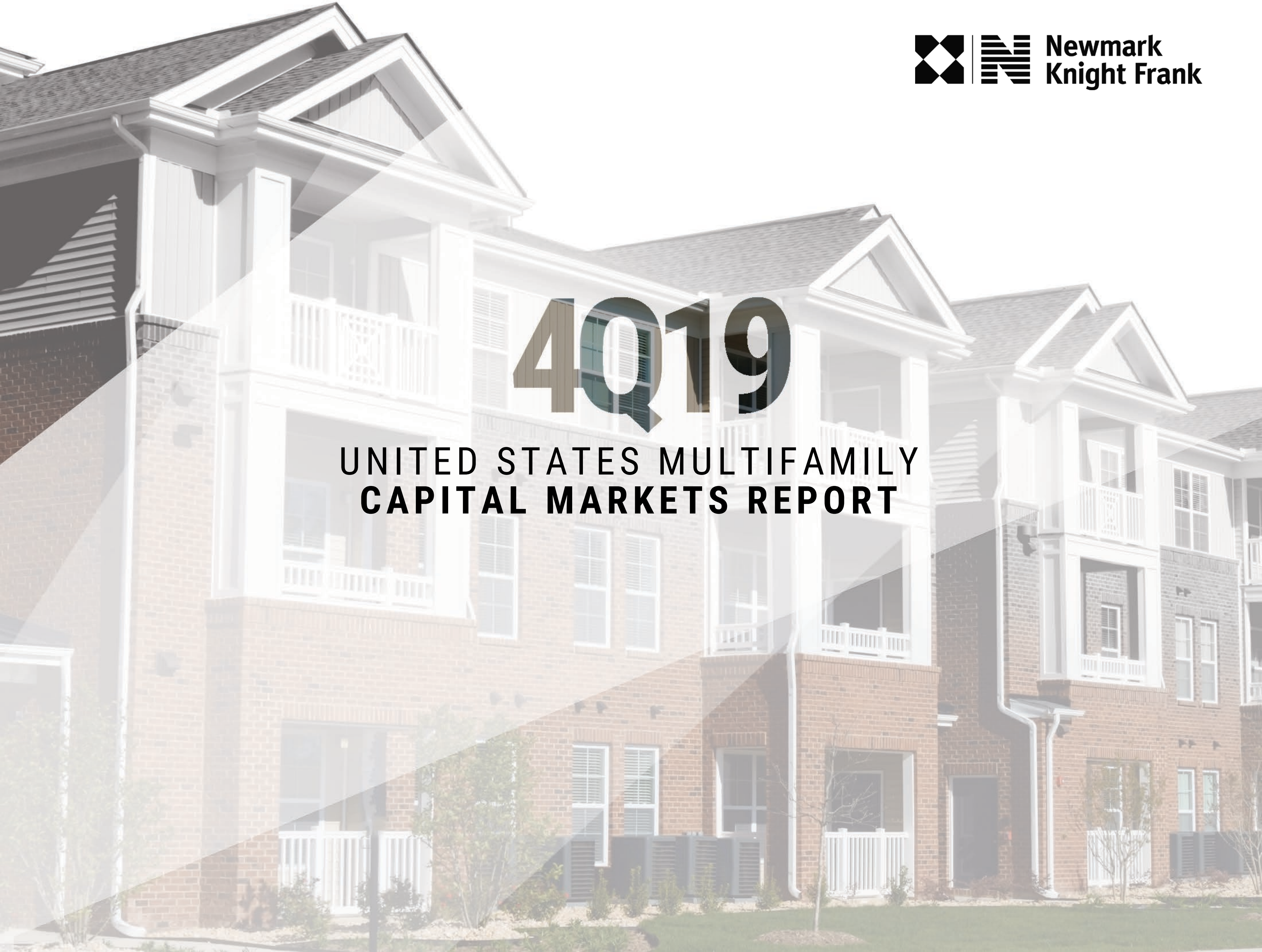

Newmark Knight Frank

4Q19

UNITED STATES MULTIFAMILY
CAPITAL MARKETS REPORT

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KEY TAKEAWAYS

SALES VOLUME

Investment sales volume rose to an all-time high of $183.5 billion, increasing 4.4% year over year. Fourth-quarter volume totaled $50.5 billion, up 4.3% quarter-over-quarter. Non-major markets accounted for 72.1% of investment in 2019, as investors gravitated toward markets with a strong combination of yield and growth prospects.

CAP RATES

National multifamily cap rates compressed 8 basis points year-over-year. Although cap rates increased 16 basis points year-over-year in major markets, a surge of investment activity in non-majors caused yields to fall 12 basis points.

RENT GROWTH

Annual effective rent growth climbed 30 basis points year-over-year to 3.1% nationally in 2019. After dipping slightly in 2017, rent growth rose 60 basis points above the long-term average, led by Sunbelt markets such as Atlanta, Charlotte and Phoenix, which are experiencing positive demographic and economic trends.

SUPPLY AND DEMAND

High levels of new supply were met with robust demand in 2019, as absorption outpaced units delivered. Although Dallas added the largest number of units over the past 12 months, Charlotte saw the largest inventory increase on a percentage basis at 3.3%, compared with 1.1% nationally.

INTERNATIONAL CAPITAL

Direct international capital sources invested $12.1 billion over the past 12 months. Canada led all countries in acquisitions in 2019, accounting for 52.2% of all international capital investment. Non-major markets accounted for 74.9% of international capital volume, a substantial increase from 53.2% in 2018.

DEBT MARKETS

Mortgage debt outstanding grew by $40.6 billion to $1.5 trillion, a 2.8% quarter-over-quarter increase. GSEs, banks, life insurance companies and CMBS all saw their debt outstanding increase for the quarter, led by CMBS, which grew 4.4%.

DECADE IN REVIEW

10-YEAR TRENDS

The past decade saw multifamily surpass office to become the largest recipient of institutional capital. The markets that benefitted from the demographic shifts have been a mix of supply-constrained coastal markets as well as key Sunbelt markets that have experienced unprecedented amounts of employment and population growth.

RENT GROWTH

San Francisco	83.4%
Seattle	81.2%
Denver	80.9%
Portland	73.1%
Phoenix	70.2%
Nashville	69.3%
Atlanta	68.7%
Charlotte	65.8%
Sacramento	64.1%
Austin	63.4%
NATIONAL	**46.5%**

INVENTORY GROWTH

Charlotte	36.3%
Austin	31.2%
Nashville	31.2%
Raleigh-Durham	25.8%
Salt Lake City	25.2%
San Antonio	25.0%
Dallas	24.5%
Denver	23.2%
Seattle	22.7%
Orlando	19.9%
NATIONAL	**11.9%**

EMPLOYMENT GROWTH

Austin	38.8%
San Francisco	36.7%
Orlando	35.6%
Nashville	34.6%
Dallas	32.3%
Las Vegas	29.9%
Phoenix	28.8%
Charlotte	28.7%
Salt Lake City	28.3%
Denver	28.0%
NATIONAL	**16.4%**

POPULATION GROWTH

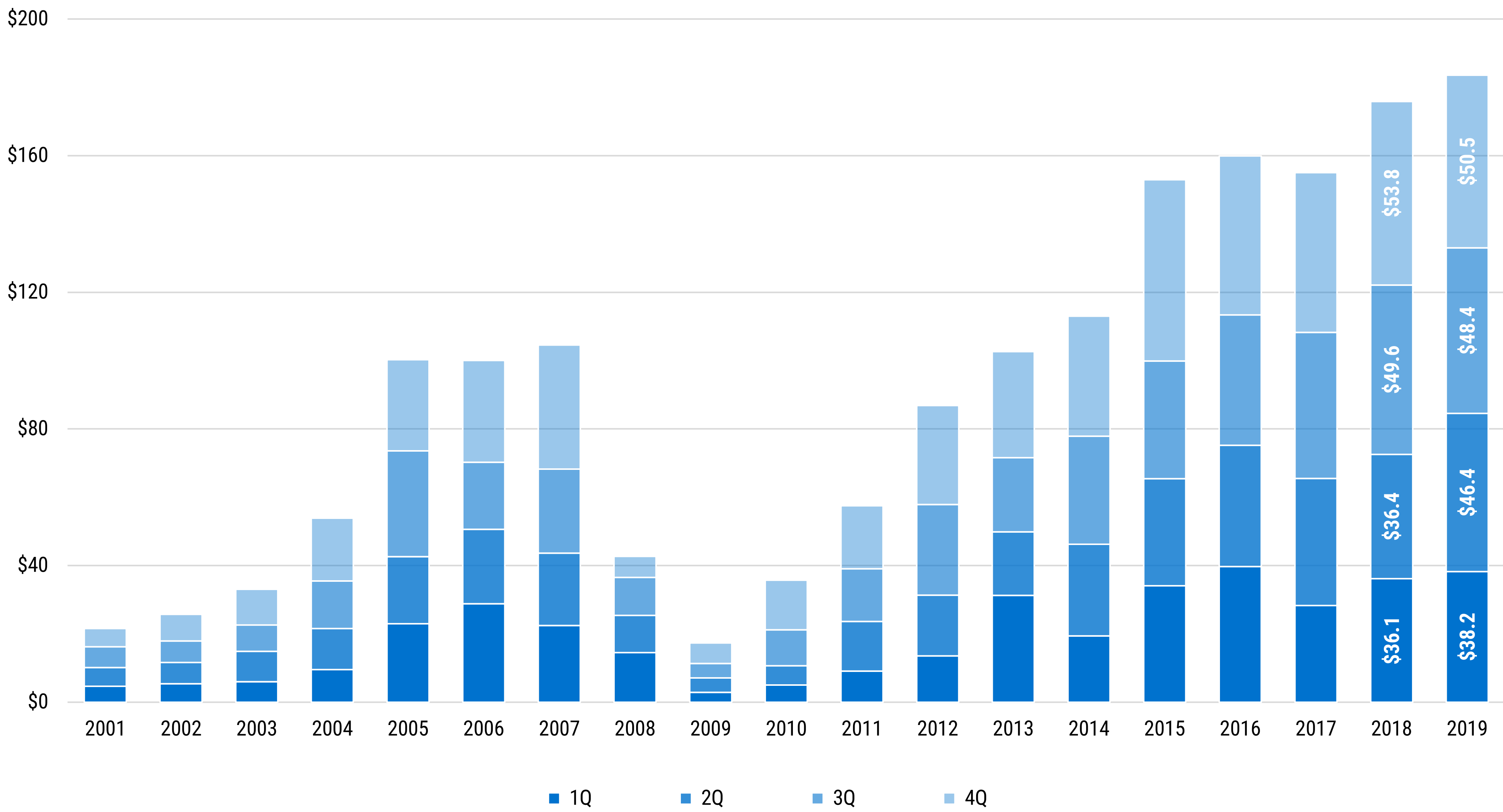
Austin	28.6%
Orlando	22.8%
Houston	19.8%
Raleigh-Durham	19.3%
San Antonio	19.2%
Dallas	18.9%
Nashville	17.5%
Phoenix	17.4%
Charlotte	17.3%
Denver	16.7%
NATIONAL	**6.5%**

Source: NKF Research, RealPage, JobsEQ

SALES VOLUME

UNITED STATES; DOLLARS IN BILLIONS

Investment sales volume rose to an all-time high of $183.5 billion, increasing 4.4% year-over-year. Fourth-quarter volume totaled $50.5 billion, up 4.3% quarter-over-quarter. Portfolio transactions accelerated to $35.5 billion, accounting for 19.3% of sales volume for the year.

