ULI TERWILLIGER CENTER 2021 HOME ATTAINABILITY INDEX

Urban Land Institute

Summary Report

2001 L Street, NW | Suite 200 | Washington, DC 20036-4948

Recommended bibliographic listing:
Urban Land Institute. *ULI Terwilliger Center 2021 Home Attainability Index: Summary Report.* Washington, DC: Urban Land Institute, 2021.

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 2020 alone, more than 2,600 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 ULI 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.

Urban Land Institute Terwilliger Center for Housing

Acknowledgments

Support for this research was provided by the Robert Wood Johnson Foundation. The views expressed in this publication do not necessarily reflect those of the Foundation.

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.

NATIONAL HOUSING CONFERENCE

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.

NATIONAL LOW INCOME HOUSING COALITION

In addition, the Terwilliger Center thanks the following experts in housing research, finance, policy, planning, and development for participating on the 2021 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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The Big Picture

The ULI Terwilliger Center's 2021 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.

Though the Index does not assign a single "score" for each region, **Ogden-Clearfield, Utah**, was the region that performed better than the data set median for the most Index metrics. Of the 50 most-populous regions, only **San Antonio** and **Pittsburgh** performed better than the median across a minimum of two-thirds of Index metrics. Only three regions in the 2021 Index data set—**Colorado Springs, Honolulu**, and **Las Vegas**—met the standard for "low" levels of racial segregation (though this metric does not control for the overall diversity of the region). **Oxnard–Thousand Oaks–Ventura, California**, was the only region to perform better than the median across all Index metrics directly focused on equity. Among regions that are relatively affordable, there were nine regions in which strong affordability may be offset by lagging performance on equity-related measures: **Toledo, Cleveland, Birmingham, Charlotte, St. Louis, Cincinnati, Scranton, Louisville**, and **Winston-Salem**.[1] Conversely, nine metro areas—**San Diego, Los Angeles, Riverside, Denver, Portland, Stockton, Colorado Springs, Las Vegas**, and **Seattle**—struggle with affordability but perform comparatively well on most equity measures.

In sum, the Terwilliger Center identified the following high-level findings:

- The most severe cost burdens among middle-income households are predominantly found in the most-populous regions.
- However, there is a nationwide lack of attainable homes for many members of the workforce that is not limited to the most vibrant U.S. metropolitan economies.
- In particular, there is a national struggle for lower-income households to find attainable rental units.
- Segregation—both by income and race—cuts across market types and geographies, and high housing costs threaten to worsen racial and socioeconomic disparities.

Introduction and Purpose

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.

Since release of the pilot, the center has worked with a national cross-sector group of partners to expand and improve this resource, informed by recent global and national events. Specifically, demonstrations against racial injustice have brought to the fore issues of segregation and access to opportunity, and the 2021 Home Attainability Index incorporates a more robust discussion of issues related to segregation, equity, and opportunity. In addition, the 2021 Index addresses the COVID-19 pandemic and associated economic disruption by incorporating health-related metrics and highlighting workers at elevated risk of infection, job disruption, or both. This work is supplemented by a separate policy brief focusing specifically on the health and housing nexus, "ULI Terwilliger Center 2021 Home Attainability Index: Housing, Health, and the COVID-19 Crisis."

With this background, the 2021 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 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;
- Explicitly identifies and highlights racial, socioeconomic, and intraregional disparities and inequities;
- Addresses attainability gaps and housing vulnerability of those whose occupations have been particularly affected by COVID-19 and the resulting economic disruption; and
- Enables national and regional comparisons to inform housing production, policy, and financing decisions.

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[2]—such as the National Low Income Housing Coalition's Out-of-Reach and The Gap.

Description of Data and Interpretations

This research effort includes two core components: the Home Attainability Index and the Occupational Analysis.

- The Index is an array of housing-related metrics for regions across the country. The Index includes data on the 100 most-populous metropolitan statistical areas (MSAs)[3] in the United States, as well as an additional 12 MSAs served by ULI district councils. The Index metrics can be used to compare regions with each other and the median values for the full 112 MSA data set.
- An Occupational Analysis was conducted using data provided by the National Housing Conference (NHC) through its Paycheck to Paycheck database (see accompanying description). This analysis involved selecting a sample of occupations and comparing region- and job-specific median wage information to housing costs for both rental and homeownership. The resulting attainability gap—i.e., the additional income the household would need in order to afford a given housing type—or surplus can be used to compare attainability across regions.

Housing markets are influenced by multiple, interrelated submarkets differentiated by tenure, location, and income, among other factors. Any housing policy, production, or financing solution must be tailored to the specific regional and local context to be effective. **In designing the Index and selecting metrics, the Terwilliger Center was guided by the critical fact that no single indicator can adequately summarize the full spectrum of housing needs in a given region and that aggregate, regional data can mask significant differences in affordability within regions.**

As such, instead of assigning a single "attainability score," the Index uses a selection of metrics that address overall attainability, attainability by tenure, neighborhood opportunity and access, and housing production. Each of these categories and the specific metrics therein are discussed in more detail in the following section.

Data Partner Acknowledgment

NATIONAL HOUSING CONFERENCE'S PAYCHECK TO PAYCHECK DATA

Data for the Index and Occupational Analysis were provided by the National Housing Conference, whose annual Paycheck to Paycheck data tool (2018 edition) and report provide "insights into the ability of working households to afford typical housing in metropolitan areas across the country."

The full Paycheck to Paycheck data tool includes the following:

- Graphs that compare wages and housing costs in 259 metro areas and the nation;
- Median incomes for 81 occupations;
- Median home prices and the income needed to afford them; and
- Fair-market rents and the income needed to afford them.

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'S THE GAP DATA

Data on rental attainability was 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.

Components of the Home Attainability Index

The 2021 Home Attainability Index is composed of five categories intended to provide a summary overview of housing-related challenges in a given region—overall affordability, homeownership attainability, rental attainability, neighborhood opportunity and access, and housing production. The data are supplemented with the Occupational Analysis.

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: Percentage of households earning $35,000–75,000/year that are severely cost burdened (income groupings: $35,000–50,000/year and $50,000–75,000/year)[4]

This metric is an indicator of the extent to which middle-income households experience significant cost-related housing challenges. For context, the low-end threshold of $35,000 is slightly more than that of one full-time worker earning twice the federal minimum wage or a household with two full-time minimum-wage workers. The high-end threshold is slightly more than 120 percent of the nationwide median household income in 2018.[5] As such, these data capture a large segment of households that the market may be reasonably expected to serve. The Terwilliger Center selected "severe cost burden"—spending more than 50 percent of income on housing—rather than the "cost burden" standard of 30 percent of income in order to focus on households facing the most severe home affordability challenges. Though many cost-burdened households face similar housing struggles, the middle-income household category (particularly in the $50,000 to $75,000 per year cohort) may include households that elect to spend slightly more than 30 percent of income on housing to meet location, amenity, or other consumer preferences without significant financial strain.

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: Percentage of all homes likely affordable to a four-person family (income levels: 80 percent and 120 percent of area median income, or AMI)[6]

These metrics demonstrate the extent to which the existing owner-occupant housing stock is affordable to middle-income households. A higher percentage indicates that a greater proportion of the region's housing stock is affordable to moderate-income households at the designated income level.

METRIC: Percentage of owner-occupant households[7]

Commonly referred to as the "homeownership rate," this metric contextualizes homeownership attainability data by defining the proportion of households in this tenure category.

METRIC: Gap in homeownership rates among White, Black, and Hispanic households[8]

This metric demonstrates the extent to which different racial/ethnic categories are currently accessing homeownership in the region. Comparisons are based on the percentage point difference between non-Hispanic White and Black/African American homeownership rates, and the non-Hispanic White and Hispanic homeownership rates. Differences in homeownership rates can serve as a proxy for wealth gaps. Positive values indicate that non-Hispanic White households are more likely to be homeowners; negative values indicate that a non-Hispanic White household is less likely to be a homeowner. Larger absolute values indicate a larger homeownership gap.

METRIC: Tenure cost proportionality (ownership to rental)[9]

This metric illustrates whether rental and ownership costs in a region are proportional compared to the median for the Index data set. A score of 1 indicates costs are proportional (for example, both rental and ownership costs are 5 percent higher than the median). 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.

METRIC: Estimated years needed to save for downpayment/closing costs; households at 80 percent of AMI[10]

This metric 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. Larger values indicate that it takes longer to reach the estimated target savings level and illustrate the extent to which a lack of wealth/savings can serve as a barrier to homeownership, in the context of regional housing costs.

METRIC: High-cost mortgages: gap among White, Black, and Hispanic homeowners[11]

This metric is based on the percentage of borrowers in a given demographic group that have "high-cost" mortgages. This is one indicator of whether different groups have equitable access to capital, if the cost of borrowing serves as a barrier to sustainable homeownership, or both. Comparisons are based on the percentage point difference between the rates of high-cost mortgages for non-Hispanic White and non-Hispanic Black/African American borrowers, and non-Hispanic White and Hispanic borrowers, respectively. Positive values indicate that non-Hispanic Black or Hispanic borrowers are more likely have high-cost mortgages; negative values indicate that non-Hispanic White borrowers are more likely to have high-cost mortgages. Larger absolute values indicate that the demographic group in question may face larger barriers to safe, sustainable mortgage capital.

RENTAL ATTAINABILITY: Similar to the homeownership data, 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: Affordable and available rental units per 100 households at or below 30 percent and 80 percent of AMI[12]

This metric demonstrates the extent to which rental housing is attainable to lower- and middle-income households. "Affordable and available" means that (a) the monthly rent would not lead to cost burden (more than 30 percent of income spent on housing) for a household at the given income level, and (b) the unit is not occupied by a higher-income household. A higher number indicates that a greater proportion of the region's housing stock is attainable to lower-income renters.

METRIC: Percentage of renter-occupant households[13]

This metric contextualizes rental attainability data by defining the proportion of households who rent their homes.

METRIC: Tenure cost proportionality (rental to ownership)[14]

This metric illustrates whether rental and ownership costs in a region are proportional compared to the median for the Index data set. A score of 1 indicates that costs are proportional (for example, both rental and ownership costs are 5 percent higher than the median). A score greater than 1 indicates that renting is comparatively more expensive than owning; a score less than 1 indicates that homeownership is disproportionately expensive.

