

Mueller

Real Estate Market Cycle Monitor

First Quarter 2020 Analysis

May 2020

The Physical Market Cycle Analysis of 4 Property Types in 54 Metropolitan Statistical Areas (MSAs).

The 100 Year Pandemic Cycle caught us by surprise: 1740 The Plague, 1817 Cholera, 1919 The Spanish Flu, now in 2019 The Corona Virus. (Bill Gates warned us of this in a 2015 TED Talk!) Economic growth came to a full stop in March as the US and the world shut down with the biggest Black Swan event in history! The shutdown of most of the economy created the fastest and largest unemployment rate increase ever experienced. The government selected essential businesses that could stay open and they are thriving, thus creating short term winners in commercial real estate space. Closed business are asking for rent relief or not paying rent at all. Many real estate owners are asking for mortgage payment holidays. The differences are dramatic. Macro details on the major property types and markets are reviewed in this report.

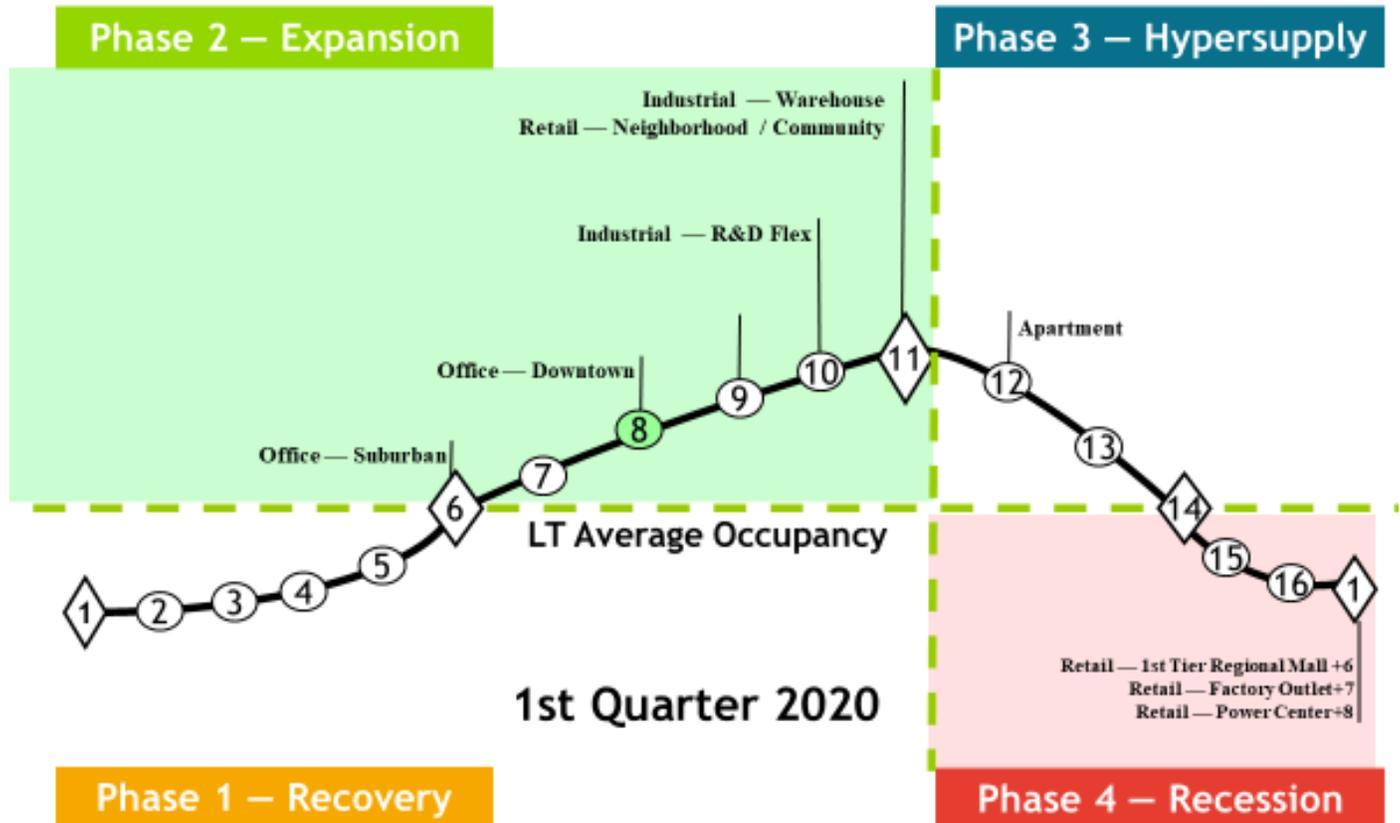
Office occupancy **declined 0.1%** in 1Q20, and rents **grew 0.4%** for the quarter and 2.2% annually.

