

Research

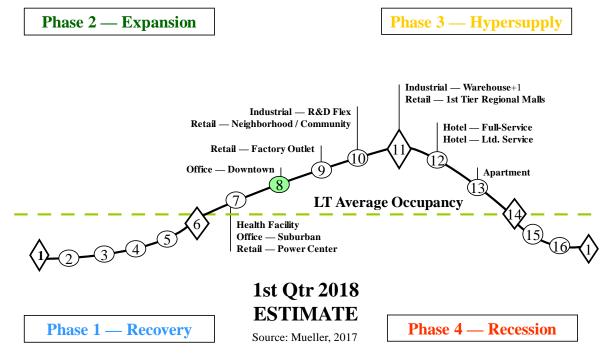
So far, 2017 continues along at a slow Gross Domestic Product (GDP) growth rate near 2% and employment continues to hover above 200,000+ jobs per month. It appears the economy has reached a plateau of moderate growth that could be sustained for several years. If these levels can be maintained, demand for real estate should continue to expand nicely. Banks have become more cautious in their lending, which should restrain supply to levels that closely match demand. This restraint should be especially helpful for the over-supplied apartment sector. We forecast 2017 and 2018 to see increased real estate occupancy and rent growth in most of the property sectors.

First Quarter 2018 Estimates

May 2017

Office occupancies are forecast to **improve** 0.1% in 1Q18, with rents improving 0.5% quarter-over-quarter. Industrial occupancies are forecast to **improve** 0.2% in 1Q18, with rents improving 0.6% quarter-over-quarter. Apartment occupancies are forecast to **decline** 0.1% in 1Q18, with rents improving 0.4% quarter-over-quarter. Retail occupancies are forecast to be **flat** in 1Q18, with rents improving 0.6% quarter-over-quarter. Hotel occupancies are forecast to **decline** 0.1% in 1Q18, with quarterly room rates improving 0.2% quarter-over-quarter.

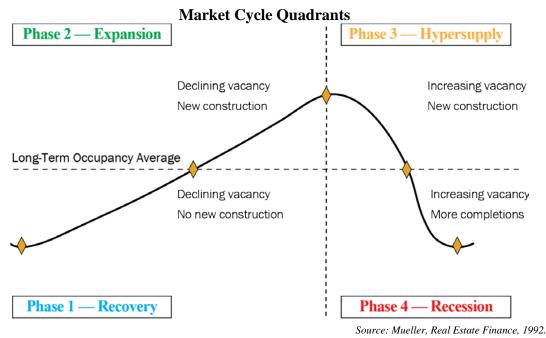
# **National Property Type Cycle Forecast**



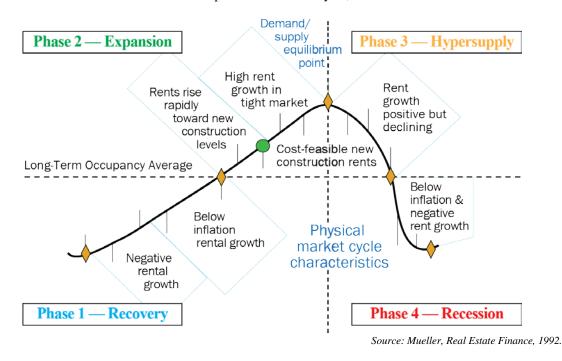
National Property Type Cycle Graph shows relative positions of sub-property types — major markets are reviewed inside. Glenn R. Mueller, Ph.D. gmueller@dividendcapital.com 303.953.3872 Dividend Capital Research, 518 17th Street, 17th Floor, Denver, CO 80202 www.dividendcapital.com 866.324.7348

All relevant disclosures and certifications appear on page 9 of this report.

The cycle forecast analyzes occupancy movements in five property types in more than 50 Metropolitan Statistical Areas (MSAs). The market cycle analysis should enhance investment-decision capabilities for investors and operators. The five property type cycle charts summarize almost 300 individual models that analyze occupancy levels and rental growth rates to provide the foundation for long-term investment success. Commercial real estate markets are cyclical due to the lagged relationship between supply and demand for physical space. The long-term occupancy average is different for each market and each property type. *Long-term occupancy average* is a key factor in determining rental growth rates — a key factor that affects commercial real estate returns.