METRIC: Estimated months needed to save for first/last month's rent plus security deposit; households at 50 percent of AMI[15]

This metric provides an approximation of long it could take a hypothetical very low-income household to accumulate a specific benchmark for cash saving, measured in months. Larger values indicate that it takes longer to reach the estimated target savings level. 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. In order to sign a lease, property owners sometimes require upfront, one-time payment of the first and last month's rent, plus a security deposit equal to one month's rent. A lack of savings in this amount can inhibit the ability of a household to lease a new apartment appropriate to its needs. Adequate savings are also helpful in avoiding eviction or involuntary displacement if the household is affected by adverse financial circumstances.

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, economic mobility, and health access to provide a snapshot of how housing and development patterns may influence neighborhood choice, racial equity, integration, and economic opportunity.

METRIC: AllTransit score and MSA/central city ratio[16]

This metric 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 regionwide 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.

METRIC: Percentage of workers with commute longer than one hour[17]

This metric 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.

METRIC: Brookings Metro Monitor racial and geographic inclusion ranking[18]

This metric is intended to demonstrate 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 2008 to 2018. 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.

METRIC: Theil index of residential segregation by race/ethnicity[19]

This metric ranges from 0 to 1 based on the level of racial segregation in the region, comparing the diversity of subregions to the region as a whole. Values below 0.2 suggest less segregation; values above 0.4 indicate more segregation.

METRIC: Income segregation: percentage of households in "middle-income" neighborhoods[20]

This metric is intended to provide 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.

METRIC: COVID-19: percentage of households living in high-risk census tracts[21]

This metric illustrates the extent to which households in the region are exposed to severe risk of contracting COVID-19. Severe risk is based on a range of factors, including underlying health conditions such as chronic obstructive pulmonary disease (COPD), heart disease, high blood pressure, diabetes, and obesity. Higher values indicate that a greater proportion of households live in high-risk neighborhoods.

METRIC: Percentage of households living in census tracts classified as medically underserved areas[22]

This metric is intended to serve as an indicator of the extent to which a region's population has equitable access to health care services, using federal Medically Underserved Area designations developed by the U.S. Department of Health and Human Services' Health Resources and Services Administration (HRSA). Higher values indicate that a greater proportion of households live in medically underserved areas.

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: Permits per 100 households added, last 10 years[23]

This metric demonstrates the extent to which new housing development is keeping up with household formation and growth. Larger values indicate more production.

METRIC: New permit activity by building type (single-family homes, two- to four-unit buildings, buildings with five or more units)[24]

These metrics demonstrate the proportion of new housing permitted by different development/building types.

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.

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 household formation rates 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 to the regional data included in the Index?
- What is 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?

Finally, the purpose of this brief is to provide a summary overview of the Home Attainability Index contents and data. Links to more robust discussion, empirical evidence, and historical context are provided throughout to complement this information.

Findings and Analysis

The Terwilliger Center has analyzed Index metrics to provide a high-level overview of attainability and opportunity challenges across the United States, with the aforementioned data limitations in mind. It is also important to note that the Index data mostly predate the COVID-19 pandemic and therefore do not reflect conditions before the spring 2020 outbreak and associated economic disruption. However, these data are still relevant, because preexisting conditions (both financial and medical) have an impact on who has been affected and to what degree (see the accompanying policy brief, "Housing, Health, and the COVID-19 Crisis," for more discussion). The following sections discuss the data and relevant takeaways in more detail.

Overall Performance

The Index includes a total of 30 metrics. Twenty-three metrics can be interpreted as "performance measures," through which value judgments can be made.[25] For example, it is better to have a larger supply of rental units affordable and available at 30 percent of AMI and worse to have a large racial disparity in homeownership rates. However, performing better than the median does not necessarily imply adequacy or that a region is doing well in a given area. To illustrate, according to the Theil index (residential segregation by race/ethnicity), a value of less than 0.2 indicates low levels of segregation and a value of 0.4 indicates high levels of segregation. The median for the Index data set is closer to this higher threshold at 0.34, suggesting that some better-than-median regions may perform comparatively well but still require substantive action to combat segregation.

Given the large number of metrics, it is unsurprising that no regions had Index values that were better than the median across all metrics. Only 11 of 112 regions met this standard for more than two-thirds of metrics.

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 2021 Index data can serve as the foundation for deeper analysis at the local level to identify the particular relevant issues for that region. In addition, over the next year the Terwilliger Center will be releasing additional research that explores the Index data and findings in more detail.

TABLE 1 Regions with Index Values Better Than the Median for More Than Two-Thirds of Metrics

Region	Number of Index metrics better than median	Percentage of total
Ogden-Clearfield, UT	20	86.96%
Albany-Schenectady-Troy, NY	17	73.91%
Tucson, AZ	17	73.91%
Oxnard-Thousand Oaks-Ventura, CA	16	69.57%
San Antonio-New Braunfels, TX	16	69.57%
Spokane-Spokane Valley, WA	16	69.57%
Syracuse, NY	16	69.57%
Pittsburgh, PA	16	69.57%
Wichita, KS	16	69.57%
Akron, OH	16	69.57%
Cedar Rapids, IA	16	69.57%

On the other end of the spectrum, 11 of 112 regions performed better than the median for fewer than one-third of the Index metrics.

Though it was outside the scope of this research to determine statistical correlation, both the average and median populations for the best-performing regions were smaller than that of the full data set. Of the 50 most-populous regions, only San Antonio and Pittsburgh performed better than the median across a minimum of two-thirds of Index metrics. More variability existed among the worst-performing regions, with a lower median population than that of the full data set, a higher average population, and a particularly wide population range (Naples, population: 363,922; Miami, population: 6,070,944).

TABLE 2 Regions with Index Values Better Than the Median for Fewer Than One-Third of Metrics

Region	Number of Index metrics better than median	Percentage of total
Cape Coral-Fort Myers, FL	4	17.39%
Charleston-North Charleston, SC	4	17.39%
North Port-Sarasota-Bradenton, FL	4	17.39%
Boston-Cambridge-Newton, MA-NH	6	26.09%
Fresno, CA	6	26.09%
Naples-Immokalee-Marco Island, FL	6	26.09%
New Orleans-Metairie, LA	6	26.09%
Allentown-Bethlehem-Easton, PA-NJ	7	30.43%
Atlanta-Sandy Springs-Roswell, GA	7	30.43%
Bakersfield, CA	7	30.43%
Miami-Fort Lauderdale-West Palm Beach, FL	7	30.43%

Affordability and Attainability

The Index included six metrics that directly measured housing affordability and attainability, including the levels of severe cost burden among middle-income households, and the proportion of both owner-occupied and rental housing units affordable at given levels of AMI. Twenty-seven regions had better-than-median performance across all relevant categories where data were available.

THE IMPORTANCE OF ATTAINABLE HOUSING

Housing quality and stability have a considerable impact on households, their neighborhoods, and the broader economy. The Urban Institute's Housing Matters webpage provides a library of research and evidence on the connections between housing and a range of other issues, such as health and education.

TABLE 3 Most-Affordable Regions

Region	Percent of severely cost-burdened households, $35,000–50,000/year	Percent of severely cost-burdened households, $50,000–75,000/year	Ownership: Percent of all homes likely affordable to a 4-person family earning 80 percent of AMI	Ownership: Percent of all homes likely affordable to a 4-person family earning 120 percent of AMI	Rental: Affordable and available units per 100 households at 30 percent of AMI	Rental: Affordable and available units per 100 households at 80 percent of AMI
Cedar Rapids, IA	1.63%	1.09%	66.96%	87.14%	—	—
Little Rock-North Little Rock-Conway, AR	2.40%	1.05%	49.77%	69.27%	39	116
Augusta-Richmond County, GA-SC	2.41%	1.00%	53.87%	71.12%	—	—
Dayton, OH	2.55%	0.71%	58.49%	76.45%	44	103
Knoxville, TN	2.67%	1.42%	42.02%	61.24%	56	104
Toledo, OH	3.09%	0.74%	60.01%	76.61%	37	103
Winston-Salem, NC	3.23%	1.04%	44.19%	70.93%	36	106
Akron, OH	3.38%	1.41%	52.14%	69.31%	43	106
Jackson, MS	3.39%	1.53%	51.10%	68.66%	—	—
Tulsa, OK	3.40%	0.99%	51.60%	71.27%	35	109
Louisville/Jefferson County, KY-IN	3.41%	0.90%	44.73%	63.31%	37	105
Wichita, KS	3.44%	1.07%	57.82%	76.17%	35	109
Scranton–Wilkes-Barre–Hazleton, PA	3.44%	1.20%	54.97%	73.47%	52	105
Buffalo-Cheektowaga-Niagara Falls, NY	3.66%	1.53%	53.90%	72.32%	42	101
Greenville-Anderson-Mauldin, SC	3.75%	1.35%	46.63%	65.02%	45	109
Pittsburgh, PA	3.75%	1.52%	50.77%	68.36%	51	100
Cleveland-Elyria, OH	3.89%	1.21%	51.36%	69.14%	41	103
Birmingham-Hoover, AL	4.02%	1.20%	45.64%	62.64%	52	112
Syracuse, NY	4.16%	1.78%	58.14%	76.23%	38	110
Memphis, TN-MS-AR	4.57%	1.49%	50.68%	67.85%	34	103
Grand Rapids-Wyoming, MI	4.67%	0.89%	49.88%	70.76%	51	99
Cincinnati, OH-KY-IN	4.80%	1.67%	62.07%	82.17%	39	104
Kansas City, MO-KS	4.84%	1.56%	58.67%	80.16%	36	102
Charlotte-Concord-Gastonia, NC-SC	4.93%	1.69%	49.73%	69.77%	33	103
St. Louis, MO-IL	4.99%	1.63%	42.15%	60.71%	34	105
Des Moines-West Des Moines, IA	5.43%	1.27%	58.17%	82.05%	39	105
Rochester, NY	5.76%	1.97%	55.16%	74.50%	35	104
Detroit-Warren-Dearborn, MI	5.79%	1.75%	46.95%	63.71%	36	98
Median	6.15%	2.04%	37.26%	60.21%	32.20	98.42

Note: Darker shades indicate 10 best-performing regions in each category; brighter green indicates the best-performing region in each category.

