To Our Valued Clients:

The U.S. economy continued to make steady gains, overcoming numerous hurdles and headwinds last year to post solid growth across a wide spectrum of benchmarks. Corporations maintained near record profits, job growth was widespread, consumption rose at a steady pace and inflation remains in check. Looking forward, economic indicators support cautious optimism despite softening international growth and a wide array of potential geopolitical flash points. For the office sector, underlying momentum is sound, with corporate expansion and steady office-using employment gains anticipated. Limited office construction in most markets will remain a strongly positive factor supporting escalating performance and values.

Readily accessible capital, together with the likelihood of stable, low interest rates, will support investment activity this year. Though the Federal Reserve has taken initial steps toward tightening monetary policy, low oil prices and the strong dollar will help restrain inflation, allowing the Fed considerable flexibility in how they handle additional increases to the Fed Funds rate. Still, the Fed must walk a fine line, balancing domestic economic growth against inflation while considering broader global economic risks. Within this environment, office property yields will become increasingly attractive to investors. Though office yields have tightened, they remain attractive compared to many other asset classes and many investors may reposition portfolios to capitalize on both the stability and the upside potential of these properties.

The office property outlook continues to improve, with strong corporate profits spurring steady hiring of office personnel. Though many companies tightened their space allocations per employee following the recession, steady hiring has boosted total office-using employment more than 5 percent above its pre-recession peak, while total occupied space has advanced by just 4.3 percent. As companies continue to fill their existing footprints, they will begin to more aggressively seek additional space. Because construction remains limited, at about half pre-recession levels, vacancies will tighten in most markets. These positive trends will support both urban and suburban offices, especially in markets boasting the tightest vacancies.

The steadily strengthening outlook for office assets, together with comparably attractive yields, will support investor demand this year. Cap rates have tightened for properties in the urban core of primary metros, but suburban and secondary market opportunities have gathered increasing attention. As these trends continue, yields in these secondary locations will tighten, thereby lifting valuations. This will allow investors who have held assets in these areas since the last cycle to consider strategies for repositioning their holdings both in terms of market area and property type.

The new opportunities brought by the coming year will be reinforced by the spread of positive dynamics beyond core markets, offering a wider array of options. We hope this report offers useful insights on a variety of trends, markets and investment strategies, and our investment professionals look forward to assisting you in meeting your goals.

Sincerely,

Al Pontius
Senior Vice President, National Director
National Office and Industrial Group

John Chang
First Vice President
Research Services
# National Perspective

**Executive Summary**

- 2016 National Office Property Index .................................................. 4-5
- Specialty Indexes, ...................................................................................... 6-7
- National Economy, .................................................................................... 8
- National Office Overview, ......................................................................... 9
- Capital Markets, ....................................................................................... 10
- Office Investment Outlook ......................................................................... 11
- Medical Office Outlook ........................................................................... 12-13

## Market Overviews

- Atlanta, ........................................................................................................ 14
- Austin, ........................................................................................................ 15
- Baltimore, ................................................................................................. 16
- Boston, ....................................................................................................... 17
- Charlotte, .................................................................................................. 18
- Chicago, .................................................................................................... 19
- Cincinnati, ................................................................................................ 20
- Cleveland, ................................................................................................ 21
- Columbus, ................................................................................................ 22
- Dallas/Fort Worth, ..................................................................................... 23
- Denver, ...................................................................................................... 24
- Detroit, ..................................................................................................... 25
- Fort Lauderdale, ........................................................................................ 26
- Houston, ................................................................................................... 27
- Indianapolis, ............................................................................................ 28
- Jacksonville, ............................................................................................. 29
- Kansas City, .............................................................................................. 30
- Las Vegas, ................................................................................................ 31

## Statistical Summary

- Los Angeles, .............................................................................................. 32
- Louisville, ................................................................................................. 33
- Miami-Dade, ............................................................................................ 36
- Milwaukee, .............................................................................................. 37
- Minneapolis-St. Paul, ................................................................................ 38
- Nashville, .................................................................................................. 39
- New Haven-Fairfield County, ................................................................. 40
- New York City, ........................................................................................ 41
- Northern New Jersey, ............................................................................... 42
- Oakland, ................................................................................................... 43
- Orange County, ....................................................................................... 44
- Orlando, .................................................................................................... 45
- Philadelphia, ............................................................................................ 46
- Phoenix, .................................................................................................... 47
- Pittsburgh, ............................................................................................... 48
- Portland, .................................................................................................. 49
- Riverside-San Bernardino, ..................................................................... 50
- Sacramento, ............................................................................................. 51
- Salt Lake City, .......................................................................................... 52
- San Antonio, ............................................................................................ 53
- San Diego, ................................................................................................ 54
- San Francisco, .......................................................................................... 55
- San Jose, ................................................................................................... 56
- Seattle-Tacoma, ....................................................................................... 57
- St. Louis, ................................................................................................... 58
- Tampa-St. Petersburg, ............................................................................. 59
- Washington, D.C., .................................................................................... 60
- West Palm Beach, .................................................................................... 61

## Client Services

- Office Locations, ..................................................................................... 62-63
- Contacts, Sources and Definitions, ......................................................... 64

Developed by Hessam Nadji, Senior Executive Vice President, and John Chang, First Vice President, Research Services. The Capital Markets section was co-authored by William E. Hughes, Senior Vice President, Marcus & Millichap Capital Corporation. Additional contributions were made by Marcus & Millichap market analysts and investment brokerage professionals nationwide.
Executive Summary

National Office Property Index (NOPI)

- Markets with strong job growth and low vacancy rates dominate the upper echelon of the 2016 National Office Property Index. San Francisco and San Jose nail down the top two spots, while New York City slides up onto the third rung in a swap of positions with Seattle-Tacoma. Austin is the only new entrant in the top 10 from one year ago, supplanting San Diego.

- Several regions are represented in the 20 highest-placed markets. Boston reprises its high ranking from one year ago, outplacing Oakland, which anchors a strong Bay Area contingent in the upper levels of this year’s Index. Salt Lake City, Charlotte and Minneapolis-St. Paul also claim spots in the top 20, while Dallas-Fort Worth jumps three rungs from one year ago.

- Metros with slower projected improvements in office-property operations populate the lower third of this year’s Index. Midwest metros are well represented in the rankings of markets from 30 to 40, joined by Fort Lauderdale and Jacksonville. Subdued performance places Detroit, Milwaukee and Northern New Jersey in the lowest positions in the 2016 Index.

National Economy

- After creating an estimated 2.65 million jobs last year, employers will continue to expand staffing, adding 2.8 million positions in 2016. This year’s total includes 820,000 office-using jobs, surpassing the gain of 802,000 office-using posts in 2015. Further expansion in healthcare payrolls will also generate new demand for medical office space.

- The consumer will carry the economy this year. Continuing growth in consumer spending from higher wages, ongoing low gas prices and comparatively inexpensive imported items will underpin U.S. economic growth of 2.6 percent in 2016.

- Amid the positive developments in the labor market and other facets of the domestic economy last year, many foreign economies lost momentum in 2015. The risk of softness in foreign economies spreading will persist in 2016 and potentially weigh more greatly on U.S. economic momentum during the year.

National Office Market Overview

- Expansions and new business formation will drive net absorption of nearly 90 million square feet in 2016 and reduce the national vacancy rate to 14.6 percent. Tightening vacancy will maintain rent growth on par with last year’s solid rate of growth.

- Office-property development will modestly accelerate from nominal levels during this recovery but not hinder vacancy improvement. Projects comprising 79 million square feet will come online in 2016 and will be heavily concentrated in a handful of markets during the year.

- Financial-services tenants have yet to make an appreciable contribution to space demand growth during this recovery. However, the increase in the Federal Reserve’s benchmark rate last year may offer a lift to interest-rate-sensitive financial-service businesses and generate additional hiring and new space requirements as 2016 progresses.

Capital Markets

- The Federal Reserve’s long-awaited fourth quarter rate bump illustrates its faith in the economy, but with inflation contained and moderate growth anticipated in 2016, the central bank will likely defer additional rate adjustments until midyear. In addition, the 10-year U.S. Treasury stayed below the long-term average last year, and low long-term rates will persist in 2016 as global demand for risk-free securities remains elevated.

- Leverage in acquisition loans typically ranged from 65 percent for life companies to as much as 75 percent for CMBS deals last year and will likely remain range bound as lenders continue to practice disciplined underwriting. Debt providers also continue to review new projects discriminately, favoring build-to-suits in major markets.

Investment Outlook

- Following a strong flow of capital in 2015, several factors remain aligned for additional office property acquisitions during 2016. These include functioning capital markets and further growth in office-using payrolls that will translate into new space demand. Also, development will remain subdued.

- The average cap rate in all transactions compressed last year, with initial yields in primary, secondary and tertiary markets all tightening to near pre-recession levels.
Some shuffling occurred among the top markets in this year’s National Office Property Index, but the 10 highest-ranked markets are virtually unchanged from one year ago. Sub-10 percent vacancy rates and robust job growth enabled San Francisco (#1) and San Jose (#2) to reclaim and tighten their grips on the top spots from one year ago. New York City, meanwhile, climbed one rung to round out the top three, swapping positions with Seattle-Tacoma (#4) despite that metro’s projected vacancy rate of less than 10 percent. Nashville (#8) also rose one spot and completes the group of markets with sub-10 percent vacancy in this year’s top 10; the market will also post strong rent growth for a second consecutive year. Miami-Dade rose two spots to the fifth position, while Austin (#6) vaulted five positions behind a vigorous expansion of payrolls and a drop in completions. Orange County ceded a top-five position from one year ago, but respectable strengthening in payrolls and property performance still enable it to retain a lofty position as the seventh-ranked metro in the Index. Denver (#9) retreated three rungs from one year ago. Job growth in the metro remains solid but is tapering from the heightened levels of the past few years, while developers will increase output this year to moderate the projected drop in vacancy. Portland illustrated the strength of the Pacific Northwest region and maintained the tenth spot in the NOPI, while San Diego (#11) slipped three posts to just outside of the top 10.

Some shuffling occurred among the top markets in this year’s National Office Property Index, but the 10 highest-ranked markets are virtually unchanged from one year ago. Sub-10 percent vacancy rates and robust job growth enabled San Francisco (#1) and San Jose (#2) to reclaim and tighten their grips on the top spots from one year ago. New York City, meanwhile, climbed one rung to round out the top three, swapping positions with Seattle-Tacoma (#4) despite that metro’s projected vacancy rate of less than 10 percent. Nashville (#8) also rose one spot and completes the group of markets with sub-10 percent vacancy in this year’s top 10; the market will also post strong rent growth for a second consecutive year. Miami-Dade rose two spots to the fifth position, while Austin (#6) vaulted five positions behind a vigorous expansion of payrolls and a drop in completions. Orange County ceded a top-five position from one year ago, but respectable strengthening in payrolls and property performance still enable it to retain a lofty position as the seventh-ranked metro in the Index. Denver (#9) retreated three rungs from one year ago. Job growth in the metro remains solid but is tapering from the heightened levels of the past few years, while developers will increase output this year to moderate the projected drop in vacancy. Portland illustrated the strength of the Pacific Northwest region and maintained the tenth spot in the NOPI, while San Diego (#11) slipped three posts to just outside of the top 10.

Tight Vacancy, Elevated Pace of Hiring
Place Bay Area Stalwarts Atop Ranking

Strengthening Operations Dominate Markets
Occupying Top Half of Index

After San Diego, metros comprising the remainder of the upper half of this year’s Index span several geographic regions. Boston (#12) reclaimed its standing from a year ago, while Oakland (#13) jumped four spots and rounds out the strong representation of the Bay Area in the Index. Salt Lake City (#14) slipped one slot as a rise in completions will push up vacancy in 2016, but it placed ahead of Charlotte (#15) despite that metro’s three-rung ascent. Respectable key performance indicators enabled Minneapolis-St. Paul (#16) to remain unchanged from 2015 and top another Midwest market, Chicago (#21) in the ranking. Fast-growing Dallas/Fort Worth (#17) is the second-highest Texas market in the top half, while Houston (#23) descended eight positions. Softer space demand related to low oil prices and elevated construction are principal factors affecting the market’s near-term performance. Los Angeles (#18) fell four rungs from 2015, while Washington, D.C. (#22), rode a four-spot rise into the upper half.

1 See National Office Property Index Note on page 64.
Lower Half of Index Features Mix of Markets; Florida, Midwest Metros Populate the Rankings

San Antonio (#24) and Phoenix (#25) lead off the second half of the NOPI, which features a climb of six spots by Orlando (#28), the largest rise in this year’s ranking. Space demand in the market continues to grow, while development remains subdued as builders maintain a keen focus on multifamily. The remaining Florida metros claimed positions in the top 40 of the Index, where Midwest markets also nailed down spots ranging from Columbus (#30) to St. Louis (#40). Within this span, Kansas City (#33) tumbled four positions from one year ago, but Baltimore notched a one-spot rise behind a more substantial pace of job growth that will generate new space demand. Robust office-using job growth lifted Las Vegas (#37) two rungs just ahead of Sacramento despite that metro’s climb of four positions. Following meager supply growth last year, completions will increase in Sacramento during 2016, but net absorption will also grow. Cleveland (#41) kicks off the group of this year’s lowest-ranked metros, a tier that also includes slower-growing Cincinnati (#42) and Detroit (#44). A combination of tepid job and rent growth, plus relatively elevated vacancy, pushed down Northern New Jersey (#46) five slots to the bottom of the 2016 Index.

Index Methodology

The NOPI ranks 46 major office markets based upon a series of 12-month, forward-looking economic, supply-and-demand variables. Markets are ranked based on their cumulative weighted-average scores for various indicators, including projected employment growth, vacancy level and change, construction, and rents. Weighing both the forecasts and incremental change over the next year, the Index is designed to indicate relative supply-and-demand conditions at the market level.

Users of the Index are cautioned to be aware of several important considerations. First, the NOPI is not designed to predict the performance of individual investments. A carefully chosen property in a bottom-ranked market could easily outperform a poor choice in a top-ranked market. Second, the NOPI is a snapshot of a one-year time horizon. A market facing difficulties in the near term may provide excellent long-term prospects, and vice versa. Third, a market’s ranking may fall from one year to the next even if its fundamentals are improving. The NOPI is an ordinal index, and differences in rankings should be carefully interpreted. A top-ranked market is not necessarily twice as good as the second-ranked market, nor is it 10 times better than the 10th-ranked market.

1 See National Office Property Index Note on page 64.
Investors Target High-Growth Secondary Markets For Yield Opportunities

The search for yield has intensified with general market confidence and affordable debt compressing cap rates in many of the nation’s premier metros. Cash-flow-oriented investors have turned to secondary and tertiary markets as a way to capture additional yield. As the economy continues to improve, many of these areas will offer assets that have potential NOI improvements yet to be baked into pricing, leaving non-risk-averse investors with unique opportunities. This index highlights those metros that offer consistent returns and upside potential, although some high-end submarkets may have reached maturity and are pricing at premiums. Risk factors include limited capital appreciation potential as well as the possibility for exit-strategy complications if economic performance isn’t aligned with investment horizons.

Las Vegas tops this year’s High-Yield Index. The metro is still at the front end of its recovery, although the hard-hit housing market is beginning to build momentum. Above-trend vacancy rates remain pervasive, leaving plenty of room for motivated investors to retool and re-tenant underperforming assets. Cleveland claims the second spot as improving vacancy and high barriers to new development maintain metro offices as a steady and consistent yield play. Strong growth among tech firms in Salt Lake City and Orange County have earned these metros the third and fourth spots in the ranking. Salt Lake City in particular, has a robust combination of established corporations and homegrown startups, spurring further rent growth and cultivating optimism among investors. Baltimore’s improving labor market helped it round out the top five.

Professional and Business Employee Surplus, Affordable Space Tighten Operations

Employment growth and the demand for office space are not equal in metros across the nation. The Office-Using Jobs Growth Demand Index highlights markets where above-average office-using job gains have resulted in the substantial tightening in vacancy and stimulated rent growth. Metros that were hit hard by the recession and have been slower to regain momentum lead the index. These metros benefit from a lower cost of living than nearby markets, have an available skilled labor pool and tend to have more affordable rents that attract companies seeking to lower costs. Recent local economic improvements in these metros have produced a rise in hiring in office-using sectors, which is generating new space demand amid subdued inventory additions.

Riverside-San Bernardino leads the index as the metro transitions from a bedroom community for Los Angeles to its own employment center. As the local housing market gains traction, professionals providing services to the growing population need more office space. The next three entries — Las Vegas, San Diego and Orlando — each have diversified beyond their large tourism bases. Lower costs compared with many California markets and rebounds in the gaming and housing sectors will continue to lure companies to Las Vegas, while the expanding tech sector in Southern California is creating office demand in San Diego. Orlando is benefiting from gains in biotech, digital simulation, healthcare and healthcare-administration sectors, which are absorbing a significant amount of office space. In addition, more affordable office rents than nearby Tampa-St. Peters burg may attract some companies farther inland. Detroit ranks fifth in the index. Here, the surging auto industry and a blossoming tech sector elevate office-using hiring, filling additional office space. Rents in most areas of the metro are not high enough to support speculative construction, keeping inventory expansions to build-to-suits and the renovation of long-vacant buildings.
Prices Still Well Below Pre-Recession Levels In Many Major Markets

The Opportunity Index highlights markets where asset prices have not yet recovered and are furthest from the previous peak. Less than half of the office markets covered in the index have recaptured prior pricing levels as economic recoveries have unfolded at a much slower pace than other metros in this report. However, a stronger pace of office-using employment growth and reduced construction are strengthening property performance in many of the markets where prices have lagged, enhancing prospects for near-term price appreciation. Though risk can be higher in some of these markets, significant gains can be realized by investors as the pricing spread continues to narrow over the next few years.

Las Vegas appears at the top of our index as asset prices rest 55 percent below the pre-recession peak. Job growth in office-using sectors will rise at one of the fastest paces in the nation this year, advancing property operations and boosting NOI growth. Tampa-St. Petersburg follows; reduced construction there will contribute to vacancy falling 400 basis points from the cyclical peak and rents will rise at the fastest pace in a decade. Sacramento takes the number three spot and has experienced four straight years of vacancy declines, though rent progression and pricing gains have been slow to follow. Rent advances this year will further revenue growth at area properties, boosting value appreciation. While Phoenix still has some headwinds to face, rents will continue to rise and end the year 8 percent below pre-recession levels, allowing significant room for investors to realize upside. Cleveland rounds out our index. Office-using employment has steadily risen and prices have already appreciated nearly 60 percent since 2010 with plenty of room to grow before reaching the previous peak.

Property Valuations Shift Investor Focus to Total Returns; Tech Hubs and Midwest Markets Lead

As the business cycle enters its seventh year of expansion, office-property valuations and rents have risen substantially since the last recession. Strong growth trends in technology and biotech have driven valuations in many primary markets to all-time highs, leading investors to consider value-add and return maximization strategies in order to generate higher returns. The Total Return Index places its core emphasis on initial cap rates, providing sizable current income at a reasonable price. Additional factors considered in the index weightings include low expected supply increases and strong asking-rent growth in 2016, helping to provide investors with a margin of safety.

Benefiting from a surging Bay Area, first place Oakland has recorded robust growth in both asking rents and appreciation. Despite recent gains, properties can still be acquired at an 8.8 percent initial yield, with a high-single-digit rent increase over the next year. In the heart of the Midwest, Kansas City assets yield 9.5 percent, with little threat of speculative development in the coming years. Rent growth will outpace inflation yet will remain below 3 percent, improving NOIs. A growing tech hub in the West, third place Salt Lake City has outperformed the broader nation as tech startups and financial-services firms pile into the metro. Assets in the area begin with cap rates at 8.7 percent, with 3.3 percent rent growth. West Palm Beach, an under-followed metro, occupies the fourth spot as investors bid for a foothold in surging Florida markets, but at a much more attractive price. Cap rates average 8.3 percent, with rents set to tack on 4.2 percent over the coming year. Rounding out the top five, Portland has become home to a number of startups that propel economic growth in the metro. Investors have yet to take note, however, with initial yields averaging 8.1 percent. Strong economic growth will also underpin a 4.2 percent uptick in asking rents.
U.S. Economy Positioned for Gains in 2016
Under Watch of Federal Reserve

The U.S. economy registered a moderate pace of growth last year, overcoming many obstacles to resiliently advance numerous performance metrics. The strong dollar together with softer international markets weighed on exports, but these forces joined lower energy prices to minimize inflation. Although the third quarter was marked by a significant bout of turbulence on Wall Street, the U.S. economy maintained momentum, enabling the Federal Reserve to finally lift its overnight lending rate in December. The Fed’s initial tightening action was largely priced into the market, so it had a limited influence on broader interest rate movements or economic trends. The combination of moderate economic expansion countered by a variety of setbacks has formed a choppy growth pattern that will likely extend the economic cycle beyond the typical duration and support further gains in 2016. Downside risks include potentially higher inflation that prompts the Fed to act more aggressively and weakness abroad.

Additional tightening in the unemployment rate, accelerating wage growth and tame inflation pressures will position consumers to lead the economy again in the year ahead. The ongoing integration of thousands of millennials into the labor force will also provide a longer-term lift to consumer spending, household formation and overall economic expansion. A sizable wave of millennials are increasingly graduating from college or advanced-degree programs, generating new office space demand, particularly in urban areas. In the corporate sector, job openings hover near an all-time high and the rate of hiring has also increased, signaling that payrolls will continue to grow at a healthy tempo during 2016. Openings in professional and business services, specifically, remain elevated and the conversion of these openings into actual jobs that fill cubicles will translate into needs for larger office layouts. Gauges of service-sector activity and conditions, including new business on the books, remained in expansionary territory throughout 2015 and promise to maintain consistent workflows for office-based industries in the coming months.

2016 National Economic Outlook

• **U.S. Payrolls to Reach New High in 2016**: Following the addition of approximately 2.65 million jobs in 2015, employers will create 2.8 million positions this year. Led by the filling of new posts in the professional and business services sector, office-using employers will add 820,000 workers, topping last year’s total. The total will be augmented by additional hiring in healthcare fields to provide services to new enrollees in employer-sponsored health coverage and the aging population.

• **Consumers Fueling Modest Economic Expansion**: Reflecting strong trends in personal consumption stemming from higher wages, low gas prices and comparatively inexpensive imported items, the U.S. economy will grow 2.6 percent in 2016. Trade imbalances related to the strong dollar could subdue economic expansion, however, and should international economies dramatically slow, risks to the U.S. economy could intensify.

• **Small Businesses Mostly Upbeat**: An uninterrupted flow of credit to small businesses for the purposes of expansion presents a potential source of new office space demand during 2016 as many employers outgrow current layouts. Surveys last year revealed only mild variations in a generally positive outlook and consistently favorable sentiment regarding staff expansions.
Solid Growth Prospects on the Horizon
For U.S. Office Sector in Year Ahead

Office properties were late to reap the benefits of the economic recovery, but last year’s steady improvement in performance provides momentum into 2016. Growing payrolls pushed more tenants into bigger spaces in 2015 and helped lower the U.S. vacancy rate. Tightening availability placed owners and tenants on more equal footing last year, blunting the edge previously wielded by tenants in lease discussions and supporting a more vigorous pace of rent growth. Last year’s only modest drop in the vacancy rate, however, likely reflects the continuing reduction of the workspace per employee ratio. Since the pre-recession peak, a 5 percent rise in office-using jobs has translated into only a 4.3 percent bump in occupied space. New office construction has lagged throughout the recovery and may not be sufficient to relieve unmet needs of tenants seeking new spaces with modern amenities. Many office users took advantage of lower rents early in the recovery to relocate to buildings with the features and amenities they desire, but they now face constricting availability in suitable properties.

Limited completions will support a slight drop in the vacancy rate during 2016, although challenges in matching tenants to available spaces may intensify. Growth in office-based services will support additional spending on staff expansions that necessitate larger workspaces or opening new locations. Professional and business services employment, encompassing a range of office-intensive fields including law, accounting and engineering, sits at an all-time high and is pressuring existing layouts. Job openings here also remain elevated, signaling potential new hiring in 2016. Thus far in the office market upswing, financial-services payrolls have not regained their previous high, and vacant spaces related to deficits in fields related to residential real estate linger. Nonetheless, the hike in the Fed’s short-term lending rate may improve prospects for interest-rate sensitive financial businesses and create new space requirements.

2016 National Office Market Outlook

- **Vacancy Tightens, Rents to Grow:** Additions to office-using payrolls will push more tenants to the limits of their existing layouts, sparking a broader movement into larger spaces during 2016. During the year, tenant expansions and new business formation will drive net absorption of nearly 90 million square feet and trim the national vacancy rate 30 basis points to 14.6 percent. Projected rent growth of 3.9 percent is on par with the increase posted in 2015.

