

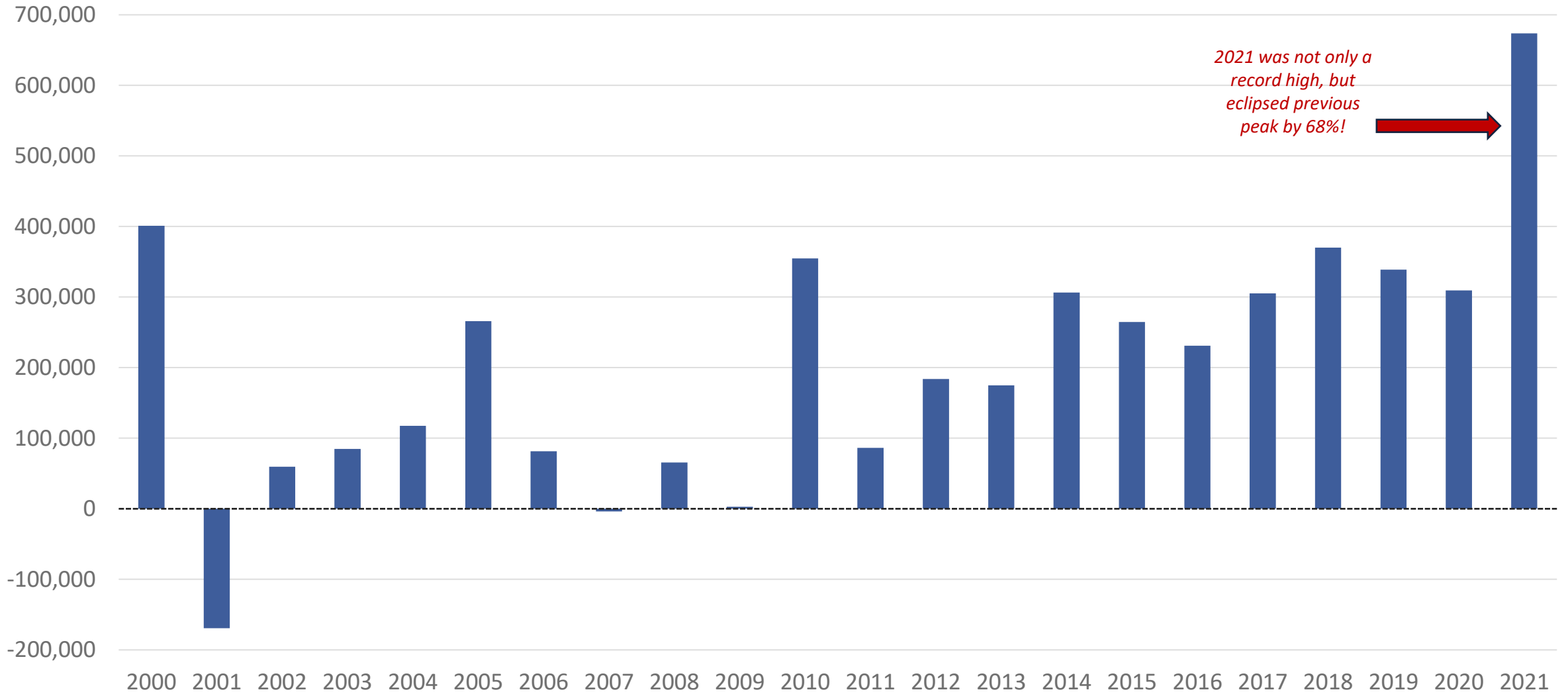
Trends in Rent Growth, Future Outlook and The Impact on Development Decision-Making

Prepared for the NCHMA Annual Meeting
September 5, 2024

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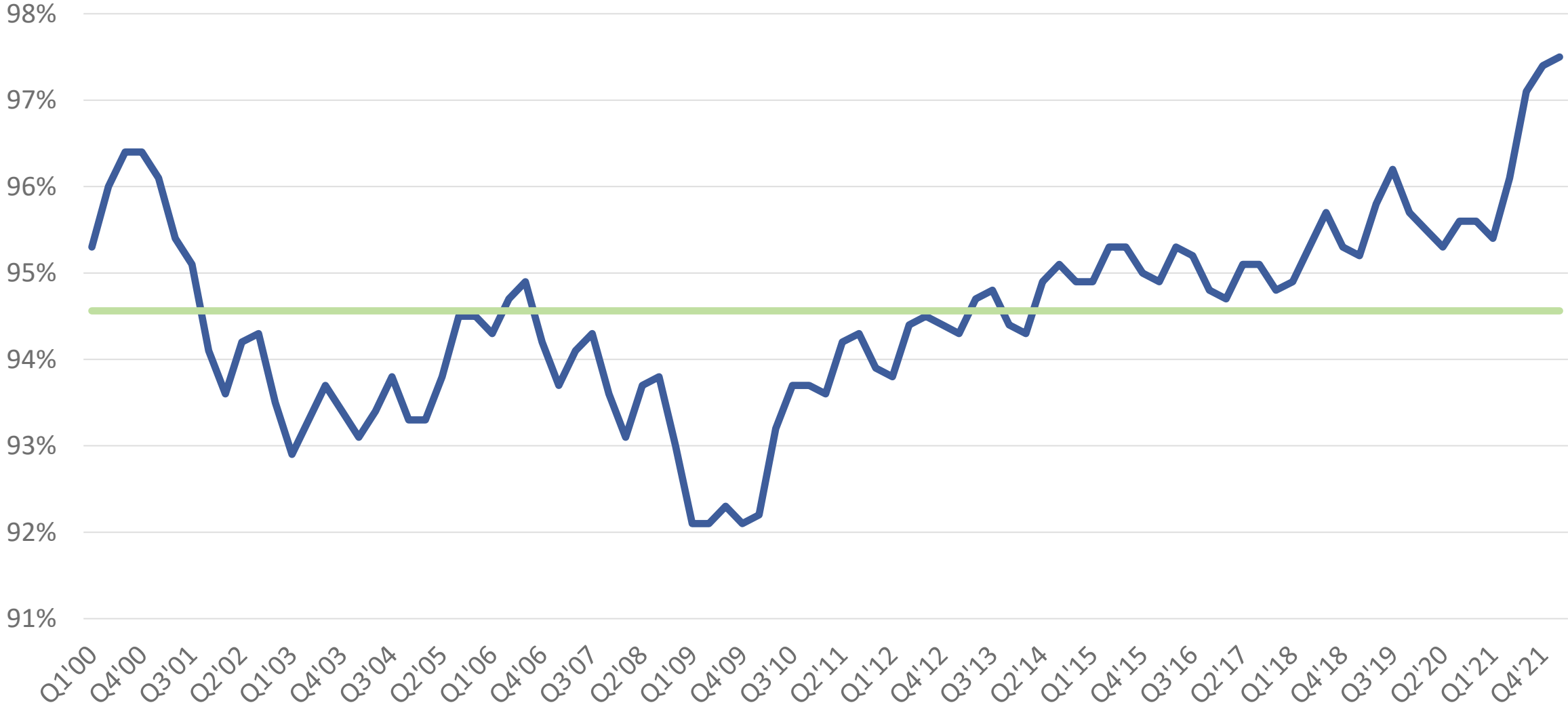
Quick Rewind: Record Demand for Apartments in COVID Era

Net Absorption (Move-ins – Move-outs) for U.S. Apartments, in Units



Because of Record Demand, Occupancy Hit Long-Term Highs

U.S. Market Rate Apartment Occupancy



Source: Madera Residential research, RealPage

Because of High Occupancy, Rent Growth Hit Long-Term Highs

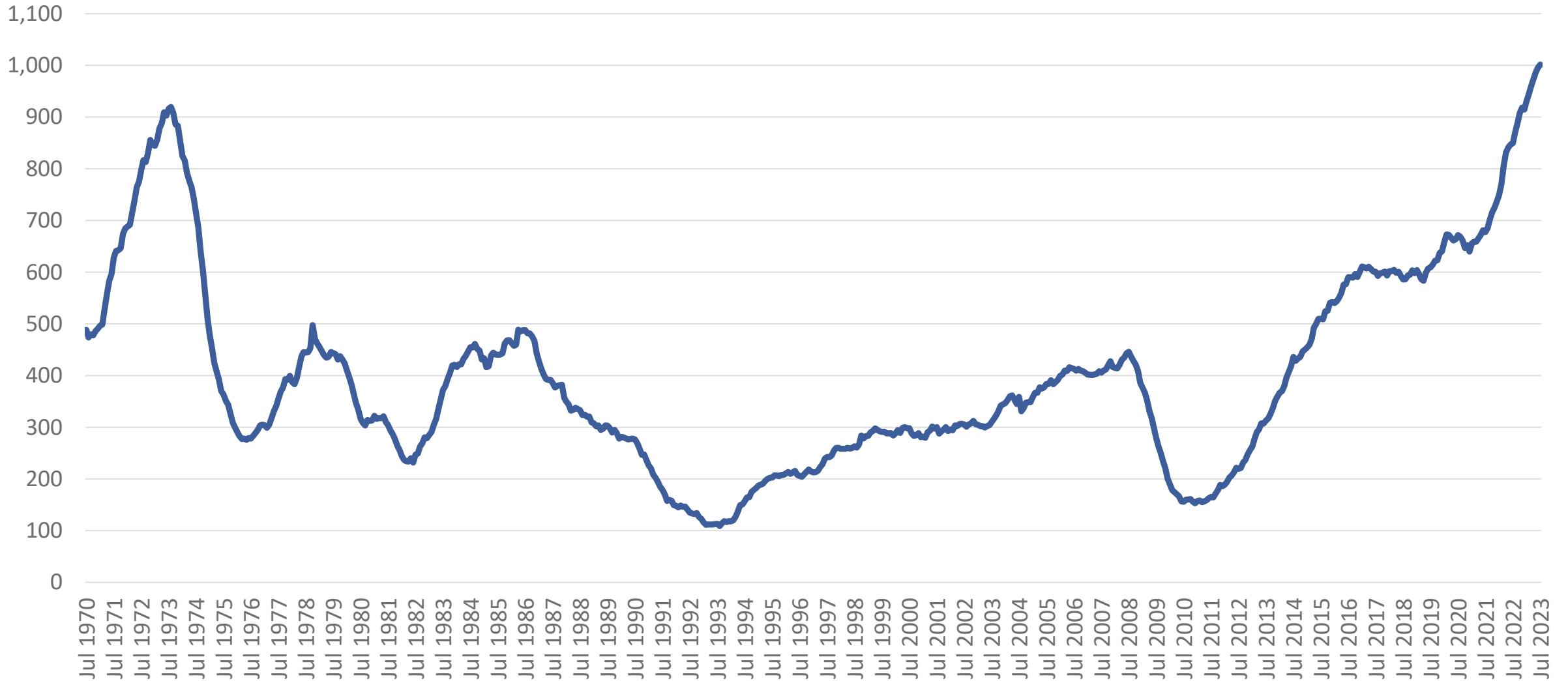
Apartment Rents (RealPage's YoY Change) vs. Wages (Atlanta Fed's 3-Mo Moving Average)



Sources: Madera Residential research. Effective asking rents from RealPage covering market-rate, professionally managed apartments. Wages from Federal Reserve Bank of Atlanta's Wage Tracker tool.

