

Office Outlook

United States | Q3 2016

A large, modern office interior with a grid of floor-to-ceiling windows. The view outside shows a dense urban skyline with several prominent skyscrapers, including one with a distinctive white, crystalline structure. The interior has a polished floor reflecting the windows and a long, low wooden bench in the foreground. A red rectangular box is overlaid on the right side of the image, containing white text.

*Stable and
growing U.S.
office markets
continue to benefit
from economic
expansion*

What's inside:



"The U.S. economy remains a bright spot in an increasingly uncertain global picture, and although growth has become more volatile and less predictable during 2016, fundamentals remain relatively sound."

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5 Key metrics to watch

Neither Brexit nor summer vacation were able to slow the office leasing market during the third quarter and by the end of September, U.S. leasing volume totaled nearly 60 million square feet—4.4 percent higher than the fourth-quarter trailing average—and expansionary leases comprised the largest share of 20,000-square-foot-and-larger leases at 47.1 percent. While labor market volatility has increased over the past six months, employment has continued to grow with more than 2.4 million jobs added over the past 12 months. Even the price of oil and its supply have shown signs of improvement—welcome news for Houston and other energy markets. While all indicators point to a stable economy, uncertainties surrounding the election, interest rates and geopolitical conditions have certainly been fodder for the discussion about the commercial real estate market's outlook. Though no immediate impact on the economy is anticipated, it is certain to create additional excitement going into the fourth quarter.

1

Job openings: Broad-based economic growth pushed job openings up by 3.9 percent in September, while labor force participation increased by 10 bps. Positive signs, for sure, but with limited slack in the labor market, employers may still have a hard time finding the talent required to fill job postings. As a result, expansionary leasing will taper with the limited supply of talent.

2

Sublease space: Increasing by 20 bps during the third quarter, large development markets like New York, Dallas and Washington, DC will be on the lookout for changes in sublease vacancy, while Houston and less so the San Francisco Bay Area monitor existing sublease supply levels. While we don't expect sublease space to emerge from faltering economic conditions, but rather relocations into new developments, it will place pressure on peaking markets.

3

Peaking markets: Both high tenant demand and high development markets are nearing their peak in rental rates, with limited rent growth expected over the next 12 months, except where new, premium-priced supply is expected to deliver or where supply constraints persist. Based on Denver's position at 12 o'clock, it could be the next market after Houston to see rents decline.

4

Tech: Consistently driving the largest portion of leasing activity—and expansionary leasing activity for that matter—the technology industry has been spurring growth in markets large and small. However, with talent shortages plaguing all industries, especially for skilled tech talent, adding headcount will become more challenging just as the bulk of new supply starts to come online in 2017.

5

Headquarters: In an effort to attract what is becoming elusive talent, corporate occupiers are thinking critically about their headquarters locations and relocating where opportunity presents itself. Watch for preleasing activity to take on more headquarters tenants over the next 12 months—especially where supply is most constrained. United Airlines' new, 237,000-square-foot lease at 609 Main Street in Houston is a recent example of this.

Our view

Slow and steady economic growth has led the U.S. office market's trajectory over the last several years, and that trend isn't expected to change over the near term. As long as employment continues to grow, occupancy in the office market should continue to expand. That said, primary markets welcoming new supply are nearing an inflection point as supply begins to catch up to demand. With more than 60 percent of the 105 million-square-foot development pipeline expected to deliver by the end of 2017, leasing conditions will become much more balanced by 2018, with a large shift to more tenant-favorable conditions by 2019.

United States Office market

Slow and steady growth drives U.S. economy

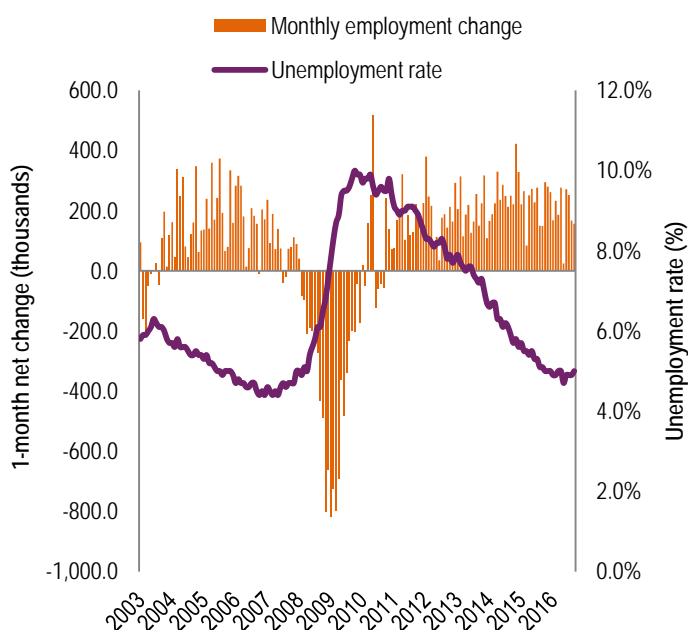
The U.S. economy remains a bright spot in an increasingly uncertain global picture, and although growth has become more volatile and less predictable during 2016, fundamentals remain relatively sound. Over the course of the year, the labor market has added 1.4 million jobs at varying rates ranging from 24,000 to 271,000 new jobs per month, driven by continued increases in professional services, health, leisure, retail and construction. The wobbling rate of monthly gains has its roots in an increasingly visible talent shortage, with unemployment nationally at 5.0 percent and falling below 4.0 percent in numerous primary and secondary geographies, boosting wage growth to 2.6 percent annually and above 3.0 percent in many high-demand industries. Tech in particular has slowed to 4.5 percent growth over the year because of this, compared to the 6.0+ percent recorded earlier in the cycle. However, as participation rises and workforce expansion remains steady, employers will still be able to add to headcounts, while the desire to recruit new talent has resulted in job openings across sectors that's, which are growing faster than employment. These factors are all boosting external indicators, particularly consumer confidence, which is keeping spending and overall economic growth up.

