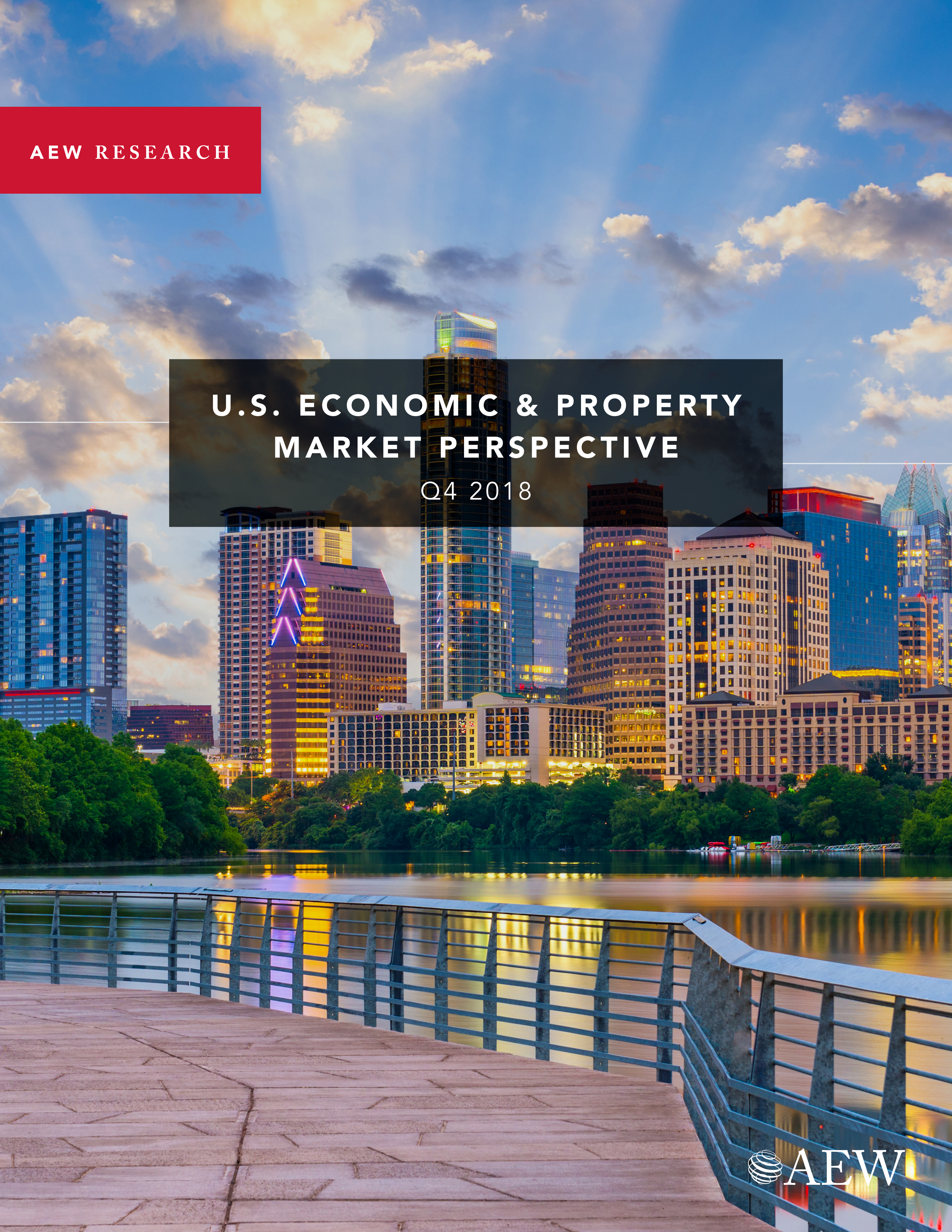
AEW RESEARCH

U.S. ECONOMIC & PROPERTY MARKET PERSPECTIVE

Q4 2018



AEW

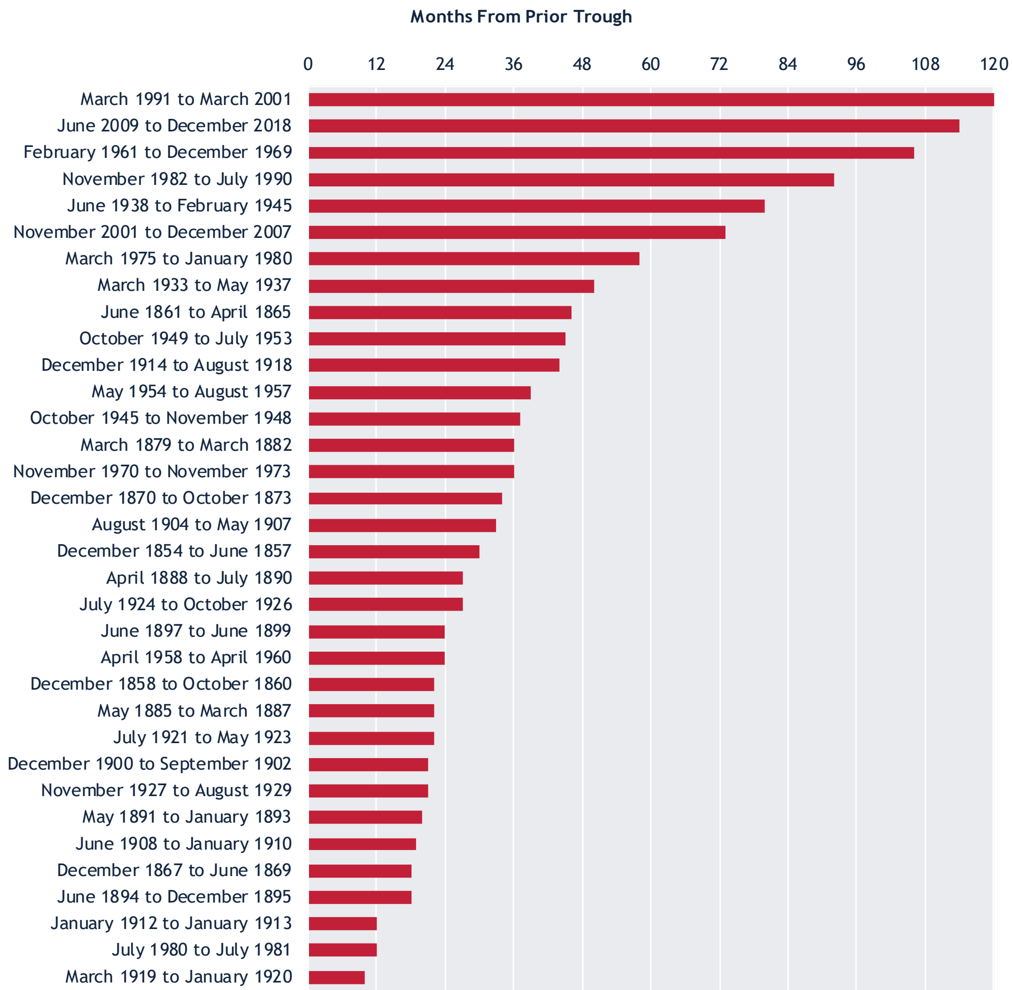
Prepared by AEW Research, March 2019

The U.S. Economy

The current U.S. expansion is now the second-longest expansion since records began in the 1850s and, by June, will surpass the longest prior expansion (March 1991 through March 2001), in aggregate, exceeding ten years of continuous growth.

