

Mueller

Real Estate Market Cycle Monitor

First Quarter 2024 Analysis – May 2024

The Physical Market Cycle Analysis of 5 Property Types in 54 Metropolitan Statistical Areas (MSAs).

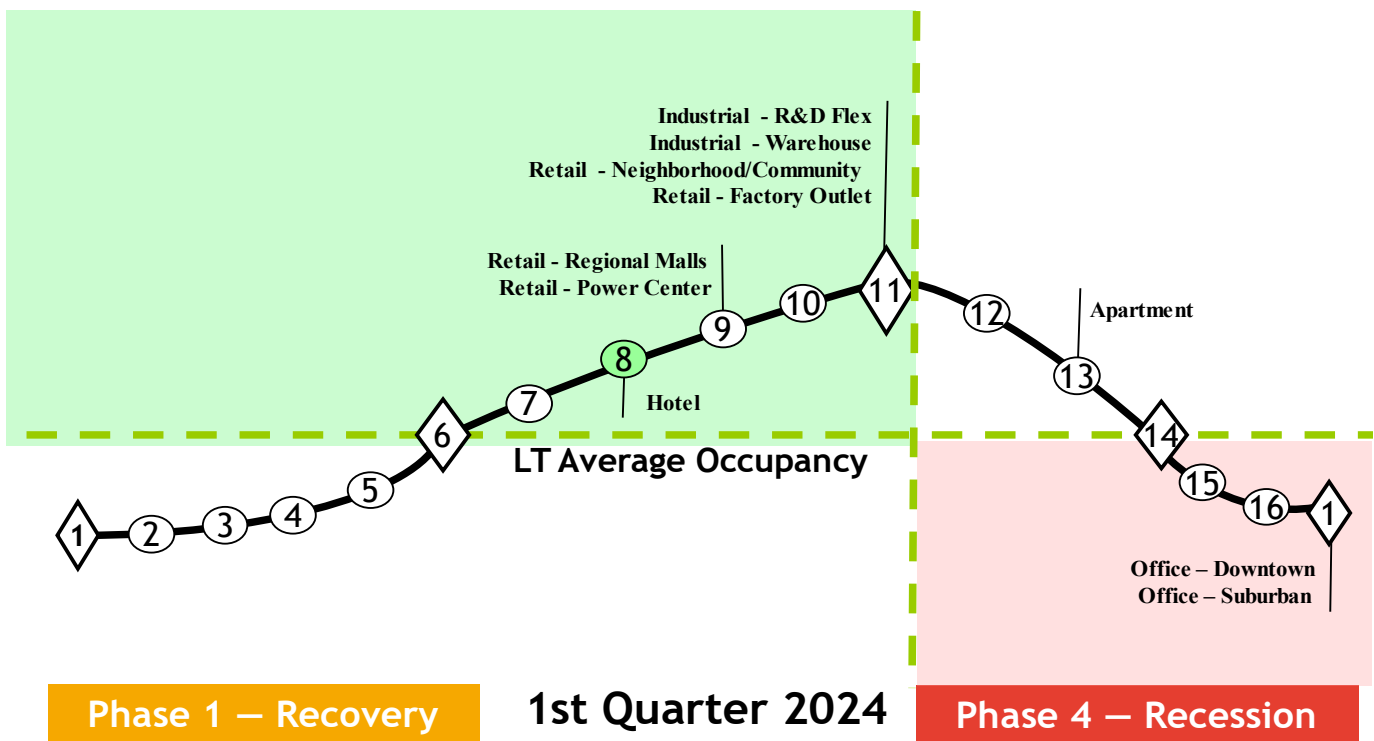
Job growth and new stock market highs seem to propel steady employment growth, even with high wage inflation. The Fed appears to be on pause until they see inflation reduce to close to 2%, but this may take another year as 30% of the CPI is housing costs (both rental and ownership) and both rents and mortgage interest rates would have to decline to bring inflation down. Unfortunately, 10-year commercial loans coming due cannot be refinanced at 6%, putting almost 1,000 banks at the risk of high loan losses. This means both construction and permanent loan financing may be very difficult.