(In Part) Because of High Rent Growth, Construction Hit Record High

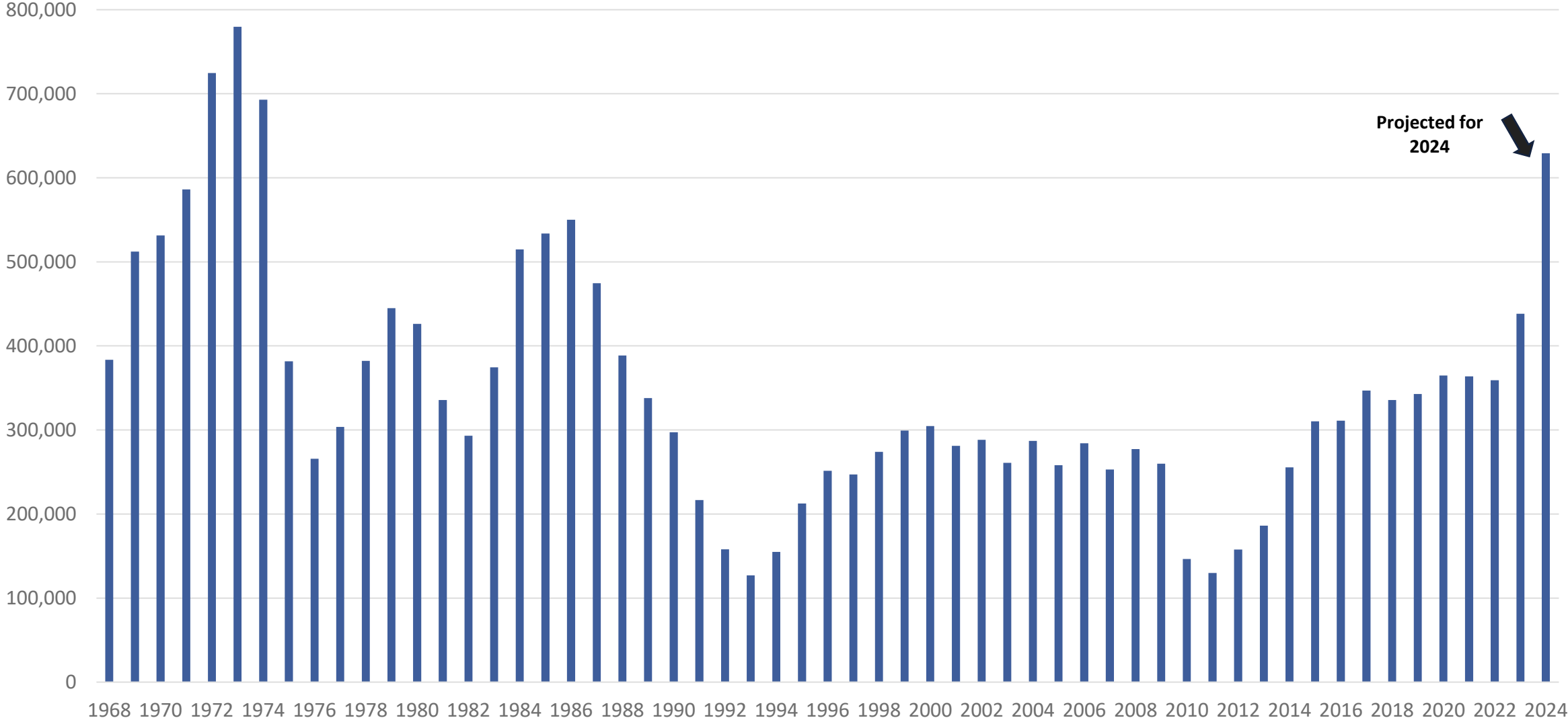
New Multifamily Units Under Construction, Not Seasonally Adjusted



Sources: Madera Residential research, U.S. Census

Because of Heavy Construction, Completions Hit 50-Year High

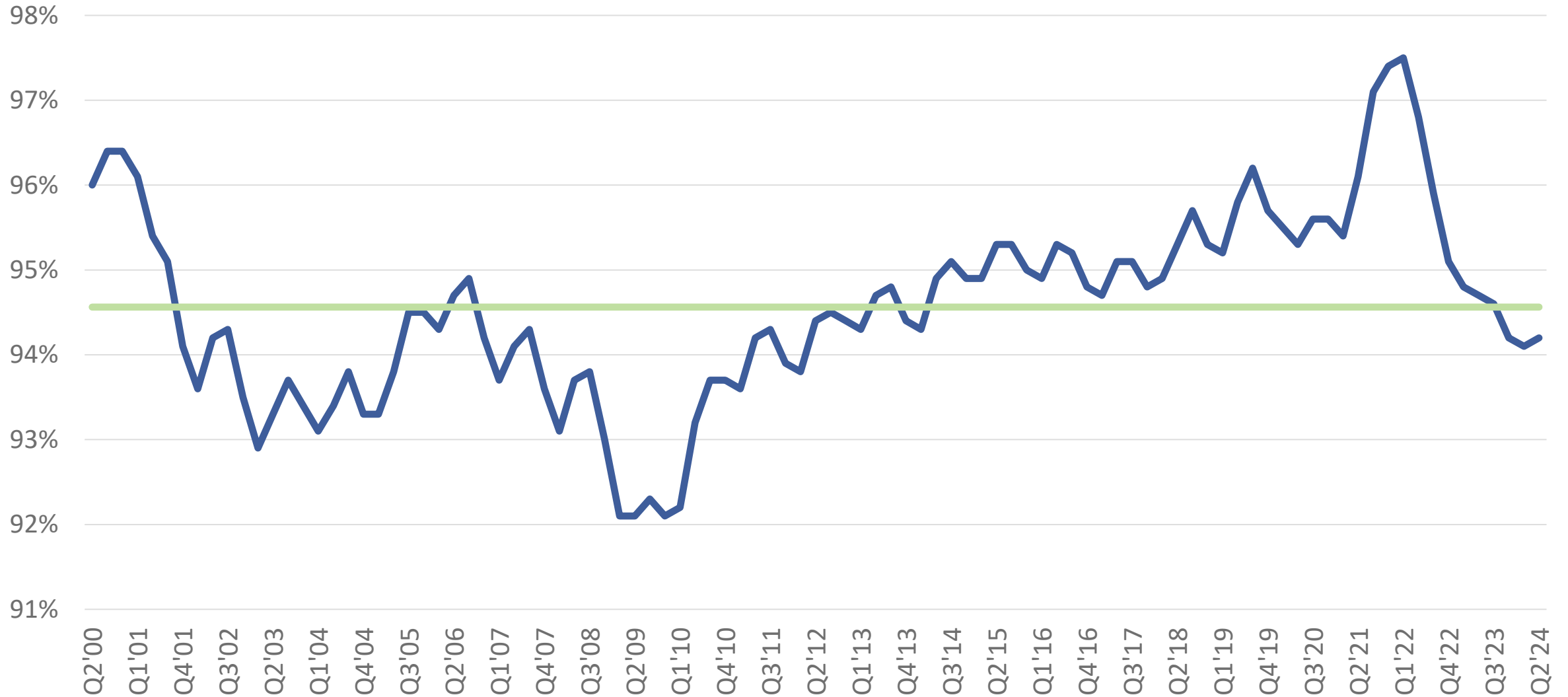
Multifamily Units Completed by Year



Sources: Madera Residential research, Census, RealPage. RealPage 2024 forecast includes only rental apartments.

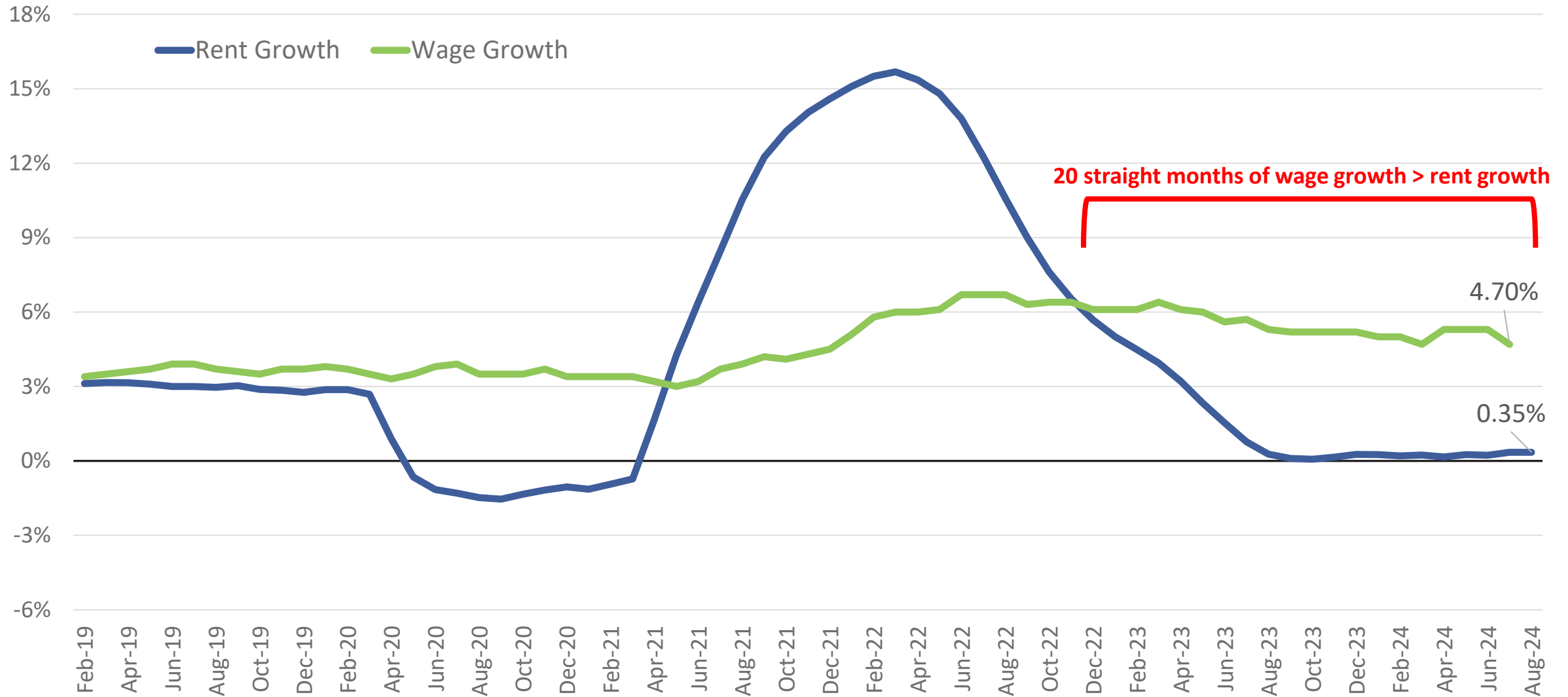
RESULT: Supply Wave Pushes Occupancy Below Long-Term Norm

