HOME ATTAINABILITY INDEX 2024 RELEASE







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ACKNOWLEDGMENTS

- About ULI: The Urban Land Institute is a global, member-driven organization comprising more than 48,000 real estate and urban development professionals dedicated to advancing the Institute's mission of shaping the future of the built environment.
- About ULI Terwilliger Center: 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, and housing awards.
- About RCLCO: RCLCO is the "first call" for real estate developers, investors, the public sector, and non-real estate companies and organizations seeking strategic and tactical advice regarding property investment, planning, and development. Our team leverages quantitative analytics and a strategic planning framework to provide end-to-end business planning and implementation solutions at an entity, portfolio, or project level. With the insights and experience gained over 55 years and thousands of projects, RCLCO brings success to all product types across the United States and around the world.
- To those who helped, the Institute and RCLCO extend sincere thanks for sharing valuable time and expertise. Without the involvement of these many individuals, this report would not have been possible. In particular, thanks to Mike Spotts for his input and all his initial work on establishing the Index and methodology.

Terwilliger Center

Housing



RCL REAL ESTATE CONSULTING

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ABOUT THE INDEX

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

Specifically, the Index:

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

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 challenges faced by workforce households above 60 percent of area median income (AMI).

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."



2023 INDEX INNOVATIONS AND PATH FORWARD

The 2023 edition of the Index takes a new tack, building on the framework set forth by the 2020 pilot and 2021 and 2022 editions. The Terwilliger Center is partnering with RCLCO for the first time. The Index has been structured to focus on fewer external data sources, relying instead on the underlying and, in many cases, public, data. This streamlined approach increases the ease of replicability for years to come. It also enables consistent tracking and production of the Index over the next decade, facilitating future insights into changes in attainability by market, region, and market cohort over time. Finally, this approach will allow for a more granular analysis of not just markets, but housing attainability trends on the county and even census tract level.

As with previous editions, the Home Attainability Index focuses on demographic, housing, and occupational data available for over 300 metropolitan statistical areas (MSAs). The analysis in this report hones in on 111 MSAs specifically—those with populations over 500,000, breaking them into three key market size groups. Additionally, the Index also uses the market cohorts based on ULI's 2023 *Emerging Trends* report and splits those same markets into geographic regions for the first time, to provide further insights and cross-market analytics.

Cohort	Summary Description from Emerging Trends	Example of Regions in Cohort	Median Population for Cohort
Establishment	Long the nation's economic leaders, these regions offer tremendous opportunities, but appeal has waned in recent years as growth has slowed and challenges increased.	New York City, Boston, Chicago, San Francisco (9 total)	4,912,449
Magnets	These regions are migration destinations for both people and companies, and most are growing more quickly than the U.S. average in terms of both population and jobs.	Atlanta, Nashville, Boise, Phoenix (18 total)	2,814,037
Niche	These regions are generally smaller or less economically diverse but have a dominant economic driver that supports stable economic growth.	Baltimore, Columbus, Las Vegas, Orlando (23 total)	966,688
Backbone	These regions provide a variety of interesting and enjoyable places to live and work. They are slower growing but benefit from moderate housing and business costs.	Albuquerque, Cleveland, Indianapolis, Sacramento (17 total)	1,568,940

INTRODUCTION

In some ways, in 2023, the dust settled following the COVID pandemic. Employers are no longer caught in limbo; many at this point have established hybrid or in-office policies. Many Americans are locked into locational decisions made during COVID— quit rates are down, migration has slowed, and while rents and interest rates are no longer growing rapidly, their persistent elevated levels have translated to keeping households where they are. Unfortunately, this "settling" has far from alleviated housing attainability challenges.

The ULI 2023 *Emerging Trends* report highlighted the idea of "Too Much for Too Many" as one of 10 key trends in real estate that year. In many ways, this housing attainability report serves to further unpack the high cost-of-living challenge that plagues America's major markets. As the enclosed report highlights, housing affordability has fallen to its lowest level in 30 years. Despite high mortgage rates, home prices continue to march higher with low sales volume and inventory levels. In 2022, according to the National Association of Realtors (NAR), current supply levels needed to essentially double to moderate home price gains. This is mirrored by rental market trends: the share of cost-burdened households, defined as those paying over 35 percent of monthly income on rent, has risen from 40 percent in 2017 to 43 percent in 2022 (the latest census data).

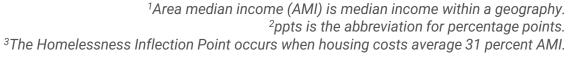
Unfortunately, persistent challenges remain in delivering the supply that is needed to alleviate the attainability crisis. Restrictive zoning, cumbersome entitlement processes, high cost of debt, and developer caution all hamper attainable housing production, which shows in the data—permits were down 4.2 percent across the United States in 2022. However, there is variation by market size, cohort type, and geography.



INDEX VARIABLES AND CATEGORIES

To give practitioners easy access to data points related to housing attainability forces, RCLCO and the Terwilliger Center analyzed 20 variables that relate to the five areas of interest examined in previous Indices: Overall Affordability; Homeownership Attainability, Rental Attainability; Neighborhood Opportunity and Access; and Growth and Production Balance.

Overall Affordability	Variable Code
Percentage of severely cost-burdened households with incomes between \$35,000 and \$50,000/year	Percentage of Cost-Burdened Households with Income \$35K-\$50K
Percentage of severely cost-burdened households with incomes between \$50,000 and \$75,000/year	Percentage of Cost-Burdened Households with Income \$50K-\$75K
Tenure cost proportion (own/rent) relative to dataset median	Tenure Cost Proportionality
Homeownership Attainability	
Estimated percentage of all households that own a home	Owner-Occupied Percentage
Estimated percentage of all homes likely affordable to a four-person family earning 80% AMI ¹	Percentage of Homes Affordable to Buy (80% AMI)
Estimated percentage of all homes likely affordable to a four-person family earning 120% AMI	Percentage of Homes Affordable to Buy (120% AMI)
Non-Hispanic White–Black homeownership gap (ppts ²)	Gap in Ownership (White and Black)
Non-Hispanic White–Hispanic homeownership gap (ppts)	Gap in Ownership (White and Latino)
Length of time in years to save for downpayment (80% AMI, four-person household; median-priced home)	Years to Save for Downpayment (80% AMI)
Rental Attainability	
Estimated percentage of two-bedroom rentals likely affordable to a four-person family earning 50% AMI	Percentage of Affordable Rentals (50% AMI)
Estimated percentage of two-bedroom rentals likely affordable to a four-person family earning 80% AMI	Percentage of Affordable Rentals (80% AMI)
Homelessness inflection point: distance to threshold ³	Homelessness Inflection Point
Length of time in months to save for rental move (first/last month's rent, security deposit; 50% AMI, four-person household; fair market rent)	Months Savings for Rent
Neighborhood Opportunity and Access	
Share of commuters who drive to work	Percentage Who Drive to Work
Estimated percentage of workers with a work commute of more than an hour	Percentage with Over-Hour Commute
Theil Index of residential segregation	Theil Index
Income segregation: percentage of households in middle-income neighborhoods (80–120% AMI)	Percentage in Middle-Income Tract
Growth and Production Balance	
Percentage growth in households, 2013–2022	Percentage of Growth Households
Percentage growth in permits, 2013–2022	Percentage of Growth Housing Units
Permits added as a share of housing stock, 2013–2022	Housing Permits Issued as Percentage of Housing Stock (2013–2022)





