	91.89%	72.19%	81.04%	87.75%
Deeply Affordable Rental Gap: Affordable and available rental units per 100 HH at 30% AMI (NLHC)	32.29	30.71	27.31	32.24	36.08	30.22	31.47	34.10
Homelessness Inflection Point: Distance to threshold	6.16%	-9.94%	3.06%	3.68%	14.71%	1.91%	9.34%	3.69%
Length of time in months to save for rental move (first/last month’s rent, security deposit; 50% AMI, four-person household)	28.00	36.65	30.34	29.96	25.09	31.11	28.79	27.25

High market rents are not the sole cause of homelessness, and lower rents across the board will not, alone, eliminate homelessness. However, failing to address market rents that are out of line with incomes takes an enormous toll on the families affected and creates additional demand for subsidies needed to support households facing additional barriers to housing.

Neighborhood Opportunity and Access

Regional data can mask considerable variety from city to city and neighborhood to neighborhood. The Index focuses on two core issues that address geospatial differences within regions: segregation and mobility.

The baseline state of U.S. cities and regions can be characterized as racially segregated. According to the Theil Index of racial segregation, only six regions included in the Index were below the threshold for low segregation, six were highly segregated, and the remaining 100 regions were considered moderately segregated. All cohorts analyzed had median levels of segregation well above the cutoff for moderate segregation.

In terms of income segregation, the Index includes a measure of the proportion of households that live in “middle-income neighborhoods.” There was minimal variation among the various cohorts. At opposite ends of the spectrum, the middle-income proportion was less than 60 percent in eight regions (Birmingham, Detroit, El Paso, New York City, Houston, Fresno, Bridgeport, and Memphis) while eight had proportions above 80 percent (Harrisburg; Fayetteville, North Carolina; Modesto; Madison; Ogden; Deltona; Portland, Maine; and Lancaster, Pennsylvania).

Segregation on the basis of race took centuries to create and become entrenched, and racial and economic segregation have shown no signs of being rapidly undone. In fact, the reverse may be true in some cases. A recent analysis showed that nationwide, the share of census tracts where the median rent was affordable to the median renter in the county fell from 72 percent to just 41 percent from 2000 to 2019 (McCue). While regional data on racial segregation trends are mixed, the past decade has seen an increase in racial diversity in the suburbs (Frey, “Today’s Suburbs”).

Multimodal mobility is important in its own right for economic opportunity, but can also ameliorate the effects of spatial segregation by opening up a wider range of

TABLE 7 2022 Home Attainability Index Summary Statistics – Neighborhood Opportunity and Access

Neighborhood Opportunity and Access	Dataset Median	Emerging Trends Cohorts				Population Cohorts		
		Establishment	Magnets	Niche	Backbone	Top 25	>1MM	500K-1MM
Center for Neighborhood Technology MSA AllTransit Score	2.9	5.5	3.05	2.7	3.6	4.5	3.7	2.4
Center for Neighborhood Technology City AllTransit Score	5.7	9.1	6.05	5.1	6.3	8	6.8	4.6
Center for Neighborhood Technology AllTransit score – MSA/city ratio	0.55	0.71	0.58	0.55	0.50	0.59	0.55	0.52
Estimated percent of workers with a work commute of more than an hour	5.82%	14.16%	7.59%	5.21%	5.11%	10.61%	7.45%	5.40%
Theil Index of residential segregation	0.29	0.29	0.265	0.27	0.33	0.29	0.315	0.275
Brookings Metro Monitor: racial inclusion score (normalized)	0.53	0.75	0.41	0.60	0.55	0.57	0.50	0.52
Income segregation: percent of households in “middle-income” neighborhoods	69.04%	66.26%	67.82%	71.09%	66.29%	66.25%	66.57%	73.40%
Brookings Metro Monitor: geographic inclusion score (normalized)	0.49	0.79	0.49	0.36	0.47	0.53	0.50	0.50

neighborhoods to households without automobiles. Nonautomotive transportation also helps advance environmental sustainability and emissions reduction goals.