U.S. Market Rate Apartment Occupancy



RESULT: Rent Growth Flattens and Trails Wage Growth

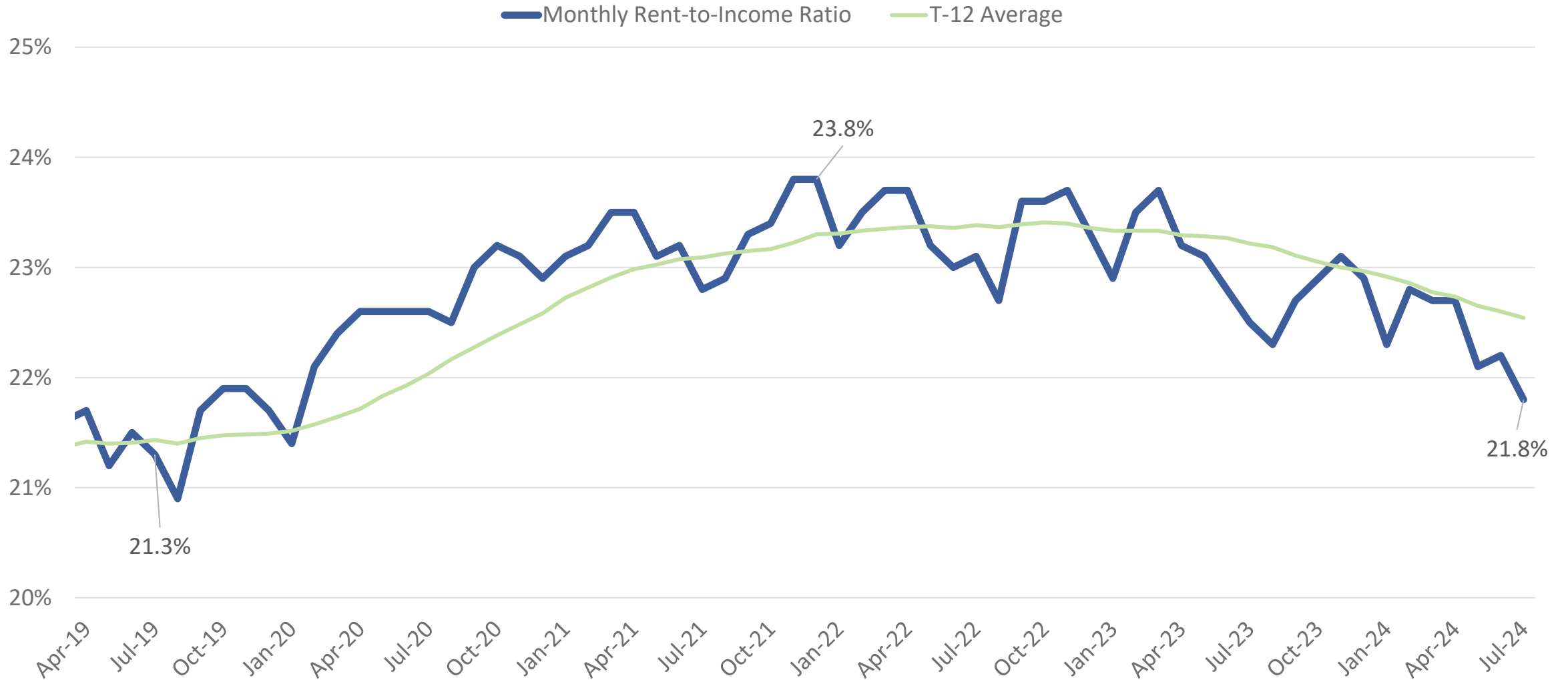
Apartment Rents (RealPage's YoY Change) vs. Wages (Atlanta Fed's 3-Mo Moving Average)



Sources: Madera Residential research. Effective asking rents from RealPage covering market-rate, professionally managed apartments. Wages from Federal Reserve Bank of Atlanta's Wage Tracker tool.

RESULT: Rent-to-Income Ratios Tick Down as Wages Outpace Rents

Median Rent-to-Income Ratio Among New Lease Signers in Market-Rate Apartments

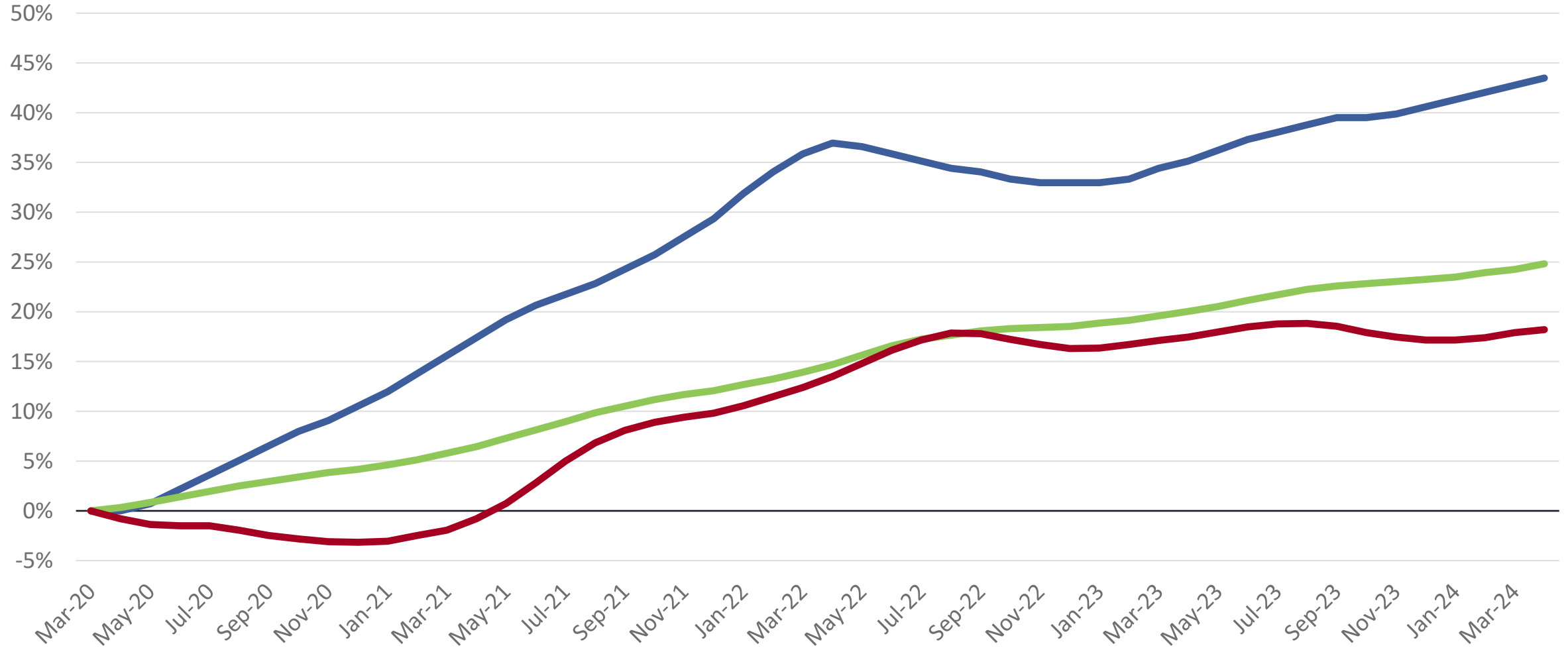


Source: Madera Residential research, RealPage Market Analytics. Note: Data reflects new lease signers in market-rate, professionally managed apartments.

High Supply Helped Keep Apartment Inflation Below Other Housing

Cumulative Change in U.S. Prices/Rents Since COVID (March 2020): For-Sale Homes, SFR, Apartments

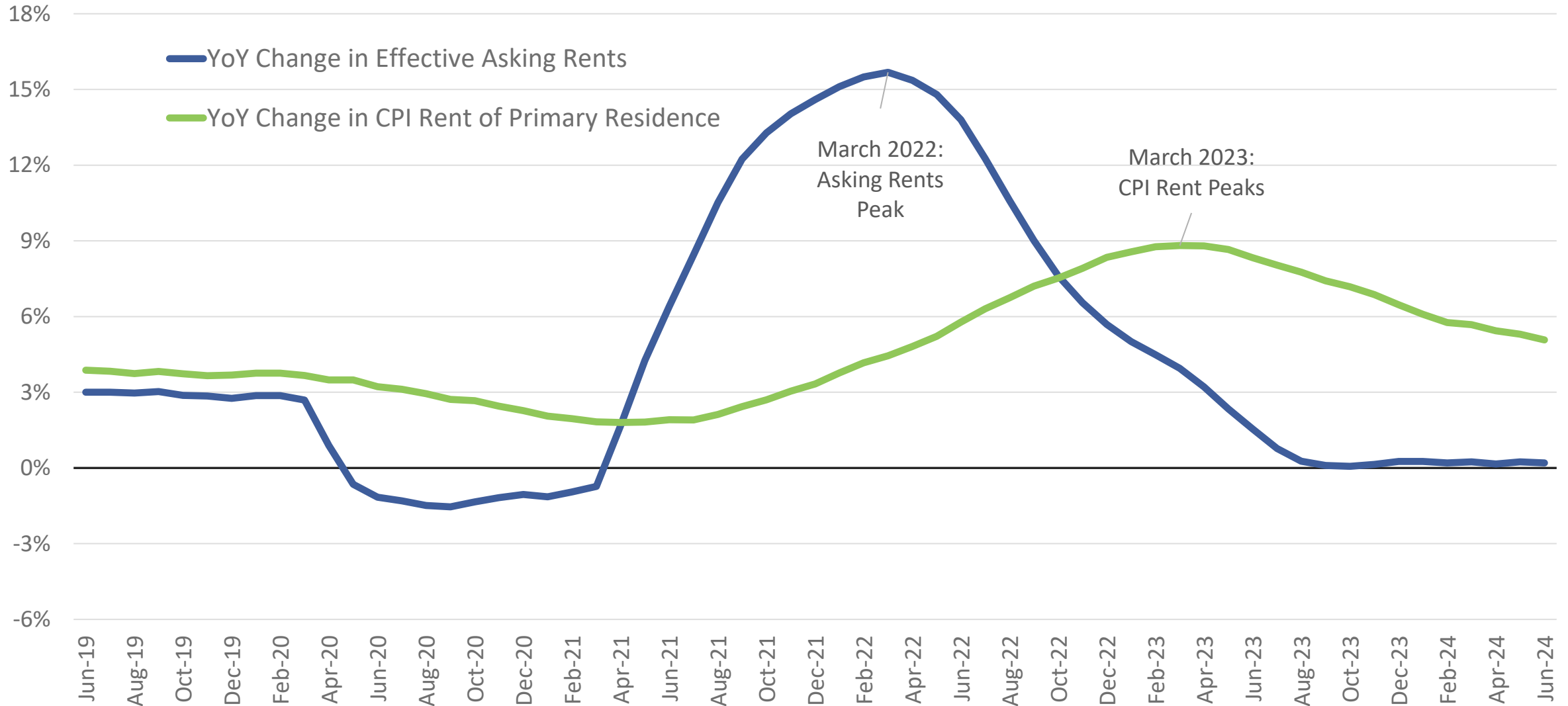
Entry-Level Median Home Prices Single-Family Rents Apartments



Sources: Data from John Burns Research & Consulting, analysis by Madera Residential. SFR = Burns Single-Family Rent Index (Mid Tier). Apartments = Burns Apartment Rent Index.

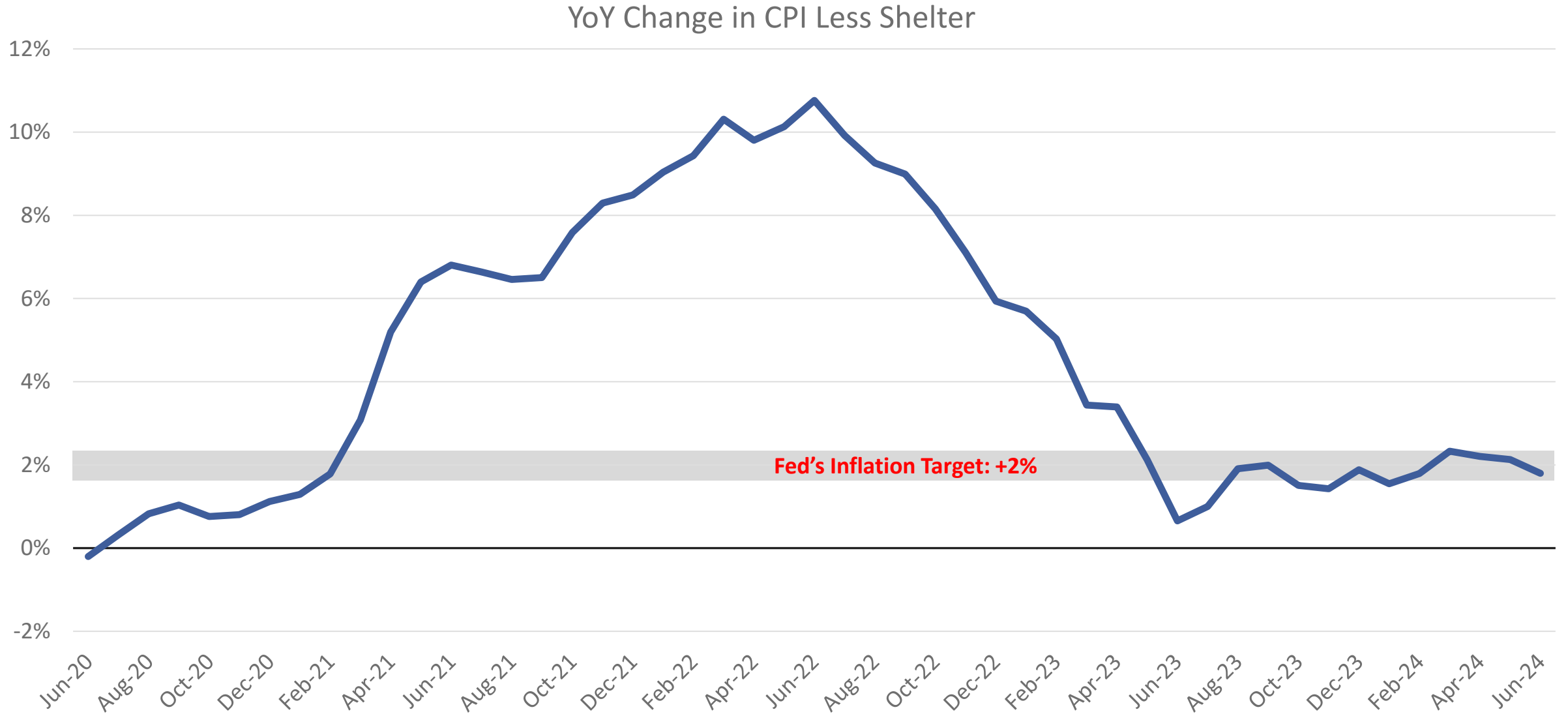
Impact: Flattening Rents Help Cool Inflation (Slowly Due to Lag)

Asking Rents vs. CPI Rent of Primary Residence



Sources: Madera Residential research, U.S. BLS (CPI Rent), RealPage Market Analytics (effective asking rents covering market-rate, professionally managed apartments.)