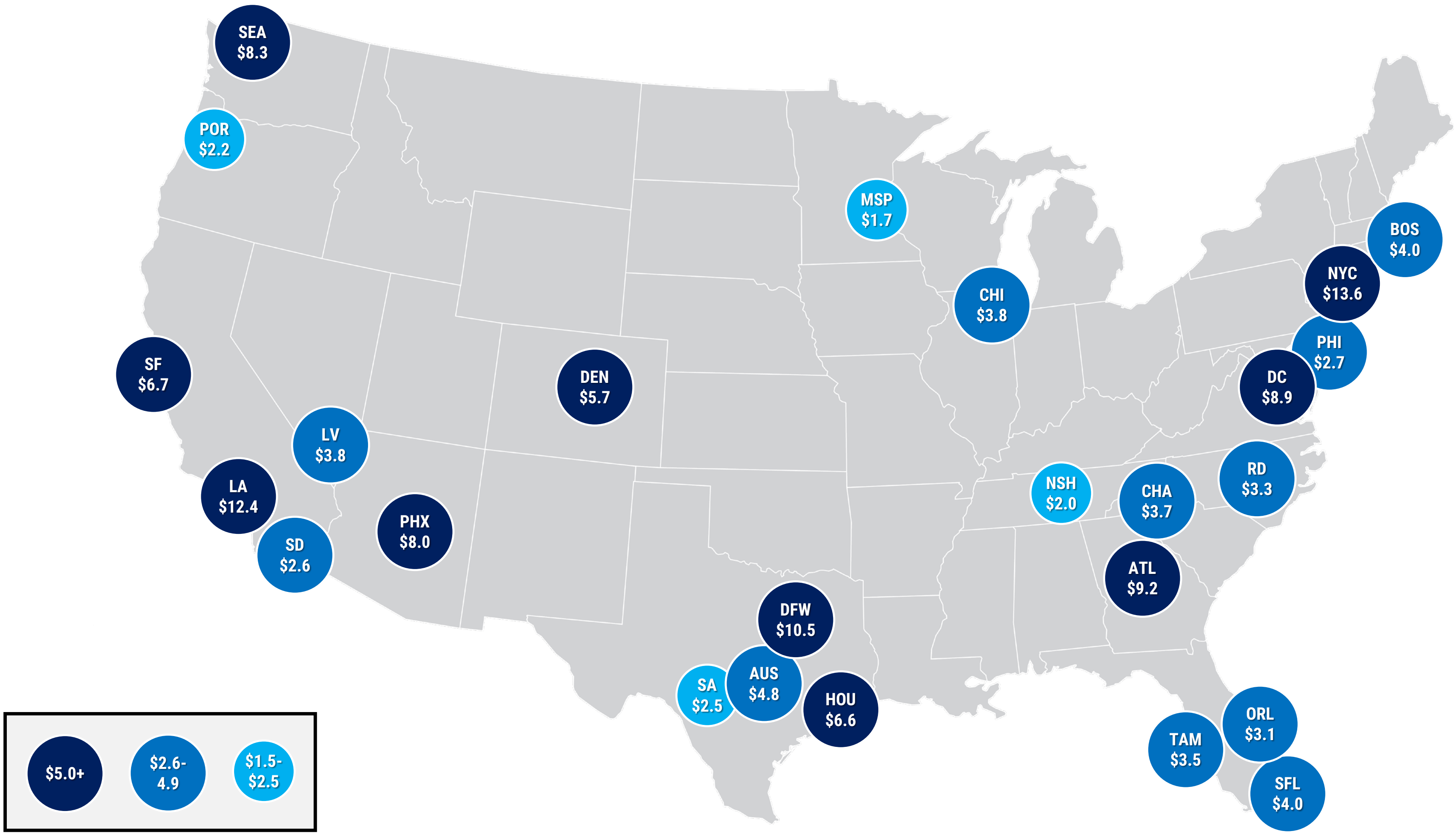


Source: NKF Research, Real Capital Analytics

SALES VOLUME BY MARKET

12-MONTH TOTALS; DOLLARS IN BILLIONS

Supply-constrained markets such as New York and Los Angeles attracted the largest amount capital over the past 12 months, although non-major markets such as Seattle (71.7%), Las Vegas (65.6%) and Charlotte (30.3%) experienced the largest year-over-year increases. Non-major markets accounted for 72.1% of total investment in 2019, as investors gravitated toward markets with a strong combination of yield and growth prospects.



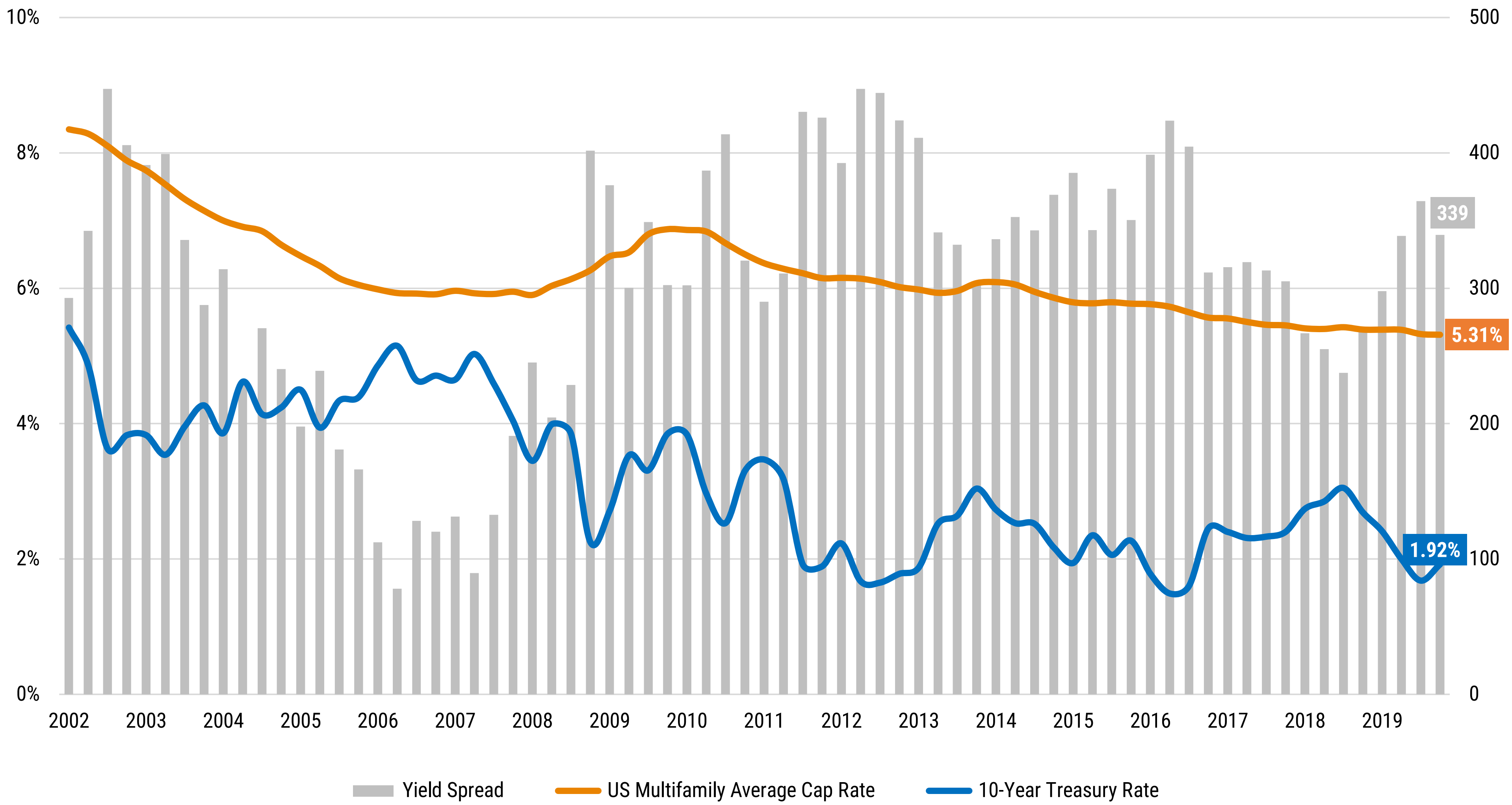
* Major markets: Boston, Chicago, Los Angeles metro, New York metro, San Francisco metro, Washington, D.C. metro. Non-major markets: all other markets.

Source: NKF Research, Real Capital Analytics

YIELD SPREAD

UNITED STATES

The 10-year treasury note increased 24 basis points quarter-over-quarter to 1.92% in the fourth quarter. The yield spread between multifamily cap rates and the 10-year treasury rate decreased marginally to 339 basis points, remaining above the long-term average of 307.