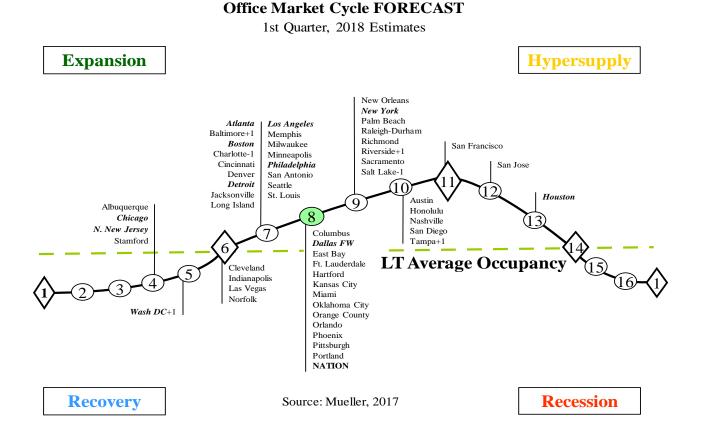


Rental growth rates can be characterized in different parts of the market cycle, as shown below.



#### **OFFICE FORECAST**

Office occupancies are forecast to improve 0.1% in 1Q18, producing a 0.3% increase year-over-year. The forecast model is showing an occupancy plateau near 90% that could last well into 2019. The occupancy plateau is similar to the 2006 cycle peak, but about 4% lower than both the 1979 and 2000 cycle peaks. It appears that this cycle might imitate the 21-year cycle experienced from 1979 to 2000. While downtown demand has driven the first seven years of this cycle, it appears that suburban demand has now picked up and may lead the next phase of this cycle. Tighter loan underwriting, rising construction material costs, and labor shortages are constraining supply growth, keeping market demand and supply in balance. National average office rents are expected to increase 0.5% in 1Q18 and be up 1.9% year-over-year.



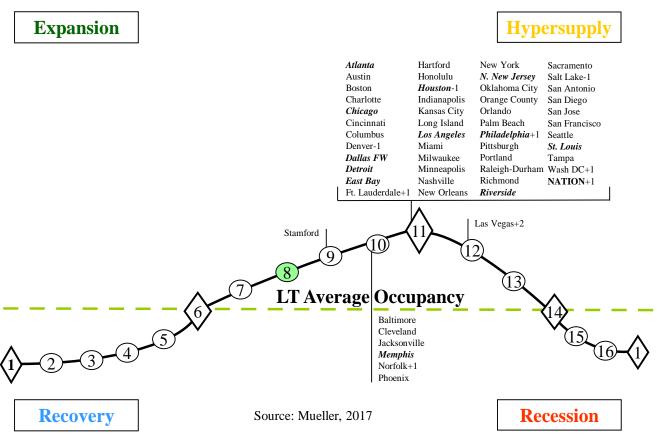
Note: The 11-largest office markets make up 50% of the total square footage of office space that we monitor. Thus, the 11-largest office markets are in *bold italics* to help distinguish how the weighted national average is affected.

Markets that have moved since the previous quarter are shown with a + or - symbol next to the market name and the number of positions the market has moved is also shown, e.g., +1, +2 or -1, -2. Markets do not always go through smooth forward-cycle movements and can regress, or move backward in their cycle position when occupancy levels reverse their usual direction. This can happen when the marginal rate of change in demand increases (or declines) faster than originally estimated or if supply growth is stronger (or weaker) than originally estimated.

## INDUSTRIAL FORECAST

Industrial occupancies are forecast to improve 0.2% in 1Q18 and increase 0.3% year-over-year. Absorption has increased every quarter since 2009 and has stayed ahead of supply the entire time. E-commerce is driving this demand and many retailers are working toward online e-commerce strategies to compete with Amazon, increasing demand even further. Amazon is expected to continue to be the largest lead tenant for several years as they roll out their local same-day delivery to more markets throughout the country. It also appears that the global economy is strengthening again. Increased U.S. trade restrictions do not appear to be in play for the next few years. Thus, port warehouse demand should expand as well. Our cycle model shows that the peak occupancy just reached could last well into late 2019, based on current demand and supply forecasts. We expect rents to increase 0.6% in 1Q18 and increase 3.5% year-over-year.