Industrial occupancy **declined 0.1%** in 1Q20, and rents **grew 0.3%** for the quarter and 4.0% annually.

Apartment occupancy **declined 0.2%** in 1Q20, but rents **declined 0.7%** for the quarter, but were up 1.7% annually.

Retail occupancy **declined 0.3%** in 1Q20, and rents **grew 0.4%** for the quarter and 2.4% annually.

National Property Type Cycle Locations



Source: Mueller, 2020

The National Property Type Cycle Locations graph shows relative positions of the sub-property types.

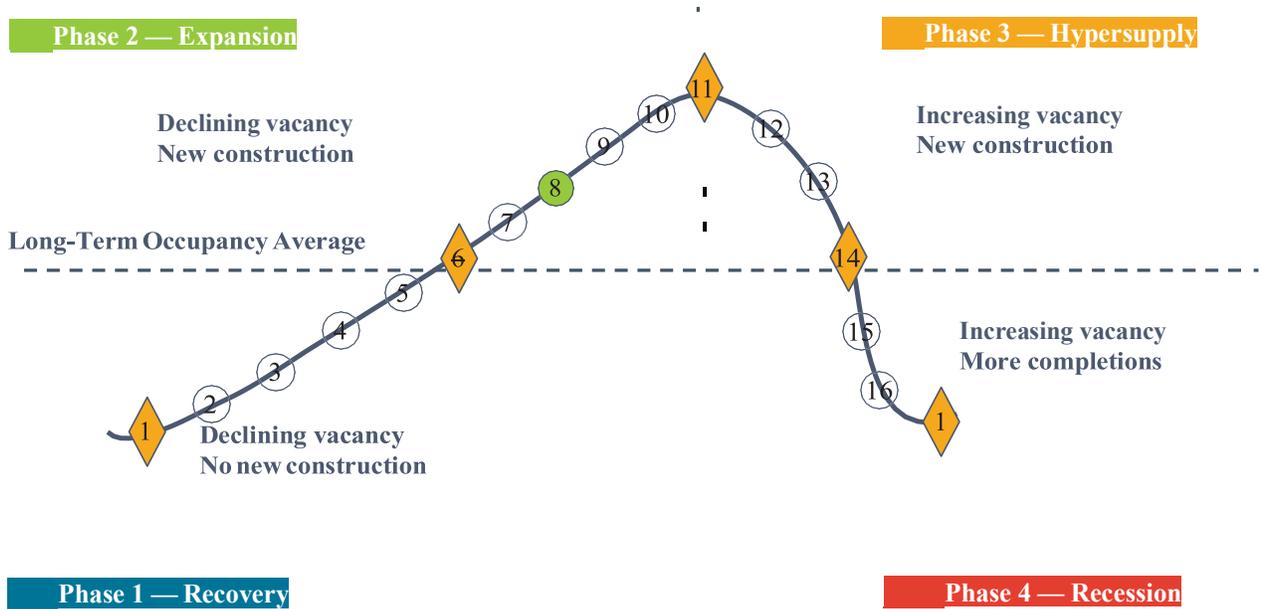
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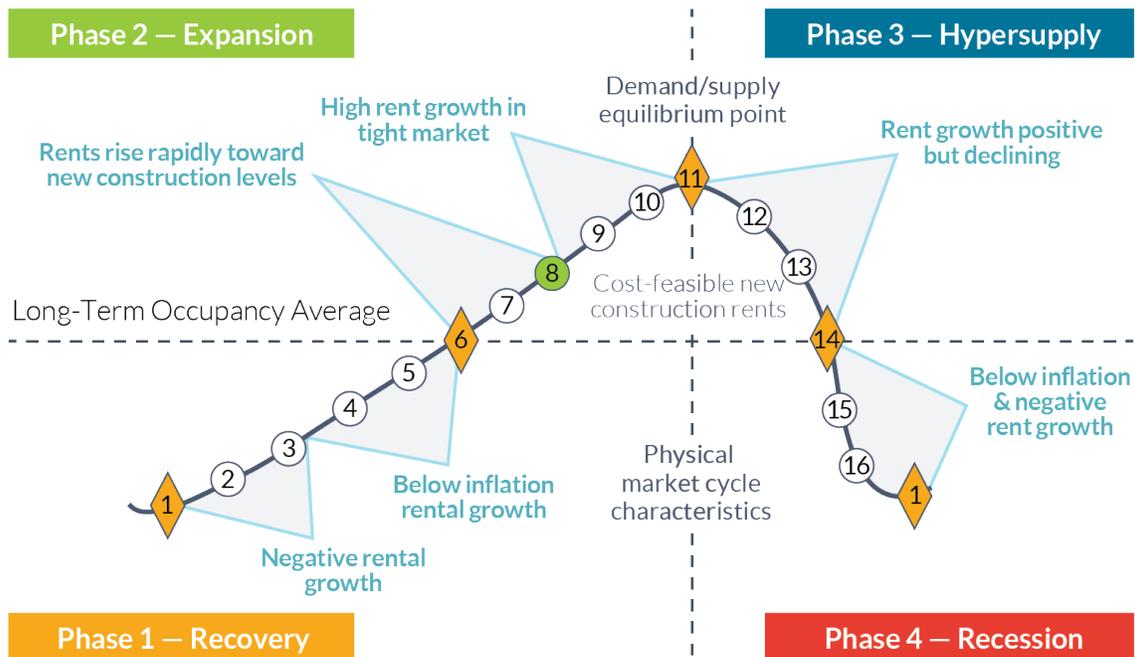
The cycle monitor analyzes occupancy movements in five property types in 54 MSAs. Market cycle analysis should enhance investment-decision capabilities for investors and operators. The five property type cycle charts summarize almost 300 individual models that analyze occupancy levels and rental growth rates to provide the foundation for long-term investment success. Commercial real estate markets are cyclical due to the lagged relationship between demand and supply 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 income and thus returns.

Market Cycle Quadrants



Source: Mueller, Real Estate Finance, 1996.

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



Source: Mueller, Real Estate Finance, 1996.

Office

The national office market occupancy level was declined 0.1% in 1Q20 but was up 2.2% year-over-year. With most office leases being very long-term, the Corona Virus shutdown has not caused widespread cancellations of leases at this point. The major setback was to short term office rental operations such as WeWork, where rentals went quickly to zero. Whether short-term suppliers of space can come back is totally up in the air. Many believe that stay at home working should accelerate, but distance in the office should also increase the needed space per worker and thus balance out the loss from stay at home working. Average national rents increased 0.4% in 1Q20 and produced a 2.2% rent increase year-over-year. This trend should change substantially to negative growth with 2nd quarter data.