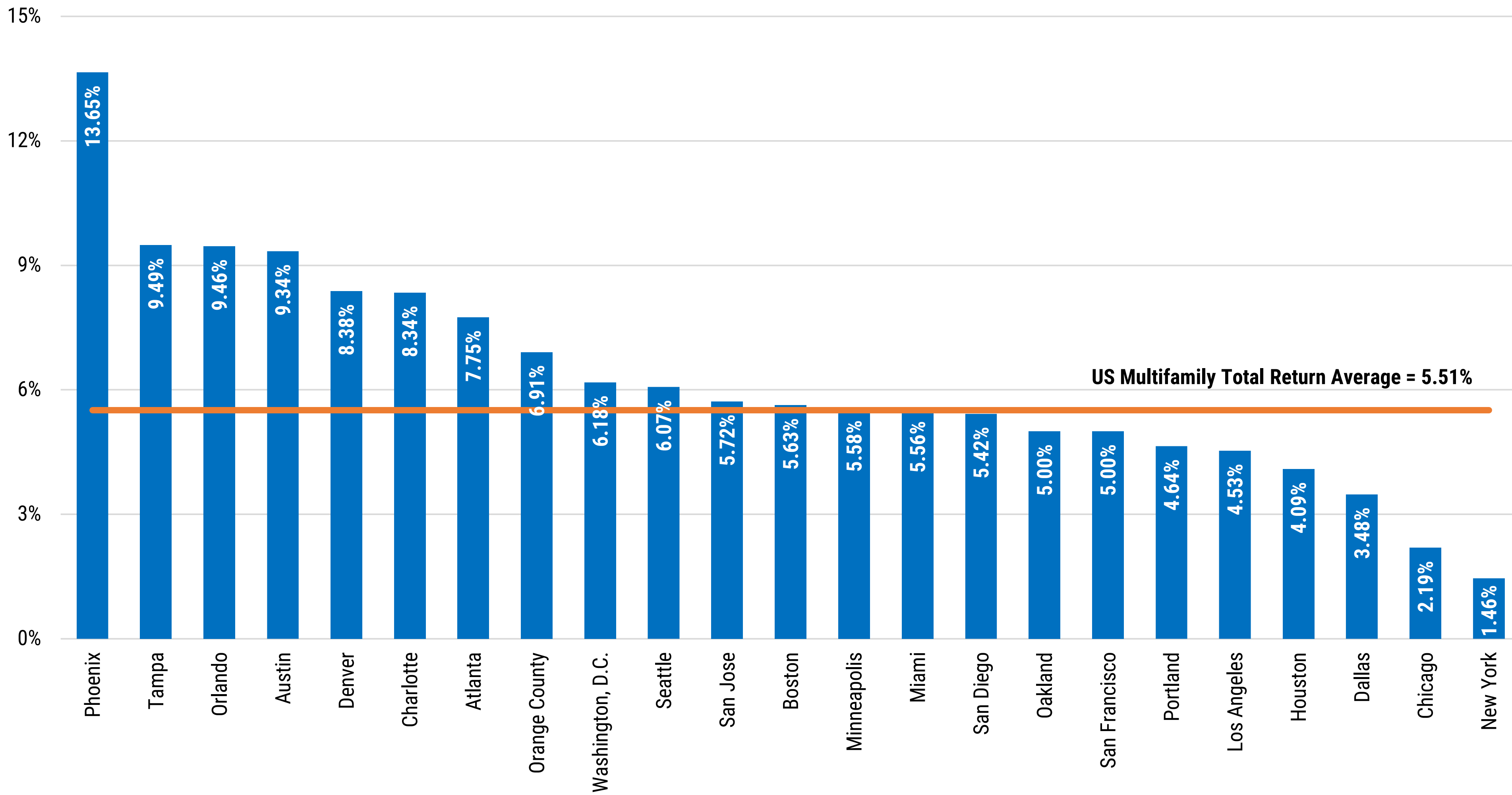


Source: NKF Research, Federal Reserve Bank of St. Louis, Real Capital Analytics (Transactions $10 million and greater)

TOTAL RETURNS BY MARKET

ANNUALIZED TOTALS

Over the past 12 months, multifamily total returns nationally averaged 5.51%, contracting 56 basis points year-over-year. Sunbelt markets, including Phoenix (13.65%), Tampa (9.49%), Orlando (9.46%) and Austin (9.34%) continue to outperform the broader market.

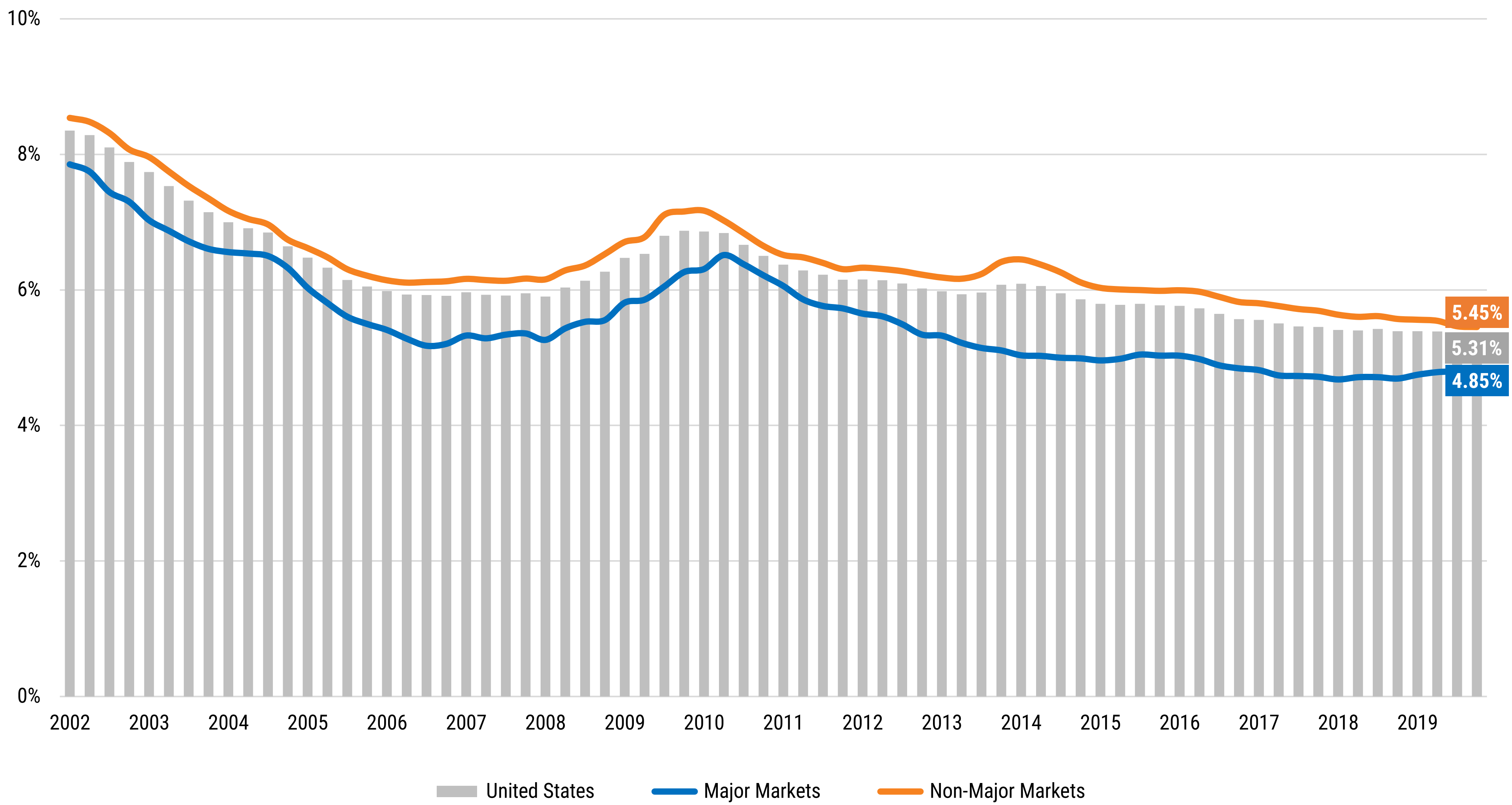


Source: NKF Research, NCREIF

CAP RATES

UNITED STATES; 12-MONTH AVERAGE

National multifamily cap rates compressed 8 basis points year-over-year. Although cap rates increased 16 basis points year-over-year in major markets, a surge of investment activity in non-major markets caused yields to fall 12 basis points.



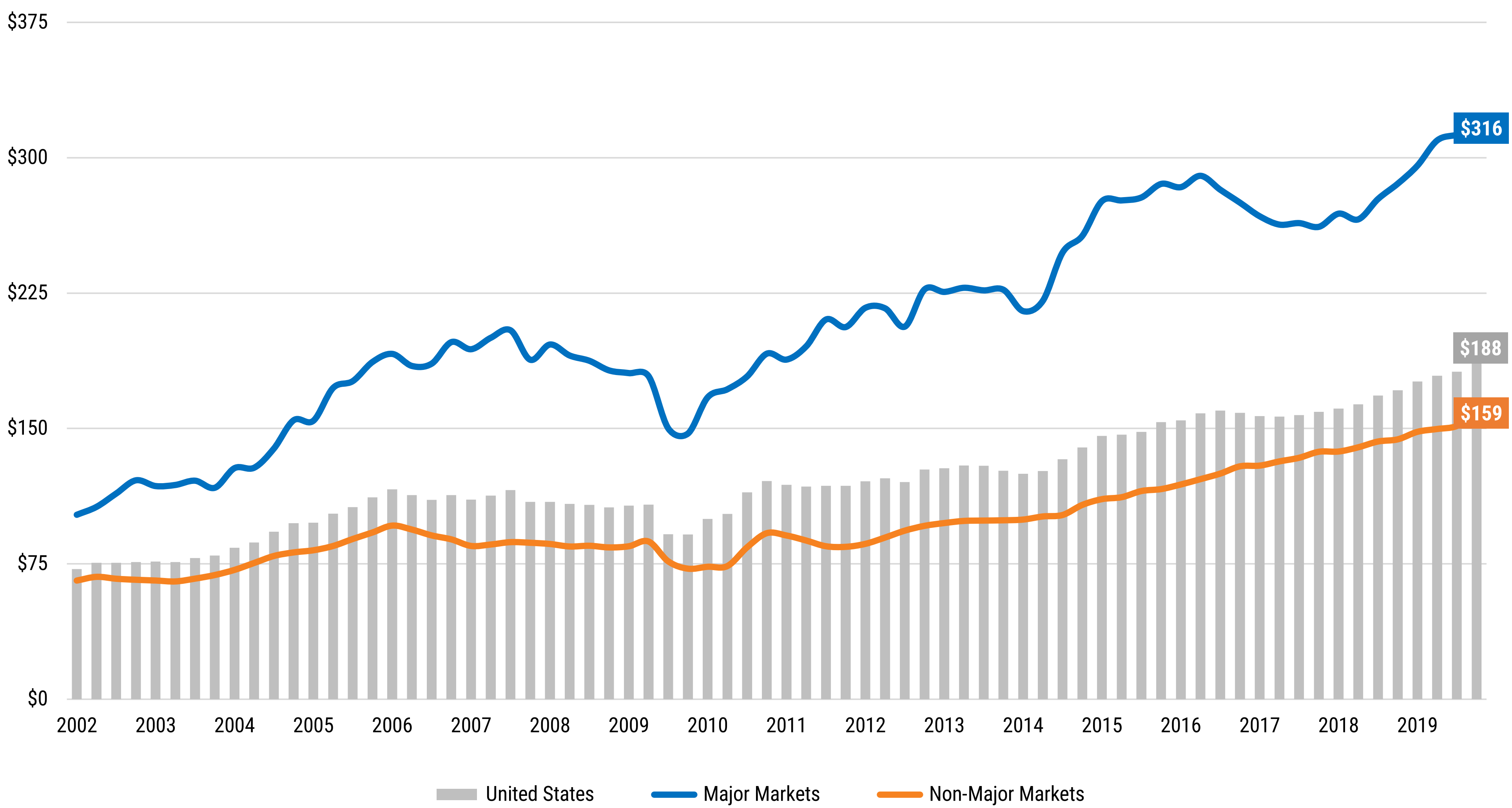
* Major markets: Boston, Chicago, Los Angeles metro, New York metro, San Francisco metro, Washington, D.C. metro. Non-major markets: all other markets.