FIGURE 1

LENGTH OF CURRENT AND PRIOR EXPANSIONS

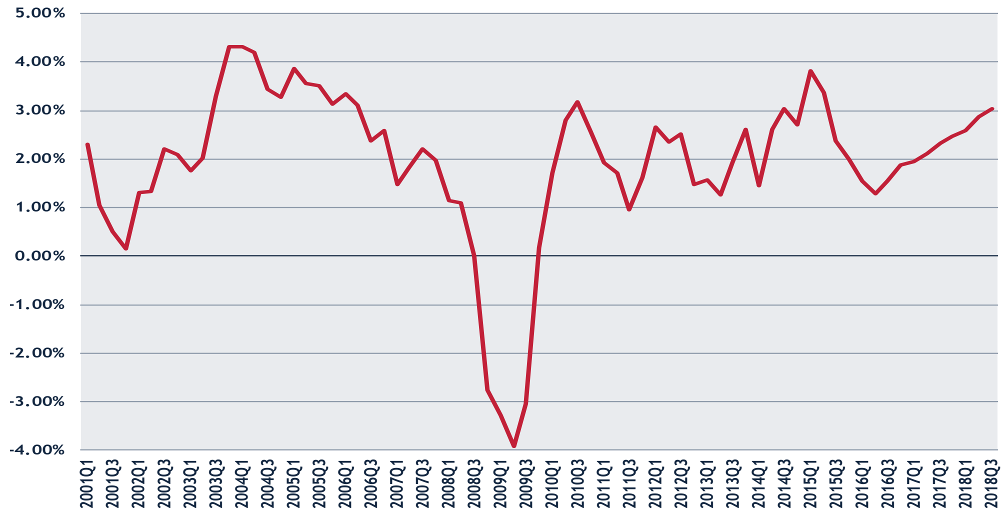


Source: National Bureau of Economic Research (NBER) - Recession Dating Committee

In contrast to most prior long expansions, economic growth has accelerated over the past year in response to the stimulative effects of large tax cuts approved at year-end 2017 and the significant increase in government spending approved in early 2018. Overall, real GDP grew approximately 3% during 2018 compared with growth below 2% during 2016. Similarly, total employment growth has accelerated from approximately 175,000 new jobs per month at the end of 2016 to more than 230,000 jobs per month over the past year.

FIGURE 2

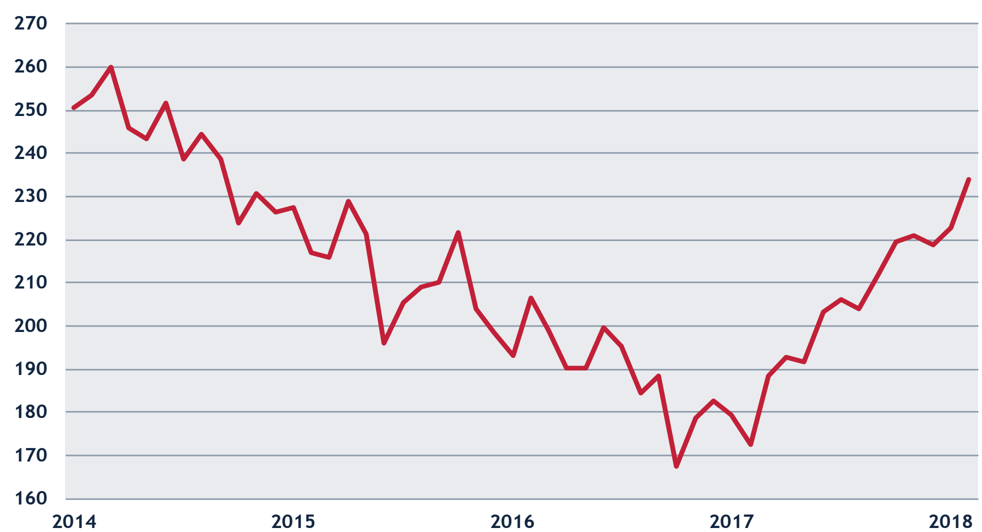
YEAR-OVER-YEAR GROWTH IN REAL GDP



Source: Bureau of Economic Analysis (BEA)

FIGURE 3

AVERAGE MONTHLY JOB GROWTH OVER THE PRIOR YEAR (000s)

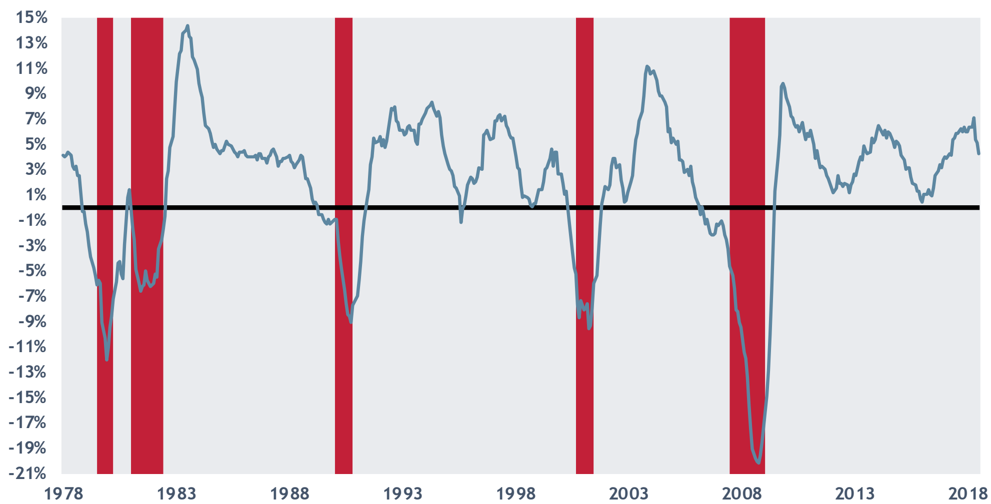


Source: Bureau of Labor Statistics (BLS)

Despite the stronger growth of the past year, near-term growth concerns persist. So-called 'hard' data embodied in measures such as the Conference Board's index of leading economic indicators suggest positive, albeit slowing, growth over the next 12-24 months (see Figure 4). At the same time, 'soft' data, such as measures of consumer sentiment, signal much greater economic risk. Figure 5 shows the difference in consumer attitudes about their current economic situation and their expectations for future conditions. As shown, when future expectations drop well below assessment of current conditions, recession (shaded area) is typically at hand.