### **Industrial Market Cycle FORECAST**



1st Quarter, 2018 Estimates

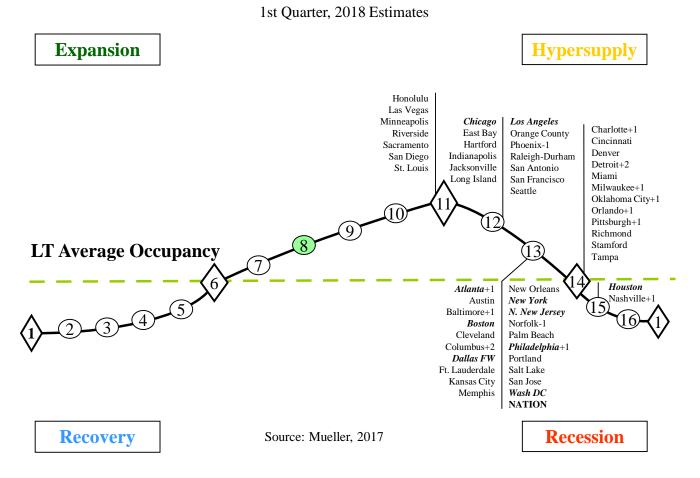
Note: The 12-largest industrial markets make up 50% of the total square footage of industrial space that we monitor. Thus, the 12-largest industrial markets are in *bold italics* to help distinguish how the weighted national average is affected.

Markets that have moved since the previous quarter are shown with a + or - symbol next to the market name and the number of positions the market has moved is also shown, e.g., +1, +2 or -1, -2. Markets do not always go through smooth forward-cycle movements and can regress, or move backward in their cycle position when occupancy levels reverse their usual direction. This can happen when the marginal rate of change in demand increases (or declines) faster than originally estimated or if supply growth is stronger (or weaker) than originally estimated.

#### **APARTMENT FORECAST**

Apartment occupancies are forecast to decline 0.1% in 1Q18 and decrease 0.4% year-over-year. Demand continues to be strong from the Millennial generation. Home buying (moving them out of the rental pool) is more of a challenge as loan underwriting standards are tight. New home construction is at lower levels than needed, increasing house prices and making houses less affordable. The problem continues to be oversupply and the number of completions in 2017 and 2018 are still projected to be higher than demand. The good news is that banks are tightening their lending standards. Getting a new development loan is becoming harder, which should translate into reduced supply in 2019. The shift from downtown locations to suburban locations continues. The national apartment asking rental rate is expected to increase 0.4% in 1Q18 and we estimate a 1.8% increase year-over-year.

#### **Apartment Market Cycle FORECAST**



Note: The 10-largest apartment markets make up 50% of the total square footage of apartment space that we monitor. Thus, the 10-largest apartment markets are in *bold italics* to help distinguish how the weighted national average is affected.

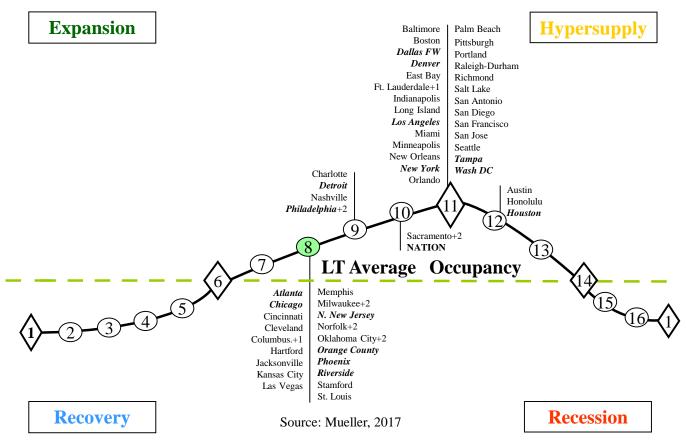
Markets that have moved since the previous quarter are shown with a + or - symbol next to the market name and the number of positions the market has moved is also shown, e.g., +1, +2 or -1, -2. Markets do not always go through smooth forward-cycle movements and can regress, or move backward in their cycle position when occupancy levels reverse their usual direction. This can happen when the marginal rate of change in demand increases (or declines) faster than originally estimated or if supply growth is stronger (or weaker) than originally estimated.

