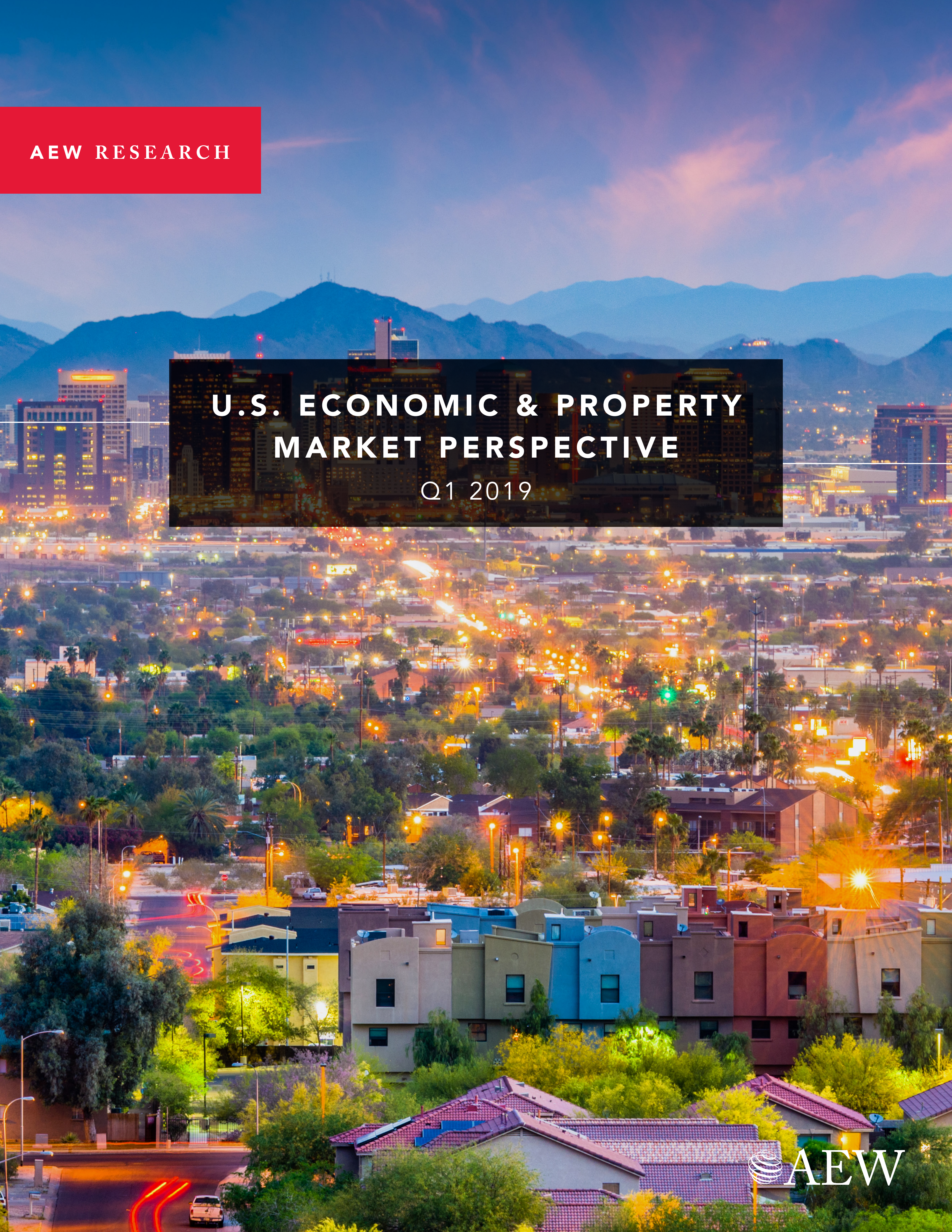
AEW RESEARCH

U.S. ECONOMIC & PROPERTY MARKET PERSPECTIVE

Q1 2019



AEW

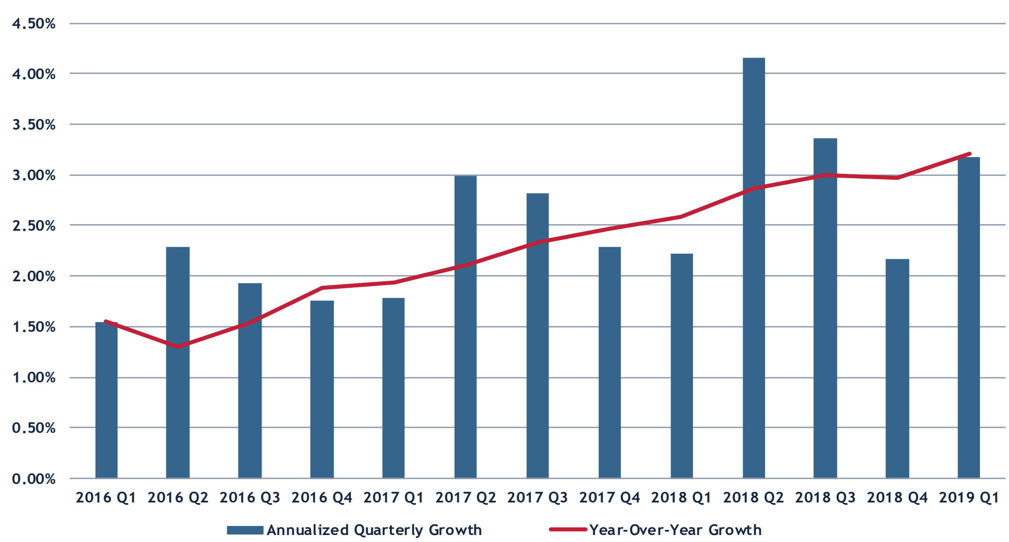
Prepared by AEW Research, May 2019

The U.S. Economy

Preliminary economic data released at the beginning of May shows stronger than expected growth for the first quarter of 2019, with real GDP expanding at an annual rate of 3.2%. While this is clearly positive news, the composition of first-quarter growth reflects a large buildup of inventories and a sharp drop in imports, both of which are likely not sustainable. Additionally, there remains a larger than average likelihood of revisions to the first-quarter data given the prolonged government shutdown at the start of the year. Regardless, by July of this year, the current economic expansion will be the longest expansion in U.S. history.