— = no data

TABLE 4 Least-Affordable Regions

Region	Percent of severely cost-burdened households, $35,000–50,000/year	Percent of severely cost-burdened households, $50,000–75,000/year	Ownership: Percent of all homes likely affordable to a 4-person family earning 80 percent of AMI	Ownership: Percent of all homes likely affordable to a 4-person family earning 120 percent of AMI	Rental: Affordable and available units per 100 households at 30 percent of AMI	Rental: Affordable and available units per 100 households at 80 percent of AMI
San Diego-Carlsbad, CA	29.49%	12.28%	8.08%	28.47%	18.61	63.67
Los Angeles-Long Beach-Anaheim, CA	27.95%	12.50%	7.44%	25.00%	19.89	55.95
Washington-Arlington-Alexandria, DC-VA-MD-WV	27.93%	9.37%	10.55%	47.31%	27.60	98.17
Riverside-San Bernardino-Ontario, CA	19.12%	6.36%	14.64%	22.73%	17.70	71.70
Seattle-Tacoma-Bellevue, WA	19.06%	6.36%	12.56%	45.83%	29.68	86.67
Miami-Fort Lauderdale-West Palm Beach, FL	17.96%	6.52%	36.47%	58.97%	22.45	49.05
Naples-Immokalee-Marco Island, FL	16.80%	6.10%	14.50%	23.14%	—	—
Sacramento–Roseville–Arden-Arcade, CA	16.64%	5.82%	14.31%	34.28%	19.87	85.51
Denver-Aurora-Lakewood, CO	14.19%	3.79%	15.45%	38.33%	29.53	93.19
Portland-Vancouver-Hillsboro, OR-WA	14.03%	4.24%	15.16%	39.82%	27.24	92.18
Stockton-Lodi, CA	11.84%	5.04%	13.81%	23.81%	23.00	78.04
Charleston-North Charleston, SC	10.06%	2.47%	28.33%	44.44%	31.35	96.12
Allentown-Bethlehem-Easton, PA-NJ	9.61%	3.76%	29.44%	52.01%	27.36	97.29
North Port-Sarasota-Bradenton, FL	9.30%	3.65%	28.68%	43.25%	15.98	78.70
Colorado Springs, CO	8.77%	2.17%	14.10%	31.05%	19.11	90.30
Orlando-Kissimmee-Sanford, FL	8.77%	2.26%	31.48%	49.54%	19.53	74.77
Fresno, CA	8.52%	3.67%	22.14%	38.52%	25.39	77.14
Reno, NV	8.40%	3.19%	14.42%	24.56%	31.24	89.97
Cape Coral-Fort Myers, FL	8.35%	2.95%	31.88%	48.07%	15.43	76.93
Bakersfield, CA	8.30%	2.67%	28.94%	48.27%	19.71	77.95
Las Vegas-Henderson-Paradise, NV	8.09%	2.05%	20.81%	37.43%	13.57	91.64
Phoenix-Mesa-Scottsdale, AZ	7.64%	2.67%	23.37%	40.01%	18.31	93.60
The Villages, FL	7.27%	2.43%	20.24%	32.34%	—	—
New Orleans-Metairie, LA	7.21%	2.32%	31.95%	53.35%	31.70	95.16
Median	6.15%	2.04%	37.26%	60.21%	32.20	98.42

Note: Darker shades indicate 10 worst-performing regions in each category; brighter green indicates the worst-performing region in each category.

— = no data

Twenty-four regions had below-median performance across all six categories where data were available.

The regions that performed best in terms of attainability and affordability were on average smaller than those that were least affordable (average populations of 1.27 million and 2.6 million, respectively). The 20 regions with the highest levels of severe cost burden for households earning $35,000 to $50,000 per year tended to be even larger, with an average population of approximately 4.2 million. Interestingly, half of the least-affordable regions by this standard are not listed among the worst performers (table 4) because they exceed the median for the number of affordable and available rental units for households at 30 percent of AMI (San Jose, Honolulu, Oxnard, San Francisco, Bridgeport, New York City, Boston, New Haven, Baltimore, and Hartford). Though the reason for this discrepancy requires further investigation and likely varies by region, one hypothesis is that comparatively large stocks of public housing may play an important role in these markets. However, though these 10 regions perform better than the data set median, none comes close to providing a sufficient number of units for this income category (of these 10 regions, Boston has the most at 47 per 100 households). Therefore, extremely low-income households unable to access a public housing unit may be particularly vulnerable to housing insecurity, given the chasm separating the rents in subsidized housing compared with market rates in these regions.

The six metrics selected for the preceding calculation include metrics that adjust for regional cost of living (affordable units at a given percentage of AMI) and others that do not (severely cost-burdened households earning between $35,000 and $75,000). In theory, the affordability impact of higher costs in some regions could be mitigated by higher wages. The interplay between wage levels and affordability is discussed in more detail in the Occupational Analysis section. However, limiting the analysis to the four metrics based on AMI produced only one additional region that had performed better than the data set median (Albany) for each. Fifteen regions performed better than the Index median for all but one tenure/affordability category.

TABLE 5 Regions with Better-than-Median Values for All but One Housing Type

All except: Ownership at 80% AMI	All except: Affordable/available rentals at 30% AMI	All except: Affordable/available rentals at 80% AMI
Hartford-West Hartford-East Hartford, CT	Indianapolis-Carmel-Anderson, IN Oklahoma City, OK Milwaukee-Waukesha-West Allis, WI Columbus, OH Omaha-Council Bluffs, NE-IA Richmond, VA Dallas-Fort Worth-Arlington, TX Durham-Chapel Hill, NC Raleigh, NC Fayetteville-Springdale-Rogers, AR-MO	Springfield, MA McAllen-Edinburg-Mission, TX Greensboro-High Point, NC San Antonio-New Braunfels, TX

The *rental units affordable and available at 30 percent of AMI per 100 households* metric again illustrates the fact that performance better than the Index median does not necessarily mean the region is doing well on that issue. By this metric, no region has an adequate supply (i.e., 100 units for every 100 households) of rentals for this income cohort. The Knoxville, Tennessee, region performs best by this metric but has only 56 units affordable and available to every 100 households that need them.

Only seven regions (Knoxville, Providence, Scranton–Wilkes-Barre, Birmingham, Grand Rapids, Pittsburgh, and Springfield, Massachusetts) have half the amount of affordable and available units necessary to provide homes to all extremely low-income renters.

The Index's tenure cost proportionality metric measures the extent to which homeownership or rental costs are disproportionately expensive compared with the national median for each tenure. For example, if a median-cost home in a region is 15 percent more costly than the Index median and the fair-market rent for a two-bedroom unit is also 15 percent above the Index median, the tenure cost proportionality score would be 1 and the market would be considered to be "balanced" (if somewhat more costly). Twenty-five regions in the Index data set would be considered balanced (with scores between 0.9 and 1.1), with the Houston (1.00), Memphis (0.99), and Orlando (0.99) regions closest to perfect balance. Homeownership was disproportionately expensive in 41 regions, with San Jose (1.94) and San Francisco (1.91) having the largest differentials. Renting was disproportionately expensive in 41 regions, with the most significant disparities in Detroit (0.57), Philadelphia (0.58), and Scranton (0.58). Three-quarters of regions with disproportionately high homeownership costs also had levels of severe cost burden for middle-income households above the Index median, compared with 32 percent for regions with disproportionately high rental costs and 44 percent for more balanced regions.

One potential implication of disproportionately high homeownership costs is that relatively higher-income households may stay in the rental market longer, thereby increasing competition and driving up costs for lower-income renters if the supply of rental homes does not increase in response. As such, policy initiatives that increase the availability of entry-level or attainable homeownership stock could have positive spillover effects on rental affordability.

Equity and Opportunity

Affordability and attainability metrics are necessary but insufficient for illustrating housing-related conditions, particularly when data are at the regional level. Housing challenges can vary significantly from neighborhood to neighborhood and more so across the central cities, suburbs, and exurbs that constitute MSAs.

Geographic variability cannot be separated from racial and ethnic disparities caused by more than a century of segregation, redlining, exclusionary zoning, and discriminatory practices in the real estate and finance industries. It is important to acknowledge this history and incorporate data on such disparities into policy, programmatic, and funding decisions. Such affirmative efforts are necessary to identify opportunities to advance racial and social equity and avoid decisions that reinforce or exacerbate these disparities.

Equity-related challenges are universal. In the Index data set, Oxnard–Thousand Oaks–Ventura, California, was the only region to perform better than the median across all Index metrics directly focused on equity but still does not meet the threshold for "low racial segregation" (discussed in more detail below).

The 2021 Index includes several metrics that are intended to address both spatial and socioeconomic variability within regions. These fall into several broad categories:

- Integration and barriers to housing choice;
- Progress toward geographic and racial equity; and
- Geographic access and mobility.

RACIAL DISPARITIES IN URBAN PLANNING AND DEVELOPMENT

"Segregated by Design" is an approximately 20-minute video by author Richard Rothstein that provides a concise overview of the historical policies and practices in housing, finance, planning, and infrastructure development that have had a discriminatory and lasting negative impact on minority communities in general and Black households in particular.

Integration and Barriers to Housing Choice

The Thiel index is a measure of racial segregation. A region with a Theil index value of less than 0.2 is considered to have low segregation, and a value of greater than 0.4 corresponds with high segregation. Only three regions in the 2021 Index had Theil values below 0.2, and 18 regions had values that exceeded 0.4. The Index data set median Theil index value was 0.34, meaning that half of all regions are either highly segregated or close to meeting that threshold (see table 6).

NOTE ON DATA INTERPRETATION

The Theil index does not account for the overall diversity of the region. It is possible that lower levels of segregation in some regions may be the result of particularly small minority populations rather than high levels of integration. The overall level of diversity may also influence other equity-related metrics, such as homeownership and lending gaps. To build upon the 2021 Index, practitioners should explore demographic data available from the U.S. Census Bureau and other regional data providers, such as metropolitan planning organizations or universities.