September 2016 U.S. labor market at a glance

+156,000 (72 consecutive months of growth) 1-month net change	5.0% Unemployment rate	5,871,000 (+3.9% YOY) Job openings
+2,447,000 (+1.7% YOY) 12-month change	-10 bps 12-month change in unemployment	5,227,000 (+3.6% YOY) Hires
+782,000 10-year average annual growth	62.9% Labor force participation rate	2,980,000 (+2.1% YOY) Quits

Source: JLL Research, Bureau of Labor Statistics

As the workforce grew faster than employment, unemployment increased by 10bps to 5.0 percent



Source: JLL Research, Bureau of Labor Statistics

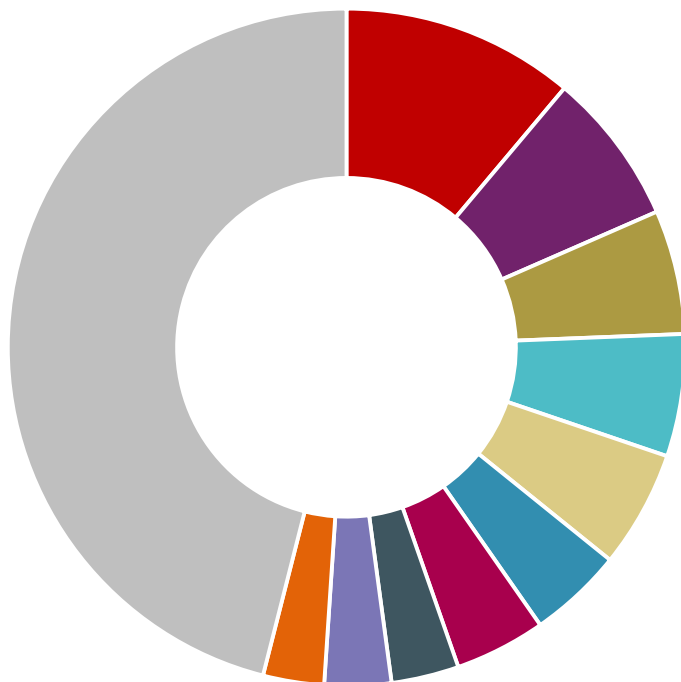
On the other hand, GDP has been underperforming compared to 2014 and 2015 growth, as well as coming in below consensus in many instances. Real GDP is up just 1.3 percent as of Q2 2016 compared to nearly 3.0 percent one year ago. Keeping growth on an upward trend has been personal consumption expenditures, which was responsible for all net GDP growth in real terms over the past year. Business investment, a smaller but critical barometer of economic headwinds, has contracted in recent quarters and is down 2.9 percent over the year, mirroring the wobbling in corporate profits of late. However, there are bright spots within investment, particularly research and development (+7.1 percent), software (+3.6 percent) and industrial equipment (+2.5 percent), which have been critical sectors throughout the current cycle. On the back of a strengthening dollar, imports are rising faster than exports, while government expenditures remain flat. That said, the strength in consumer spending and demand due to a meaningful wage growth in a low-inflation environment has helped other indicators, notably home sales (+20.6 percent) and housing starts (+8.3 percent YTD), which had previously been struggling. Overall, the economy remains steady and is weathering Brexit, slowdowns in resource-based economies and continued economic troubles within the Eurozone well, and we expect that 2017 will continue to show steady, albeit somewhat slower, growth.

No slowdown for leasing activity during the quarter

Counter to less predictable monthly employment gains and below-expectations GDP growth, leasing activity grew once again during the third quarter, with 59.9 million square feet recorded over the past three months. As a result of more broad-based growth across industries and sectors, the top-performing leasing markets year-to-date have ranged from major diversified metros such as Atlanta (+33.5 percent) to industry- and corporate-driven secondary markets such as Salt Lake City (+136.2 percent), Columbus (+70.6 percent) and Orlando (+68.3 percent), all of which have benefited from a combination of large-block office users in professional services, finance and even tech as well as non-office users such as leisure, hospitality, education and health.