FIGURE 1

RE-ACCELERATION OF REAL GDP GROWTH

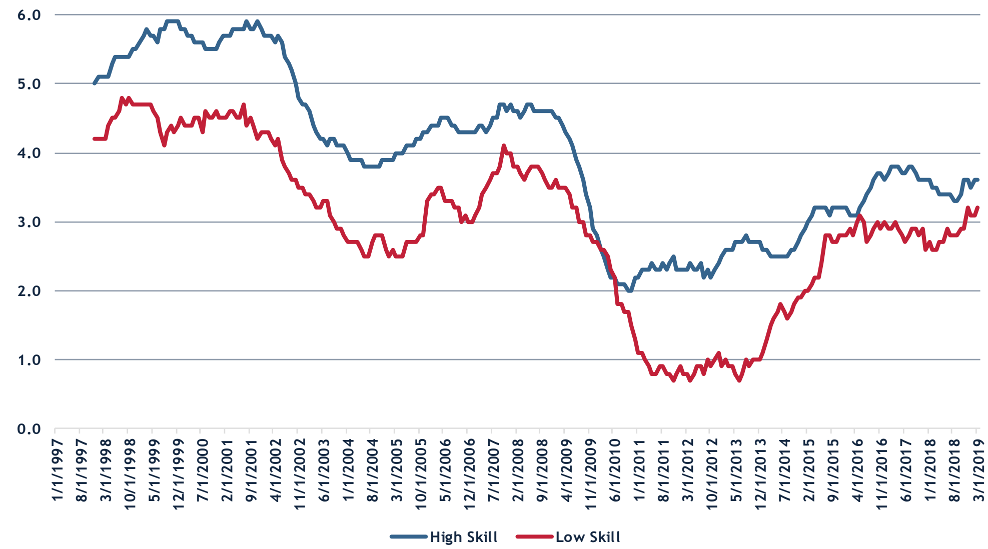


Source: Bureau of Economic Analysis

In addition to GDP, U.S. employment growth continues its surprising positive momentum. As of April, the U.S. economy added an average of 220,000 new jobs per month over the prior year and the national unemployment rate fell to 3.6%, the lowest level in 50 years. Reflecting this, wage growth is accelerating and the wage growth gap between high- and low-skilled workers is narrowing.

FIGURE 2

ANNUAL GROWTH IN AVERAGE WAGES BY SKILL LEVEL

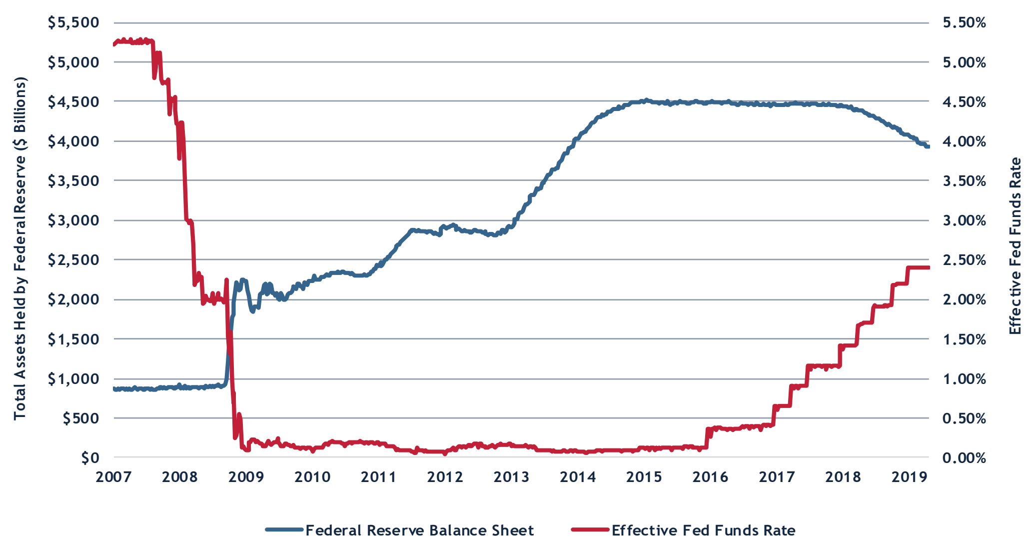


Source: Federal Reserve Bank of Atlanta

Despite accelerating wage growth, increases in unit labor costs and overall inflation remain quite low, most likely reflecting productivity gains across many sectors of the economy. Overall, actual and expected inflation remain close to 2%, the inflation rate targeted by the Federal Reserve and most other central banks.

FIGURE 3

THE FED FUNDS RATE AND THE SIZE OF THE FEDERAL RESERVE BALANCE SHEET



Source: Federal Reserve

With stronger than expected GDP and employment growth, historically low unemployment and little sign of accelerating inflation, policy makers at the Federal Reserve appear to have slowed or paused their long-signaled normalization of monetary policy. As such, the target overnight lending rate has increased from zero to 2.5% and the aggregate size of the Federal Reserve balance sheet has declined from approximately $4.5 trillion to slightly less than $4 trillion. Both of these measures will remain relatively static over the near-term and will likely only change in response to a significant deviation in growth (positive or negative) and inflation. Consistent with this, the U.S. yield curve has largely flattened following a brief inversion at the end of March, and expectations for GDP growth in 2019 remain around 2.5%.