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KEY THEMES AND CONCLUSIONS

IN ADDITION TO GROUPING VARIABLES BY CATEGORY, THIS YEAR, THE TERWILLIGER CENTER AND RCLCO FOCUSED ON 10 KEY TAKEAWAYS:

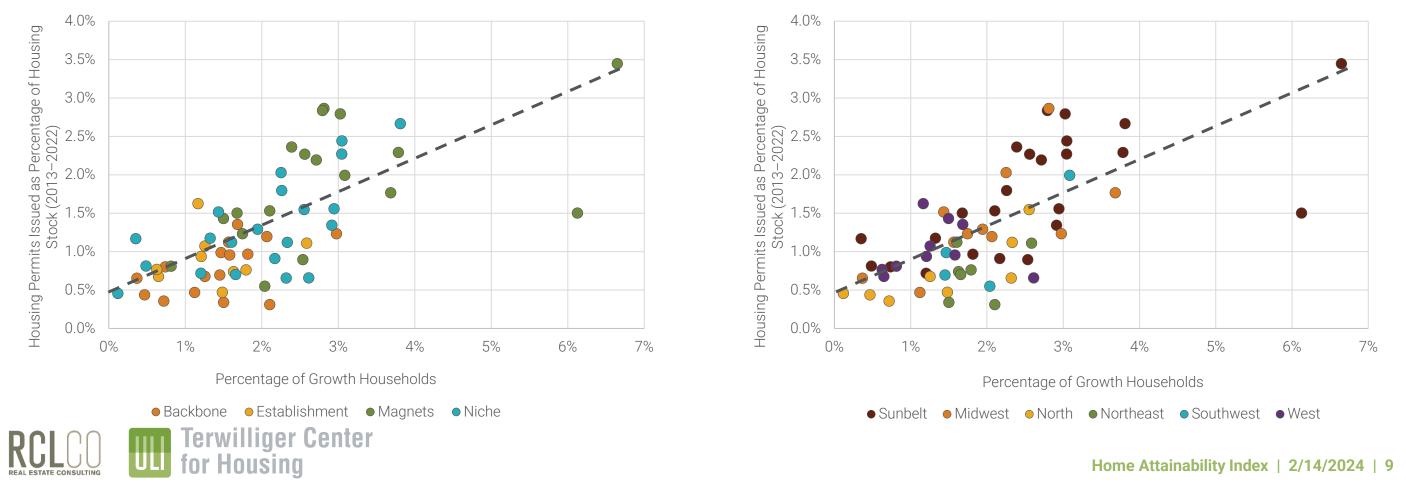
- >> Data confirms what is simple and what we know: production impacts affordability.
- >> For-sale and rental affordability move in tandem across major markets.
- > Large, coastal Establishment markets remain most unaffordable with the largest share of cost-burdened renter households.
- >> Large, coastal markets are most disproportionately expensive to buy relative to renting.
- Middle-income households have the most access to buying in Backbone markets such as the Northeast (e.g., Pennsylvania, New York).
- >> Rentals are most affordable in smaller Midwest and Sunbelt markets (e.g., Texas, North Carolina, Kentucky).
- >> The least economically polarized markets are an interesting group; these are areas that have seen substantial inmigration recently, predominantly located in the West (Salt Lake, Boise, but also Palm Bay and Deltona, Florida).
- >> Markets that struggle with racial disparity on a market level struggle with it on a neighborhood level too.
- Backbone markets that have the most for-sale attainability also have the largest racial challenges related to housing access.
- >> Magnet markets are doing best in terms of racial integration (e.g., Orlando, Austin, Miami, Houston).



HOUSING PRODUCTION

IN MOST MARKETS, PRODUCTION IS NOT KEEPING UP WITH HOUSEHOLD GROWTH

Looking at the relationship between household growth rates from 2013–2022 and average permits issued as a share of housing inventory over the same period shows persistent underproduction in most markets; balanced household growth and production would straddle the black line depicted below in this case. Most markets are below this threshold; i.e., production rates are well below household growth with a few notable exceptions.