Leasing volume by market

Primary markets remain leaders, although Silicon Valley is disproportionately contributing to volume

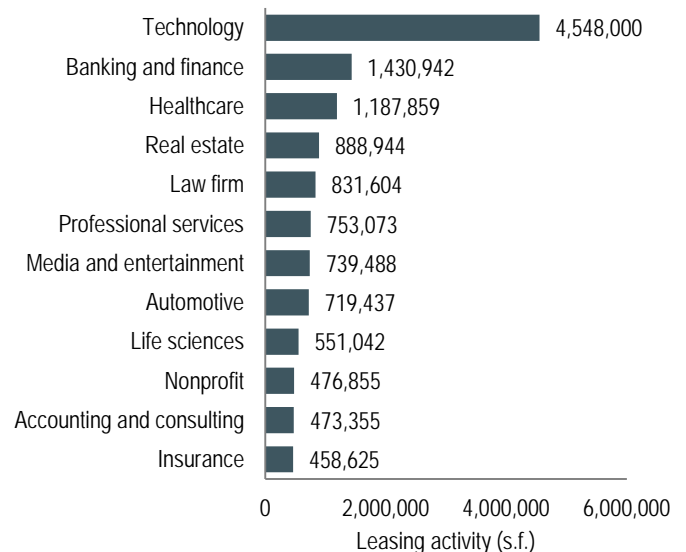


Market	Leasing activity (s.f.)
New York	6,665,424
Washington, DC	4,379,517
Boston	3,549,945
New Jersey	3,497,458
Chicago	3,350,427
Seattle	2,693,694
Los Angeles	2,600,042
Atlanta	1,931,398
Dallas	1,906,676
Silicon Valley	1,744,264
All other markets	27,567,367
Total leasing activity	59,886,212

At the industry level, creative and digital content and services remain the leaders in growth, having overtaken technology due to talent shortages and an earlier wave of leasing activity compared to the rest of the economy and office market, although technology remains the largest single industry for leasing nationally. Expansionary activity from companies in high-growth areas such as Penguin Random House, Google, iCIMS, Illumina, Ellie Mae and NCR alone totaled 2.4 million square feet across a variety of media and associated industries, from publishing to software to mortgage lending and manufacturing. On the other hand, traditional drivers—in particular law firms, finance, insurance, government and telecom—continue to see above-average rates of contraction as companies right-size and place greater capital into research and development. These trends will continue throughout the remainder of the cycle, with additional gains expected in life sciences, health and advanced manufacturing and engineering.

Leasing by industry

High-profile deals in the Bay Area, Atlanta, Seattle and New York resulted in 4.5 m.s.f. of tech leasing



Source: JLL Research

The push and pull of supply and demand

Total vacancy edged downward by 10 bps during the quarter as markets absorbed 12.8 million square feet compared to the 12.5 million square feet that were delivered. Leading the markets in occupancy gains during the quarter were New Jersey (1.5 m.s.f.), New York (1.2 m.s.f.), Phoenix (1.1 m.s.f.) and Seattle (950,000 s.f.) as companies like Allergan expanded into Madison, New Jersey, bringing what was negative absorption for the year back into positive territory for a year-to-date net absorption figure of 1.3 million square feet. Meanwhile, L'Oreal and Coach, among others, took occupancy at newly delivered 10 Hudson Yards, adding 1.6 million square feet of occupancy gains—almost enough to break even with the year's losses, which amounted to -123,000 square feet at the end of the quarter. Additionally, State Farm began a phased occupancy at their new campus in Phoenix, which contributed 623,000 square feet to net absorption for a year-to-date total of 2.6 million square feet, or 3.1 percent of total inventory.

Phoenix's absorption gains of 3.1 percent of total inventory come second to Cincinnati, which has absorbed 3.6 percent of its total inventory year-to-date and is followed by Silicon Valley (2.6 percent), San Antonio and Salt Lake City (2.5 percent), to round out the top five. However, more impressive is the continued occupancy growth in the most popular tech and millennial markets to bring vacancy to single digits. With the exception of Nashville, tenants should enjoy some additional supply options over the next 12 to 24 months that will also begin to balance conditions by reducing some of the leasing competition in the market. The same is true for other markets set to welcome a portion of the 105 million-square-foot pipeline.

Market	Total vacancy (%)	Under construction (s.f.)	Total preleased (%)
Nashville	4.6%	3,981,918	69.9%
Salt Lake City	7.3%	2,122,795	45.9%
Seattle-Bellevue	8.3%	7,159,557	41.3%
San Francisco	8.3%	4,435,830	39.5%
Portland	9.0%	1,605,421	31.9%

