

Mueller

Real Estate Market Cycle Monitor

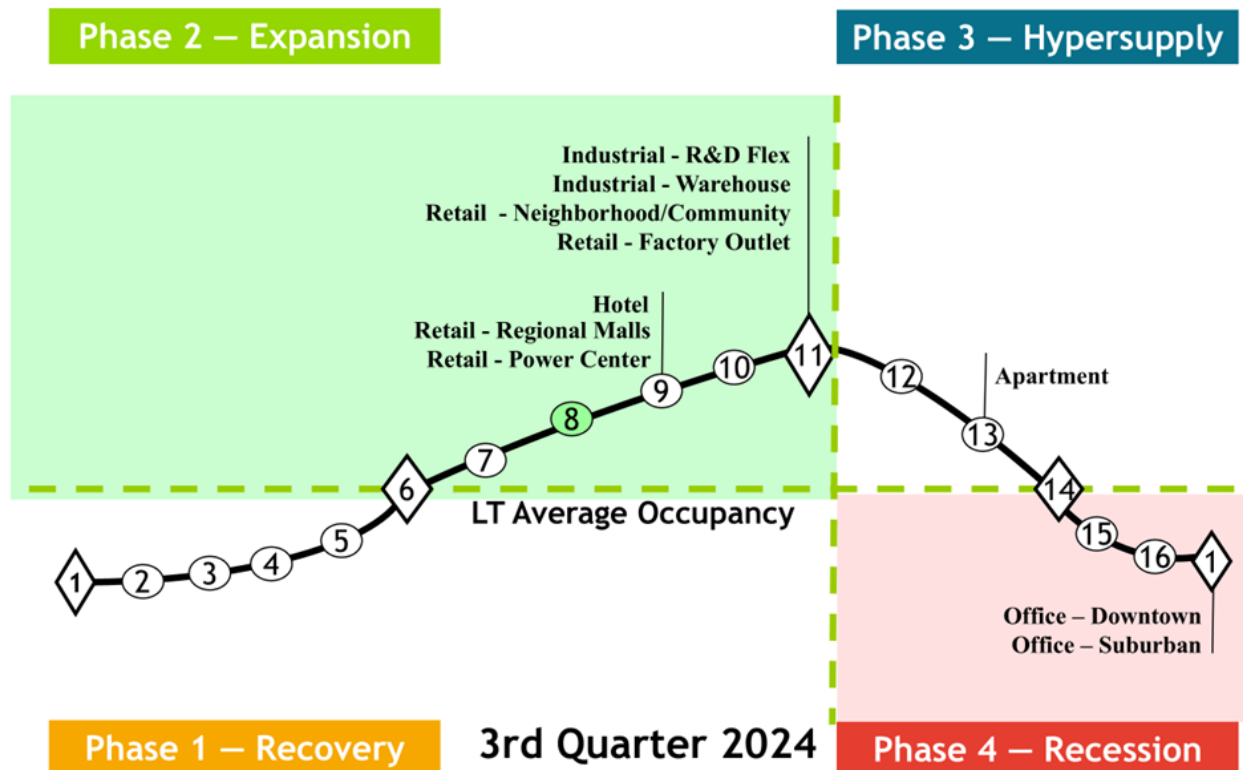
Third Quarter 2024 Analysis – November 2024

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

GDP and employment growth continued at a positive slow pace in 3Q25. The Fed’s first rate cut put a positive response into the real estate community and transaction volume started to pick up. Many real estate firms have called this the bottom of the financial cycle, and we agree with that on the price and transaction data, however, many cities and property types are at peak (not bottom) occupancies – the Physical Cycle. Higher costs in labor, materials and property taxes are the biggest concerns on the income return part of real estate’s total return and are very location and property type in nature. Investment risk levels remain high in many places and property types

Office occupancy **declined -0.2%** in 3Q24, while rents **were up 0.1%** for the quarter and **were up 0.9%** annually. Industrial occupancy **declined -0.3%** in 3Q24, but rents **were flat** for the quarter and **were up 3.1%** annually. Apartment occupancy **decreased -0.1%** in 3Q24, and rents **were down -0.4%** for the quarter, and **down -1.1%** annually. Retail occupancy **was flat** in 3Q24, and rents **were up 0.3%** for the quarter and **were up 2.3%** annually. Hotel occupancy **declined -0.2%** in 3Q24, and Rev PAR **grew 0.4%** for the quarter and **was up 1.4%** annually.