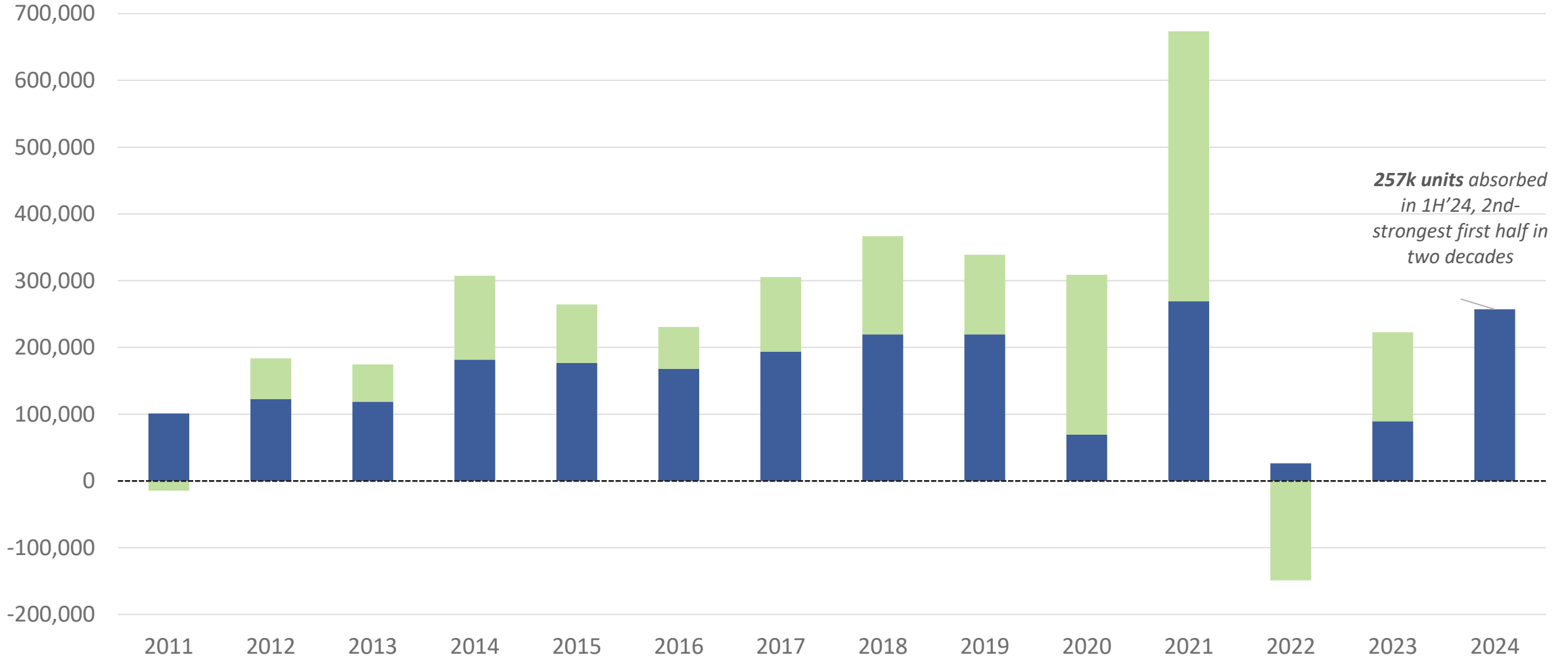
Excluding Lagged Shelter, Inflation Hovers in Fed's Target Range



Not a Demand Issue: Apartment Demand is Robust So Far in '24

Net Absorption (Move-ins – Move-outs) for U.S. Apartments, in Units

■ First Half of Year ■ Second Half of Year



Sources: Madera Residential research, RealPage Market Analytics.

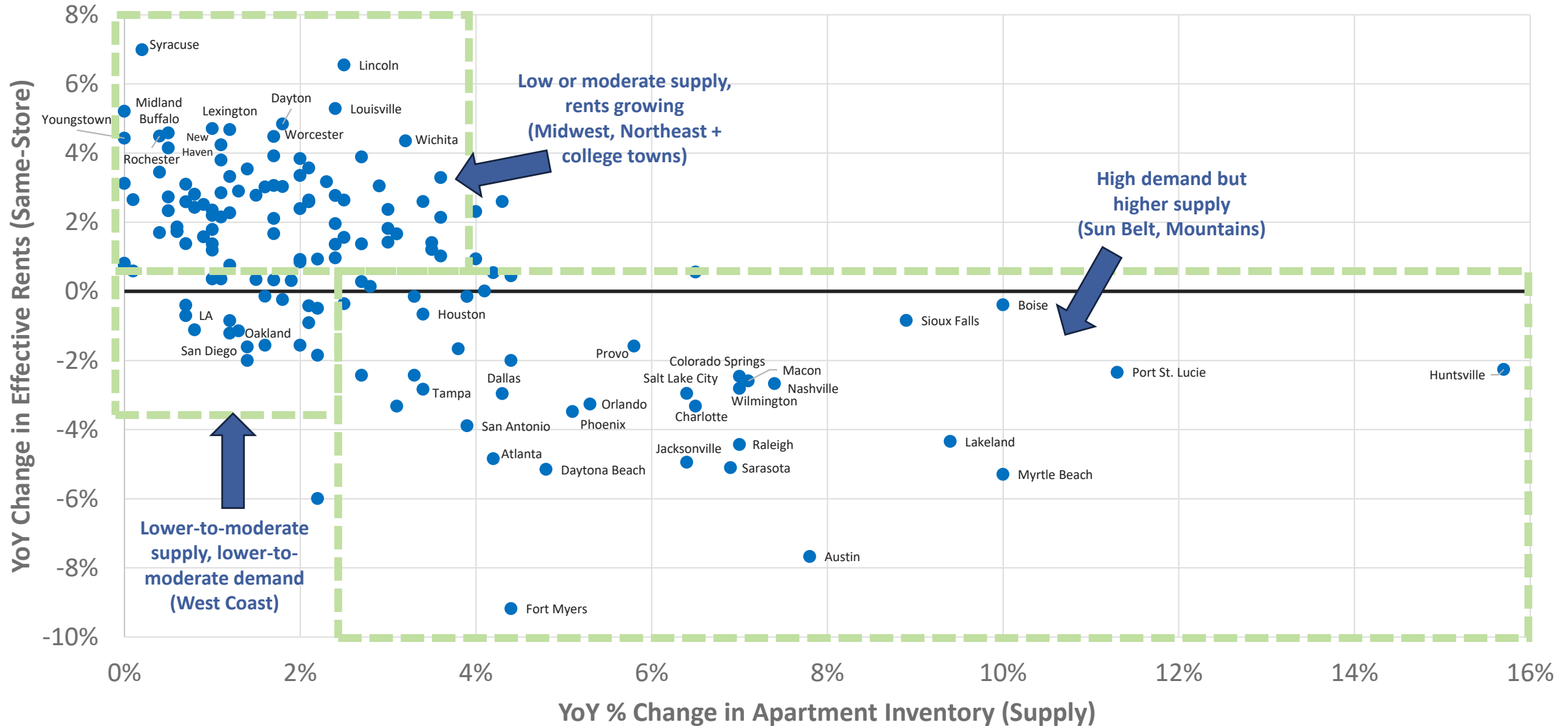
Top 15 Markets for Apartment Demand

Rank	Metro Area	T-12 Net Absorption (units)	Demand > Supply?
1	Dallas/Fort Worth, TX	21,693	No
2	Houston, TX	18,189	No
3	Austin, TX	14,753	No
4	Phoenix, AZ	13,704	No
5	Atlanta, GA	13,165	No
6	Washington, DC	11,653	No
7	Nashville, TN	11,224	No
8	Charlotte, NC	10,379	No
9	Denver, CO	10,026	No
10	Raleigh/Durham, NC	10,006	No
11	Orlando, FL	9,296	No
12	Minneapolis, MN	9,008	No
13	Seattle, WA	7,483	No
14	Philadelphia, PA	7,146	No
15	Miami, FL	6,481	No

Sources: Madera Residential research, RealPage. Data reflects net absorption for the year-ending June 2024.

Apartment Rents Slow Where Supply Goes, Grow Where It Doesn't

T-12 Supply Change vs. Rent Change, Top 150 U.S. Markets, June 2024





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How new apartments create opportunities for all

Market-rate rental construction in Minneapolis has freed up more affordable homes for households across the income spectrum

March 4, 2024

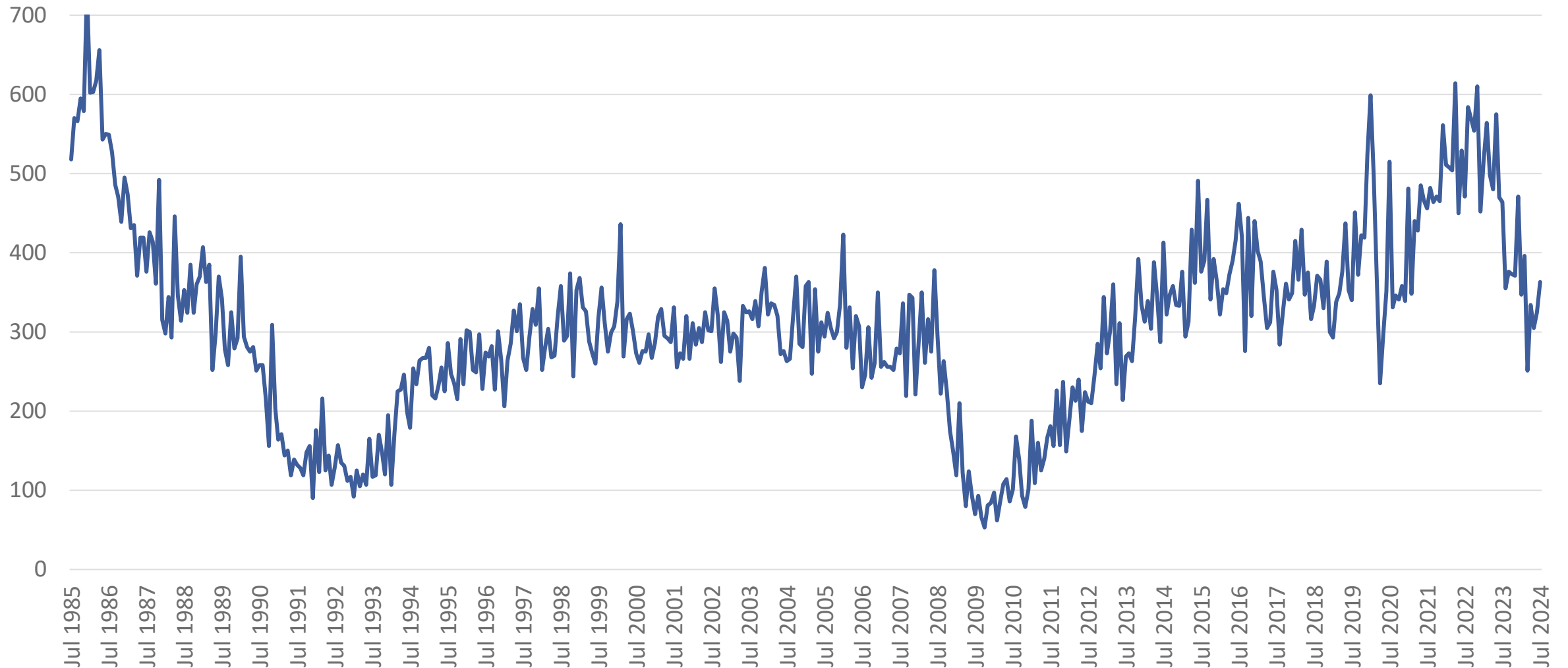
Class C Rents are Falling Hardest in High-Supplied Markets