TABLE 6 Regions with High and Low Levels of Segregation according to Theil Index

Low segregation (<0.2)		High segregation (>0.4)	
Colorado Springs, CO	0.18	Birmingham-Hoover, AL	0.53
Urban Honolulu, HI	0.18	Jackson, MS	0.51
Las Vegas-Henderson-Paradise, NV	0.19	Detroit-Warren-Dearborn, MI	0.50
		Milwaukee-Waukesha-West Allis, WI	0.49
		Chicago-Naperville-Elgin, IL-IN-WI	0.48
		St. Louis, MO-IL	0.48
		Baton Rouge, LA	0.47
		Cleveland-Elyria, OH	0.47
		The Villages, FL	0.46
		Memphis, TN-MS-AR	0.45
		Dayton, OH	0.44
		New Orleans-Metairie, LA	0.44
		Buffalo-Cheektowaga-Niagara Falls, NY	0.44
		Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	0.43
		Pittsburgh, PA	0.43
		Flagstaff, AZ	0.42
		New York-Newark-Jersey City, NY-NJ-PA	0.41
		Little Rock-North Little Rock-Conway, AR	0.41

To explore income segregation, the 2021 Index uses a methodology developed by Brown University's Diversity and Disparities project to identify the number of households that live in neighborhoods that are neither particularly poor nor affluent, based on the median income of the U.S. Census tracts as it relates to the regional AMI (see table 7). These "middle-income neighborhoods" may be open to a wider range of households because housing is moderately priced, or the area has a wide range of price points, or both.

TABLE 7 Income Segregation Demonstrated by Percentage of Households in "Middle-Income Neighborhoods"

Less segregation by income (>80%)		More segregation by income (<60%)	
Ocala, FL	95.03%	Memphis, TN-MS-AR	53.77%
Asheville, NC	94.00%	Bridgeport-Stamford-Norwalk, CT	54.57%
The Villages, FL	92.67%	Houston-The Woodlands-Sugar Land, TX	55.01%
Punta Gorda, FL	90.44%	New York-Newark-Jersey City, NY-NJ-PA	55.68%
Coeur d'Alene, ID	87.23%	Tucson, AZ	57.40%
Ogden-Clearfield, UT	86.36%	Detroit-Warren-Dearborn, MI	58.40%
Deltona-Daytona Beach-Ormond Beach, FL	86.06%	Gainesville, FL	58.52%
Scranton–Wilkes-Barre–Hazleton, PA	83.59%	Fresno, CA	58.64%
Naples-Immokalee-Marco Island, FL	82.92%	Dallas-Fort Worth-Arlington, TX	59.85%
Cedar Rapids, IA	82.45%		
Harrisburg-Carlisle, PA	82.07%		
Madison, WI	81.77%		
Palm Bay-Melbourne-Titusville, FL	81.76%		
Flagstaff, AZ	81.42%		
Fayetteville-Springdale-Rogers, AR-MO	80.56%		
Lakeland-Winter Haven, FL	80.41%		
Median population	**428,363**	**Median population**	**1,703,879**
Average population	**488,175**	**Average population**	**4,497,262**

Regions with higher levels of income segregation (i.e., fewer households living in such middle-income neighborhoods) were substantially more populous on average. Among the most-populous regions (top 25 in population), Portland (76.24 percent; 25th-highest overall) performed best. This dynamic was not as stark for the Thiel index, as Seattle (0.22), Portland (0.25), and Riverside (0.24) were among the 15 best regions in the Index data set in terms of racial segregation (though none of these would be considered to have "low segregation").

Most regions with high levels of racial segregation also had higher levels of income segregation. That being said, when looking at segregation levels in comparison to the data set as a whole (rather than the absolute benchmarks), 19 regions had high levels of segregation by either race or income, but low levels of segregation for the other.

TABLE 8 Levels of Segregation by Race or Income

	Lower racial segregation	Higher racial segregation
Higher income segregation	Phoenix-Mesa-Scottsdale, AZ Tucson, AZ Gainesville, FL Fresno, CA San Antonio-New Braunfels, TX San Francisco-Oakland-Hayward, CA Riverside-San Bernardino-Ontario, CA Reno, NV Sacramento–Roseville–Arden-Arcade, CA Colorado Springs, CO	Birmingham-Hoover, AL Jackson, MS Detroit-Warren-Dearborn, MI Milwaukee-Waukesha-West Allis, WI Chicago-Naperville-Elgin, IL-IN-WI Cleveland-Elyria, OH Memphis, TN-MS-AR New Orleans-Metairie, LA Dayton, OH Philadelphia-Camden-Wilmington, PA-NJ-DE-MD New York-Newark-Jersey City, NY-NJ-PA Indianapolis-Carmel-Anderson, IN Miami-Fort Lauderdale-West Palm Beach, FL Baltimore-Columbia-Towson, MD Springfield, MA Toledo, OH Akron, OH Richmond, VA
Lower income segregation	Oxnard-Thousand Oaks-Ventura, CA Madison, WI Punta Gorda, FL Virginia Beach-Norfolk-Newport News, VA-NC Orlando-Kissimmee-Sanford, FL Cedar Rapids, IA San Jose-Sunnyvale-Santa Clara, CA Boise City, ID Palm Bay-Melbourne-Titusville, FL Salt Lake City, UT Portland-Vancouver-Hillsboro, OR-WA Ogden-Clearfield, UT Coeur d'Alene, ID Seattle-Tacoma-Bellevue, WA Provo-Orem, UT Urban Honolulu, HI	The Villages, FL Pittsburgh, PA Flagstaff, AZ Little Rock-North Little Rock-Conway, AR Columbia, SC Winston-Salem, NC Harrisburg-Carlisle, PA Scranton–Wilkes-Barre–Hazleton, PA Naples-Immokalee-Marco Island, FL

Notes: "Lower" = region metric score is among the best one-third in the Index data set; "Higher" = region metric score is among the worst one-third in the Index data set. Regions not listed fall into the moderate segregation category for at least one metric.

Segregation is not the only equity-related consideration incorporated into the Index. To more closely examine gaps in access to economic opportunity and wealth creation, the Index includes data on the gaps in homeownership rates between White households and Black and Hispanic households, respectively. Examining gaps in homeownership is important because—for better and worse—home equity is the largest financial asset for middle-income households.[26] Nationwide, Black and Hispanic households are less likely to own their home, and those that are homeowners have less housing equity on average.[27] The median White-Black homeownership gap for the 2021 Index data set was slightly under 33 percentage points, while the White-Hispanic homeownership gap was approximately 25 percentage points. The only region in which Black households had a higher homeownership rate was in San Juan, Puerto Rico. The only regions with higher Hispanic homeownership rates were San Juan and El Paso.

ADDITIONAL RESEARCH INFORMATION ON HOMEOWNERSHIP AND WEALTH GAPS

Examining the Black-White Wealth Gap (Brookings Institution)

Breaking Down the Black-White Homeownership Gap (Urban Institute)

The Devaluation of Assets in Black Neighborhoods (Brookings Institution)

TABLE 9 Gaps in Homeownership Rates by Race/Ethnicity

Regions with largest White-Black homeownership gap	Gap (percentage point difference)	Regions with smallest White-Black homeownership gap	Gap (percentage point difference)
Scranton–Wilkes-Barre–Hazleton, PA	54.00%	San Juan-Carolina-Caguas, PR	–1.41%
Cedar Rapids, IA	53.24%	Punta Gorda, FL	9.88%
Madison, WI	52.62%	Coeur d'Alene, ID	14.14%
Minneapolis-St. Paul-Bloomington, MN-WI	51.03%	Charleston-North Charleston, SC	18.44%
McAllen-Edinburg-Mission, TX	47.61%	Oxnard-Thousand Oaks-Ventura, CA	18.67%
Grand Rapids-Wyoming, MI	45.14%	Washington-Arlington-Alexandria, DC-VA-MD-WV	21.47%
Syracuse, NY	44.69%	El Paso, TX	21.92%
Albany-Schenectady-Troy, NY	44.49%	Austin-Round Rock, TX	21.98%
Salt Lake City, UT	44.40%	Gainesville, FL	23.45%
Harrisburg-Carlisle, PA	43.42%	The Villages, FL	24.03%
Fayetteville-Springdale-Rogers, AR-MO	43.28%	Palm Bay-Melbourne-Titusville, FL	24.43%
Milwaukee-Waukesha-West Allis, WI	42.56%	Los Angeles-Long Beach-Anaheim, CA	24.46%
Des Moines-West Des Moines, IA	42.24%	Tallahassee, FL	24.67%
Rochester, NY	41.91%	Augusta-Richmond County, GA-SC	24.88%
Spokane-Spokane Valley, WA	41.88%	Durham-Chapel Hill, NC	25.12%
Regions with largest White-Hispanic homeownership gap	**Gap (percentage point difference)**	**Regions with smallest White-Hispanic homeownership gap**	**Gap (percentage point difference)**
Springfield, MA	50.10%	San Juan-Carolina-Caguas, PR	–4.08%
Worcester, MA-CT	44.95%	El Paso, TX	–2.48%
Hartford-West Hartford-East Hartford, CT	43.43%	The Villages, FL	7.01%
Boston-Cambridge-Newton, MA-NH	42.11%	Albuquerque, NM	7.64%
New Haven-Milford, CT	42.04%	McAllen-Edinburg-Mission, TX	11.69%
Harrisburg-Carlisle, PA	41.96%	San Antonio-New Braunfels, TX	12.35%
Scranton–Wilkes-Barre–Hazleton, PA	41.07%	Urban Honolulu, HI	13.29%
Providence-Warwick, RI-MA	40.92%	Tucson, AZ	13.48%
Bridgeport-Stamford-Norwalk, CT	40.29%	Flagstaff, AZ	13.64%
New York-Newark-Jersey City, NY-NJ-PA	39.73%	Palm Bay-Melbourne-Titusville, FL	14.80%
Syracuse, NY	39.67%	Riverside-San Bernardino-Ontario, CA	14.94%
Buffalo-Cheektowaga-Niagara Falls, NY	39.54%	Bakersfield, CA	16.16%
Allentown-Bethlehem-Easton, PA-NJ	39.18%	Ocala, FL	16.41%
Rochester, NY	38.39%	Wichita, KS	16.56%
Albany-Schenectady-Troy, NY	36.93%	Austin-Round Rock, TX	16.70%

Accessing homeownership requires sufficient savings to cover a downpayment and closing costs. However, high housing costs can serve as a barrier to accumulating these savings. In some cases, high rental costs lead to limited disposable income, making it difficult to accumulate savings sufficient to achieve basic housing stability, let alone purchase a home. Racial and ethnic disparities exist, with research showing that Black and Hispanic families have smaller emergency savings.[28]

To illustrate barriers to housing stability and wealth creation, the 2021 Index includes a metric that estimates the number of months it would take for a household at 50 percent of AMI to accrue sufficient savings to cover a move to a new apartment (first and last month's rent, plus a security deposit) or withstand a three-month disruption in income if it were able to build savings based on national savings rate data (see "Note on Data Interpretation" for more details). The median for the full data set was 29.7 months, with the nation's hottest rental markets (San Francisco, Los Angeles, Miami, San Diego, New York City, San Jose, and Seattle) each requiring more than 40 months of savings.