National Property Type Cycle Locations



Source: Mueller, 2024

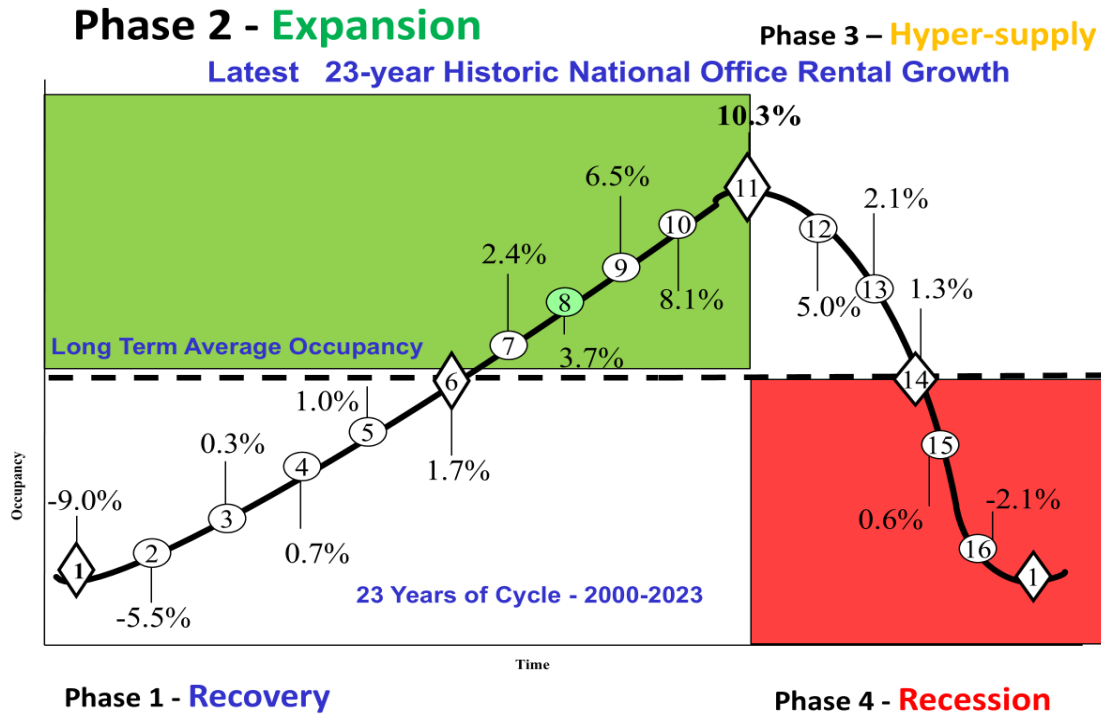
The National Property Type Cycle Locations graph shows relative positions of the sub-property types.

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The cycle monitor analyzes occupancy movements in 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.