Rank	Metro Area	Supply Rate Above U.S. Avg?	Class C YoY Rent Change
1	Fort Walton Beach, FL	Yes	-13.5%
2	Austin, TX	Yes	-10.7%
3	Fort Myers, FL	Yes	-9.0%
4	Sarasota, FL	Yes	-8.6%
5	Phoenix, AZ	Yes	-6.6%
6	Daytona Beach, FL	Yes	-6.5%
7	Provo, UT	Yes	-5.7%
8	Salt Lake City, UT	Yes	-5.7%
9	Raleigh/Durham, NC	Yes	-5.6%
10	Atlanta, GA	Yes	-5.3%
11	Naples, FL	No	-5.3%
12	Greenville, SC	Yes	-5.2%
13	Jacksonville, FL	Yes	-5.0%
14	Colorado Springs, CO	Yes	-4.9%
15	Wilmington, NC	Yes	-4.8%
16	Tampa, FL	Yes	-4.5%
17	Palm Bay, FL	Yes	-4.3%
18	Dallas, TX	Yes	-4.3%
19	Charlotte, NC	Yes	-4.2%
20	Orlando, FL	Yes	-4.1%
21	Fort Worth, TX	Yes	-4.0%

Source: Madera Residential research, RealPage Market Analytics. Supply rate = year-over-year change in apartment inventory relative to U.S. average of 2.7% as of June 2024.

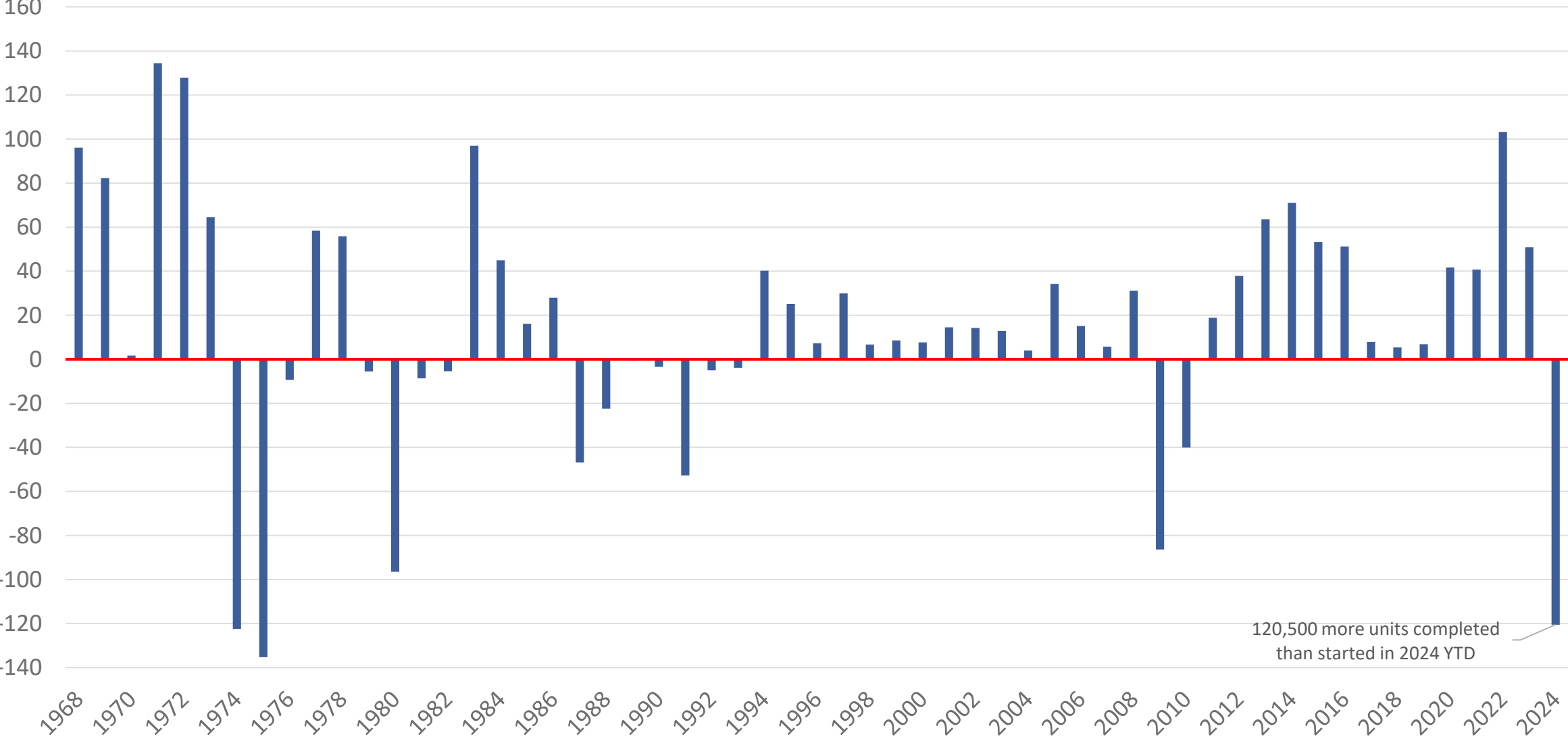
BUT ... Flat-to-Falling Rents + High Rates = Sharp Declines in Starts

Annualized Multifamily Starts, Seasonally Adjusted (in thousands)



Multifamily Completions Outpacing Starts at Historic Pace in 2024

Multifamily Units: Started minus Completed, Jan-July by Year (in thousands)