The U.S. Property Market

The U.S. commercial property market remains remarkably healthy as the U.S. economy enters the 11th year of the current expansion. National average vacancy/availability rates for the major property types continue to slowly decline as net absorption of space slightly outpaces new supply in most markets. As expected later in an elongated cycle, property net operating income (NOI) growth is moderating with the exception of industrial property where growth remains quite strong. Reflecting this, U.S. commercial property continues to produce solid, albeit somewhat more moderate, returns with the NCREIF Property Index (NPI) recording a 1.8% total return for the first quarter of 2019, and a total return of 6.8% for the one-year period ending March 31, 2019. Performance during the quarter varied considerably by property type with industrial properties posting a 3.02% total return versus 1.35% for apartments. This variation was even greater for the trailing one-year period, with industrial property posting a 14.0% total return versus a 3.2% total return for retail property.

TABLE 1

NCREIF PROPERTY INDEX – TRAILING ONE-YEAR RETURN AS OF 2019 Q1

	Total NPI	Apartment	Industrial	Office	Retail
Total Return	6.8%	5.9%	14.0%	6.7%	3.2%
Income Return	4.6%	4.3%	4.8%	4.5%	4.7%
Capital Appreciation	2.2%	1.6%	8.9%	2.1%	-1.4%

Source: NCREIF

Going forward, total return expectations for property are more modest, with most of the total return anticipated to come from income rather than appreciation. Further, consensus forecasts gathered by PREA project modest negative capital appreciation in retail and office properties over the next several years. Overall, the total return consensus expectation for the unleveraged NCREIF Property Index is now slightly more than 5%. While this is lower than actual returns recorded in recent years, we do believe property performance will be competitive with other major asset classes over the next five years.

TABLE 2

CONSENSUS FORECAST FOR PROPERTY CAPITAL APPRECIATION

EXPECTED CAPITAL APPRECIATION	2018	2019	2020	2018 - 2022
All Property Types	1.5%	0.0%	-0.7%	0.4%
Office	0.9%	-0.6%	-1.6%	-0.1%
Retail	-0.7%	-1.3%	-1.3%	-0.6%
Industrial	4.5%	1.8%	0.5%	1.7%
Apartment	1.6%	0.8%	0.1%	0.9%

Source: PREA

Office

Just as the U.S. economy continues to defy the odds in the length and strength of its expansion, so too does the office market. Roughly 11 million square feet (msf) of space was absorbed in the first quarter of 2019, the strongest first quarter since 2006. Moreover, first-quarter demand exceeded the current expansion's historical first-quarter average by 35%. At the same time, roughly 9.6 msf was completed in the quarter, down from the nearly 14 msf delivered in the fourth quarter of 2018 and the lowest completion level since mid-2016. Vacancies remained flat quarter-over-quarter at 12.5%, but improved by 50 basis points (bps) year-over-year. Vacancies are at a cyclical low, matching levels last seen in mid-2007.

The tech powerhouses led the way in terms of demand. Austin and San Francisco ranked first and third in net absorption with 1.3 msf and 1.0 msf of new demand, respectively, in the quarter. As a share of inventory, Austin and San Francisco also remained in first and third place. Interestingly, Washington, D.C. ranked second in square footage absorbed; but, 18th when absorption is ranked as a share of inventory. Overall, 17 markets reported net absorption of 300,000 square feet (sf) or more, while only 10 markets reported meaningfully negative net absorption of 100,000 sf or more, including Philadelphia, Minneapolis and Jacksonville. On the supply side, the bulk of markets (45 of 63) reported minimal or no new completions. The most notable markets for new supply included Austin (2.8%); Raleigh (1.1%); Phoenix (1.0%); San Francisco (1.0%;) and Seattle (0.9%).

In terms of vacancies, 41 markets reported flat or declining levels, 12 markets reported a modest uptick (between 10 bps and 40 bps) and only ten metros reported a more meaningful increase. Jacksonville, Minneapolis and Fort Worth were among the weaker office performers, reporting both above-average vacancies and sizeable increases in vacancy in the quarter. In Jacksonville vacancies increased 170 bps to 14.5%, while Fort Worth and Minneapolis saw vacancies edge up 80 and 70 bps, respectively, to 17.6% and 18.2%. On the other end of the spectrum, Sacramento (12.3%; -140 bps); Fort Lauderdale (10.9%; -90 bps); and Charlotte (9.5%; -50 bps) reported a level of vacancy below the U.S. average and a better than average reduction in vacancy. The tightest markets in the quarter were San Francisco, Seattle, Raleigh, Orlando, Austin, Boston, New York, Salt Lake City, Charlotte and Tampa, all of which reported vacancies below 10%.