Given the affordability challenges of Establishment markets, the mobility-related implications could be considerable if these regions begin to lose population (or have a reduced share of growth) over the long term. Establishment markets have considerably higher AllTransit scores at both the central city and regional levels. It is too simplistic to assume that moving from a better-served region to a less-served region will necessarily undermine multimodal access. While some households may move from Manhattan to exurban Syracuse and end up driving more, others may move from suburban Seattle to Boise to be able to afford a walkable, mixed-use neighborhood that may have otherwise been out of reach.

Ultimately, more data (and time) will be needed to better understand the net impact of migration patterns. However, if on balance more people move away from established multimodal networks, it could undermine the sustainability of existing transit investments, create demand for new infrastructure, and potentially undermine climate and environmental goals.



“People want that 15-minute lifestyle if they can get it. They want walkable, amenitized, real places that allow them to live fuller lives without having to get into a car and transition from one segment of their life to another.”

—Developer interviewee, *Emerging Trends in Real Estate*® 2022

Housing Production

The year 2022 is a “transition year” for the Index’s Housing Production category. The Terwilliger Center is in the process of examining alternative methodologies that will provide a more detailed and nuanced understanding of issues related to housing supply and production. In the interim, this year’s Index shifts the focus from construction permitting to the actual change in inventory in relation to household growth.

Recent research indicates that there is a national production shortfall of 3.79 million housing units, with 169 regions experiencing underproduction as of 2019 (Kingsella and MacArthur). Both indicators have worsened since 2012.

Over the past decade, household growth was strongest in the Magnet and Niche cohorts (in percentage terms). These regions also saw inventory grow the most during this time, with Niche markets adding considerably more units than all other cohorts. Given that greater availability of attainable housing is often theorized as a reason for the strength of these cohorts, it will be important for these regions to take concerted action to ensure that markets can absorb the additional demand and that acute affordability challenges do not migrate with the new households. Certain markets may have already fallen behind this curve: Denver, Nashville, and Phoenix (all Magnets) rank among the least affordable homeownership markets in this data set.

In addition to focusing on new supply, regions will also need to consider the various dimensions of supply that is being built. What housing types are being produced? Where in the region are those units located? What is the new housing replacing (i.e., greenfield development vs.



CHIPPER HATTER

TABLE 8 2022 Home Attainability Index Summary Statistics – Housing Production

Housing Production	Dataset Median	Emerging Trends Cohorts				Population Cohorts		
		Establishment	Magnets	Niche	Backbone	Top 25	>1MM	500K-1MM
Percent growth in households, 2010-2020	5.37%	5.12%	11.19%	5.95%	2.81%	7.09%	5.87%	5.36%
Percent growth in housing inventory, 2010-2020	7.78%	5.51%	10.35%	9.22%	3.19%	7.89%	5.83%	9.22%
Units added to inventory per new household, 2010-2020	1.28	1.06	1.10	1.57	1.05	1.10	1.11	1.52

infill redevelopment)? The answers to these questions will influence how much new development improves attainability.

The answers will also affect the issues addressed in the Neighborhood Opportunity and Access category. For example, research suggests that neighborhoods with more diverse housing inventory (lower shares of single-family homes) tend to be more socioeconomically diverse (Hadden Loh, Kim, and Vey). Anecdotal evidence suggests that developers are increasingly focusing on new construction that can create and/or support neighborhood retail and nonautomotive transportation, even when it occurs in the suburbs.

Comparing Regions

The Home Attainability Index enables comparisons across regions. Such comparisons can serve multiple purposes, such as:

- Allowing cross-regional comparisons to identify threats and opportunities related to regional economic competitiveness.
- Enabling analysis of contextual housing need with wages for various occupations.
- Providing a better understanding of the comparative housing/economic conditions that are contributing to interregional mobility trends (i.e., learning what regions that are losing/gaining population have in common? Our region is gaining population from region X; how does our housing market compare to theirs, and what does it mean for us?).
- Serving as a starting point for identifying best practices for addressing regional needs (i.e., who is facing similar challenges and what are they doing to address them?).