FIGURE 4

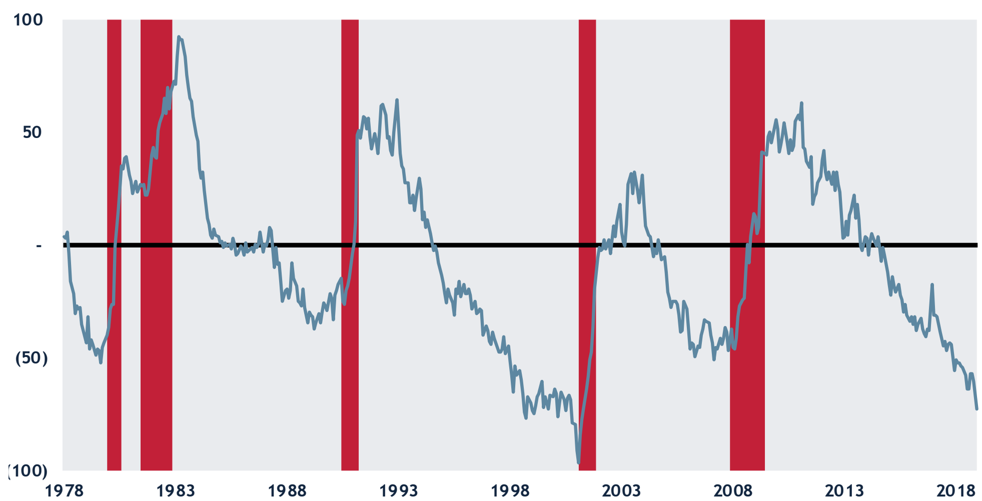
YEAR-OVER-YEAR GROWTH IN INDEX OF LEADING INDICATORS VS. PAST RECESSIONS



Source: Conference Board

FIGURE 5

DIFFERENCE BETWEEN HOW CONSUMERS FEEL ABOUT TODAY AND THE FUTURE VS. PAST RECESSIONS

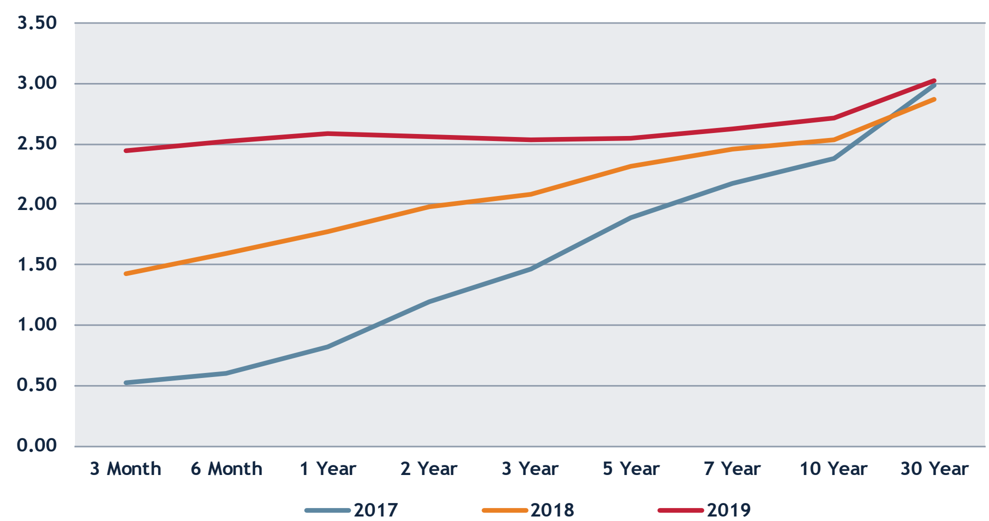


Source: Conference Board

For its part, the Federal Reserve appears to be preparing to slow its steady move towards normalization of monetary policy. Over the past three years, the FOMC has increased their target for the overnight borrowing rate from zero to 250 basis points, most recently raising the rate 25 basis points in December. Since the December rate increase, however, various Federal Reserve officials have indicated that a pause in normalization is likely. This change in forward guidance now suggests that future increases in the Fed Funds rate will likely stop at 3% or less. As a result, longer rates have settled back to levels below 3% and the yield curve has flattened significantly. Consistent with both the 'hard' and 'soft' economic data discussed above, the flattening yield curve also signals slower growth ahead.

FIGURE 6

FLATTENING YIELD CURVE



Source: Moody's Analytics

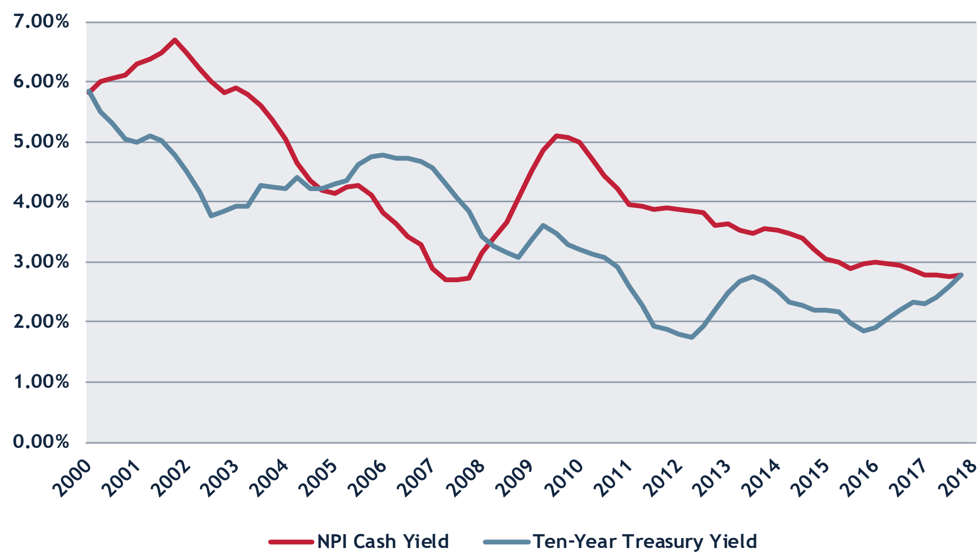
The U.S. Property Market

Reflecting stronger economic growth during 2018, U.S. commercial property market conditions are sound. Vacancy and availability rates remain at cycle lows across the major property types and rent growth, outside of retail property, continues to be stronger than expected in many markets. Despite generally positive operating conditions, significant pricing differences between the private direct market and the publicly traded listed REIT market persist. These differences are particularly acute within retail properties and, to a somewhat lesser extent, office properties with implied property capitalization rates in the public market currently 100-200 basis points higher than appraisal capitalization rates in the private market.

At the same time, the cash (income less capital expenditures) yield in the private market has now fallen to approximately the same level as the ten-year Treasury yield (Figure 6) for the first time since the financial crisis. While this does not necessarily suggest immediate valuation risk, investors will likely require higher current yield unless there remains a reasonable near-term income growth narrative for the sector. Reflecting this, consensus forecasts for go-forward property investment returns (Table 1) have moderated considerably; the 2020-projected total return is expected to moderate to less than 5%, a marked slowdown from the nearly 8% average annual growth over the past three years.