Source: NKF Research, Real Capital Analytics (Transactions $10 million and greater)

PRICE PER UNIT

UNITED STATES; 12-MONTH AVERAGE; DOLLARS IN THOUSANDS

The national average price per unit increased to $188,000, up 10.0% year-over-year. Price per unit in both major and non-major markets grew year-over-year, by 10.8% and 10.2%, respectively. Non-major markets grew by an extraordinary 116.2% in the last decade, compared with 89.2% for major markets.



* Major markets: Boston, Chicago, Los Angeles metro, New York metro, San Francisco metro, Washington, D.C. metro. Non-major markets: all other markets.

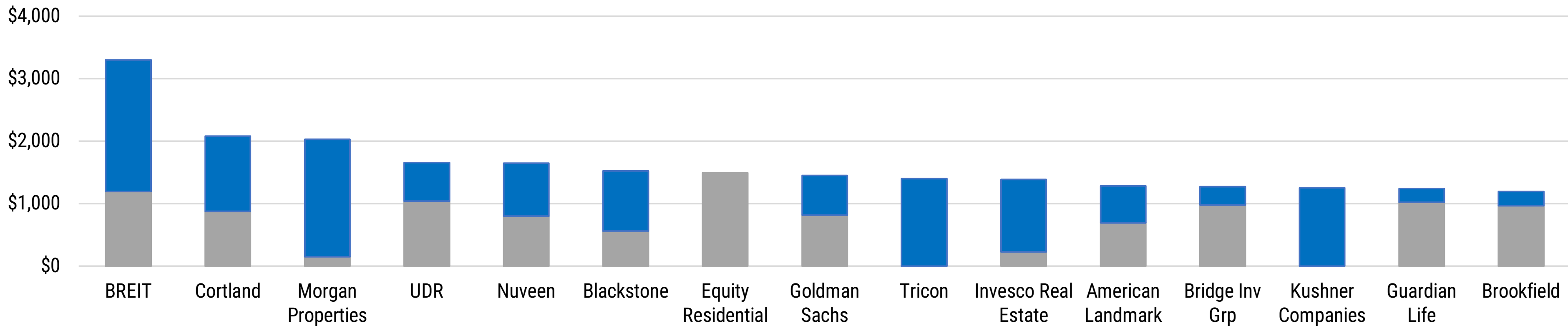
Source: NKF Research, Real Capital Analytics (Transactions $10 million and greater)

TOP BUYERS AND SELLERS

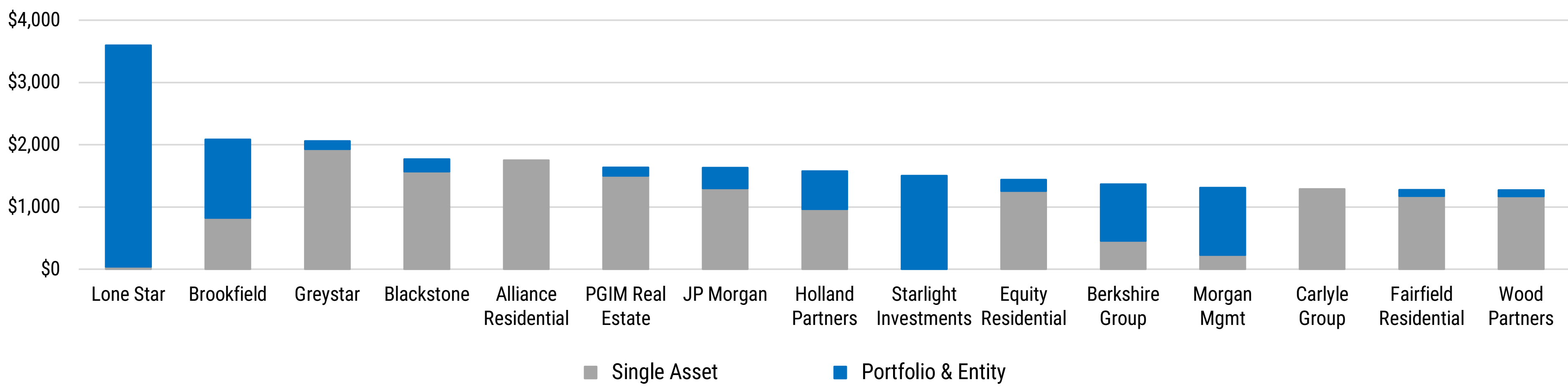
UNITED STATES; 12-MONTH TOTALS; DOLLARS IN MILLIONS

Portfolio and entity-level transactions accounted for 20.8% of volume in 2019, as the largest buyers increasingly view large-scale transactions as the most efficient entry point. BREIT and Blackstone acquired $3.1 billion combined in portfolio and entity-level deals in 2019, primarily through a series of regional portfolios.

Top Buyers



Top Sellers

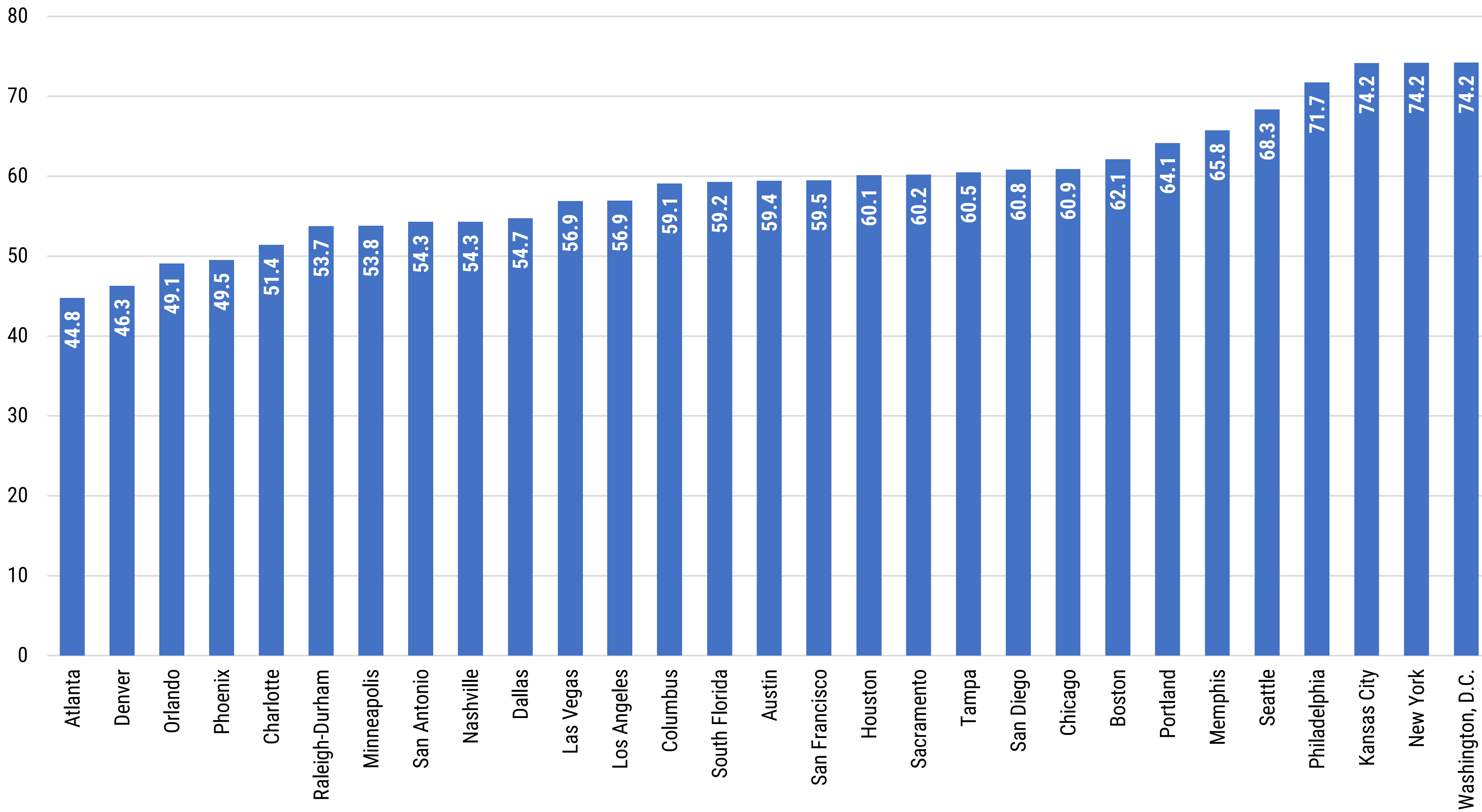


Source: NKF Research, Real Capital Analytics

AVERAGE HOLD TIME BY MARKET

NUMBER OF MONTHS; TRADES OVER THE PAST 12 MONTHS

In 2019, Atlanta, Denver and Orlando experienced the shortest hold times of multifamily assets, as investors cashed in on returns from value-add product in these markets. Turnover was much lower in markets with lower yields, such as New York and Washington, D.C.