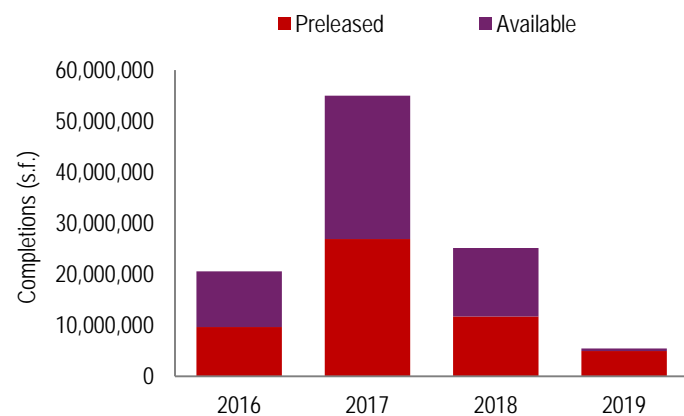
**Data reflect office markets with single-digit rates of total vacancy*

But with new supply comes new vacancy

With nearly 35.5 million square feet of new supply delivered year-to-date, markets are keeping pace and have absorbed space at nearly 100 percent the rate of new deliveries. Occupancy growth has been strong enough to post an additional 10 bps decline in vacancy during the quarter, for a year-to-date decline of 20 bps. This is impressive in the face of a slow first quarter for leasing activity and concerns ranging from tech IPOs and Brexit to oil prices and the upcoming election. Market fundamentals have remained stable.

Forecasted completions

The remainder of the groundbreaking wave has boosted 2018 completions to 25.1 m.s.f.

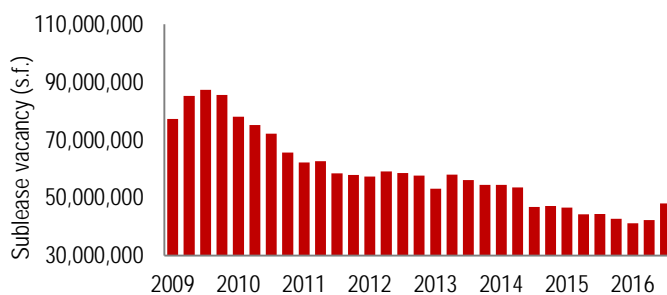


Source: JLL Research

Despite solid overall figures, some markets are beginning to see vacancy creep as new supply hits the market. In 15 of the 51 markets JLL tracks, vacancy increased by an average of 50 bps during the quarter. In some markets, this was the result of both new deliveries and occupancy losses, as was the case in Houston, where year-to-date absorption is -74,000 square feet while the market has received almost 4.0 million square feet of new supply. Vacancy went from 18.5 to 19.7 percent—largely attributable to large sublease vacancies. The same was also true in Minneapolis, where vacancy increased from 14.7 to 15.2 percent following quarterly occupancy losses of 156,000 square feet.

Sublease vacancy

Sublease space spiked in Q1 to 48.0 m.s.f. as relocating tenants placed space on the market



Source: JLL Research

For the market at large, though, vacancy remains on the downward. San Diego saw the sharpest vacancy decline during the third quarter, falling 130 bps from 14.3 to 12.9 percent following 708,000 square feet of net absorption. This was followed by Sacramento and West Palm Beach, which both saw vacancy decline 90 bps to reach 14.0 and 16.0 percent, respectively. Until recently, both markets were without any development under way, but Sacramento recently broke ground on two suburban office projects totaling 240,000 square feet. Declining vacancy rates will persist for most markets well into the final stages of this cycle—29 markets (all of which are 50 million square feet or less in size) have just 19.9 million square feet of new supply currently under way. This comprises just 15.0 percent of the total development pipeline. Among those 29 markets, only seven markets are responsible for 14.5 million square feet, or 73.0 percent of the 19.9 million square feet.