Office occupancy **declined -0.2%** in 1Q24, while rents **were up 0.2%** for the quarter and were **up 0.8%** annually. Industrial occupancy **declined -0.4%** in 1Q24, but rents **grew 1.2%** for the quarter and were **up 4.7%** annually. Apartment occupancy **decreased -0.2%** in 1Q24, but rents **were up 0.2%** for the quarter, and **up 1.0%** annually. Retail occupancy **was flat** in 1Q24, and rents **grew 0.7%** for the quarter and were **up 2.8%** annually. Hotel occupancy **increased 0.2%** in 1Q24, and average RevPAR **grew 1.81** for the quarter and was **up 4.1%** annually.

National Property Type Cycle Locations

Phase 2 – Expansion

Phase 3 – Hypersupply



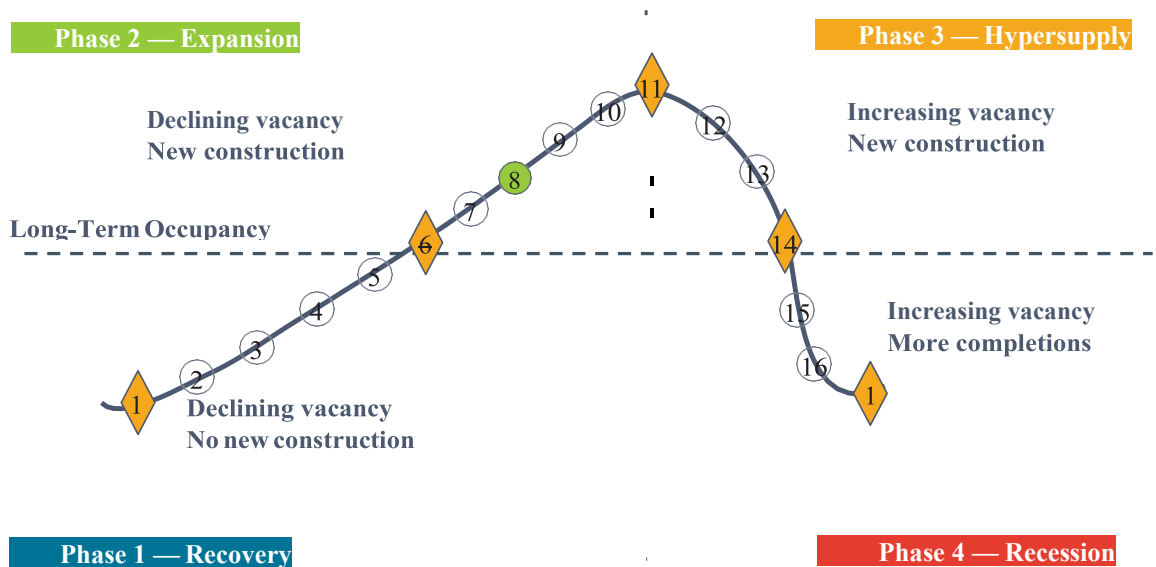
Source: Mueller, 2024

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

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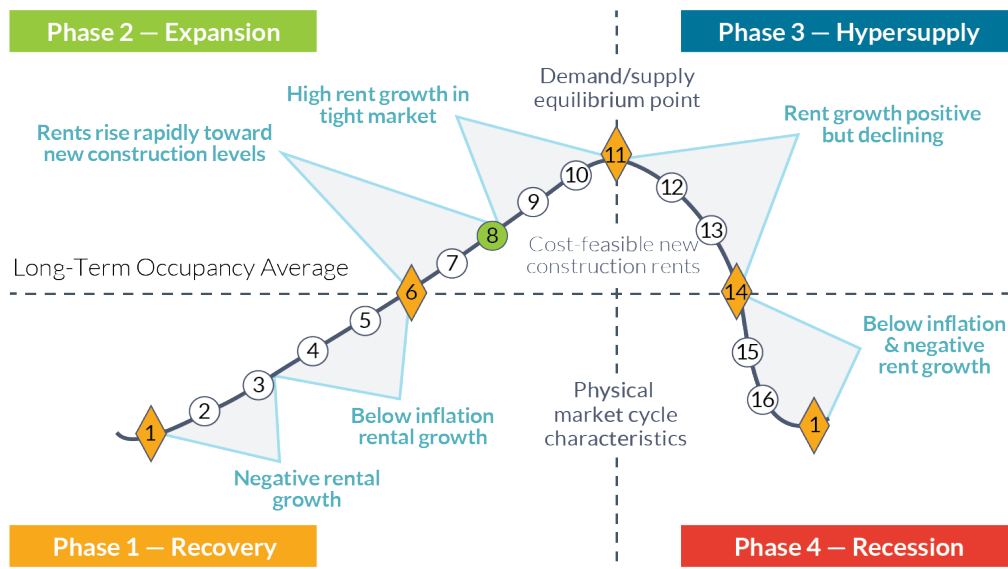
The cycle monitor analyzes occupancy movements in four property types in 54 MSAs. Market cycle analysis should enhance investment-decision capabilities for investors and operators. The five property type cycle charts summarize almost 300 individual models that analyze occupancy levels and rental growth 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.

