

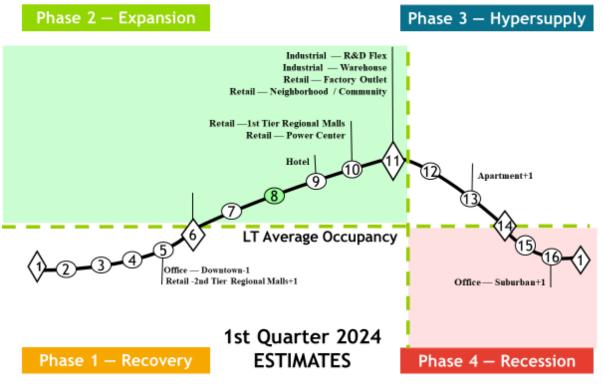


MUELLER REAL ESTATE MARKET CYCLE <u>FORECAST</u>

First Quarter 2024 Estimates – May 2023

We expect a very minor recession in 2023 but believe the presidential election in 2024 should produce some government stimulus by the party in power to have the economy grow starting the end of summer 2024. The current Fed tightening is creating a decline in real estate transactions and new construction that should help keep the demand/supply balance close to equilibrium through 2023 and into 2024 in most property types and cities. BUT the numbers are very city and property type specific. The opportunities for cash buyers may be plentiful later in 2023 as many mortgages come due over the next two years. Banks should be the least likely to make new loans for the rest of the year and debt is going to be more expensive from higher risk lenders, thus cash buyers should have great opportunities.

Office occupancies are forecast to **decline 0.1%** in 1Q24, with rent growth flat quarter-over-quarter. Industrial occupancies are forecast to **decline 0.1%** in 1Q24, with rents increasing 1.3% quarter-over-quarter. Apartment occupancies are forecast to **decline 0.1%** in 1Q24, with rent growth declining 0.5% quarter-over-quarter. Retail occupancies are forecast to **flat** in 1Q24, with rents increasing 0.8% quarter-over-quarter. Hotel occupancies are forecast to **be flat** in 1Q24, with RevPar increasing 1.3% quarter-over-quarter.



National Property Type Cycle Forecast

Source: Mueller, 2023

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

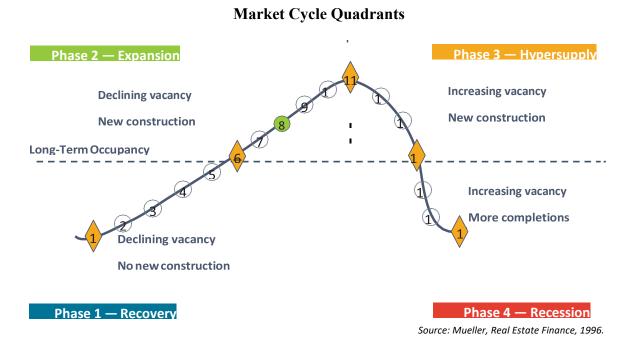
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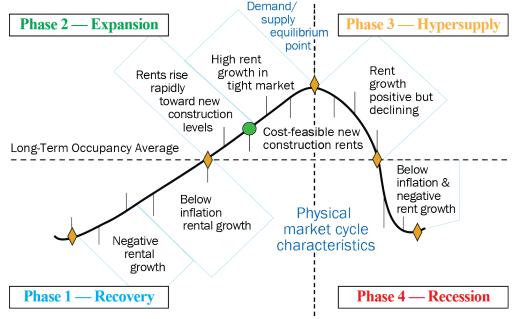




The <u>Cycle Forecast</u> analyzes occupancy movements in four property types in more than 50 Metropolitan Statistical Areas (MSAs). The market cycle analysis should enhance investment-decision capabilities for investors and operators. The four property type cycle charts summarize almost 300 individual 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. Long-term occupancy average is different for each market & each property type. *Long-term occupancy averages* (points #6 & #14) are a key factor determining rental growth rates that drive income affecting commercial real estate returns.



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



Source: Mueller, Real Estate Finance, 1996.





OFFICE FORECAST

Office occupancies are forecast to decline 0.1% in 1Q24 and be down 0.9% year-over-year. This pushed the National office down one position to point #4 on the cycle chart. Note that more markets moved to lower occupancy levels on the cycle chart, as we expect new demand to be very low during the year. We forecast as much as 100 million Sq Ft could be given back by tenants, as leases end with smaller amounts of space being leased going forward. The Sq Ft of space per office worker should continue to drop as well. The other headwind is that strong new supply of space from pre pandemic building starts pre-pandemic is expected in 2023. We expect the national average office asking rents to be flat in 1Q24 and be down 1.3% year-over-year. While effective rents decline from the major concessions needed to attract tenants.