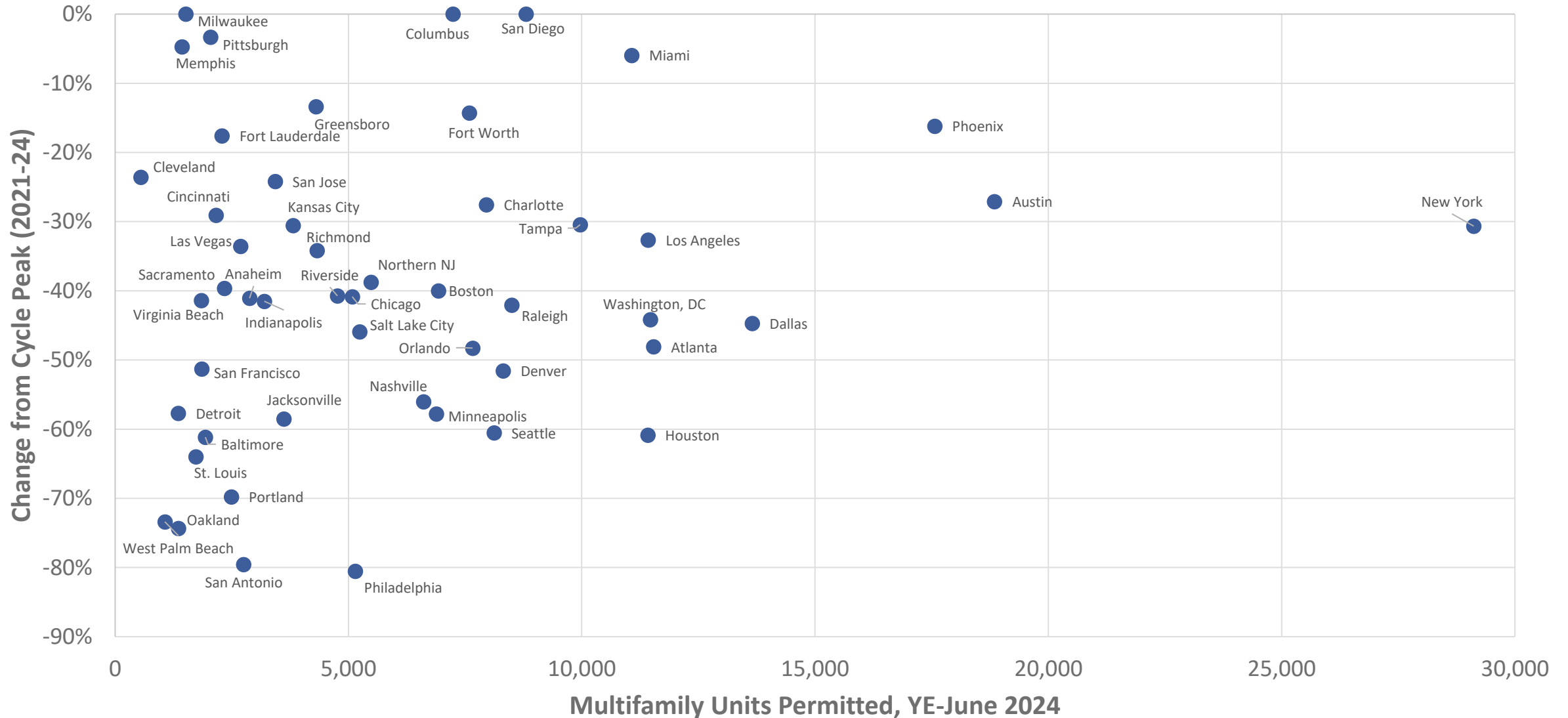


120,500 more units completed than started in 2024 YTD

Sources: Madera Residential research, U.S. Census

Multifamily Building Permits Have Plunged Nearly Everywhere

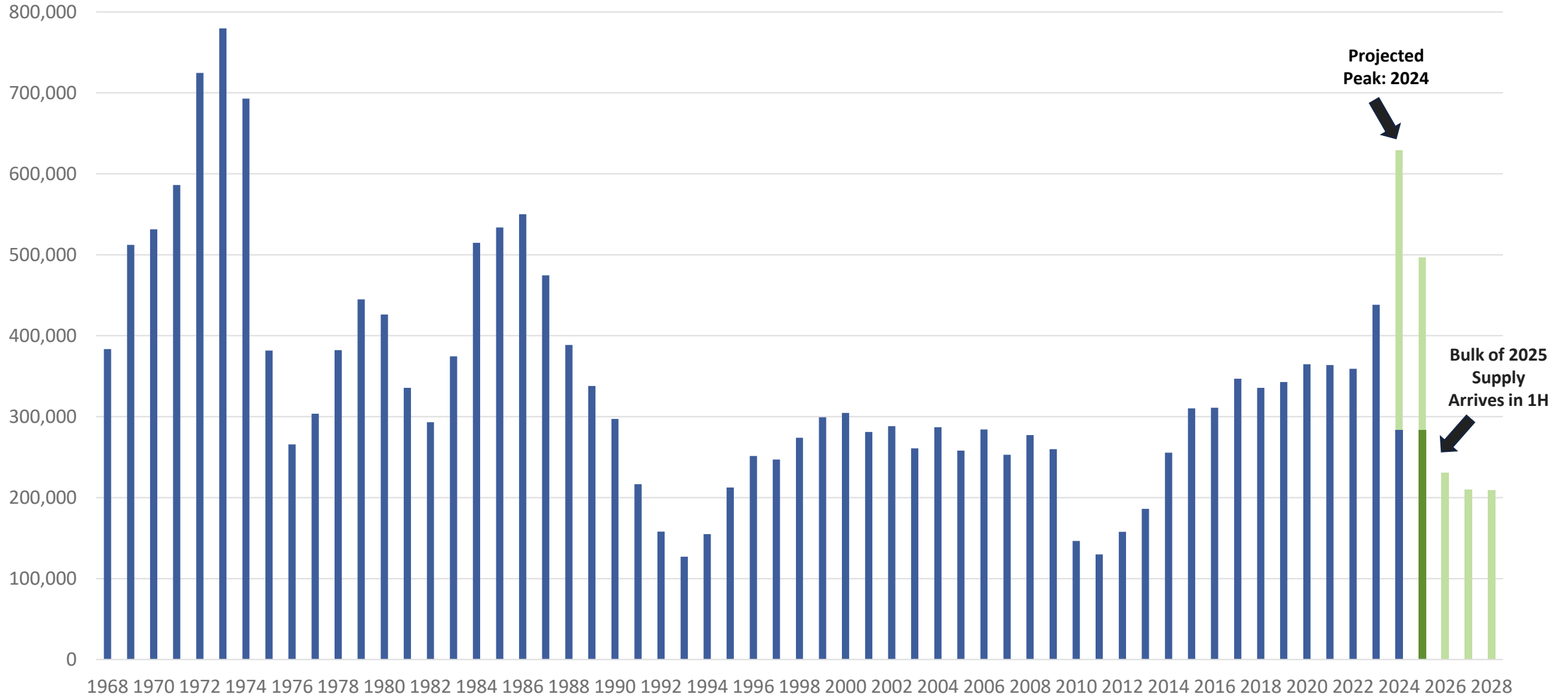
Multifamily Units Permitted: Current vs. Peak



Source: Madera Residential research, U.S. Census

Multifamily Supply Will Hit a 50-Year High in 2024, Then Drop Fast

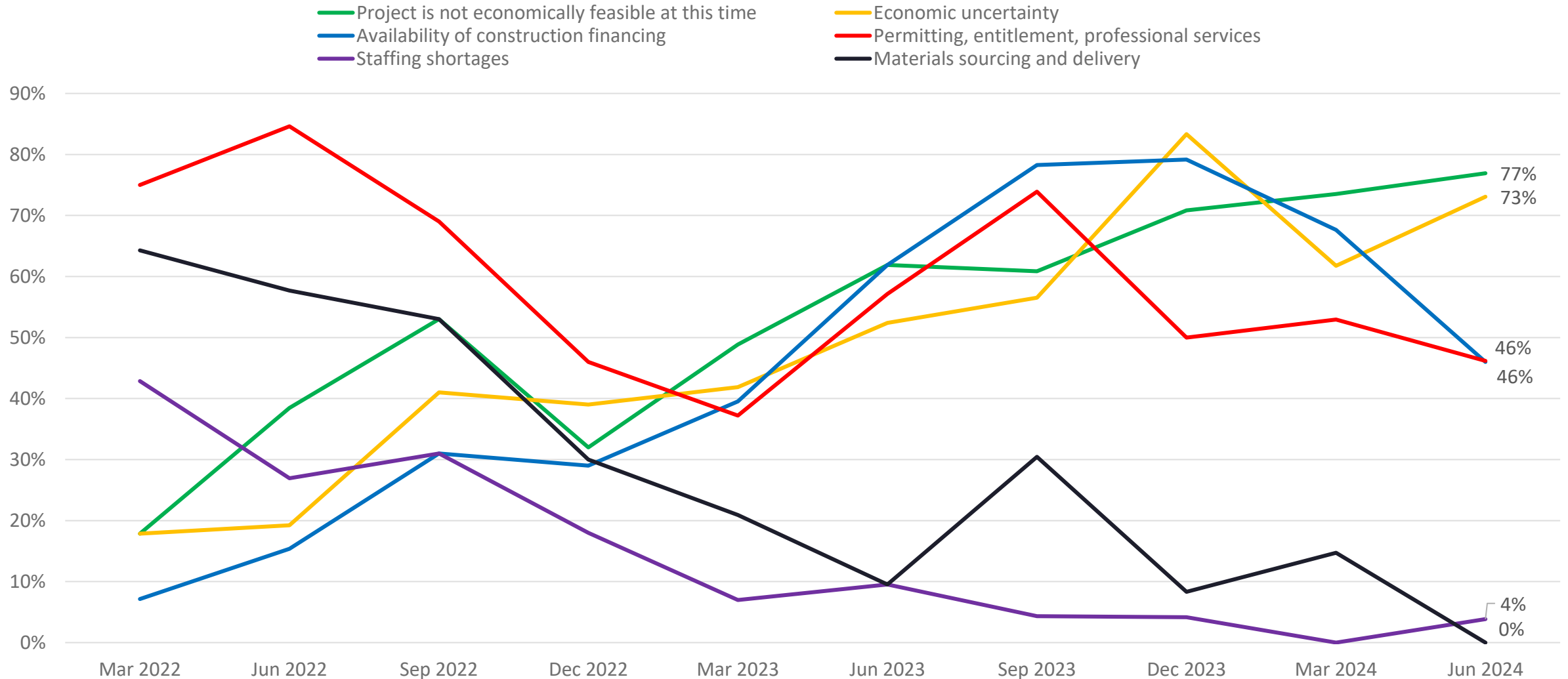
Multifamily Units Completed by Year (Census) and Forecast (RealPage)



Sources: Madera Residential research, Census, RealPage. RealPage forecast includes only rental apartments.

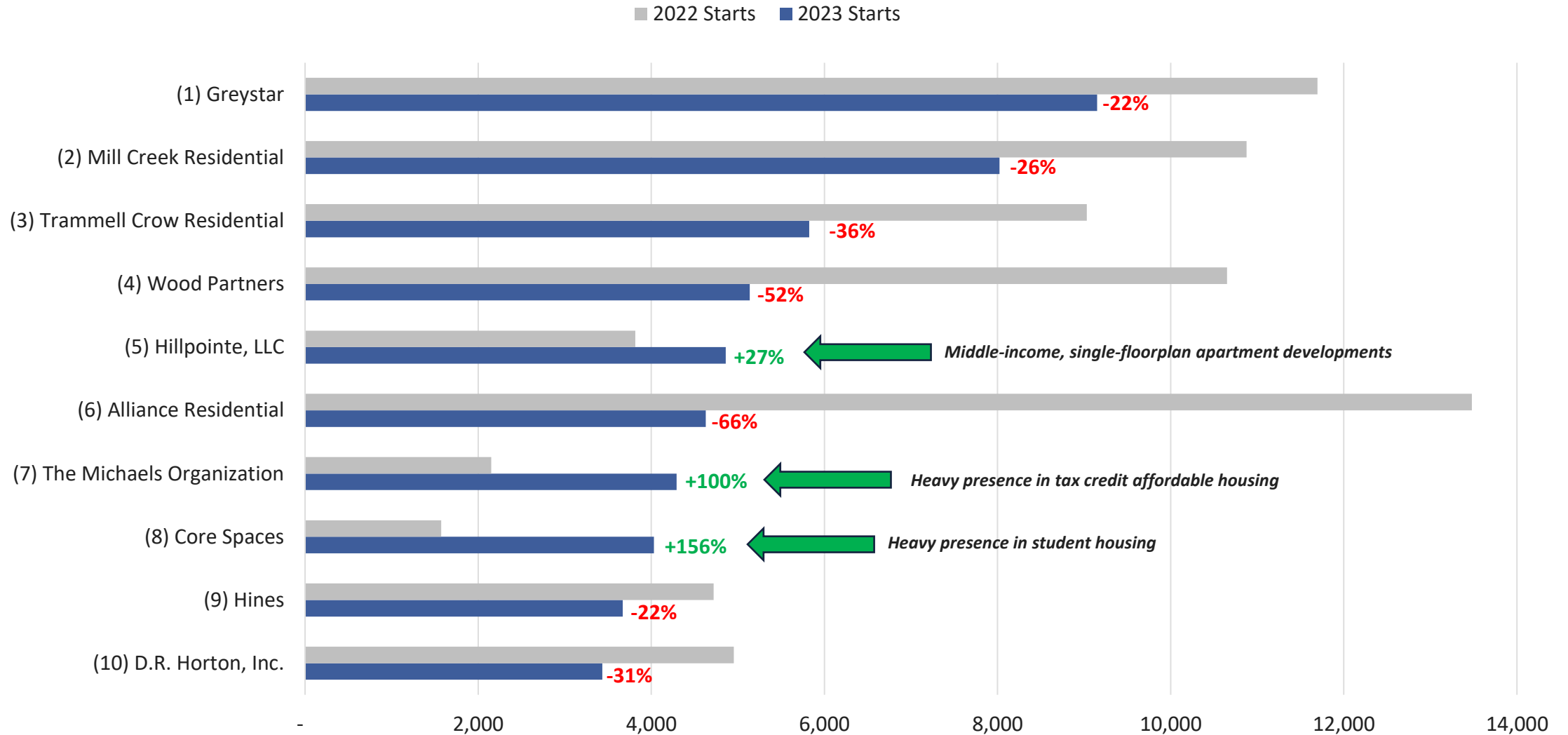
Top Reasons for Slowdown in Apartment Construction Starts

NMHC Multifamily Developer/Builder Survey: Reasons for Delayed Starts



Sources: Madera Residential research, NMHC Quarterly Survey of Apartment Construction & Development Activity. Note that survey allows respondents to provide multiple answers, so totals will not add up to 100%.

Apartment Starts in 2023 vs. 2022 Among NMHC Top 10 Developers

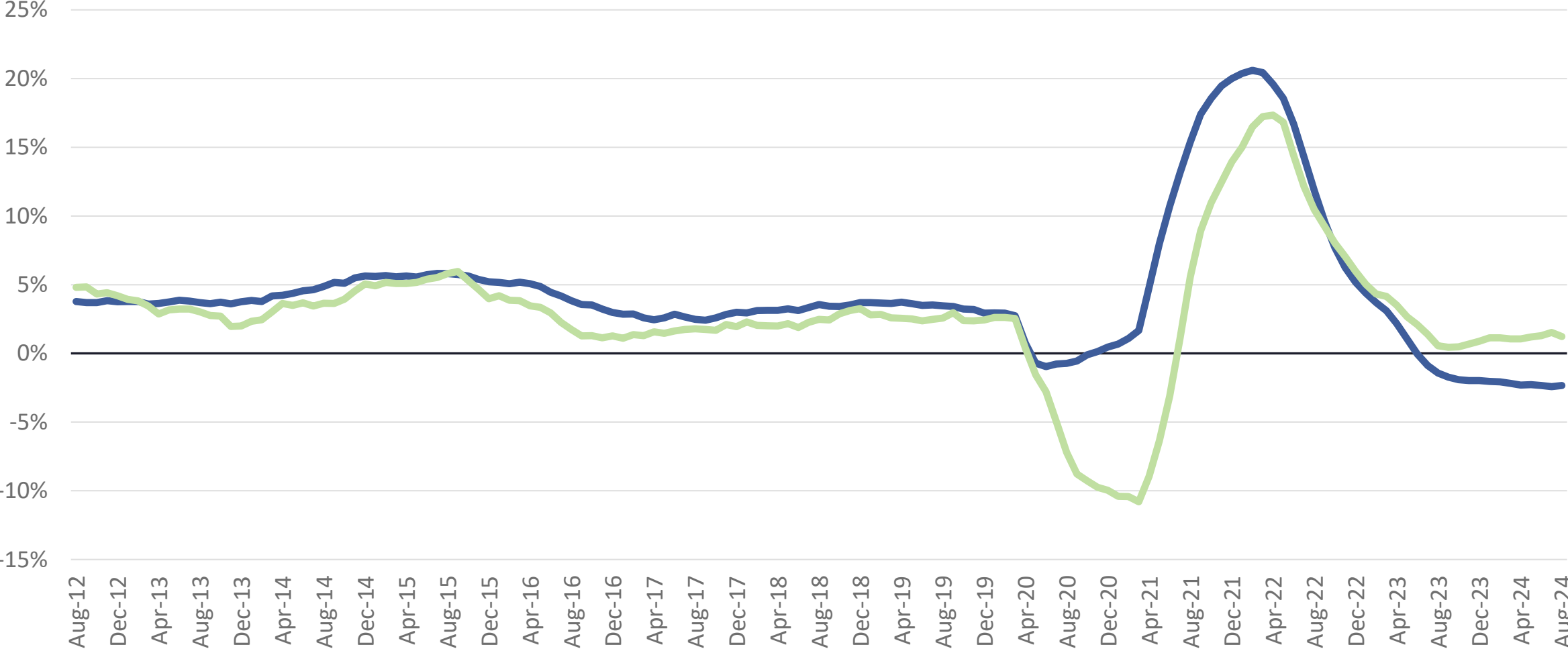


Sources: Madera Residential research, National Multifamily Housing Council (NMHC)