FIGURE 7

PROPERTY CASH YIELD AND THE TEN-YEAR TREASURY YIELD



Source: NCREIF

TABLE 1

PREA CONSENSUS RETURN EXPECTATION SURVEY RESULTS

2018 Q4 Survey	2018	2019	2020	2018 to 2022
NPI Total Return	7.6%	5.7%	4.4%	5.4%
Income Return	4.6%	4.5%	4.6%	4.7%
Capital Appreciation	2.4%	1.0%	-0.4%	0.5%

Source: PREA, 2018 Q4

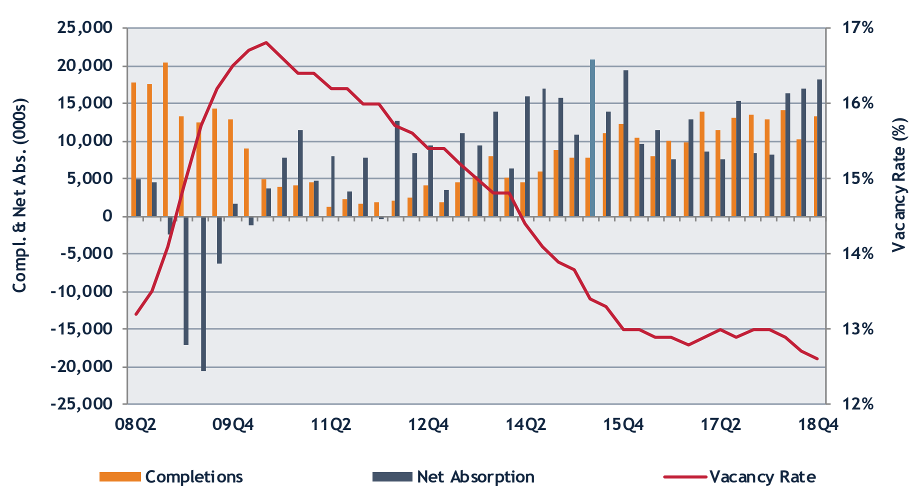
Office

The ongoing U.S. economic expansion continues to translate into improving office market fundamentals. According to CBRE-EA, office vacancies dropped to 12.6% in the fourth quarter of 2018, down 10 basis points (bps) quarter over quarter and 40 bps year over year. Office vacancies are now at their lowest level in 11 years. Demand totaled 18.1 million square feet (msf) for the quarter and nearly 60 msf for the year. Overall, net absorption for the year increased 50% from 2017. The strong demand in 2018 outpaced completions of roughly 50 msf. Additionally, while this was the second year in a row in which 50 msf was delivered to the market, the current expansion has been marked by exceptionally low levels of supply growth in general.

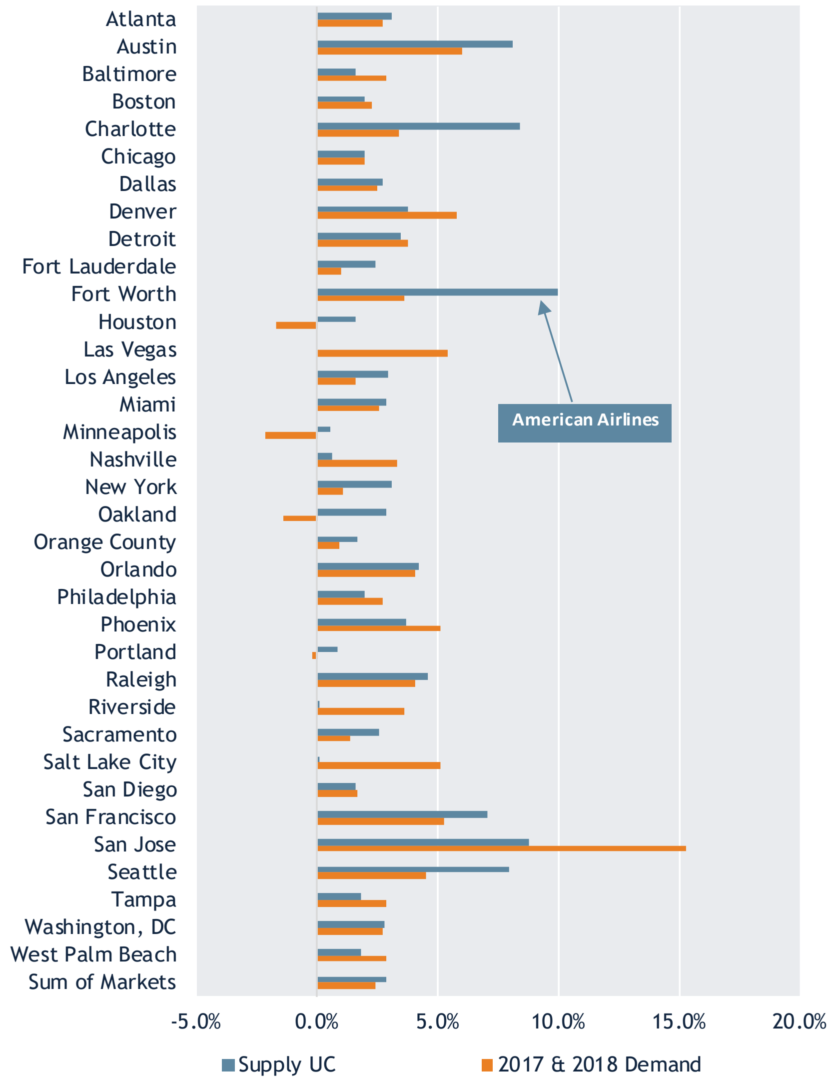
Regionally, tech-centric markets remained strong. Demand as a share of inventory in San Jose, San Francisco, Denver, and Austin ranged from 15.3% to 5.3% over the past two years, far outpacing the U.S. average of 2.4%. Further, San Francisco, Seattle, Raleigh, New York and Boston all reported single-digit vacancies. With top-tier major markets exceptionally tight, secondary markets like Salt Lake City, Fort Worth, Riverside and Nashville are exhibiting strong demand, and the two-year absorption rates among these markets ranged from 5.1% to 3.3%. Only a few markets showed weak demand or a significant supply/demand imbalance, and most of these markets were located in the Midwest (Columbus, Indianapolis, Milwaukee, Minneapolis and St. Louis). Fort Worth has a sizeable pipeline relative to demand; however, this is overstated as it includes a build-to-suit for American Airlines.

Going forward, both economic and employment growth are expected to slow in the coming quarters, and we are anticipating a similar moderation in office demand. Supply, meanwhile, is peaking for this cycle and much of the space underway has significant preleasing. In the near term, supply may slightly outpace new demand, leading to a slight uptick in vacancies. Still, we expect the market will remain in equilibrium with relatively low vacancies and rent growth in the 3% to 5% range. Overall, however, AEW will continue to approach the sector with caution, given the headwinds of increased space densification, rising tenant improvement costs, higher taxes and the generally high operating costs and capital-intensive nature of the sector.