Office Market Cycle Analysis 1st Quarter, 2020



Source: Mueller, 2020

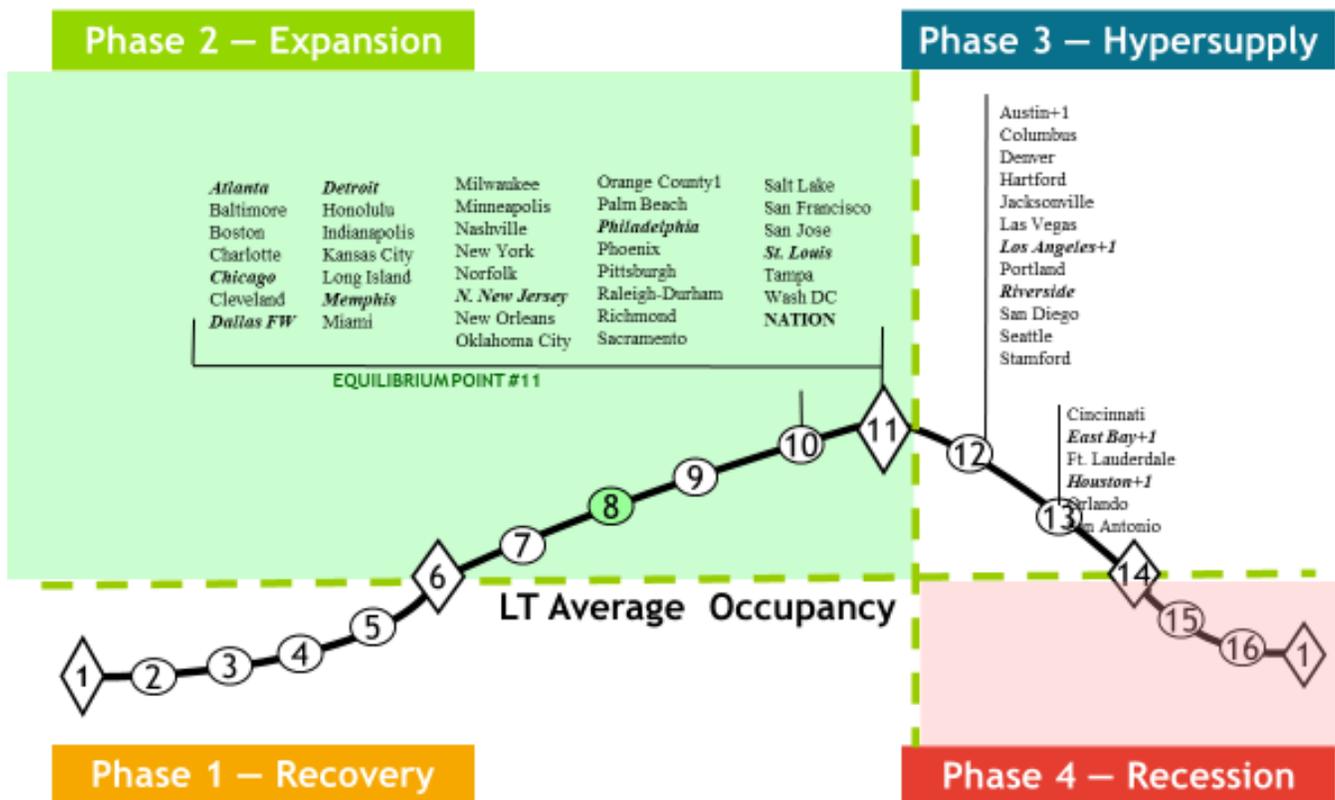
Note: The 11-largest office markets make up 50% of the total square footage of office space we monitor. Thus, the 11-largest office markets are in ***bold italic*** type to help distinguish how the weighted national average is affected.

Markets that have moved since the previous quarter are now shown with a + or - symbol next to the market name and the number of positions the market has moved is also shown, i.e., +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

Industrial occupancies declined 0.1% in 1Q20 and were down 0.3% year-over-year. Additional supply moved 3 markets into hypersupply phase of the cycle, and demand decline moved the oil driven Houston market lower in the hypersupply phase. Industrial is the property type performing the best after the onset of Corona Virus, as online shopping increased substantially with the largest online retailers Amazon and Walmart reporting online sales similar to Black Friday and the Christmas season. This strong online demand is expected to continue to increase demand for warehouse space. Industrial national average rents increased 0.3% in 1Q20 and increased 4.0% year-over-year. Expect to see even better results in the next few quarters.