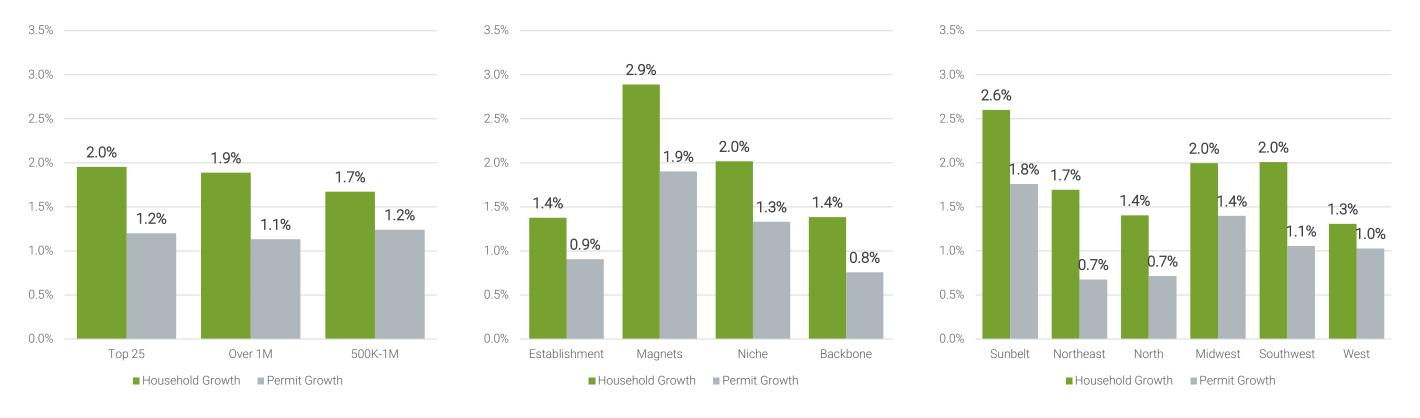


Household Growth vs. Housing Production

HOUSING PRODUCTION

WHILE HOUSEHOLD GROWTH AND PERMIT GROWTH ARE GENERALLY CORRELATED, PRODUCTION GAPS VARY BY MARKET TYPE

Across the board, production has lagged growth. In recent years, small markets are seeing the smallest gaps. As expected, there is less building activity in older markets such as Establishment and Backbone markets and in North and Northeast areas. To some degree, where the most growth is occurring, permitting levels follow (Sunbelt), but slowing starts this year may set the region further behind.



Household Growth vs. Housing Production, 2013–2022



DOES HOUSING PRODUCTION REALLY IMPACT AFFORDABILITY?

HOUSING PRODUCTION IS RELATED TO AFFORDABILITY, THOUGH A MURKY PICTURE

The data for the largest markets reveals that while growth in building production is not clearly related to the share of for-rent inventory that is affordable to middle-income households, there can be a slightly positive relationship between more production and more attainable rental inventory, especially in Magnet markets. However, trends are much less clear for Establishment markets where cost of living is high. To fully understand this relationship in future years, it will be prudent to look at the growth in the share of inventory affordable to middle income households relative to permit growth.



Housing Production vs. Rental Affordability



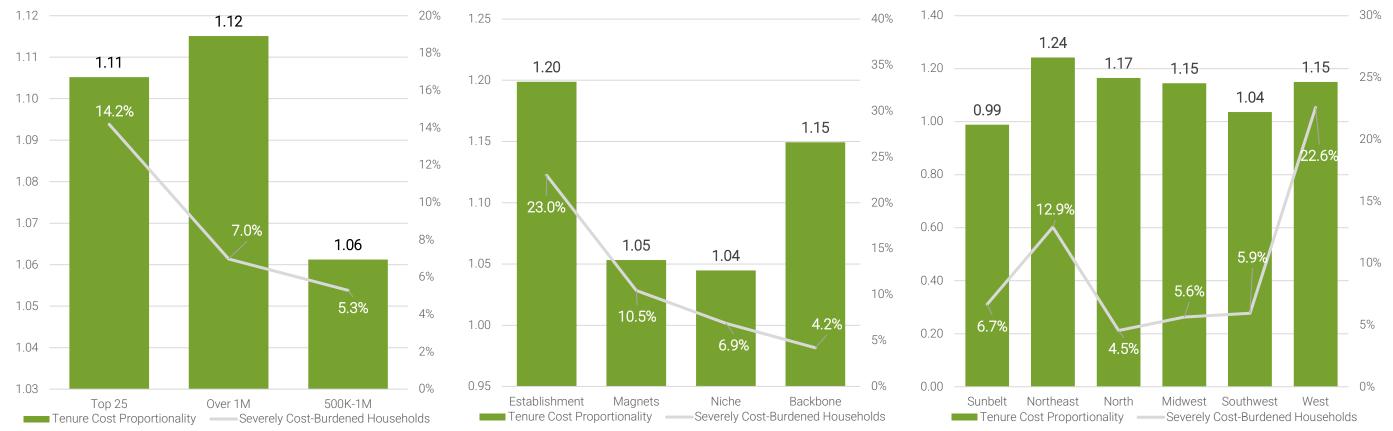
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OVERALL AFFORDABILITY

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IT IS MORE EXPENSIVE TO OWN IN LARGE MARKETS

Considering tenure cost proportionality (relative cost of owning to renting in each market relative to median of all MSAs), as we would expect, it is disproportionately harder to get a foot in the door of the for-sale market in large, major metro areas. Interestingly, these are also the markets that see the highest rates of severely cost-burdened households in the \$35K to \$50k (as well as the \$50K to \$75K) income range.



Tenure Cost Proportionality vs. Severely Cost-Burdened Households



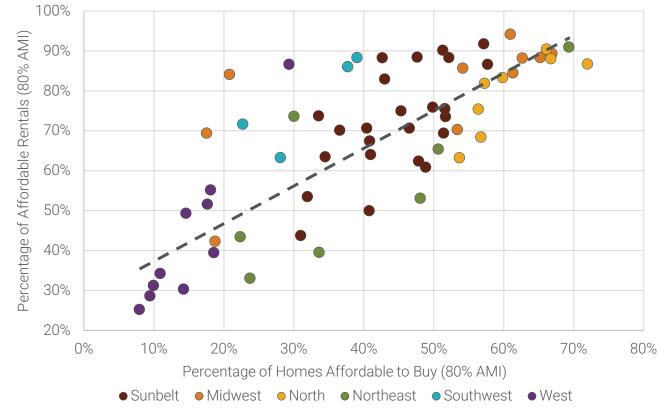
OVERALL AFFORDABILITY

WHERE OWNING IS EXPENSIVE, SO IS RENTING

Indeed, when examining the relationship between the share of rental inventory affordable to a four-person household at 80 percent AMI and the share of for-sale inventory affordable (assumes sufficient income saved for a 10 percent downpayment), there is a strong relationship. The data reveals that, not surprisingly, Backbone and Niche markets found in the North and Midwest tend to be the least expensive for both renting and owning, while Establishment West markets are least affordable for housing, broadly speaking.



For-Sale vs. Rentals Affordable at 80% AMI



OVERALL AFFORDABILITY

MOST AFFORDABLE RENTAL MARKETS ARE DIFFERENT FROM THOSE WITH **MOST AFFORDABLE FOR-SALE HOUSING STOCK**

In the least affordable markets, there is little variation between for-sale and rental housing availability, with major California markets dominating the list. However, there is more variation in terms of most affordable by tenure; while for-sale markets that top the list include a larger share of Northeast and Rust Belt markets, the biggest-value rental markets lean more toward small markets in the Sunbelt and West. Note that data used in this analysis represents total market inventory instead of recent sales, so while trends are accurate, the share of housing stock attainable for four-person 80 percent AMI households is inflated relative to current market conditions.