1st Quarter, 2024 Estimates Phase 2 - Expansion Phase 3 — Hypersupply Austin Norfolk+1 Dallas FW-2 Palm Beach Denver-3 New Orleans-1 Detroit-2 Riverside-1 Houston Honolulu+1 San Jose Albuquerque Miami Las Vegas-1 Baltimore Charlotte Boston-2 N. New Jersev Tampa+2 Ft. Lauderdale Nashville-3 Columbus Richmond Orange County Los Angeles-1 Indianapolis-1 g Pittsburgh-1 New York Portland Sacramento+1 Milwankee-2 San Antonio-3 Salt Lake Orlando-1 San Francisco Seattle 6 St Louis-1 LT Average Occupancy Stamford 4 Atlanta N. New Jersey Cincinnati Philadelphia East Bay-1 Cleveland-1 Phoenix Chicago Hartford-2 Jacksonville-1 San Diego-2 Kansas City-1 Long Island Wash DC-1 Minneapolis Memphis Raleigh-Durham-3 Oklahoma City-1 NATION-1 Phase 1 — Recovery Phase 4 – Recession

Office Market Cycle FORECAST

Source: Mueller, 2023

Note: The <u>11-largest office markets make up 50%</u> 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.

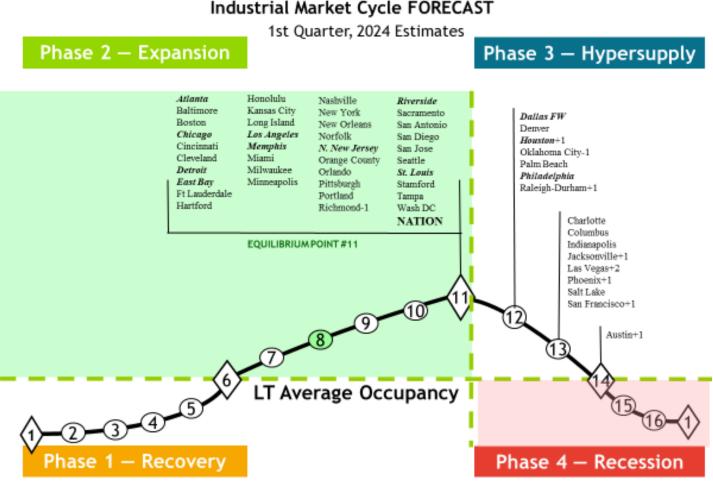
Markets do not always go through smooth forward-cycle movements and can regress or move backward in their cycle position when occupancy levels reverse their usual direction. This can happen when the marginal rate of change in demand increases (or declines) faster than originally estimated or if supply growth is stronger (or weaker) than originally estimated.





INDUSTRIAL FORECAST

The national industrial occupancy growth is forecast to decline 0.1% in 1Q24 and be down 1.18% year-over-year as occupancy bounces around its peak equilibrium level. 2024 will be the first challenging year for industrial space in over a decade, as retailer expansions and import growth slows down in anticipation of a recession. The bright spot is 20 new electric vehicle, battery and semi-conductor plants are under construction, that need millions of square feet of warehouse to supply their parts – creating a new demand surge in late 2024 & 2025. Current construction times are now up to an average 13 months. There is a forecast 600+ million Sq Ft of space coming online in 2023. Rent growth should slow in 2024, thus we expect national average asking rents to increase 1.3% in 1Q24 and be up 6.1% year-over-year.



Source: Mueller, 2023

Note: The <u>12-largest industrial markets make up 50%</u> 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.

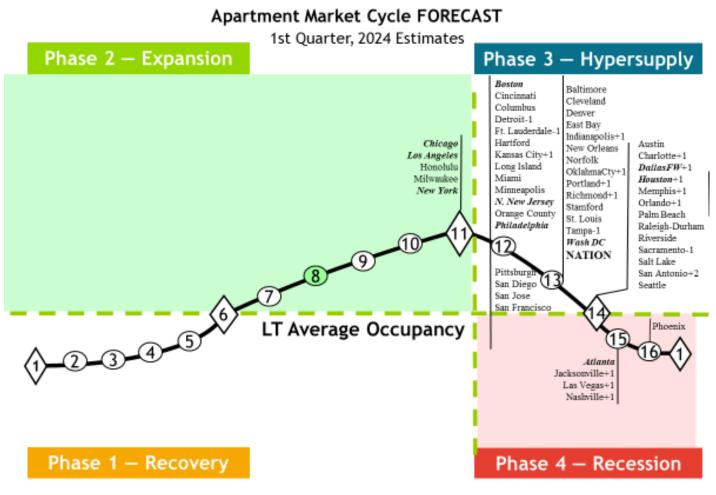
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APARTMENT FORECAST

Apartment occupancies are forecast to decline -0.1% in 1Q24 and be down -0.5% year-over-year. The current economic forecast models slow household formations, as tenants worry about a recession and potential job layoffs. The spike in apartment demand from the pandemic caused developers to increase their new construction starts, thus over 500,000 new apartment units are coming on-line over the next 12 months. This strong number has not seen since the 1980s! However, the new numbers calculated by the National Association of Realtors shows that the US is short 6.5 million housing units (ownership and rental combined). We expect apartment demand should rebound quickly when the economy begins recovery in late 2024, probably just before the national elections in November. We forecast the national apartment asking rental rate to increase 1.0% in 1Q24 and be up 2.7% year-over-year.