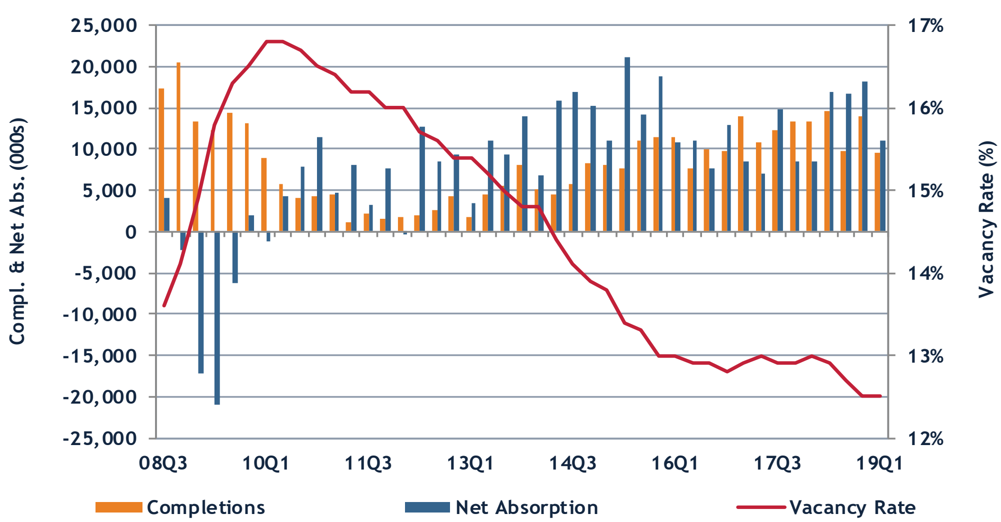
Going forward, we fully anticipate the broader U.S. office market will remain in equilibrium in the coming quarters with demand and supply roughly evenly matched. Despite some isolated softness in the quarter, the overall U.S. office market and the bulk of metropolitan areas are healthy. Commensurate with the expected equilibrium conditions, future rent growth is projected to be in the 3% to 5% range in the near term. Longer term, rent growth will moderate to 3% which will put downward pressure on cash yields as capital expenditures as a share of NOI remain high. Newer and renovated properties will outperform their older counterparts as the pressure on cash yields will be more limited.

TECH MARKETS ARE OVERWHELMINGLY AMONG THE TOP 10 TIGHTEST MARKETS (MARKETS WITH AN ABOVE-AVERAGE HIGH TECH CONCENTRATION HIGHLIGHTED BELOW)

Market	Inventory (SF x 1,000)	Completions (SF x 1,000)	Net Absorption (SF x 1,000)	Vacancy Rate (%)	Vacancy QDQ Change
San Francisco	99,372	1,000	1,039	5.20	-10
Seattle	96,133	897	366	7.20	50
Raleigh	59,498	627	534	7.60	0
Long Island	30,732	0	141	8.10	-50
Orlando	37,410	25	-169	8.10	50
Austin	46,898	1,293	1,291	8.40	-20
Boston	194,590	181	690	8.90	-30
Riverside	23,959	0	60	8.90	-30
New York	499,001	0	260	9.20	0
Salt Lake City	35,815	136	124	9.30	0

Source: CBRE-EA

CBRE-EA MARKET FUNDAMENTALS



Source: PREA, 2018 Q4

OFFICE	
Vacancy Rate	12.5%
12-Month Historical Trend	
Vacancy Change	↓
Rent	↑
Absorption	↑
Completions	↓
Cap Rates	↔
Transaction Volume	↓

Apartment

The apartment market remained a steady performer in the first quarter of 2019. Vacancy, at 4.6%, was up 20 basis points (bps) quarter-over-quarter (QOQ); but, down 20 basis points year-over-year (YOY). Overall, vacancies continue to linger in the 4%-5% range, as they have for the past 20 quarters. Roughly 16,200 units were absorbed in the quarter and nearly 286,000 were absorbed over the past four quarters. The rolling four-quarter demand total was down from the exceptionally strong fourth (317,000 units) and third (346,000 units) quarters of 2018; but, still exceeded the average over the past five years by 16.3%. On the supply side, nearly 40,000 units were delivered to the market in the most recent quarter, outpacing net absorption by 23,000 units and pushing vacancies up a modest 20 bps in the quarter. Over the past four quarters, however, the net absorption of 286,000 units outpaced completions by nearly 20,000 units, leading to the YOY improvement in vacancy. Construction activity has trended down in the most recent quarters, however, this will change as roughly 313,000 units are expected to be delivered in 2019. This year will likely be the high watermark for construction this cycle as there are only 163,000 units underway for delivery beyond 2019. Indeed, we expect rising construction costs will temper construction activity in the near term.

With overall healthy conditions in the apartment market, rents advanced 3.0% YOY, essentially in line with the previous quarter's growth rate, but a clear acceleration from the roughly 2.0% rate that persisted from late-2016 through mid-2018. Regionally, all markets showed an uptick in rents. That said, there were vast differences in performance by market, with rent growth ranging from a high of 8.0% in Las Vegas and Phoenix to very modest 0.2% growth in Houston. In total, 11 markets reported rent growth of 4.5% or better; including Las Vegas (8.0%), Phoenix (8.0%), Tucson (7.7%), Birmingham (6.1%), Atlanta (5.4%), Greensboro (5.3%), Sacramento (5.1%), Memphis (5.0%), Riverside (4.8%), Austin (4.7%) and Greenville (4.6%). Absent from this list of top performers are Coastal California, Northeast, Midwest and Pacific Northwest markets. Many markets in the aforementioned regions reported still solid growth in the 2.5%-4.0% range (including Boston, Los Angeles, Minneapolis, San Diego, San Francisco, San Jose and Seattle); however, greater construction activity relative to many of the smaller top-performing rent growth markets weighed on growth. Still, their ability to show solid, above-inflation growth points to the health of the market.

The ongoing expansion and a lack of for-sale housing should bode well for apartment demand and rent growth. We continue to build too few housing units to meet the current level of new household formations. As such, rent growth will be healthy, in the 3%-5% range near term.