- **New Space Deliveries at a Faster Trickle:** Developers have lined up for completion in 2016 projects encompassing 79 million square feet, marking an increase from last year. This year’s total is highly concentrated in 10 markets that account for more than half of the amount, led by 8 million square feet in Houston and 6.4 million square feet in San Jose. Traditional debt financing remains for construction remains challenging, helping to maintain construction significantly below levels in the years preceding the recession.

- **Tug of War Between Urban, Suburban Locations:** The construction of thousands of apartments in urban cores provides office employers with a large, captive source of potential workers. The growing appeal of live-work-play accommodations will continue to influence site selection and relocation decisions, potentially elevating the performance of urban office assets. Suburban locations are strengthening and will benefit from additional tightening in CBDs. They could also gain momentum with the potential migration of maturing millennials to the suburbs to buy homes and start families.
Stronger asset performance across a broad array of markets continued to drive equity flows into the office sector in 2015, intensifying the competition among lenders to capture new business and expand market share. Despite a brief, minor disruption in issuance late in the year, CMBS were the go-to source for borrowers, accounting for roughly 20 percent of issuance volume in 2015. Assets in major markets were the principal focus of CMBS, although a greater number of property sales in secondary metros encouraged the conduits to follow the equity. For many investors operating outside of the major metros, though, regional and local banks were a major source of acquisition funding in 2015, enabling these lenders to claim a modestly larger piece of the market. The Federal Reserve’s accommodative monetary policy conferred a low cost of capital to these lenders, an advantage that could wane if the central bank raises its benchmark rate more aggressively and frequently than anticipated during 2016.

Expanding office-using payrolls will further strengthen office-property performance in 2016 and maintain the flow of debt into the transaction market. Lending capacity remains healthy, though low oil prices could impose additional stress on low-rated energy-sector bonds and potentially limit overall credit availability. Leverage levels, which typically ranged from 65 percent for life companies to as much as 75 percent for CMBS deals last year, will likely remain range bound as lenders continue to practice disciplined underwriting. Life companies expanded market share last year and are positioned to maintain allocations again in 2016 to balance exposures to other property sectors. In addition to lending on new deals, refinancing is likely to increase as a significant volume of CMBS loans issued prior to the recession mature in the coming months. Loans coming due on properties in second-tier office submarkets may face valuation challenges that require an infusion of additional equity to fund.

2016 Capital Markets Outlook

- **Fed Will Closely Watch Economic Indicators:** The Federal Reserve’s rate hike in the fourth quarter last year was anticipated for some time and offers the clearest expression to date of the central bank’s confidence in the U.S. economy. Inflation remains subdued, however, and economic-growth expectations are modest, indicating that the Fed may defer additional actions until the middle of 2016.

- **U.S. Treasury Rate Stable; Susceptible to Swings in Foreign Buying:** The 10-year U.S. Treasury tracked well below the long-term average throughout last year. The long-term rate will be held near those levels again in 2016 as slowing economies in other parts of the world sustain demand for risk-free U.S government debt. China remains a potential variable, however, as additional cutbacks in purchases of the 10-year Treasury resulting from the country’s softening economic growth pressure long-term interest rates and property financing benchmarks.

- **Underwriting Standards Suppress Development:** Subdued construction has been one of the hallmarks of the sector’s upswing thus far and a primary driver of reductions in vacancy rates in most markets. Completions will remain limited this year and planning pipelines are also thin, partly reflecting lenders’ discipline in funding new projects. Build-to-suits in major markets will be viewed favorably, but speculative multi-tenant projects face challenges without significant pre-leasing and sizable equity commitments from the sponsor.
Sector’s Upswing Lifts Investor Sentiment, Driving Additional Transactions

Growing payrolls and sparse construction supported more potent office-property performance last year, yielding lower vacancy and higher rents that encouraged a pickup in transaction velocity and momentum for the investment market heading into 2016. Consistent equity flows and an expansion of lending capacity continue to add liquidity, enabling more properties in a wider array of markets to trade and additional investors to participate. Diverse space demand drivers will continue to sustain strong capital flows into primary markets, but the most significant increases in deals and dollar volume last year occurred in secondary metros. Investors can potentially pick up additional yield in these markets versus primary locations, as broadening economic momentum supports performance trends in these markets. Recoveries were late to take root in many of these areas, but with job growth gaining traction in the past two years, rising space demand will boost operations and drive additional capital inflows.

Several factors are aligned for additional office-property acquisitions during 2016. Capital markets are functioning normally and lenders are intensely competing to secure deals. Moreover, further growth in office-using payrolls will generate new space demand, while development will remain subdued. A large pool of active domestic investors is supplemented by a diverse group of foreign investors. Led by Canadian interests, international investors claimed a notable share of the market last year, and softer overseas and cross-border economies will bring additional capital to the security of U.S. office properties despite a strong dollar. In general, growing space demand and rising rents are compatible with many investment preferences, from fully occupied buildings to value-add options involving properties with high vacancy or imminent lease expirations. Recent price appreciation in many markets, though, raises the possibility that some misalignment of sellers’ and buyers’ expectations could occur. In addition, investors will exercise greater selectivity in picking suburban assets, focusing on properties with amenities for tenants, such as nearby retail.

2016 Investment Outlook

• Top End of the Market Gathering Momentum: At the upper end of the market, sales of $20 million or greater jumped, and a significant amount of capital flowed in secondary markets during 2015. Cap rates in primary markets declined 20 basis points to 6.9 percent and tracked even lower in the largest markets. Meanwhile, the average cap rate in secondary metros compressed to 7.4 percent last year, as investors targeted a wider range of markets during 2015.

• Cap Rate Spreads Between Markets Narrows: The average cap rate in all transactions last year slightly compressed to approximately 7.3 percent, with initial yields in primary, secondary and tertiary markets all tightening. The narrowing of the spread between primary and tertiary market cap rates to near pre-recession peak tightness signals that additional compression could occur. Increases in NOIs will continue to emerge as the principal driver of growth in asset values.

• Gauging the Effects of Fed Liftoff: The balance of factors associated with higher short-term interest rates tilts in favor of further strengthening of office performance as the economy accelerates and payrolls grow. Also, many loans on troubled office properties bought before the recession will come due during a period of rising interest rates, which could affect values and refinancing ability.
Aging Population, Revitalization of Industry Boost Medical Office Market

The aging of the U.S. population is greatly contributing to a rise in healthcare needs, signaling a bright outlook for the medical office sector. The age cohort consisting of residents 65 and older will rise by nearly 42 percent over the next 10 years as more than 20 million join this segment. As a result, the 65-plus age cohort will account for 20 percent of total population. At the same time, hiring in healthcare and related industries will increase 17 percent to meet the growing demands of an older demographic, though a potential physician shortage will remain a cause for concern. A boost in healthcare needs will bode well for medical office assets, though the long-term effect is hard to project due to a rise in in-store clinics, telemedicine, the care delivery model and industry consolidation as hospitals merge and acquire private medical practices.

The revitalization of the healthcare industry is placing medical services into the local community, providing a more patient-centered model. The trend toward this level of care has encouraged providers to expand outpatient services into more retail-like settings, providing easier access to patients and capitalizing on strong traffic and demographic trends. Due to consolidation, major medical providers account for a large share of all leasing decisions and tend to favor properties providing more modern amenities. Newer-vintage assets will continue to fare well; however, vacancy at outdated centers will rise amid physician retirements and hospital acquisitions.

Off-Campus Development Leads Construction Surge

An estimated 12.2 million square feet of medical office space will come online in 2016 as hospitals and health systems remain the driving force behind new projects. Last year, just 7.5 million square feet of new space was delivered. As the healthcare industry moves toward a convenience-oriented and patient-centered model, the layout of doctors’ offices is changing. Modern amenities and spaces promoting data sharing and a team-based approach to care are replacing excessive file storage and large areas for administrative staff. Buildings that promote these objectives will remain in high demand.

The evolution of the healthcare sector is encouraging off-campus development, which comprises a large share of projects underway. A shift toward a more patient-centric delivery model has major medical providers expanding services into communities. This will place ambulatory surgery centers, stand-alone emergency departments and large multi-tenant medical office buildings housing physicians and outpatient services closer to residential and retail developments.

Vacancy Tightens as Health Systems Expand

U.S. medical office vacancy dropped 20 basis points in 2015 on net absorption of more than 6 million square feet, ending the year at 9.4 percent. The Pacific Northwest region boasts the lowest vacancy in the country, falling 90 basis points year over year to 5.5 percent. The Central Plains, California, Southeast, Midwest and Northeast regions follow, respectively, with vacancy ranging from 7.2 percent to 9.9 percent. Conditions in the Mountain region are softest, and vacancy contracted 10 basis points from last year to 13.5 percent.
Conditions will continue to tighten at medical office properties through 2016, despite a surge in completions. The majority of space coming online is mostly pre-leased, and expanding practices will seek space in existing buildings. Earlier-vintage assets will continue to struggle, however, as modern amenities fostering a patient-centered model are in high demand.

Major Medical Providers Playing Larger Role In Rent Advances

Despite tightening conditions at medical office assets across all regions, average rents declined in some areas as health systems dominate the changing healthcare industry. Both credit and scale will work in their favor, likely keeping rent growth subdued in the months to come. The average U.S. medical office rent dipped 0.6 percent last year, reaching $22.50 per square foot. In the Central Plains region, the average grew at the fastest pace, rising 2.4 percent to $18.44 per square foot. The Southeast and West South Central Regions also experienced an uptick, as rents advanced 1.6 and 1.3 percent, respectively. The Pacific Northwest, Northeast, Mountain and Midwest regions all realized declines in average rent this year, ranging from 1.0 percent to 3.6 percent.

In addition to health systems making up a larger share of medical office leases, the push into off-campus properties also contributed to a slight dip in rents. Space in on-campus buildings rents for a premium when compared with space in off-campus assets; however, as conditions tighten for these properties, overall rent growth will resume.

Medical Office Prices Rise Amid Strengthening Investment Market

A multitude of buyers are active in medical office investments, with institutions, REITs and private investors raising significant capital to purchase assets. The aging population, credit tenants and positive outlook for our nation’s healthcare industry are driving this demand. These factors, coupled with a limited amount of inventory available for sale, are raising values. Migration patterns of those older than 65 years of age are spurring both sales and development, with Southeast, Southwest and Western United States markets performing strongest.

In 2015, sales accelerated approximately 10 percent while the average price edged up 23 percent to $240 per square foot, surpassing 2007 levels. Prices vary widely, depending on asset quality, property location and tenant credit. Overall, the average cap rate compressed 20 basis points to 7.3 percent, inching closer to pre-recession levels. On-campus assets trade at the lowest initial yields, with single-tenant buildings drawing first-year returns below 6 percent in some instances and multi-tenant assets trading at cap rates in the mid-6 to low-7 percent area. First-year returns for off-campus assets depend on multiple factors, including hospital affiliation and tenancy, and can range from the low-6 percent area to above 8 percent.

Hospital mergers and acquisitions are increasing tenant quality across the medical office spectrum. As a result, REITs and institutions have steadily increased capital flows into the sector, accounting for nearly 40 percent of investment, according to preliminary 2015 estimates. Private buyers remain the main player, however, accounting for nearly 50 percent of transactions last year.
Demand for Atlanta Offices Heating Up, Absorption Dramatically Outpacing Construction

The local economy is strengthening as expanding corporations propel demand for Atlanta offices, dropping vacancy rates to a post-recession low. Employment gains, particularly those in the office-using sector, will draw and retain highly skilled professionals to the metro, stimulating need for more space. Some larger businesses are opting to construct high-end offices, taking advantage of pent-up demand and consolidating their staffs under one roof. The most noteworthy project of the year will be a 600,000-square-foot tower for the State Farm campus in Dunwoody. The development represents a re-commitment by the insurance provider to the Atlanta area and has allocations for retail space, restaurants and a hotel. This, along with the speculative Three Alliance tower in Buckhead, will help grow the stock of available large contiguous space. Despite the new development pushing annual completions to well above the five-year average, the metrowide vacancy rate will fall further in 2016, reaching the tightest level since mid-2007. As the market continues to contract, the average asking rent will climb to record levels, lifting NOIs higher and luring investors to the metro.

As rent and vacancy rates continue to trend in positive directions, transaction velocity will intensify through 2016. Investors targeting Class B/C assets in the $1 million to $10 million price range focus on properties along Interstate 75 outside the Perimeter up to Kennesaw and east of the metro core from Decatur up to the Peachtree Corners area. REITs look to the established Buckhead and Central Perimeter areas, despite the compressed first-year yields found here. The number of prospective buyers continues to outweigh available listings, causing prices to swell. The average price per square foot is up nearly 60 percent since bottoming in 2011, reaching the highest point yet during the cycle. Although the metro has seen some cap-rate compression in recent years, considerable yield can be found in burgeoning suburbs.

2016 Market Forecast

- **NOPI Rank**: 19, no change
- **Employment**: up 3.2%
- **Construction**: 1.5 million sq. ft.
- **Vacancy**: down 100 bps
- **Rent**: up 5.7%
- **Investment**: Strong job growth stemming from corporate expansion and relocation is signaling market strength to investors, intensifying demand for Atlanta office buildings.

* Estimate ** Forecast
Sources: CoStar Group, Inc.; Real Capital Analytics
Tech Sector Stimulating Space Demand in Austin; Capital Flowing into Office Assets

Corporate expansions are intensifying in Austin, propelling job creation and fostering demand for office space. Growth in the area’s technology industry is leading the charge as Apple, Google and other major technology firms make plans to increase staffing. Apple will complete construction on a new phase of its northwest Austin campus this year, expanding to 1.1 million square feet. It has pledged to create 3,600 positions over the next few years, nearly doubling its workforce in the region. The growth of these large tech companies is attracting startups and incubators to the area. In addition, the development of the Dell Medical School and Dell Seton Medical Center at the University of Texas will drive advancement in the local healthcare community. The combination of a talented tech workforce and the addition of a growing medical field will boost the healthcare IT industry, increasing the need for office and medical office space in the metro. Strong demand for space and limited new inventory coming online in 2016 will facilitate another year of steep vacancy declines.

Investors remain positive about the Austin office market, a trend that will continue through 2016. Rising tenant demand is drawing high-net-worth individuals to the metro in search of value-add properties. Assets built in the 1980s and 1990s with occupancies between 70 percent and 80 percent will garner multiple bids. These properties are prime for repositioning as rents are well below market in some instances. Class B assets sell at cap rates averaging in the 7 percent range, while Class C properties trade nearly 100 basis points higher. Well-located, quality assets, meanwhile, are in high demand and elevated construction last year will satiate investors’ appetites as projects are leased up and brought to market. When available, these properties change hands at first-year returns in the low- to mid-6 percent range.

2016 Market Forecast

**NOPI Rank**
- 6, up 5 places

**Employment**
- up 3.9%

**Construction**
- 800,000 sq. ft.

**Vacancy**
- down 120 bps

**Rent**
- up 5.8%

**Investment**
- Institutions and REITs are increasingly active in the market and will continue to funnel capital into downtown towers and suburban campuses with credit tenants.

A large drop in vacancy contributed to Austin jumping five places in the NOPI.

Austin employers will expand payrolls 3.9 percent in 2016 with the addition of 37,500 workers, including 11,500 positions in the primary office-using sectors. Last year, companies created 38,000 jobs, of which 12,000 are office-using.

Completions will drop dramatically as builders deliver 800,000 square feet of office space this year, down from 4 million brought online in 2015.

Average vacancy will fall 120 basis points year over year to 10.4 percent in 2016. Vacancy in the metro tumbled 180 basis points last year.

The average asking rent will rise to $31.46 per square foot, an increase of 5.8 percent from last year. In 2015, the average asking rent grew 5.4 percent.

* Estimate ** Forecast

Sources: CoStar Group, Inc.; Real Capital Analytics
**Urban Core Diverges From Flagging Suburbs; Buyers Become More Selective to Counter Risk**

After years of below-average economic growth, the Baltimore employment picture is brightening. Hiring reached the most robust pace of the cycle last year, encouraging market participants to become more optimistic about future improvement. The labor market will continue to accelerate this year, providing incentive for firms to acquire additional spaces and plot a path toward future expansion. Although labor conditions are strengthening, builder ambitions remain out of sync with operations in the metro, with completions set to nearly quadruple after a dramatic slowdown in 2015. While more than half of the planned space has already been spoken for, speculative development is poised to surpass aggregate demand, particularly in the suburban submarkets where expected deliveries are highest. As a result, vacancy will be pressured over the coming year, especially in the outlying portions of the metro. Despite a slowdown in operations, NOIs are likely to keep pace with inflation as thriving properties in the urban core offset weakness in fringe assets.

Amid increasing disparity in operational performance, investors have been highly selective in their bidding, leading to divergences in closed transactions and pricing. Properties in the CBD and nearby submarkets will see velocity accelerate substantially as incredibly tight vacancy rates and rising rents are encouraging an active market. Institutions and REITs are the most prolific buyers, although smaller properties will be scooped up by private parties with in-depth knowledge of the local landscape. Cap rates in the core can drift into the low-7 percent range, with lower yields for established, well-located assets. Suburban stock is facing weaker demand as buyers have pulled back, seeking to avoid distressed trades and speculative development. However, risk tolerance in these areas is picking up as first-year yields push into the mid-8 percent range, compensating investors for greater potential headwinds.

**2016 Market Forecast**

- **NOPI Rank**: An increase in vacancy and slower-than-average rent growth stifled greater improvement in Baltimore’s one-place rise to rank 36th in the Index.
- **Employment**: After expanding at 2.2 percent on headcount growth of 30,000 workers in 2015, the pace of improvement will accelerate to 32,000 jobs this year.
- **Construction**: Completions will nearly quadruple this year to 1.8 million square feet, with planned deliveries spread evenly throughout the metro. Last year, 470,000 square feet of stock was brought to market.
- **Vacancy**: Accelerating development, although well pre-leased, will push vacancy 30 basis points higher to 15.1 percent on net absorption of more than 1.1 million square feet.
- **Rent**: Boosted by strength in the urban core, asking rents will climb 1.5 percent to $22.10 per square foot, keeping pace with inflation.
- **Investment**: Buyers seeking stability will scour the CBD, while investors with higher risk tolerance will be rewarded for acquiring value-add offerings in suburban locales.

* Estimate ** Forecast  
Sources: CoStar Group, Inc.; Real Capital Analytics
Office Buildings Rising in Boston; Investors Bullish on Asset Performance

Boston employers remain confident that the local economy will mark a sixth year of job growth, filling existing office space and creating demand for new buildings both in the city center and suburbs. Office construction is primarily focused in the core, with the largest project consisting of 425,000 square feet at 888 Boylston Street in the Back Bay. A majority of the development is pre-leased. Farther from the core, a handful of companies are moving into new offices in suburban locations such as Waltham and Watertown. Those two areas will receive a combined 600,000 square feet of space this year, including the 245,000-square-foot CityPoint development that is nearly fully pre-leased. Overall, new office projects are nearly 75 percent leased on average, minimizing the impact on metro vacancy. Despite reaching a new peak in construction in 2015, developers will temper deliveries in the next couple of years. As employer expansions continue to support absorption, vacancy will contract for a seventh straight year, lifting rents.

Investors are bullish on the local economy and property performance, with cap rates averaging in the mid-5 percent area. Institutional interest remains strong in the market, but transactions of Class A office buildings waned last year as fewer listings were available compared with previous terms. Trades of upper-tier assets could pick up in 2016 as several new buildings are completed and brought to market. Properties in the Back Bay, Financial District and Midtown areas exchanged at first-year returns in the high-3 to high-4 percent range. Investors are also willing to take on more risk as assets with higher vacancy rates trade. This trend will likely continue as some buyers seek value-add options, while others target the stability of fully leased, well-located buildings. Opportunistic investors have been trading into these Class B/C properties, which offer first-year yields ranging from mid-5 to mid-7 percent.

2016 Market Forecast

Solid vacancy improvement kept Boston in 12th place in this year’s NOPI.

This year, 50,000 new workers will fill positions, adding 1.9 percent to employment and building on last year’s 52,000 hires. Office-using employment will rise 2.7 percent in 2016.

Builders completed 4.1 million square feet of office space last year, exceeding the peak from the prior cycle. In 2016, developers will increase office inventory 0.8 percent, or by 2.7 million square feet.

Vacancy will drop 80 basis points this year to 12.5 percent, as tenants absorb 4.9 million square feet. A 60-basis-point decrease occurred last year.

Asking rent will advance 4.2 percent in 2016 to $31.95 per square foot on average, compounding the 4.8 percent escalation last year. Rents can exceed this figure many times over in the metro’s prime business centers.

A high number of office completions last year will provide greater potential for upper-tier trades in 2016.

---

* Estimate ** Forecast
Sources: CoStar Group, Inc.; Real Capital Analytics
Uptown Construction Rising; Employers Expand Floor Plates and Headcounts

Charlotte employers have been adding to the local workforce for the past five years, supporting a steady drop in vacancy that will persist in 2016. Many Fortune 500 companies and others have headquarters or significant operations in the metro, and some are expanding. CPI Security is growing its corporate headquarters, hiring 300 employees and completing a 120,000-square-foot addition off Interstate 485. Across the metro, office tenants continue to fill empty cubicles and workspaces. As demand grows, construction will ascend to a six-year high, but a majority of the new space is pre-leased. Up to 1 million square feet is in Uptown, or the CBD, and includes the completion of the first office high-rise since the recession. The area remains one of the tightest in the metro, and the vacancy rate here has remained below the metro level despite an uptick in recent quarters. Suburban submarkets are also faring well, and strengthening demand marketwide will drive a significant increase in occupied space and support another year of mid-single-digit rent growth.

Tight vacancy and rising rents are increasing NOIs in office assets, encouraging more property owners to list in order to monetize recent increases in property values. Institutions are targeting Class A buildings occupied by banking and tech industry firms. Amid a dearth of construction recently, other buyers are also seeking Class B/C space suitable for redevelopment into upper-tier offices that can capture higher rents and increased revenues after renovation. Some of these properties can trade at cap rates in the low-8 percent area, or up to 150 basis points above the metro average for all assets. Investors focus on areas of Uptown and South End, obtaining assets at first-year returns varying within the mid-6 and high-7 percent band. Many of these properties were Class C or value-add opportunities. Overall, the compression of cap rates in the metro will encourage more owners to reconsider projected holding periods.

2016 Market Forecast

Above-average rent growth propelled Charlotte three places to rank 15th in the Index.

Charlotte area employers will create 11,000 office-using jobs in 2016, comprising a portion of the 33,500 positions that will be added overall. Local establishments created a virtually identical number of jobs in 2015.

Developers will build 1.7 million square feet of offices this year, expanding local inventory by 1.9 percent. Only 700,000 square feet was completed last year.

In 2015, the vacancy rate contracted 80 basis points. This year, the rate will tighten 20 basis points to 12.6 percent as nearly 1.7 million square feet of office space is absorbed.

Average asking rent will rise 5.2 percent to $23.25 per square foot in 2016, narrowly exceeding the rise of 5.1 percent posted last year.

Investors will continue to target Charlotte office assets for relative stability in spaces housing various large business operations and their partnering vendors.

* Estimate ** Forecast
Sources: CoStar Group, Inc.; Real Capital Analytics
Developers Shifting Focus to City, Driving Speculative Construction

Corporate expansions and relocations will bolster the Chicago office market as the demand for large blocks of Class A space tightens vacancy and drives speculative construction. The suburbs will receive the bulk of this year’s new inventory with the completion of the 750,000-square-foot headquarters for insurance company Zurich North America. The building will occupy a portion of the former Motorola Solutions campus in Schaumburg. Deliveries will then shift to the city where 3.4 million square feet of office space is underway, including two speculative buildings in the West Loop that each contain more than 1 million square feet. Although the buildings are not scheduled for occupancy until 2017, they are each nearly 60 percent leased. More companies are expected to vacate existing space for amenity-rich buildings downtown or open small offices in the city in an effort to attract young professionals. Meanwhile, the availability of large blocks of suburban office space is luring expanding biomedical companies. As a result, vacancy marketwide will inch lower in 2016, maintaining rent growth.

The relative stability of the Midwest’s largest office market and strengthening operations are drawing a wide range of capital to Chicago. Competition is especially strong for medical office assets at cap rates that begin in the 5 percent area. Office buildings preferred by tech companies in the West Loop and River North neighborhoods are also being targeted. Investor demand has outpaced the supply of listed properties, causing buyers to extend their investment parameters. This results in intense competition for assets in the $10 million to $20 million range. Meanwhile, higher taxes in Chicago and Cook County will move some buyers to the collar counties for lower operating expenses. The suburban market, however, is bifurcated with major employment hubs garnering buyer attention, while properties farther away from job centers spark less enthusiasm.