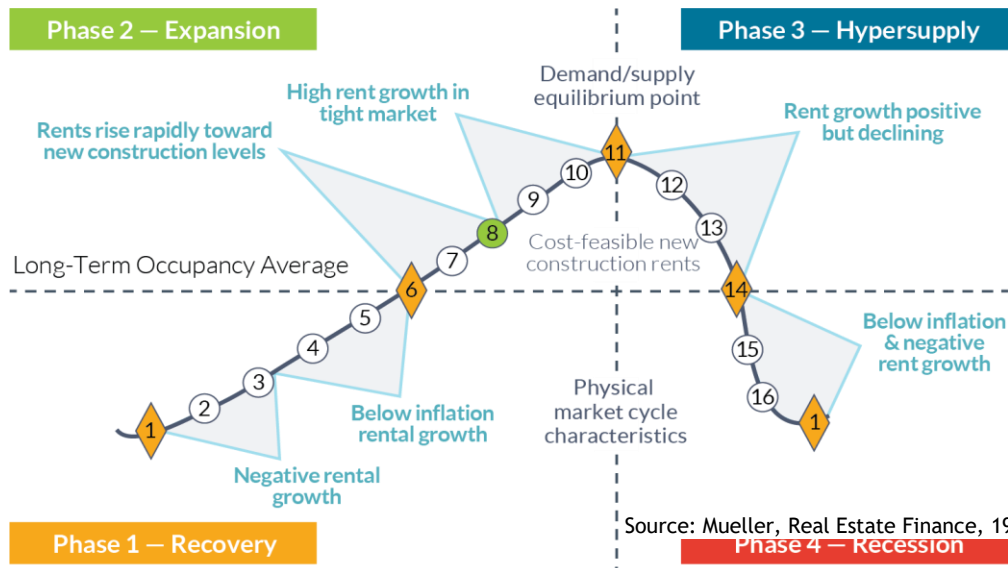
Market Cycle Quadrants



Source: Mueller, Real Estate Finance 1998

Source: Mueller, 2024

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