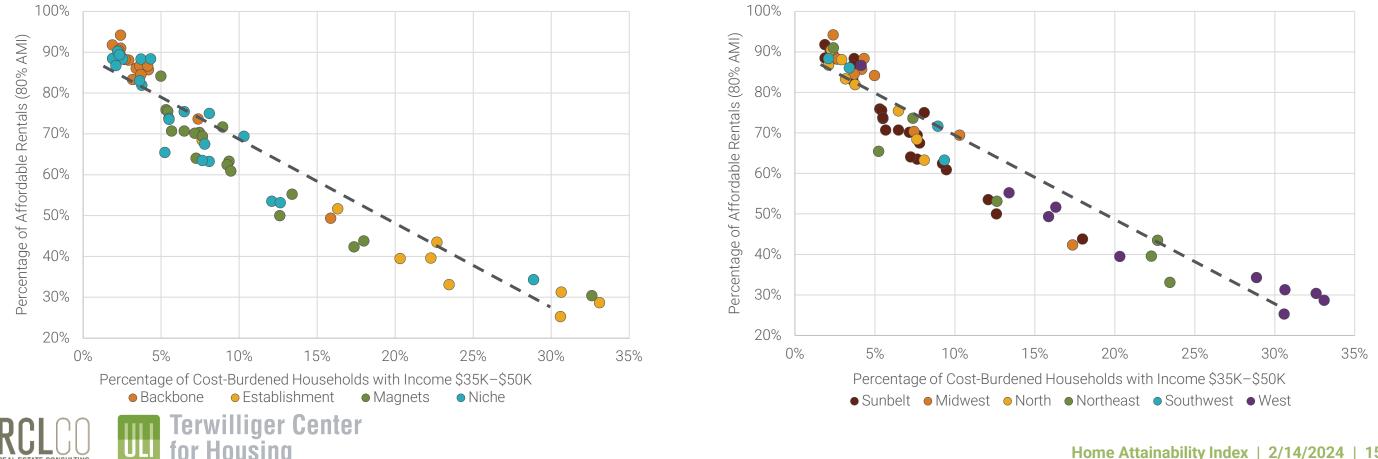
Top 15 - Share of For-Sale Inventory Valued at Affordable Levels for 80% AMI Four-Person Household		Bottom 15 – Share of For-Sale Inventory Valued at Affordable Levels for 80% AMI Four-Person Household		Top 15 – Share of Two-Bedroom Rental Inventory Valued at Affordable Levels for 80% AMI Four-Person Household			Bottom 15 – Share of Two-Bedroom Rental Inventory Valued at Affordable Levels for 80% AMI Four-Person Household				
Rank	MSA	%	Rank	MSA	%	Ran		%	Rank		%
1	Syracuse, NY	78%	106	San Francisco-Oakland-Berkeley, CA	8%	1	McAllen-Edinburg-Mission, TX	98%	106	San Francisco-Oakland-Berkeley, CA	25%
2	McAllen-Edinburg-Mission, TX	76%	105	San Jose-Sunnyvale-Santa Clara, CA	9%	2	Youngstown-Warren-Boardman, OH-P	A 97%	105	San Jose-Sunnyvale-Santa Clara, CA	29%
3	Rochester, NY	76%	104	Los Angeles-Long Beach-Anaheim, CA	10%	3	Fayetteville-Springdale-Rogers, AR	96%	104	San Diego-Chula Vista-Carlsbad, CA	30%
4	Youngstown-Warren-Boardman, OH-PA	75%	103	Urban Honolulu, HI	11%	4	Fayetteville, NC	95%	103	Oxnard-Thousand Oaks-Ventura, CA	31%
5	Lansing-East Lansing, MI	72%	102	Stockton, CA	11%	5	El Paso, TX	95%	102	Los Angeles-Long Beach-Anaheim, CA	31%
6	Pittsburgh, PA	72%	101	Oxnard-Thousand Oaks-Ventura, CA	12%	6	Dayton-Kettering, OH	95%	101	Washington-Arlington-Alexandria, DC-VA-MD-WV	V 33%
7	Dayton-Kettering, OH	71%	100	Modesto, CA	13%	7	Wichita, KS	95%	100	Urban Honolulu, HI	34%
8	Buffalo-Cheektowaga, NY	69%	99	San Diego-Chula Vista-Carlsbad, CA	14%	8	Tulsa, OK	95%	99	Seattle-Tacoma-Bellevue, WA	40%
9	Albany-Schenectady-Troy, NY	69%	98	Sacramento-Roseville-Folsom, CA	15%	9	Little Rock-North Little Rock-Conway, A	AR 95%	98	Boston-Cambridge-Newton, MA-NH	40%
10	Toledo, OH	68%	97	Provo-Orem, UT	15%	10	ScrantonWilkes-Barre, PA	94%	97	Denver-Aurora-Lakewood, CO	42%
11	Wichita, KS	68%	96	Las Vegas-Henderson-Paradise, NV	18%	11	Oklahoma City, OK	94%	96	New York-Newark-Jersey City, NY-NJ-PA	43%
12	Des Moines-West Des Moines, IA	67%	95	Riverside-San Bernardino-Ontario, CA	18%	12	Winston-Salem, NC	94%	95	Miami-Fort Lauderdale-Pompano Beach, FL	44%
13	Cincinnati, OH-KY-IN	67%	94	Portland-Vancouver-Hillsboro, OR-WA	18%	13	Greensboro-High Point, NC	94%	94	Sacramento-Roseville-Folsom, CA	49%
14	Harrisburg-Carlisle, PA	66%	93	Seattle-Tacoma-Bellevue, WA	19%	14	Toledo, OH	94%	93	Austin-Round Rock-Georgetown, TX	50%
15	Cleveland-Elyria, OH	66%	92	Denver-Aurora-Lakewood, CO	19%	15	Lexington-Fayette, KY	94%	92	Riverside-San Bernardino-Ontario, CA	52%



RENTAL AFFORDABILITY

MARKETS THAT ARE EXPENSIVE TO RENT ARE EXPENSIVE ACROSS INCOME LEVELS

Backbone and Midwest markets tend to be relatively affordable compared to Establishment and West markets, as one would guess. Note the strong correlation between the share of two-bedroom rental inventory affordable to a four-person family earning 80 percent AMI household and the share of severely cost-burdened households making \$35,000 to \$50,000 annually, regardless of AMI.