2016 Market Forecast

NOPI Rank
21, up 1 place

Vacancy and rent improvements will nudge Chicago up one notch to 21st place this year.

Employment
up 1.2%

Metro payrolls will expand by 54,000 workers, or 1.2 percent, in 2016. This is up from a 1.0 percent gain last year. Office-using employment will increase 1.4 percent this year.

Construction
2 million sq. ft.

Developers are on track to complete 2 million square feet of office space in 2016, after 1.7 million square feet was finalized last year. Another 4 million square feet is underway with deliveries scheduled into 2018.

Vacancy
down 10 bps

Higher tenant demand will move vacancy down 10 basis points year over year to 17.7 percent metrowide. A 30-basis-point rise was posted in 2015.

Rent
up 1.9%

Asking rents will advance an average of 1.9 percent to $23.89 per square foot in 2016, a slight decline from last year when rents climbed 2.2 percent.

Investment

Owners with notes coming due and who are unable to refinance will provide some additional buying opportunities throughout the Chicago metro this year.
Cincinnati Employers Expand and Consolidate; Office Pre-Leasing Compresses Vacancy

Employers are hiring at a rapid pace not seen since the mid-1990s and developing build-to-suit offices while existing properties lease up. One of the largest projects slated for delivery this year is Mercy Health’s 365,000-square-foot headquarters in the city center. Developers are also building speculative offices and show optimism as leasing activity remains elevated, with three-quarters of space already pre-leased. CDK Global is new to the market and recently signed one of the larger leases for contiguous space; it will occupy about 170,000 square feet within the Central Park office complex while creating 1,000 client-services and back-office jobs. The site lies near recently completed offices at the mixed-use Kenwood Collection and Rookwood Exchange developments, which record high occupancy. Leasing activity in these and other office hubs will boost net absorption above 1 million square feet this year, compressing vacancy and supporting higher rents.

Above-average yields have generated increased buyer interest in local office properties, boosting transactions to a 10-year high. Marketwide, cap rates for these assets have compressed to the mid-7 percent span. As listed Class A properties become limited, institutional buyers will expand their investment parameters and be more willing to move down the quality scale or farther from the urban core. Properties situated near major transportation routes and close to urban amenities that appeal to tenants will be most sought after. Well-located Class B assets will trade at initial yields reaching up to the mid-8 percent area. Many high-net-worth individuals who have a greater appetite for risk will seek Class C offices. Locations within the Loop 275 that provide quick access to major transit corridors and employment hubs will trade at cap rates that average in the 8 to 10 percent range.

2016 Market Forecast

Moderate gains in office-using employment and rents inched Cincinnati up one slot in the NOPI.

Local employers will expand staffing by 2.4 percent as they bring on 25,400 additional workers, including 10,000 office-using jobs. Last year, employers added 22,000 positions.

Developers will complete 800,000 square feet of office space in 2016, expanding inventory by 1 percent. Last year, builders delivered 1.3 million square feet.

The vacancy rate in the metro will compress 40 basis points this year to 16 percent, following the 50-basis-point decrease registered in 2015.

Average asking rent will advance 1.6 percent in 2016 to $16.25 per square foot after gaining 2.4 percent last year. Companies moving into new space will vacate existing space, allowing rents to rise to market rate.

Buyers will seek assets in the core where development abounds and in employment hubs including Blue Ash. Yields will remain above the U.S. average.
High Yields and Moderate Vacancy Rates Draw Out-of-State Investors to Cleveland

A steady millennial demographic base and a healthy employment climate are helping Cleveland lead a regional revitalization, spurring demand for office space. Corporate expansion remains prolific because of the affordable cost of living and steady local economy that are encouraging business owners to grow their footprints. The most noteworthy example this year is American Greetings. The greeting-card titan will finish construction on its new headquarters in Crocker Park, adding 660,000 square feet of space to the area. Office construction in Cleveland is generally limited with developers focusing on built-to-suit complexes or projects that already have an established anchor tenant. The lack of speculative development has allowed vacancy rates to see a slow and incremental decline for the past couple of years, tightening to one of the lowest levels since the recession. Improving vacancy numbers and a lack of competition from new product will support moderate asking rent gains in 2016, while reining in the use of concessions.

Although rent growth has remained subdued in recent years, the improving local economy and one of the highest average cap rates in the nation has supported demand for Cleveland offices. Many out-of-state investors, particularly those from New York and Canada, have turned to the Cleveland metro as a source of yield, as first-year returns compressed in their home markets. A 150- to 200-basis-point differential exists for comparable product, drawing action from cash-flow-oriented buyers. On the institutional side, some funds have begun divesting their assets in the metro, allowing opportunistic buyers to capitalize on the heightened availability of listings. As investor interest intensifies, buyers will be forced to bid more aggressively on available properties, lifting office valuation to post-recession highs.

2016 Market Forecast

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOPI Rank</td>
<td>Lower-than-average rent and office-using employment gains dropped Cleveland to 41st place in the Index.</td>
</tr>
<tr>
<td>Employment</td>
<td>Cleveland businesses will expand payrolls 1.8 percent this year through the addition of 19,000 new hires. In 2015, the workforce grew 2.0 percent or by 20,900 jobs. Office-using employers will hire 1,800 people this year.</td>
</tr>
<tr>
<td>Construction</td>
<td>Builders will expand the stock of office inventory 0.7 percent in 2016, with the completion of 745,000 square feet of space. This is a stark increase from last year when 105,000 square feet was finished.</td>
</tr>
<tr>
<td>Vacancy</td>
<td>Following a 20-basis-point drop in 2015, the metrowide vacancy rate will fall another 20 basis points to 16.5 percent this year on 825,000 square feet of net absorption.</td>
</tr>
<tr>
<td>Rent</td>
<td>Up 1.0 percent this year, the average asking rent will reach $16.95 per square foot. In 2015, rents decreased 1.7 percent.</td>
</tr>
<tr>
<td>Investment</td>
<td>High cap rates remain the primary motivation for many Cleveland buyers, particularly with value-add opportunities in select submarkets.</td>
</tr>
</tbody>
</table>

Sources: CoStar Group, Inc.; Real Capital Analytics
New Columbus Offices Pre-Leasing, Maintaining Tight Metro Vacancy and Rent Growth

Corporations expanding in the Ohio capital have supported tighter vacancies in Columbus area offices, pushing them below pre-recession levels. Growth in these companies has contributed to the addition of more than 35,000 office-using workers in the last five years. Significant workforce increases at Nationwide Insurance and Alliance Data Systems is generating the need for some of the largest build-to-suit office buildings this year. Nationwide Insurance will begin the initial phase of consolidating employees into 350,000 square feet in two buildings at its Grandview Yard campus, while vacating 60,000 square feet in Dublin and Westerville. By 2019, the company will empty another 700,000 square feet in these suburbs, which may impact vacancy in coming years. Alliance Data Systems will expand into 370,000 square feet at the Easton Square Place mixed-use development off Interstate 270 east. These build-to-suit projects will account for a large portion of this year’s deliveries, leaving less than 20 percent available for lease. This dynamic bodes well for vacancy and will spur the strongest annual rent gain in six years.

Rising revenues will pique greater buyer interest in local office assets, pushing demand ahead of supply and driving prices higher. Investors will target large employment centers, favoring properties in Columbus, Dublin, Grove City and Hilliard. This year, institutional buyers will target top-tier assets north of Interstate 70 and within the 270 loop at cap rates averaging in the mid-6 percent span and ranging 100 basis points higher in Class B/C buildings. Overall higher yields than the U.S. average is also a draw for investors seeking better returns in a Midwestern metro. Medical office properties will be targeted by a number of investors; a limited number of available listings will require buyers to expand geographic parameters and bid aggressively to obtain desirable assets. First-year returns in this property type generally range from the mid-6 to high-8 percent span.

2016 Market Forecast

Columbus moved down three slots in this year’s NOPI due to modest rent growth and vacancy improvement.

Office operations will be elevated this year as office-using jobs rise by 1.5 percent, or 4,000 workers, which will lift overall employment by 24,000 workers, or 2.4 percent. This is an acceleration from the 22,000 positions in 2015.

In 2016, builders will deliver the most office construction since 2007 as 1.9 million square feet increase inventory by 2.2 percent, up from 500,000 square feet last year.

Strong pre-leasing and rising demand will allow vacancy to tick 20 basis points lower this year to 11 percent for marketed space after falling 40 basis points in 2015.

Average asking rent will advance 2.4 percent in 2016 to $16.82 per square foot, the fastest growth rate since 2010 and up from a 2.0 percent escalation last year.

Investors will get creative to obtain yield objectives in local office trades. High pre-leasing and overall tight vacancy will improve returns in various submarkets and across asset classes this year.
Corporate Expansion Fuels Space Demand
In Metroplex; Investors Eye Fort Worth Assets

Strong job creation will continue in Dallas/Fort Worth this year, supporting stout absorption as companies expand, spurring rent growth. A significant influx of new stock last year contributed to rising vacancy in 2015; however, a slowdown in completions in the coming months will bode well for overall property operations as tenants grow into new and existing space. Prominent companies have eyed the Metroplex for new headquarters, including Liberty Mutual, State Farm, FedEx and Toyota. While millions of square feet of office space are underway for these companies, their expansion in the region will aid in attracting new businesses. Including major office campuses, more than 8 million square feet of office space is under construction in the metro, with millions more planned. Ahead of this coming surge of new space, plenty of demand has accumulated over the past few years as office-using payrolls have expanded 25 percent since 2009. Further gains in employment this year will minimize supply imbalances, placing downward pressure on vacancy and encouraging rent increases.

Investor interest in the Dallas/Fort Worth Metroplex will continue to rise this year as the area’s prosperous economic outlook fuels demand for assets. Though institutions and funds have increased investment activity in the last year, private buyers will remain the primary investor segment in 2016. Many are targeting Class B and C assets under 50,000 square feet near prime employment hubs, which trade at initial yields in the 8 to 9 percent spread depending on location and quality. While construction is heavy in select portions of the market, the pipeline remains thin in Fort Worth. As a result, sales of assets in this area are rising as buyers seek opportunities where the threat of new construction is minimal and the outlook remains bright in the near future. With deliveries subdued in this portion of the metro, expanding companies will take space at existing centers, boosting property operations.

2016 Market Forecast

- **NOPI Rank**
  17, up 3 places
  Above-average rent growth advanced Dallas/Fort Worth three places to the 17th spot in the Index this year.

- **Employment**
  up 2.3%
  Metroplex employers will generate 26,000 office-using jobs this year and total employment will expand by 2.3 percent with the creation of 78,000 positions. Last year, companies added 82,000 workers.

- **Construction**
  4.7 million sq. ft.
  Office inventory will rise 1.4 percent with the delivery of 4.7 million square feet of space. In 2015, builders completed 7.5 million square feet of office space in the market.

- **Vacancy**
  down 60 bps
  Following an 80-basis-point increase in vacancy last year, the average rate will decline 60 basis points in 2016 to 19.2 percent.

- **Rent**
  up 5.4%
  Building on last year’s 5.0 percent advance, the average asking rent will reach $23.81 per square foot, an increase of 5.4 percent from 2015.

- **Investment**
  Sales of medical office assets grew significantly last year, a trend that will continue in 2016. Cap rates for these properties average near 8 percent but can vary depending on tenancy and location.

---

[**Graphs and charts**]

* Estimate ** Forecast
Sources: CoStar Group, Inc.; Real Capital Analytics
Tenants Expanding Office Space in Anticipation Of Future Growth in Denver

Strong hiring in Denver’s office-using sectors over the past several years is beginning to pay dividends in the area’s office market. Though job growth is advancing at a slower pace than in previous years, payrolls in primary office-using industries, including finance, accounting, technology and other professional service firms, will reach nearly 10 percent above pre-recession levels by year end, stirring demand for office space in the metro. Comcast, Transamerica and Sunrun are expanding offices in Denver this year to meet the needs of a growing workforce. Combined, the companies plan to create approximately 2,000 positions over the next few years. In addition, DaVita has leased enough space to double its workforce in the next 10 years, further signifying companies’ long-term confidence in the market. Builders have taken notice, and office construction this year will reach levels not realized since the recession. Despite elevated construction, local businesses will continue to expand and outgrow current floor plates through the year. As a result, rising demand will boost absorption at office properties in the months to come, constricting vacancy and encouraging strong rent growth.

Sales activity will accelerate this year as a healthy economy draws national attention from investors, increasing competition for assets in the metro and pushing prices higher. A rise in completions over the past two years has spurred additional institutional capital into the market as these buildings are stabilized and listed. Quality Class A properties are trading at first-year yields in the low- to mid-6 percent range. Private buyers, however, remain the main player in the metro’s office market, and those in search of additional yield will focus on the West Denver and Aurora areas where cap rates often rise above 8 percent. Future light-rail extensions will also pose value-add opportunities as transit-oriented locations grow in popularity with office tenants.

2016 Market Forecast

Denver fell three places but remains among the top 10 markets in the NOPI ranking. Slowing job growth amid rising construction account for the lower ranking.

Denver employers will create 24,500 positions this year, including 5,000 office-using jobs, for a total expansion of 1.8 percent year over year. In 2015, companies added 27,000 workers to payrolls.

Builders will complete 2.5 million square feet of office space in 2016, following the delivery of 2.0 million square feet last year.

Average vacancy will fall 20 basis points this year, reaching 14.9 percent by year end. Last year, the rate declined 60 basis points.

The average asking rent will rise at the fastest pace since before the recession, growing 6.2 percent to $26.37 per square foot. Last year, the average rose 6.0 percent.

An increase in buyer interest will accelerate timelines for owners considering near-term dispositions, further boosting transaction velocity this year.
Thriving Auto Industry Ignites Construction
As Demand for Office Space in Detroit Zooms

Downtown redevelopment and the flourishing automobile industry will underpin improvement in the Detroit office market this year. Strong auto sales have supported the continued expansion of auto companies and their suppliers, generating the need for additional office space. Tenant demand is especially vibrant in Auburn Hills, where Nexteer Automotive will relocate from Saginaw this year. The need for Class A office space has driven vacancy into the single digits in Auburn Hills and Dearborn, although not all suburbs are faring equally. Significant inventory emptied by companies consolidating space or moving to downtown Detroit has yet to be filled in Farmington Hills, Southfield and Troy, providing large blocks of space to attract expanding or relocating firms. Builders remain active in downtown Detroit, renovating old office towers. The Farwell and the 1700 W. Fort Street building are two projects due for completion by year end. The conversion of vacant office buildings in the core to residential and hotel uses will whittle vacancy further. Marketwide, vacancy will continue its downward trajectory while rents rise for a third consecutive year.

Significant improvements in the Detroit economy and great strides made in the local office market garner the attention of investors from around the world. Many seek the lower entry costs and potential for above average yields compared with other metros of its size. Medical office properties throughout the region remain the prime target of many buyers at initial yields that generally start in the 7 percent range. Competition can be fierce for the limited number of listed properties, requiring investors to make a strong first offer. At the other end of the spectrum, yield-driven buyers will find cap rates above 8 percent for Class B/C assets. Investor demand is especially intense for properties in the redeveloping neighborhoods of Detroit and in Southfield where buyers with a tenant in tow can significantly add value to highly vacant office buildings.

2016 Market Forecast

- **NOPI Rank**: Detroit vacated last year’s bottom ranking, moving up two slots as office operations continue to strengthen.
- **Employment**: During 2016, Detroit employers will create 38,000 positions, a 1.9 percent increase, up slightly from last year’s 1.8 percent gain. Office-using jobs will account for nearly 40 percent of this year’s total.
- **Construction**: Roughly 500,000 square feet of office space will be completed this year, expanding inventory by 0.3 percent. This is on par with 2015 deliveries.
- **Vacancy**: Heightened tenant demand in 2016 will decrease vacancy 70 basis points to 18.6 percent, the lowest level since 2008. In 2015, vacancy fell 60 basis points.
- **Rent**: The average asking rent will climb 4.0 percent to $19.71 per square foot this year, after recording a 3.9 percent rise in 2015.
- **Investment**: The mixed-use District Detroit, anchored by the new Detroit Red Wings arena, is one of many redevelopment projects boosting property values and luring employers, residents and investors back into the city.

Sources: CoStar Group, Inc.; Real Capital Analytics
Payroll Gains Position Broward for Vacancy Drop
As Investors Comb County for Opportunities

Expanding payrolls will create potential new sources of office space demand in Broward County and property construction will remain subdued, fueling reductions in vacancy and higher rents in 2016. New demand will come from employment sectors that have been at the front of the recovery since it commenced. Degreed professional and business services staffing in the county is growing, while favorable in-migration trends and the enrollment of new workers in employee-sponsored healthcare plans is stoking demand for physicians’ offices and diagnostic facilities. Only finance and insurance establishments, which include residential mortgage brokerage, have yet to make an appreciable contribution to increases in occupied space.Employers continue to turn to existing buildings to fulfill new office needs because construction remains greatly restrained. Intensifying demand for space in downtown Fort Lauderdale and in other urbanized areas including Hollywood reveal a preference among employers for spaces in sections with established amenities and accessibility to new multifamily housing.

Equity flows and greater access to acquisition financing are propelling an active investment market in Broward. Nominal gains in deals, dollar volume and the county-wide average price were recorded last year, and recent strengthening in property operations and NOIs will exert additional upward pressure on property values in the months ahead. Investors traded to an average cap rate in the low-7 percent range last year, reflecting the predominance of private capital active in the $1 million to $10 million price tranche. The solidly performing Pompano Beach and Fort Lauderdale submarkets remain a targeted area for these buyers. Countywide, assets commanding more than $20 million remain a segment of the market for opportunistic purchases. Cap rates here can decline to the mid-6 percent band, and prospective investors continue to pursue targets ranging from fully leased assets with diverse tenant mixes to higher vacancy buildings.

2016 Market Forecast

A sharper decline in vacancy this year advanced Fort Lauderdale one place in the Index.

Payrolls in Broward County will grow 2.0 percent this year through the addition of 16,400 positions. In 2015, 20,000 jobs were created, including 9,000 new hires in office-using employment sectors.

Pressures from new supply remain minimal. Developers will complete 500,000 square feet in 2016, marking an increase from a meager 270,000 square feet last year.

Growing payrolls in office-using industries will generate nearly 900,000 square feet of net absorption in 2016, slicing vacancy 80 basis points to 15.7 percent.

The average effective rent will advance 3.7 percent to $25.69 per square foot this year, narrowly exceeding the gain of 3.4 percent recorded in 2015.

* Estimate ** Forecast

Sources: CoStar Group, Inc.; Real Capital Analytics
Office Developers Scale Back in Houston; Investors Remain Confident in Long-Term Prospects

Modest economic growth is expected in Houston this year as hiring in primary office-using sectors expands slightly despite minimal contribution from the energy sector. Though the office market will continue to face headwinds in the months to come, the majority of these hurdles will be faced in the Class A sector. Several large energy companies consolidated or vacated office space last year, leaving millions of square feet empty in Houston towers. In addition, sublease space in the market has increased significantly, indicating the pace of tenant expansion and space demand growth experienced over the past few years is slowing. This has encouraged developers to delay groundbreakings where pre-costs and financing has not been secured. While completions will fall this year, they will still outpace demand, and vacancy will rise for the second consecutive year. Some mild tempering can be expected in Class B/C offices; however, the exposure to lower oil prices and its effect on this sector of the office market have been much smaller, boding well for property operations in this segment.

Investor interest in the market remains robust, indicating continued confidence in Houston’s long-term economic growth potential. While institutions and larger funds are paring their investment activity, private regional buyers continue to place capital into office assets. As a result, many of these investors are able to compete for and acquire higher-quality listings than one year ago. In general, the majority of investors are searching for value-add deals, encompassing a range of scenarios, including properties with deferred maintenance or high vacancy. Cap rates can vary widely, dipping below 6 percent for high-quality Class A product, and can start in the 7 to 8 percent range for Class B deals. A healthy, local healthcare community bodes well for medical office assets, and trades in this sector of office assets will continue to rise over the year.

2016 Market Forecast

**NOPI Rank**
23, down 8 places

Houston dropped out of the NOPI’s top 15 as the decline in the energy sector weighed on the local office market.

**Employment**
up 0.6%

Employment will expand by 17,000 workers this year as employers grow payrolls 0.6 percent. This includes the creation of 2,100 office-using positions. In 2015, companies generated 15,000 jobs.

**Construction**
8 million sq. ft.

Developers will complete 8 million square feet of office space in Houston in 2016, scaling back from the 12 million square feet delivered last year.

**Vacancy**
up 80 bps

Vacancy will reach 18.5 percent by year end, up 80 basis points year over year. Last year, vacancy increased 170 basis points.

**Rent**
down 1.6%

Rent growth will stall as the market continues to face headwinds due to the oil and gas slump. The average asking rent will dip 1.6 percent to $27.23 this year.

**Investment**

A potential upside to slowing construction is tenants diverting to existing space instead of newly constructed buildings, which benefits investors seeking to add value in high-vacancy buildings.
Stability of Indianapolis Office Market
Revs Up Investor Interest

Steady employment growth and a slight increase in hiring by office-using companies will boost the Indianapolis office market this year. State incentives continue to attract firms to expand and relocate in the metro, tightening availability of large blocks of office space and dropping vacancy to a seven-year low. This has spurred modest levels of office construction. Lids and Cummins will occupy new headquarters, accounting for roughly half of the space due for completion in 2016. Both companies will be vacating mostly industrial square footage, lessening the impact of their moves on the office market. Developer’s confidence has resulted in smaller speculative projects emerging in the higher-demand Carmel and Keystone Crossing areas. The construction pipeline is thinning, however, leading to an expected slowdown in office deliveries during 2017. This, combined with the conversion of older office properties to residential uses, could greenlight some planned projects. The tightening in vacancy will produce a fourth consecutive year of rent growth, pushing office rents to an all-time high.

Stability and the potential for less downside risk have enticed a wide range of out-of-state investors to consider office assets in Indianapolis. The readiness of financing and yields above those obtainable in many larger markets has capital flowing into the metro, pushing buyer demand to exceed supply. The increased competition for office assets is moving many local buyers to the sidelines. Medical-office buildings with a single tenant are coveted at cap rates that begin in the 6 percent range for a credit tenant with a long-term lease. Initial yields can start 200 basis points higher if multi-tenanted. Stronger population and employment growth will draw buyers to assets in downtown Indianapolis, Hamilton County and Greenwood. Owners in these areas ready to capitalize on current market conditions will find investors plentiful and yields for Class B/C properties beginning in the 8 percent span.

2016 Market Forecast

Despite some improvements, other markets outpaced Indianapolis this year, lowering it one slot in the NOPI.

- **NOPI Rank**: 31, down 1 place
- **Employment**: up 2.1%
- **Construction**: 700,000 sq. ft.
- **Vacancy**: down 10 bps
- **Rent**: up 1.8%
- **Investment**: Office buildings in areas such as Broad Ripple that provide convenient transit options and an urban lifestyle will be sought after by investors and tenants alike.
Expanding Jacksonville Companies Heighten Demand for Office Assets

Jacksonville job growth will remain brisk this year, and office-using payrolls will account for one-quarter of additions, strengthening demand for office space in the metro. Construction remains limited to pre-leased space, and speculative supply pressure will not be an issue in the coming months. As a result, companies seeking to expand will pursue existing buildings. Last year, Citizens Property Insurance leased nearly 240,000 square feet at EverBank Tower in Downtown Jacksonville, boosting occupancy in the area after consolidating more than 1,000 positions from other parts of the metro, Tallahassee and Tampa. This year, Deutsche Bank will push forward with local expansion plans, leasing space near its existing campus in Southside to fill approximately 350 jobs by 2017. As other companies seek to grow in the market this year, demand for space will rise and vacancy will fall to its lowest point since 2008 as rents push above the pre-recession peak.

Sales activity nearly doubled last year as buyers targeted the Jacksonville metro for office assets. Competition for properties in larger Florida markets has intensified, encouraging yield-driven investors to seek assets in nearby markets. Private, local buyers have been most active and the number of deals priced between $1 million and $10 million more than doubled during 2015, with cap rates for these properties averaging near 9 percent. The Southside portion of the metro will remain popular with investors this year as a deep and diverse inventory, as well as an attractive tenant mix, catches the attention of buyers. In addition, a growing healthcare community is drawing medical office investors to the market, and sales of assets in this category accounted for one-quarter of total transaction volume in 2015. While activity will not accelerate as quickly this year, buyer demand for office assets in the market will continue to rise as property operations advance.

2016 Market Forecast

Larger advances in other markets moved Jacksonville down one position Index to 39th place.

