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HOMEOWNERSHIP AND DEMOGRAPHIC TRENDS WILL CONTINUE TO BOOST DEMAND FOR MULTIFAMILY HOUSING

PART 1 – HOMEOWNERSHIP

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INTRODUCTION

Homeownership and demographic trends are powerful structural forces that will create healthy U.S. multifamily housing demand over the foreseeable future. These trends shape multifamily demand more gradually than economic variability but are equally significant. Multifamily's emerging build-to-rent (BTR) sector is especially well-suited to capture a rising portion of overall demand.

Homeownership and demographic trends help explain why multifamily has been a preferred property sector for many years. They also explain why multifamily capital markets activity should bounce back quickly once interest rates have stabilized.

This paper is structured in two parts. The first examines today's challenging climate for moving into homeownership. The second, to be published next month, examines nine principal demographic trends and their impressive influence on household formation, housing choice, and multifamily demand.

MOVING INTO HOMEOWNERSHIP IS INCREASINGLY DIFFICULT

Not all renters want to buy a home, but those who do face a challenging homebuying environment.

Moving into homeownership has become increasingly expensive and out of reach for a large percentage of renters. Homeownership rates — at 66.0% as of Q2 2023 (seasonally adjusted) — are up only three percentage points from the 40+ year low of 63.1% reached in 2016 and still well under the 69.4% peak reached in 2004.

Three housing trends best capture the challenging climate facing would-be homebuyers: substantial price appreciation, declining for-sale house affordability, and a continuing housing shortage. In each case, the difficulty of moving into homeownership translates into increased multifamily demand.

HOUSE PRICES HAVE APPRECIATED 7% PER YEAR SINCE THE GFC

The value of for-sale housing has appreciated greatly since the Great Financial Crisis, much higher than inflation rates or wage growth. House prices have more than doubled in the past 12 years, rising 122% from mid-2011, when prices bottomed out after the GFC, to Q1 2023 according to the Federal Housing Finance Agency's (FHFA) Home Price Index. This equates to a 7.0% annual increase.

House prices experienced double-digit increases in the 2021 and early 2022 period and then flattened out in the late 2022/early 2023 period due to mortgage rates more than doubling. However, there has been far less erosion in pricing than expected. Nationally, and in nearly half of the metros tracked, FHFA's Home Price Indices showed no downward movement in recent months, only stabilization.

Data from the National Association of Realtors (NAR) confirms this year's higher-than-expected pricing. June's median sales price for all existing homes sold was $410,200, down only 0.9% from June 2022's all-time high of $413,800. (Based on Q2 2023 single-family house sales, 58% of the 221 markets tracked experienced year-over-year price gains.) NAR further reported that despite the lower than usual volume of sales activity, the June inventory level (available homes for sale) remained very tight at only 3.1 months of supply (traditionally six months has been considered a balanced marketplace).

For-sale home prices have long been very expensive in many U.S. metros, making moves into homeownership difficult financially. But possibly more relevant for homeownership decisions and multifamily demand has been the exceptionally high levels of price appreciation in many metros over recent years. In the 2011-2023 period, seven metros experienced average annual house price increases of 10% or higher: Phoenix, Las Vegas, and five Florida metros. Eight of EMBREY's 11 target markets were among the top 16 for house price increases out of 62 major metros tracked. (**Figure 1**)

Figure 1

METROS WITH GREATEST HOUSE PRICE APPRECIATION, 2011-2023

	MAJOR METROS	HPI AVERAGE ANNUAL CHANGE (%)
	U.S.	7.0
1	**Phoenix**	11.6
2	**West Palm Beach**	11.4
3	**Las Vegas**	11.1
4	**Tampa**	11.0
5	**Miami**	10.3
6	**Orlando**	10.3
7	**Fort Lauderdale**	10.0
8	**Inland Empire**	9.7
9	**Atlanta**	9.5
10	**Nashville**	9.3
11	**Denver**	9.3
12	**Oakland**	9.2
13	**Austin**	9.2
14	**Grand Rapids**	9.2
15	**Salt Lake City**	9.1
16	**Charlotte**	8.8

SOURCE: EMBREY Partners; Rice Economics, LLC; Federal Housing Finance Agency (House Price Index, seasonally-adjusted, 100=1991). Rank among 62 MSAs or metropolitan divisions with 1+ million population. EMBREY markets noted by orange shading.

FOR-SALE HOUSING HAS BECOME INCREASINGLY UNAFFORDABLE

For many lower-income and even middle-income Americans, homeownership has been out of reach financially for decades. But housing affordability worsened greatly in recent years, especially in the post-COVID 2021-2022 period of exceptionally high price inflation and the 2022-2023 period of high mortgage rates.

Residential mortgage rates have doubled since the end of 2021. A typical 30-year fixed-rate mortgage reached a low of 2.65% at the beginning of 2021. (**Figure 2**) Through 2021, rates remained near historic lows. But as federal funds rates and Treasuries widened through 2022, so did mortgage rates. In October 2022, the average mortgage reached 7%. Through 2023, mortgage rates have fluctuated mostly in the low to high 6%s. But, as of mid-August, mortgage rates had risen to 7.1%, the highest since 2002.