CBRE-EA OFFICE MARKET FUNDAMENTALS



OFFICE SUPPLY/DEMAND OUTLOOK
SHARE OF INVENTORY



Source: CBRE-EA, CoStar

OFFICE	
Vacancy Rate	12.6%
12-Month Historical Trend	
Vacancy Change	↓
Rent	↑
Absorption	↑
Completions	↔
Cap Rates	↓
Transaction Volume	↔

Apartment

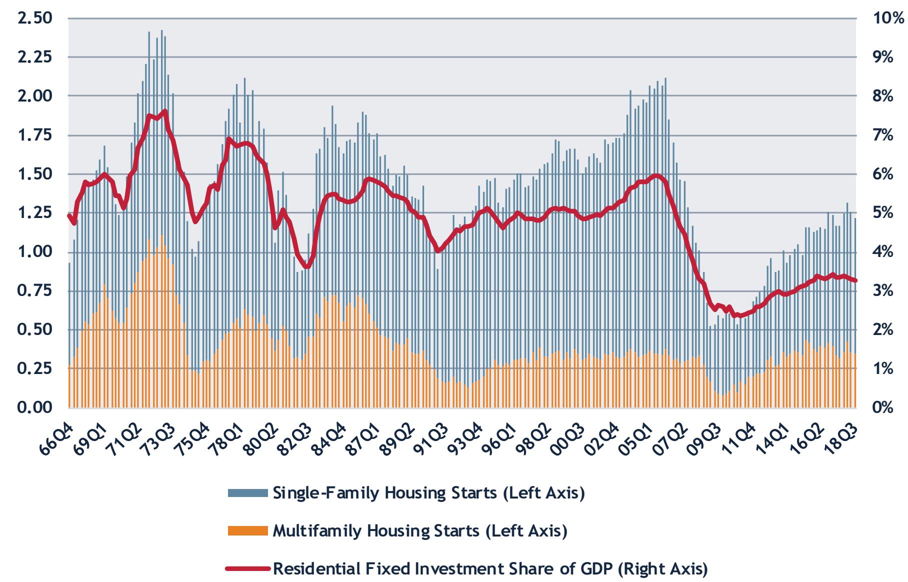
The biggest story in the apartment sector for 2018 was the resiliency of demand and the subsequent pick up in rent growth. Ten years into the expansion and apartment demand growth accelerated for the fourth consecutive year. Overall, nearly 287,000 units were absorbed on net in 2018, the greatest annual demand since 2000, per CBRE-EA. New completions totaled 268,000 units in 2018, the fourth consecutive year deliveries topped 200,000 units; of note, however, completions were down 2.2% from the 274,000 units delivered in 2017. Vacancies closed the year at 4.5%. As is typical in the fourth quarter, vacancies did edge higher (50 basis points); however, they were down 20 basis points (bps) year-over-year. More importantly, rent growth accelerated to 2.8% among the nation's 62 largest markets (3.3% in the top 50 markets), which bucked the trend of slowing growth over the previous two years.

While supply has been steady, we continue to believe that the U.S. remains undersupplied with respect to overall housing. Residential housing investment is peaking this cycle at levels typically seen in the depths of a downturn, not the height of an expansion. The exceptionally low levels of single-family housing construction is lending support to the multifamily market, which is working to fill the void. Furthermore, even apartment markets where construction has been heightened have reported significant improvements in rent growth. Austin, in particular, which sustained a 0.8% reduction in rents in 2017, reported growth of 4.5% in 2018. Other hotbeds for construction activity reported a similar improvement as well. Rent growth in Raleigh/Durham, San Francisco and Atlanta improved to 3.7%, 4.0% and 4.8% from 2.0%, 1.6% and 2.7%, respectively, in 2017. Pittsburgh, Phoenix, West Palm Beach, Las Vegas, Nashville, Fort Lauderdale, Boston, Washington DC and Charlotte also reported a notable acceleration in rent growth. On the other end of the spectrum, markets that reported a moderation in rent growth included Houston, New York, Seattle, Sacramento and Minneapolis. Of note, Sacramento and Minneapolis still reported healthy growth of 4.3% and 3.1%, respectively, while Houston, New York and Seattle posted more restrained gains of 0.2%, 0.9% and 2.7%.

Going forward, 2019 will likely be the year of peak apartment deliveries for this cycle. Currently, there are more than 400,000 units underway across the country with three-quarters of these units expected to be completed in 2019. Based on recent demand trends, however, the total pipeline underway will be absorbed in less than 1.5 years. As such, we expect the market will remain in equilibrium. Rent growth will be healthy, in the 3%-5% range, with higher near-term growth in select markets and 3% long-term growth in most markets. We expect the Southeast, Northern California, suburban Boston and the Southwest will experience the greatest growth while growth in the Midwest, Pacific Northwest and Mideast will be more moderate. Seattle, Portland and New York will experience more moderate growth due to new supply while the Midwest will be saddled by weaker demographic trends and relative affordability in the for-sale housing segment.

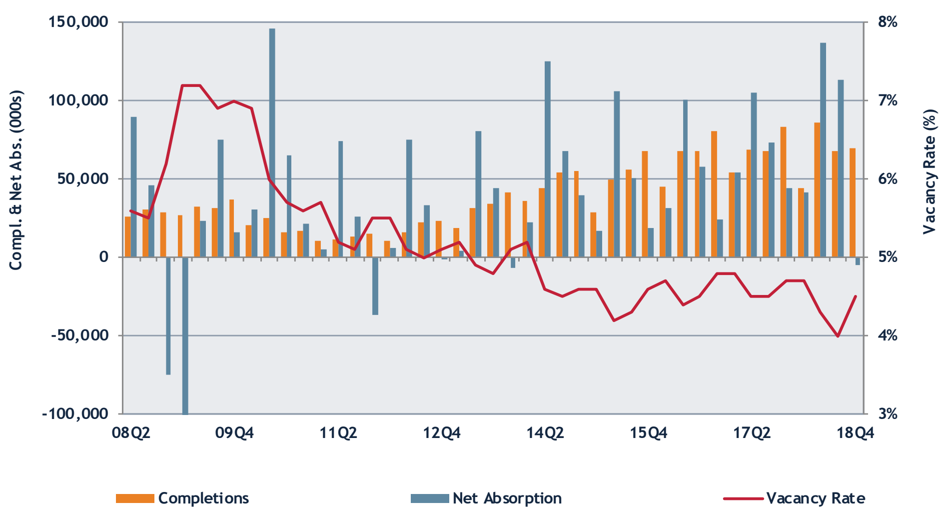
HOUSING PEAKING AT PRIOR TROUGH LEVELS

HOUSING STARTS (MILLIONS) AND RESIDENTIAL FIXED INVESTMENT SHARE OF GDP



Source: Commerce Department

CBRE-EA APARTMENT MARKET FUNDAMENTALS



APARTMENT	
Vacancy Rate	4.5%
12-Month Historical Trend	
Vacancy Change	↓
Rent	↑
Absorption	↑
Completions	↓
Cap Rates	↔
Transaction Volume	↑