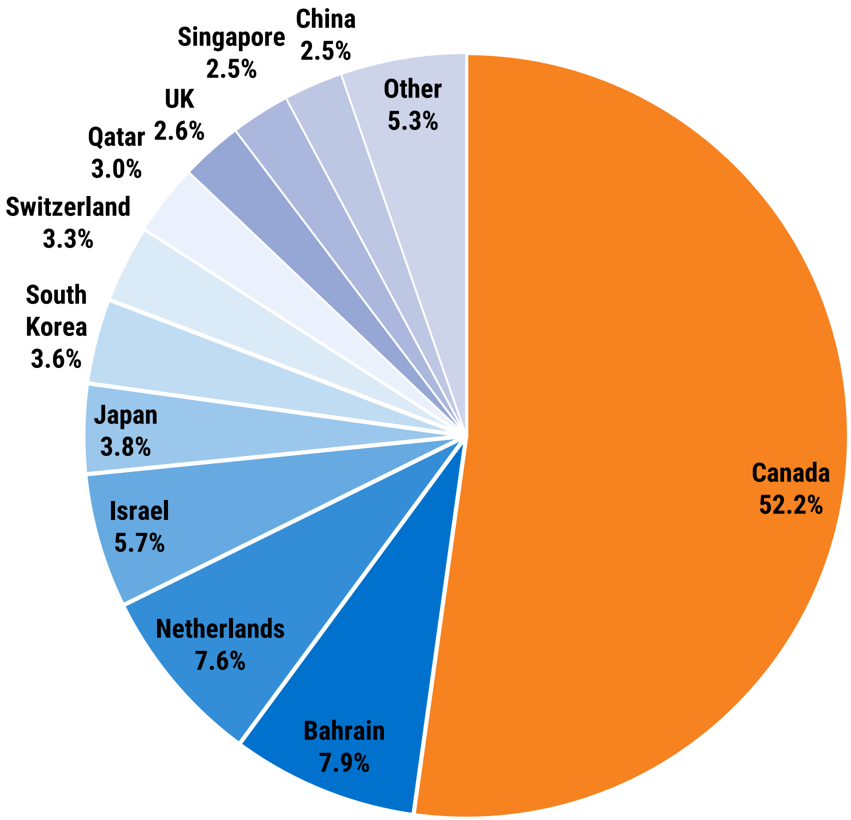
Source: NKF Research, Real Capital Analytics

INTERNATIONAL CAPITAL BUYERS

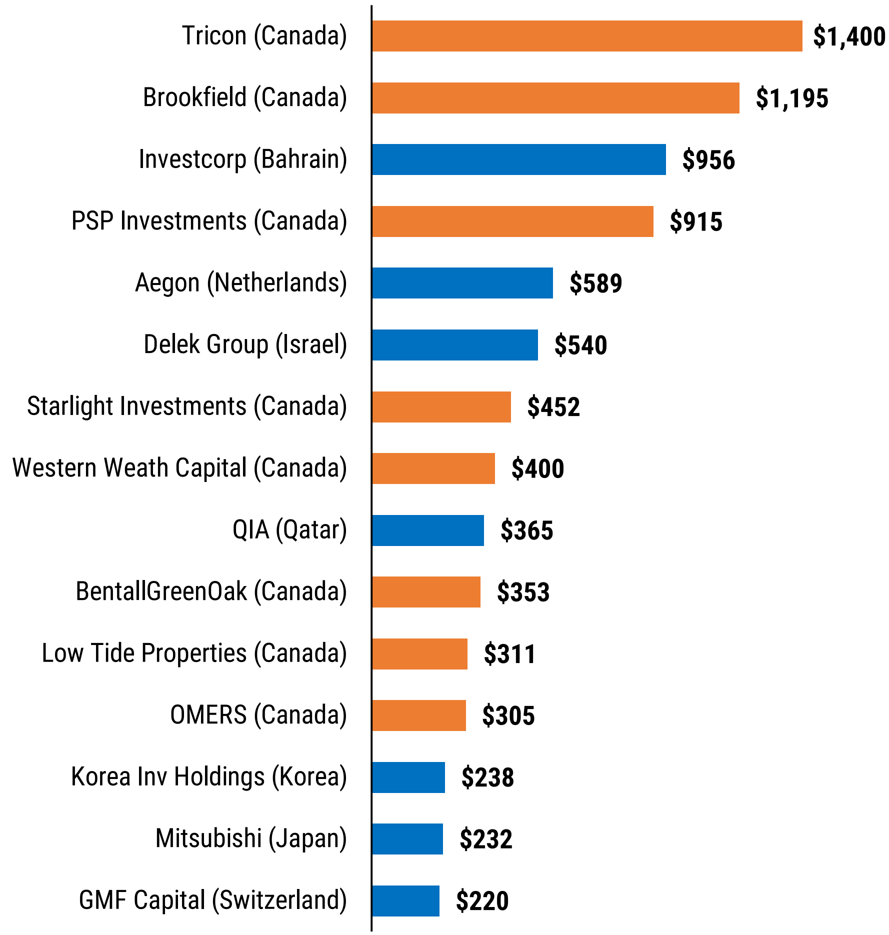
UNITED STATES; 12-MONTH TOTALS

Direct international capital sources invested $12.1 billion over the past 12 months, a 26.5% decrease in cross-border acquisition volume from the previous year. Canada led all countries in acquisitions in 2019, accounting for 52.2% of all international capital investment led by Tricon's acquisition of Starlight's 7,289-unit U.S. multifamily fifth core fund, concentrated in the Carolinas, Florida and Texas.

BY COUNTRY



TOP BUYERS (DOLLARS IN MILLIONS)

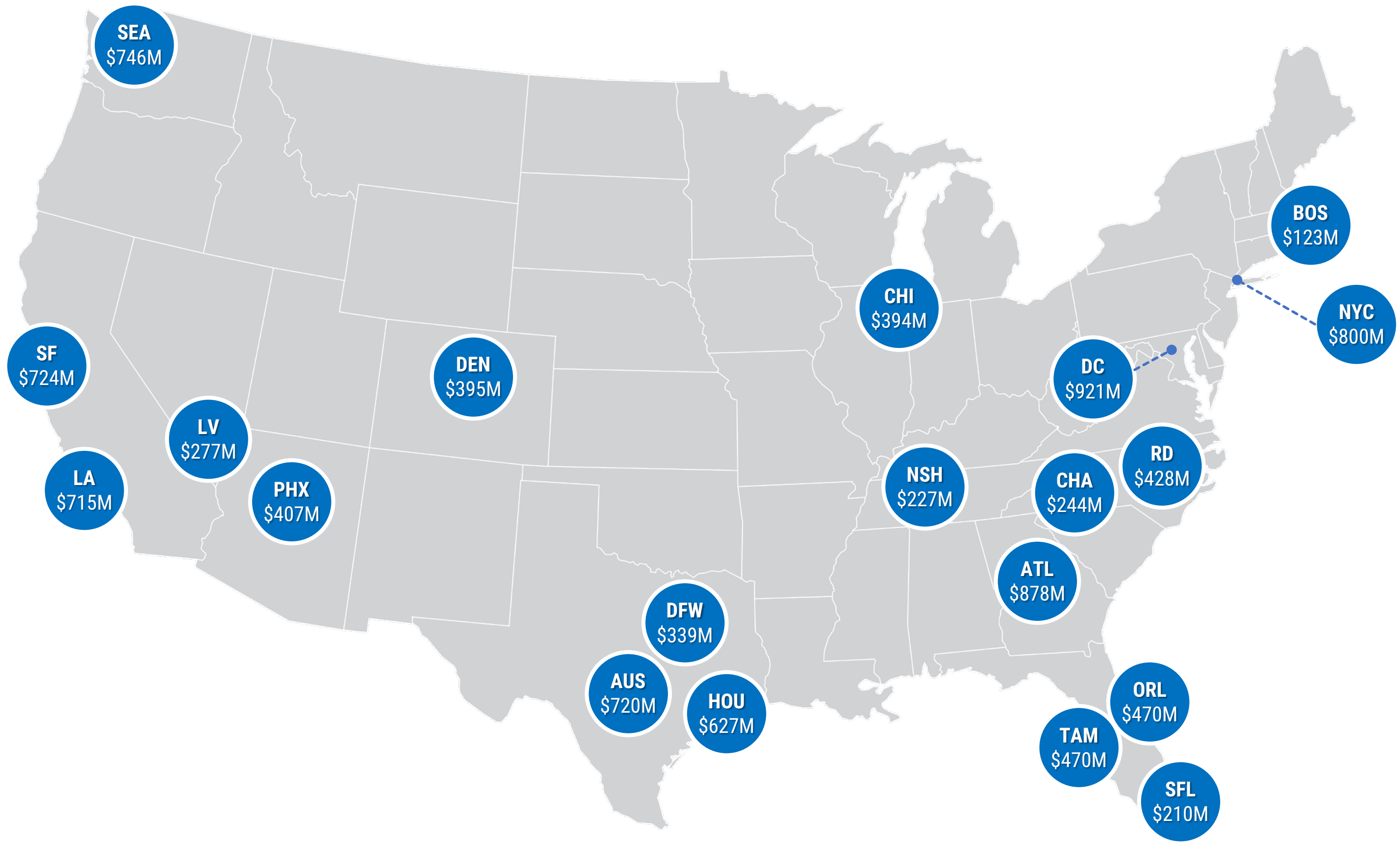


Source: NKF Research, Real Capital Analytics

INTERNATIONAL CAPITAL DESTINATIONS

12-MONTH TOTALS

Much like their U.S. counterparts, direct international capital sources focused the majority of their capital on growth markets outside of the six major markets in 2019. Non-major markets accounted for 74.9% of international capital, a substantial increase from 53.2% in 2018, as international investors chase yield and strong demographic trends into quality non-major markets.