Metro employers will create 14,250 jobs in 2016, an increase of 2.2 percent year over year. Office-using employment will rise by 3,500 positions. Last year, companies added 13,500 workers to staffs.

Construction will remain limited in the metro this year as builders deliver 75,000 square feet of office space. In 2015, developers brought 50,000 square feet online.

Vacancy will tumble 50 basis points this year to 15.2 percent by year-end. A 10-basis-point dip was recorded in 2015.

The average asking rent will rise 3.4 percent annually to $19.32 per square foot in 2016. The average advanced 3.1 percent last year.

Growth in the local healthcare industry will continue to attract investment in the area’s medical office buildings. Cap rates for these assets can average approximately 150 basis points lower than other office properties.

2016 Market Forecast

NOPI Rank 39, down 1 place

Employment up 2.2%

Construction 75,000 sq. ft.

Vacancy down 50 bps

Rent up 3.4%

Investment

Sources: CoStar Group, Inc.; Real Capital Analytics

* Estimate ** Forecast
Corporate Expansions Dominate Development As Kansas City Office Market Tightens

The Kansas City office market is expanding, led by major employers including Cerner and Burns & McDonnell, both of which have headquarters or major expansions underway. Cerner will complete two buildings in the Trails Campus southeast of downtown during 2016. The first of nearly 3,500 employees will begin to move into the facility in early 2017. The company is not expected to vacate existing space, limiting the impact on the overall office market. In downtown Kansas City, this year’s opening of a 2-mile streetcar route and the extension of Google Fiber into more office buildings should attract additional businesses. Here, some office buildings are being repurposed into mixed-use residential or hotel uses with ground-floor retail, further enhancing the urban lifestyle in the area. Tech and creative companies in particular will use the added amenities to draw and retain young workers. A lack of construction in South Johnson County, a major employment hub, during the last two years has tightened office operations. This may change if the proposed redevelopment of Brookridge golf course is approved. The mixed-use project could add up to 3 million square feet of office space, although neighborhood concerns have slowed the approval process. Marketwide, vacancy will contract in 2016, boosting the average rent for a fourth consecutive year.

Steady rent gains, higher yields and lower entry costs than many other markets entice an increasing number of buyers to Kansas City office assets. Investors will continue to seek older or obsolete Class B/C office properties near downtown for mixed-use residential conversions. Some of these buildings in strong locations can also be updated to lure tech and creative companies. Assets along the new streetcar line or near urban amenities will garner heightened buyer interest at cap rates that typically start in the 8 percent range. An increase in Class A listings should appeal to institutions at initial yields beginning in the 7 percent band.

2016 Market Forecast

Below-average job growth and rent gains expected in 2016 resulted in Kansas City falling four places.

- **Employment** up 0.9%
  
  Kansas City employers will expand the workforce 0.9 percent in 2016 with the creation of 9,000 jobs. This is up slightly from last year’s 0.8 percent gain. Office-using employment will advance 1.4 percent this year.

- **Construction** 800,000 sq. ft.
  
  After just 200,000 square feet of office space was delivered in 2015, construction activity will soar. This year, developers will complete 800,000 square feet of mainly build-to-suit projects, a 0.7 percent rise in inventory.

- **Vacancy** down 40 bps
  
  The vacancy rate will drop 40 basis points to 12.7 percent in 2016, the lowest level in eight years. A 30-basis-point decline occurred last year.

- **Rent** up 2.8%
  
  With less available space the average asking rent will tick up 2.8 percent to $18.08 per square foot in 2016, building on last year’s 2.6 percent increase.

- **Investment**
  
  Strengthening operations and the availability of for-sale assets will draw more out-of-state investors to office properties in Johnson County.

* Estimate ** Forecast

Sources: CoStar Group, Inc.; Real Capital Analytics
Strong Employment Outlook and Tightening Vacancy Rates Boost Las Vegas Office Appeal

Office-using businesses will ramp up hiring in 2016, accelerating the pace of job growth and intensifying demand for Las Vegas office space. This along with an affordable cost of living and a housing market that is beginning to stabilize will encourage corporate investment in the area. SolarCity recently announced plans to open a new flagship training facility in West Las Vegas, further growing its Nevada footprint. This type of business growth has helped push the unemployment rate down to the lowest point since the recession. Developers will remain skittish in 2016 as new office completions slip below the five-year average, despite builders finishing the large Federal Justice Tower downtown. The 140,000-square-foot office project represents the most significant development of the year and will come online 100 percent pre-leased by government organizations. High net absorption amid limited construction will put downward pressure on the metrowide vacancy rate, reaching its tightest level since late 2008. As market conditions continue to improve, the average asking rent will finally start seeing some upward movement as the metro posts back-to-back years of annual growth of 2 percent or higher.

Buyers outnumber sellers in the metro as out-of-state investors target the higher yields offered by Las Vegas offices. Escalated prices and low cap rates in the California markets have pushed some to secondary locations, driving up demand for Nevada opportunities. The Southwest Las Vegas and Summerlin areas are particularly sought after, although not much activity has extended far beyond the Beltway. Some tenants looking for their own space are purchasing buildings in existing office parks for personal use and then leasing out vacant portions. Cap rates will likely compress to the 8 to low-9 percent range this year, although first-year yields in Las Vegas remain one of the highest in the nation.

2016 Market Forecast

- **NOPI Rank**: Las Vegas gained two spots to 37th place in this year’s Index as demand for office space strengthened amid a slow construction pipeline.
- **Employment**: The rate of job growth will advance in 2016 with businesses hiring 29,500 workers, an increase of 3.2 percent. Office-using employment will account for 7,400 of these new positions.
- **Construction**: Developers will bring 235,000 square feet of office space to market this year. This is a slowdown from 2015 when 332,000 square feet were completed.
- **Vacancy**: Following a 90-basis-point drop last year, the metrowide vacancy rate will slide another 90 basis points to 19 percent in 2016.
- **Rent**: The average asking rent will climb 2.0 percent this year, reaching $21.00 per month. Last year, Las Vegas registered rent growth of 2.3 percent.
- **Investment**: Investors that bought smaller properties that were foreclosed on during the downturn may begin listing assets with valuations at respectable levels and loans maturing.
## MSA Name

<table>
<thead>
<tr>
<th>Office Employment Growth</th>
<th>Completions (000s of Sq. Ft.)</th>
<th>Net Absorption (000s of Sq. Ft.)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Atlanta</strong></td>
<td>4.0% 4.6% 4.4% 4.4%</td>
<td>640 1,460 1,030 1,460</td>
</tr>
<tr>
<td></td>
<td>4.6% 4.8% 5.2% 4.8%</td>
<td>350 1,360 4,000 800</td>
</tr>
<tr>
<td><strong>Austin</strong></td>
<td>1.7% 2.3% 2.5% 2.4%</td>
<td>1,070 1,120 470 1,800</td>
</tr>
<tr>
<td></td>
<td>2.2% 1.7% 3.4% 2.7%</td>
<td>3,200 2,390 4,100 2,700</td>
</tr>
<tr>
<td><strong>Charlotte</strong></td>
<td>4.6% 4.9% 3.7% 3.7%</td>
<td>270 520 700 1,700</td>
</tr>
<tr>
<td></td>
<td>3.6% 0.6% 1.2% 1.4%</td>
<td>1,010 600 1,700 2,000</td>
</tr>
<tr>
<td><strong>Cincinnati</strong></td>
<td>2.3% 2.9% 3.6% 3.8%</td>
<td>190 390 1,300 800</td>
</tr>
<tr>
<td></td>
<td>2.7% 0.3% 0.9% 0.8%</td>
<td>880 430 110 750</td>
</tr>
<tr>
<td><strong>Columbus</strong></td>
<td>3.5% 2.6% 1.3% 1.5%</td>
<td>220 540 500 1,900</td>
</tr>
<tr>
<td><strong>Dallas/Fort Worth</strong></td>
<td>4.2% 4.7% 3.1% 2.3%</td>
<td>2,360 3,880 7,500 4,700</td>
</tr>
<tr>
<td><strong>Denver</strong></td>
<td>3.3% 2.9% 0.4% 1.2%</td>
<td>920 1,460 2,000 2,500</td>
</tr>
<tr>
<td><strong>Detroit</strong></td>
<td>3.0% 1.1% 3.0% 2.7%</td>
<td>60 100 500 500</td>
</tr>
<tr>
<td><strong>Fort Lauderdale</strong></td>
<td>2.7% 4.3% 1.3% 1.5%</td>
<td>30 410 270 500</td>
</tr>
<tr>
<td><strong>Houston</strong></td>
<td>3.1% 2.8% 0.4% 0.3%</td>
<td>4,210 8,960 12,000 8,000</td>
</tr>
<tr>
<td><strong>Indianapolis</strong></td>
<td>6.6% 1.6% 0.8% 1.3%</td>
<td>520 130 650 700</td>
</tr>
<tr>
<td><strong>Jacksonville</strong></td>
<td>4.1% 2.0% 1.2% 2.0%</td>
<td>50 10 50 80</td>
</tr>
<tr>
<td><strong>Kansas City</strong></td>
<td>1.5% 2.8% 1.1% 1.4%</td>
<td>1,130 780 200 800</td>
</tr>
<tr>
<td><strong>Las Vegas</strong></td>
<td>4.0% 3.7% 3.6% 4.1%</td>
<td>280 190 330 240</td>
</tr>
<tr>
<td><strong>Los Angeles</strong></td>
<td>2.3% 0.1% 1.5% 1.3%</td>
<td>1,480 870 1,570 2,540</td>
</tr>
<tr>
<td><strong>Louisville</strong></td>
<td>2.9% 5.2% 2.5% 2.3%</td>
<td>250 500 90 350</td>
</tr>
<tr>
<td><strong>Miami-Dade</strong></td>
<td>3.3% 5.2% 2.0% 3.3%</td>
<td>170 460 430 600</td>
</tr>
<tr>
<td><strong>Milwaukee</strong></td>
<td>2.4% -0.3% 4.2% 2.5%</td>
<td>200 130 300 600</td>
</tr>
<tr>
<td><strong>Minneapolis-St. Paul</strong></td>
<td>1.3% 2.0% 2.7% 2.2%</td>
<td>340 1,610 2,000 2,000</td>
</tr>
<tr>
<td><strong>Nashville</strong></td>
<td>5.6% 4.2% 4.7% 4.9%</td>
<td>80 930 600 1,700</td>
</tr>
<tr>
<td><strong>New Haven-Fairfield County</strong></td>
<td>1.5% 0.5% 1.1% 1.0%</td>
<td>40 10 590 240</td>
</tr>
<tr>
<td><strong>New York City</strong></td>
<td>2.5% 3.1% 2.3% 1.9%</td>
<td>5,130 3,870 1,650 3,600</td>
</tr>
<tr>
<td><strong>Northern New Jersey</strong></td>
<td>-0.2% -0.8% -0.2% 0.1%</td>
<td>1,260 670 1,050 1,120</td>
</tr>
<tr>
<td><strong>Oakland</strong></td>
<td>1.3% 3.5% 2.0% 2.5%</td>
<td>130 0 310 230</td>
</tr>
<tr>
<td><strong>Orange County</strong></td>
<td>0.6% 4.0% 1.1% 1.4%</td>
<td>350 1,350 300 430</td>
</tr>
<tr>
<td><strong>Orlando</strong></td>
<td>3.5% 3.7% 3.2% 2.7%</td>
<td>400 410 270 270</td>
</tr>
<tr>
<td><strong>Philadelphia</strong></td>
<td>1.2% 1.6% 0.1% 0.2%</td>
<td>1,030 970 220 770</td>
</tr>
<tr>
<td><strong>Phoenix</strong></td>
<td>5.3% 2.2% 2.9% 3.4%</td>
<td>270 1,590 2,400 2,800</td>
</tr>
<tr>
<td><strong>Pittsburgh</strong></td>
<td>0.4% -0.9% 1.3% 0.8%</td>
<td>690 1,450 1,900 720</td>
</tr>
<tr>
<td><strong>Portland</strong></td>
<td>4.3% 3.2% 5.1% 4.3%</td>
<td>30 180 210 1,300</td>
</tr>
<tr>
<td><strong>Riverside-San Bernardino</strong></td>
<td>4.7% 5.8% 4.5% 7.2%</td>
<td>110 340 60 180</td>
</tr>
<tr>
<td><strong>Sacramento</strong></td>
<td>1.0% 2.9% 0.5% 0.8%</td>
<td>260 100 20 380</td>
</tr>
<tr>
<td><strong>Salt Lake City</strong></td>
<td>5.5% 3.2% 5.0% 4.4%</td>
<td>910 1,390 1,570 3,050</td>
</tr>
<tr>
<td><strong>San Antonio</strong></td>
<td>3.2% 5.0% 5.3% 4.8%</td>
<td>670 1,000 1,000 800</td>
</tr>
<tr>
<td><strong>San Diego</strong></td>
<td>2.6% 2.3% 3.6% 3.8%</td>
<td>800 930 1,300 180</td>
</tr>
<tr>
<td><strong>San Francisco</strong></td>
<td>6.1% 7.9% 6.0% 5.1%</td>
<td>370 980 2,600 2,900</td>
</tr>
<tr>
<td><strong>San Jose</strong></td>
<td>6.6% 9.4% 7.8% 6.4%</td>
<td>2,350 1,550 4,520 6,400</td>
</tr>
<tr>
<td><strong>Seattle-Tacoma</strong></td>
<td>3.4% 3.4% 3.9% 3.8%</td>
<td>1,210 570 3,660 3,300</td>
</tr>
<tr>
<td><strong>St. Louis</strong></td>
<td>2.9% 1.5% 0.3% 0.3%</td>
<td>10 650 100 150</td>
</tr>
<tr>
<td><strong>Tampa-St. Petersburg</strong></td>
<td>2.6% 2.2% 3.3% 2.4%</td>
<td>730 180 550 300</td>
</tr>
<tr>
<td><strong>Washington, D.C.</strong></td>
<td>-0.9% 0.6% 3.0% 3.1%</td>
<td>3,920 4,130 2,000 3,500</td>
</tr>
<tr>
<td><strong>West Palm Beach</strong></td>
<td>4.7% 5.1% 3.9% 2.2%</td>
<td>40 210 80 120</td>
</tr>
<tr>
<td><strong>U.S. Metro Total</strong></td>
<td>2.4% 3.0% 2.7% 2.6%</td>
<td>42,160 55,120 73,000 79,000</td>
</tr>
</tbody>
</table>

* Estimate ** Forecast ² See Statistical Summary Note on page 64.
## 2016 National Office Report Statistical Summary

### Vacancy

<table>
<thead>
<tr>
<th>MSA Name</th>
<th>Estimate</th>
<th>Forecast</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atlanta</td>
<td>18.2%</td>
<td>17.2%</td>
</tr>
<tr>
<td>Austin</td>
<td>13.3%</td>
<td>13.4%</td>
</tr>
<tr>
<td>Baltimore</td>
<td>14.1%</td>
<td>14.7%</td>
</tr>
<tr>
<td>Boston</td>
<td>14.8%</td>
<td>13.9%</td>
</tr>
<tr>
<td>Charlotte</td>
<td>14.4%</td>
<td>13.6%</td>
</tr>
<tr>
<td>Chicago</td>
<td>18.0%</td>
<td>17.5%</td>
</tr>
<tr>
<td>Cincinnati</td>
<td>16.4%</td>
<td>16.9%</td>
</tr>
<tr>
<td>Cleveland</td>
<td>17.0%</td>
<td>16.9%</td>
</tr>
<tr>
<td>Columbus</td>
<td>12.0%</td>
<td>11.6%</td>
</tr>
<tr>
<td>Dallas/Fort Worth</td>
<td>19.2%</td>
<td>19.0%</td>
</tr>
<tr>
<td>Denver</td>
<td>14.1%</td>
<td>13.4%</td>
</tr>
<tr>
<td>Detroit</td>
<td>18.4%</td>
<td>16.5%</td>
</tr>
<tr>
<td>Fort Lauderdale</td>
<td>16.3%</td>
<td>16.0%</td>
</tr>
<tr>
<td>Houston</td>
<td>12.7%</td>
<td>12.7%</td>
</tr>
<tr>
<td>Indianapolis</td>
<td>16.0%</td>
<td>15.8%</td>
</tr>
<tr>
<td>Jacksonville</td>
<td>14.2%</td>
<td>13.4%</td>
</tr>
<tr>
<td>Kansas City</td>
<td>22.0%</td>
<td>20.8%</td>
</tr>
<tr>
<td>Las Vegas</td>
<td>15.3%</td>
<td>15.3%</td>
</tr>
<tr>
<td>Los Angeles</td>
<td>11.3%</td>
<td>11.1%</td>
</tr>
<tr>
<td>Louisville</td>
<td>16.3%</td>
<td>14.5%</td>
</tr>
<tr>
<td>Miami-Dade</td>
<td>14.2%</td>
<td>13.6%</td>
</tr>
<tr>
<td>Nashville</td>
<td>11.6%</td>
<td>9.8%</td>
</tr>
<tr>
<td>New Haven-Fairfield County</td>
<td>18.1%</td>
<td>19.4%</td>
</tr>
<tr>
<td>New York City</td>
<td>19.9%</td>
<td>19.8%</td>
</tr>
<tr>
<td>Northern New Jersey</td>
<td>14.7%</td>
<td>13.2%</td>
</tr>
<tr>
<td>Oakland</td>
<td>15.9%</td>
<td>14.8%</td>
</tr>
<tr>
<td>Orange County</td>
<td>17.1%</td>
<td>16.8%</td>
</tr>
<tr>
<td>Orlando</td>
<td>15.9%</td>
<td>15.8%</td>
</tr>
<tr>
<td>Philadelphia</td>
<td>20.7%</td>
<td>21.2%</td>
</tr>
<tr>
<td>Phoenix</td>
<td>13.9%</td>
<td>13.9%</td>
</tr>
<tr>
<td>Pittsburgh</td>
<td>11.6%</td>
<td>10.9%</td>
</tr>
<tr>
<td>Portland</td>
<td>16.7%</td>
<td>16.0%</td>
</tr>
<tr>
<td>Sacramento</td>
<td>12.8%</td>
<td>13.1%</td>
</tr>
<tr>
<td>San Antonio</td>
<td>16.0%</td>
<td>14.7%</td>
</tr>
<tr>
<td>San Diego</td>
<td>12.0%</td>
<td>9.8%</td>
</tr>
<tr>
<td>San Francisco</td>
<td>14.2%</td>
<td>13.8%</td>
</tr>
<tr>
<td>San Jose</td>
<td>16.4%</td>
<td>14.7%</td>
</tr>
<tr>
<td>Salt Lake City</td>
<td>12.2%</td>
<td>10.6%</td>
</tr>
<tr>
<td>Seattle-Tacoma</td>
<td>16.8%</td>
<td>15.1%</td>
</tr>
<tr>
<td>St. Louis</td>
<td>18.5%</td>
<td>19.5%</td>
</tr>
<tr>
<td>St. Louis</td>
<td>15.8%</td>
<td>15.3%</td>
</tr>
</tbody>
</table>

### Asking Rent (Year End) per Sq. Ft.

<table>
<thead>
<tr>
<th>MSA Name</th>
<th>Estimate</th>
<th>Forecast</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atlanta</td>
<td>$19.45</td>
<td>$20.09</td>
</tr>
<tr>
<td>Austin</td>
<td>$26.92</td>
<td>$28.21</td>
</tr>
<tr>
<td>Baltimore</td>
<td>$21.28</td>
<td>$21.35</td>
</tr>
<tr>
<td>Boston</td>
<td>$28.59</td>
<td>$29.26</td>
</tr>
<tr>
<td>Charlotte</td>
<td>$20.37</td>
<td>$21.02</td>
</tr>
<tr>
<td>Chicago</td>
<td>$23.14</td>
<td>$22.93</td>
</tr>
<tr>
<td>Cincinnati</td>
<td>$15.30</td>
<td>$15.63</td>
</tr>
<tr>
<td>Cleveland</td>
<td>$17.23</td>
<td>$17.07</td>
</tr>
<tr>
<td>Columbus</td>
<td>$16.02</td>
<td>$16.11</td>
</tr>
<tr>
<td>Dallas/Fort Worth</td>
<td>$20.63</td>
<td>$21.50</td>
</tr>
<tr>
<td>Denver</td>
<td>$22.20</td>
<td>$23.43</td>
</tr>
<tr>
<td>Detroit</td>
<td>$17.89</td>
<td>$18.23</td>
</tr>
<tr>
<td>Fort Lauderdale</td>
<td>$22.97</td>
<td>$23.95</td>
</tr>
<tr>
<td>Houston</td>
<td>$25.94</td>
<td>$27.39</td>
</tr>
<tr>
<td>Indianapolis</td>
<td>$16.99</td>
<td>$17.27</td>
</tr>
<tr>
<td>Jacksonville</td>
<td>$17.69</td>
<td>$18.12</td>
</tr>
<tr>
<td>Kansas City</td>
<td>$16.93</td>
<td>$17.14</td>
</tr>
<tr>
<td>Las Vegas</td>
<td>$20.00</td>
<td>$20.13</td>
</tr>
<tr>
<td>Los Angeles</td>
<td>$30.06</td>
<td>$31.51</td>
</tr>
<tr>
<td>Louisville</td>
<td>$15.85</td>
<td>$15.68</td>
</tr>
<tr>
<td>Miami-Dade</td>
<td>$28.49</td>
<td>$29.01</td>
</tr>
<tr>
<td>Milwaukee</td>
<td>$16.40</td>
<td>$16.28</td>
</tr>
<tr>
<td>Minneapolis-St. Paul</td>
<td>$17.75 $18.58</td>
<td></td>
</tr>
<tr>
<td>Nashville</td>
<td>$20.18</td>
<td>$21.27</td>
</tr>
<tr>
<td>New Haven-Fairfield County</td>
<td>$29.29 $28.87</td>
<td></td>
</tr>
<tr>
<td>New York City</td>
<td>$52.46</td>
<td>$55.85</td>
</tr>
<tr>
<td>Northern New Jersey</td>
<td>$24.88 $25.49</td>
<td></td>
</tr>
<tr>
<td>Oakland</td>
<td>$24.29</td>
<td>$25.90</td>
</tr>
<tr>
<td>Orange County</td>
<td>$23.27</td>
<td>$24.70</td>
</tr>
<tr>
<td>Orlando</td>
<td>$18.87</td>
<td>$19.27</td>
</tr>
<tr>
<td>Philadelphia</td>
<td>$22.54</td>
<td>$22.94</td>
</tr>
<tr>
<td>Phoenix</td>
<td>$20.64</td>
<td>$21.47</td>
</tr>
<tr>
<td>Pittsburgh</td>
<td>$19.67</td>
<td>$19.85</td>
</tr>
<tr>
<td>Portland</td>
<td>$20.21</td>
<td>$21.23</td>
</tr>
<tr>
<td>Riverside-San Bernardino</td>
<td>$19.25 $19.62</td>
<td></td>
</tr>
<tr>
<td>Sacramento</td>
<td>$20.81</td>
<td>$20.85</td>
</tr>
<tr>
<td>Salt Lake City</td>
<td>$17.57</td>
<td>$17.61</td>
</tr>
<tr>
<td>San Antonio</td>
<td>$19.09</td>
<td>$19.44</td>
</tr>
<tr>
<td>San Diego</td>
<td>$25.94</td>
<td>$27.37</td>
</tr>
<tr>
<td>San Francisco</td>
<td>$43.94</td>
<td>$47.75</td>
</tr>
<tr>
<td>San Jose</td>
<td>$33.94</td>
<td>$35.36</td>
</tr>
<tr>
<td>Seattle-Tacoma</td>
<td>$27.97</td>
<td>$29.04</td>
</tr>
<tr>
<td>St. Louis</td>
<td>$17.67</td>
<td>$17.91</td>
</tr>
<tr>
<td>Tampa-St. Petersburg</td>
<td>$19.44 $19.73</td>
<td></td>
</tr>
<tr>
<td>Washington, D.C.</td>
<td>$36.14</td>
<td>$35.90</td>
</tr>
<tr>
<td>West Palm Beach</td>
<td>$25.79</td>
<td>$26.17</td>
</tr>
<tr>
<td>U.S. Metro Total</td>
<td>$26.27</td>
<td>$27.13</td>
</tr>
</tbody>
</table>