#### **RETAIL FORECAST**

Retail occupancy is forecast to be flat in 1Q18 and decrease 0.2% year-over-year. The occupancy dip is forecast to be temporary. We now see a peak occupancy in late 2018 of about 94.5%. Tenant types keep shifting from goods to experiences and new concepts are being created by the creative Millennial generation entrepreneurs. Retailers must be creative and proactive to compete with e-commerce. Supply continues to be the most constrained in retail and lenders are the most cautious in this property type. Retail rental rates are expected to increase 0.6% in 1Q18 and 1.1% year-over-year.

## **Retail Market Cycle FORECAST**

1st Quarter, 2018 Estimates



Note: The 15-largest retail markets make up 50% of the total square footage of retail space that we monitor. Thus, the 15-largest retail markets are in *bold italics* to help distinguish how the weighted national average is affected.

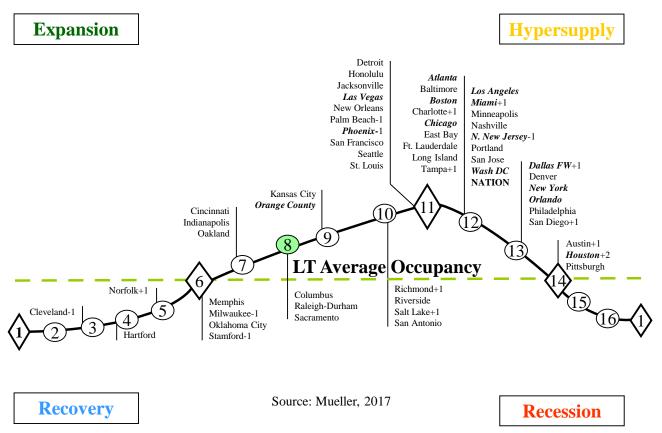
Markets that have moved since the previous quarter are shown with a + or - symbol next to the market name and the number of positions the market has moved is also shown, e.g., +1, +2 or -1, -2. Markets do not always go through smooth forward-cycle movements and can regress, or move backward in their cycle position when occupancy levels reverse their usual direction. This can happen when the marginal rate of change in demand increases (or declines) faster than originally estimated or if supply growth is stronger (or weaker) than originally estimated.

#### HOTEL FORECAST

Hotel occupancy is forecast to decrease 0.1% in 1Q18 and increase 0.8% year-over-year. The national average occupancy forecast stayed in the hypersupply phase on the cycle chart, with lots of new supply still coming online in 2018. This is not a major concern, as the peak 72.5% occupancy level is well above all previous cyclical peaks. Our model does not show occupancy dropping below 70% (the previous cyclical high back in 1996) until late 2020. Airbnb is now having a more difficult time as many municipalities have declared Airbnb rentals to be businesses. They are charging higher property taxes and collecting sales tax on landlords, causing many people to abandon the Airbnb system. Room rate growth is expected to increase 0.2% in 1Q18 and annual room rate growth is expected to be 3.3% year-over-year.

#### Hotel Market Cycle FORECAST

1st Quarter, 2018 Estimates



Note: The 14-largest hotel markets make up 50% of the total square footage of hotel space that we monitor. Thus, the 14-largest hotel markets are in **bold italics** to help distinguish how the weighted national average is affected.

Markets that have moved since the previous quarter are shown with a + or - symbol next to the market name and the number of positions the market has moved is also shown, e.g., +1, +2 or -1, -2. Markets do not always go through smooth forward-cycle movements and can regress, or move backward in their cycle position when occupancy levels reverse their usual direction. This can happen when the marginal rate of change in demand increases (or declines) faster than originally estimated or if supply growth is stronger (or weaker) than originally estimated.