To illustrate, the following table compares western regions from each Emerging Trends category. The San Francisco region is a clear example of a high-cost region where housing is unattainable for many, despite comparatively high incomes. The housing stock in Denver and Boise (Magnets) and Las Vegas (Niche) has been growing substantially faster than that in San Francisco but is lagging the national median when compared to household growth. Companies—or remote employees—considering relocating from Silicon Valley to mountain or desert markets already may face comparatively high homeownership costs, and affordability challenges have already begun to extend to middle-income renters in the Denver market. While Boise and Spokane remain attainable in comparison with most markets, there are significant gaps in the housing market and proactive steps are necessary to add supply and improve affordability.

BOISE AT A CROSSROADS

Recently, ULI held a technical assistance panel in Boise to address the planning and policy choices required to ensure that future development meets the city’s needs, particularly for households earning less than the median income. Panelists developed a series of recommendations to address underproduction through improved land use and planning policies and increased investment in affordable housing.

TABLE 9 2022 Home Attainability Index Summary Statistics

		Establishment	Magnet		Niche	Backbone
Metrics	Dataset Median	San Francisco-Oakland-Berkeley, CA	Denver-Aurora-Lakewood, CO	Boise City, ID	Las Vegas-Henderson-Paradise, NV	Spokane-Spokane Valley, WA
Overall Affordability						
Percentage of severely cost-burdened households with incomes between \$35-50,000/year	6.96%	39.89%	19.84%	5.98%	10.13%	4.77%
Percentage of severely cost-burdened households with incomes between \$50-75,000/year	2.29%	20.74%	4.94%	1.49%	2.96%	2.17%
Tenure cost proportion (own/rent)	1.03	1.69	1.4	1.76	1.3	1.55
Homeownership Attainability						
Estimated percent of all households that own a home	65.30%	54.98%	64.79%	71.04%	54.79%	64.37%
Estimated percent of all homes likely affordable to a four-person family earning 80% AMI	30.91%	5.48%	8.2%	14.6%	12.6%	19.26%
Estimated percent of all homes likely affordable to a four-person family earning 120% AMI	52.02%	10.04%	23.51%	29.24%	23.52%	35.87%
Non-Hispanic White-Black homeownership gap (percentage points)	32.37%	25.41%	29.46%	25.47%	32.6%	42.03%
Non-Hispanic White-Hispanic homeownership gap (percentage points)	23.71%	19.4%	20.82%	15.56%	16.89%	26.12%
Length of time in years to save for downpayment (80% AMI, four-person household; median-priced home)	16.6	52.48	26.75	30.04	24.77	24.43
Rental Attainability						
Estimated percent of all households that rent a home	34.71%	45.02%	35.21%	28.96%	45.21%	35.63%
Estimated percent of two-bedroom rentals likely affordable to a four-person family earning 50% AMI	35.85%	16.56%	13.12%	58.62%	37.84%	59.01%
Estimated percent of two-bedroom rentals likely affordable to a four-person earning 80% AMI	85.49%	16.56%	49.7%	95.76%	88.27%	94.27%
Deeply Affordable Rental Gap: Affordable and available rental units per 100 HH at 30% of AMI (NLIHC)	32.3	32.83	28.06	33.29	13.22	32.66
Homelessness Inflection Point: Distance to threshold	6.16%	9.94%	10.11%	6.51%	14.98%	4.03%
Length of time in months to save for rental move (first/last month's rent, security deposit; 50% AM, four-person household; fair market rent)	28.0	49.58	31.34	29.4	32.91	27.2
Neighborhood Opportunity and Access						
Center for Neighborhood Technology MSA AllTransit Score	2.9	6.8	5.3	1.8	4.8	3.8
Center for Neighborhood Technology City AllTransit Score	5.7	9.6	7.8	3.8	5.1	6.0
Center for Neighborhood Technology AllTransit score – MSA/city ratio	0.55	0.71	0.68	0.47	0.94	0.63
Estimated percent of workers with a work commute of more than an hour	5.82%	17.71%	7.56%	3.79%	4.58%	4.16%
Theil Index of residential segregation	0.29	0.25	0.26	0.24	0.19	0.19
Brookings Metro Monitor: racial inclusion score (normalized)	0.53	0.98	0.23	0.09	0.51	0.6
Income segregation: percent of households in "middle-income" neighborhoods	69.04%	66.25%	68.34%	77.81%	67.58%	70.71%
Brookings Metro Monitor: geographic inclusion score (normalized)	0.49	1.00	0.19	0.91	0.91	0.11
Housing Production						
Percent growth in households, 2010-2020	5.37%	4.51%	8.67%	19.6%	12.85%	9.73%
Percent growth in housing inventory, 2010-2020	7.78%	4.39%	8.19%	17.46%	10.67%	20.39%
Units added to inventory per new household, 2010-2020	1.28	1.02	0.98	0.9	0.93	1.92