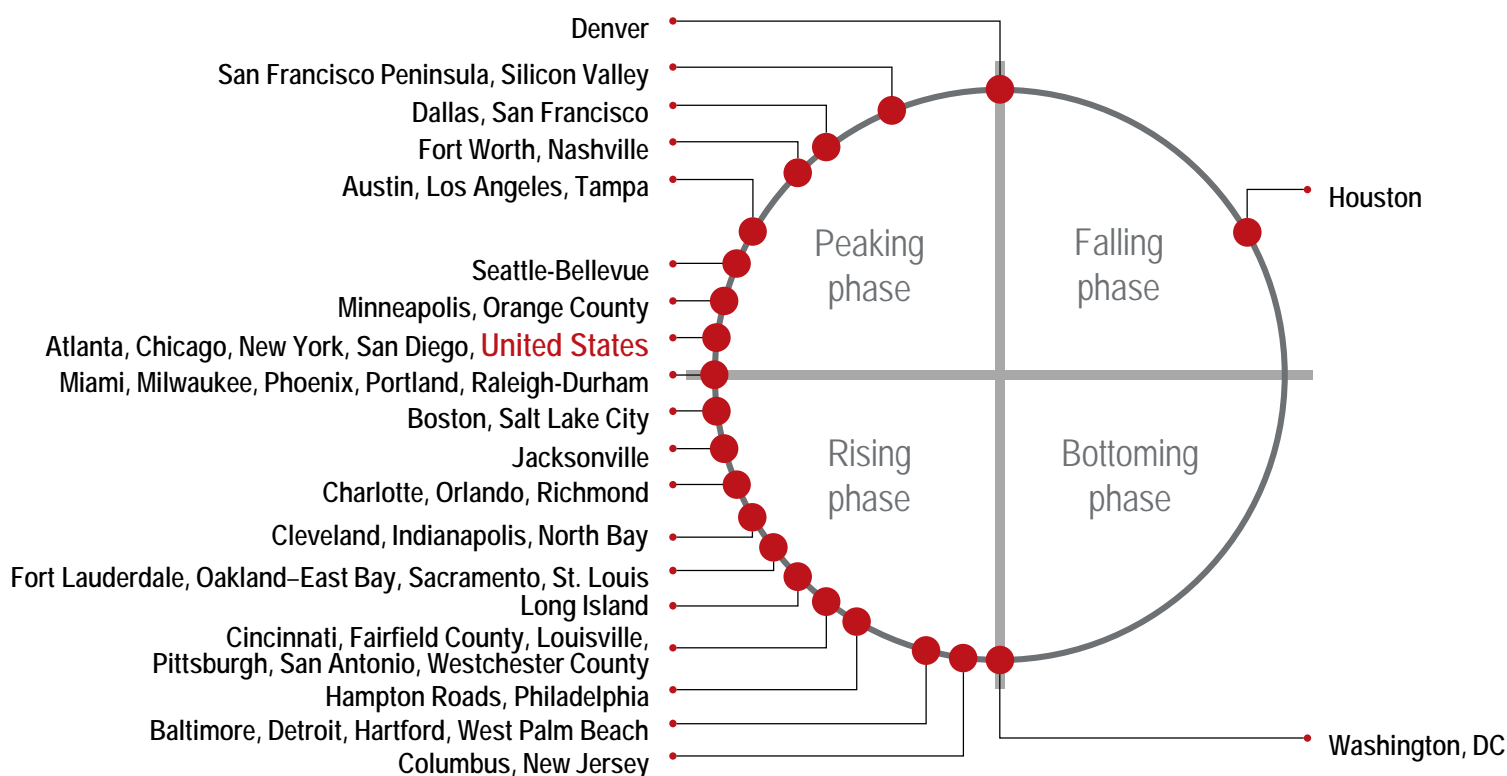
Market	Total inventory (s.f.)	Total vacancy (%)	Under construction (s.f.)
Nashville	33,678,562	4.6%	3,981,918
Charlotte	47,160,155	11.8%	2,491,211
Austin	49,920,997	11.3%	2,221,861
Salt Lake City	49,442,083	7.3%	2,122,795
Raleigh-Durham	44,213,459	11.0%	1,833,068
Fort Worth	40,433,966	14.9%	1,222,951
San Francisco Peninsula	27,100,522	12.1%	1,215,839

**Data reflect office markets of 50,000,000 square feet or less, with development pipelines over 1 million square feet*

United States Office clock

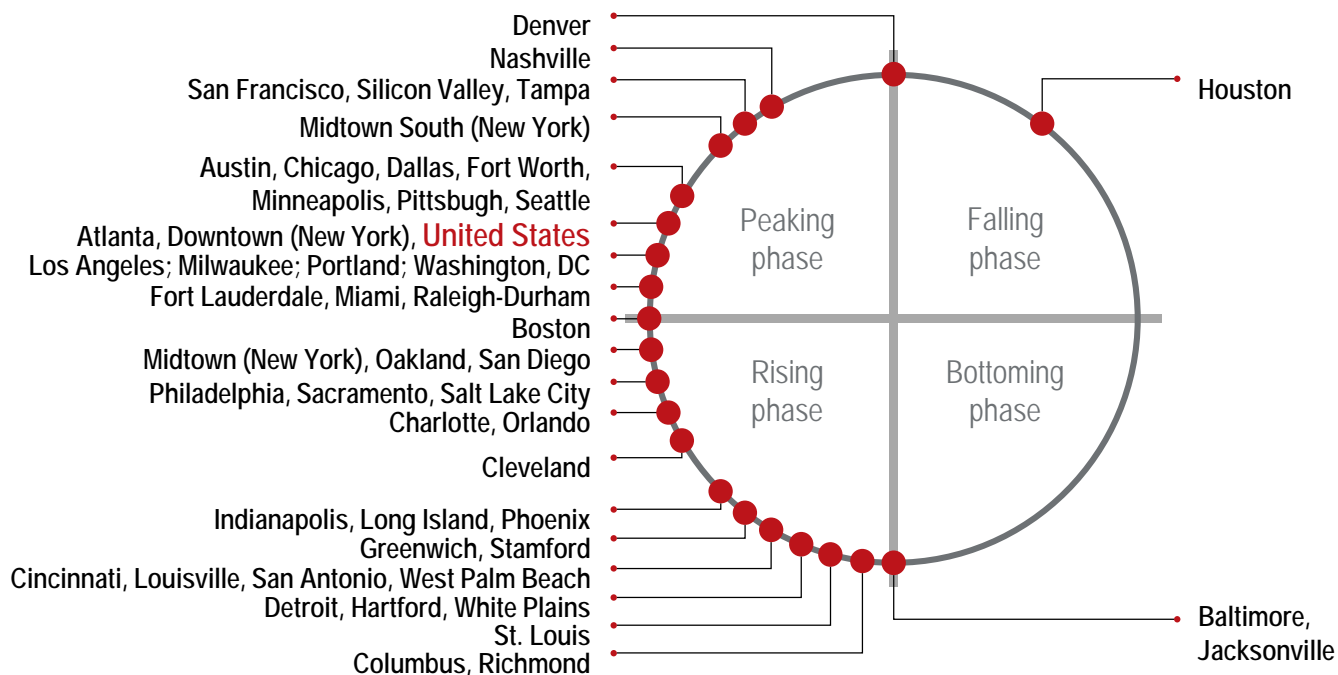
A combination of low vacancy and the increasing rate of new deliveries in select markets continues to push up asking rents across the United States, which rose by 1.0 percent over the course of Q3 to a cycle high of \$32.35 per square foot. Consistent with recent quarters, growth has been strongest in diversified and secondary markets such as Philadelphia, Nashville, Oakland and Salt Lake City, which benefit from broad-based economic gains and lower occupancy and labor costs. On the other hand, the continued removal of the few remaining high-priced blocks led to a 7.6 percent quarterly decline in Silicon Valley asking rents, although other fundamentals remain healthy.