Industrial Market Cycle Analysis 1st Quarter, 2020



Source: Mueller, 2020

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

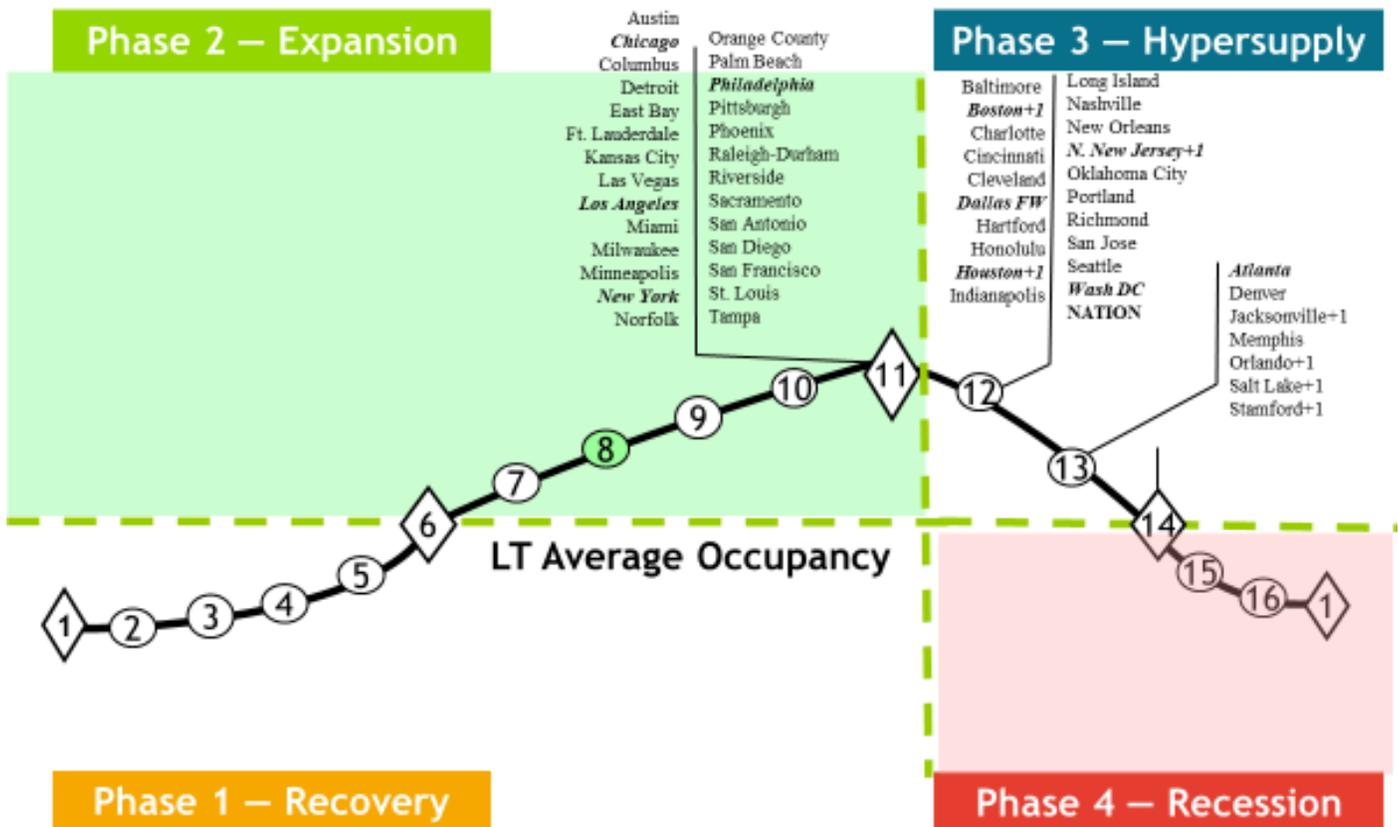
Markets that have moved since the previous quarter are now shown with a + or - symbol next to the market name and the number of positions the market has moved is also shown, i.e., +1, +2 or -1, -2. Markets do not always go through smooth forward-cycle movements and can regress or move backward in their 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