### Average Price per Sq. Foot

<table>
<thead>
<tr>
<th>MSA Name</th>
<th>Estimate</th>
<th>Forecast</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atlanta</td>
<td>$103</td>
<td>$114</td>
</tr>
<tr>
<td>Austin</td>
<td>$29</td>
<td>$31.46</td>
</tr>
<tr>
<td>Baltimore</td>
<td>$119</td>
<td>$128</td>
</tr>
<tr>
<td>Boston</td>
<td>$211</td>
<td>$227</td>
</tr>
<tr>
<td>Charlotte</td>
<td>$169</td>
<td>$176</td>
</tr>
<tr>
<td>Chicago</td>
<td>$126</td>
<td>$136</td>
</tr>
<tr>
<td>Cincinnati</td>
<td>$110</td>
<td>$117</td>
</tr>
<tr>
<td>Cleveland</td>
<td>$88</td>
<td>$90</td>
</tr>
<tr>
<td>Columbus</td>
<td>$106</td>
<td>$113</td>
</tr>
<tr>
<td>Dallas/Fort Worth</td>
<td>$143</td>
<td>$153</td>
</tr>
<tr>
<td>Denver</td>
<td>$126</td>
<td>$137</td>
</tr>
<tr>
<td>Detroit</td>
<td>$81</td>
<td>$95</td>
</tr>
<tr>
<td>Fort Lauderdale</td>
<td>$138</td>
<td>$152</td>
</tr>
<tr>
<td>Houston</td>
<td>$155</td>
<td>$165</td>
</tr>
<tr>
<td>Indianapolis</td>
<td>$110</td>
<td>$114</td>
</tr>
<tr>
<td>Jacksonville</td>
<td>$137</td>
<td>$144</td>
</tr>
<tr>
<td>Kansas City</td>
<td>$111</td>
<td>$127</td>
</tr>
<tr>
<td>Las Vegas</td>
<td>$126</td>
<td>$137</td>
</tr>
<tr>
<td>Los Angeles</td>
<td>$119</td>
<td>$128</td>
</tr>
<tr>
<td>Louisville</td>
<td>$211</td>
<td>$227</td>
</tr>
<tr>
<td>Miami-Dade</td>
<td>$177</td>
<td>$193</td>
</tr>
<tr>
<td>Milwaukee</td>
<td>$226</td>
<td>$245</td>
</tr>
<tr>
<td>Minneapolis-St. Paul</td>
<td>$110</td>
<td>$127</td>
</tr>
<tr>
<td>Nashville</td>
<td>$151</td>
<td>$165</td>
</tr>
<tr>
<td>New Haven-Fairfield County</td>
<td>$20.60</td>
<td>$21.50</td>
</tr>
<tr>
<td>New York City</td>
<td>$583</td>
<td>$657</td>
</tr>
<tr>
<td>Northern New Jersey</td>
<td>$195</td>
<td>$207</td>
</tr>
<tr>
<td>Oakland</td>
<td>$177</td>
<td>$193</td>
</tr>
<tr>
<td>Orange County</td>
<td>$205</td>
<td>$225</td>
</tr>
<tr>
<td>Orlando</td>
<td>$126</td>
<td>$136</td>
</tr>
<tr>
<td>Philadelphia</td>
<td>$128</td>
<td>$138</td>
</tr>
<tr>
<td>Phoenix</td>
<td>$114</td>
<td>$118</td>
</tr>
<tr>
<td>Pittsburgh</td>
<td>$151</td>
<td>$174</td>
</tr>
<tr>
<td>Portland</td>
<td>$122</td>
<td>$130</td>
</tr>
<tr>
<td>Riverside-San Bernardino</td>
<td>$33.90</td>
<td>$35.36</td>
</tr>
<tr>
<td>Sacramento</td>
<td>$331</td>
<td>$400</td>
</tr>
<tr>
<td>Salt Lake City</td>
<td>$325</td>
<td>$332</td>
</tr>
<tr>
<td>San Antonio</td>
<td>$241</td>
<td>$262</td>
</tr>
<tr>
<td>San Diego</td>
<td>$272</td>
<td>$287</td>
</tr>
<tr>
<td>San Francisco</td>
<td>$351</td>
<td>$368</td>
</tr>
<tr>
<td>San Jose</td>
<td>$177</td>
<td>$193</td>
</tr>
<tr>
<td>Seattle-Tacoma</td>
<td>$94</td>
<td>$102</td>
</tr>
<tr>
<td>St. Louis</td>
<td>$148</td>
<td>$156</td>
</tr>
<tr>
<td>Tampa-St. Petersburg</td>
<td>$190</td>
<td>$203</td>
</tr>
<tr>
<td>Washington, D.C.</td>
<td>$20.60</td>
<td>$21.50</td>
</tr>
<tr>
<td>West Palm Beach</td>
<td>$226</td>
<td>$245</td>
</tr>
<tr>
<td>U.S. Metro Total</td>
<td>$188</td>
<td>$196</td>
</tr>
</tbody>
</table>

* Estimate  ** Forecast  2 See Statistical Summary Note on page 64.
Completions Outpace Demand Despite Surging Silicon Beach Tech Scene; Buyers Stay Active

Los Angeles’ growing economy is encouraging office-using organizations to expand their footprints and create new job opportunities for metro residents. While the pace of improvement is slowing, the long-term trend remains robust, supporting developers who wish to capitalize on market strength. This year, construction will reach the highest level of the current cycle, underscoring the ambitious pipeline for 2016. However, nearly half of the planned additions are already spoken for, reducing supply pressure on the market. In addition, the few speculative offerings scheduled for delivery will target surging demand in the Greater Downtown and West Los Angeles submarkets. Meanwhile, activity in the South Bay and the San Fernando Valley submarkets will be subdued, with planned completions in these areas comprising just over 250,000 square feet. Holistically, the metro will remain moderately oversupplied in the medium term, lifting vacancy slightly as firms pen new leases. Market fluctuation will be unable to stop ascension in asking rents, which will record a low-single-digit gain.

Although operations have yet to tighten appreciably, investors remain very active in the metro amid an environment of historically low interest rates. Deal volume in 2015 set a record for the current cycle as buyers bid aggressively for well-located assets. Institutions are focusing on established Class A properties in Downtown Los Angeles and West Los Angeles, while also venturing into the Silicon Beach areas of the South Bay. Private investors are transitioning to a value-add strategy, keying on building and occupancy improvements in order to drive superior NOI growth. In 2016, cap rates will continue to diminish in the San Fernando Valley area as additional capital flows toward more suburban submarkets where yields can be 150 basis points higher than the urban core. Overall, first-year yields will continue to drift into the low-6 percent range, providing opportunities for excellent risk-adjusted returns.

2016 Market Forecast

A projected rise in vacancy and slower rent growth dropped Los Angeles four spots in this year’s ranking.

- **NOPI Rank**: 18, down 4 places
- **Employment**: up 1.8%
- **Construction**: 2.5 million sq. ft.
- **Vacancy**: up 10 bps
- **Rent**: up 3.5%
- **Investment**: Capital will continue to flow into value-add San Fernando Valley offerings and technology-based submarkets in the South Bay as investors seek greater returns.

Local firms will create 80,500 positions this year, increasing total employment by 1.8 percent. Office-using organizations will account for 13,000 of the total jobs, a 1.3 percent advancement.

Developers will complete 2.5 million square feet of office space this year, with the Greater Downtown Los Angeles and Westside Cities markets receiving the vast majority of new supply.

Accelerating supply growth will modestly outpace demand for space, pushing vacancy 10 basis points higher to 15.5 percent.

Robust demand in the Westside Cities and South Bay tech markets will elevate asking rents 3.5 percent to $34.10 per square foot.
Office Demand to Mount in Louisville Amid Growing Technology Industry

Louisville’s office market is poised for improvement this year as a steady pace of employment growth increases demand. Jobs have surpassed pre-recession levels by 5 percent, and hiring in professional and business services has led the charge. As many companies backfill underutilized space and business conditions continue to improve, tenants will begin expanding footprints to hire additional workers in the months to come. In addition, the metro is beginning to establish itself as a Midwest technology hub, and Google is pursuing bringing its Fiber network to the market. City officials hope the installation of the network will attract additional technology companies and startups, boosting demand for office space. Construction remains limited, and space coming online in 2016 is mostly speculative construction. Two projects in Hurstbourne/Lyndon will be delivered later this year, adding 275,000 square feet to the market. Pre-leasing has been negligible thus far, though significant interest from companies to locate in both buildings could raise occupancy as completion dates draw near.

Sales velocity will remain subdued in Louisville this year as investors hold on to properties, hoping to capitalize on recent improvements in property operations. Local, private investors remain the most active investor group in the metro, targeting stabilized properties between $1 million and $10 million for long-term hold strategies. Cap rates for these assets average in the 8 to 9 percent area. In addition, business owners are taking advantage of the opportunity to invest in their own real estate assets, snapping up buildings they already occupy or spaces to expand their companies. Institutional-grade buyers increased activity in the metro last year, targeting properties in the core and trading at first-year yields below 7 percent. Despite solid performance and a history of restrained inventory growth, a more notable influx of buyers will not likely occur until investors have exhausted opportunities in larger, nearby markets.

2016 Market Forecast

<table>
<thead>
<tr>
<th>NOPI Rank</th>
<th>A boost in office deliveries coupled with a decline in job growth contributed to Louisville’s three-place drop in this year’s Index.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment</td>
<td>Payrolls will expand 1.4 percent in Louisville this year as 9,000 positions are added. Office-using employment will account for over one-third of additions. In 2015, companies added 10,000 workers to staffs.</td>
</tr>
<tr>
<td>Construction</td>
<td>Completions will rise as developers add 350,000 square feet of office space to stock in 2016. Last year, builders delivered 85,000 square feet of space.</td>
</tr>
<tr>
<td>Vacancy</td>
<td>Vacancy will fall to its lowest point since mid-2007 this year, tumbling 50 basis points annually to 10.5 percent. A 10-basis-point dip was realized in the prior year.</td>
</tr>
<tr>
<td>Rent</td>
<td>The average asking rent will advance 3.4 percent annually, reaching $16.67 by year end. The average rose 2.8 percent in 2015.</td>
</tr>
<tr>
<td>Investment</td>
<td>Louisville’s East End, a prominent residential area with a sizable stock of well-performing office properties, will remain a target of investors this year.</td>
</tr>
</tbody>
</table>
Equity Flowing into Miami-Dade
As Vacancy Continues to Plummet

A combination of growing demand spawned by new and expanding tenants and subdued construction point to another year of declining vacancy and rising rents in the Miami-Dade office sector. The market ended last year with the highest amount of occupied space on record, and all-time highs in professional and business services, as well as financial services staffing. Additional hiring in these key office-using employment sectors will generate new needs for larger layouts in the coming months, raising the amount of occupied space and spreading demand into a wider range of properties. Space in the county’s newest buildings is consistently filling and accounted for more than half of all space absorbed during 2015; space demand for pre-2000 construction is also mounting a resurgence, however. Competition for tenants from new properties is minimal as many desirable development sites in the county have been acquired by residential developers or eyed for multiple uses and not solely for offices.

The county’s lengthy upswing in property operations continues to drive a liquid and vigorous investment market. Considerable gains in transactions and dollar volume were recorded last year, pushing down the average cap rate to the high-5 percent range and providing momentum heading into 2016. Private capital dominates the transaction marketplace, sustaining substantial flows of equity into the $1 million to $10 million price tranche. Brand-name submarkets including Coral Gables, Kendall and Northeast Dade remain the primary targets for these investors due to the depth of inventory and liquidity. In all of these submarkets, and Coral Gables especially, a more rigorous pace of rent growth is taking hold, offering potential upsides for investors purchasing assets with availability or near-term lease renewals. Redevelopment and repositioning opportunities are also emerging for private capital in the Biscayne Corridor, an older area in the urban core that continues to gain in popularity for potential tenants and investors.

2016 Market Forecast

- **NOPI Rank**: 5, up 2 places
- **Employment**: up 2.1%
- **Construction**: 600,000 sq. ft.
- **Vacancy**: down 70 bps
- **Rent**: up 4.7%
- **Investment**:

Above-average rent gains and job growth helped propel Miami-Dade’s ascent into the NOPI’s top five markets.

Staffing in Miami-Dade will expand 2.1 percent, or by 23,700 jobs, in 2016. The total surpasses last year’s gain and includes 8,500 office-using posts.

Developers will place in service 600,000 square feet in 2016, primarily comprising buildings measuring less than 100,000 square feet. An additional 412,000 square feet is underway and slated for delivery next year.

The vacancy rate will tumble 70 basis points this year to 12.8 percent, representing a moderation from the 100-basis-point plunge posted during 2015.

Lower vacancy will support a 4.7 percent bump in the average effective rent to $31.58 per square foot in 2016. An increase of 4.0 percent occurred in 2015.

A large buildup of multifamily stock in and surrounding the Miami Airport office submarket will attract office employers. Recent deals in the area offer price transparency and will encourage additional owners to list assets.

---

* Estimate ** Forecast
Sources: CoStar Group, Inc.; Real Capital Analytics
Investors Searching for Higher Yields and Stability Find Milwaukee Office Investment Opportunities

Milwaukee’s office market made positive strides in the last three years as rising tenant demand surpassed the slow pace of construction. Development activity has begun to escalate with deliveries doubling in each of the last two years. This trend will continue into next year when Northwestern Mutual occupies its 1.1 million-square-foot headquarters in downtown Milwaukee. The lack of available large floor plates in the most desired employment hubs has incited multi-tenant construction. More than 500,000 square feet of space will be completed this year, contributing to higher metrowide vacancy. In downtown Milwaukee, the 360,000-square-foot 833 East building is the largest multi-tenant office building to debut in more than six years. Multi-tenant construction is not confined to the core; the 155,000-square-foot Meadowlands Research & Technology Center will be added in Wauwatosa this year. As tenants vacate existing space for these new buildings, operators will renovate and adjust rents to market rate, a factor leading to the first annual rent growth in six years.

The relative stability of Milwaukee’s office market attracts investors, boosting transaction volume. More out-of-state and exchange buyers have joined a growing number of local investors focusing on Class B office properties in Milwaukee and Waukesha County where cap rates generally start above 8 percent for multi-tenant assets. Older office properties, especially in downtown Milwaukee, will be targeted for repurposing to residential or hotel uses, further spurring the area’s renaissance. New multi-tenant office construction here could provide some additional investment opportunities as developers sell buildings to fund future endeavors. Interest in medical office assets remains strong throughout the metro at initial yields that typically start in the 7 percent span, although a lack of available listings will stifle transaction activity this year.

2016 Market Forecast

- **NOPI Rank**: 45, down 1 place
- **Employment**: up 0.8%
- **Construction**: 600,000 sq. ft.
- **Vacancy**: up 20 bps
- **Rent**: up 0.9%

Milwaukee slipped one place due to a rise in inventory and remained near the bottom of the NOPI ranking. Office-using employment will account for more than half of the 7,000 total jobs generated in 2016, increasing payrolls 0.8 percent. Last year, staffing levels posted a 1.2 percent gain. Developers will complete 600,000 square feet of office space during 2016, expanding inventory 1 percent and doubling last year’s deliveries. Downtown Milwaukee and Wauwatosa will receive the majority of the projects.

New inventory will contribute to office vacancy advancing 20 basis points to 15.3 percent in 2016, erasing last year’s 20-basis-point decline. Asking rents will rise an average of 0.9 percent to $16.40 per square foot this year, the first annual growth since 2010. During 2015, rents dipped 0.2 percent.

Revitalization efforts in downtown Milwaukee and the trendy Historic Third Ward neighborhood provide investors with value-add and redevelopment opportunities.
Corporate Expansions Boosting Construction, Attracting Investors to Minneapolis-St. Paul

Steady employment growth will underpin tenant demand in the Minneapolis-St. Paul office market this year as construction remains at an eight-year high. For the third year, more than 10,000 office-using jobs will be created metrowide and developers are on target to deliver 2 million square feet for the second consecutive year. New buildings for Wells Fargo and Xcel Energy in Minneapolis will account for the majority of the completions. Both companies will be vacating some currently leased space, which will temporarily nudge the market’s vacancy up. Strong demand for offices in the trendy North Loop of Minneapolis from creative and tech firms has prompted the first speculative building in the city since the recession. T3 will be ready for occupancy in the final quarter. Marketwide, rising rents will spur some tenants to relocate to less-expensive space, while others are renewing leases for longer terms as concessions and TIs ease.

The metro’s large corporate presence and strong operations will draw a wide range of investors to this vibrant Midwest market. Amenity-rich assets near the core of Minneapolis and in neighborhoods that offer a live-work-play lifestyle will receive heightened investor interest. Older office buildings in these areas will continue to be prime targets for renovations that appeal to tech and creative companies, or for conversion to residential uses. Development projects in Downtown East and the North Loop are expanding the footprint of the Minneapolis core, raising surrounding property valuations and attracting buyers to assets nearby. Yield-seeking investors will need to move farther outward or down the quality scale for cap rates above 8 percent. Suburban properties close to major employment centers or adjacent to transit hubs will be highly sought after. Throughout the region, medical office properties are in great demand. Competition should remain intense for the few assets brought to the market, and those properties will quickly receive offers at cap rates beginning in the 6 percent area.

2016 Market Forecast

Minneapolis-St. Paul kept its 16th position in the Index as one of the highest-ranked Midwest markets.

Employment
- Following growth of 1.6 percent last year, metro employment will advance 1.8 percent in 2016 with the generation of 35,000 positions. Office-using employment will expand 2.2 percent this year.

Construction
- Nearly 2 million square feet of office space will be finalized in 2016, on par with last year’s deliveries. Downtown East will account for more than 50 percent of the total.

Vacancy
- Speculative construction and tenants vacating leased space for new buildings will contribute to vacancy moving up 40 basis points to 14.6 percent in 2016. This follows a 60-basis-point rise last year.

Rent
- Metrowide, the average asking rent will jump 3.0 percent to $19.45 per square foot in 2016, after a 1.7 percent climb last year.

Investment
- Office assets along the expanding mass-transit network should provide investors with upside potential as areas surrounding proposed stations are redeveloped.

* Estimate ** Forecast
Sources: CoStar Group, Inc.; Real Capital Analytics
Intense Interest in Nashville Office Market Pushes Rent and Occupancy Rates to New Highs

The growing healthcare and technology industries are driving the local economy and instilling optimism in the Nashville office market. Akin to Austin, Texas, the metro has established itself as an appealing, urban environment with unique lifestyle options. The quality of life resonates with many young professionals, fostering a strong and growing base of highly skilled millennials. The availability of skilled professionals has spurred expansion among software development and biomedical technology firms, helping push the metrowide unemployment rate down to the lowest level since the recession. Developers have taken notice and will supply the metro with the greatest amount of office space since 2008. Construction will be headlined by the 530,000-square-foot Capitol View Tower in downtown Nashville. The project will come online fully pre-leased and has allocations for both retail and office space. High absorption numbers stemming from overwhelming demand will drive vacancy to a 10-year low in 2016. These tight market operations will spur rent increases, lifting the average asking rate well beyond pre-recession levels.

The significant pool of buyers will compete aggressively for listed office assets. Well-funded out-of-state buyers have moved into the metro, looking to capitalize on above-trend yields and general market confidence. These investors are able to leverage deep pockets to price out local investors, leaving many smaller private buyers relegated to lower-volume deals outside the urban core. Heightened interest from all types of investors has caused values to soar, surpassing prior peak pricing. As loans taken out toward the end of the previous cycle come due, Nashville property owners may begin listing assets, prompting an acceleration of deal flow. Cap rates are steady in the high-8 percent range, although Class A space in premier locations can fetch yields 100 to 150 basis points lower.

2016 Market Forecast

<table>
<thead>
<tr>
<th>NOPI Rank</th>
<th>Nashville’s low vacancy and strong rent growth pushed the metro up one place into the eighth position in the NOPI ranking this year.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment</td>
<td>Nashville employers will hire 22,000 workers in 2016, growing the labor pool 2.4 percent. Last year growth reach 3.0 percent. Office-using jobs will account for 11,000 of annual employment gains this year.</td>
</tr>
<tr>
<td>Construction</td>
<td>Builders will complete 1.7 million square feet of office space this year, increasing the inventory 2.5 percent. This will be a stark jump from 2015, when 600,000 square feet were delivered.</td>
</tr>
<tr>
<td>Vacancy</td>
<td>Following an 80-basis-point drop last year, the vacancy rate will fall 30 basis points to 8.7 percent in 2016.</td>
</tr>
<tr>
<td>Rent</td>
<td>As market tightness continues, the average asking rent will climb 5.6 percent to $23.75 per square foot this year. In 2015, rent growth hit 5.8 percent.</td>
</tr>
<tr>
<td>Investment</td>
<td>Although Nashville garners a majority of investor attention, areas in Williamson County such as Brentwood and Franklin are just as active.</td>
</tr>
</tbody>
</table>

Sources: CoStar Group, Inc.; Real Capital Analytics
Developer Slowdown Becomes Investor Boon; Wall Street Capital Follows the Subway North

The New Haven-Fairfield County office market is improving, supported by positive employment growth and an upswing in leasing activity. The momentum raises the prospects for acceleration in 2016. Several factors point to rising sentiment in the market, yet developers seem uninterested. Construction has only topped a million square feet once in the current cycle, while the pace of completions continues to slow. Expected deliveries this year will be less than half of 2015 totals, underscoring the lack of participation from builders. However, the subdued activity has allowed new leases to clear dark space, fostering a tightening of operations over the past year. This year, pre-leasings will account for more than 90 percent of the quarter million square feet planned, indicating an extremely high level of interest among prospective tenants. Viewed holistically, a lack of options among office-using firms will push vacancy lower, helping the market record the best year of the current cycle. Mounting competition for space will also encourage healthy asking rental rate growth.

As operations continue to show healthy gains, investors are following suit in a search for yield amid historically low interest rates. Transactions and prices are accelerating, indicating that the investor pool is expanding, which will support additional gains in the coming months. Institutional buyers are targeting established offerings along major metro stations, seeking a margin of safety by owning the highest-quality assets. Private buyers, however, are seeking a combination of value-add offerings and smaller, urban properties. Greenwich and Stamford will command most of the capital flow thanks to their large corporate leasee profile. Assets in these areas will trade with cap rates that are more than 50 basis points below the metro average in the mid-6 percent range, underscoring the safety of these properties. Meanwhile, greater first-year returns can be located by extending farther into Bridgeport and New Haven.

2016 Market Forecast

- **NOPI Rank**: The New Haven-Fairfield County market moved up two spots this year, although above-average vacancy kept the metro near the bottom of the Index.
- **Employment**: After creating 8,000 jobs in 2015, hiring activity will pick up this year as 9,500 positions are added to the labor force, a 1.2 percent growth rate. Office-using firms will account for 1,800 new workers.
- **Construction**: Development will slow dramatically this year as just 235,000 square feet of space comes to market, down from 590,000 square feet completed last year.
- **Vacancy**: Falling construction and steady net absorption will combine to trim vacancy 40 basis points to 18.7 percent this year. In the prior year, vacancy fell 30 basis points.
- **Rent**: Accelerating demand for space will strengthen average asking rents 2 percent to $29.60 per square foot, quadrupling the previous year’s 0.5 percent gain.
- **Investment**: Searching for additional yield, New York City investors will be drawn to Connecticut assets, where cap rates are more than 150 basis points above local equivalents.
Hudson Yards Set to Debut Amid Manhattan Space Grab; Local Buyers Head to the Boroughs

Renewals and expansions by large existing tenants and citywide space searches conducted by new office-using businesses have the New York City office market firing on all cylinders. Google, Facebook and Amazon have recently committed to large blocks of space, which are becoming exceedingly rare as vacancy levels continue to tighten. As a result, builders have begun to add to the pipeline, which will be highlighted in 2016 by the opening of 10 Hudson Yards, Related Cos.’ long-awaited project. While Manhattan is still the top choice among developers, Brooklyn is quickly advancing as creative spaces see high demand and larger firms become more comfortable establishing a presence across the East River. Additionally, activity in Queens is picking up as builder interest in the borough rises. Despite an overall pickup in construction, pre-leasing activity is elevating in lockstep, particularly in the Manhattan submarkets that account for the vast majority of the metro’s office market. Viewed holistically, demand will surpass modest supply growth, contributing to a seventh straight year of asking-rent ascension.

Amid an environment of rising prices, investors have been keen on well-located assets with quality tenants, particularly in Midtown and Lower Manhattan. The consistency of appreciation and rental growth, combined with a diverse pool of buyers, makes New York City the first investment choice for many sources of foreign capital and institutional buyers who dominate the top end of the market. Meanwhile, local private investors have been busily transforming outdated industrial spaces into offices in the outer boroughs, while focusing on smaller options when venturing into Manhattan. Continued strength will encourage many buyers to stay active, while investors who have held over the long term may take advantage of a seller’s market in order to diversify their portfolios. Brooklyn will see an uptick of participants as confidence in the office market improves.