Figure 2

RESIDENTIAL MORTGAGE RATES AND MONTHLY PAYMENTS, 2020-2023

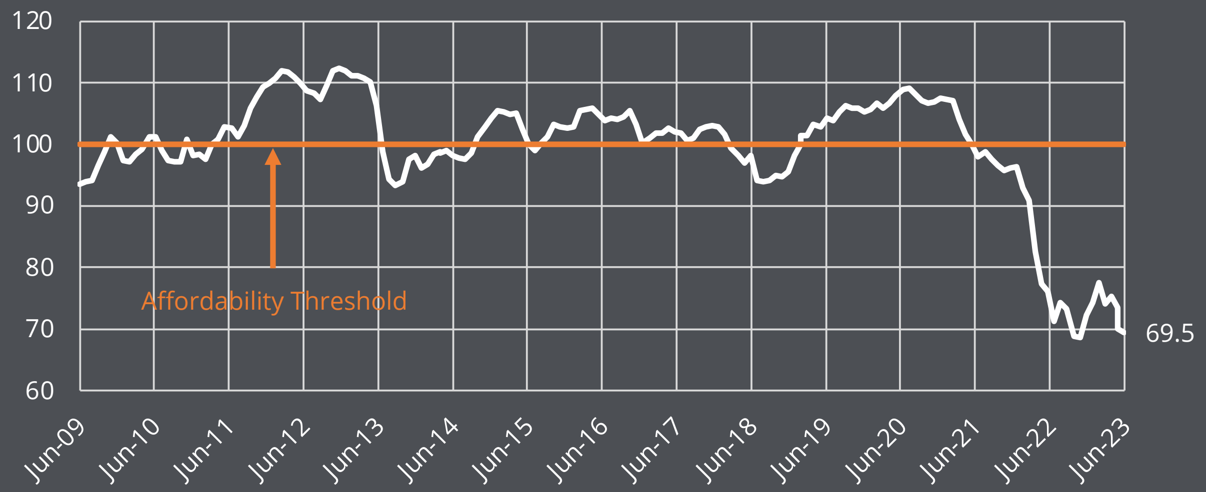
SOURCE: EMBREY; Rice Economics, LLC; Freddie Mac. Weekly data through August 17, 2023. Based on $400,000 sales price, 10% down, $360,000 loan.

Mortgage rates have significantly pushed mortgage costs up. The monthly mortgage payment on a $400,000 house bought with a 10% down payment ($360,000 loan) in early January 2021 would have been $1,451. For that same house financed in mid-August 2023, the monthly mortgage payment would have been $2,417 or 67% higher than January 2021. Potential homebuyers have lost considerable purchasing power over the past two years.

The Federal Reserve Bank of Atlanta's "Home Ownership Affordability Index" shows a very sharp decline in affordability from 2021 through the present. An index of 100 means that the median household income is sufficient to cover mortgage costs of a median-priced house. A value lower than 100 means that income is insufficient — the lower the index value, the wider the gap between median household income and the income needed to buy a median-priced house. (**Figure 3)**

Figure 3

HOMEOWNERSHIP AFFORDABILITY INDEX



SOURCE: EMBREY; Rice Economics, LLC; Federal Reserve Bank of Atlanta. An HOAM index value lower than 100 means that median household income is insufficient to cover the mortgage for a median-priced home based on 10% downpayment and 30% mortgage-to-income ratio.

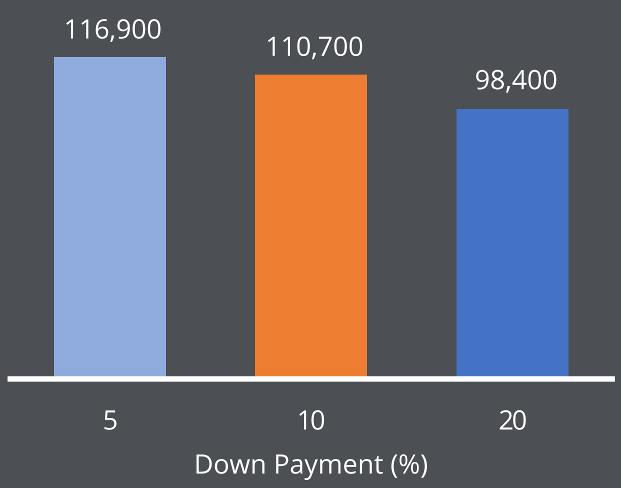
The National Association of Realtors calculated that the qualifying household income needed for a mortgage on a median-priced single-family home with 10% down payment was $111,000 in 2Q 2023. (**Figure 4**) We estimate that U.S. median household income today is around $77,000 (based on the latest official Census estimate of $70,784 in 2021), a figure well under that needed to buy a median-priced home.

In an analysis of April 2023 housing data, NAR found that households making $75,000 could afford only 23.0% of the available for-sale houses. Five years prior, the percentage was 49.9%.