Source: Mueller, Real Estate Finance, 1996.

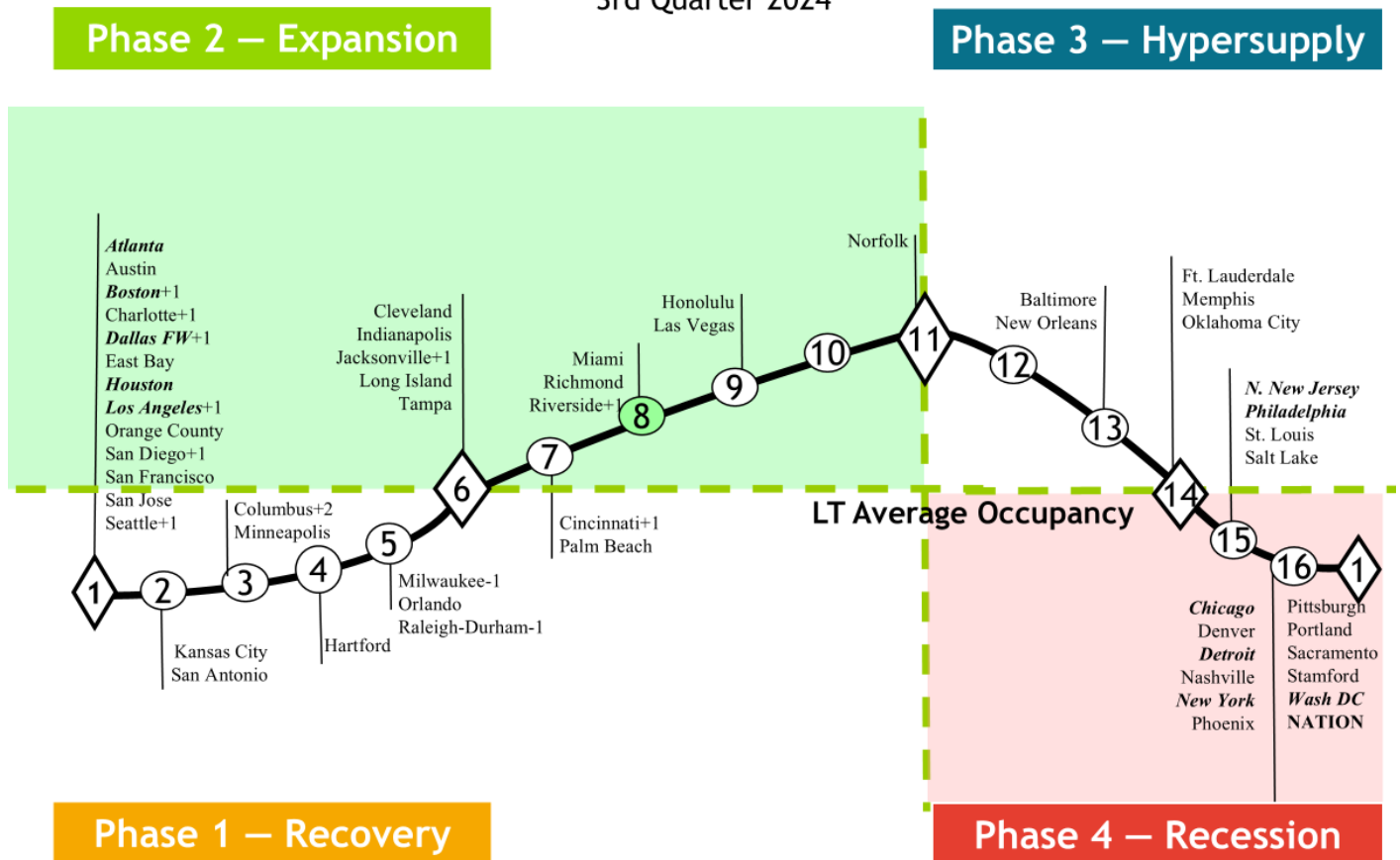
Source: Mueller, Real Estate Finance, 1996.