Cost-Burdened Households vs. Rentals Affordable

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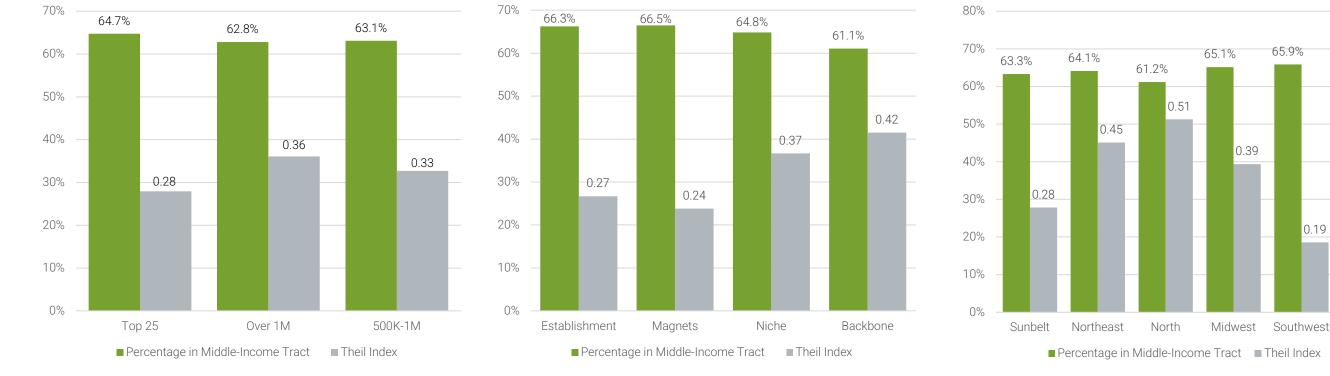
MIDDLE-INCOME HOUSEHOLDS

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Housing

MARKETS WITH MOST ECONOMIC INTEGRATION TEND TO BE RACIALLY INTEGRATED

Despite lack of overall affordability, larger, Establishment coastal markets exhibit the most neighborhood-level economic diversity (largest share of households living in census tracts with median incomes 80 to 120 percent AMI). The West is particularly well integrated; though, conversely, shows some of the worst general affordability challenges with the least rental units affordable at 80 percent AMI compared to any other region. While there is not a direct relationship when looking at the data on a market-by-market basis, markets with more middle-income neighborhoods also tend to have the least racial segregation as measured by the Theil Index (a lower value representing a more even distribution of races by census tract).



Middle-Income Neighborhoods (Percentage of Tracts with Median Income 80–120% AMI) and Theil Index (Higher = More Racial Disparity)

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69.4%

0.20

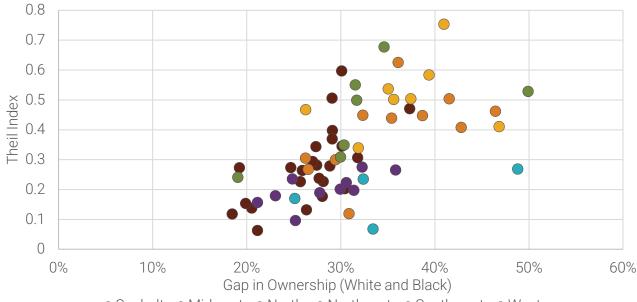
West

DIVERSITY OBSERVATIONS

- Comparing granular, neighborhood-level segregation measures to MSA-level segregation, there is a strong correlation and significant regional variation. Gaps in white–Black homeownership rates and the Theil Index exhibit the highest disparities in legacy Northeast and Rust Belt markets, while Sunbelt markets, perhaps counterintuitively, with much more significant recent growth, are more integrated.
- Going forward, analyzing changes over time by region would be helpful to benchmark what types of markets see gains in integration rates, both on the market and neighborhood level.

Тор	o 15 - Gap In Ownership (White and Black)		Bottom 15 - Gap In Ownership (White and Black)				
Rank	MSA	%	Rank MSA	%			
1	ScrantonWilkes-Barre, PA	52%	110 Oxnard-Thousand Oaks-Ventura, CA	17%			
2	Portland-South Portland, ME	50%	109 Palm Bay-Melbourne-Titusville, FL	17%			
3	Salt Lake City, UT	49%	108 Fayetteville, NC	18%			
4	Madison, WI	47%	107 Miami-Fort Lauderdale-Pompano Beach, FL	18%			
5	Minneapolis-St. Paul-Bloomington, MN-WI	46%	106 Modesto, CA	19%			
6	Albany-Schenectady-Troy, NY	44%	105 Washington-Arlington-Alexandria, DC-VA-MD-WV	19%			
7	Des Moines-West Des Moines, IA	43%	104 Charleston-North Charleston, SC	19%			
8	Grand Rapids-Kentwood, MI	43%	103 Austin-Round Rock-Georgetown, TX	20%			
9	McAllen-Edinburg-Mission, TX	43%	102 Orlando-Kissimmee-Sanford, FL	21%			
10	Syracuse, NY	42%	101 Los Angeles-Long Beach-Anaheim, CA	21%			
11	Milwaukee-Waukesha, WI	42%	100 San Antonio-New Braunfels, TX	21%			
12	Pittsburgh, PA	41%	99 Colorado Springs, CO	22%			
13	Ogden-Clearfield, UT	40%	98 El Paso, TX	23%			
14	Cincinnati, OH-KY-IN	39%	97 Urban Honolulu, HI	23%			
15	Fayetteville-Springdale-Rogers, AR	39%	96 Durham-Chapel Hill, NC	23%			