BY MARKET TIER

As a % of Cross-Border Capital

MAJOR MARKETS **25.1%**

NON-MAJOR MARKETS **74.9%**

BY REGION

As a % of Cross-Border Capital

MID-ATLANTIC **12.2%**

MIDWEST **6.1%**

NORTHEAST **5.2%**

SOUTHEAST **32.3%**

SOUTHWEST **24.1%**

WEST **20.1%**

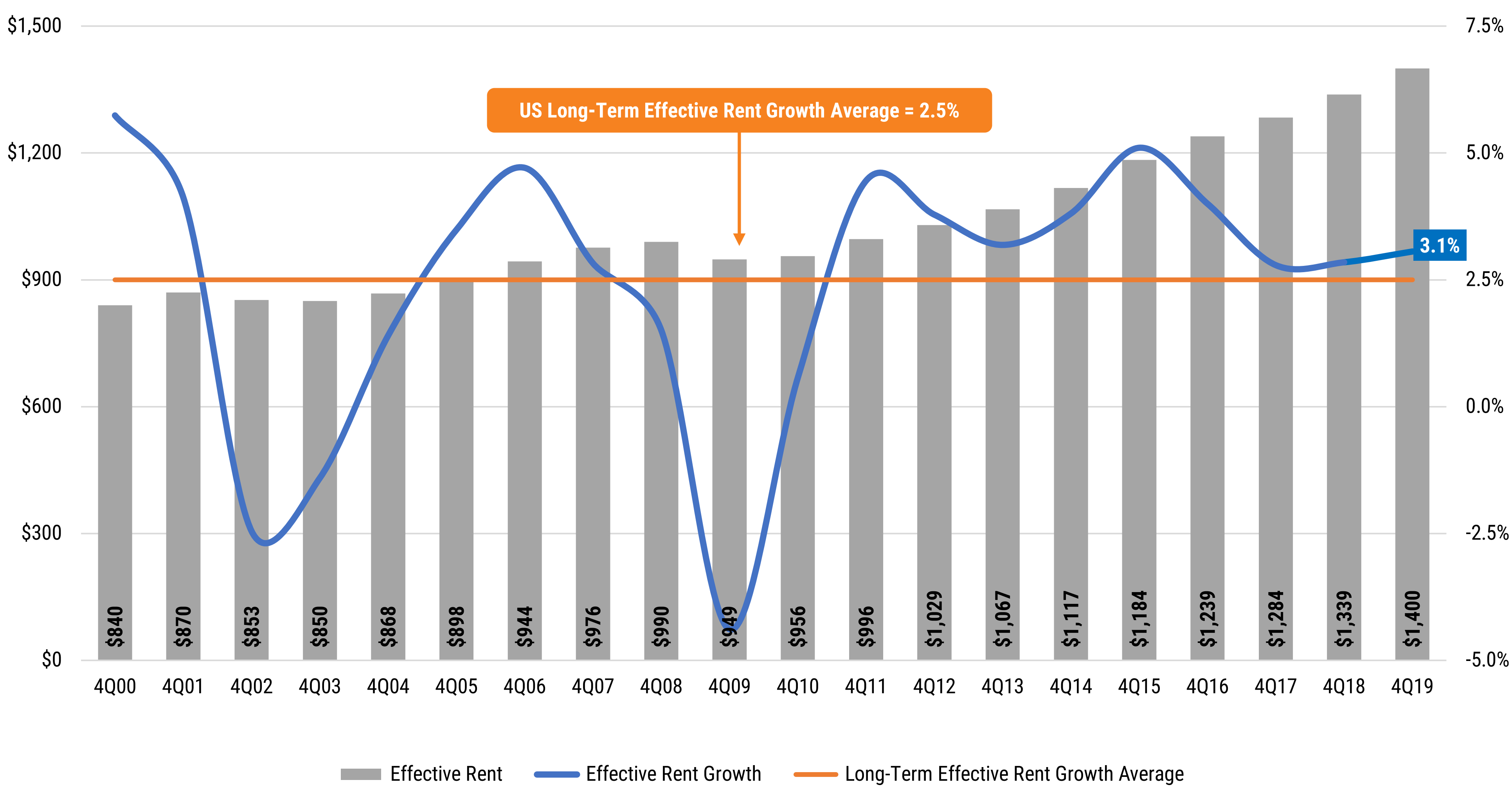
* Major markets: Boston, Chicago, Los Angeles metro, New York metro, San Francisco metro, Washington, D.C. metro. Non-major markets: all other markets.

Source: NKF Research, Real Capital Analytics

EFFECTIVE RENT GROWTH

UNITED STATES; ANNUALIZED

Annual effective rent growth climbed 30 basis points year-over-year to 3.1% nationally in 2019. After dipping slightly in 2017, rent growth is now 60 basis points above the long-term average of 2.5%. Nominal effective rents increased 46.5% over the past decade, from $956 to $1,400 on average.

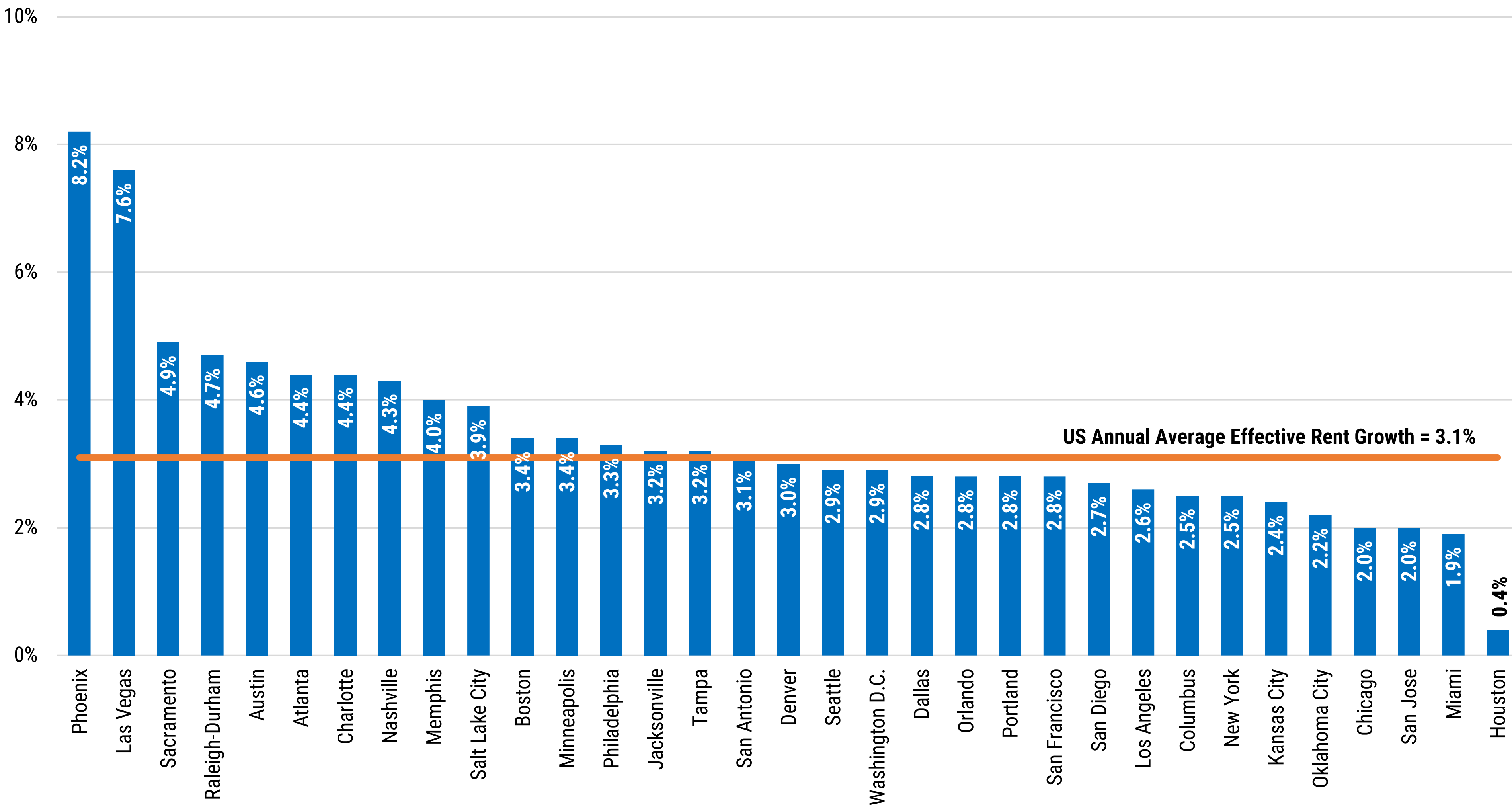


Source: NKF Research, RealPage

EFFECTIVE RENT GROWTH BY MARKET

ANNUALIZED; SELECT MARKETS

Sunbelt markets with robust net migration and low cost of living, such as Atlanta, Austin, Charlotte, Las Vegas and Phoenix, have seen a surge in absorption, translating to above-average effective annual rental growth compared with the national average.