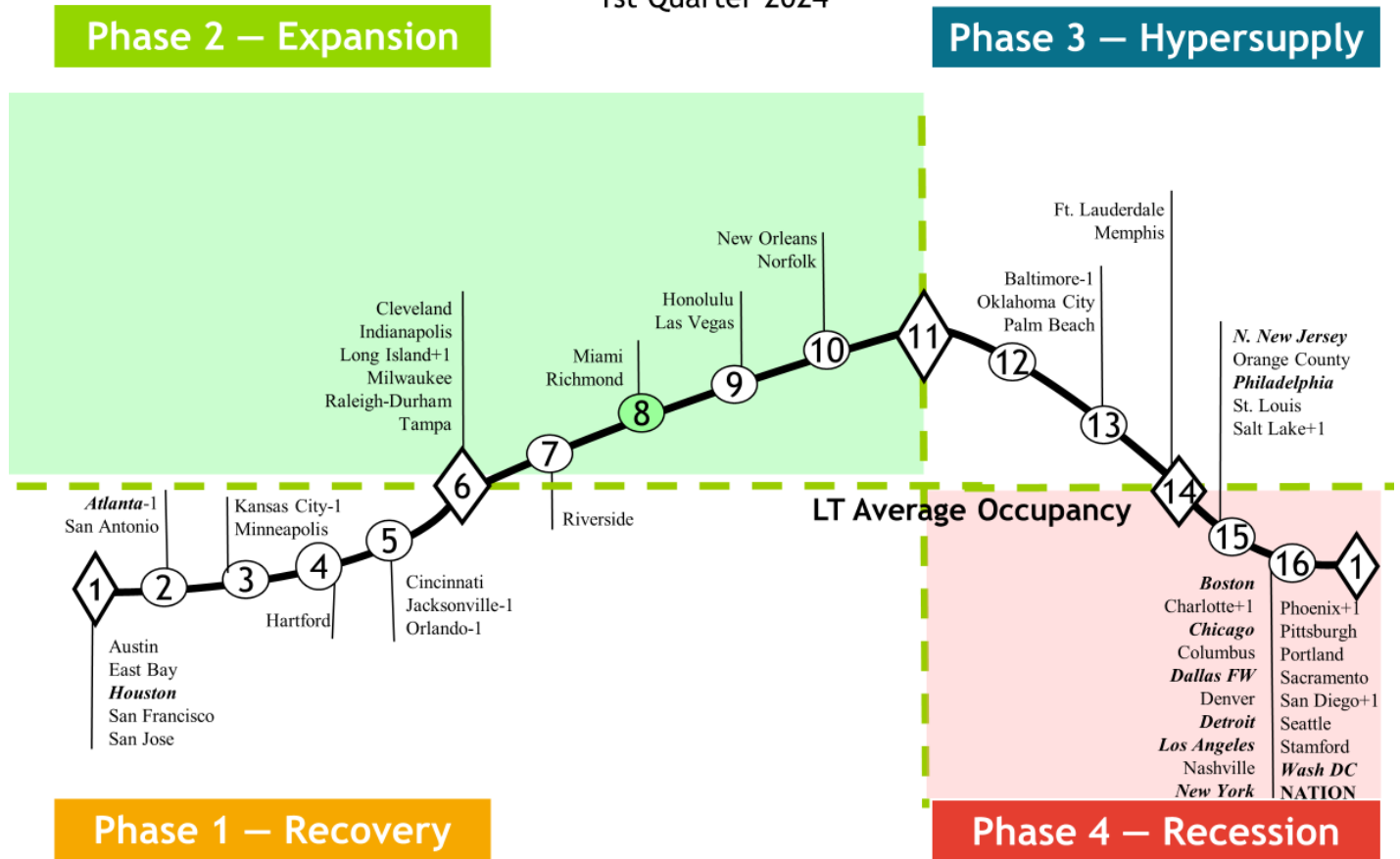


Office

The national office market occupancy level **decreased 0.2%** in 1Q24 and was **down 1.3%** year-over-year. Declining demand continues as office-using job growth was below 1% and the tenants signing new leases are taking an average 15% less space than pre-pandemic. Sub-lease space is now four times more than during the great recession. We expect occupancy to continue its decline as 50% of leases signed pre-pandemic have yet to expire. Total US **negative net absorption** is now **over 200 million square feet**. Asking rental rates were **up 0.2%** in 1Q24 and **up 0.8%** year-over-year – but growing concessions continue to depress net effective rents.

Office Market Cycle Analysis

1st Quarter 2024



Source: Mueller, 2024

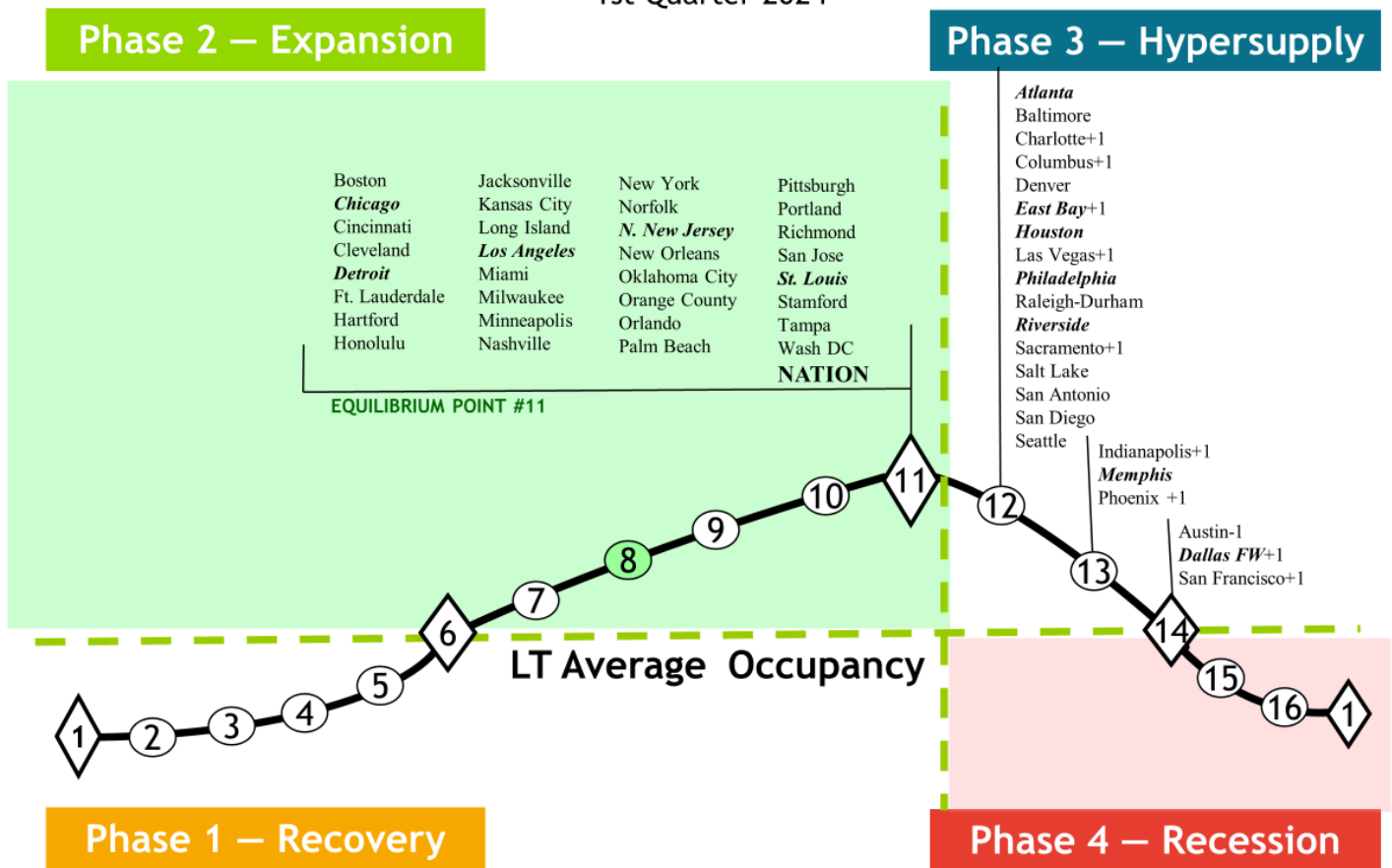
Note: The **11-largest office markets** make up 50% of the total square footage of office space we monitor. Thus, the 11-largest office markets are in **bold italic** type to help distinguish how the weighted national average is affected. Markets that have moved since the previous quarter are now shown 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 **decreased 0.4%** in 1Q24 and were **down 2.7%** year-over-year. Demand growth was slow, due to economic uncertainty. Large goods sales, such as furniture and building materials, were still down. Some distributors were also closing facilities that they had opened post-pandemic. Net absorption was still barely positive, but the lowest rate in a decade. A large amount of unleased space also came online. Asking rent growth was **up 1.2%**, pushed by building costs, and annual rent growth was **up 4.7%** year-over-year.