Markets that will likely outperform, particularly as new supply is absorbed, include the Southeast, Northern California, Suburban Boston and the Southwest. Growth in the Midwest will be more moderate, driven by demographic factors, while the Northwest (Seattle and Portland) and Mideast (New York and Washington, DC) will be more moderate due to supply growth.

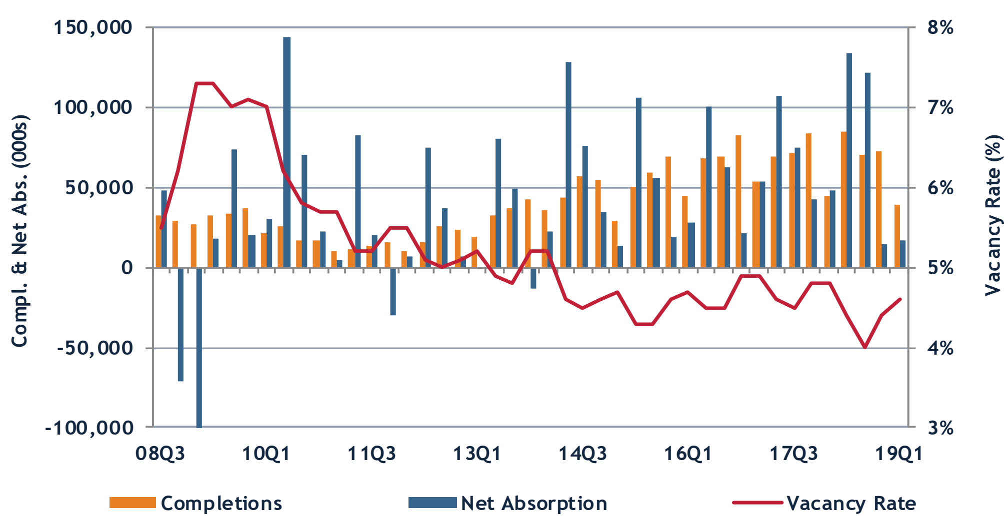
ANNUAL RENT GROWTH LEADERS AND LAGGARDS

FIRST QUARTER 2019

Metro Leaders	Percent Change	Metro Laggards	Percent Change
Las Vegas	8.00%	Dallas	2.30%
Phoenix	8.00%	Oklahoma City	2.30%
Tucson	7.70%	New York	2.30%
Birmingham	6.10%	Newark	1.80%
Atlanta	5.40%	Orange County	1.80%
Greensboro	5.30%	St. Louis	1.80%
Sacramento	5.10%	Cleveland	1.70%
Memphis	5.00%	Kansas City	1.70%
Riverside	4.80%	Honolulu	1.00%
Austin	4.70%	Houston	0.20%

Source: CBRA-EA/RealPage,Inc.

CBRE-EA APARTMENT MARKET FUNDAMENTALS



APARTMENT	
Vacancy Rate	4.6%
12-Month Historical Trend	
Vacancy Change	↓
Rent	↑
Absorption	↓
Completions	↓
Cap Rates	↔
Transaction Volume	↔

Industrial

The industrial market remained exceptionally tight in the first quarter of 2019, with availability of only 7.0%. Availability was down 30 basis points (bps) year-over-year (YOY), but was flat quarter-over-quarter, remaining at its lowest level since the end of 2000. Both construction and tenant activity was slow in the quarter; however, this was likely a function of today's low overall availability and a lack of available quality space. Only 33 million square feet (msf) was completed in the quarter, the lowest quarterly delivery total since early 2015, and only 32 msf was absorbed, the lowest quarterly demand since early 2012. Again, this is not an indication of softness in the market, but rather a reflection of the 7.0% availability rate. Evidence of the strength of the market was the 8.1% YOY increase in rents in the first quarter, an acceleration from the 7.8% growth in the fourth quarter and the 5.8% growth reported a year ago.

One thing that has become crystal clear is vacancies are exceptionally low everywhere, including smaller secondary and tertiary markets. In fact, only three markets—Dayton, Baltimore and Wilmington, DE—had availability over 10%. The West Coast remains the tightest of the regions; however, the Midwest is showing substantial improvement, with Cincinnati and Indianapolis now among the top ten tightest markets. In terms of demand, not surprisingly, the nation's largest markets reported the greatest square footage absorbed. Looking at demand as a share of inventory, however, shows a different picture with many smaller markets bubbling to the top. Jacksonville, Kansas City, Las Vegas, Portland, Memphis, Orlando, Phoenix, Indianapolis and Louisville rank among the 15 strongest metros based on absorption as a share of inventory.

The strength in the secondary and tertiary markets is partially attributable to the overall strength in the U.S. economy, but is more likely due to changes in supply chain management and the race to trim delivery times. Further, in an era defined by instant gratification, the lines between the retail and industrial market continue to blur, a factor that should further bolster industrial demand. Overall, omni-channel retailing has put greater emphasis on retailers' industrial portfolios and is spurring additional demand for space in non-gateway markets. Today's retailers need to be able to access population across all markets, not just gateway or growth markets, thus allowing for the resurgence of secondary and tertiary markets. Additionally, as retailers trim store counts, secondary and tertiary markets are disproportionally affected on this front; the loss of retail stores in these markets will continue to boost demand for industrial space as retailers focus on accessing customers through door-to-door delivery.