Office

The national office market occupancy level **declined -0.2%** in 3Q24 and **was down 0.6%** year-over-year. Office demand growth slowed in line with the lower economic and employment growth. Completions from the 10-year construction supply pipeline brought on more supply at just the wrong time. US average occupancy is now 7% lower than the pre-COVID average. Office usage is still 40% below its long-term average, thus tenants with expiring leases are looking for less space going forward. New office is leasing better than existing space, as tenants want attractive fresh space to lure workers back to the office. “Hotelification” with resort-like amenities is the new trend in tenant finish, as CEOs strive to end the remote work trend. Asking rental rates **were up 0.1%** in 3Q24 and **were up 0.9%** year-over-year, driven up by newly completed properties leasing – but growing concessions continue to depress net effective rents.

Office Market Cycle Analysis

3rd Quarter 2024



Source: Mueller, 2024

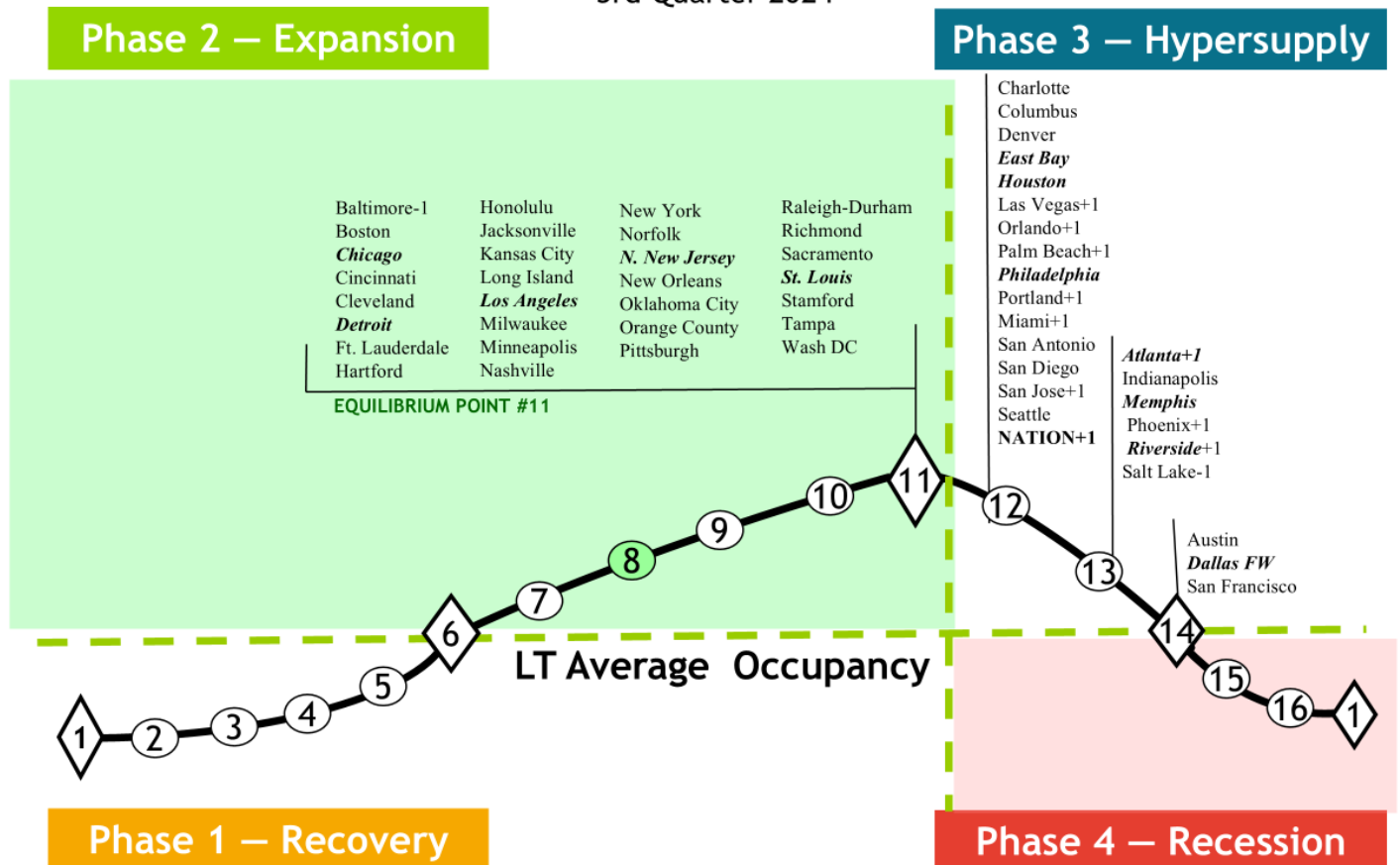
Note: The 11-largest office markets make up 50% of the total square footage of office space we monitor. Thus, the 11-largest office markets are in ***bold italic*** type to help distinguish how the weighted national average is affected.