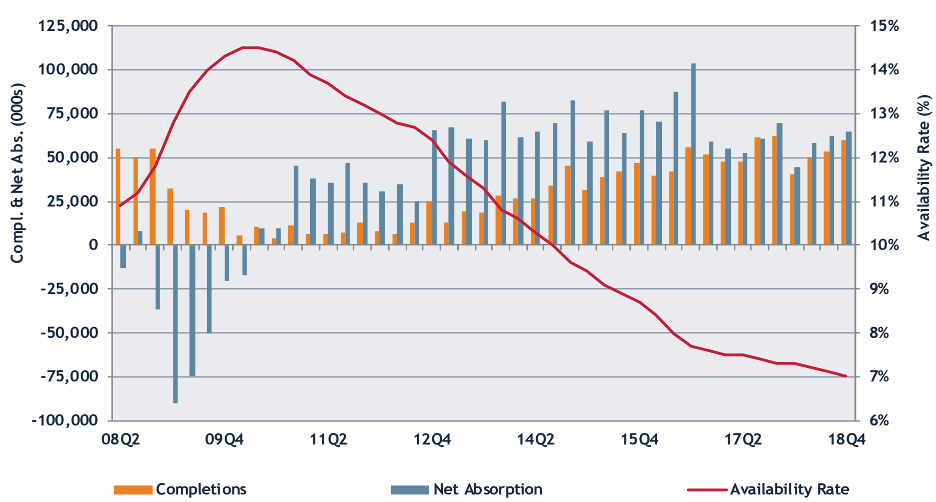
Industrial

The industrial sector remained the darling of the four core property types with declining availability and the strongest rent growth of the four sectors during the year. Availability dropped to 7.0% in the fourth quarter of 2018, down 10 basis points (bps) from the previous quarter and 30 bps year-over-year. Availability is now at its lowest level since the end of 2000. Meanwhile, rent growth accelerated to 7.4% on a year-over-year basis in the fourth quarter, up from 6.2% a year ago.

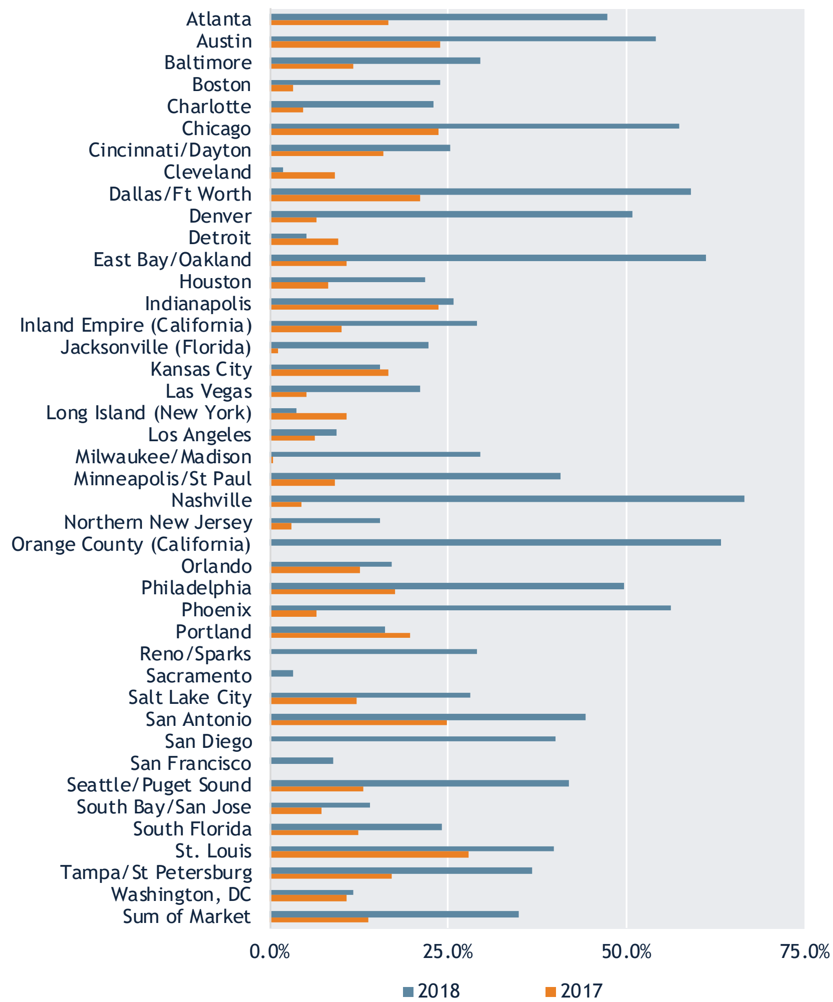
Demand remained strong with nearly 63 million square feet (msf) of net absorption in the fourth quarter and 230 msf of net absorption in 2018. On the flip side, construction remained steady as nearly 57 msf was completed in the quarter and 200 msf was added in the year. Of note, completions in 2018 were down over 8% from 2017. The pipeline of space underway totals roughly 200 msf; however, the completion of this supply pipeline will likely be split between 2019 and 2020. Thus, it is probable that supply growth will continue to decelerate and 2019 deliveries will likely fall below 2018.

The strength of the market is pervasive with almost all age and size ranges enjoying single-digit availability. The sole exception is the market segment of properties built since 2010, where availability stood at 13.4%; however, this likely includes properties still in lease-up. In fact, data from CoStar shows availability of only 5.2% among properties built between 2010 and 2016. Meanwhile, properties built in 2017 have an availability of 13.7% on average. Notably, however, within the 2017-vintage market segment, 28 of 41 of the nation's largest markets reported below-average availability and only six markets had availability over 20%. Among 2018-vintage properties, the average availability is roughly 35% and only 16 markets reported above-average availability. While availability among new product appears high, the actual square footage available represents only six to nine months of supply, based on recent demand trends in the respective markets. With supply likely past peak, barring a downturn, this should allow most markets to remain in equilibrium or better for the foreseeable future and yield steady, moderate rent growth (3%-5%) in the years ahead.

CBRE-EA INDUSTRIAL MARKET FUNDAMENTALS



AVAILABILITY AMONG RECENT COMPLETIONS



Source: CoStar

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

Retail

The end of the year brought welcome news to the retail sector. According to Mastercard SpendingPulse, December holiday sales were up 5.1% to more than $850 billion. This marks the strongest performance in six years. Additionally, apparel sales were up 7.9%, the best growth since 2010. Finally, wage gains are accelerating, with average hourly earnings growth topping 3% for the first time during the current expansion. Given this backdrop, it is not surprising that total retail availability dropped to 6.3% in the fourth quarter of 2018, down 10 basis points (bps) from the previous quarter and 30 bps from a year earlier. Demand increased nearly fourfold as 52 million square feet (msf) of space was absorbed in the year, up from only 15 msf in 2017. Supply, meanwhile, slowed with less than 38 msf being completed, down from 58 msf in 2017.