SAM FENTRESS PHOTOGRAPHY

Conclusions in a Climate of Uncertainty

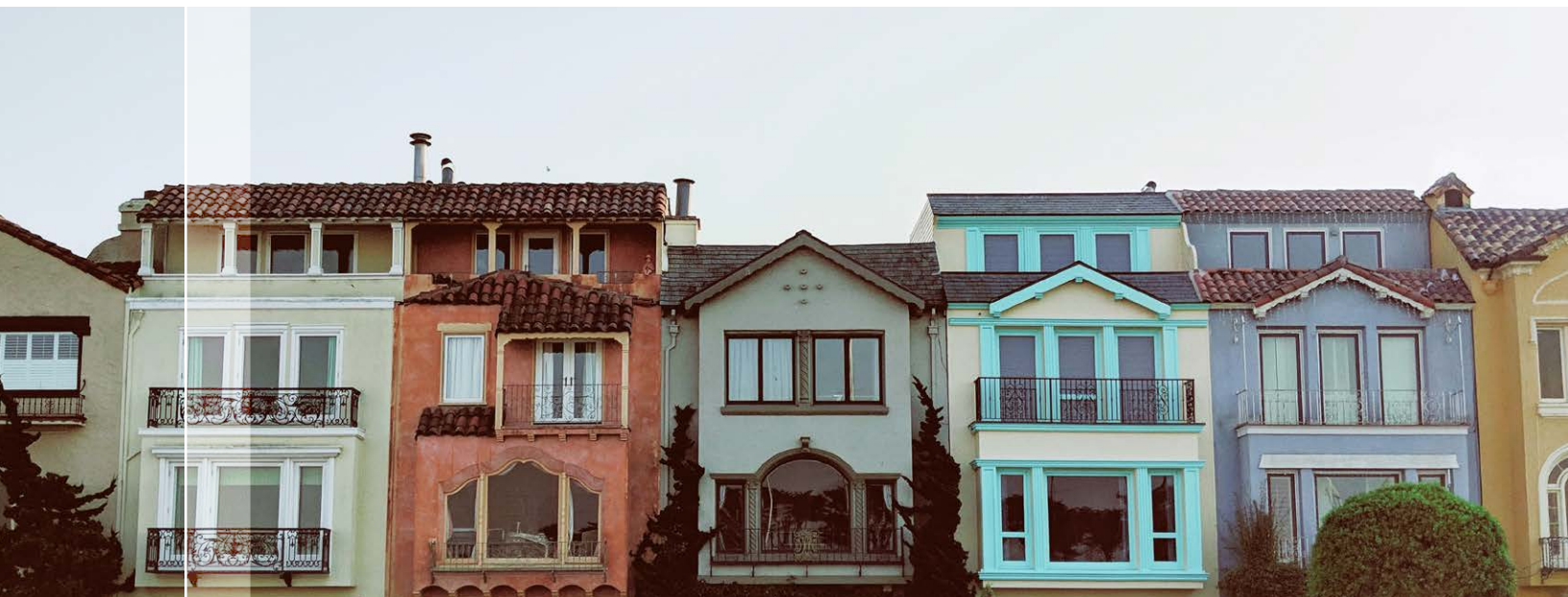
The past several years have been characterized by wild swings—a booming economy with historically low interest rates, followed by a pandemic and economic recession that disrupted all aspects of life (including housing markets), followed by a stop-and-start recovery in which the nature of office-based work remains an open question. Today, inflation and rising interest rates add more uncertainty to the housing market and create additional challenges for households without a stable foothold on the housing ladder.