The more than 35 million square feet of new space that has come online year-to-date is also providing a short-term boost to rents; this growth will abate somewhat as markets begin to reach equilibrium beginning in mid-2017. However, high preleasing rates across most markets mean that this new space will have more limited benefit to tenants than in previous cycles. Overall, we expect shifting market conditions in the coming quarters—spurred by supply and demand beginning to reach a balance—to result in plateauing rents in 2017, with leading markets the first to shift to the next phase of the rent cycle.



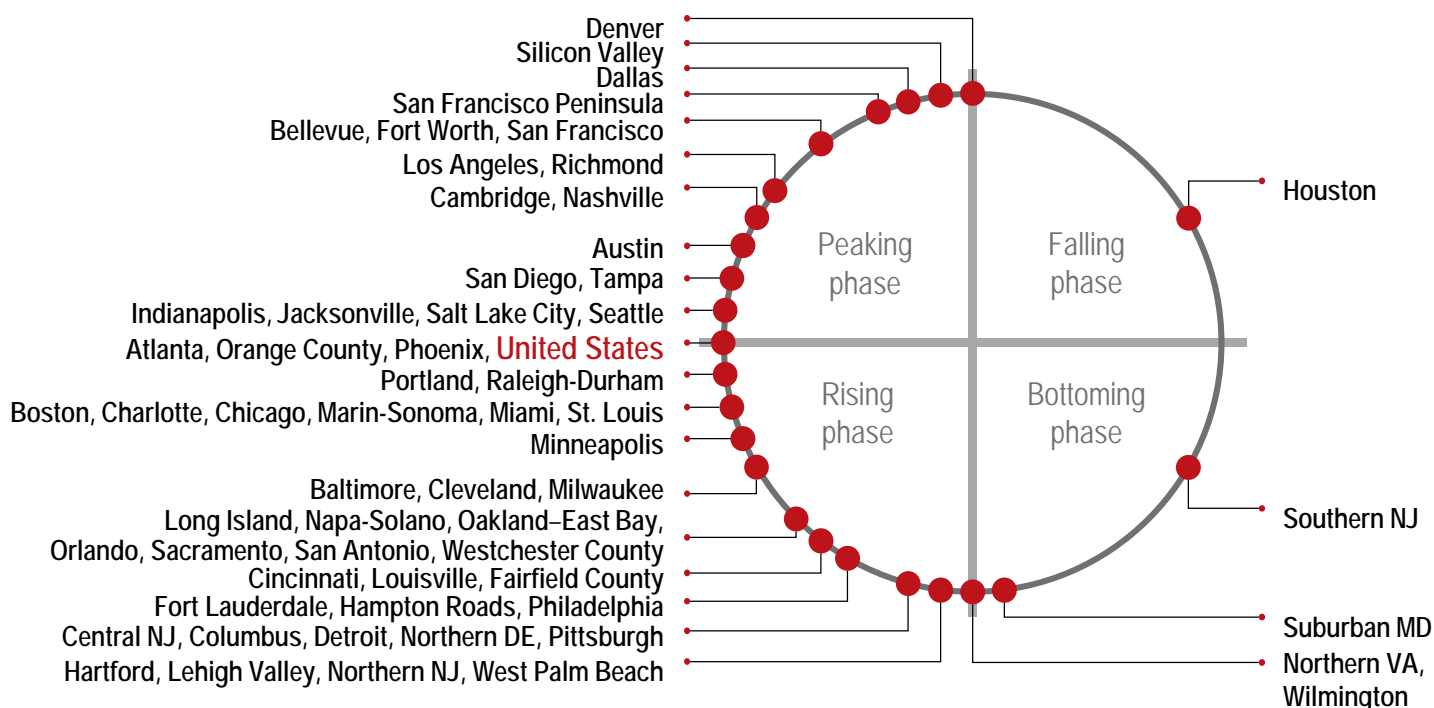
United States

CBD office clock



United States

Suburban office clock



Local markets



"Tenants should enjoy additional supply options over the next 12 to 24 months that will begin to balance conditions by reducing some of the leasing competition in the market."