By product subtype, the neighborhood and community shopping center (NCSC) segment of the market has been leading the charge, followed by the lifestyle and mall (L&M) segment, while the power center segment of the market has been the clear laggard. NCSC availability dropped to 9.0% in the fourth quarter, an improvement of 10 bps from the third quarter and 50 bps from a year earlier. Availability in the L&M segment of the market faltered earlier in the year, increasing to 5.7% in the second quarter, but rallied by year-end, posting an availability rate of 5.3% (-10 bps year over year). Finally, retail bankruptcies continued to impact the power center segment of the market with availability increasing to 6.9% in the fourth quarter, up 30 bps year over year. The good news is all retail subtypes reported improved demand in 2018 relative to 2017 and supply growth continued to moderate from already low levels.

Regionally, the South, East and West reported flat to improved fundamentals over the course of the year while the Midwest continued to soften. Looking over the broader two-year period, the weighted-average availability rate in the Midwest expanded by 220 bps to 9.4% (markets 55 msf and larger). In comparison, the East, South and West experienced more modest increases of 90, 50 and 20 bps, respectively. The East, South and West ended 2018 with weighted-average availability rates of 6.5%, 5.7% and 6.0%, respectively, significantly below the Midwest's 9.4%. All markets in the Midwest reported an erosion in fundamentals with the exception of Detroit, where availability remained flat at 6.1%. Three Midwest markets, Chicago, Cincinnati and Indianapolis, were among the weakest performers with availability moving over 300 bps and crossing into double-digit territory by year-end 2018.

Going forward, demand will remain mixed as a result of pending bankruptcies and store closings (Charlotte Russe, Gap/Banana Republic, Chico's, Gymboree, etc). The good news for the sector, however, is that construction activity is virtually nonexistent. While the market will likely remain in equilibrium on average, it will be difficult to achieve any meaningful increases in rents in the near term. Tenants are taking advantage of the negative headlines in the sector and pushing back against rent increases. Once store closings wash through the system, the retail landscape should improve and allow for rent growth in the 2%-3% range.

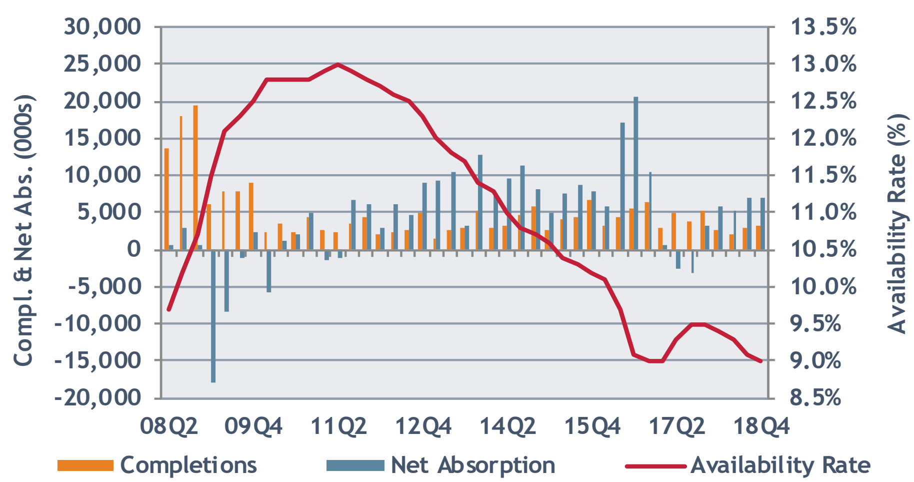
COMPARATIVE CHANGES IN TOTAL RETAIL AVAILABILITY

TOP 15 MARKETS					BOTTOM 15 MARKETS				
Market	2016	2017	2018	BPS Chg.	Market	2016	2017	2018	BPS Chg.
Tampa	6.9%	4.1%	3.6%	-330	Austin	4.6%	3.8%	6.3%	170
F. Lauderdale	6.4%	6.2%	3.8%	-260	Las Vegas	5.8%	5.0%	7.5%	170
San Jose	7.1%	7.0%	5.2%	-190	Riverside	7.8%	9.0%	9.5%	170
West Palm	5.9%	7.1%	4.5%	-140	Columbus	6.6%	7.2%	8.3%	170
Philadelphia	7.7%	8.8%	6.4%	-130	Charlotte	5.4%	8.2%	7.2%	180
Tulsa	9.4%	10.1%	10.5%	110	Wash. DC	4.3%	5.5%	6.1%	180
San Antonio	7.4%	6.3%	6.4%	-100	Raleigh	2.7%	3.8%	4.9%	220
Seattle	2.6%	2.5%	1.8%	-80	Jacksonville	8.7%	13.2%	11.1%	240
Salt Lake	7.0%	9.5%	6.2%	-80	Kansas City	4.6%	6.8%	7.1%	250
San Diego	4.5%	3.0%	3.7%	-80	S.Francisco	6.0%	9.0%	8.8%	280
Los Angeles	5.7%	6.2%	5.0%	-70	Newark	6.3%	5.8%	9.3%	300
Orange Co.	4.7%	4.4%	4.0%	-70	Chicago	8.2%	10.9%	11.7%	350
Louisville	9.9%	7.5%	9.3%	-60	Indianapolis	9.4%	12.7%	13.6%	420
Pittsburgh	4.3%	3.3%	3.9%	-40	Cincinnati	10.0%	12.7%	15.2%	520
Dallas	4.8%	4.2%	4.6%	-20	Long Island	2.6%	5.5%	10.3%	770

SOUTH   WEST   EAST   MIDWEST

Source: Ports of LA & LB

CBRE-EA N&CSHOPPING CENTER MARKET FUNDAMENTALS



RETAIL	N&C SHOPPING CENTER	LIFESTYLE & MALL	POWER CENTER
Availability Rate	9.0%	5.3%	6.9%
12-Month Historical Trend			
Availability Change	↓	↓	↑
Rent	↑	↑	↔
Absorption	↑	↑	↓
Completions	↓	↓	↓
Cap Rates	↑	↑	↑
Transaction Volume	↔	↑	↓

Capital Markets

Per Real Capital Analytics, total transaction volume was up 15% in 2018 with $562 billion in properties changing hands, the third-largest annual volume on record. Retail, industrial and apartment volumes increased substantially, while office volumes were flat. Retail transaction volume was up 32% in 2018, despite the negative headlines in the sector, with nearly $85 billion in property trades— this marked the first time the sector reported an increase in volume since 2015. The large increase in retail volume was primarily driven by the mega-mall portfolio mergers of Westfield and Unibail-Rodamco ($16 billion) and GGP and Brookfield ($15 billion). Apartment and industrial volumes increased 25% and 12%, respectively, as more than $92 billion and $172 billion, respectively, in properties traded. Finally, $135 billion in office properties changed hands, which was flat year over year (YOY). There were notable differences within the office sector as CBD office volumes increased 7% to $52 billion while suburban office, which has fallen out of favor with investors, reported a 2% decline in transaction volume with $83 billion in properties trading.