#### MARKET CYCLE ANALYSIS - Explanation

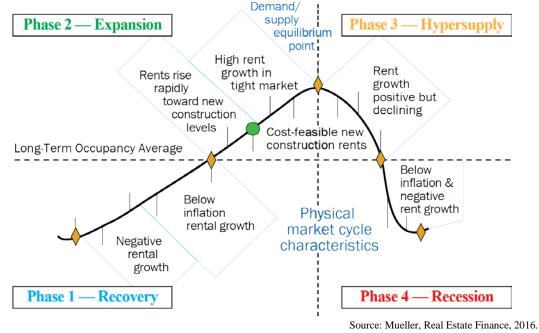
**Supply and demand interaction is important to understand. Starting in Recovery Phase I at the bottom of a cycle** (see chart below), the marketplace is in a state of oversupply from previous new construction or negative demand growth. At this bottom point, occupancy is at its trough. Typically, the market bottom occurs when the excess construction from the previous cycle stops. As the cycle bottom is passed, demand growth begins to slowly absorb the existing oversupply and supply growth is nonexistent or very low. As excess space is absorbed, vacancy rates fall, allowing rental rates in the market to stabilize and even begin to increase. As this recovery phase continues, positive expectations about the market allow landlords to increase rents at a slow pace (typically at or below inflation). Eventually, each local market reaches its *long-term occupancy average* whereby rental *growth is equal to inflation*.

In Expansion Phase II, demand growth continues at increasing levels creating a need for additional space. As vacancy rates fall below the *long-term occupancy average*, signaling that supply is tightening in the marketplace, rents begin to rise rapidly until they reach a

"cost-feasible" level that allows new construction to commence. In this period of tight supply, rapid rental growth can be experienced, which some observers call "rent spikes." (Some developers may also begin speculative construction in anticipation of cost-feasible rents if they are able to obtain financing.) Once cost-feasible rents are achieved in the marketplace, demand growth is still ahead of supply growth — a lag in providing new space due to the time to construct. Long expansionary periods are possible and many historical real estate cycles show that the overall up-cycle is a slow, long-term uphill climb. As long as demand growth rates are higher than supply growth rates, vacancy rates will continue to fall. The cycle peak point is where demand and supply are growing at the same rate *or equilibrium*. Before equilibrium, demand grows faster than supply; after equilibrium, supply grows faster than demand.

Hypersupply Phase III of the real estate cycle commences after the peak / equilibrium point #11 — where demand growth equals supply growth. Most real estate participants do not recognize this peak / equilibrium's passing, as occupancy rates are at their highest and well above long-term averages, a strong and tight market. During Phase III, supply growth is higher than demand growth (hypersupply), causing vacancy rates to rise back toward the long-term occupancy average. While there is no painful oversupply during this period, new supply completions compete for tenants in the marketplace. As more space is delivered to the market, rental growth slows. Eventually, market participants realize that the market has turned down and commitments to new construction should slow or stop. If new supply grows faster than demand once the long-term occupancy average is passed, the market falls into Phase IV.

Recession Phase IV begins as the market moves past the long-term occupancy average with high supply growth and low or negative demand growth. The extent of the market down-cycle will be determined by the difference (excess) between the market supply growth and demand growth. Massive oversupply, coupled with negative demand growth (that started when the market passed through long-term occupancy average in 1984), sent most U.S. office markets into the largest down-cycle ever experienced. During Phase IV, landlords realize that they will quickly lose market share if their rental rates are not competitive; they then lower rents to capture tenants, even if only to cover their buildings' fixed expenses. Market liquidity is also low or nonexistent in this phase, as the bid–ask spread in property prices is too wide. The cycle eventually reaches bottom as new construction and completions cease, or as demand growth turns up and begins to grow at rates higher than that of new supply added to the marketplace.



This Research currently monitors five property types in more than 50 major markets. We gather data from numerous sources to evaluate and forecast market movements. The market cycle model we developed looks at the interaction of supply and demand to estimate future vacancy and rental rates. Our individual market models are combined to create a national average model for all U.S. markets. This model examines the current cycle locations for each property type and can be used for asset allocation and acquisition decisions.

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