Atlanta



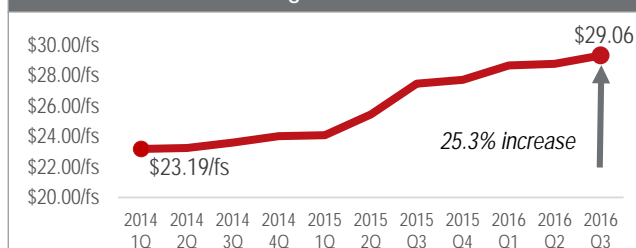
- Craig Van Pelt
Senior Research Manager,
Atlanta

Job creation leads to a very tight leasing market

Direct asking rents continue to push higher in the urban core

Lease rates for Class A properties in the Buckhead, Midtown, and Downtown submarkets have continued their climb to all-time highs over the past quarter, marking the 10th straight quarter that rates have risen. Given the lack of new deliveries coupled with positive net absorption, direct vacancy has been pushed to a 14-year low. Some relief may be on the way for tenants in the marketplace, as 850,000 square feet of Class A spec space is scheduled to be delivered by the 3rd quarter of 2017 to the CBD submarkets. Despite this new space coming online, it is expected to remain a landlord favorable market as deliveries of spec space only account for 2.1 percent of the current Class A inventory in the urban core.

Class A Urban direct asking rents

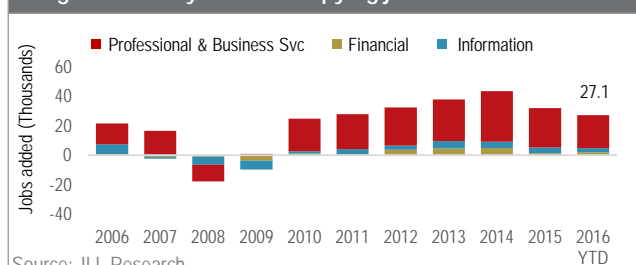


Source: JLL Research

Professional & business service jobs lead job growth

Driven by population growth that has consistently been in the top three of U.S. metros, Atlanta employment has experienced unprecedented growth with 351,000 jobs being added since 2011 alone. Unlike some other metros that have had tremendous growth, the types of jobs being added to the Atlanta economy are skilled, higher-paying positions. Much of the job growth has taken place within the professional and business services sector, adding 161,000 jobs since 2011. Many of these jobs are office-occupying positions, which correlates with the 9.3 million square feet of positive net absorption the Atlanta office market has experienced over this same time period. With population estimates projecting population to grow 42 percent by 2040, expect to see continued competition for quality office space.

Job growth led by office-occupying jobs

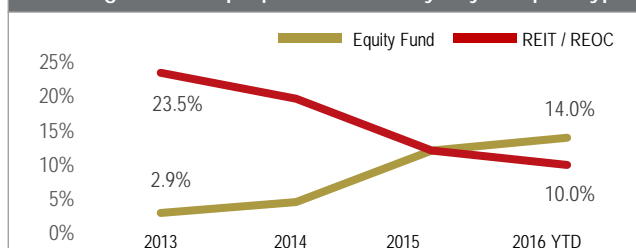


Source: JLL Research

Equity funds find increased value in the Atlanta office sector

Office buyers in the Atlanta marketplace have been dominated by developers and property companies, responsible for 46.2 percent of the properties traded in the metro in 2015, and 48.0 percent through the 3rd quarter of 2016. Over the past two years, equity funds have begun to increase their presence in Atlanta, responsible for 14.0 percent of the office trades so far this year, increasing from less than 5.0 percent in 2014. All of these equity funds are based outside of Atlanta, as investors chase value in the metro office market. During this same time, REITs/REOCs have been part of fewer office trades as the number of quality portfolio properties have declined as they come off the market due to transaction activity.

Percentage of office properties traded by buyer capital type



Source: JLL Research

133,266,353 Total inventory (s.f.)	280,252 Q3 2016 net absorption (s.f.)	\$23.66 Direct average asking rent	3,781,397 Total under construction (s.f.)
17.1% Total vacancy	941,285 YTD net absorption (s.f.)	6.0% 12-month rent growth	52.9% Total preleased

Austin



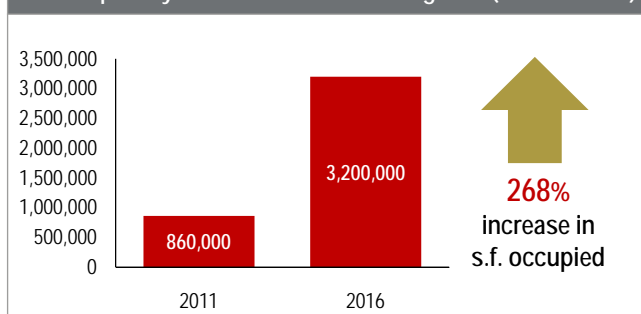
- Emily Hunt
Research Analyst,
Austin

Five years pass, Austin's tech giants more than triple in size

Technology sector experiences massive 5-year growth as Austin is revealed as 3rd most resilient tech market in United States