Prior to Historic Supply Wave, Sun Belt Routinely Beat Coasts on Rent Growth

YoY Rent Change: Sun Belt vs. Coastal Markets

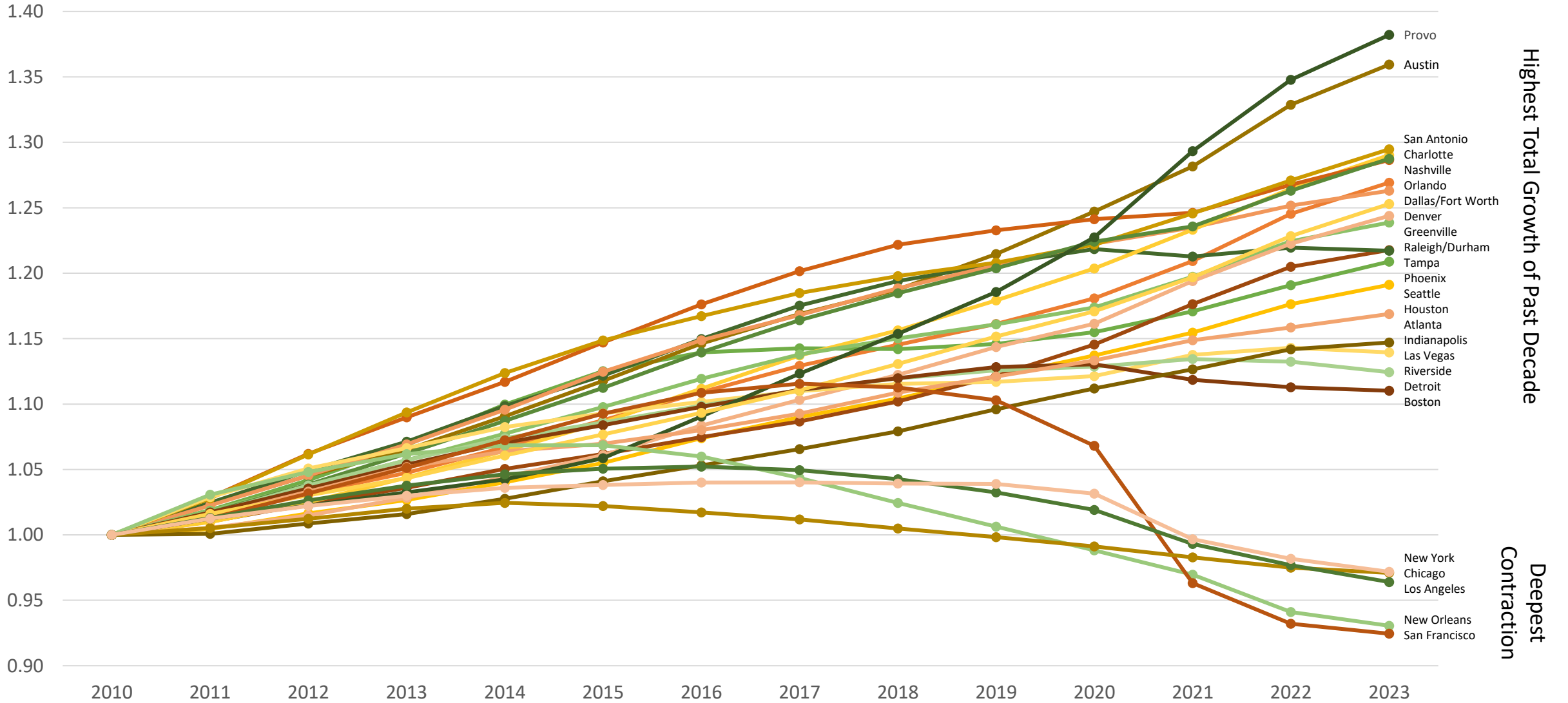
Major Sun Belt Markets Major Coastal Markets



Sources: Madera Residential research, RealPage Market Analytics

Shifts in Young Adult Population Began Long Prior to COVID

Young Adult (20-34 year-olds) Population Indexed to 2010, Select Metro Areas (CBSAs)



Sources: Madera Residential research, Oxford Economics, Census

Young Adult (20-34 y/o) Population Growth: Next 10 Years*

Rank	State	Forecasted Growth*
1	Texas	499,200
2	Florida	227,020
3	Arizona	132,910
4	Utah	101,330
5	Colorado	92,500
6	North Carolina	73,220
7	Georgia	58,610
8	Tennessee	55,680
9	Oklahoma	51,540
10	South Carolina	44,940

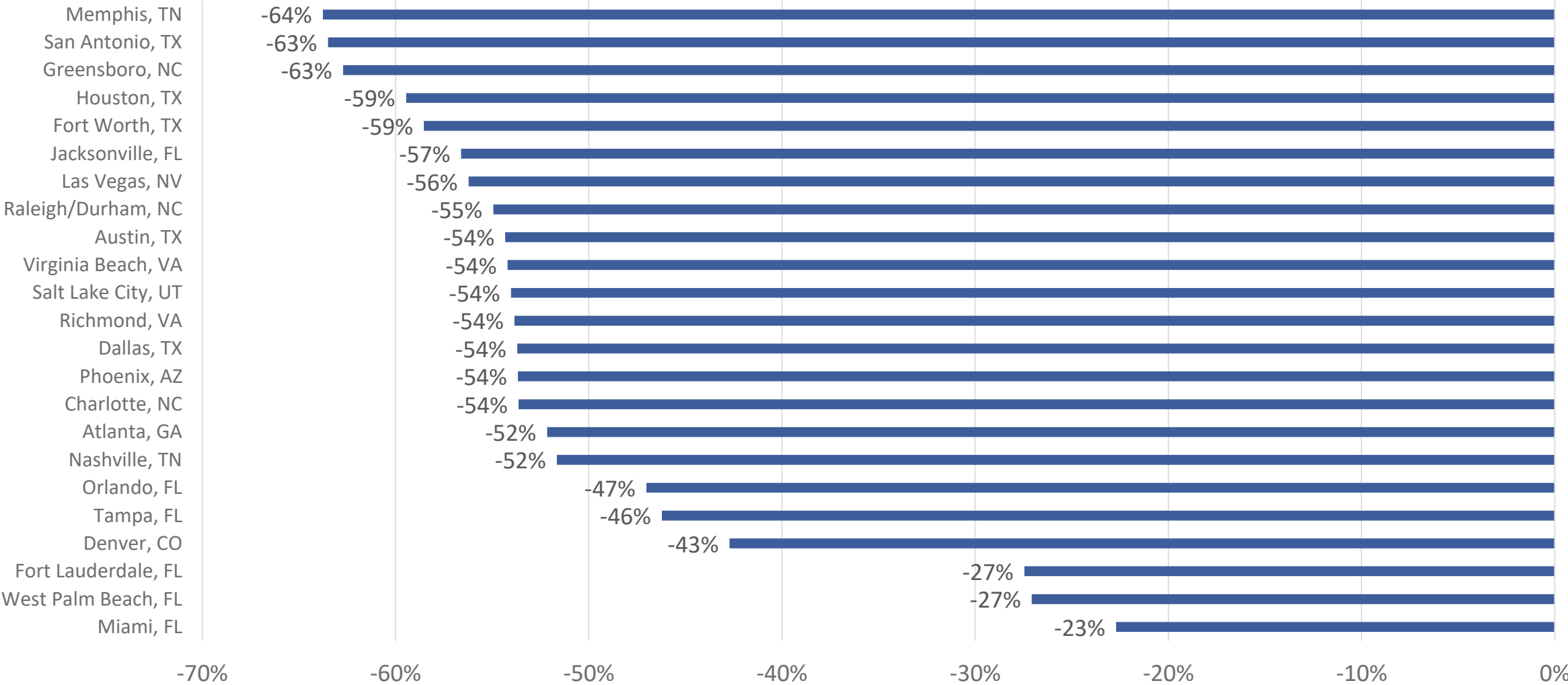
**Shifting
Demographics:**

***U.S. Overall:
-947k***

*Source: Forecast by Oxford Economics, tabulated by Madera Residential research

Discount to Rent in Sun Belt or Mountains versus Major Coastal MSA

Discount to Rent Here vs. Average Major Coastal Metro Area

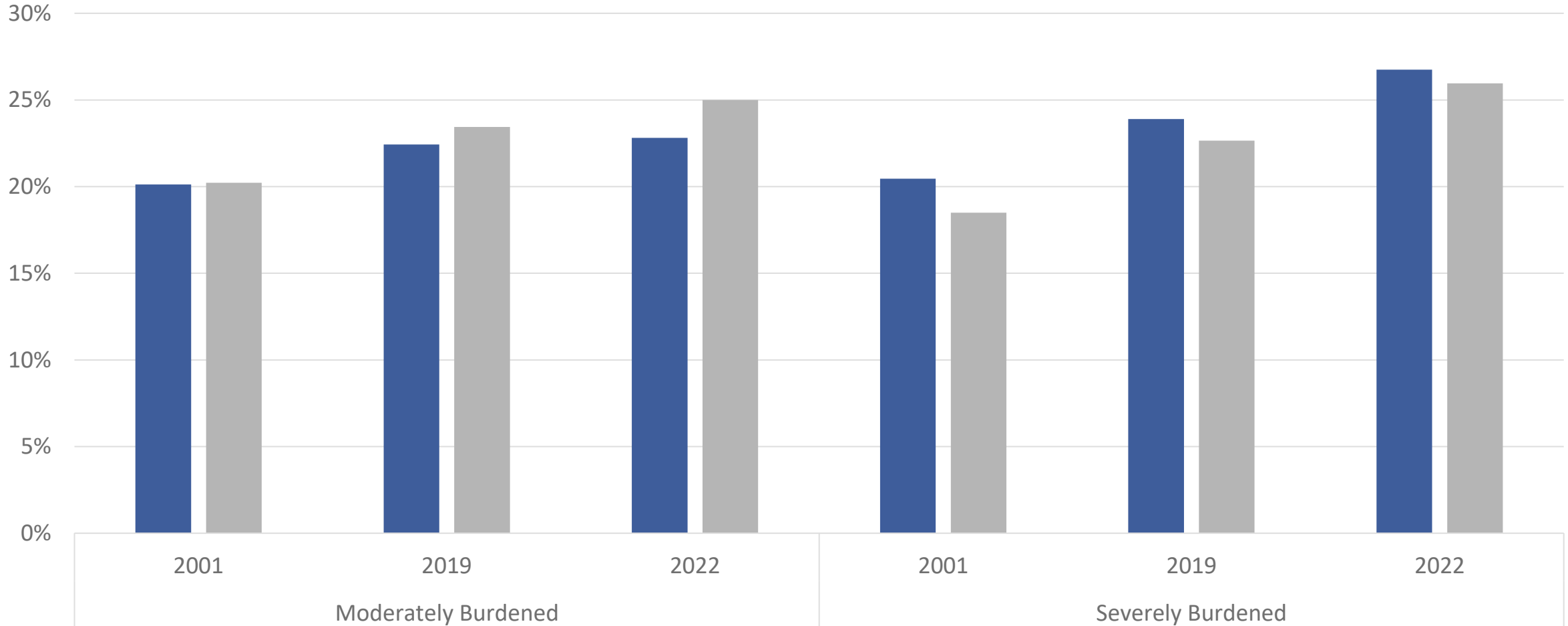


Sources: Madera Residential research, RealPage Market Analytics. Coastal average includes New York, Boston, Washington DC, Los Angeles, Bay Area, Seattle