For households who are able to rent sustainably, it is still challenging in many regions to accumulate the amounts necessary to purchase a home. The Index estimates the number of years it would take for a household at 80 percent of AMI to save for a downpayment and closing costs for a median-priced home. The median for the Index data set was 14.6 years, and 23 regions had estimates of 20 years or more. With the ability to save sufficient capital in a reasonable amount of time limited, the impact that family financial assistance can have in gaining a foothold on the ladder of wealth creation is magnified. Gaps in homeownership rates in rapidly appreciating markets can become self-reinforcing, because the wealth created through homeownership can be passed down to the next generation. In this way, racial disparities can become more entrenched, given the aforementioned racial ownership gaps and research that shows that White households are more likely to receive an inheritance or receive help for making a downpayment than Black or Hispanic households.[29] Among most regions in the 2021 Index data set, Black and Hispanic households are also more likely than White households to have high-cost mortgages (median gap of 9.28 and 7.77 percentage points, respectively), which may lead to housing instability or limit the equity and savings accrued by those households that are able to purchase a home.

NOTE ON DATA INTERPRETATION

The estimated saving rate used for this calculation is based on the national estimate for all households, which does not adjust for household income. Many lower-income households are likely unable to achieve this saving rate in practice. In addition, households facing high housing-cost burdens will have less residual income, further constraining their ability to accumulate substantial savings.

Progress toward Geographic and Racial Equity

The previously discussed Index metrics reflect point-in-time conditions. In addition, the Index considers the extent to which racial and socioeconomic disparities are improving or worsening over time, using the Brookings Institution's Metro Monitor data. According to these data, Grand Rapids, McAllen, Memphis, Bakersfield, and Kansas City had made the most progress in terms of racial inclusion, whereas Buffalo, Charleston, Dayton, Washington, D.C., and North Port had made the least. In terms of geographic inclusion, Reno, Oxnard, Denver, Raleigh, and Bridgeport made the most progress, and Toledo, Memphis, Jackson, Detroit, and Fresno made the least progress.

NOTE ON DATA INTERPRETATION

Given that the Metro Monitor scores are calculated using percentage point improvements on a range of indicators, it is important to acknowledge that comparatively high levels of progress may not constitute major or broadly felt improvements in quality of life in areas with particularly low baseline levels of inclusion. The following tables show the regions with comparatively high (and low) levels of segregation that have made particularly strong (or limited) progress toward inclusion.

TABLE 10 Racial Segregation and Progress toward Inclusion

	Lower racial segregation	Higher racial segregation
Racial inclusion: most improvement	Tulsa, OK Portland-Vancouver-Hillsboro, OR-WA Seattle-Tacoma-Bellevue, WA Riverside-San Bernardino-Ontario, CA Oxnard-Thousand Oaks-Ventura, CA Phoenix-Mesa-Scottsdale, AZ El Paso, TX Denver-Aurora-Lakewood, CO Reno, NV Stockton-Lodi, CA Tucson, AZ Ogden-Clearfield, UT San Antonio-New Braunfels, TX Colorado Springs, CO Spokane-Spokane Valley, WA Raleigh, NC	Richmond, VA Akron, OH Detroit-Warren-Dearborn, MI Jackson, MS Scranton–Wilkes-Barre–Hazleton, PA Atlanta-Sandy Springs-Roswell, GA Little Rock-North Little Rock-Conway, AR Miami-Fort Lauderdale-West Palm Beach, FL Milwaukee-Waukesha-West Allis, WI Kansas City, MO-KS Memphis, TN-MS-AR McAllen-Edinburg-Mission, TX
Racial inclusion: least improvement	Austin-Round Rock, TX Urban Honolulu, HI San Francisco-Oakland-Hayward, CA Cedar Rapids, IA Salt Lake City, UT Sacramento–Roseville–Arden-Arcade, CA San Jose-Sunnyvale-Santa Clara, CA Madison, WI Oklahoma City, OK Orlando-Kissimmee-Sanford, FL San Diego-Carlsbad, CA Boise City, ID Gainesville, FL	Buffalo-Cheektowaga-Niagara Falls, NY Dayton, OH New Orleans-Metairie, LA New York-Newark-Jersey City, NY-NJ-PA Syracuse, NY Cleveland-Elyria, OH Greensboro-High Point, NC Philadelphia-Camden-Wilmington, PA-NJ-DE-MD Chicago-Naperville-Elgin, IL-IN-WI Harrisburg-Carlisle, PA Indianapolis-Carmel-Anderson, IN Baton Rouge, LA Winston-Salem, NC Toledo, OH

Notes: "Lower racial segregation" and "most improvement" = region metric score is among the best one-third in the Index data set; "Higher racial segregation" and "least improvement" = region metric score is among the worst one-third in the Index data set. Regions not listed fall into the moderate category for at least one metric.

TABLE 11 Income Segregation and Progress toward Inclusion

	Lower income segregation	Higher income segregation
Geographic inclusion: most improvement	Harrisburg-Carlisle, PA Salt Lake City, UT Asheville, NC Des Moines-West Des Moines, IA Ogden-Clearfield, UT Allentown-Bethlehem-Easton, PA-NJ Albany-Schenectady-Troy, NY Grand Rapids-Wyoming, MI Minneapolis-St. Paul-Bloomington, MN-WI Madison, WI Cedar Rapids, IA Deltona-Daytona Beach-Ormond Beach, FL Provo-Orem, UT Oxnard-Thousand Oaks-Ventura, CA	Wichita, KS Riverside-San Bernardino-Ontario, CA Colorado Springs, CO Los Angeles-Long Beach-Anaheim, CA Dallas-Fort Worth-Arlington, TX Richmond, VA New Haven-Milford, CT Houston-The Woodlands-Sugar Land, TX Tallahassee, FL San Antonio-New Braunfels, TX Bridgeport-Stamford-Norwalk, CT Reno, NV
Geographic inclusion: least improvement	Naples-Immokalee-Marco Island, FL Ocala, FL Fayetteville-Springdale-Rogers, AR-MO Pittsburgh, PA Little Rock-North Little Rock-Conway, AR Winston-Salem, NC Scranton–Wilkes-Barre–Hazleton, PA Urban Honolulu, HI	Toledo, OH Memphis, TN-MS-AR Jackson, MS Detroit-Warren-Dearborn, MI Fresno, CA Cleveland-Elyria, OH San Francisco-Oakland-Hayward, CA Bakersfield, CA New Orleans-Metairie, LA Dayton, OH Gainesville, FL Miami-Fort Lauderdale-West Palm Beach, FL Chicago-Naperville-Elgin, IL-IN-WI Indianapolis-Carmel-Anderson, IN Columbus, OH Akron, OH Phoenix-Mesa-Scottsdale, AZ

Notes: “Lower income segregation” and “most improvement” = region metric score is among the best one-third in the Index data set; “Higher income segregation” and “least improvement” = region metric score is among the worst one-third in the Index data set. Regions not listed fall into the moderate category for at least one metric.

Can Regions Be Attainable If They Are Not Equitable?

Examining the relationship between attainability and equity can provide additional context on access to opportunity in a given region. For example, the benefits of living in a region with better housing attainability may be blunted if deep concentrations of poverty or other inequities are prevalent. Using the regions that performed either better (or worse) than the median across all affordability-focused metrics (see tables 3 and 4), nine demonstrate that strong affordability may be offset by lagging performance on equity-related measures (Toledo, Cleveland, Birmingham, Charlotte, St. Louis, Cincinnati, Scranton, Louisville, and Winston Salem).[30] Conversely, nine regions (San Diego, Los Angeles, Riverside, Denver, Portland, Stockton, Colorado Springs, Las Vegas, and Seattle) struggle with affordability but perform comparatively well on most equity measures.