Industrial Market Cycle Analysis 1st Quarter 2024



Source: Mueller, 2024

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.

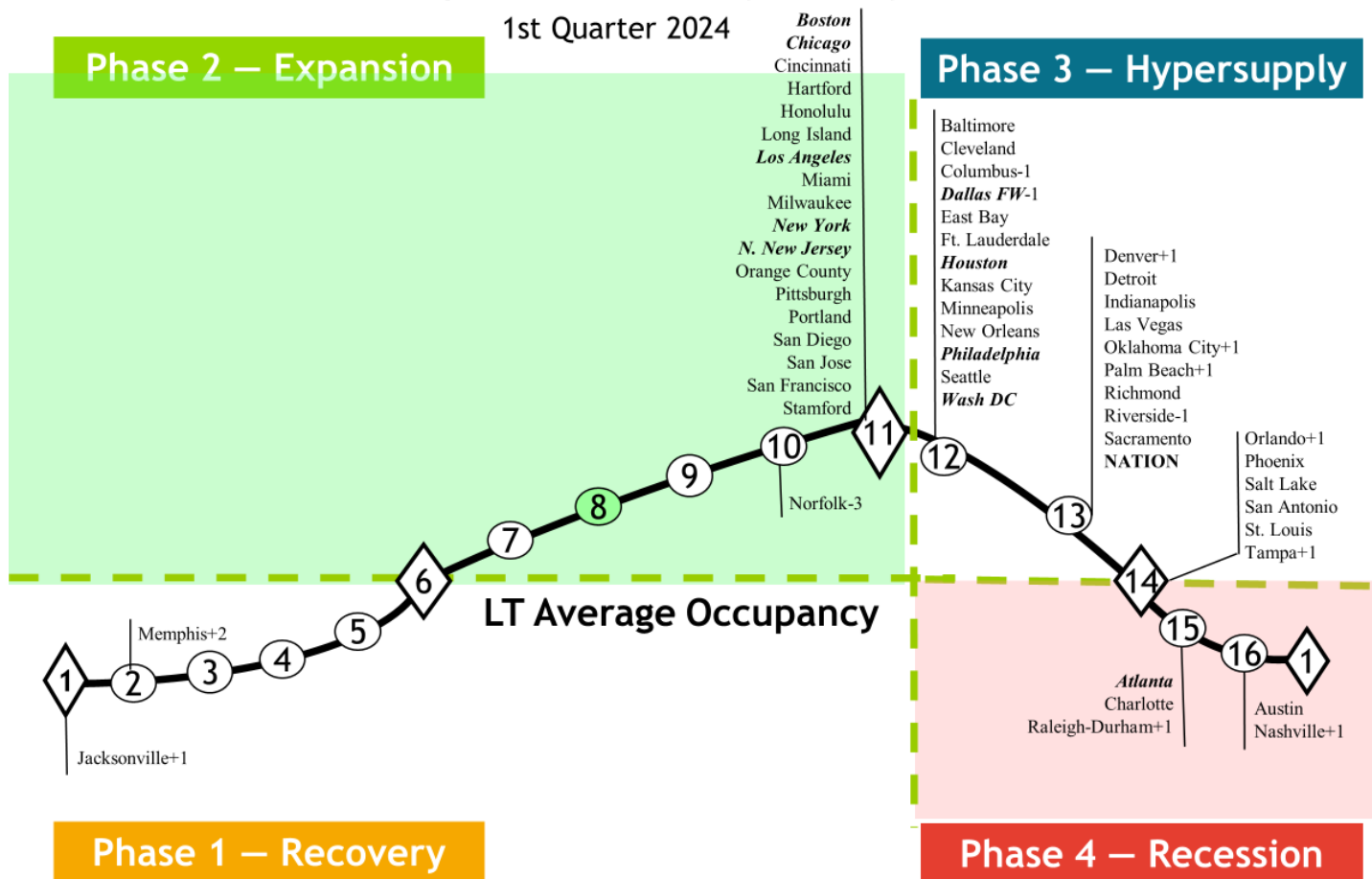
Markets that have moved since the previous quarter are now shown with a + or - symbol next to the market name and the number of positions the market has moved is also shown, i.e., +1, +2 or -1, -2. Markets do not always go through smooth forward-cycle movements and can regress or move backward in their 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 0.4%** in 1Q24 and was **down 1.1%** year-over-year. Demand had a strong rebound in 1Q24 with over 100,000 units being absorbed and almost 400,000 units year-over-year. Unfortunately, net absorption was negative as the market continues to deal with heavy new supply from 150,000 units that came online in 1Q24. Class B and C rent growth was double Class A units, as little new supply and high occupancies exist in those lower B&C tiers. Many sunbelt markets saw rents decline due to large new supply. The national average apartment rent growth was **up 0.2%** 1Q24 and was **up 1.0%** year-over-year.