Based on what we do know in this climate of uncertainty, we can draw some conclusions—and raise some concerns—about the state of home attainability:

- Few available housing units of any kind, even modest rental units, exist that are affordable to many low-wage workers in most regions. High cost burdens leave less residual income. In the current high-inflation environment, many households will face heightened economic insecurity, particularly when these factors are combined with high energy costs, which affect utilities and commuting expenses. Left unchecked, these factors could raise the risk of homelessness for many households.
- Long-term housing underproduction is a primary driver of national housing challenges, and current market conditions—economic uncertainty, rising inflation, high costs of materials, high labor costs and limited worker availability—are likely to further restrain the market from catching up to meet demand. Anecdotal evidence suggests some builders are already pulling back in response to these pressures.

- While the national housing production shortage matters, shortfalls at the regional level are even more important. A lack of attainable housing in established markets is a contributing factor in some employers and households deciding to relocate to lower-cost markets.
- Though still offering a larger supply of attainable housing, many of these growing regions have not demonstrated that they can produce enough housing of the right type in the right locations (the “dimensions of supply”) to keep these markets—or submarkets therein—from following the trajectory of more established, high-cost markets. Staying ahead of the curve is crucial; regions fall behind can lead to other market distortions that raise the cost of developing new housing and further exacerbate the challenge.

As time goes on, it will be critical to examine the available data to see which of the trends of the past several years are durable and start to address some of the nuanced shifts in demand. However, today’s market is largely reflective of the conditions of not just the past two years, but also the preceding two decades. Attainability challenges require durable, systemic solutions with a focus on attacking the critical, longstanding challenges of adding new supply across all dimensions, preserving existing affordable housing, addressing entrenched socioeconomic inequities such as segregation, and providing subsidies and supports to those households that the market cannot or does not reach.



2022 Index Methodology and Data Updates

Methodological notes:

- American Community Survey (ACS) estimates aggregate survey responses over a five-year period. Annual releases (i.e., 2015–2019 ACS estimates and 2016–2020 estimates) should not be used to analyze trends over time due to the overlap in survey time periods. As such, Index data should not be used for this purpose unless otherwise specified.
- Due to the time necessary to collect and analyze it, Index data largely represent conditions before and during the early phases of the pandemic.
- Details on “changes in approach” below refer to adjustments made since publication of the 2021 Index. For more detailed methodological descriptions and interpretation notes, download the [2022 Home Attainability Index Dashboard and Data](#).

In analyzing Index data, it is important to note that no measure or index can perfectly capture the complexity of housing markets and the housing challenges of a region’s

population and workforce. The Index is intended to provide an informed starting point for deeper analysis. Critical considerations when using these data include, but are not limited to, the following:

- What other data points (such as the underlying diversity of the population and poverty levels) are relevant to a region’s context?
- How significant are housing quality challenges?
- What level of geography is being considered, and do local conditions compare with the regional data included in the Index?
- What are the magnitude and severity of special needs (such as housing for chronically homeless households or persons with disabilities), and are there other needs specific to the region?

OVERALL AFFORDABILITY: The purpose of this category is to provide a tenure-neutral snapshot of the extent to which middle-income households face substantial housing challenges.			
Metric	Source	Changes in approach	Interpretation notes
Percentage of severely cost-burdened households with incomes between \$35-50,000 and \$50-75,000/year	2016-2020 ACS	None	Households are severely cost-burdened if they spend more than 50 percent of income on housing.
Tenure cost proportion (ownership to rental)	Analysis of NHC P2P and HUD income limit data	No substantive changes; separate rental and homeownership metrics in the 2021 have been consolidated in this category.	Compares median home values and fair market rents to the median for the Index dataset in each category. A score greater than 1 indicates that homeownership is comparatively more expensive than rental; a score less than 1 indicates that renting is disproportionately expensive.