### 2016 Market Forecast

- **NOPI Rank**
  - 3, up 1 place
  - Robust rent growth contributed to New York moving up one position to third place in this year’s Index.

- **Employment**
  - up 1.9%
  - New York City organizations will create 80,000 new positions in 2016, expanding total employment by 1.9 percent. In the prior year, 85,000 jobs were added.

- **Construction**
  - 3.6 million sq. ft.
  - Developers will complete 3.6 million square feet of office space this year, with nearly half comprising 10 Hudson Yards. Last year, 1.65 million square feet came to market.

- **Vacancy**
  - down 10 bps
  - After remaining unchanged in 2015, vacancy will slip 10 basis points to 9.6 percent this year as firms absorb more than 3.8 million square feet.

- **Rent**
  - up 5.1%
  - Intense demand for existing space will continue to swell, fostering a 5.1 percent rise in asking rents to $62 per square foot on average.

- **Investment**
  - Foreign capital investors will seek security in the market, supporting values at the high end. Industrial properties with conversion potential will continue to see additional attention from private parties.
Healthcare Tenants Emerging as Main Drivers Of Metro; Yield Arbitrage Draws Investors

The Northern New Jersey metro area is undergoing dramatic changes, switching from an economy reliant on Wall Street to one that is increasingly dominated by healthcare and pharmaceuticals. Spurred by accelerating innovation in drug research, biotechnology firms have been penning leases all over the six-county area. Builders have taken note of rising interest in local office properties, expanding the project pipeline over the past few years. This year, marquee completions from Celgene and Metlife will highlight deliveries, with both firms establishing new headquarters. The two projects will account for the bulk of this year’s offerings and are fully pre-leased, reducing pressure from new supply. Though vacancy remains elevated, strengthening demand in other sectors will reduce dark spaces in the market, particularly along transportation routes. Net absorption has surpassed construction for the past three years, trimming vacancy more than 100 basis points in the process. In addition, average asking rents will continue to record modest gains.

Amid a search for income, investors are seeking office properties in Northern New Jersey, particularly as yields can be more than 200 basis points above similar assets in New York City. Institutions will seek to acquire buildings near metro stations, with an emphasis on Hoboken, Hackensack and the Hudson waterfront. These areas are popular with major corporate tenants, providing a robust margin of safety. Smaller institutions and private parties will lean more toward suburban locations, such as Parsippany and Short Hills, where valuations are below the metro average due to the longer commutes from population centers. Metrowide, cap rates will begin in the mid-7 percent range. Value-add opportunities, either through re-tenanting or building improvements, can provide above-average NOIs where available. Additionally, repositioning of older industrial properties will accelerate, particularly in the small creative-space market.

2016 Market Forecast

Northern New Jersey dropped five spots to last place in this year’s NOPI. High vacancy and slowing job gains were contributing factors.

- **Employment**: Local organizations will hire 16,000 workers this year, expanding total employment by 0.8 percent. In the prior 12 months, 20,000 new positions were created.

- **Construction**: Rising demand for space will encourage builders to deliver 1.1 million square feet in 2016, up marginally from the 1.0 million square feet delivered in the previous year.

- **Vacancy**: Steady net absorption, combined with strong pre-lease activity, will contribute to a 30-basis-point contraction in vacancy to 18.4 percent. In the prior four quarters, vacancy plunged 110 basis points.

- **Rent**: After recording a 1.2 percent rise in 2015, average asking rents will swell 1.9 percent to $26.30 in 2016 as new leases remove dark space from the market.

- **Investment**: Higher-yielding properties in the Northern New Jersey metro will continue to attract capital from New York City and other markets where cap rates are much tighter.
Uber Move Legitimizes Oakland Office Market; Occupancy and Rents Reach Record Highs

As lease rates for office space reach stratospheric levels in other parts of the Bay Area, many expanding organizations will look to Oakland as a lower-cost alternative. With the recent announcement that Uber will move its corporate headquarters to the East Bay, the metro has solidified itself as a formidable candidate for growth among top-tier technology firms. Although relative affordability is the main draw, strong job growth and a robust millennial base also make the metro highly attractive. Despite recent excitement, new development remains limited with office construction posting a slowdown from last year’s pace. The Oakland office market remains hindered by unspectacular construction activity. In order for the metro to reach its full potential, developers will need to ramp up building efforts and alleviate pent-up demand. A lack of new deliveries will enable vacancy to continue its record-setting descent, and the metro has registered an annual drop of 100 basis points or more in four out of the last five years. Rent growth posted similar velocity with the metrowide average asking rate soaring well above pre-recession levels.

Oakland offices remain appealing investment vehicles as improving fundamentals and higher yields keep investors interested in the up-and-coming East Bay market. As buyers become priced out of assets in San Francisco and San Jose, many have looked to the metro as an affordable Bay Area alternative. Those who were typically wary about Oakland real estate are becoming more confident in the area as fundamentals continue improving. Skyrocketing rent growth has caught the eye of cash-flow-oriented investors who see the possibility of pushing NOIs as demand intensifies. Value-add investing will heat up as owners see rents reach high enough levels to justify redevelopment costs. Cap rates may compress to the upper-6 percent area this year; however, yields will remain between 100 to 150 basis points above those across the Bay.

2016 Market Forecast

- **NOPI Rank**: Oakland benefits from the strong Bay Area office market, as companies seek its lower rents. The metro jumped four spots into 13th place in the Index.
- **Employment**: Oakland employers will accelerate their pace of hiring this year, through the addition of 27,600 jobs, an increase of 2.5 percent. The office-using sector will account for 6,500 of new employment.
- **Construction**: Developers will complete 225,000 square feet of office space in 2016. This is a slowdown from last year when 310,000 square feet was brought to market.
- **Vacancy**: The metrowide vacancy rate will fall 150 basis points to 10.3 percent this year as expanding companies take new space. A drop of 140 basis points came last year.
- **Rent**: Following a 7.5 percent rent increase last year, the average asking rent will climb 7.2 percent to $29.85 per square foot in 2016.
- **Investment**: Well-positioned assets in the Downtown Oakland and Berkeley areas will be particularly sought after because of their walkability and urban amenities.
Vacancy Drops to Post-Recession Low Amid Strong Demand for Orange County Offices

A healthy mix of large corporations and growing startups will keep demand elevated for Orange County offices. These companies draw highly skilled talent out of UC Irvine and Cal State Fullerton, supporting job growth across a broad range of sectors. The increase in hiring led total employment to surpass that of the pre-recession peak set in 2006 with the local economy recouping all jobs lost during the downturn. This along with steady population growth and a high quality of life have allowed businesses to attract and retain a premier workforce. Although metro developers have traditionally focused on pre-leased construction, the 200 Spectrum Center tower, a speculative development, will headline deliveries this year. Insatiable demand for Orange County offices will outpace new space, encouraging another annual vacancy contraction of 100 basis points or more for the fourth consecutive year. Tight market conditions will push the average asking rent higher in 2016, although rent growth has plenty of runway left with rates still below the previous cycle’s peak.

Interest from institutional investors remains strong as large funds become increasingly aggressive in pursuit of quality assets in high-end areas. The availability of high-caliber product, however, remains limited due in part to the prevalence of refinancing as well as strong fundamentals and improving ROIs that encourage property owners to hold their assets. Those who do bring product to market feel that low cap rates and valuations at eight-year highs may signal that the market is at or near peak pricing. Although the Orange County office market may be approaching maturity, value-add opportunities exist for select properties with struggling occupancy rates and room to stabilize. Local, private investors usually target these assets, dominating the Class B/C tranche and scooping up available yield.

2016 Market Forecast

**NOPI Rank**
- 7, down 2 places

**Employment**
- up 2.9%
  - Orange County employers will hire 45,200 people in 2016, expanding the workforce 2.9 percent. Office-using jobs registered an increase of 6,000, up 1.4 percent, last year.

**Construction**
- 425,000 sq. ft.
  - The pace of development will accelerate this year as builders complete 425,000 square feet of space. In 2015, more than 300,000 square feet was brought to market.

**Vacancy**
- down 120 bps
  - Following a 150-basis-point drop last year, amplified demand will push the metrowide vacancy rate down another 120 basis points to 12.1 percent in 2016.

**Rent**
- up 6.7%
  - Tight market conditions will encourage a rent hike this year with the average asking rate climbing 6.7 percent to $28.80 per square foot. In 2015, the metro registered rent growth of 9.3 percent.

**Investment**
- Motivated investors seeking upside potential will look farther inland to Brea, Ontario and Corona.
Orlando Office Market Positioned to Maintain Robust Pace of Growth in 2016

Another year of elevated job growth and subdued office development will fuel additional strengthening in office property vacancy and rents in 2016. Given the minimal amount of development, demand trends will dominate the market in the near term, enabling property owners to fill vacant spaces and press for higher rents as leases renew. Hiring in the coming months in traditional office-using fields will create new requirements for office layouts. Professional and business services staffing, most notably, has surged past previous peaks and many tenants in these fields may be nearing the limit of current spaces. High-growth industries, including biotech, healthcare and healthcare administration, and digital simulation, are also present in the metro and are a potentially larger segment of new demand. Positive demographic trends are also influencing the local office market. Relocations to the metro have returned to pre-downturn levels, deepening the talent pool for growing office-using establishments.

Confidence in the metro’s near-term prospects is evident in investment trends. Deal count rose slightly last year, as improving performance enabled more properties to sell. Cap rates on properties listed for sale at the end of last year averaged in the mid-7 percent to low-8 percent range and changed nominally throughout 2015. Private capital accounts for the largest segment of the investor contingent in the metro, and these investors target competitive and medical office properties pricing up to $10 million. Small properties in downtown Orlando garner attention from dedicated office investors as well as redevelopment-minded parties. The area’s residential stock is expanding, enhancing the appeal to employers. Properties in nearby Maitland and Winter Park also transact regularly. Generally, assets in Maitland will provide potential upside in vacancy improvements, while Winter Park offers tighter vacancy, steady income and potentially higher rents in lease renewals.

2016 Market Forecast

Growing tenant demand and low vacancy propelled Orlando six slots into 28th place in this year’s NOPI.

Local establishments will create 32,000 jobs in 2016, representing a moderation from the 35,000 new hires made in 2015. This year, office-using sectors will expand with the addition of 8,000 workers.

Developers will bring to market 270,000 square feet of new space this year, highlighted by the 136,000-square-foot speculative second phase of Kirkman Point in the tourist corridor.

Following a 140-basis-point tumble last year, the vacancy rate will decline an additional 100 basis points in 2016 to 14.4 percent.

Property owners will lift the average effective rent 4.3 percent to $20.84 per square foot, outpacing the 3.7 percent bump registered last year.

Large investors seeking to diversify Florida portfolios will take aim at assets in downtown Orlando, where an urban-living environment continues to take shape.

Sources: CoStar Group, Inc.; Real Capital Analytics
Rents Reach Nine-Year High; Philly Suburbs Attract Opportunistic Investors

A steady pace of job growth and renewed interest in the Philadelphia suburbs will support office rent and occupancy increases this year. Urbanization outside the metro core and access to a highly skilled workforce has elevated demand for suburban office space. Building activity will increase modestly to meet demand with new suburban space as well as intown developments slated for delivery. In downtown Philadelphia, the completion of the 575,000-square-foot FMC Tower will lead office construction in 2016 as completions more than triple last year’s clip. The project will be joined by the new 59-story Comcast headquarters in the next few years, helping reshape the Philadelphia skyline. Developers won’t only focus on corporate space, however. Two fully leased medical office buildings will be completed this year, adding more than 65,000 square feet to market inventory. The metro boasts a high concentration of health education and research institutions, driving demand for medical office space. As health and business organizations expand their footprints, the metrowide vacancy rate will see further contractions this year, reaching the lowest level since early 2009. Tight market conditions will generate a rent hike, pushing average asking rent to a post-recession high.

Easy access to affordable debt and decent yields have boosted demand for Philadelphia office assets. Many local buyers look to the suburbs for investment opportunities, leveraging their market knowledge and relationship with tenants to extract value outside of traditional employment districts. As valuations continue to rise, owners may seize the opportunity to reposition portfolios ahead of schedule, hoping to capitalize on elevated investment activity and general market confidence. Cap rates have compressed in recent years but may flatten out in 2016.

2016 Market Forecast

- **NOPI Rank**: 26, down 1 place
- **Employment**: up 1.1%
- **Construction**: 770,000 sq. ft.
- **Vacancy**: down 20 bps
- **Rent**: up 1.2%
- **Investment**: Philadelphia suburbs act as a microcosm of the CBD with developers and property owners regearing perimeter office parks to have an urban feel.

A combination of the surge in construction and lower-than-average rent growth resulted in a one-place decline, landing Philadelphia in 26th position in this year’s Index.

Philadelphia employers will add 30,000 people to staffs this year, growing the workforce 1.1 percent. About 1,200 of these jobs will come from office-using sectors. Developers will complete 770,000 square feet of office space in 2016, a 0.3 percent increase in inventory. This is a sharp jump from last year when builders brought 220,000 square feet to market.

The metrowide vacancy rate will contract 20 basis points to 15.2 percent this year. Last year Philadelphia recorded a 40-basis-point drop.

Following a 1.7 percent advance in 2015, the average asking rent will climb 1.2 percent to $23.60 per square foot this year.

Philadelphia suburbs act as a microcosm of the CBD with developers and property owners regearing perimeter office parks to have an urban feel.
Speculative Office Development Accelerates Amid Steady Hiring Gains

The Phoenix office market continues to generate steady demand as back-office operations, technology and health services employers add positions. While large corporations have been expanding local operations, small businesses are also flourishing, generating space needs among all asset classes. Metrowide demand for office space surged last year, pushing vacancy down to 2008 levels, though new construction has moderated stronger reductions. Developers have been ramping up completions with a focus in East Valley cities such as Tempe and Chandler. Recent speculative completions in the area have temporarily ticked average vacancy higher, though tenants are signing leases. Elsewhere in the metro, vacancy has been dropping led by midtown Phoenix and off Central Avenue, which have fallen nearly 10 percent in five years. Light-rail expansion and a desire for urban living is revitalizing midtown and downtown. Companies are capitalizing on workers’ desire to reside in an urban environment, pushing vacancy in older office buildings located in these areas below the metro average. While office operations have yet to fully recover in the metro, improvement in vacancy and marketed rent has been strong, with a positive outlook for 2016.

As small businesses seek space in redeveloped older assets, local investors will continue to target Class B/C properties in urban locations. These buildings can trade in the mid to high-7 percent range on average, inching higher in tertiary submarkets. Institutions are snapping up Class A complexes that are leased by credit tenants, encouraging nearby speculative development and opportunities to slice floorplates to meet new tenants’ needs. Cap rates for such properties can range in the 6 percent area. Overall, assets in eastern markets such as Scottsdale commanded below-average initial yields of 7 percent, gaining 20 to 80 basis points in Mesa.

2016 Market Forecast

<table>
<thead>
<tr>
<th>Category</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOPI Rank</td>
<td>Phoenix dropped four places in the NOPI as speculative construction will drive already high vacancy upward.</td>
</tr>
<tr>
<td>Employment</td>
<td>Employment in the Phoenix metro will rise 2.2 percent this year, or by 42,000 jobs, including 18,000 office-using positions, after gaining 40,000 overall jobs in 2015.</td>
</tr>
<tr>
<td>Construction</td>
<td>Contractors will complete 2.8 million square feet of office space in 2016, increasing local stock by 2 percent, with a moderate portion of speculative space. This comes after 2.4 million square feet was added a year earlier.</td>
</tr>
<tr>
<td>Vacancy</td>
<td>Accelerating speculative construction will push average metro vacancy up 80 basis points to 21.0 percent this year after falling 100 basis points in 2015.</td>
</tr>
<tr>
<td>Rent</td>
<td>Average asking rent will rise 3.1 percent in 2016 to $22.95 per square foot. This is a slight deceleration from the 3.7 percent increase last year.</td>
</tr>
<tr>
<td>Investment</td>
<td>Transactions will continue to gain velocity as buyers seek Class A build-to-suit offices and well-located B/C assets in areas such as Tempe and downtown near light-rail stops and new apartments.</td>
</tr>
</tbody>
</table>
Multiple, Diverse Industries Ignite Demand for Pittsburgh Offices

Increased diversification of the local economy has helped mitigate traditional risk faced by Pittsburgh office investors. Five industry sectors — advanced manufacturing, energy, financial and business services, healthcare and information technology — employ more than half of the regional private workforce. The benefits of this diversity were reiterated by sub-10 percent vacancies in numerous submarkets despite falling energy prices. Aside from the energy sector, Pittsburgh has made moves to establish itself as a tech hub. Uber recently announced plans to open an advanced robotics facility in the metro, joining other tech giants Apple and Google. These companies are attracted to the area by the affordable cost of living and quality education system, recruiting highly skilled talent out of the University of Pittsburgh and Carnegie Mellon. These schools also form part of the robust education and medical services sector, which has been a stalwart of the local economy. Despite steady demand drivers, new development will slow from last year’s record-setting pace but it will still outpace absorption, generating a slight vacancy uptick as new space takes time to stabilize. Rising demand coupled with Class A offices hitting the market will underpin another year of rent increases, drawing investors to the metro.

Yields above the national average and geographical barriers to new office development will keep investors interested in the improving Steel City office market. Buyers using inexpensive debt continue to pursue available assets, putting upward pressure on metro prices. Pittsburgh property owners traditionally employ long-term investment strategies; however, as valuations reach a 15-year high, many will bring assets to market in 2016. Cap rates sit in the high-7 to low-8 percent range but may see some compression this year as buyers compete for quality assets.

2016 Market Forecast

- **NOPI Rank**
  - 32, up 1 place
  - Pittsburgh moved up one slot to rank 32nd in this year’s Index as a slower pace of employment growth and rising vacancy hampered a larger improvement.

- **Employment**
  - up 0.9%
  - The Pittsburgh workforce will grow 0.9 percent in 2016 through the addition of 10,600 jobs. Office-using employment will grow 0.8 percent or by 2,000 jobs.

- **Construction**
  - 720,000 sq. ft.
  - The pace of construction will slow from 2015’s remarkable pace with builders bringing 720,000 square feet of office space to market. Last year, 1.9 million square feet was completed.

- **Vacancy**
  - up 10 bps
  - The metrowide vacancy rate will post a 10-basis-point uptick to 13.7 percent in 2016, following a 30-basis-point drop last year.

- **Rent**
  - up 2.2%
  - Strong demand will push up the average asking rent 2.2 percent to $20.65 per square foot this year. In 2015, a hike of 1.8 percent was registered.

- **Investment**
  - Strong tech growth in the Strip District and up-and-coming East Liberty area has captured investor attention and will see heightened activity this year.
Elevated Office Construction in Portland
Raises Investor Interest to New Levels

Accelerated construction will elevate average vacancy this year, as bullish developers supply the market with a high proportion of speculative office space. Local hiring in almost all job sectors has boosted the economy, with professionals including technology workers and healthcare staff proliferating. Developers are optimistic as they deliver the most new office inventory since 2008 in both build-to-suit and speculative projects. Multiple buildings of 200,000 square feet or more will be completed this year in the Overlook neighborhood, Bennington and downtown. These fully leased projects include the new $150 million Daimler Trucks North America headquarters on Swan Island. Downtown, the mixed-use office and residential Park Avenue West Tower will house banking sector and legal firms. While larger expanses of space are primarily spoken for, speculative construction may temporarily lift vacancy this year, though long-term prospects remain more positive.

Investors are interested in Portland’s higher office yields versus other large Pacific Coast metros, and the potential for future growth in this expanding tech hub. Transactions reached a decade-long high last year, though pricing has yet to catch up to 2008 levels, providing room for appreciation. Average cap rates for office properties hover in the mid-6 percent area. Owners can obtain initial yields in the CBD that range 30 to 110 basis points below the metro average as builders have been completing new office space in the past few years. Buyers can trade into high-6 to 7 percent cap properties in Beaverton and Vancouver, which garnered significant interest last year and accounted for 20 percent of exchanges. New construction provided more Class A opportunities for institutions and REITs, as trading activity tripled in this segment and cap rates tumbled nearly 100 basis points. The significant development pipeline will support top-tier transactions again this year.

2016 Market Forecast

NOPI Rank 10, no change

Portland’s strong economy kept the metro within the top 10 of this year’s ranking. Widespread job growth and a booming tech sector are fueling a surge in office space.

Employment up 2.7%

Portland employers will create 30,000 positions this year, expanding headcounts by 2.7 percent. This includes 11,500 office-using jobs.

Construction 1.3 million sq. ft.

Local construction will be near 2008 levels, adding 1.3 million square feet, a 1.6 percent expansion in 2016, after delivering 210,000 square feet a year earlier.

Vacancy up 30 bps

This year, average vacancy for marketed space will tick up 30 basis points to 10.2 percent. Net absorption will dip slightly from 1 million square feet in 2015, when vacancy dropped 100 basis points.

Rent up 4.2%

Asking rent will advance 4.2 percent to $23.45 per square foot in 2016, following a 6.0 percent gain registered a year earlier.

Investment

Investors will seek value-add opportunities and may bid aggressively to obtain them, factoring revenue growth into cap rates at the time of trade.
Limited Construction Supports Recovery of Office Performance; Vacancies Post Consistent Decline

While the number of Inland Empire industrial jobs continues to rise, professional and technical positions that occupy office buildings are also growing, driving absorption and pushing office vacancy to a post-recession low. Despite expected creation of the most office-using positions in a decade, deliveries will remain below 500,000 square feet for the sixth consecutive year. The minimal development has supported a full recovery of the office market, pushing vacancies back toward pre-recession levels. Prior to the downturn, builders targeted larger cities such as Riverside and San Bernardino with Class A towers. Construction has shifted to Temecula over the past five years, while Riverside, Murrieta, Apple Valley and Ontario have also seen more office inventory as smaller assets have been completed. These dynamics, paired with an outlook for another year of surging employment and tenant demand, will bring vacancy to less than 15 percent for the first time since the prior business cycle.

Buyers motivated by improving conditions in the local market are scouring the two counties for assets within the $1 million to $10 million range. Transactions grew by more than a third in the past year to the highest level in a decade with cap rates averaging 8 percent. Trades were dominated by Class B properties in Ontario, Riverside and Rancho Cucamonga, where cap rates average in the mid-7 percent area. In-state buyers seek higher initial returns versus office assets in nearby Los Angeles, where cap rates average nearly 200 basis points lower. Recent transactions were dominated by medical office buildings, which offer cap rates in the 6 to 7 percent range. Overall, first-year yields above the metro average can be found in San Bernardino, Palm Springs and Murrieta, ranging from 9 to 10 percent. Older properties in Riverside also provided similar first-year returns in the period.

2016 Market Forecast

A surge in tenant demand coupled with a slow construction pipeline will produce a large drop in vacancy, moving Riverside-San Bernardino up four places in the NOPI.

Employers will generate 50,000 jobs this year, advancing employment by 3.7 percent. This includes 15,000 traditional office-using positions, a 7.2 percent annual gain.

After relatively muted office construction of 60,000 square feet in 2015, developers will keep building activity minimal this year, completing nearly 180,000 square feet to expand supply 0.3 percent.

Vacancy will tumble 100 basis points to 14.2 percent in 2016. The rate fell 80 basis points last year.

This year, growing space demand will lift the average marketwide rent 3.8 percent to $20.80 per square foot, the highest level in six years.

California investors will target the Riverside-San Bernardino office market for higher returns and projected economic growth, targeting more secondary areas and older properties.
Office Vacancies Tumble as Steady Hiring Supports Office Sector Recovery

After years of moderate gains, employment in Sacramento will surpass the pre-recession peak this year as employers expand headcounts and workspaces. Growth in the public sector has government entities leasing private space, leading to new office construction. Developers will complete an 110,000-square-foot building in the Laguna Corporate Center, where the administrative headquarters for the California Correctional Health Care Services currently occupies two privately owned buildings. The city of Roseville recently approved a 122,000-square-foot building by private investors for the FBI, though timing for construction has not yet been announced. Higher employment throughout the metro will generate needs for Class B/C space by small businesses in the insurance, finance and business services fields. This includes office space in Yolo County where demand is especially high near the University of California-Davis. Overall, the rate of supply growth remains muted compared with demand for space, which has slashed vacancy nearly 500 basis points over the past five years. Outsize demand will support the strongest rent growth experienced in this area since the downturn.

Elevated yields and steady performance gains have lured many regional investors to Sacramento. Increased buyer interest pushed the metro’s average cap rate down into the high 7-percent area. Aside from the city of Sacramento, buyers will target offices near employment hubs in Roseville, Rocklin and Davis, where initial yields hover near 6.5 percent for mid-tier properties. While transactions among all asset classes persisted last year, the greatest increase occurred in the number of Class C sales. Activity in this segment more than doubled with first-year returns 50 basis points above the metro average. Intense interest in properties valued at less than $10 million indicates strong bidding from private investors, a trend that is expected to last into 2016.