Potential first-time homebuyers typically have lower incomes and savings, making their move into homebuying even more challenging financially

Figure 4

QUALIFYING INCOME TO PURCHASE MEDIAN-PRICED SINGLE-FAMILY HOME, 2Q 2023



SOURCE: EMBREY; Rice Economics, LLC; National Association of Realtors. Based on Q2 2023 median sale price of $402,600, 30-year fixed-rate mortage at 6.57%, mortgage payment of $2,051/month, and qualifying ratio of 25% (mortgage cannot exceed 25% of income).

HOUSING SHORTAGE WILL CONTINUE TO PUT UPWARD PRESSURE ON HOUSE PRICES

Several factors lead to the conclusion that house prices have nowhere to go but up. Over the long term, for-sale house price appreciation will very likely continue to outstrip inflation.

On the demand side, there's still strong pent-up demand for for-sale housing. Potential demand growth may also come from some of the demographic trends discussed below, including milllennials aging into traditional homebuying years.

Yet, the most significant variable is inadequate supply. Through much of the last decade, new housing supply has not kept pace with overall demand, especially at price levels conducive to would-be first-time homebuyers. "Starter homes" do not exist in many parts of the country, and where they do exist, the prices are still too expensive for a good portion of renters.

Current estimates of the national housing shortage range between 2 million and 4 million homes (single-family and multifamily combined). Efforts to find and enact solutions to the housing shortage are wide and diverse. Yet, they will still fall short of solving the problem.

Single-family and multifamily development is tough today and likely to become harder in the future. Besides the current difficulty and high cost of obtaining construction financing, developers must continue to contend with more restrictive regulatory environments, greater challenges to securing suitable sites, and higher costs of materials and labor. Furthermore, the economics of developing more affordable housing will remain particularly challenging.

HOMEOWNERSHIP CHALLENGES ARE LONG TERM

Mortgage rates fluctuate. They track Treasuries and are likely to edge down in 2024. However, lower mortgage rates will also bring more buyers than sellers to the marketplace, increasing competition and likely bringing back upward pressure on home prices.

The challenges to entering homeownership are not expected to change any time soon and will continue to translate into individuals and families staying in rental housing longer. In turn, this environment will generate increased multifamily demand, both in conventional and BTR communities.

BTR homes are designed to provide renters with many of the attributes of an owned single-family house. BTR homes typically offer more indoor square footage than conventional multifamily units — often a high priority for remote workers and families with children — and more private outdoor space including a front yard, patio, and/or back yard. The single-family feel is further created through the street-side front doors and limited or no adjoining homes. Additionally, BTR communities offer amenities and management services typical in conventional multifamily housing.

BTR homes are especially appealing to people who are shut out of homeownership due to the housing trends discussed above. Consequently, the popularity of BTR homes is expected to grow substantially in the future — alongside steady growth in conventional multifamily demand.

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Ms. Rice is one of the country's leading multifamily economists. She is the founder of Rice Economics, LLC, a consulting firm providing real estate economics and business consulting for commercial real estate firms.

Before Rice Economics, LLC, Ms. Rice was Americas Head of Multifamily Research for CBRE, the largest multifamily debt and equity intermediary in the U.S. At CBRE, Ms. Rice covered nearly all aspects of the U.S. multifamily property and capital markets. She was a frequent speaker at industry events and wrote hundreds of white papers and research briefs on the sector. Her more notable white papers included: The Case for Workforce Housing; The Single-Family Built-to-Rent Housing Sector; The Way Forward – Path to Urban Multifamily Recovery; Global Outlook 2030 – Multifamily; and U.S. Multifamily Primer for Offshore Investors.

Ms. Rice began her career in the multifamily sector. One of her first positions was with EMBREY Investments where she conducted feasibility analysis for prospective developments and provided investment strategies for EMBREY's geographic expansion in the 1980s. Following EMBREY, Ms. Rice held research leadership positions with HFF (now part of JLL), Lend Lease Real Estate Investments, Crescent Real Estate Equities, and Verde Realty.

Ms. Rice has been involved with many professional organizations through her 40-year career. In particular, she has been active with the National Multifamily Housing Council for many years. She is a Counselor of Real Estate and has held numerous leadership positions with the Counselors of Real Estate organization. Ms. Rice currently serves as an advisor to the TCU Center for Real Estate.

Ms. Rice earned a B.A. in history from the University of Washington and M.A. in urban geography from Queen's University in Canada. She also completed two years of graduate coursework in urban geography at The University of Chicago. Ms. Rice is a 40-year Texas resident, currently based in Fort Worth.

ABOUT EMBREY

EMBREY is a diversified real estate investment company that owns, develops, builds, acquires, and manages multifamily and commercial assets. Since 1974, EMBREY has developed more than 46,000 apartments and over 6 million square feet of commercial property in Texas, Arizona, Colorado, Tennessee, North Carolina, and Florida. San Antonio-based EMBREY is a leading developer in the multifamily sector, with more than 5,000 units under construction.

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