Racial Disparity



● Sunbelt ● Midwest ● North ● Northeast ● Southwest ● West

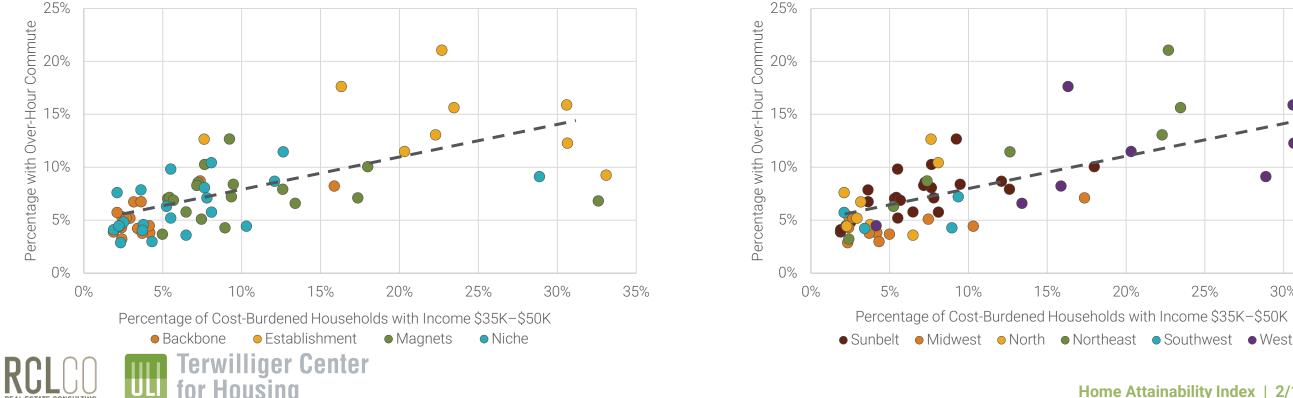
	Top 15 – Theil Index		Bottom 15 – Theil Index					
Rank	MSA	Index	Rank	MSA	Index			
1	Pittsburgh, PA	0.75	107	El Paso, TX	0.01			
2	Syracuse, NY	0.73	106	McAllen-Edinburg-Mission, TX	0.01			
3	Buffalo-Cheektowaga, NY	0.68	105	San Antonio-New Braunfels, TX	0.06			
4	Rochester, NY	0.63	104	Stockton, CA	0.06			
5	St. Louis, MO-IL	0.63	103	Albuquerque, NM	0.07			
6	Chattanooga, TN-GA	0.60	102	Modesto, CA	0.07			
7	Youngstown-Warren-Boardman, OH-PA	0.59	101	Fayetteville, NC	0.07			
8	Cincinnati, OH-KY-IN	0.58	100	Fresno, CA	0.08			
9	Dayton-Kettering, OH	0.58	99	Riverside-San Bernardino-Ontario, CA	0.10			
10	Albany-Schenectady-Troy, NY	0.57	98	Bakersfield, CA	0.10			
11	Boston-Cambridge-Newton, MA-NH	0.55	97	Miami-Fort Lauderdale-Pompano Beach, FL	0.12			
12	Lancaster, PA	0.54	96	Las Vegas-Henderson-Paradise, NV	0.12			
13	Detroit-Warren-Dearborn, MI	0.54	95	Houston-The Woodlands-Sugar Land, TX	0.13			
14	Akron, OH	0.53	94	Orlando-Kissimmee-Sanford, FL	0.14			
15	Portland-South Portland, ME	0.53	93	Austin-Round Rock-Georgetown, TX	0.15			



CONNECTIVITY

LARGE, EXPENSIVE MARKETS MEAN WORKERS ARE PUSHED FURTHER FROM **THEIR JOBS**

Commuting and accessibility are also related to housing attainability. The markets with the highest share of commuters by car tend to be smaller markets and are generally the least cost-burdened households considering housing alone. Large markets have more diversity in terms of commute mode but have disproportionately larger shares of households that commute over an hour to work, along with a higher overall housing cost burden. Given the high cost of housing in these markets, many workers are forced to live further from work, which in turn makes it harder to stay employed, results in high commute costs, and is a threat to quality of life. For policy makers, the spatial distribution of employment cores in relation to planning for housing is an important consideration.



Cost Burdens vs. Long Commutes

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30%

35%

25%

CONNECTIVITY

COMMUTING, JOB SATISFACTION, AND AFFORDABILITY ARE A VICIOUS CYCLE

- A desirable jobs-housing balance, expressed by short commute times, is one of the most important quality-of-life factors and is strongly related to attainable housing.
- As a recent paper from the National Institutes of Health (NIH) articulates, secondary-sector workers (e.g., manufacturing, construction, assembly) tend to reside near their workplaces because of relatively balanced jobs and housing, whereas tertiary-sector workers (e.g., nurses, educators, hair stylists) tend to reside further away from their workplaces to save housing costs. The data further suggests that a 1 percent reduction in commute times has a meaningful impact on fewer sick and absent days taken by workers, which in turn increases economic opportunities for workers to find better housing.
- These types of trends can be clearly seen in the data. There are strong correlations between commute times and types of commutes with attainable housing challenges.

Driving and Long Commutes: Key Correlations

Correlation	Percentage Who Drive to Work	Percentage with Over- Hour Commute
Percentage of Cost-Burdened Households with Income \$35K-\$50K	-0.58	0.58
Percentage of Cost-Burdened Households with Income \$50K-\$75K	-0.52	0.45
Tenure Cost Proportionality	-0.39	0.17
Owner-Occupied Percent	0.39	-0.31
Percentage of Homes Affordable to Buy (80% AMI)	0.28	-0.52
Percentage of Homes Affordable to Buy (120% AMI)	0.40	-0.56
Gap in Ownership (White and Black)	0.02	-0.41
Percentage of Affordable Rentals (50% AMI)	0.40	-0.63
Percentage of Affordable Rentals (80% AMI)	0.60	-0.67
Percentage Who Drive to Work	1.00	-0.57
Percentage with Over-Hour Commute	-0.57	1.00

Note: Green = Positive Correlation; Red = Negative Correlation Source: RCLCO; NIH; Monte et al. 2018

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MARKET-SPECIFIC TRENDS (AUSTIN)