TABLE 12 Relationship between Attainability and Equity

Regions with better-than-median affordability across all related metrics	Better-than-median performance on equity metrics (out of 8)	Regions with worse-than-median affordability across all related metrics	Better-than-median performance on equity metrics (out of 8)
Cedar Rapids, IA	5	San Diego-Carlsbad, CA	6
Little Rock-North Little Rock-Conway, AR	4	Los Angeles-Long Beach-Anaheim, CA	6
Augusta-Richmond County, GA-SC	6	Washington-Arlington-Alexandria, DC-VA-MD-WV	5
Dayton, OH	3	Riverside-San Bernardino-Ontario, CA	6
Knoxville, TN	4	Seattle-Tacoma-Bellevue, WA	6
Toledo, OH	0	Miami-Fort Lauderdale-West Palm Beach, FL	3
Winston-Salem, NC	1	Naples-Immokalee-Marco Island, FL	1
Akron, OH	3	Sacramento–Roseville–Arden-Arcade, CA	5
Jackson, MS	4	Denver-Aurora-Lakewood, CO	6
Tulsa, OK	5	Portland-Vancouver-Hillsboro, OR-WA	6
Louisville/Jefferson County, KY-IN	2	Stockton-Lodi, CA	6
Wichita, KS	3	Charleston-North Charleston, SC	4
Scranton–Wilkes-Barre–Hazleton, PA	2	Allentown-Bethlehem-Easton, PA-NJ	2
Buffalo-Cheektowaga-Niagara Falls, NY	3	North Port-Sarasota-Bradenton, FL	1
Greenville-Anderson-Mauldin, SC	4	Colorado Springs, CO	7
Pittsburgh, PA	3	Orlando-Kissimmee-Sanford, FL	5
Cleveland-Elyria, OH	0	Fresno, CA	3
Birmingham-Hoover, AL	2	Reno, NV	5
Syracuse, NY	3	Cape Coral-Fort Myers, FL	3
Memphis, TN-MS-AR	4	Bakersfield, CA	4
Grand Rapids-Wyoming, MI	4	Las Vegas-Henderson-Paradise, NV	6
Cincinnati, OH-KY-IN	2	Phoenix-Mesa-Scottsdale, AZ	3
Kansas City, MO-KS	4	The Villages, FL	5
Charlotte-Concord-Gastonia, NC-SC	2	New Orleans-Metairie, LA	2
St. Louis, MO-IL	1		
Des Moines-West Des Moines, IA	5		
Rochester, NY	4		
Detroit-Warren-Dearborn, MI	3		

Note: Green represents better-than-median performance across most equity measures; red represents worse-than-median performance. Equity categories include gaps in homeownership and high-cost mortgages by race and ethnicity, segregation, and economic inclusion.

Geographic Access and Mobility

In addition to racial and socioeconomic equity, development patterns, transportation systems, and commuting times can influence the extent to which a region's residents have access to opportunity. Mixed-use neighborhoods and strong, multimodal transportation options can decrease cost of commuting and travel-related expenses, provide greater access to jobs, and give households a wider range of options for reaching life's necessities when there is an adverse event (such as a car breakdown) or other substantial change (such as a new job in a different location).

The Index incorporates the Center for Neighborhood Technology's AllTransit Performance Score in evaluating transit access. This metric takes into account the quality, frequency, and reach of a region's transit system. Unsurprisingly, New York City and San Francisco fared best by this metric. The Villages, Punta Gorda, and Birmingham performed worst.

Though transit is critical to urban mobility (especially in the most-populous regions), it is not the dominant mode share in most regions.[31] Therefore, the Index includes a mode-neutral measure of the proportion of workers with commutes longer than one hour ("super commuters"). Among the regions with the most super commuters were those with strong transit access (San Francisco, Boston), as well as several with particularly poor transit access (Greenville, Columbia, Charleston).

NOTE ON DATA INTERPRETATION

The AllTransit Score used in the Index considers transit for the whole MSA, which includes suburbs and exurbs. Thus some regions not generally considered to be transit hubs (such as Los Angeles and Salt Lake City) perform better than regions with legacy transit systems (Washington, D.C., Philadelphia, Chicago, and Boston). Of the 10 best central cities according to City AllTransit scores, only five (San Francisco, New York City, Washington, D.C., Philadelphia, and Portland, Oregon) were also among the 10 best for the MSA AllTransit score. The reasons for this discrepancy vary from region to region, but possible explanations may be that cities with weaker central city transit may have comparatively better bus access through a larger proportion of the region's suburbs.

TABLE 13 Transit Access and Commute Time

	Weaker transit access	Stronger transit access
Lower share of extended commutes	The Villages, FL Birmingham-Hoover, AL Jackson, MS Asheville, NC Little Rock-North Little Rock-Conway, AR Harrisburg-Carlisle, PA Baton Rouge, LA Naples-Immokalee-Marco Island, FL Toledo, OH Raleigh, NC Memphis, TN-MS-AR	Provo-Orem, UT Albuquerque, NM Tucson, AZ St. Louis, MO-IL Hartford-West Hartford-East Hartford, CT Baltimore-Columbia-Towson, MD San Antonio-New Braunfels, TX New Haven-Milford, CT Ogden-Clearfield, UT Seattle-Tacoma-Bellevue, WA San Diego-Carlsbad, CA Philadelphia-Camden-Wilmington, PA-NJ-DE-MD Portland-Vancouver-Hillsboro, OR-WA New York-Newark-Jersey City, NY-NJ-PA
Higher share of extended commutes	Punta Gorda, FL Ocala, FL Greenville-Anderson-Mauldin, SC Knoxville, TN Fayetteville-Springdale-Rogers, AR-MO Charleston-North Charleston, SC Columbia, SC Boise City, ID Cedar Rapids, IA Charlotte-Concord-Gastonia, NC-SC Colorado Springs, CO Kansas City, MO-KS Cape Coral-Fort Myers, FL Richmond, VA Indianapolis-Carmel-Anderson, IN	Spokane-Spokane Valley, WA Buffalo-Cheektowaga-Niagara Falls, NY Gainesville, FL Bridgeport-Stamford-Norwalk, CT Milwaukee-Waukesha-West Allis, WI Cleveland-Elyria, OH Las Vegas-Henderson-Paradise, NV Boston-Cambridge-Newton, MA-NH Chicago-Naperville-Elgin, IL-IN-WI Denver-Aurora-Lakewood, CO San Francisco-Oakland-Hayward, CA

Notes: "Lower share of extended commutes" and "Stronger transit access" = region metric score is among the best one-third in the Index data set; "Higher share of extended commutes and "Weaker transit access" = region metric score is among the worst one-third in the Index data set. Regions not listed fall into the moderate category for at least one metric.

Barriers to opportunity brought about by segregation may be further exacerbated if a lack of multimodal transportation options makes commuting to jobs, stores, and services more difficult. Six regions had comparatively high levels of income segregation and weaker transit access. Eighteen of the most segregated regions in terms of income also had comparatively strong transit access. However, in regions in which transit-served neighborhoods are associated with higher housing costs, lower- and middle-income households may not be able to take advantage of the full range of transportation choices.

TABLE 14 Transit Access and Income Segregation

	Lower income segregation	Higher income segregation
Stronger transit access	Salt Lake City, UT Seattle-Tacoma-Bellevue, WA Minneapolis-St. Paul-Bloomington, MN-WI San Jose-Sunnyvale-Santa Clara, CA Urban Honolulu, HI Albany-Schenectady-Troy, NY Portland-Vancouver-Hillsboro, OR-WA Provo-Orem, UT Ogden-Clearfield, UT	Bridgeport-Stamford-Norwalk, CT New York-Newark-Jersey City, NY-NJ-PA Tucson, AZ Gainesville, FL Cleveland-Elyria, OH Philadelphia-Camden-Wilmington, PA-NJ-DE-MD Milwaukee-Waukesha-West Allis, WI Miami-Fort Lauderdale-West Palm Beach, FL Los Angeles-Long Beach-Anaheim, CA New Haven-Milford, CT Chicago-Naperville-Elgin, IL-IN-WI San Antonio-New Braunfels, TX Sacramento–Roseville–Arden-Arcade, CA Phoenix-Mesa-Scottsdale, AZ San Francisco-Oakland-Hayward, CA Baltimore-Columbia-Towson, MD Riverside-San Bernardino-Ontario, CA Springfield, MA
Weaker transit access	Little Rock-North Little Rock-Conway, AR Columbia, SC Winston-Salem, NC Cape Coral-Fort Myers, FL Boise City, ID Lakeland-Winter Haven, FL Fayetteville-Springdale-Rogers, AR-MO Flagstaff, AZ Palm Bay-Melbourne-Titusville, FL Harrisburg-Carlisle, PA Cedar Rapids, IA Naples-Immokalee-Marco Island, FL Coeur d'Alene, ID Punta Gorda, FL The Villages, FL Asheville, NC Ocala, FL	Memphis, TN-MS-AR Jackson, MS Toledo, OH Birmingham-Hoover, AL Wichita, KS Colorado Springs, CO

Notes: "Lower income segregation" and "Stronger transit access" = region metric score is among the best one-third in the Index data set; "Higher income segregation" and "Weaker transit access" = region metric score is among the worst one-third in the Index data set. Regions not listed fall into the moderate category for at least one metric.

Access to Health Care

Public health and access to medical services are a critical component of a community's well-being. The need for high-quality health services has been underscored by the impact of COVID-19 on individuals with preexisting health complications and overwhelmed medical centers in some areas. The 2021 Index includes a metric on the proportion of households in medically underserved areas, as defined by the Health Resources and Services Administration as "having too few primary care providers, high infant mortality, high poverty or a high elderly population."[32] Using this metric, the median for all regions in the Index data set was 24.33 percent of households. However, 12 entire regions (of which 10 are in Florida) are classified as Medically Underserved Areas. More discussion of this issue, as well as other elements of the health and housing nexus, appears in the accompanying policy brief, "Housing, Health, and the COVID-19 Crisis."

Housing Production

The impact of new housing production on attainability varies by context. The 2021 Index data set includes a wide spectrum of market types, including some rapidly gaining households and others that are losing population. Therefore, no single target constitutes sufficient production to maintain or improve attainability. That is particularly true since other dimensions of supply—tenure, location, and housing type, among others—mean that the mix of new construction could matter as much as the amount.

Based on the 2021 Index data, Syracuse had the highest level of production relative to household growth and Worcester the least. The lists of the 10 highest- and lowest-producing regions both included a mix of larger, medium-sized, and small regions, but none of the 25 most populous. The regions with the greatest share of multifamily construction were predominantly very large regions. Data included in the 2021 Index provide limited information on "missing-middle" housing production, because the multifamily category (five or more units) groups many product types that meet this definition with larger apartment and condominium projects. However, the attached single-family (two to four units) subset of missing middle can play an important role in the market, in theory providing more attainable homeownership opportunities or rental housing in lower-density neighborhoods. Production of this housing type was limited. Wichita had the highest proportion of permits in structures of two to four units at 17.68 percent, and the Index data set median was 2.27 percent.