Apartment Market Cycle Analysis



Source: Mueller, 2024

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.

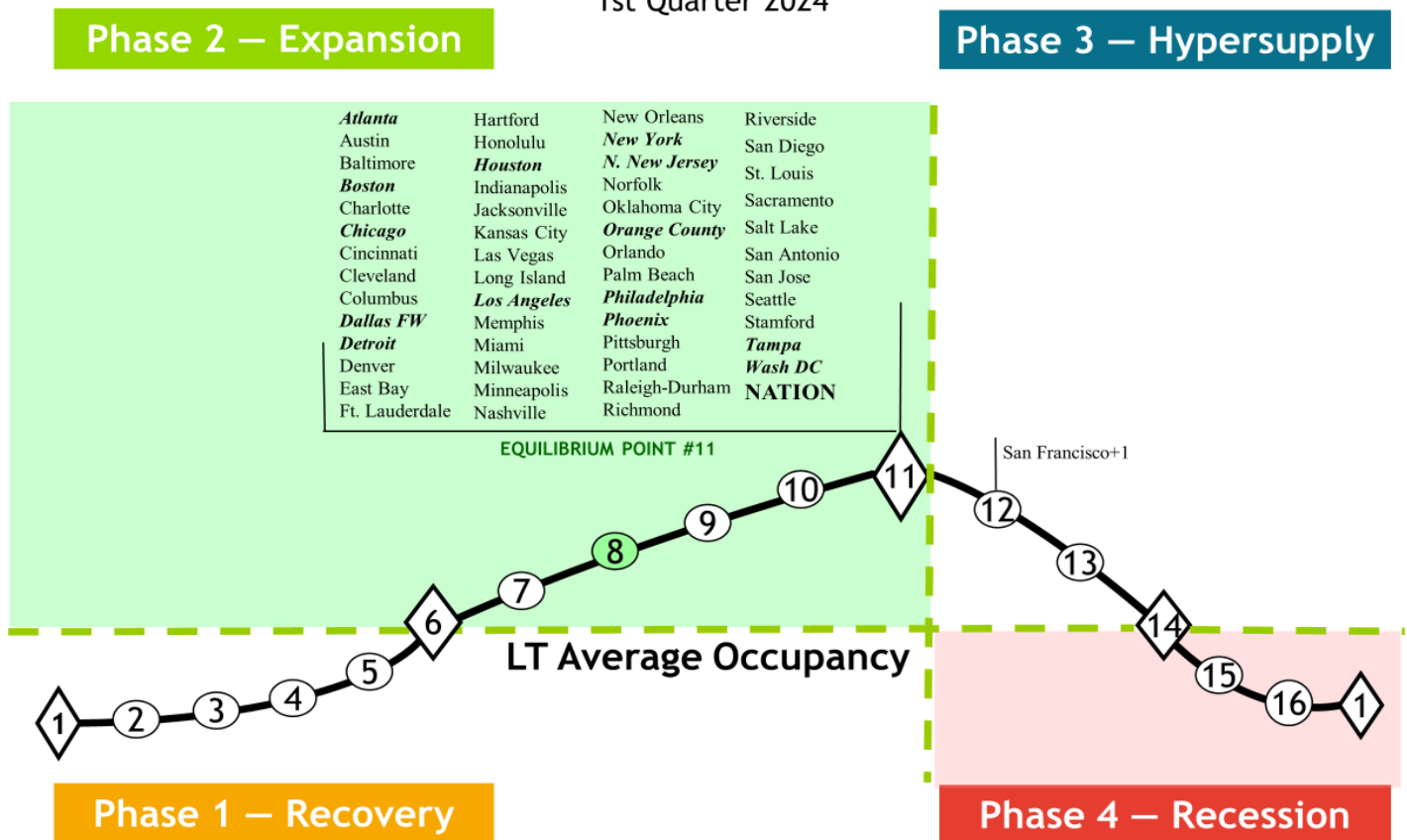


Retail

Retail occupancies were **flat** nationally in 1Q24 and were **up 1.9%** year-over-year maintaining the highest peak-occupancy in history. Only San Francisco had an occupancy decline. Half of new demand was driven by start-ups, discount/off price, and food & beverage tenants. Good locations are hard to find and in high demand, with free standing retail having the highest occupancy rates. Demand was up 42 million square feet year-over-year with 250 million square feet of total leasing. New supply was 40% below the long-term average and 155 million square feet of retail have been demolished since the start of COVID, further restricting supply. Most new supply was either single tenant build-to-suit or ground floor space in a mixed-use project. National average retail asking rents were **up 0.7%** for the quarter and were **up 2.8%** year-over-year.