But at Same Time: Growing Share of Rent-Burdened Households

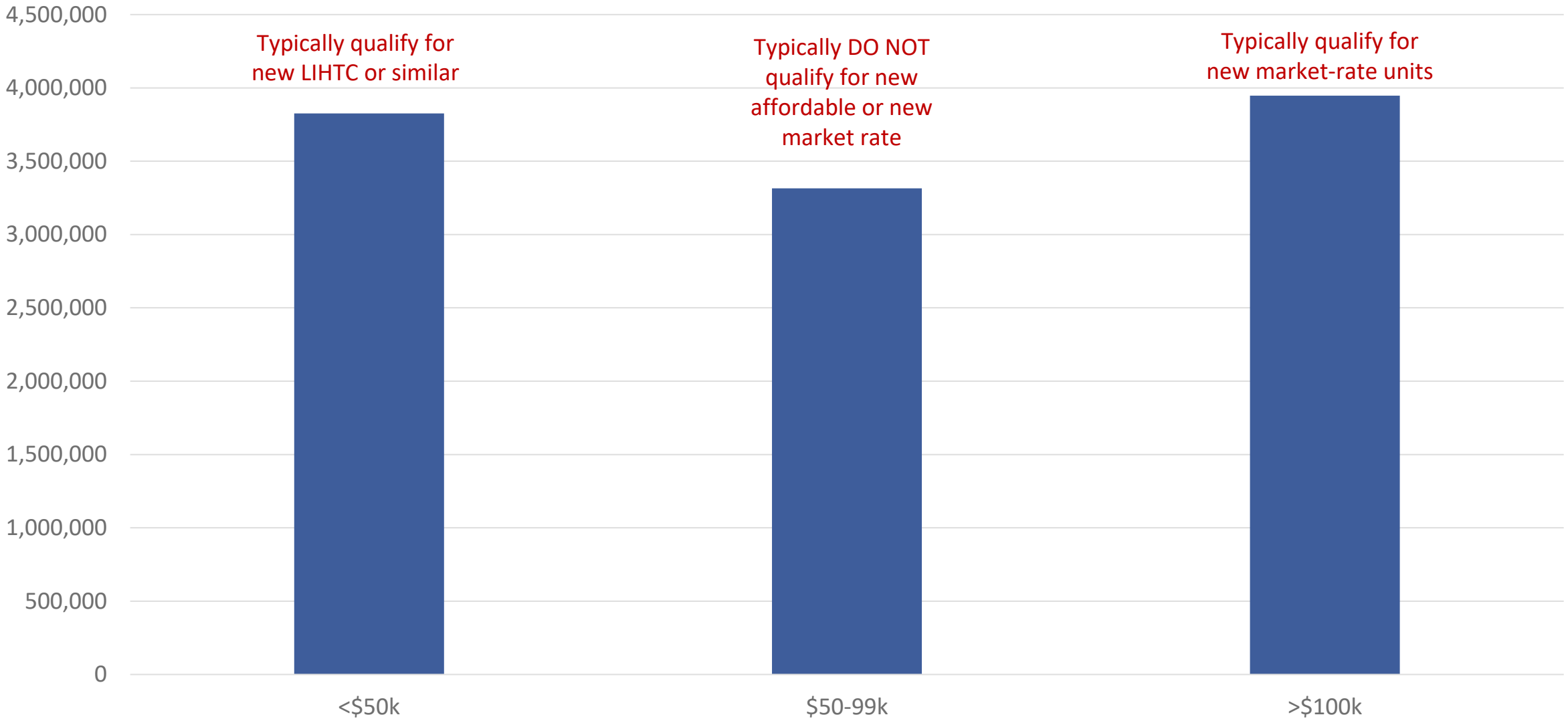
Share of Renter Households

■ U.S. ■ Texas



TX Missing Middle: Too Rich for LIHTC, Too Poor for New Market Rate

Distribution of Texas Household Incomes, 2022



Sources: U.S. Census, Madera Residential research

New Research: Correlation Between Investment Performance & Rent Affordability

RESEARCH INSIGHTS

Can Investors Afford to Ignore Affordability? The Investment Characteristics of Affordable Housing



Greg MacKinnon
PREA

There is an affordability crisis in housing. While higher interest rates and rising home values have put homeownership out of the reach of many people, the crisis extends to the rental market as well. The Joint Center for Housing Studies of Harvard University notes that 22.4 million renter households

The long-term solution to a lack of affordable housing is actually fairly simple—more units, both for single-family ownership and for rent, of all types but especially those with rents targeted at people with average and below-average incomes.

What role can the private sector, and specifically institutional capital, play in helping solve the affordability crisis? Many institutional investors, quite rightly, are often

Exhibit 2: Summary Investment Performance

	Most Affordable	Mid-Market	Least Affordable
Average Return/ Quarter	1.64%	1.42%	1.06%
Volatility of Quarterly Returns	2.78%	2.87%	2.89%
Compound Average Annual Return, 1Q2008 to 1Q2024	6.54%	5.62%	4.15%

Source: PREA Research based on NCREIF data

More Research: Investment Case for Middle-Income Housing

Moderate-Income Rental Housing

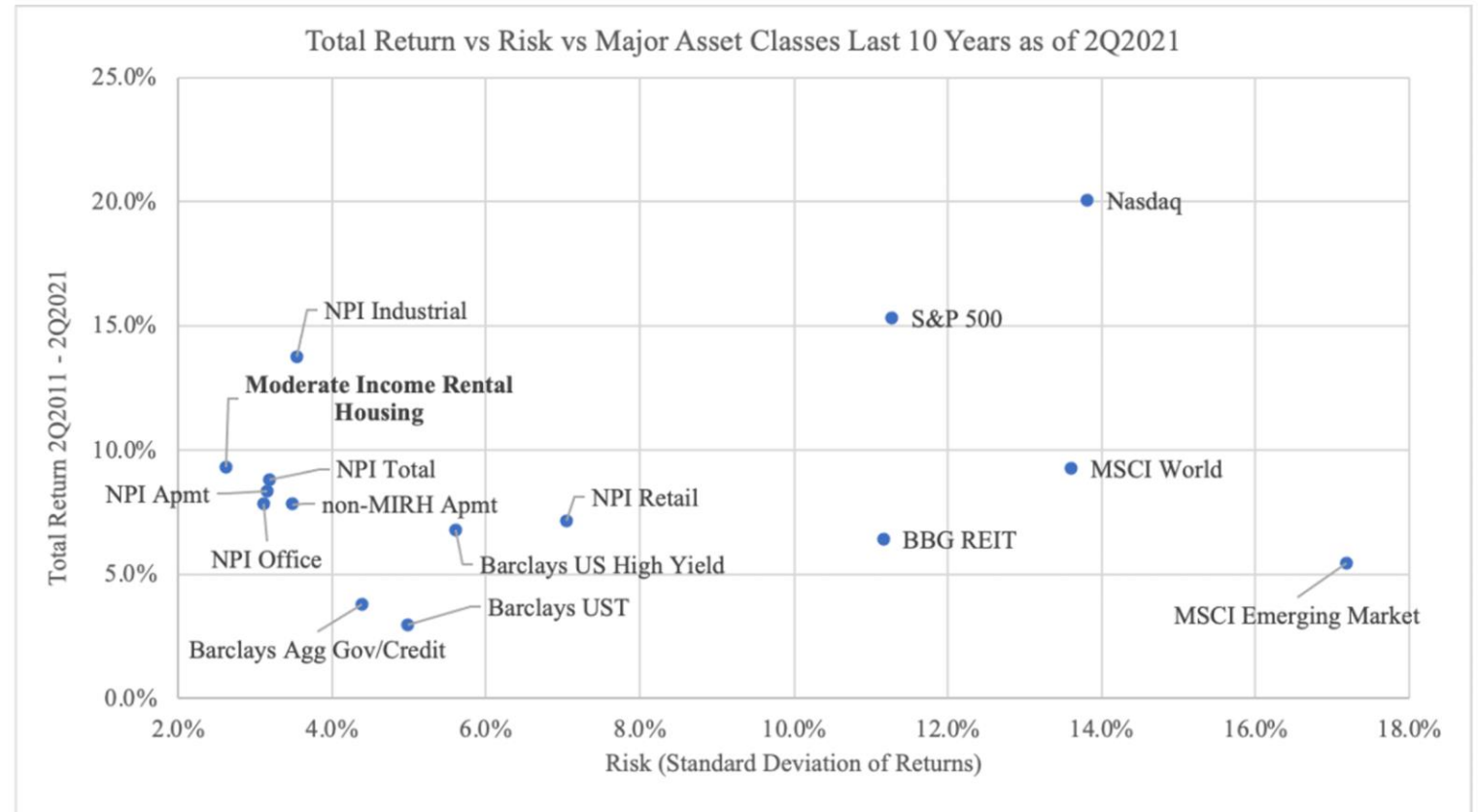
Assessing its Viability as an Asset Class for Real Estate Investment with Environmental, Social, and Governance (ESG) Criteria



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Associate Professor
Community & Regional Planning Program
at the University of Texas at Austin
School of Architecture

Exhibit 9: 10-Year Total Return and Risk of National MIRH vs Major Asset Classes



Potential Implications

1. Housing affordability is nuanced issue too often painted in one broad brush

- Massive demand for newer, pricier rentals from qualified renters (and low delinquency)
- AND severe shortage of affordable housing among those who cannot afford market-rate units
- Misguided, broad brush policy could backfire by discouraging new housing investment

2. Massive (market rate) supply wave is pushing down market rents (and rent-to-income ratios)

- Filtering works! Key is to build ... a lot

3. But... starts are plummeting, pointing to renewed rent momentum in 2026-27

- Real window to push affordable and attainable housing construction

4. Today's "oversupply" markets are likely to revert back to undersupply as people keep coming

- Real risk (and potential dev opportunity) in being lulled to sleep by high supply in some markets
- Macro demand drivers remain firmly intact to support mid/long-term rental multifamily investment

Potential Focus Areas for Next Wave of Development

1. Traditional “luxury” development where there’s a compelling story

- Fewer of these today, and unlikely to match 2022-23 highs again any time soon
- Likely less focus in this cycle on smaller floor plans, given lesson of early 2010s

2. LIHTC and other low-income housing

- Easier to pencil out, but limited unless expanded. Harris housing plan would expand (as Biden proposed, too)
- Office-to-affordable-housing conversions are the dream, but (sadly) unlikely to reach big numbers

3. Middle-income apartments subsidized by state/local tax incentives (i.e. PFC/HFC in Texas)

- Cities have unique window to incentivize middle-income housing, but hurdles are plenty
- Federal MIHTC could be real needle-mover, but blocked due to misguided opposition (both/and, not either/or)

4. Middle-income apartments without tax incentives (likely in lower-cost neighborhoods)

- Bigger developers with scale driving down costs via heavy focus on efficiency and scalability
- Savings primarily come via supply chain efficiencies and “cutting out middle man” – less from finish-out

THANK YOU

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