HOMEOWNERSHIP ATTAINABILITY: The purpose of this category is to illustrate the extent to which the ownership-oriented housing stock serves the middle segment of the market and to examine at a high level the extent to which there are gaps in homeownership opportunity by race and ethnicity.

Metric	Source	Changes in approach	Interpretation notes
Percentage of owner-occupant households	2016-2020 ACS	None	Provides context/scale for other Index metrics
Percentage of all homes likely affordable to a four-person family (income levels: 80 percent and 120 percent of AMI)	Analysis of 2016-2020 ACS data	None	Demonstrates the extent to which the existing owner-occupant housing stock is affordable to middle-income households. This is an analysis of the full inventory, not just recent sales.
Gap in homeownership rates among White, Black, and Hispanic households	Analysis of 2016-2020 ACS data	None	Demonstrates the extent to which different racial/ethnic categories are currently accessing homeownership and wealth creation (by proxy) in the region.
Estimated years needed to save for downpayment/closing costs; households at 80 percent of AMI	Analysis of NHC P2P & US Bureau of Economic Analysis data	None	Provides an approximation of how long it could take a hypothetical middle-income household to accumulate the cash savings necessary to purchase a median-price home in the region, measured in years.

RENTAL ATTAINABILITY: The purpose of this category is to illustrate the extent to which the rental market serves the lower and middle segments of the market. This category also examines the impact of rental costs on the ability of households to improve housing stability through savings.

Metric	Source	Changes in approach	Interpretation notes
Percentage of renter-occupant households	2016-2020 ACS	None	Provides context/scale for other Index metrics
Percentage of two-bedroom rentals likely affordable to a four-person family (income levels: 50 percent and 80 percent of AMI)	Analysis of 2016-2020 ACS data	New metric selected for methodological consistency with homeownership metrics	Demonstrates the extent to which the existing rental housing stock is affordable to middle-income households. This is an analysis of the full inventory, not just recent listings.
Affordable and available rental units per 100 households at or below 30 percent of AMI	NLIHC analysis (2016-2020 ACS)	Focusing solely on 30 percent AMI level to highlight needs of the most vulnerable households	Demonstrates the need for deeply affordable housing units, which generally require subsidy or other forms of public/philanthropic support.
Homeless Inflection Point: distance to threshold	Analysis of Zillow rent data and 2016-2020 ACS data	New metric for 2022	Recent research (Glynn, et al) suggests community-level homelessness rates increase once median rents reach/exceed 31 percent of median incomes. This metric measures (in percentage terms) how much “slack” a regional market has before it reaches that inflection point (negative numbers indicate that the market has exceeded the threshold by a given percent).
Estimated months needed to save for first/last month’s rent plus security deposit; households at 50 percent of AMI	Analysis of NHC P2P & US Bureau of Economic	None	Provides an approximation of how long it could take a hypothetical very low-income household to accumulate a specific benchmark for cash saving, measured in months. The purpose of this metric is to illustrate the extent to which a level of wealth/savings can serve as a barrier to housing choice and stability, in the context of regional housing costs.

NEIGHBORHOOD OPPORTUNITY AND ACCESS: Regionwide data can mask geographic, racial, and socioeconomic discrepancies and barriers to home attainability and opportunity. Though job markets and local economic factors cross municipal/county boundaries, the sheer size of many MSAs (which include urban cores, inner-ring suburbs, and exurbs) means that households face limits to where they can locate within a region beyond income and home attainability. It is outside the scope of this Index to comprehensively analyze disparities in regional housing markets and other critical issues such as exclusionary zoning. However, the Index does include metrics related to transit access, racial segregation, income segregation, and economic mobility to provide a snapshot of how housing and development patterns may influence neighborhood choice, racial equity, integration, and economic opportunity.