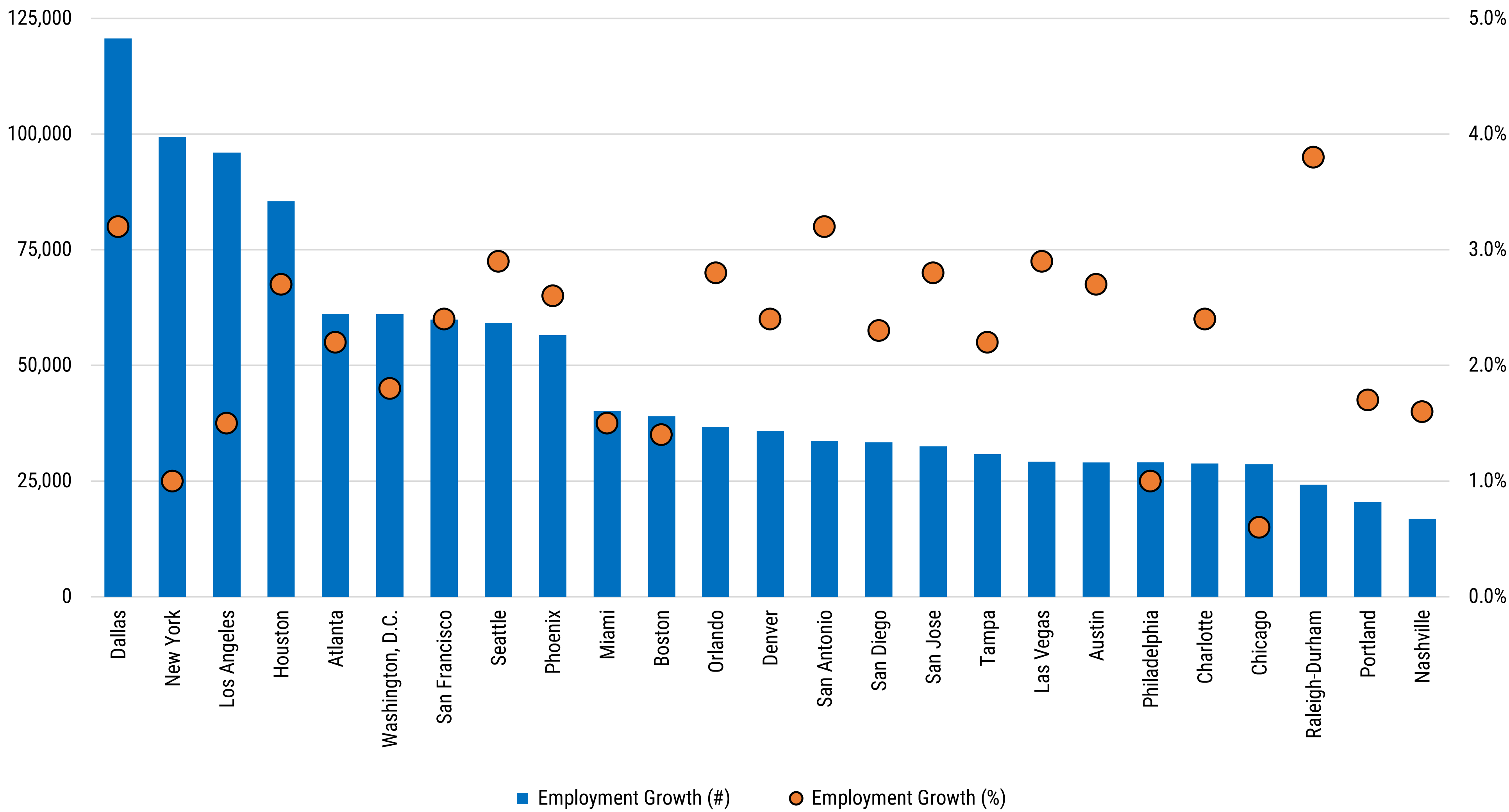


Source: NKF Research, RealPage

EMPLOYMENT GROWTH

YEAR-OVER-YEAR; SELECT MARKETS

Over the past 12 months, the market that saw the greatest number of new jobs was the Dallas metro with 120,700 non-farm jobs added. The markets that experienced the highest employment growth relative to their total number of employees were Raleigh-Durham (3.8%), Dallas (3.2%), and San Antonio (3.2%).

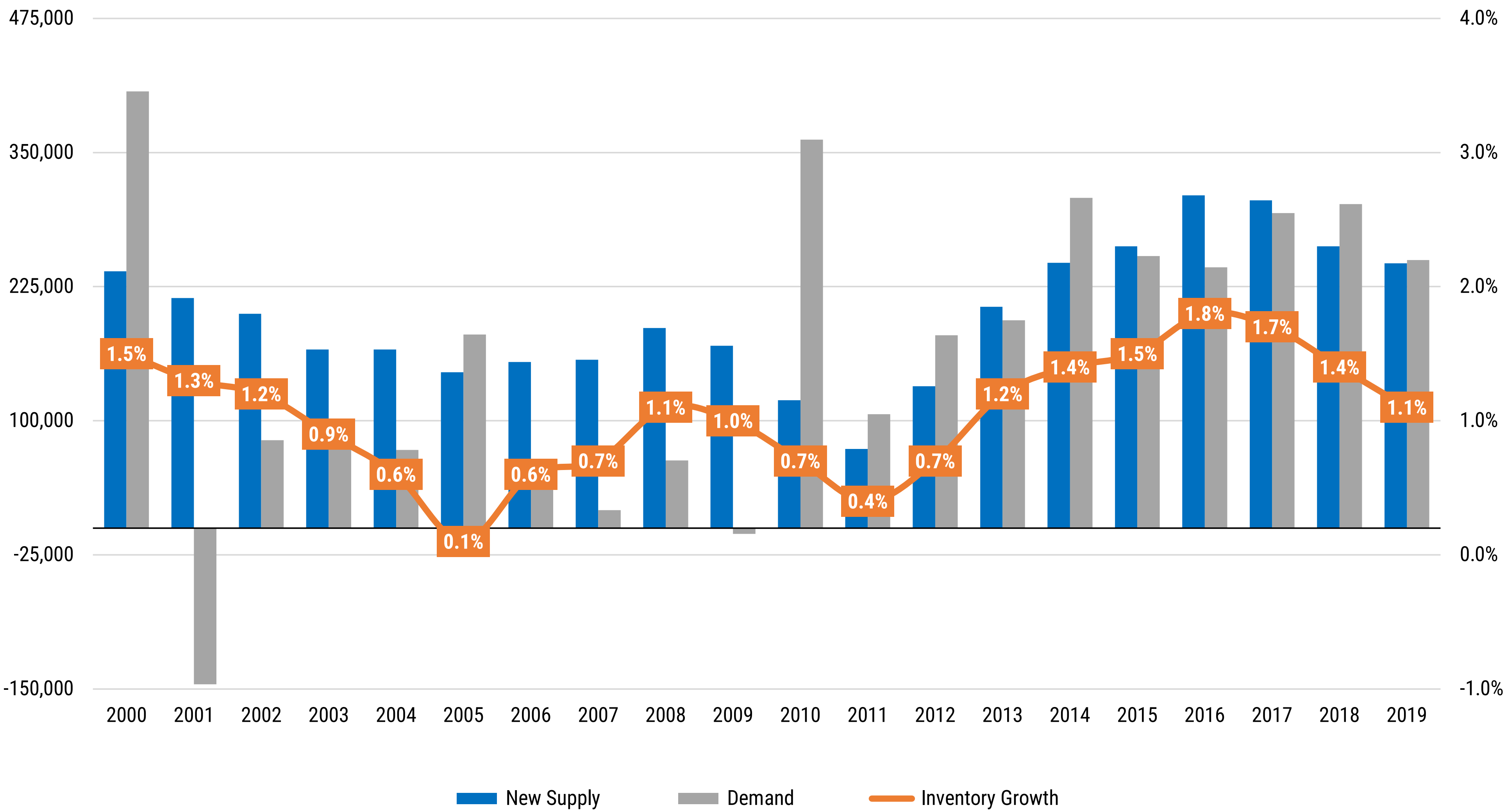


Source: NKF Research, U.S. Bureau of Labor Statistics (November release)

SUPPLY AND DEMAND

UNITED STATES

In 2019, demand outpaced new supply with 249,721 units absorbed compared with 246,779 units delivered. Inventory growth has steadily fallen each year since 2016, although that is expected to reverse course in 2020. Just over 370,000 units are expected to be delivered in 2020, equivalent to 2.1% inventory growth.

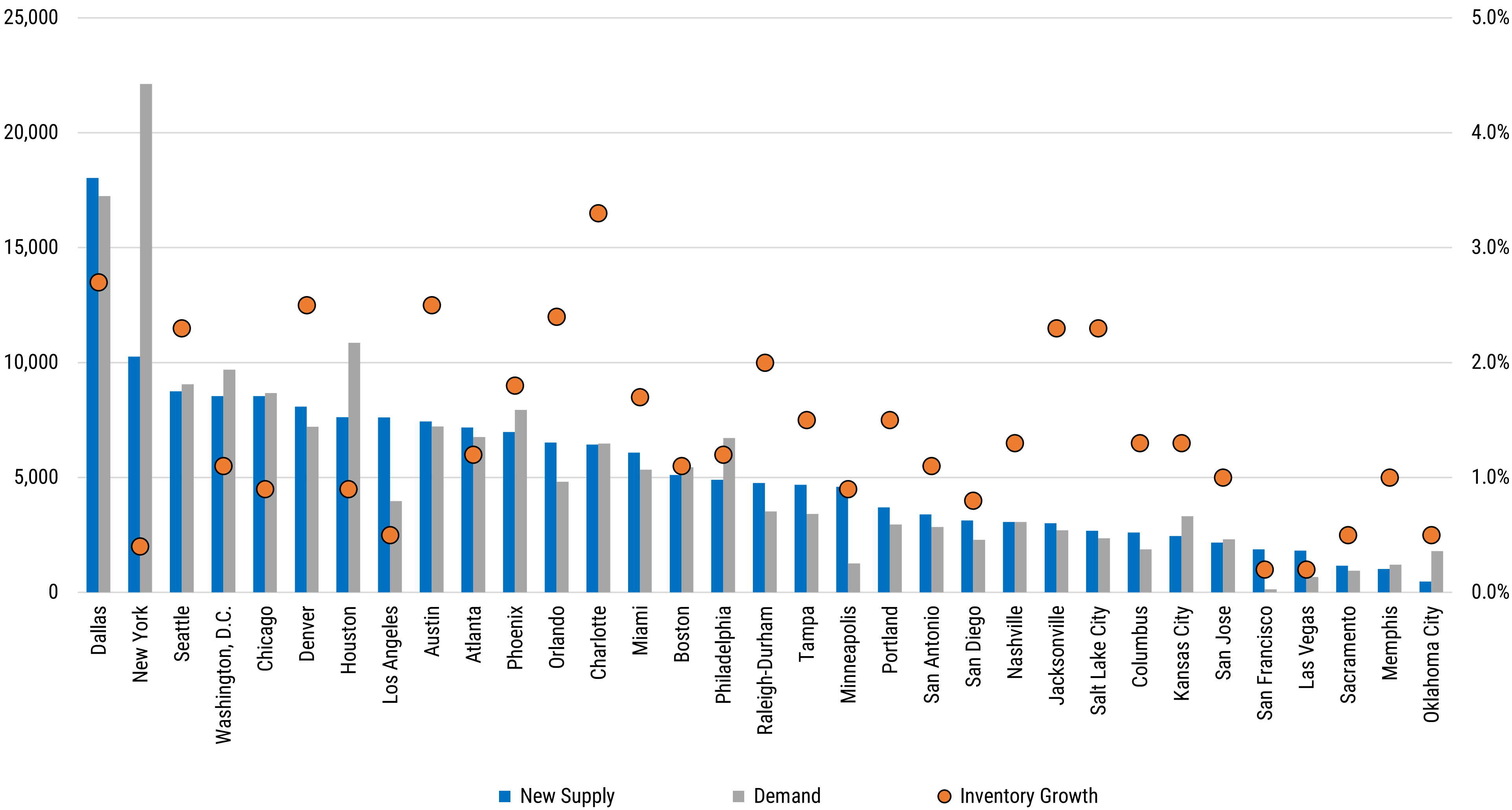


Source: NKF Research, RealPage

SUPPLY AND DEMAND BY MARKET

12-MONTH TOTALS; SELECT MARKETS

Dallas and New York saw the largest new supply of multifamily deliveries in 2019, while both markets saw strong levels of demand. The markets that experienced the largest percentage of total inventory growth this year were Charlotte (3.3%), Dallas (2.7%) and Denver (2.5%).