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 -0.3%** in 3Q24 and **decreased -1.4%** year-over-year (indicating that industrial has past its peak equilibrium level and moved into hypersupply point #12 on the cycle chart). Strong completions caused net absorption to decline to a 10-year low in 3Q24. However, new leasing has started to increase lead by Amazon pursuing new distribution space for its portfolio. Demand is improving due to increasing consumer spending, and US semiconductor manufacturing growth. This demand growth is also evidenced by increasing employment in the warehouse sector. The other good news is that new starts are now at a 10-year low. Asking rent growth **was flat** and annual rent growth **was up 3.1%** year-over-year.

Industrial Market Cycle Analysis 3rd Quarter 2024



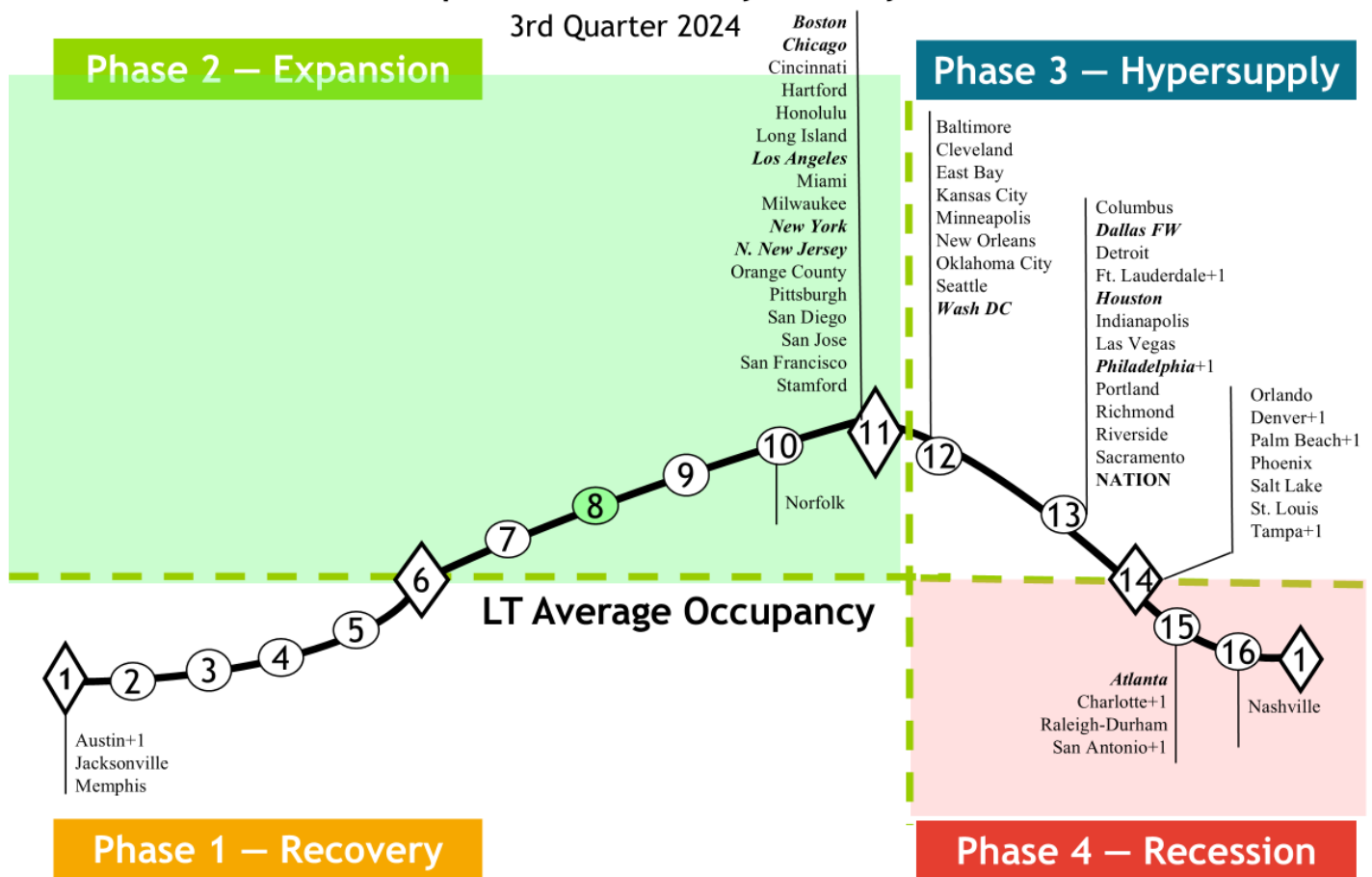
Note: The 12-largest industrial markets make up 50% of the total square footage of industrial space we monitor. Thus, the 12-largest industrial markets are in ***bold italic*** type to help distinguish how the weighted national average is affected.

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 -0.1%** in 3Q24 and was **down -0.4%** year-over-year. US demand continues to rebound with over 450,000 units absorbed year-to-date, the strongest since 2021. Unfortunately, apartment deliveries should reach over 500,000 units in 2024 the highest in 20 years. The potential for demand and supply to balance by the end of the year is high. The new supply was concentrated in the South and West markets causing lower occupancies there. The national average apartment rent growth **was down -0.1%** in 3Q24 but **was down -1.1%** year-over-year.