Metric	Source	Changes in approach	Interpretation notes
Center for Neighborhood Technology AllTransit score and MSA/central city ratio	Center for Neighborhood Technology	None	Assesses the quality and reach of the region's transit system. Regions with higher AllTransit scores provide households with better transportation alternatives beyond the automobile and put more employment opportunities within reach. Ratings are on a scale of 1 to 10, with a higher value indicating better transit access. The Index includes the region wide measure and a score for the ratio of transit in the region versus the central city. The latter is intended to demonstrate the extent to which high-quality transit access is available throughout the whole region or concentrated in a more limited area. An MSA/central city ratio of 1 indicates balanced transit access; the lower the value below 1, the more high-quality transit access is concentrated in the central city.
Percentage of workers with commute longer than one hour	2016-2020 ACS	None	Provides a mode-neutral assessment of the prevalence of extended commutes, which can serve as a proxy for location efficiency. Larger values indicate that a greater proportion of households have extended commutes.
Brookings Metro Monitor racial and geographic inclusion ranking	Brookings Institution (2019 ACS)	None	Demonstrates progress in addressing regional disparities in access to opportunity, using research that "tracks the inclusive economic growth performance of metropolitan regions. The racial inclusion rank incorporates changes in racial gaps in employment rates, median earnings, and relative poverty from 2009 to 2019. The geographic inclusion rank considers gaps at the neighborhood level for the same indicators over the same period of time. Lower values indicate the region is making more progress toward inclusivity (as measured by the percentage point change) relative to similarly sized regions.
Theil index of residential segregation by race/ethnicity	PolicyMap analysis (2016-2020 ACS)	Prior analysis was based on decennial Census data instead of more frequently updated ACS data.	Provides a measure of racial segregation in a region on a scale of 0 to 1 by comparing the diversity of subregions to the region as a whole. Values below 0.2 suggest lower levels of segregation; values above 0.4 indicate higher levels of segregation. One interpretation challenge is that regions with lower levels of overall diversity may be rated as having lower levels of segregation compared to regions with considerably higher levels of overall diversity.
Income segregation: percentage of households in "middle-income" neighborhoods	PolicyMap analysis (2016-2020 ACS)	None	Provides an indication of the extent to which the region's neighborhoods are 'within reach of middle-income households, by illustrating the proportion of families living in neighborhoods that are neither particularly "poor" nor affluent,' using methodology developed as part of Brown University's Diversity and Disparities project. A higher value indicates more households are living in neighborhoods that are either (a) moderately priced or (b) provide a wider range of price points.

HOUSING PRODUCTION: The purpose of this category is to identify the extent to which the region’s housing stock is keeping up with growth and the extent to which housing production includes a diversity of housing types. Housing production by itself does not guarantee an adequate supply of homes attainable across the income spectrum. However, in the context of growing regions and economies, new production in line with that growth is a necessary, though insufficient, component of a comprehensive approach to support broader attainability.

Metric	Source	Changes in approach	Interpretation notes
Percent growth in housing inventory, 2010-2020	RCLCO analysis of US Census Bureau Data	New metric, replaces metrics focused on permitting activity	Demonstrates the extent to which the overall housing inventory in a region has grown or shrunk. Though permitting activity is still an important metric for analyzing market trends, there is a considerable lag between permit issuance and when actual units are available and does not account for the extent to which housing units are being removed from the housing stock.
Percent growth in households, 2010-2020	Decennial Census and 2016-2020 ACS data	New metric	Contextualizes inventory shifts with the extent to which there is increased demand for housing in a region.
Units added to inventory per new household added, 2010-2020	Derivative of above metrics	New metric, replaces permits per new household metric	Demonstrates the extent to which inventory growth is keeping up with household formation and growth.

OCCUPATIONAL ANALYSIS

Using NHC’s Paycheck to Paycheck database, the Occupational Analysis compares the amount needed to afford various housing types with the median amounts earned by various occupations in each region. The analysis includes a selection of 18 hypothetical “households”-15 one-income households and three two-income households-using a variety of occupation types and industries. The data are used to demonstrate whether there is a surplus (a household earns more than necessary to afford the given housing type without being cost burdened) or a gap. Housing types analyzed include:

- **Ownership of a median-priced home with a 3 percent downpayment and a 10 percent downpayment, respectively, and**
- **Renting a one-, two-, and three-bedroom apartment at fair-market rent.**

In addition, the core Index measures of average years to save for downpayment/closing costs and months to save for first and last month’s rent plus a security deposit are calculated for each occupation in each region.

Resources

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