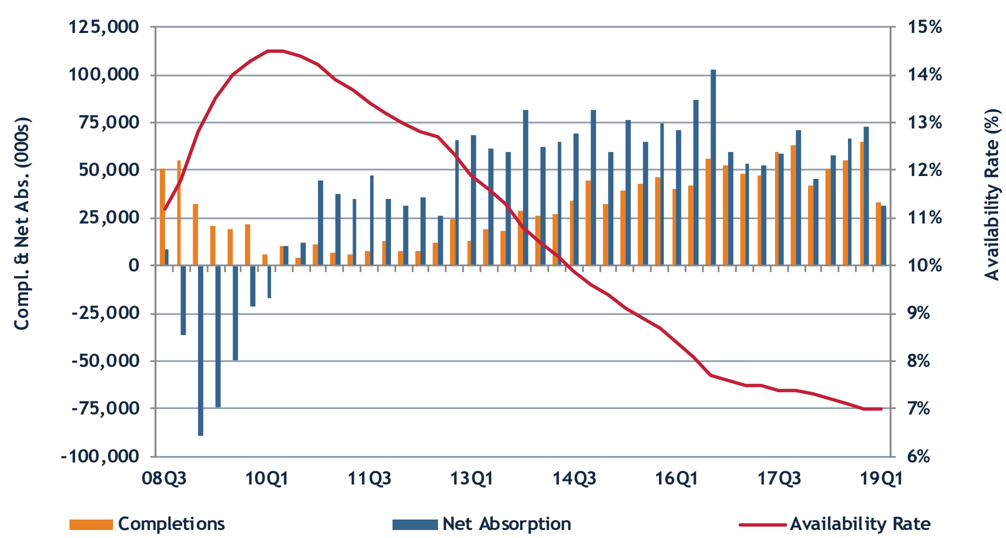
Despite the more modest completion levels in the first quarter, the current pipeline suggests that deliveries for 2019 will top 200 msf, similar to the supply totals over the past two years. Demand, meanwhile, should remain solid, keeping availability low. Rent growth, which we were expecting to moderate, continues to show capacity for growth beyond our expectations. Rent growth will likely top 5% on average in 2019; however, some markets, like Southern California, Seattle and Central Florida, will likely exceed this.

SMALLER MARKETS ARE POSTING INCREASINGLY STRONG DEMAND
TOP 15 MARKETS FOR DEMAND - FIRST QUARTER 2019

Market	As a Share of Inventory	Market	Thousands of Square Feet
Fort Worth	1.83%	Riverside	4,423
Jacksonville	1.50%	Fort Worth	4,400
Greenville	1.47%	Dallas	3,339
Kansas City	1.11%	Kansas City	3,143
Las Vegas	1.09%	Chicago	2,921
Portland	1.08%	Greenville	2,915
Dallas	0.87%	Phoenix	2,349
Memphis	0.82%	Indianapolis	2,243
Orlando	0.78%	Portland	2,164
Phoenix	0.76%	Philadelphia	2,019
Indianapolis	0.72%	Memphis	1,880
Riverside	0.65%	Jacksonville	1,440
Louisville	0.63%	Orlando	1,324
Stamford	0.61%	Louisville	1,303
Dayton	0.58%	Newark	1,180

Source: CBRE-EA

CBRE-EA INDUSTRIAL MARKET FUNDAMENTALS



INDUSTRIAL	
Availability Rate	7.0%
12-Month Historical Trend	
Availability Change	↓
Rent	↑
Absorption	↓
Completions	↔
Cap Rates	↓
Transaction Volume	↓

Retail

Retail bankruptcy announcements continued into early 2019 with Gymboree and Charlotte Russe both announcing they would close all stores. While these announcements are highlighted in the press, they ignore the fact that there continues to be net new store openings. In fact, IHL Group estimated that in 2018 for every retailer announcing store closures, two more were announcing openings. In aggregate, IHL estimates more than 2,000 new stores opened, on net, in 2018. The data from CBRE-EA confirms this as retail demand has remained positive and availability has continued to decline. On net, nearly 10 million square feet (msf) of space was absorbed in the first quarter of the year and more than 50 msf was absorbed over the previous four quarters. Construction activity continues to wind down with only 4 msf of space completed in the first quarter, the lowest quarterly completion level ever reported. Further, over the previous four quarters, less than 36 msf was added to the market, again a record low. The combination of moderate demand and minimal new supply allowed availability to improve to 6.2% in the first quarter of 2019, down from 6.3% in the previous quarter and 6.5% a year earlier.

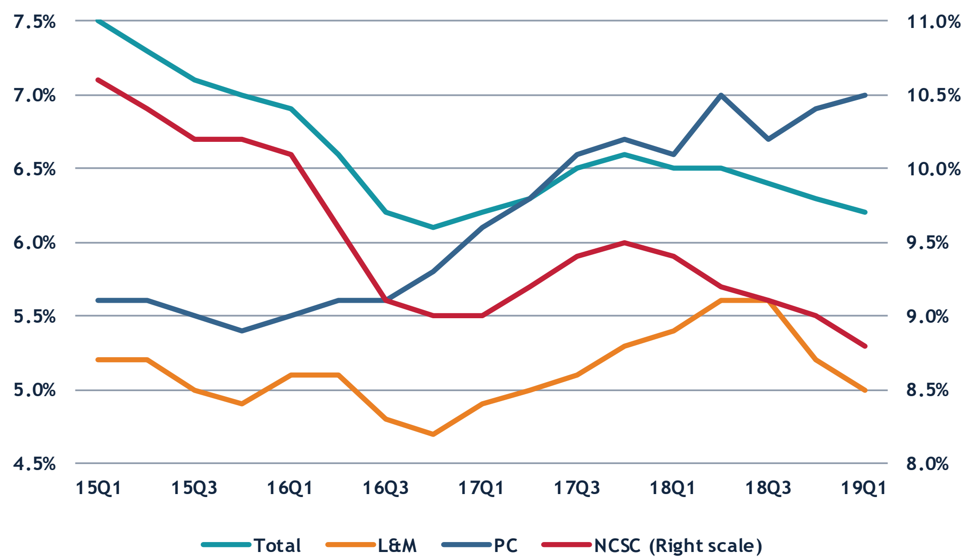
Within the broader retail market, performance remains uneven. The neighborhood and community shopping center (NCSC) segment of the market continues to outperform by a significant margin. The lifestyle and mall (L&M) sector showed modest improvement while the power center (PC) segment was the sole laggard. Availability in the NCSC declined to 8.8%, down 20 bps from the fourth quarter and 60 bps from a year earlier. NCSC availability is now at its lowest level since mid-2007. The L&M segment reported availability of 5.0%, down from 5.2% in the fourth quarter and 5.4% a year ago. On the flip side, PC availability edged higher to 7.0%, up 10 bps from the prior quarter and 40 bps year over year (YOY). PC availability has now increased on a YOY basis for 11 consecutive quarters.