The national apartment occupancy average declined 0.2% in 1Q20 and was down 0.3% year-over-year. Three markets moved from peak occupancy into the hypersupply phase of the cycle while four markets had occupancy declines that moved them further down in the hypersupply phase. These were mainly oversupply driven declines. The Corona Virus did not hurt occupancy levels at the end of 1Q20, but many tenants have requested rent relief as their jobs and income abruptly stopped. Class A apartments produced the best rent collections, as most white-collar workers were able to continue work from home. Class C apartments had a tougher time with rent collections, as low wage workers were laid off and could not pay rent. In some cases government payments are providing higher after tax income allowing rents to be paid. Average national apartment rent growth declined -0.7% in 1Q20, while national average rents increased 1.7% year-over-year. Expect rent growth to turn negative in the future.

Apartment Market Cycle Analysis

1st Quarter, 2020



Source: Mueller, 2020

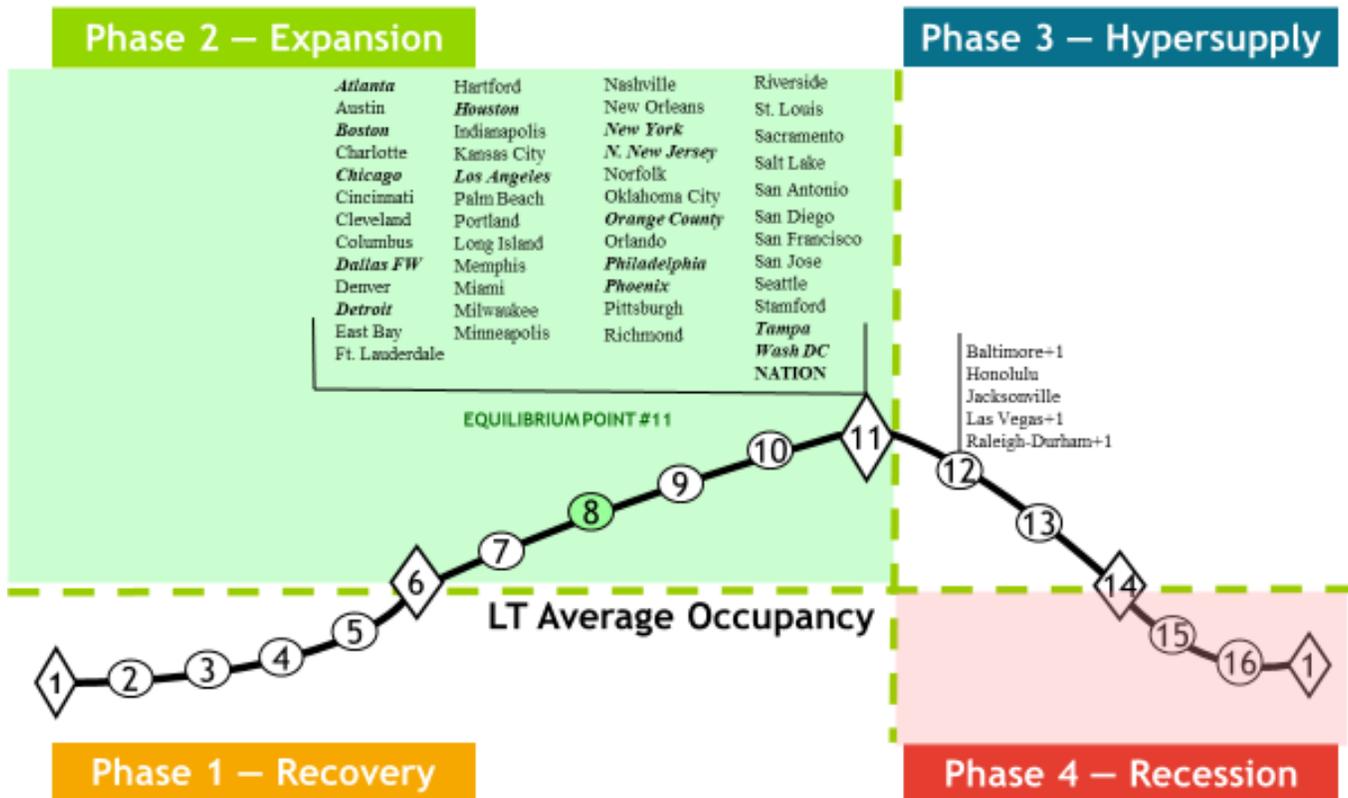
Note: The 10-largest apartment markets make up 50% of the total square footage of multifamily space we monitor. Thus, the 10-largest apartment markets are in ***bold italic*** type to help distinguish how the weighted national average is affected.