Apartment Market Cycle Analysis



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

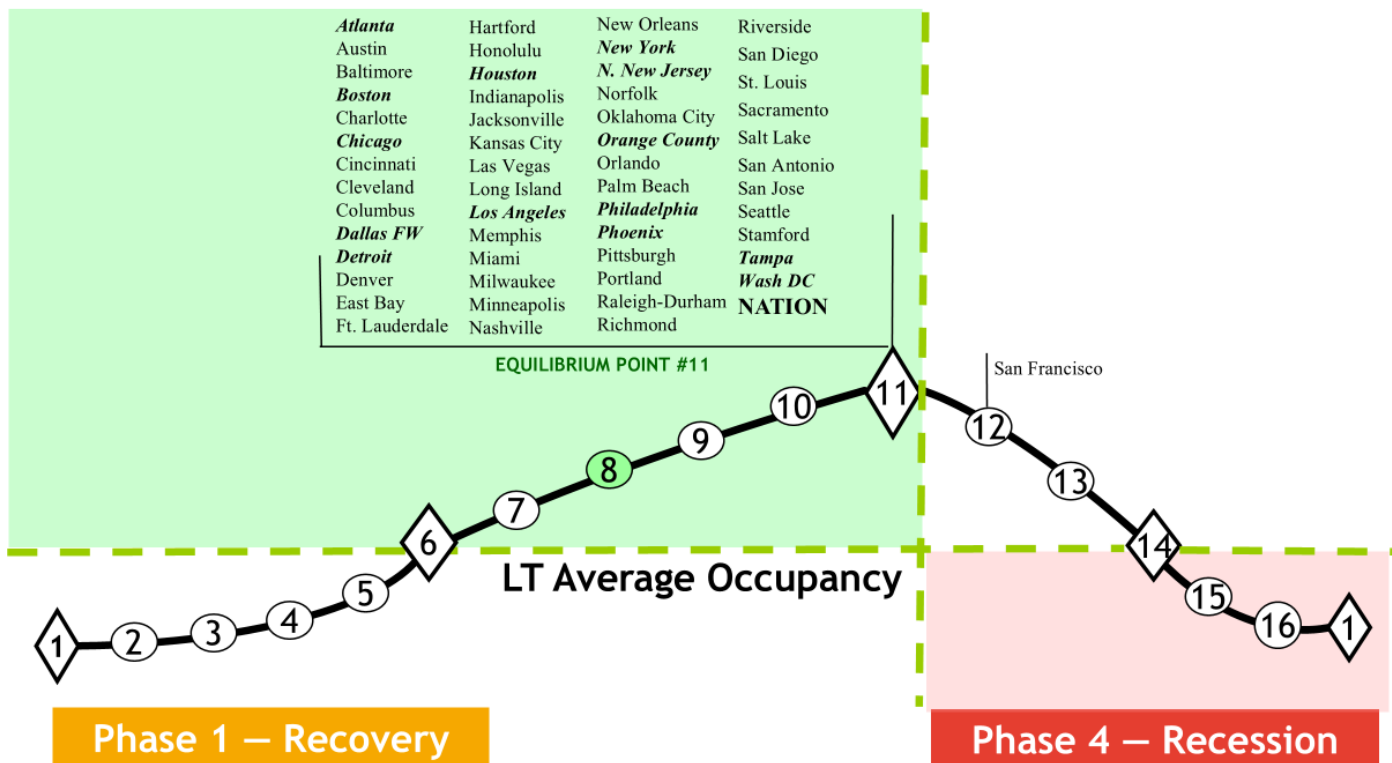
Retail occupancies were **flat** nationally in 3Q24 and **were flat** year-over-year, maintaining the highest peak-occupancy level in retail's history. Retail sales increased 3% year-over-year (inflation adjusted) helping to keep demand strong. Constrained supply over the past 15 years has allowed retail space to fill to peak occupancy with only poor quality and/or location space being available. Retail strip centers are the top performing sector with foot traffic up over 10% year to date. Filling vacant space has taken only 3 to 6 months. The national average retail asking rents **were up 0.3%** for the quarter and **were up 2.3%** year-over-year.

Retail Market Cycle Analysis

3rd Quarter 2024

Phase 2 – Expansion

Phase 3 – Hypersupply



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.