The PC segment of the market continues to be hampered by soft demand. Roughly 300,000 sf of space was returned to the market in the first quarter while 1.1 msf was given back over the past four quarters. In comparison, 5 msf of NCSC was absorbed in the most recent quarter and over 24 msf was absorbed over the previous four quarters. Likewise, the L&M sector reported positive quarterly and four-quarter absorption of 1 msf and 5 msf, respectively.

All tiers of markets—primary, secondary and tertiary—reported improving retail availability. In total, 46 metro areas reported flat or declining availability quarter-over-quarter. Oklahoma City, Sacramento, Cincinnati, Philadelphia, Portland, Tampa, Long Island, Newark and Indianapolis reported the greatest improvement in availability, ranging from 180 to 30 bps. Generally speaking, there were very few markets with significant increases in availability.

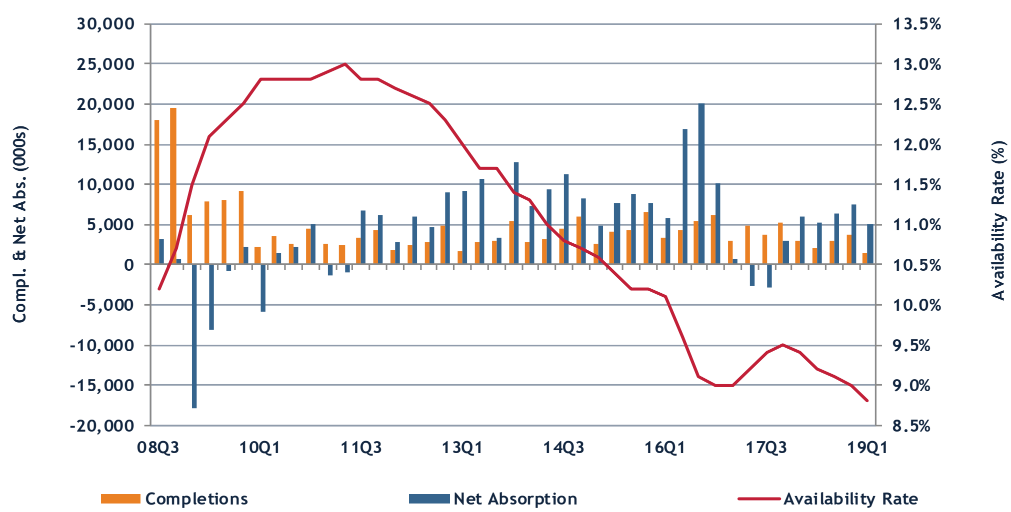
Going forward, the retail market is expected to remain in equilibrium. Availability will likely nudge lower, with minimal new supply and positive demand expected. That said, rent growth will be tempered in the near term as retail headlines create headwinds to growth. By 2020 or 2021, rent growth should gain traction, but will remain in the 2-3% range.

BANKRUPTCIES ARE IMPACTING POWER CENTERS; TRADITIONAL SHOPPING CENTERS ARE OUTPERFORMING (COMPARATIVE AVAILABILITY RATES)



Source: CBRE-EA

CBRE-EA N&C SHOPPING CENTER MARKET FUNDAMENTALS



RETAIL	N&C Shopping Center	Lifestyle & Mall	Power Center
Availability Rate	8.8%	5.0%	7.0%
12-Month Historical Trend			
Availability Change	↓	↓	↑
Rent	↑	↑	↑
Absorption	↔	↑	↓
Completions	↓	↓	↓
Cap Rates	↔	↔	↔
Transaction Volume	↓	↓	↓

Capital Markets

A more cautious transaction market has emerged in 2019. Volumes were down relative to 2018 levels as investors reacted to the uptick in the ten-year treasury yield at the end of 2018. Per Real Capital Analytics (RCA), $106.4 billion in properties changed hands in the quarter, an 11% year-over-year (YOY) decline. Both individual ($83.9 billion) and portfolio-level ($22.0 billion) transactions were down 8.2% and 8.9%, respectively. Meanwhile, less than $1 billion in entity-level transactions occurred in the quarter, down 89% from a year ago, marking only the second time since 2012 that entity volume dropped below $1 billion.