2016 Market Forecast

Sacramento regained last year’s four-place drop, landing in 38th place as stronger tenant demand will tighten vacancy even further.

Local employment will advance 2.7 percent as 25,000 new workers join payrolls this year. Office-using jobs will increase 0.8 percent, or by 1,400 jobs.

Contractors will complete 380,000 square feet of offices this year, increasing local supply by 0.4 percent. While this is the most new inventory in the past six years, it falls short of the 2009 peak of 2 million square feet delivered.

Vacancy will descend 90 basis points this year to 15.1 percent, matching the decline in 2015.

Average rent for marketed space will gain 3.3 percent in 2016, ending the year at $22 per square foot, an acceleration from 2.2 percent growth a year earlier.

Buyers seeking higher returns will look to value-add options near the metro core or consider suburban assets. An increase in investor interest may encourage more owners to market properties.
Expanding Tech Firms Bolster Office Demand, Helping Rents Scale Higher

Strong demographics and robust tech sector growth point to a bright future for the Salt Lake City office market. BYU and the University of Utah supply metro employers with a pool of highly skilled young professionals. Organizations along the Wasatch Front heavily recruit local talent, which has pushed the unemployment rate to a post-recession low of 3.3 percent. Sustained job growth and a rebounding housing market helped Salt Lake City recover well from the downturn. The metro is quickly becoming one of the nation’s biggest tech leaders as a mix of established firms and homegrown startups call the area home, earning it the nickname the Silicon Slopes. These growing businesses seek architecturally innovative space and amenity-laden buildings to help attract and retain talent. Developers have keyed in on this with Class A space comprising over four-fifths of all projects this year. Construction will reach a 10-year high in 2016 as builders nearly double last year’s annual deliveries. Elevated building activity will put upward pressure on the metrowide vacancy rate, although new projects should stabilize quickly amid heightened demand. Despite an expected rise in vacancy, rent growth will remain vibrant as the average asking rate climbs to the highest level of the cycle.

Transaction velocity is accelerating this year as high cap rates and NOI growth keep demand heightened for Wasatch Front offices. There are more buyers than sellers in the market; however, low interest rates and soaring values have kept listings plentiful. Those who do sell usually look to redeploy their capital, driving demand for 1031 exchanges. Further driving exchange use are buyers moving out of land or apartment assets into offices to bolster portfolio yields. Although California investors often target Salt Lake City properties, local buyers are prevalent and have the necessary capital to pursue investments of all types. Cap rates may face downward pressure in 2016 as strong investor interest prompts aggressive bidding by market participants.

2016 Market Forecast

- NOPI Rank: 14, down 1 place
- Employment: up 3.3%
- Construction: 3.1 million sq. ft.
- Vacancy: up 40 bps
- Rent: up 3.3%
- Investment: Provo’s promising economic outlook has piqued investor interest. Although value-add potential remains limited, opportunistic buyers may target this area.

A slower pace of job growth coupled with a surge in supply will result in vacancy rising, which moved Salt Lake City down one place in the Index.

Employers along the Wasatch Front will add 38,100 workers to payrolls this year, growing the workforce 3.3 percent. Office-using employment will account for 12,400 of total new jobs.

Developers will complete 3.1 million square feet of space in 2016, expanding the office stock 3.8 percent. Last year builders delivered 1.6 million square feet.

Heightened construction will generate a vacancy increase this year. The metrowide rate will climb 40 basis points to 10.8 percent. Last year it fell 90 basis points.

The average asking rent will jump 3.3 percent to $18.95 per square foot in 2016, following a 4.2 percent climb last year.
Employment Diversification Drives Demand
For San Antonio Office Assets

Further diversification in San Antonio’s economy and growth in financial services and technology are stirring demand for office space, improving operations marketwide. The metro’s financial services industry employs approximately 86,000 workers and has grown nearly 30 percent since the recession. USAA, one of San Antonio’s largest employers, moved workers into space downtown last year, reiterating the resurgence of companies and individuals locating in the core. The company has no plans to move all of its employees from its current headquarters in Northwest San Antonio, but it aims to reach the growing millennial talent that is moving to the metro and seeking a live-work-play lifestyle. From a technology standpoint, the success of Geekdom in downtown San Antonio has spurred the creation of additional co-working space in other areas of the metro, offering telecommuters and freelance employees the opportunity to work in an office environment. While initial floor plans are small, growth in technology startups and incubator companies, as well as individuals who primarily work from home, are driving the need for this space. As businesses continue to expand in the metro this year, vacancy will retreat to its lowest point since 2008.

Investors will be drawn to San Antonio this year as office-property operations strengthen across the market. A bright outlook and diversifying economy is attracting buyers to the metro, and first-year yields compressed approximately 30 basis points last year while the average price escalated 20 percent. Cap-rate compression will likely continue through 2016 as buyer demand rises and competition intensifies. Private, regional buyers will remain the main investor segment, though the number of high-net-worth individuals searching the market for deals priced between $10 million and $20 million began to rise last year, a trend that will progress through 2016. Institutions and REITs will also grow portfolios in San Antonio over the coming months as assets delivered in recent quarters are stabilized.

2016 Market Forecast

**NOPI Rank**
San Antonio placed 24th in the NOPI, down one slot as slower job gains allowed other markets to jump in front of it.

Employment
San Antonio employers will add 29,500 positions in 2016, including 11,500 office-using jobs. Last year, companies increased staffs by 30,500 workers, including an expansion of 12,000 office-using employees.

Construction
 Builders will complete 800,000 square feet of office space in San Antonio this year, down from the 1 million square feet delivered in 2015.

Vacancy
down 60 bps
After a 10-basis-point decline last year, vacancy in the metro will fall 60 basis points to 13.1 percent by year-end 2016.

Rent
up 1.4%
The average asking rent will tick up 1.4 percent to $19.92 per square foot. In 2015, the average rent grew 1.1 percent.

Investment
The market’s bustling healthcare community makes it an appealing option for medical office investment, and sales of these assets will continue to make up a significant share of transaction velocity this year.

Sources: CoStar Group, Inc.; Real Capital Analytics
Vacancy Constricts as Developers Pause in San Diego; Private Investment Dominates Deal Flow

Strong hiring and reduced office construction will benefit office properties in San Diego this year, driving down vacancy and fostering rent advancement. Job gains in typical office-using fields, including law, accounting, financial services, brokerage and insurance, will account for more than one-third of total employment expansion this year. Growth in the market’s technology industry is gaining steam, and the metro stands to benefit from Northern California firms expanding their operations in this market. San Diego’s relative affordability both in terms of office lease rates and cost of living are major contributors to this migration, and office performance will advance as a result. This year, a substantial dip in completions will bode well for office property operations as expanding companies seek space in existing buildings. Vacancy will decline more than 100 basis points in 2016 while rents advance above $30 per square foot for the first time in nearly 10 years.

Investment activity will strengthen in San Diego this year as operations advance and competition in other southern California metros intensifies. Buyer demand for assets remains fierce and listings are limited in the metro; however, rising values will encourage some owners considering near-term dispositions to divest and redeploy capital, boosting velocity. High-net-worth individuals and small groups will dominate sales in the coming months, targeting deals priced between $1 million and $10 million. Stabilized assets will draw significant interest and may receive multiple bids. The bulk of these deals are sale-leaseback in nature as companies sell off real estate assets to fund further expansion plans. Those buyers in search of value-add opportunities will seek higher-vacancy, Class B assets in submarkets with overall low vacancy. These properties are prime for repositioning and typically trade in the high-5 to low-6 percent area. Medical office investment will remain subdued this year, though not due to a lack of interested buyers. Limited inventory will continue to weigh on activity in this segment.

2016 Market Forecast

San Diego dropped out of the top 10 as other markets pulled ahead. The metro landed in the 11th spot in this year’s Index.

- **NOPI Rank**: 11, down 3 places
- **Employment**: up 2.7%
- **Construction**: 175,000 sq. ft.
- **Vacancy**: down 130 bps
- **Rent**: up 5.5%
- **Investment**: Institutions and large funds will become more active in the market this year as recently developed assets are stabilized and brought to market.

* Estimate ** Forecast
Sources: CoStar Group, Inc.; Real Capital Analytics
Big Tech Continues Land Grab as Construction Rises; San Mateo Assets Prime for Upside

Soaring venture-capital investment and economic growth has led the San Francisco labor market to make enormous strides as technology firms compete for additional workers and office space. This competition has fostered robust drops in vacancy, particularly in the urban core where development is most difficult. This year, builders will intensify their efforts, pushing construction to a cycle high amid a shortage of quality spaces. Completions will be split between urban locales in San Francisco and corporate campuses in San Mateo County. Marquee projects slated for completion include 181 Fremont Street in SoMa and Facebook’s redevelopment of 300 Constitution Drive in Menlo Park. As a result, overcoming Proposition M restrictions, which limits office-space construction annually to 875,000 square feet, will be much more important in 2016. Despite the pickup in deliveries, more than half of this year’s upcoming floor space is pre-leased, pressing vacancy rates as pressure mounts to pen leases on existing space. In addition, competition among organizations will ramp asking rents as well, the sixth straight yearly advancement.

Reinforced by healthy operations and historically low interest rates, investors of all sizes are active in the office market. Institutions overwhelmingly seek assets in San Francisco, favoring barriers to entry and a strong tenant profile in order to mitigate potential risk. Meanwhile, individuals are focusing on repositionings in old industrial spaces and fringe areas where above-average returns can be achieved. While the majority of trades are inside city limits, more investors are shifting their focus to San Mateo County, where yields are at least 50 basis points above the core. In addition, large corporations are scooping up adjacent properties for further expansion, raising competition among potential buyers wishing to deploy capital. Transaction velocity will increasingly be driven by the number of willing sellers in 2016, further extending gains in prices per square foot.

2016 Market Forecast

NOPI Rank 1, no change

San Francisco maintained its first-place ranking in the NOPI, leading other markets in rent growth.

Employment up 4.3%

Surging demand for workers in technology and business services will underpin the hiring of 46,400 new employees in 2016, a 4.3 percent expansion.

Construction 2.9 million sq. ft.

Development will rise again this year as builders complete 2.9 million square feet of space, with deliveries split between San Francisco and San Mateo counties. Last year, 2.6 million square feet came online.

Vacancy down 90 bps

Robust pre-leasing activity and intense demand for office space will support a 90-basis-point drop in vacancy to 8.4 percent this year.

Rent up 10.7%

Accelerating competition among firms seeking space will create a flourishing rental environment, fostering a 10.7 percent rise in asking rents to $60 per square foot. Last year, rents vaulted 13.5 percent.

Investment

Assets near corporate campuses will see premiums rise as big tech continues to expand, particularly in San Mateo County near Highway 101.

---

* Estimate ** Forecast

Sources: CoStar Group, Inc.; Real Capital Analytics
Apple’s Spaceship Set to Land in Cupertino; Investors Ride Waves of Silicon Valley Heavyweights

The San Jose office market is soaring to new heights, propelled by the rapid pace of innovation and the concentration of multiple multibillion-dollar technology firms. In the past year, Google, Apple, Netflix and others have established new leases or purchased land for further expansion, highlighting the extreme demand for space in this highly competitive metro. Builders have responded in earnest, with construction set to reach the highest point since the late ’90s. While deliveries will jump more than 30 percent, the vast majority of the new space is already spoken for, indicating that demand remains well in excess of a near-record supply increase. Nearly half of this year’s development will be for two firms: Apple and Internet security pioneer Palo Alto Networks. Apple is set to unveil its spaceship headquarters, while Palo Alto Networks will take up residence at 3333 Scott Boulevard in Santa Clara. Overall, demand will be more than sufficient for another plunge in vacancy as the limited amount of vacant space is scooped up, ushering in a sixth straight advancement in asking rents.

Along with investors, owner-users are actively deploying capital into the San Jose metro. With historically low interest rates, the desire among institutions for yield and appreciation has encouraged a robust bidding environment headlined by rising prices and mid-5 percent cap rates. Locations near Los Gatos, Mountain View, Palo Alto and San Jose are particularly sought out due to the proximity of major technology headquarters as buyers seek to benefit from the land grab. Large Class A properties with marquee tenants are the favorite among institutions seeking a store of capital and appreciation, while private parties are increasingly eyeing fringe areas and smaller offerings in an effort to boost returns through building improvements and higher rents. Capital will continue to flow into San Jose as vacancy dwindles, ensuring another year of strong returns in the office property sector.

2016 Market Forecast

- **NOPI Rank**: San Jose remained in the second position in this year’s Index as intense demand drops vacancy further.
- **Employment**: Local employers will create 48,000 jobs, a 4.5 percent growth rate, with more than 22,000 positions coming in office-using industries.
- **Construction**: Developers will complete 6.4 million square feet of space this year, expanding total inventory by 6.4 percent. Projects will be highlighted by Apple’s massive headquarters in Cupertino.
- **Vacancy**: Strong pre-leasing activity will contribute to net absorption of more than 6.5 million square feet, clipping vacancy 70 basis points to 8.2 percent. In the prior year, vacancy contracted 170 basis points.
- **Rent**: Existing spaces will benefit from robust demand, allowing asking rents to vault 7.7 percent to $42.00 per square foot. Last year, rents jumped 10.3 percent.
- **Investment**: Large technology firms will continue to be active, with investors seeking to position in probable expansion zones, particularly next to freeways.
Surging Growth in E-commerce and Tech Sectors Bolsters Office Demand in Seattle-Tacoma

The Seattle-Tacoma market continues to benefit from steady employment growth, lifting demand for office space. More than 65,000 office-using workers have been added to payrolls in the last four years. E-commerce, tech and biotech firms will account for a large portion of this year’s positions as the local economy shifts from being dominated by the aerospace, computer and financial industries. Many of the new jobs will be at white-collar companies, augmenting demand for Class A office space as more of these employers use amenity-rich offices in urban environments to attract and retain young talent. A tightening of upper-tier space has dotted the skyline with cranes, and for a second consecutive year, more than 3.3 million square feet of office inventory will be delivered. Although Amazon will account for a significant portion of the new space, startups and expanding tech firms will also devour sizable chunks of inventory, further tightening vacancy and supporting rent growth in 2016.

The robust Seattle-Tacoma economy draws a wealth of buyers to local office assets. The intense competition for available listings requires that investors be willing to expand investment parameters, nimble in execution and aggressive in first offers. Buyers are also becoming more cautious and conservative, and they will wait for the right opportunity. Initial yields for Class A assets in the core typically begin in the 5 percent area. Yield-seeking buyers will find cap rates in Snohomish or Pierce counties generally starting 200 basis points higher. Medical office assets, especially near a hospital campus, remain in strong demand at first-year yields in the 6 to 7 percent span, depending on location and tenant credit. Older medical office properties in secondary locations may be good candidates for repurposing to general office uses. A lack of available lab space and rising rents in Seattle spur more biotech firms to move northward into Bothell and Woodinville, boosting office demand nearby.

2016 Market Forecast

**NOPI Rank**
4, down 1 place
Seattle-Tacoma stayed in the top five but slipped one spot into fourth place as other markets pulled ahead.

**Employment**
up 3.0%
Staffing levels will increase 3.0 percent in 2016 as employers add 57,750 jobs. This is up slightly from last year’s 57,000 positions. Office-using employment will rise 3.8 percent this year.

**Construction**
3.3 million sq. ft.
Developers will remain active with 3.3 million square feet scheduled for delivery in 2016. This is down from the completion of nearly 3.7 million square feet last year.

**Vacancy**
down 120 bps
Strong demand, especially from expanding e-commerce, technology and biotech companies, will drop vacancy 120 basis points in 2016 to 9.2 percent. Last year, vacancy registered a 190-basis-point plummet.

**Rent**
up 4.3%
As vacancy tightens, asking rents will soar an average of 4.3 percent to $31.39 per square foot in 2016. Last year rents jumped 3.7 percent.

**Investment**
A sharp decline in vacancy coupled with a lack of new inventory in the Tacoma area should make office assets in the city more appealing to investors.

Sources: CoStar Group, Inc.; Real Capital Analytics
Support for Research and Technology Firms Will Benefit the St. Louis Office Market

Public rail transit together with growth of research and technology firms will propel the St. Louis office market this year. The region’s universities and medical institutions produce a highly skilled labor force that attracts medical and technology-related research firms, generating demand for office space. A recently announced partnership between the Cortex Innovation Community, Saint Louis University and Washington University in St. Louis will offer access to research facilities for companies residing in the Center for Emerging Technologies. This should provide the stimulus for research and tech startups in the Cortex district of St. Louis. Technology company Square has already moved into the area and a new multi-tenant office building will attract similar companies. In addition, higher-density mixed-use projects are drawing young professionals to this neighborhood. In downtown, the Loop Trolley will begin service in 2016. The 2.2 miles of track will connect the Loop entertainment district with Forest Park and will spur demand for office space along the route. Marketwide, the repurposing of older office buildings will contribute to rent growth for the third consecutive year.

Lower entry costs will lure abundant capital to St. Louis office properties at cap rates averaging in the 7 percent range. Both local and out-of-state investors will vie for top-tier assets. Buildings in the larger employment hubs of downtown St. Louis, Clayton and Chesterfield will be especially sought after. Other buyers will focus on older properties near the downtown core that can be updated to appeal to tech and research companies, or repurposed into residential uses. Assets in the city’s central corridor, which includes the trendy Cortex district, should receive additional attention. Coastal buyers are also heightening competition throughout the metro for the few marketed medical office assets. A number of medical office buildings traded for less than $5 million last year, indicating strong interest from private investors for these assets.

2016 Market Forecast

St. Louis fell four positions into 40th place in the NOPI, hindered by weak office-using employment gains.

- **NOPI Rank**: 40, down 4 places
- **Employment**: up 1.0%
- **Construction**: 150,000 sq. ft.
- **Vacancy**: up 40 bps
- **Rent**: up 1.0%
- **Investment**: Last year’s completion of Ikea in the Cortex district should boost property values and attract additional investors to office assets nearby.
Investors Race to Position Holdings in Tampa Bay Ahead of More Robust Space-Demand Growth

Tampa Bay, Florida’s largest office market as measured by square footage, rides a tailwind coming into 2016 that will enable owners to achieve lower vacancy and an accelerated tempo of rent growth during the year. After logging only a slight drop in vacancy in 2015, the market may be nearing an inflection point. Steady growth in office-using fields, including law, accounting, financial services brokerage and insurance, have filled underutilized spaces and are pressuring existing layouts. With only modest additions to office stock since the upswing in property operations began six years ago, the metro’s existing buildings will be the target of tenants seeking larger workspaces in the near term. This year’s scheduled completions consist of significantly pre-leased medical office space and only a limited amount of competitive space. The pipeline of planned projects totaling 3.2 million square feet offers prospects of a more vigorous pace of building once rents rise to a point that justifies new construction.

Anticipating a new wave of faster growth in space demand, investors continue to step up the pace of transactions in Tampa Bay. In the past year, deal flow rose substantially and additional assets selling for more than $20 million catapulted dollar volume to a post-recession high. The high-end sales were spread across several Hillsborough County submarkets, including Westshore and the Tampa CBD. Cap rates in this segment of the market run in the mid- to high-6 percent range, or about 100 basis points less than the average for all properties. Large investors and small private groups intersect in the Westshore submarket, where assets listed for sale typically receive an unwavering level of interest due to amenities in the area and proximity to the airport. Physical vacancy in the submarket is decreasing and sublease space is minimal following a surge during the recession. Properties here offer potential upside in the consistent lowering of vacancy and resetting rents higher on lease renewals.

2016 Market Forecast

<table>
<thead>
<tr>
<th>Measure</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOPI Rank</td>
<td>20, up 4 places</td>
</tr>
<tr>
<td>Employment</td>
<td>up 2.6%</td>
</tr>
<tr>
<td>Construction</td>
<td>300,000 sq. ft.</td>
</tr>
<tr>
<td>Vacancy</td>
<td>down 80 bps</td>
</tr>
<tr>
<td>Rent</td>
<td>up 4.0%</td>
</tr>
<tr>
<td>Investment</td>
<td></td>
</tr>
</tbody>
</table>

Rising demand and rents lifted Tampa-St. Petersburg four spots into 20th place in the Index.

Staffing will expand 2.6 percent this year as employers make 32,600 new hires, including 8,100 posts in office-using employment sectors. Total payrolls expanded 2.9 percent during 2015.

Only 300,000 square feet of new space will be placed in service this year, marking a drop from 550,000 square feet in 2015. Last year’s completions include a 260,000-square-foot facility for USAA in East Tampa.

After a nominal decline last year, the vacancy rate will decrease 80 basis points to 14.1 percent in 2016; net absorption will top 1 million square feet.

The average effective rent in Tampa Bay will rise 4 percent in 2016 to $21.13 per square foot. An increase of 3 percent occurred in the preceding 12 months.

Additions to multifamily stock in downtown St. Petersburg potentially enhance the area’s appeal to office investors seeking growing resident populations.

---

Sources: CoStar Group, Inc.; Real Capital Analytics
Election and Budget Deal Raise Optimism; Tepid Operations Struggle with Overdevelopment

After several years of consistent employment growth, hiring will accelerate in the District this year. The increases will be most pronounced in office-using sectors, which represent a large portion of the local workforce and will outpace the broader metro in 2016. Despite robust net absorption, Washington, D.C., struggles with pockets of high vacancy, wrought by a combination of federal budget cuts, the sequester and overdevelopment. While construction firms are still active, completions will fall below prior years in the current cycle, helping to limit the impact of new supply, particularly as only a third of the space comes online pre-leased. However, the coming elections this fall and a recent rollback of automatic budget cuts will foster a more healthy operating environment than typical for the District, raising confidence among market participants. Demand for space will be positive again this year, yet will be unable to halt a slight increase in vacancy, particularly in suburban Virginia where speculative development is highest. Rent growth will prove difficult as tenants remain in control of the market.

Although operations have been lackluster, investors continue to scour the metro for well-leased assets, particularly inside the Beltway. Institutions are seeking Class A offerings with a good portion of the lease remaining, removing risks to income and providing stability. Private buyers will be more active in the suburban portions, seeking smaller office formats with the possibility for upside appreciation through renovations or improvements. From a pricing perspective, properties inside the District will start with cap rates as low as the mid-5 percent range, while submarkets farther out will post first-year yields in the high-7 percent area, depending on location and asset quality. The majority of closed transactions will feature buildings near the District and proximate suburbs, particularly along transportation routes. An abundance of buyers will provide incentives for long-term holders to list.

2016 Market Forecast

Washington, D.C., rose four places in the NOPI into 22nd position due to the strength of office-using job formation.

After organizations created 55,000 jobs in 2015, the pace of hiring will rise to 60,000 workers this year. Office-using sectors will account for half the total growth.

The rate of completions will accelerate to 3.5 million square feet in 2016, an increase from the 2.0 million completed in the prior four quarters. Deliveries will be well below previous cycle years.

Construction will outstrip demand this year, prompting a 40-basis-point rise in vacancy to 19.8 percent. In the previous year, vacancy slipped 10 basis points.

Construction will outstrip demand this year, prompting a 40-basis-point rise in vacancy to 19.8 percent. In the previous year, vacancy slipped 10 basis points.

The rate of completions will accelerate to 3.5 million square feet in 2016, an increase from the 2.0 million completed in the prior four quarters. Deliveries will be well below previous cycle years.

Significant slack in the office market will prevent strong improvement in the asking rental rate, which will climb just 0.7 percent to $36.25 per square foot.

Suburban offerings with value-add components, such as renovation or high vacancy, will receive increasing buyer interest as pricing continues to diverge between the CBD and outlying office parks.
Restrained Development Contributing To Vacancy Drop in Palm Beach County

The Palm Beach County office sector swings into 2016 in sound condition, boasting a favorable balance of demand to supply. Few obstacles stand in the way of attaining lower vacancy and higher rents in the year ahead. Most notably, development remains extremely restrained, with only scant new space coming online during the recovery and a nominal expansion of inventory on deck this year. In addition, only 90,000 square feet is planned in the county, representing less than 2 percent of existing stock. Locally, more pressing needs exist for multifamily and retail space, relegating office construction to a secondary consideration in the near term. Space demand drivers, meanwhile, remain in solid condition and capable of generating a sizable share of future vacancy declines. Professional and technical fields, including law, engineering and architecture, are rising as a high-growth sector, while medical practices and healthcare administration staffing also continue to expand.