Markets that have moved since the previous quarter are now shown with a + or - symbol next to the market name and the number of positions the market has moved is also shown, i.e., +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

Retail occupancies were down 0.3% in 1Q20 and were down 0.3% year-over-year. While leases were in place, more than half of all retail stores were closed by government mandate. Essential good providers (especially grocery, liquor and building materials) who were allowed to stay open were the big winners with increased sales. Discount retailers Walmart and Target were allowed to stay open with their food as an essential good and both are looking to expand. A majority of restaurants are attempting to survive with delivery and pick-up options, while fast food restaurants with drive through are doing well. Stand-alone stores with essential goods like auto parts and hardware are also doing well. It is unique to have grocery and drug stores thriving while the other in-line stores are dark. Whether small tenants survive is a big question. National average retail rents increased 0.4% in 1Q20 and were up 2.4% year-over-year, the same as the previous quarter. Expect that to reverse to negative growth in the next quarter.

Retail Market Cycle Analysis 1st Quarter, 2020



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

Markets that have moved since the previous quarter are now shown with a + or - symbol next to the market name and the number of positions the market has moved is also shown, i.e., +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

Hotel Occupancy dropped substantially in mid- March, with many hotels closing all together. This drop would put all hotel markets at the bottom of their cycle point #1 on the cycle chart. Travel restrictions may last for a long time – thus future occupancy and room rates are unknown.

Data is no longer available from the normal source –
thus Hotel coverage is suspended till further notice.

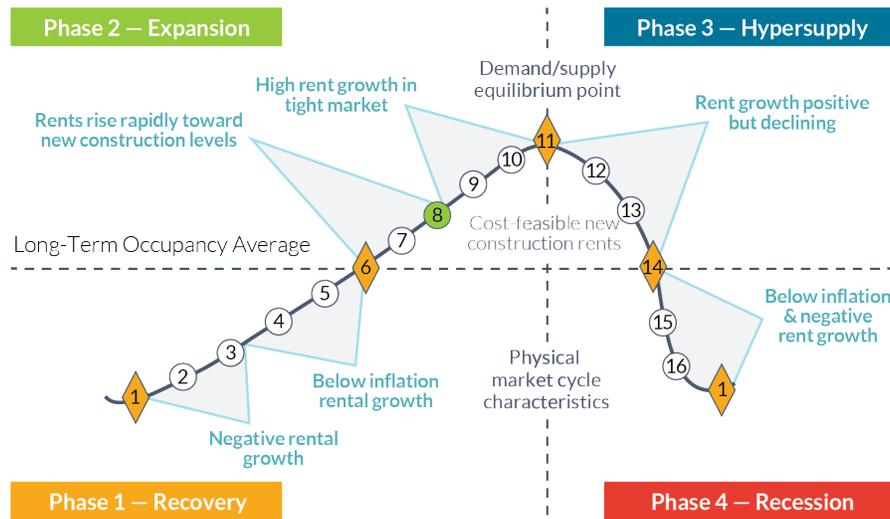
Market Cycle Analysis — Explanation

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 either 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 should 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 is 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 could quickly lose market share if their rental rates are not competitive. As a result, 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.



Source: Mueller, Real Estate Finance, 1996

This research currently monitors five property types in 54 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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