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Hotel

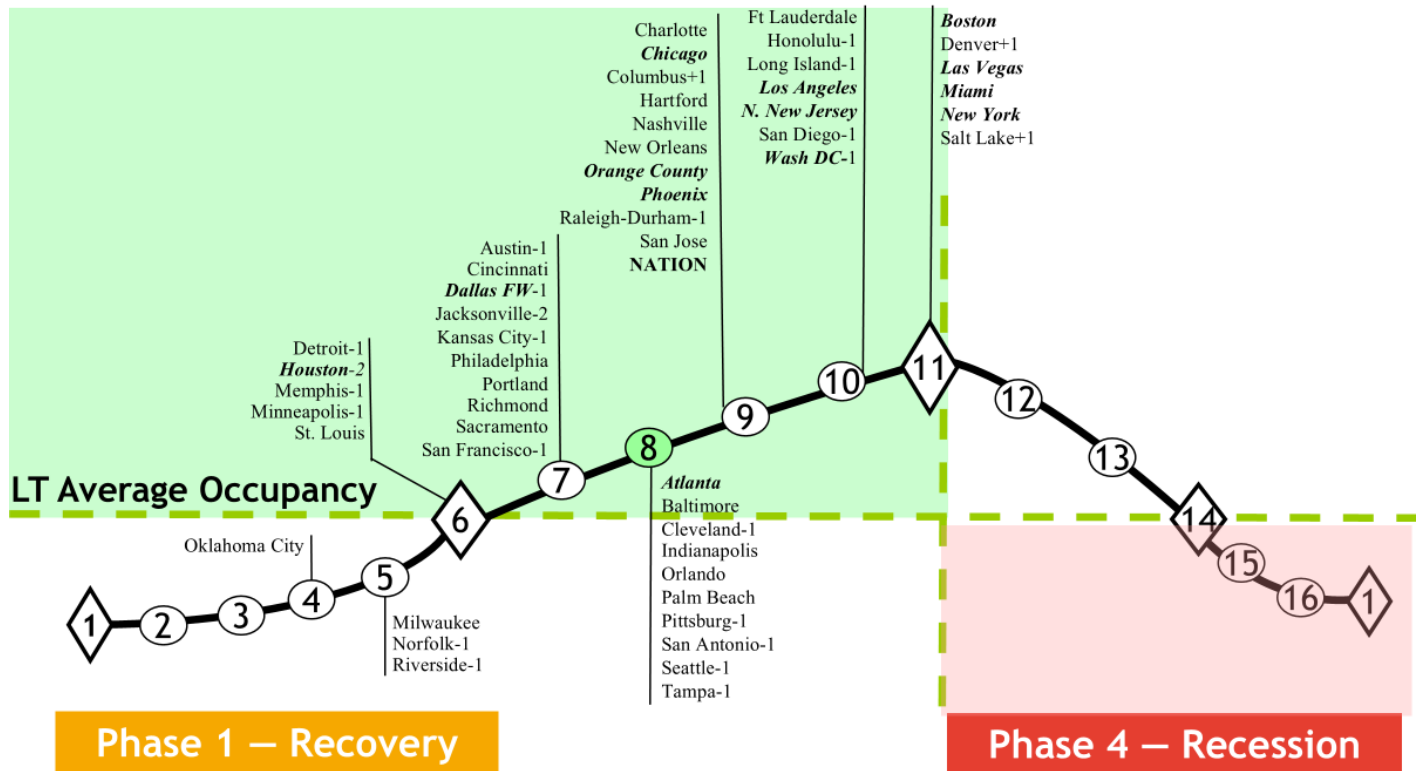
Hotel occupancies were **down -0.2%** in 3Q24 and **down -0.7%** year-over-year. Continued bifurcated demand saw upper end hotels experiencing 4.2% demand growth year to date, while economy class hotel demand was down 3.4%. Business hotels also saw demand growth again, with conference business leading the way. New hotel supply continues to be constrained at a low 150,000 units per year average, that has maintained that level over the past 2+ years. National average Revenue Per Available Room – (RevPAR) was **up 0.4%** for the quarter and **up 1.4%** year-over-year.

Hotel Market Cycle Analysis

3rd Quarter 2024

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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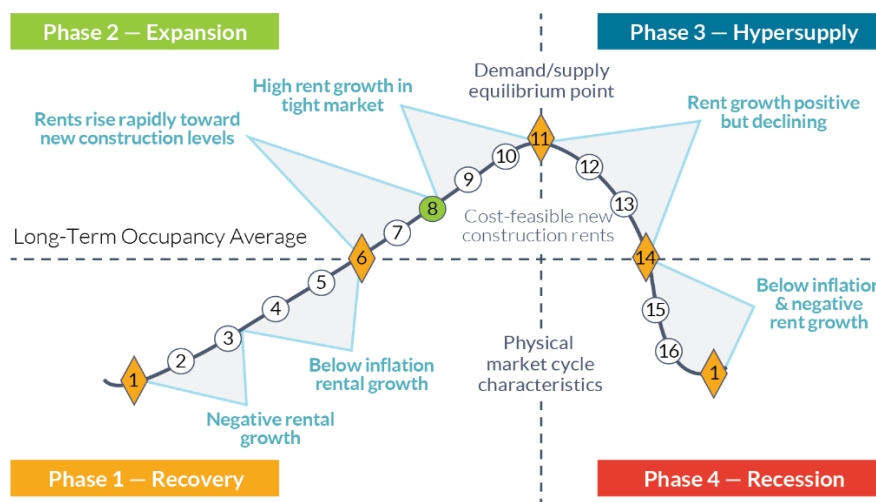
Market Cycle Analysis — Explanation

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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