AUSTIN OVERVIEW

AUSTIN BOASTS STRONG INTEGRATION, BUT IS NOT PRODUCING ENOUGH HOUSING UNIT TO KEEP UP WITH DEMAND

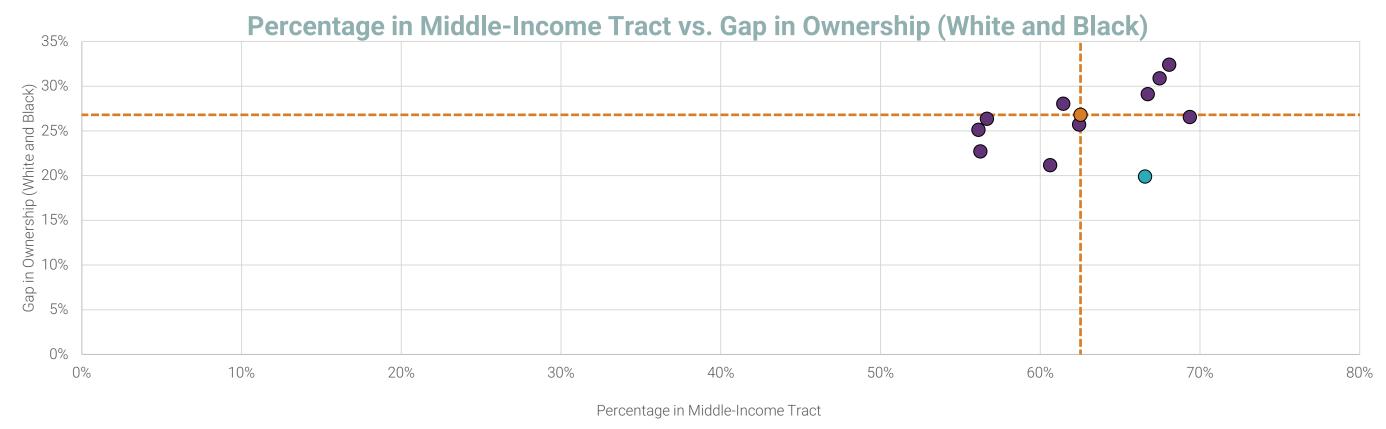
Compared to its cohort of similar markets, Austin is well integrated economically and racially. However, its unprecedented level of building activity is still not offsetting affordability challenges compared to its peers.

Variable Name	Austin-Round Rock- Georgetown, TX Metro Area	Other Comparable Metro Areas	Over 1M	Magnets	Sunbelt	Average - All MSAs				
Overall Affordability										
Tenure Cost Proportionality	1.18	1.02	1.12	1.05	0.99	1.09				
Percentage of Cost-Burdened Households with Income \$35K-\$50K	12.6%	7.2%	7.0%	10.5%	6.7%	7.8%				
Percentage of Cost-Burdened Households with Income \$50K-\$75K	1.9%	1.1%	2.0%	2.2%	1.2%	2.0%				
	Midd	le Income								
Percentage in Middle-Income Tract	67%	62%	63%	66%	63%	63%				
Percentage of Affordable Rentals (80% AMI)	50%	73%	77%	63%	72%	75%				
Percentage of Homes Affordable to Buy (80% AMI)	41%	43%	47%	37%	45%	45%				
	Racial	Highlights								
Theil Index	0.15	0.17	0.36	0.24	0.28	0.33				
Gap in Ownership (White and Black)	20%	27%	32%	29%	27%	31%				
Percentage in Middle-Income Tract	67%	62%	63%	66%	63%	63%				
	Con	nectivity								
Percentage Who Drive to Work	93.8%	94.5%	94.1%	93.8%	95.2%	93.2%				
Percentage with Over-Hour Commute	7.9%	7.4%	5.6%	7.4%	7.2%	7.2%				
Percentage of Cost-Burdened Households with Income \$35K-\$50K	12.6%	7.2%	7.0%	10.5%	6.7%	7.8%				
	Housi	ng Growth								
Housing Permits Issued Annually (2013 - 2022)	31,230	24,447	7,290	22,363	16,653	8,976				
Percentage of Growth Households	3.4%	1.6%	1.1%	1.9%	1.8%	1.2%				
Percentage of Growth Housing Units	5.9%	2.4%	1.5%	2.6%	2.2%	1.4%				



ECONOMIC AND RACIAL INTEGRATION

AUSTIN HAS A NOTABLY HIGHER PERCENTAGE OF PEOPLE IN MIDDLE-INCOME TRACTS, AND THE GAP IN OWNERSHIP BETWEEN WHITE AND BLACK HOUSEHOLDS IS MEANINGFULLY LOWER



• Austin-Round Rock-Georgetown, TX Metro Area • Other Co

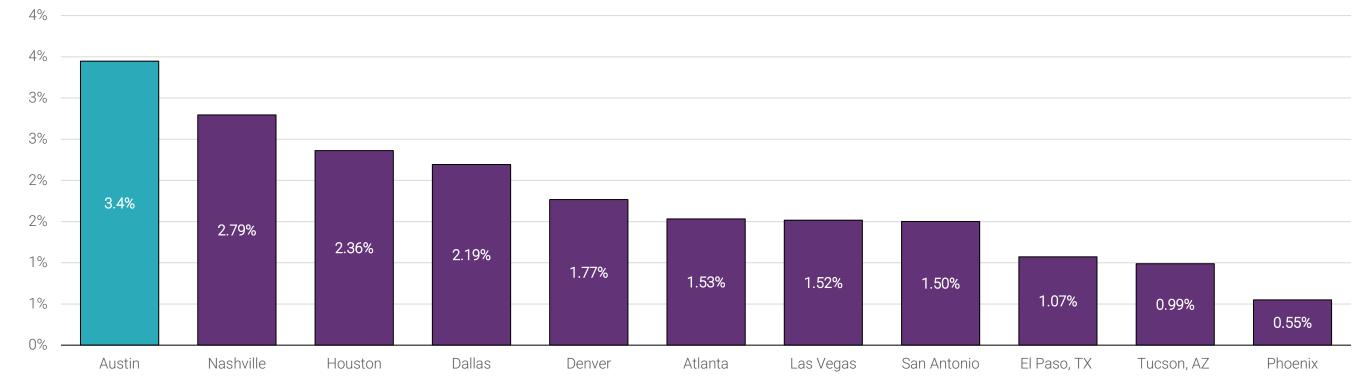
• Other Comparable Markets • Group Average



HOUSING PRODUCTION

AUSTIN IS A DEVELOPMENT HOT SPOT, EXPANDING AT A MUCH FASTER RATE THAN COMPARABLE MSAS

Despite aggressive development above its peers' levels, Austin has only been able to develop 0.52 units per new household, placing it below the average for comparable MSAs.