TABLE 15 New Housing Permits, Total and by Type

Most new permits per 100 new households*	Highest percentage – 1-unit structures	Highest percentage – 2- to 4-unit structures	Highest percentage – 5-unit structures
Syracuse, NY	Ocala, FL	Wichita, KS	New York-Newark-Jersey City, NY-NJ-PA
Springfield, MA	Baton Rouge, LA	Cedar Rapids, IA	San Jose-Sunnyvale-Santa Clara, CA
Augusta-Richmond County, GA-SC	Jackson, MS	McAllen-Edinburg-Mission, TX	San Francisco-Oakland-Hayward, CA
Oxnard-Thousand Oaks-Ventura, CA	Punta Gorda, FL	Providence-Warwick, RI-MA	Los Angeles-Long Beach-Anaheim, CA
Richmond, VA	Scranton–Wilkes-Barre–Hazleton, PA	Albany-Schenectady-Troy, NY	Miami-Fort Lauderdale-West Palm Beach, FL
Hartford-West Hartford-East Hartford, CT	Augusta-Richmond County, GA-SC	New Orleans-Metairie, LA	San Diego-Carlsbad, CA
Urban Honolulu, HI	Lakeland-Winter Haven, FL	Rochester, NY	Madison, WI
Palm Bay-Melbourne-Titusville, FL	Akron, OH	Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	Seattle-Tacoma-Bellevue, WA
Baton Rouge, LA	Oklahoma City, OK	El Paso, TX	Urban Honolulu, HI
Albuquerque, NM	Cleveland-Elyria, OH	Springfield, MA	Bridgeport-Stamford-Norwalk, CT

Fewest new permits per 100 new households*	Lowest percentage – 1-unit structures	Lowest percentage – 2- to 4-unit structures	Lowest percentage – 5-unit structures
Worcester, MA-CT	New York-Newark-Jersey City, NY-NJ-PA	Gainesville, FL	Ocala, FL
Winston-Salem, NC	San Jose-Sunnyvale-Santa Clara, CA	Columbia, SC	Punta Gorda, FL
Grand Rapids-Wyoming, MI	Los Angeles-Long Beach-Anaheim, CA	Raleigh, NC	Baton Rouge, LA
Deltona-Daytona Beach-Ormond Beach, FL	San Francisco-Oakland-Hayward, CA	Palm Bay-Melbourne-Titusville, FL	Jackson, MS
Greenville-Anderson-Mauldin, SC	San Diego-Carlsbad, CA	Charleston-North Charleston, SC	Scranton–Wilkes-Barre–Hazleton, PA
Gainesville, FL	Miami-Fort Lauderdale-West Palm Beach, FL	Knoxville, TN	New Orleans-Metairie, LA
Knoxville, TN	Boston-Cambridge-Newton, MA-NH	Asheville, NC	Augusta-Richmond County, GA-SC
Charlotte-Concord-Gastonia, NC-SC	Seattle-Tacoma-Bellevue, WA	Lakeland-Winter Haven, FL	Bakersfield, CA
Spokane-Spokane Valley, WA	Madison, WI	Urban Honolulu, HI	Lakeland-Winter Haven, FL
Indianapolis-Carmel-Anderson, IN	Bridgeport-Stamford-Norwalk, CT	Houston-The Woodlands-Sugar Land, TX	Cleveland-Elyria, OH

* Among regions with household growth during relevant time period.

Occupational Analysis

The Index research project also includes an Occupational Analysis that compares the amount needed in order 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. Occupations were selected to reflect a broad range of industries and income levels. 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. Table 16 shows the median values for all regions in the 2021 Index data set for which data are available. Throughout much of the country, housing options affordable to the regions' workforce remain limited, particularly in the context of one-income households. The lowest-paid workers, in particular, struggle. A housekeeper can afford only the least expensive housing type (one-bedroom apartment at fair-market rent) in four regions: Toledo, Dayton, Cedar Rapids, and Winston-Salem. Furthermore, high wages do not necessarily offset higher costs in the most expensive markets. A hypothetical two-income household in San Francisco including a child care worker and teacher can afford only a one-bedroom apartment without being cost burdened.

TABLE 16 Home Attainability by Occupation and Housing Type

	Median annual wage	Gap/surplus – median-priced home (10 percent downpayment)	Gap/surplus – median-priced home (3 percent downpayment)	Gap/surplus – 1 bedroom at fair-market rent	Gap/surplus – 2-bedroom at fair-market rent	Gap/surplus – 3-bedroom at fair-market rent
Dual-income households						
Child care worker, teacher	$85,441	$25,050	$21,452	$53,568	$46,619	$32,784
Health aide, truck driver	$67,039	$6,120	$2,549	$35,316	$27,897	$14,309
Retail salesperson, janitor	$56,383	($4,841)	($8,376)	$24,709	$17,569	$3,576
Single-income households						
Geriatric nurse (RN)	$66,390	$5,452	$1,932	$34,595	$27,267	$13,552
Public school teacher	$54,608	($6,668)	($10,117)	$22,889	$15,776	$1,760
Auto mechanic	$47,254	($14,082)	($17,604)	$15,188	$8,339	($5,559)
Cardiac technician	$43,398	($17,662)	($21,109)	$11,347	$4,709	($9,453)
Long-haul truck driver	$42,773	($18,274)	($21,721)	$10,778	$4,120	($10,014)
Delivery truck driver	$38,320	($22,641)	($26,088)	$6,263	($82)	($14,244)
Stock mover	$30,846	($29,969)	($33,416)	($1,147)	($7,317)	($21,756)
Child care worker	$30,833	($29,982)	($33,429)	($1,161)	($7,330)	($21,769)
Security guard	$30,137	($30,664)	($34,111)	($1,865)	($8,046)	($22,468)
Nursing aide	$28,956	($31,823)	($35,270)	($3,004)	($9,263)	($23,656)
Home health aide	$28,719	($32,054)	($35,501)	($3,232)	($9,506)	($23,893)
Janitor	$28,262	($32,502)	($35,949)	($3,689)	($9,977)	($24,353)
Retail salesperson	$28,121	($32,641)	($36,088)	($3,843)	($10,122)	($24,495)
Waitress	$26,532	($34,199)	($37,646)	($5,488)	($11,759)	($26,092)
Housekeeper	$24,365	($36,324)	($39,771)	($7,575)	($14,096)	($28,270)

Source: Terwilliger Center tabulation of NHC Paycheck to Paycheck data.

Note: Red indicates cost-burden gap to afford housing type.

Next Steps: A Guide for Further Investigation in Your Region

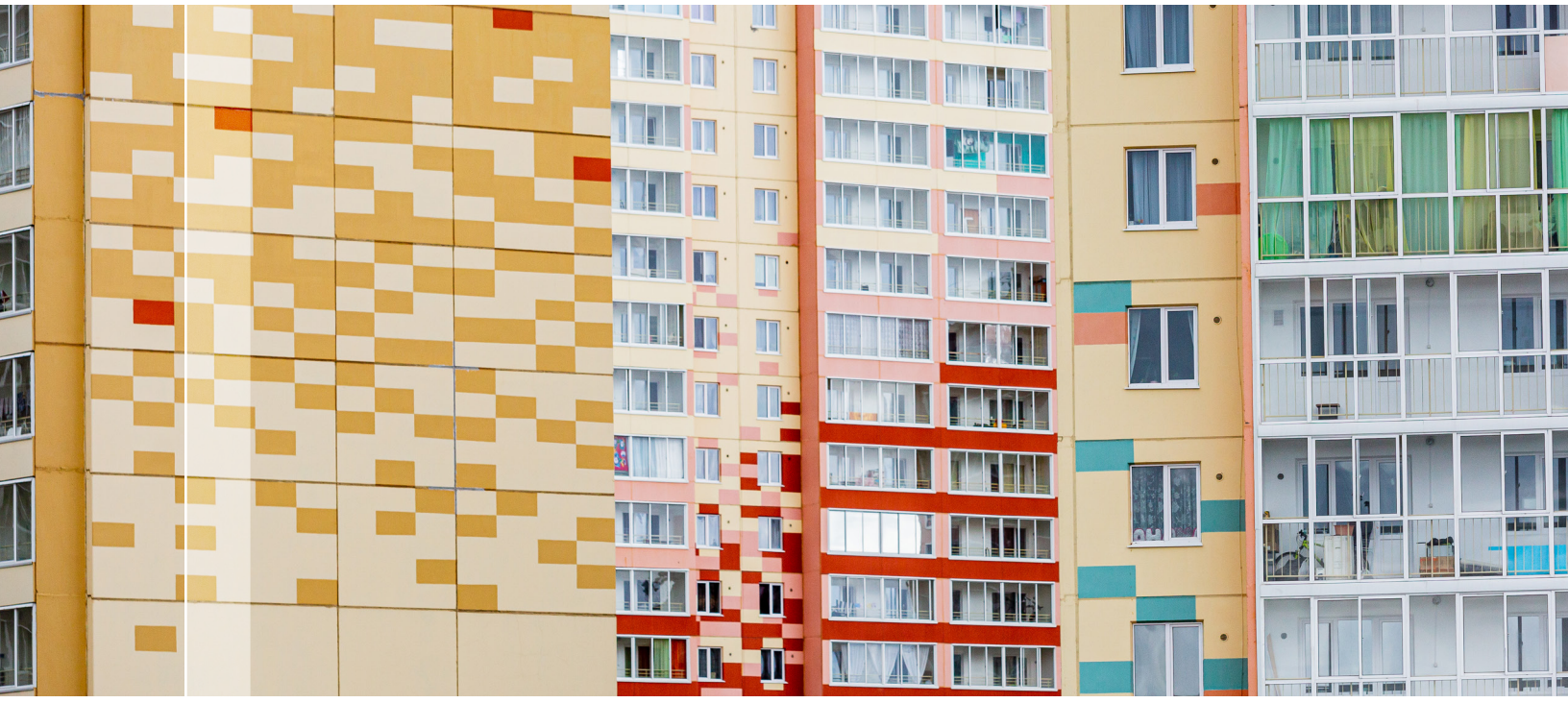
This report provides a high-level overview of the 2021 Home Attainability Index as well as summary findings based on a high-level review of the data. However, understanding the housing-related challenges of any given market requires a more robust analysis of the data. To explore the full Index data set, visit Knowledge Finder to download an interactive spreadsheet.