Retail Market Cycle Analysis

1st Quarter 2024



Source: Mueller, 2024

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

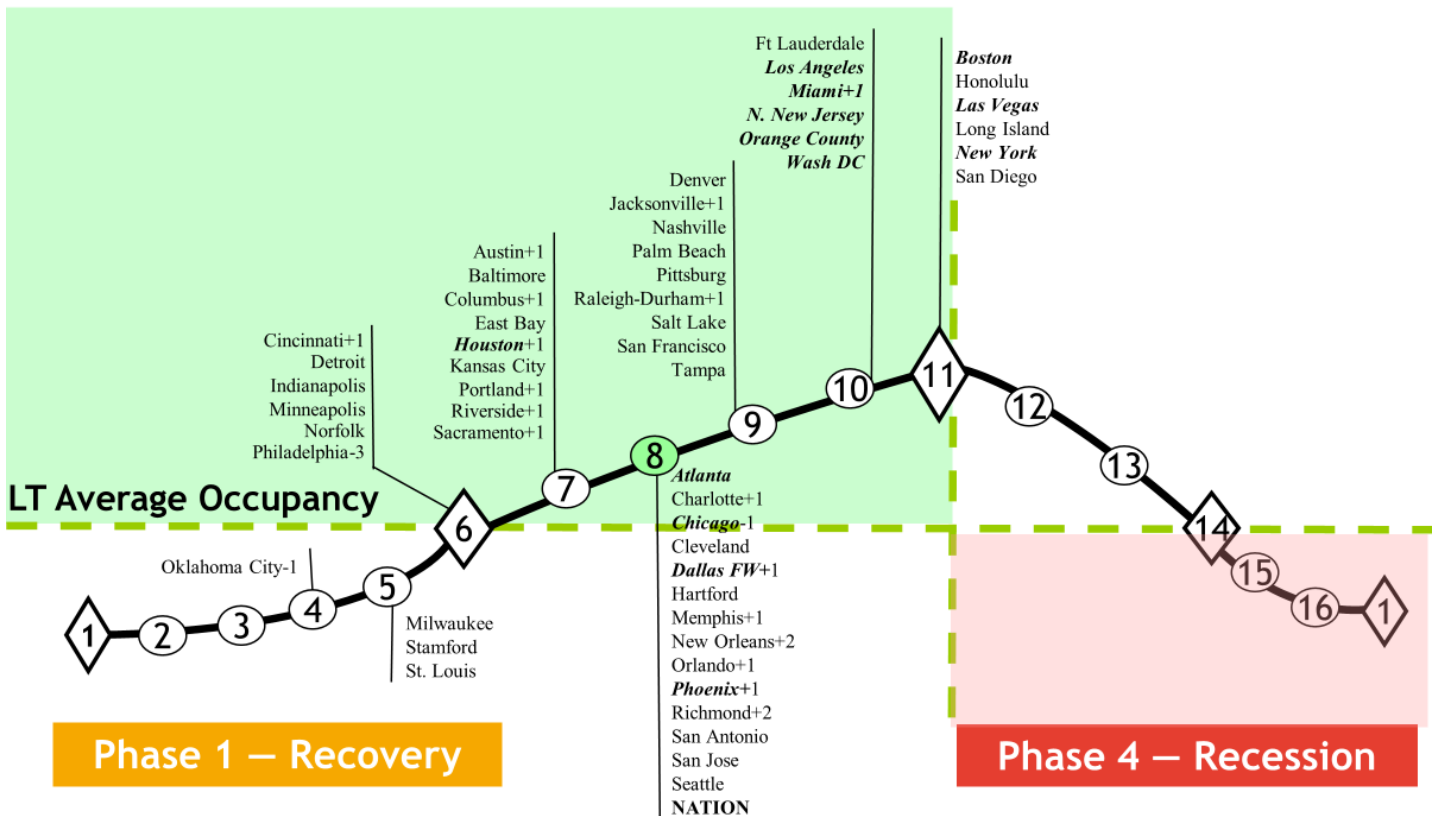
Hotel occupancies were **up 0.4%** in 1Q24 and **up 1.6%** year-over-year. Room Demand declined overall, indicating that the post-COVID “revenge travel” phenomena may be over. New supply declined to about 30% below the long-term average. The hotel sub-sectors performed quite differently with luxury demand being up 4.6% and RevPAR growth up 2/.6% (this may have been skewed by Las Vegas hosting the Superbowl), while economy