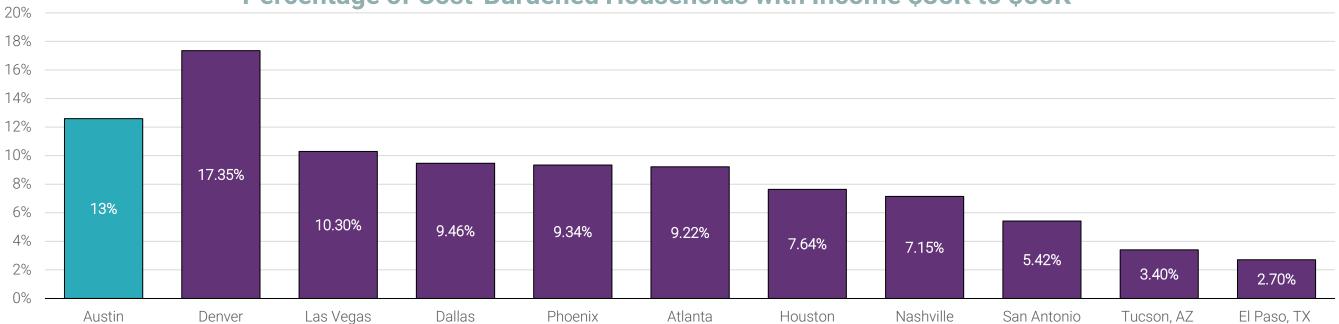
Housing Permits Issued as Percentage of Housing Stock (2013–2022)



AFFORDABILITY CHALLENGES

AUSTIN HAS A RELATIVELY HIGH PERCENTAGE OF COST-BURDENED HOUSEHOLDS

- Despite elevated development, demand has outpaced supply in Austin, creating financial difficulties for many households. This is a problem that is impacting both owners and renters, as less than 50 percent of the overall housing stock in the area is affordable for those making 80 percent AMI.
- While both renting and owning are relatively unaffordable in Austin, the cost of ownership in disproportionately expensive relative to renting, with a tenure cost proportionality of 1.18, the highest amongst the comparable MSA set.



Percentage of Cost-Burdened Households with Income \$35K to \$50K



DISCLAIMERS

CRITICAL ASSUMPTIONS

Our conclusions are based on our analysis of the information available from our own sources and from the client as of the date of this report. We assume that the information is correct, complete, and reliable.

We made certain assumptions about the future performance of the global, national, and local economy and real estate market, and on other factors similarly outside either our control or that of the client. We analyzed trends and the information available to us in drawing these conclusions. However, given the fluid and dynamic nature of the economy and real estate markets, as well as the uncertainty surrounding particularly the near-term future, it is critical to monitor the economy and markets continuously and to revisit the aforementioned conclusions periodically to ensure that they are reflective of changing market conditions.

We assume that the economy and real estate markets will continue to recover, albeit at a moderating pace over the next 12 to 24 months. However, stable and moderate growth patterns are historically not sustainable over extended periods of time, the economy is cyclical, and real estate markets are typically highly sensitive to business cycles. Further, it is very difficult to predict when an economic and real estate expansion will end. With the above in mind, we assume that the long-term average absorption rates and price changes will be as projected, realizing that most of the time performance will be either above or below said average rates.

Our analysis does not consider the potential impact of future economic shocks on the national and/or local economy, and does not consider the potential benefits from major "booms" that may occur. Similarly, the analysis does not reflect the residual impact on the real estate market and the competitive environment of such a shock or boom. Also, it is important to note that it is difficult to predict changing consumer and market psychology.

As such, we recommend the close monitoring of the economy and the marketplace, and updating this analysis as appropriate.

Further, the project and investment economics should be "stress tested" to ensure that potential fluctuations in revenue and cost assumptions resulting from alternative scenarios regarding the economy and real estate market conditions will not cause failure.

In addition, we assume that the following will occur in accordance with current expectations:

- > The COVID-19 pandemic continues to ease and does not require re-imposition of lockdown measures that could materially impact consumer confidence and the economy;
- ▶ GDP, employment, and household growth and other key demographic and economic patterns will change in accordance with current expectations;
- ▶ The cost of development and construction will change in accordance with current expectations;
- > Tax laws, monetary policy, and other major legislation (i.e., property and income tax rates, deductibility of mortgage interest, and so forth) will remain the same;
- > Availability and cost of capital and mortgage financing for real estate developers, owners, and buyers will change in accordance with current expectations;
- Competitive projects will be developed as planned (active and future) and a reasonable stream of supply offerings will satisfy real estate demand; and
- ► Major public works projects occur and are completed as planned.

Should any of the above change, this analysis should be updated, with the conclusions reviewed accordingly (and possibly revised).



GENERAL LIMITING CONDITIONS

Reasonable efforts have been made to ensure that the data contained in this study reflect accurate and timely information and are believed to be reliable. This study is based on estimates, assumptions, and other information developed by RCLCO from its independent research effort, general knowledge of the industry, and consultations with the client and its representatives. No responsibility is assumed for inaccuracies in reporting by the client, its agent, and representatives or in any other data source used in preparing or presenting this study. This report is based on information that to our knowledge was current as of the date of this report, and RCLCO has not undertaken any update of its research effort since such date.

Our report may contain prospective financial information, estimates, or opinions that represent our view of reasonable expectations at a particular time, but such information, estimates, or opinions are not offered as predictions or assurances that a particular level of income or profit will be achieved, that particular events will occur, or that a particular price will be offered or accepted. Actual results achieved during the period covered by our prospective financial analysis may vary from those described in our report, and the variations may be material. Therefore, no warranty or representation is made by RCLCO that any of the projected values or results contained in this study will be achieved.

Possession of this study does not carry with it the right of publication thereof or to use the name of "Robert Charles Lesser & Co." or "RCLCO" in any manner without first obtaining the prior written consent of RCLCO. No abstracting, excerpting, or summarization of this study may be made without first obtaining the prior written consent of RCLCO. This report is not to be used in conjunction with any public or private offering of securities or other similar purpose where it may be relied upon to any degree by any person other than the client without first obtaining the prior written consent of RCLCO. This study may not be used for any purpose other than that for which it is prepared or for which prior written consent has first been obtained from RCLCO.