Not surprisingly, the most active transaction markets were the nation's largest top-tier markets. The top 10 markets, in terms of volume, included the usual suspects: New York, Los Angeles, Dallas, Chicago, Atlanta, Houston, Seattle, Boston and Denver. New to the top ten list for 2018, however, was Phoenix, where over $15 billion in properties changed hands. Phoenix advanced to the top ten after ranking eleventh in 2017 and fourteenth in 2013.

While transaction volumes remained strong, price growth moderated in the year. The RCA Commercial Property Price Index (CPPI) was up only 6.2% in the 12 months ending December 2018, the slowest rate of growth since 2012. For the 18th consecutive month, the apartment sector led YOY pricing gains. Prices advanced 8.9% in the sector YOY, a moderation from the double-digit price growth that has persisted for much of the expansion, but still well ahead of the 7.9%, 6.6% and 2.0% gains in the industrial, office and retail sectors, respectively. The national all-property CPPI, which includes the four core property types, is now 26% above the previous peak. The apartment CPPI has led the way with a 67% increase relative to the prior peak; CBD office, industrial and suburban office followed, with their respective CPPI exceeding their pre-recession peaks by 32%, 19% and 3%. The retail CPPI remains 3% below peak.

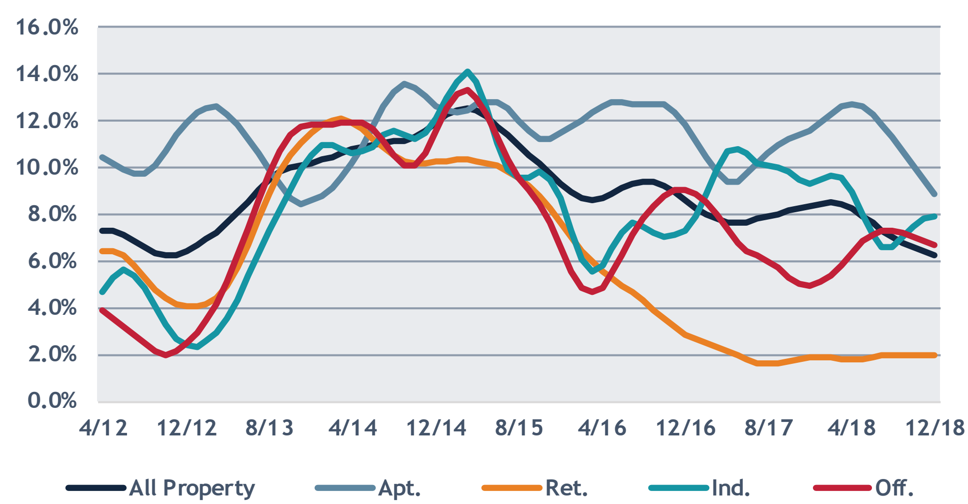
According to NCREIF, cap rates were generally flat or declined slightly in 2018 with retail, again, being the lone exception. Retail cap rates drifted up 20 basis points (bps) YOY to 4.7% on a market-value-weighted basis. Apartment cap rates were roughly flat at 4.2%, while industrial and office cap rates declined 20 and 30 bps to 4.5% and 4.2%, respectively. Going forward, we do believe the period of declining cap rates is rapidly coming to an end and we anticipate flat to modestly rising cap rates in the near future. Properties with solid net operating income growth, however, should withstand any cap rate expansion and maintain value. Overall, the bulk of returns will once again be driven by income.

MOST ACTIVE MARKETS 2018

2013	2017	2018	MARKET	SALES VOLUME ($M)	YOY
1	2	1	Manhattan	34,234	49%
2	1	2	Los Angeles	28,814	2%
3	3	3	Dallas	22,987	4%
5	5	4	Chicago	22,880	30%
6	4	5	Atlanta	17,738	0%
4	6	6	Houston	16,714	14%
8	8	7	Seattle	16,069	32%
14	11	8	Phoenix	15,089	37%
7	7	9	Boston	14,429	0%
11	16	10	NYC Boroughs	13,891	64%
12	10	11	Denver	12,484	10%
13	14	12	San Francisco	11,800	23%
10	13	13	San Jose	10,320	0%
9	9	14	DC VA burbs	9,997	-14%
17	12	15	No NJ	9,400	-9%
15	17	16	San Diego	9,316	21%
19	20	17	Inland Empire	9,119	34%
16	22	18	DC	7,764	19%
24	21	19	Philadelphia	7,632	14%
22	15	20	Orange Co	7,554	-11%
18	19	21	Austin	7,429	4%
20	18	22	Orlando	7,390	4%
23	25	23	East Bay	7,261	20%
29	28	24	Tampa	6,690	21%
28	24	25	Las Vegas	6,506	4%

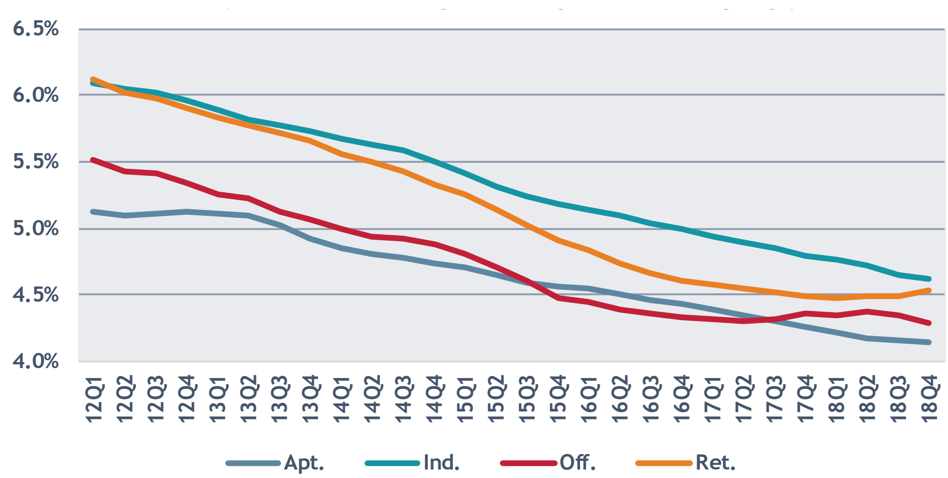
Source: Real Capital Analytics

RCA CPPI YEAR-OVER-YEAR GROWTH



NPI CAP RATES BY PROPERTY TYPE

MARKET VALUE-WEIGHTED, 4-QUARTER MOVING AVG.



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