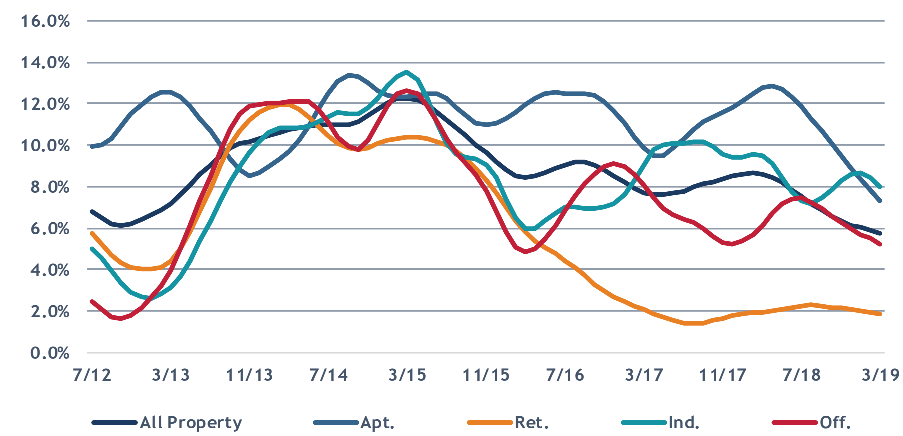
By property type, sales were lighter in the office, industrial and retail sectors, while apartment and seniors housing volumes were essentially flat. A respective $26 billion, $18 billion and $12 billion in office, industrial and retail properties changed hands, all down between 14% and 16% YOY. Apartment sales totaled nearly $36 billion, the most among the property types, while just under $4 billion in seniors housing properties closed in the quarter; again, both were relatively flat YOY. The six major markets—Boston, New York, Washington DC, Chicago, Los Angeles and San Francisco—reported a combined $40 billion in sales, down 16% YOY. Non-major market transaction volumes were also down by 8% YOY, with $66 billion in properties trading.

While volumes were down, pricing remained firm across the board. The RCA Commercial Property Price Index (CPPI) increased both quarter over quarter (QOQ) and YOY among all property types and market aggregates. With industrial being the most sought after property type among the four core property types today, it is not surprising that it led the way in terms of price appreciation. Indeed, the RCA CPPI for industrial increased 2.3% QOQ and 8.0% YOY. The next strongest gain was in the apartment sector (1.2% QOQ, 7.3% YOY), which again is unsurprising given the level of investor interest in the sector. Office price appreciation was still a healthy 1.0% QOQ and 5.2% YOY, while retail price growth was more modest at 0.3% QOQ and 1.0% YOY. By market segment, non-major market pricing outpaced the six major markets on a YOY basis with gains of 6.0% versus 4.5%. On a QOQ basis, however, the opposite was true with the major markets recording price appreciation of 1.8% versus 1.0% for the non-major market index.

RCA cap rates were generally flat across the four major property types. Among institutional investors, NCREIF cap rates showed similarly flat conditions, except for industrial where cap rates continued to compress. Interestingly, there is a growing disconnect in pricing for office and retail. Retail REIT implied cap rates are currently a sizeable discount to private market cap rates and the spread between them is widening. The REIT implied cap rates for malls is roughly 250 basis points (bps) higher than the NCREIF average, while the REIT implied shopping center cap rate is 200 bps above the NCREIF cap rate. Similarly, the REIT implied office cap rates are 250 and 150 bps above the NCREIF CBD and Suburban office cap rates, respectively. A lack of transactions in the retail sector, in particular, is making price discovery more challenging; however, we believe the public markets have likely overshot on the downside, particularly as retail fundamentals remain solid and wages are finally beginning to accelerate. That said, malls, power centers and lifestyle centers will likely have more upward pressure on cap rates than traditional grocery-anchored centers, given their exposure to apparel.

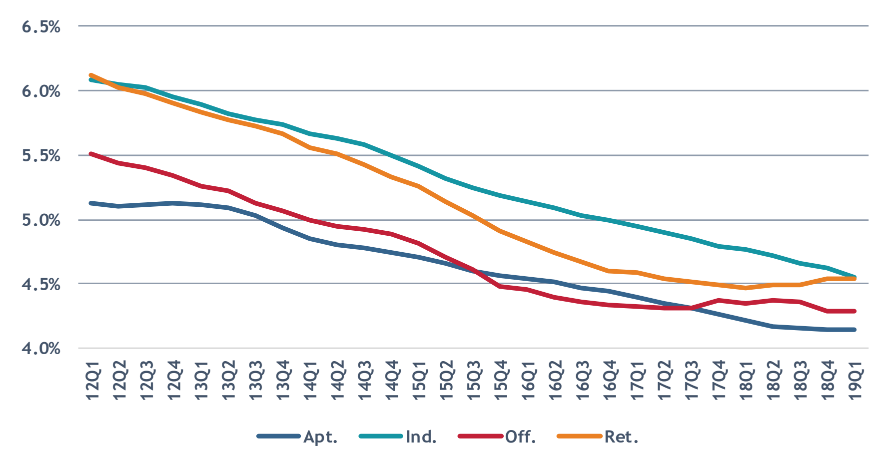
In general, the era of declining cap rates is likely over, except for industrial, where there is room for continued compression, especially in second-tier markets like in the Midwest (Detroit, Indianapolis and Minneapolis), Southwest (Las Vegas, Phoenix, Reno and Salt Lake City) and Southeast (Charleston, Charlotte, Orlando, Raleigh and Tampa). In this environment, income will once again drive overall returns as appreciation flattens out. Total returns will continue to moderate with the PREA consensus forecast averaging roughly 5.0%, annually, over the next three to five years, a marked deceleration from the double-digit returns a few years ago, but competitive with the expected returns in other asset classes.

RCA CPPI YEAR-OVER-YEAR GROWTH



Source: RCA

NPI CAP RATES BY PROPERTY TYPE
(MARKET VALUE-WEIGHTED, 4-QUARTER MOVING AVG.)



Source: NCREIF

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