class hotel demand was down 6.1% and RevPAR declined 7.2%. National average Revenue Per Available Room – (RevPAR) was **up 1.1%** for the quarter and **up 4.1%** year-over-year.

Hotel Market Cycle Analysis

1st Quarter 2024 Estimates

Phase 2 – Expansion

Phase 3 – Hypersupply



Source: Mueller, 2024

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

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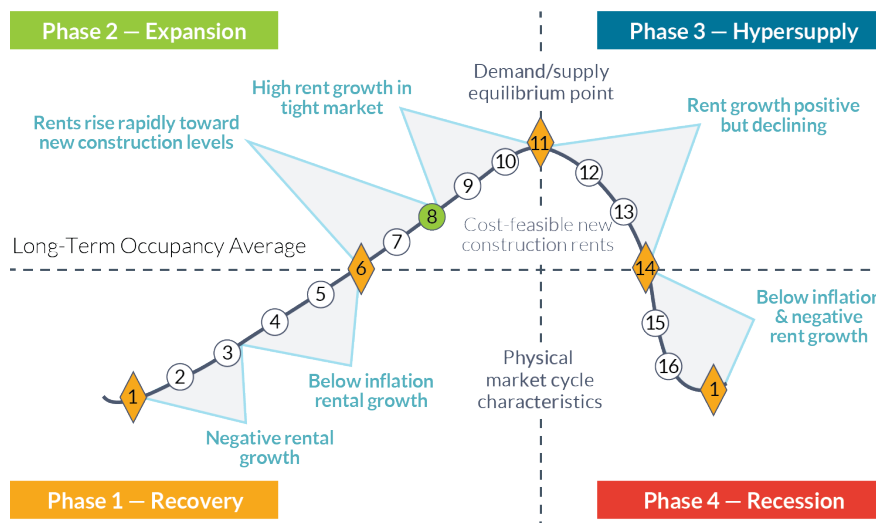
Market Cycle Analysis – Explanation

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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