Source: Mueller, 2023

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.

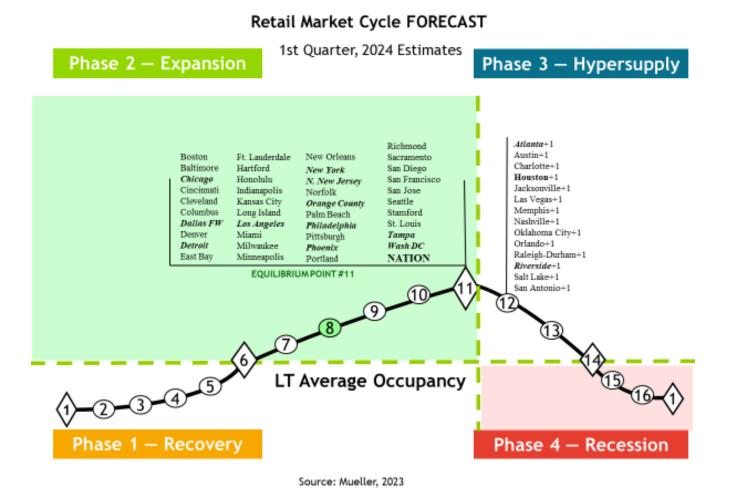
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RETAIL FORECAST

Retail occupancy is forecast to be flat 1Q24 and increase 0.1% year-over-year. While 1Q23 had strong retailer demand from post-holiday season optimism, we expect demand to slow, as recession fears cause retailers to pause on their expansion plans. Lack of available sales force labor is also a constraint to new demand, as the labor market is expected to continue to be tight. New construction is also expected to be well below long-term averages, especially with higher interest rates making new development harder to pencil out. We expect the current trend of 80% of new construction being pre-leased to continue. We forecast retail asking rental rates to increase 0.8% in 1Q24 and be up 3.1% year-over-year.



Note: The <u>15-largest retail markets make up 50%</u> 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.

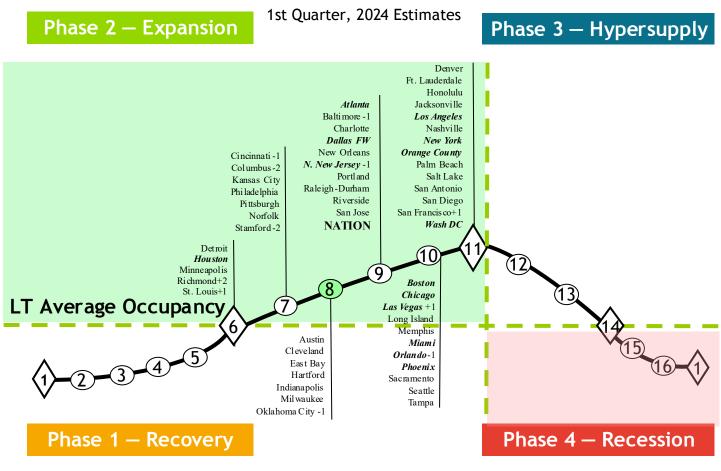
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HOTEL FORECAST

Hotel occupancies are forecast to be up 0.6% in 1Q24 and up 2.7% year-over-year. There is a positive outlook for hotel demand, even in a mild recession, as pandemic savings are allowing for more vacations and weekend trips. This may be the first time that we see positive RevPAR growth in a recession. New supply should continue to be constrained, as banks are limiting hotel construction lending, and increased construction costs make deals harder to be profitable when current RevPAR is still below 2019 levels. We expect national average Revenue Per Available Room (RevPAR) growth to be up 1.0% for the quarter and up only 3.4% year-over-year. RevPar is also forecast to be back to its 2019 level by year-end 2024.



Hotel Market Cycle FORECAST

Source: Mueller, 2023

Note: The <u>14-largest hotel markets make up 50%</u> of the total square footage of retail space we monitor. Thus, the 14-largest hotel markets are in <u>bold italic</u> 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.





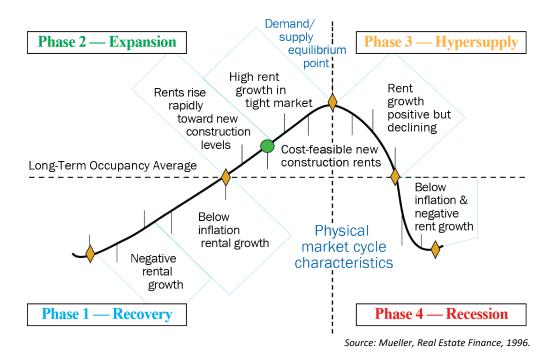
MARKET CYCLE ANALYSIS - Explanation

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 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 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

a strong and ugnt market. During Phase III, supply growth is higher than demand growth (hypersupply), causing vacancy rates to five 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; 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.



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