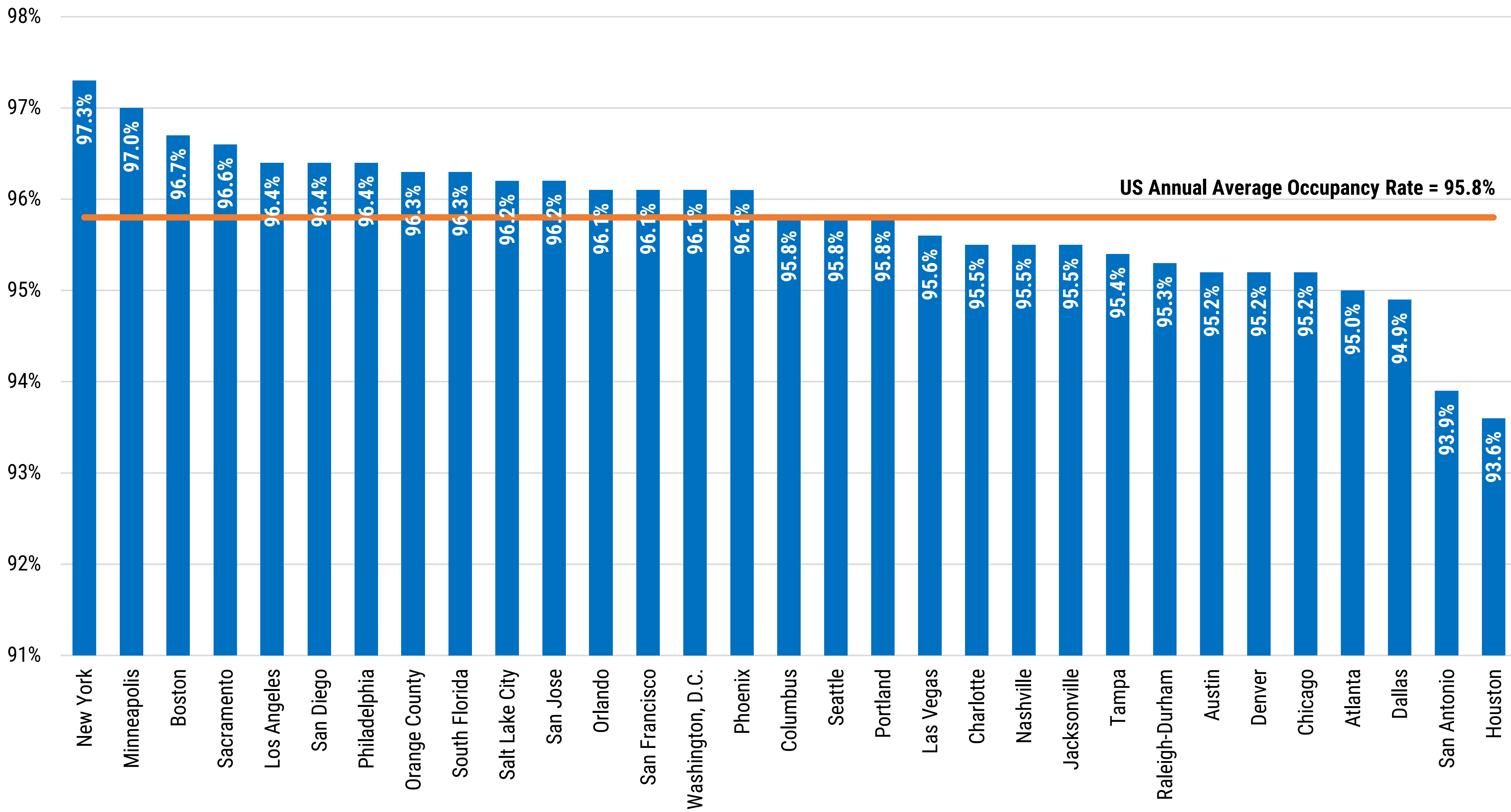


Source: NKF Research, RealPage

OCCUPANCY RATE BY MARKET

12-MONTH TOTALS; SELECT MARKETS

The annual average occupancy rate nationally rose to the highest level this cycle at 95.8%, driven by strong economic trends. New York (97.3%), Minneapolis (97.0%) and Boston (96.7%) led the country with the highest occupancy rates.



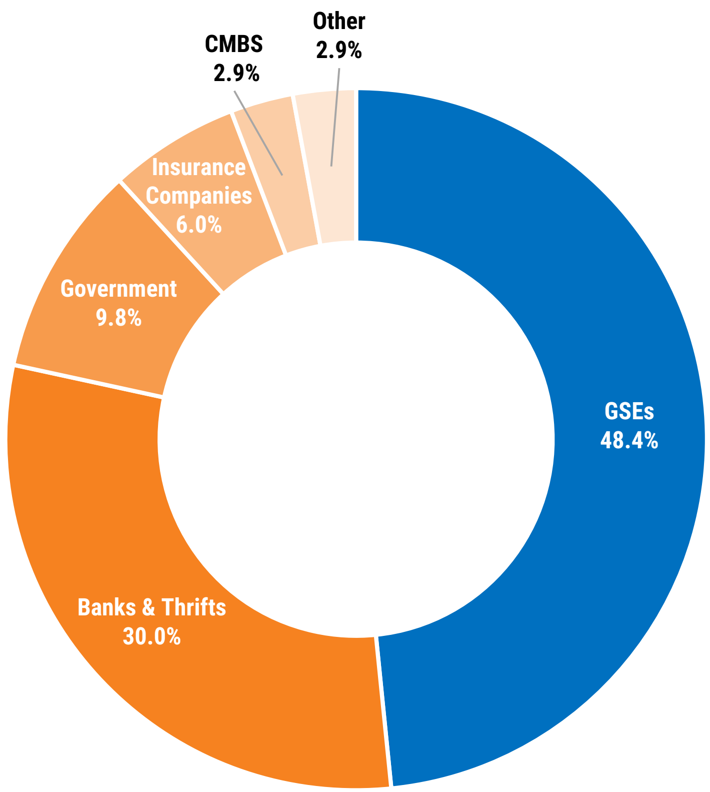
Source: NKF Research, RealPage

MORTGAGE DEBT OUTSTANDING

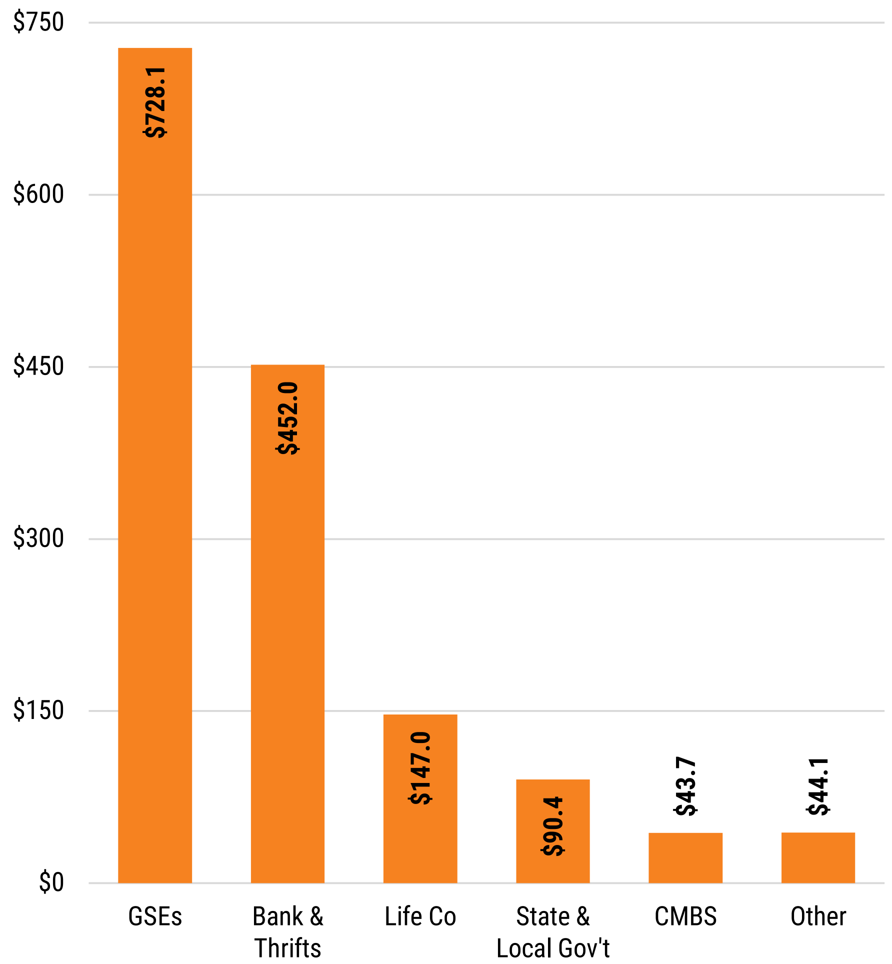
UNITED STATES

Mortgage debt outstanding grew by $40.6 billion to $1.5 trillion, a 2.8% quarter-over-quarter increase. GSEs, banks, life insurance companies and CMBS all saw their debt outstanding increase for the quarter, led by CMBS, which grew 4.4%.

DEBT OUTSTANDING BY GROUP AS A PERCENTAGE



DEBT OUTSTANDING BY GROUP IN BILLIONS



Source: NKF Research, Mortgage Bankers Association

Newmark Knight Frank

NEW YORK CITY HEADQUARTERS
125 Park Avenue
New York, NY 10017
212.372.2000

Jeff Day
President
Head of Multifamily Capital Markets
jeff.day@ngkf.com

Blake Okland
Vice Chairman
Head of Multifamily Investment Sales
bokland@ngkf.com

Sharon Karaffa
Vice Chairman
Co-Head of Production
sharon.karaffa@ngkf.com

Jonathan Mazur
Senior Managing Director
National Research
jmazur@ngkf.com

Mike Wolfson
Director
Capital Markets Research
mwolfson@ngkf.com

Sean Marmora
Research Analyst
Multifamily Research
sean.marmora@ngkf.com

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Newmark Knight Frank has implemented a proprietary database and our tracking methodology has been revised. With this expansion and refinement in our data, there may be adjustments in historical statistics including availability, asking rents, absorption and effective rents.

Newmark Knight Frank Research Reports are also available at **www.ngkf.com/research**