Strengthening property operations and intensifying investor interest provide property owners greater opportunities to transact in 2016. Sales and dollar volume jumped last year, while cap rates in the county rested in the mid-6 to low-7 percent range. The investor pool comprises primarily dedicated local, private capital but is frequently augmented by the appearance of larger equity players making one-off acquisitions. Palm Beach County’s stock of properties may not be as extensive as those in other South Florida counties, yet assets here nonetheless merit consideration as potentially higher-yielding pieces in a regional portfolio. Boca Raton and West Palm Beach, especially, are regarded favorably in the large equity segment. The small private capital pool, meanwhile, shows few submarket preferences, although a significant number of deals were done in North Palm Beach last year. The pricing transparency gained through these sales, plus declining vacancy and rising rents, may support additional listings in North Palm Beach during 2016.

2016 Market Forecast

- **NOPI Rank**
  - West Palm Beach slipped one notch in this year’s ranking as office-using job growth eases.

- **Employment**
  - Employers will create 15,100 positions in the county this year, exceeding last year’s addition of 13,500 employees. Office-using sectors will continue to expand with the hiring of 3,500 workers during 2016.

- **Construction**
  - Following the delivery of only 80,000 square feet in 2015, completions will increase to 120,000 square feet.

- **Vacancy**
  - Net absorption of more than 500,000 square feet will slash the vacancy rate 90 basis points this year to 17 percent, the lowest year-end level during the current cycle. The vacancy rate slipped 50 basis points in 2015.

- **Rent**
  - Strengthening space demand will support a 4.2 percent gain in the average effective rent to $28.30 per square foot, besting the 3.8 percent bump posted last year.

- **Investment**
  - Demographic trends make medical care a growing segment of the local economy. A lack of construction in the past few years, however, may ignite a new round of site purchases for medical office development.

*Estimate **Forecast

**Sources:** CoStar Group, Inc.; Real Capital Analytics
<table>
<thead>
<tr>
<th>Office Locations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>United States</strong></td>
</tr>
<tr>
<td><strong>Corporate Headquarters</strong></td>
</tr>
<tr>
<td>Marcus &amp; Millichap</td>
</tr>
<tr>
<td>23975 Park Sorrento</td>
</tr>
<tr>
<td>Suite 400</td>
</tr>
<tr>
<td>Calabasas, CA 91302</td>
</tr>
<tr>
<td>(818) 212-2250</td>
</tr>
<tr>
<td><a href="http://www.MarcusMillichap.com">www.MarcusMillichap.com</a></td>
</tr>
<tr>
<td><strong>Atlanta</strong></td>
</tr>
<tr>
<td>500 Northpark Town Center</td>
</tr>
<tr>
<td>1100 Abernathy Road, N.E.</td>
</tr>
<tr>
<td>Atlanta, GA 30328</td>
</tr>
<tr>
<td>(404) 333-7800</td>
</tr>
<tr>
<td>Michael J. Fasano</td>
</tr>
<tr>
<td><strong>Austin</strong></td>
</tr>
<tr>
<td>8310-2 N. Capital of Texas Highway</td>
</tr>
<tr>
<td>Suite 110</td>
</tr>
<tr>
<td>Austin, TX 78731</td>
</tr>
<tr>
<td>(512) 338-7800</td>
</tr>
<tr>
<td>Craig R. Swanson</td>
</tr>
<tr>
<td><strong>Bakersfield</strong></td>
</tr>
<tr>
<td>2801 California Avenue</td>
</tr>
<tr>
<td>Suite 600</td>
</tr>
<tr>
<td>Bakersfield, CA 93309</td>
</tr>
<tr>
<td>(661) 377-1878</td>
</tr>
<tr>
<td>Adam Christofferson</td>
</tr>
<tr>
<td><strong>Birmingham</strong></td>
</tr>
<tr>
<td>The Steiner Building</td>
</tr>
<tr>
<td>15 Richard Arrington Jr. Boulevard North</td>
</tr>
<tr>
<td>Birmingham, AL 35203</td>
</tr>
<tr>
<td>(205) 455-7322</td>
</tr>
<tr>
<td>Jody McKibben</td>
</tr>
<tr>
<td><strong>Boise</strong></td>
</tr>
<tr>
<td>950 W. Bannock Street</td>
</tr>
<tr>
<td>Suite 110</td>
</tr>
<tr>
<td>Boise, ID 83702</td>
</tr>
<tr>
<td>(208) 344-7349</td>
</tr>
<tr>
<td>Tim Rios</td>
</tr>
<tr>
<td><strong>Boston</strong></td>
</tr>
<tr>
<td>100 High Street</td>
</tr>
<tr>
<td>Suite 1025</td>
</tr>
<tr>
<td>Boston, MA 02110</td>
</tr>
<tr>
<td>(617) 861-7200</td>
</tr>
<tr>
<td>Tim Thompson</td>
</tr>
<tr>
<td><strong>Brooklyn</strong></td>
</tr>
<tr>
<td>16 Court Street</td>
</tr>
<tr>
<td>Floor 2A</td>
</tr>
<tr>
<td>Brooklyn, NY 11241</td>
</tr>
<tr>
<td>(718) 475-4300</td>
</tr>
<tr>
<td>John Horowitz</td>
</tr>
<tr>
<td><strong>Charleston</strong></td>
</tr>
<tr>
<td>151 Meeting Street</td>
</tr>
<tr>
<td>Suite 450</td>
</tr>
<tr>
<td>Charleston, SC 29401</td>
</tr>
<tr>
<td>(843) 952-2222</td>
</tr>
<tr>
<td>Raj Ravi</td>
</tr>
<tr>
<td><strong>Charlotte</strong></td>
</tr>
<tr>
<td>405 Eagle Bend Drive</td>
</tr>
<tr>
<td>Waxhaw, NC 28173</td>
</tr>
<tr>
<td>(704) 443-3000</td>
</tr>
<tr>
<td>Gary R. Lucas</td>
</tr>
<tr>
<td><strong>Chicago Downtown</strong></td>
</tr>
<tr>
<td>333 W. Wacker Drive</td>
</tr>
<tr>
<td>Suite 200</td>
</tr>
<tr>
<td>Chicago, IL 60606</td>
</tr>
<tr>
<td>(312) 327-5400</td>
</tr>
<tr>
<td>John Przybyla</td>
</tr>
<tr>
<td><strong>Chicago Oak Brook</strong></td>
</tr>
<tr>
<td>One Mid America Plaza</td>
</tr>
<tr>
<td>Suite 200</td>
</tr>
<tr>
<td>Oakbrook Terrace, IL 60181</td>
</tr>
<tr>
<td>(630) 570-2200</td>
</tr>
<tr>
<td>Steven Weinstock</td>
</tr>
<tr>
<td><strong>Cincinnati</strong></td>
</tr>
<tr>
<td>600 Vine Street</td>
</tr>
<tr>
<td>10th Floor</td>
</tr>
<tr>
<td>Cincinnati, OH 45202</td>
</tr>
<tr>
<td>(513) 878-7700</td>
</tr>
<tr>
<td>Ryan Sarbinoff</td>
</tr>
<tr>
<td><strong>Cleveland</strong></td>
</tr>
<tr>
<td>5005 Rockside Road</td>
</tr>
<tr>
<td>Suite 1100</td>
</tr>
<tr>
<td>Independence, OH 44131</td>
</tr>
<tr>
<td>(216) 364-2000</td>
</tr>
<tr>
<td>Michael L. Glass</td>
</tr>
<tr>
<td><strong>Columbus</strong></td>
</tr>
<tr>
<td>1320 Main Street</td>
</tr>
<tr>
<td>Suite 300</td>
</tr>
<tr>
<td>Columbus, OH 43201</td>
</tr>
<tr>
<td>(614) 678-4000</td>
</tr>
<tr>
<td>Raj Ravi</td>
</tr>
<tr>
<td><strong>Columbus</strong></td>
</tr>
<tr>
<td>230 West Street</td>
</tr>
<tr>
<td>Suite 100</td>
</tr>
<tr>
<td>Columbus, OH 43215</td>
</tr>
<tr>
<td>(614) 360-9800</td>
</tr>
<tr>
<td>Michael L. Glass</td>
</tr>
<tr>
<td><strong>Corpus Christi</strong></td>
</tr>
<tr>
<td>1521 S. Padre Island Drive</td>
</tr>
<tr>
<td>Suite 206</td>
</tr>
<tr>
<td>Corpus Christi, TX 78418</td>
</tr>
<tr>
<td>(361) 949-3300</td>
</tr>
<tr>
<td>J. Michael Watson</td>
</tr>
<tr>
<td><strong>Dallas</strong></td>
</tr>
<tr>
<td>5001 Spring Valley Road</td>
</tr>
<tr>
<td>Suite 100W</td>
</tr>
<tr>
<td>Dallas, TX 75244</td>
</tr>
<tr>
<td>(972) 755-5200</td>
</tr>
<tr>
<td>Tim Speck</td>
</tr>
<tr>
<td><strong>Denver</strong></td>
</tr>
<tr>
<td>1225 17th Street</td>
</tr>
<tr>
<td>Suite 1800</td>
</tr>
<tr>
<td>Denver, CO 80202</td>
</tr>
<tr>
<td>(303) 328-2000</td>
</tr>
<tr>
<td>Richard A. Bird</td>
</tr>
<tr>
<td><strong>Detroit</strong></td>
</tr>
<tr>
<td>Two Towne Square</td>
</tr>
<tr>
<td>Suite 450</td>
</tr>
<tr>
<td>Southfield, MI 48076</td>
</tr>
<tr>
<td>(248) 415-2600</td>
</tr>
<tr>
<td>Steven Chaben</td>
</tr>
<tr>
<td><strong>Encino</strong></td>
</tr>
<tr>
<td>First Financial Plaza</td>
</tr>
<tr>
<td>16830 Ventura Boulevard</td>
</tr>
<tr>
<td>Suite 100</td>
</tr>
<tr>
<td>Encino, CA 91366</td>
</tr>
<tr>
<td>(818) 212-2700</td>
</tr>
<tr>
<td>Adam Christofferson</td>
</tr>
<tr>
<td><strong>Fort Lauderdale</strong></td>
</tr>
<tr>
<td>5900 N. Andrews Avenue</td>
</tr>
<tr>
<td>Suite 100</td>
</tr>
<tr>
<td>Fort Lauderdale, FL 33309</td>
</tr>
<tr>
<td>(954) 245-3400</td>
</tr>
<tr>
<td>Ryan Nee</td>
</tr>
<tr>
<td><strong>Fort Worth</strong></td>
</tr>
<tr>
<td>300 Throckmorton Street</td>
</tr>
<tr>
<td>Suite 1500</td>
</tr>
<tr>
<td>Fort Worth, TX 76102</td>
</tr>
<tr>
<td>(817) 332-3100</td>
</tr>
<tr>
<td>Hernando Perez</td>
</tr>
<tr>
<td><strong>Greensboro</strong></td>
</tr>
<tr>
<td>324 S. Elm Street</td>
</tr>
<tr>
<td>Suite 450</td>
</tr>
<tr>
<td>Greensboro, NC 27401</td>
</tr>
<tr>
<td>(336) 450-4600</td>
</tr>
<tr>
<td>Raj Ravi</td>
</tr>
<tr>
<td><strong>Houston</strong></td>
</tr>
<tr>
<td>3 Riverway</td>
</tr>
<tr>
<td>Suite 800</td>
</tr>
<tr>
<td>Houston, TX 77056</td>
</tr>
<tr>
<td>(713) 452-4200</td>
</tr>
<tr>
<td>David H. Luther</td>
</tr>
<tr>
<td><strong>Indianapolis</strong></td>
</tr>
<tr>
<td>1812 W. Pinhook Road</td>
</tr>
<tr>
<td>Suite 202</td>
</tr>
<tr>
<td>Lafayette, LA 70508</td>
</tr>
<tr>
<td>(337) 325-3270</td>
</tr>
<tr>
<td>Matthew Fitzgerald</td>
</tr>
<tr>
<td><strong>Jacksonville</strong></td>
</tr>
<tr>
<td>15000 Sand Lake Road</td>
</tr>
<tr>
<td>Suite 100</td>
</tr>
<tr>
<td>Jacksonville, FL 32226</td>
</tr>
<tr>
<td>(904) 777-2400</td>
</tr>
<tr>
<td>Kirk A. Felici</td>
</tr>
<tr>
<td><strong>Knoxville</strong></td>
</tr>
<tr>
<td>1111 Northshore Drive</td>
</tr>
<tr>
<td>Suite S-300</td>
</tr>
<tr>
<td>Knoxville, TN 37919</td>
</tr>
<tr>
<td>(865) 299-6300</td>
</tr>
<tr>
<td>Jody McKibben</td>
</tr>
<tr>
<td><strong>Lafayette</strong></td>
</tr>
<tr>
<td>5000 Port Lane</td>
</tr>
<tr>
<td>Suite 201</td>
</tr>
<tr>
<td>Lafayette, LA 70508</td>
</tr>
<tr>
<td>(337) 325-3270</td>
</tr>
<tr>
<td>Matthew Fitzgerald</td>
</tr>
<tr>
<td><strong>Las Vegas</strong></td>
</tr>
<tr>
<td>15000 Sand Lake Road</td>
</tr>
<tr>
<td>Suite 100</td>
</tr>
<tr>
<td>Las Vegas, NV 89149</td>
</tr>
<tr>
<td>(702) 212-2700</td>
</tr>
<tr>
<td>John Vorscheck</td>
</tr>
<tr>
<td><strong>Little Rock</strong></td>
</tr>
<tr>
<td>515 S. Flower Street</td>
</tr>
<tr>
<td>Suite 100</td>
</tr>
<tr>
<td>Little Rock, AR 72203</td>
</tr>
<tr>
<td>(501) 228-9600</td>
</tr>
<tr>
<td>Matthew Fitzgerald</td>
</tr>
<tr>
<td><strong>Long Beach</strong></td>
</tr>
<tr>
<td>515 S. Flower Street</td>
</tr>
<tr>
<td>Suite 100</td>
</tr>
<tr>
<td>Long Beach, CA 90801</td>
</tr>
<tr>
<td>(562) 475-4200</td>
</tr>
<tr>
<td>Damon Wyler</td>
</tr>
<tr>
<td><strong>Los Angeles</strong></td>
</tr>
<tr>
<td>515 S. Flower Street</td>
</tr>
<tr>
<td>Suite 100</td>
</tr>
<tr>
<td>Los Angeles, CA 90071</td>
</tr>
<tr>
<td>(213) 943-3200</td>
</tr>
<tr>
<td>Enrique Wong</td>
</tr>
<tr>
<td><strong>Louisville</strong></td>
</tr>
<tr>
<td>324 S. Elm Street</td>
</tr>
<tr>
<td>Suite 300</td>
</tr>
<tr>
<td>Louisville, KY 40202</td>
</tr>
<tr>
<td>(502) 238-5900</td>
</tr>
<tr>
<td>Matthew Fitzgerald</td>
</tr>
<tr>
<td><strong>Manhattan</strong></td>
</tr>
<tr>
<td>260 Madison Avenue</td>
</tr>
<tr>
<td>Suite 100</td>
</tr>
<tr>
<td>New York, NY 10016</td>
</tr>
<tr>
<td>(212) 430-5100</td>
</tr>
<tr>
<td>J.D. Parker</td>
</tr>
</tbody>
</table>
Office Locations

Memphis
5100 Poplar Avenue
Suite 2505
Memphis, TN 38137
(901) 620-3600
Jody McKibben

Miami
5201 Blue Lagoon Drive
Suite 100
Miami, FL 33126
(786) 522-7000
Kirk A. Felici

Milwaukee
13890 Bishops Drive
Suite 300
Brookfield, WI 53005
(262) 364-1900
Matthew Fitzgerald

Minneapolis
1350 Lagoon Avenue
Suite 840
Minneapolis, MN 55408
(952) 852-9700
Craig Patterson

Mobile
Pelican Square
101 Tottie Lane
Suite 3
Fairhope, AL 36532
(251) 929-2900
Jody McKibben

Nashville
6 Cadilliac Drive
Suite 100
Brentwood, TN 37027
(615) 997-2900
Jody McKibben

New Haven
265 Church Street
Suite 210
New Haven, CT 06510
(203) 872-3300
J.D. Parker

New Jersey
River Drive Center 3
611 River Drive
4th Floor
Elmwood Park, NJ 07407
(201) 582-1000
Brian Hoby

Newport Beach
19800 MacArthur Boulevard
Suite 150
Irvine, CA 92612
(949) 419-3300
Robert Dobrink

Oakland
555 12th Street
Suite 1750
Oakland, CA 94607
(510) 379-1200
Christopher J. Economou

Oklahoma City
9120 N. Kelley Avenue
Suite 100
Oklahoma City, OK 73131
(405) 254-2200
J. Michael Watson

Ontario
One Lakeshore Center
3281 E. Guasti Road
Suite B00
Ontario, CA 91761
(909) 456-3400
Kevin Boeve

Orlando
300 South Orange Avenue
Suite 700
Orlando, FL 32801
(407) 557-3400
Justin West

Palm Springs
777 E. Tahquitz Canyon Way
Suite 200-27
Palm Springs, CA 92262
(909) 456-3400
Kevin Boeve

Palo Alto
2626 Hanover Street
Palo Alto, CA 94304
(650) 391-1700
Steven J. Seligman

Philadelphia
101 W. Elm Street
Suite 600
Conshohocken, PA 19428
(215) 531-7000
Brenton Baskin

Phoenix
2398 E. Camelback Road
Suite 550
Phoenix, AZ 85016
(602) 687-6700
Don Morrow

Pittsburgh
204 Fifth Avenue
Suite 502
Pittsburgh, PA 15222
(412) 360-7777
Michael L. Glass

Portland
111 S.W. Fifth Avenue
Suite 1550
Portland, OR 97204
(503) 200-2000
Adam Lewis

Raleigh
101 J Morris Commons Lane
Suite 130
Morrisville, NC 27560
(919) 674-1100
Raj Ravi

Reno
241 Ridge Street
Suite 200
Reno, NV 89501
(775) 348-5200
Ryan DeMar

Sacramento
3741 Douglas Boulevard
Suite 200
Roseville, CA 95661
(916) 724-1400
Ryan DeMar

Salt Lake City
36 South State Street
Suite 2650
Salt Lake City, UT 84111
(801) 736-2600
Gary K. Mangum

San Antonio
8200 IH-10W
Suite 603
San Antonio, TX 78230
(210) 343-7800
J. Michael Watson

San Diego
4660 La Jolla Village Drive
Suite 900
San Diego, CA 92122
(619) 373-3100
John Vorsheck

San Francisco
750 Battery Street
5th Floor
San Francisco, CA 94111
(415) 963-3000
Jeffrey M. Mishkin

Seattle
Two Union Square
601 Union Street
Suite 2710
Seattle, WA 98101
(206) 826-5700
Joel Deis

Southern Virginia
999 Waterside Drive
Suite 2600
Norfolk, VA 23510
(804) 736-2600
David Bradley

St. Louis
7800 Forsyth Boulevard
Suite 710
St. Louis, MO 63105
(314) 889-2500
Matthew Fitzgerald

Tampa
4030 W. Boy Scout Boulevard
Suite 850
Tampa, FL 33607
(813) 387-4700
Richard Matricaria

The Woodlands
2441 High Timbers
Suite 130
The Woodlands, TX 77380
(832) 442-2800
David H. Luther

Tulsa
7633 East 63rd Place
Suite 300
Tulsa, OK 74133
(918) 294-6300
J. Michael Watson

Ventura
2775 N. Ventura Road
Suite 101
Oxnard, CA 93036
(805) 351-7200
Adam Christofferson

Washington, D.C.
7200 Wisconsin Avenue
Suite 1101
Bethesda, MD 20814
(202) 536-3700
Bryn Merrey

West Los Angeles
12100 W. Olympic Boulevard
Suite 350
Los Angeles, CA 90064
(310) 909-5500
Tony Solomon

Westchester
50 Main Street
Suite 925
White Plains, NY 10606
(914) 220-9730
J.D. Parker

Canada

Calgary
602-16 Ave. NW
Suite 211
Calgary, AB T2M 0J7
(587) 349-1302
Gary R. Lucas

Ottawa
343 Preston Street
Suite 1142
Ottawa, ON K1S 1N4
(613) 291-1018
Gary R. Lucas

Toronto
20 Queen Street W
Suite 2300
Toronto, ON M5H 3R3
(416) 585-4645
Mark A. Paterson

Vancouver
400 Burrard Street
Suite 1020
Vancouver, BC V6C 3A6
(604) 675-5200
Rene H. Palsenbarg
National Office and Industrial Properties Group

Alan L. Pontius | Senior Vice President, National Director
(415) 963-3000 | al.pontius@marcusmillichap.com

Rick Lechtman | Vice President, Eastern Director
(212) 430-5100 | ricklechtman@marcusmillichap.com

Gary Willard | Vice President, Western Director
(650) 391-1700 | gary.willard@marcusmillichap.com

Developed by:
Hessam Nadji, Senior Executive Vice President
John Chang, First Vice President, Research Services

National Research Team
John Chang, First Vice President, Research Services
James Reeves, National Production Manager
Peter Tindall, Research Operations Manager
Tamarah Calderon, Research Administrator
Connor Devereux, Research Associate
Maria Erofeeva, Graphic Designer
Marette Flora, Copy Editor
Art Gering, Senior Analyst
Jessica Hill, Research Analyst
Gregory Leight, Research Associate
Aaron Martens, Research Analyst
Mridul Nanda, Research Associate
Nancy Olimsted, Market Research Analyst
Troy Roffi, Data Analyst
Carlynn Rogers, Research Coordinator
Spencer Ryan, Research Associate

Communications/Graphic Design
Michelle Cocagne, Senior Vice President, Communications

Contact:
John Chang
First Vice President, Research Services
2398 E. Camelback Road, Suite 550
Phoenix, Arizona 85016
(602) 687-6700 | john.chang@marcusmillichap.com

Media Contact:
Gina Relva, Public Relations Manager
2999 Oak Road, Suite 210
Walnut Creek, CA 94597
(925) 953-1716 | gina.relva@marcusmillichap.com

Senior Management Team
John J. Kerin, President and Chief Executive Officer
(818) 212-2250 | john.kerin@marcusmillichap.com

Hessam Nadji, Senior Executive Vice President
(818) 212-2250 | hessam.nadji@marcusmillichap.com

Gene A. Berman, Executive Vice President
(954) 245-3400 | gene.berman@marcusmillichap.com

William E. Hughes, Senior Vice President
Marcus & Millichap Capital Corporation
(949) 419-3200 | william.hughes@marcusmillichap.com

Martin E. Louie, Senior Vice President, Chief Financial Officer
(818) 212-2250 | marty.louie@marcusmillichap.com

Gary R. Lucas, Senior Vice President
(415) 963-3000 | gary.lucas@marcusmillichap.com

Paul S. Mudrich, Senior Vice President, Chief Legal Officer
(650) 391-1700 | paul.mudrich@marcusmillichap.com

Steven R. Chaben, Senior Vice President
(248) 415-2600 | steven.chaben@marcusmillichap.com

Kent R. Williams, Senior Vice President
(858) 373-3100 | kent.williams@marcusmillichap.com

National Office Property Index Note: Employment and office data forecasts for 2016 are based on the most up-to-date information available as of November 2015 and are subject to change.

Statistical Summary Note: Metro-level employment, vacancy and annual asking rents are year-end figures and are based on the most up-to-date information available as of December 2015. Average prices and cap rates are a function of the age, class and geographic area of the properties trading and therefore may not be representative of the market as a whole. Forecasts for employment and office data are made during the fourth quarter and represent estimates of future performance. No representation, warranty or guarantee, express or implied may be made as to the accuracy or reliability of the information contained herein.


© Marcus & Millichap 2016
<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Phone</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>JOHN CHANG</td>
<td>First Vice President</td>
<td>(602) 687-6803</td>
<td><a href="mailto:jchang@ipausa.com">jchang@ipausa.com</a></td>
</tr>
<tr>
<td>WILLIAM E. HUGHES</td>
<td>Senior Vice President</td>
<td>(949) 419-3310</td>
<td><a href="mailto:whughes@ipausa.com">whughes@ipausa.com</a></td>
</tr>
<tr>
<td>RICK LECHTMAN</td>
<td>Vice President/Regional Director</td>
<td>(212) 430-6143</td>
<td><a href="mailto:rlechtman@ipausa.com">rlechtman@ipausa.com</a></td>
</tr>
<tr>
<td>ALAN L. PONTIUS</td>
<td>Senior Vice President National Director, IPA</td>
<td>(415) 963-3070</td>
<td><a href="mailto:apontius@ipausa.com">apontius@ipausa.com</a></td>
</tr>
</tbody>
</table>

Corporate Headquarters:
23975 Park Sorrento, Suite 400
Calabasas, California 91302
(818) 212-2250

www.IPAusa.com