Using the Index, practitioners across the country can build a data-informed foundation for discussions of housing-related challenges. To paint a more complete picture of the needs, challenges, and opportunities specific to a regional or local market, these data can be supplemented with other sources and resources that cover topics such as the age and other demographic characteristics of the population, housing quality, and preservation needs.

Similar to the findings from the 2020 pilot edition of the Home Attainability Index, there are four core findings from the 2021 edition:

- The most severe cost burdens among middle-income households are predominantly found in the most-populous regions.
- However, there is a nationwide lack of attainable homes for critical members of the workforce that is not limited to the United States' most vibrant metropolitan economies.
- In particular, lower-income households struggle to find attainable rental units nationwide.
- Segregation—both by income and race—cuts across market types and geographies, and high housing costs threaten to worsen racial and socioeconomic disparities.

In addition, Index data demonstrate that racial and socioeconomic disparities will not be easily overcome. Household budgets are generally zero-sum, and "the rent eats first,"[33] reducing the ability to save for emergency expenses, a downpayment for a home purchase, or education, among other desired goals, thus contributing to existing gaps in homeownership and access to opportunity. Given the entrenched nature of this challenge, accelerating progress requires a proactive focus not just on increasing the attainability of a region's housing stock, but also an affirmative effort to remedy past injustices and create a more equitable future, as was envisioned in the Fair Housing Act of 1968.



Notes

1. The equity-related metrics that are the focus of this analysis are racial homeownership gaps, racial gaps in rates of high-cost mortgages, income segregation, racial segregation, geographic inclusion, and racial inclusion.

2. Extremely low-income households are defined as those earning up to 30 percent of the area median income.

3. MSAs are regional areas, with boundaries defined by the U.S. Census Bureau.

4. Data calculation and source: Terwilliger Center tabulation of U.S. Census Bureau 5-year (2014–2018) American Community Survey data (ACS 2014–2018).

5. Jessica Semega, Melissa Kollar, Emily A. Shrider, and John Creamer, *Income and Poverty in the United States: 2019,* U.S. Census Bureau, Report P60-270 (Sept. 15, 2020), https://www.census.gov/library/publications/2020/demo/p60-270.html.

6. Data calculation and source: Metrics based on Terwilliger Center analysis of county-level ACS 2014–2018 data tabulated by PolicyMap, aggregated to the regional level. Percentage of all homes that are likely affordable for a four-person family earning 80 percent and 120 percent of AMI between 2014 and 2018: PolicyMap, https://www.policymap.com/data/our-data-directory/ (based on data from U.S. Census Bureau American Community Survey; accessed November 2020).

7. Data calculation and source: Terwilliger Center tabulation of U.S. Census Bureau 5-year ACS 2014–2018 data.

8. Data calculation and source: Terwilliger Center tabulation of U.S. Census Bureau 5-year ACS 2014–2018 data.

9. Data calculation and source: Terwilliger Center analysis of regional median home prices and two-bedroom fair-market rents accessed through the National Housing Conference Paycheck to Paycheck database. For more information, see https://nhc.org/paycheck-to-paycheck/.

10. Data calculation and source: Terwilliger Center analysis based on the following information: (1) Regional median home prices, accessed through the National Housing Conference Paycheck to Paycheck database; (2) Assumed 10 percent downpayment and 3 percent closing costs; (3) Estimates of annual savings rates, based on U.S. Bureau of Economic Analysis averages for post-tax disposable income and savings rates. The savings rate for homeownership is assumed to be half the total savings rate, to adjust for savings for purposes other than housing (retirement, "rainy day" expenses, etc.).

11. Calculations: Metrics based on PolicyMap tabulation of Federal Financial Institutions Examination Council Home Mortgage Disclosure Act summaries. High-cost loans are those with an annual percentage rate more than 1.5 percentage points higher than the average prime offer rate for a first-lien loan or more than 3.5 percentage points higher for a second-lien loan.

Percentage of loans to non-Hispanic White, non-Hispanic Black/African American, and Hispanic borrowers that were high cost in 2018: PolicyMap, https://www.policymap.com/data/our-data-directory/ (based on data from Federal Financial Institutions Examination Council: Home Mortgage Disclosure Act Summaries; accessed November 2020).

12. Data calculation and source: Data provided by the National Low Income Housing Coalition, based on ACS 2018 1-Year data. Andrew Aurand et al., "The Gap: A Shortage of Affordable Rental Homes 2020," National Low Income Housing Coalition, March 2020, reports.nlihc.org, https://reports.nlihc.org/gap.

13. Data calculation and source: Terwilliger Center tabulation of U.S. Census Bureau 5-year ACS 2014–2018 data.

14. Data calculation and source: Terwilliger Center analysis of regional median home prices and two-bedroom fair-market rents accessed through the National Housing Conference Paycheck to Paycheck database. For more information, see https://nhc.org/paycheck-to-paycheck/.

15. Data calculation and source: Terwilliger Center analysis based on the following information: (1) Two-bedroom fair-market rents, accessed through the National Housing Conference Paycheck to Paycheck database; (2) Assumption of savings equal to three times the rent level; (3) Estimates of annual savings rates, based on U.S. Bureau of Economic Analysis averages for post-tax disposable income and savings rates. The savings rate for renting-related expenses is assumed to be half the total savings rate, to adjust for savings for purposes other than housing (retirement, "rainy day" expenses, etc.).

16. Data calculation and source: Terwilliger Center analysis of Center for Neighborhood Technology AllTransit data. Center for Neighborhood Technology 2019, AllTransitTM, alltransit.cnt.org.

17. Data calculation and source: Terwilliger Center tabulation of U.S. Census Bureau 5-year ACS 2014–2018 data.

18. Data calculation and source: The Brookings Institution Metro Monitor 2020 report, which is based on a range of data sources that include the U.S. Census Bureau's Public Use Microdata Samples (PUMS) for the ACS 2008–2018 1-year estimates. The Metro Monitor report ranks metro areas in three categories based on size. The Home Attainability Index normalizes these rankings on a scale of 1 to 100. Alan Berube et al., Metro Monitor 2020, Brookings Institution, March 5, 2020, https://www.brookings.edu/interactives/metro-monitor-2020/.

19. Data calculation and source: Racial segregation according to the Theil Index, 2010: PolicyMap, https://www.policymap.com/data/our-data-directory/ (based on data from U.S. Census Bureau Decennial Census estimates; accessed November 2020).

20. Data calculation and source: Metrics based on Terwilliger Center analysis of census tract–level ACS 2014–2018 data tabulated by PolicyMap, aggregated to the regional level. High-income neighborhoods are defined as those having a median income 1.5 times the regional median. Low-income neighborhoods are defined as those having a median income two-thirds of the regional median.

Estimated median income of a household between 2014 and 2018: PolicyMap, https://www.policymap.com/data/our-data-directory/ (based on data from U.S. Census Bureau American Community Survey; accessed November 2020); estimated number of households between 2014 and 2018: PolicyMap, https://www.policymap.com/data/our-data-directory/ (based on data from U.S. Census Bureau American Community Survey; accessed November 2020).

21. Data calculation and source: Metric based on Terwilliger Center analysis of PolicyMap's Severe COVID-19 Health Index census tract–level data, aggregated to the regional level. The percentage of households used in this metric is based on the number of households living in census tracts that fall in the "above average," "high," and "very high" risk categories. Severe COVID-19 health risk index in 2020: PolicyMap, https://www.policymap.com/data/our-data-directory/ (accessed November 2020).

22. Data calculation and source: Metric based on Terwilliger Center analysis of census tract–level HRSA designations assembled by PolicyMap, aggregated to the regional level. Medically Underserved Areas, as of 2019: PolicyMap, https://www.policymap.com/data/our-data-directory/ (based on data from the Health Resources and Services Administration; accessed November 2020).

23. Data calculation and source: Terwilliger Center tabulation of Building Permits Survey data.

24. Data calculation and source: Terwilliger Center tabulation of Building Permits Survey data.

25. Metrics not included in the count of performance measures are predominantly descriptive (i.e., population) and/or related to tenure choice, as the Center does not take a position that homeownership is inherently preferable to or better than renting, or vice versa. Excluded metrics include percent of owner- and renter-occupied households, tenure cost proportionality, and the proportion of new housing production by building type.

26. Jenny Schuetz, "Rethinking Homeownership Incentives to Improve Household Financial Security and Shrink the Racial Wealth Gap" (Brookings, December 9, 2020), https://www.brookings.edu/research/rethinking-homeownership-incentives-to-improve-household-financial-security-and-shrink-the-racial-wealth-gap/.

27. Schuetz, "Rethinking Homeownership Incentives to Improve Household Financial Security and Shrink the Racial Wealth Gap."

28. Neil Bhutta, Andrew C. Chang, Lisa J. Dettling, and Joanne W. Hsu, "Disparities in Wealth by Race and Ethnicity in the 2019 Survey of Consumer Finances," FEDS Notes, September 28, 2020, https://www.federalreserve.gov/econres/notes/feds-notes/disparities-in-wealth-by-race-and-ethnicity-in-the-2019-survey-of-consumer-finances-20200928.htm.

29. Bhutta et al., "Disparities in Wealth by Race and Ethnicity."

30. The equity-related metrics that are the focus of this analysis are racial homeownership gaps, racial gaps in rates of high-cost mortgages, income segregation, racial segregation, geographic inclusion, and racial inclusion.

31. Five percent of commuters nationally take public transit to work. Even in the central cities of the two regions with the best transit access according to AllTransit Scores, the percentage of residents using transit was just 34.77 percent in San Francisco and 56.01 percent in New York City. U.S. Census Bureau 2015–2019 ACS data, accessed via PolicyMap, 1/19/2021.

32. Health Resources and Services Administration, data.HRSA.gov, MUA Find, https://data.hrsa.gov/tools/shortage-area/mua-find.

33. Whitney Airgood-Obrycki, "The Rent Eats First," in *House Perspectives,* Harvard Joint Center for Housing Studies, January 13, 2021, https://www.jchs.harvard.edu/blog/rent-eats-first-most-renters-cant-afford-comfortable-standard-living.

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