According to JLL's new High Technology Outlook, the technology sector remains the leading industry for real estate expansion in the US, accounting for almost 25 percent of leasing activity across the country in past two years. When stacked against 45 other technology markets, Austin is highlighted as the third most resilient technology market, meaning that in times of national economic contraction, Austin's tech sector is expected to remain stable. In 2011, seven of Austin's largest technology bellwether giants (think Google, Oracle), occupied approximately 860,000 square feet of space. Fast forward the clock to today and these same seven have now more than tripled in size, occupying nearly 3.2 million square feet, an impressive 268 percent increase.

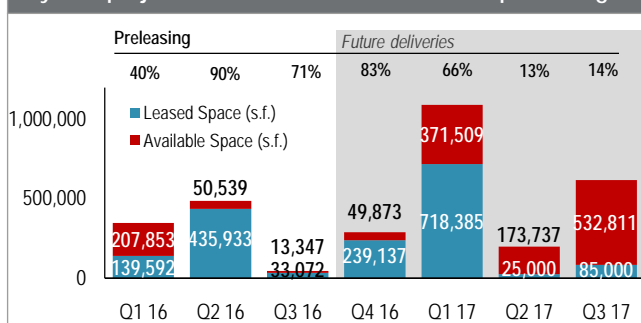
S.f. occupied by 7 select tech bellwether giants (2011-Present)



Over one million square feet on the horizon but little remains unencumbered

Five speculative projects broke ground during the third quarter across five submarkets representing 430,000 square feet. These projects include Springdale General (165,000 s.f. – East), MoPac Centre (100,000 s.f. – NW), 801 Barton Springs (95,000 s.f. – South), Walsh Tarlton (55,500 s.f. SW) and 2301 E Riverside (30,000 s.f. – SE). Six projects citywide totaling over one million square feet are slated to deliver during the first quarter of 2017. These six projects are currently 66 percent preleased. If we include the 100,000 square feet in leases, it brings preleasing to 75 percent, leaving only 270,000 square feet to meet strong demand.

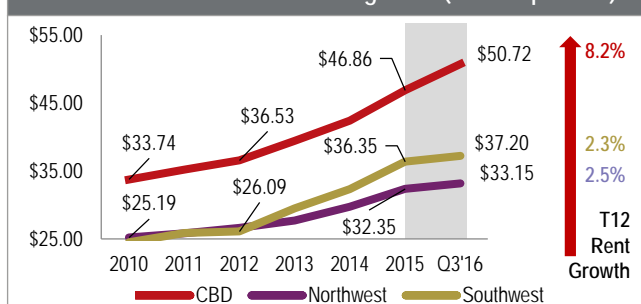
Citywide projected construction deliveries and preleasing



CBD year-over-year rent growth shows no sign of slowing

The CBD, Northwest and Southwest submarkets are the largest and most popular submarkets in Austin, representing 70 percent of inventory. Over the last twelve months, there has been an ease in rental rate growth. From third quarter 2014 to third quarter 2015, rental rate growth within each of the three submarkets totaled approximately 8 to 10 percent year-over-year. From third quarter 2015 to third quarter 2016, CBD rent growth has continued unabated while the Northwest and Southwest submarkets have shown signs of stabilization (with some exceptions such as the Domain). The CBD maintained a notable year-over-year rent growth of 8.2 percent while the Northwest and Southwest experienced a growth of 2.3 to 2.5 percent. While rental rate growth is easing Northwest and Southwest, consistent demand and limited supply will drive increases in rates into the foreseeable future.

Select submarket full service rent growth (2010 to present)



49,920,997 Total inventory (s.f.)	397,142 Q3 2016 net absorption (s.f.)	\$34.05 Direct average asking rent	2,251,066 Total under construction (s.f.)
11.3% Total vacancy	1,178,343 YTD net absorption (s.f.)	4.5% 12-month rent growth	47.4% Total preleased

Baltimore



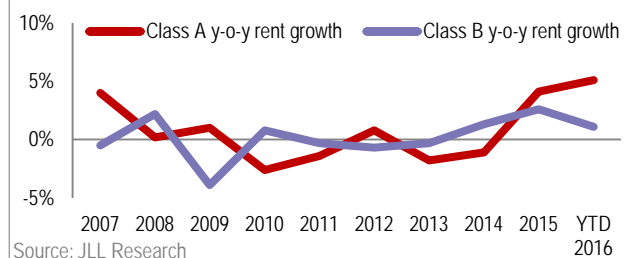
- Patrick Latimer
Research Manager,
Baltimore

Shrinking supply leads to tightening dynamics

Class A asking rent growth outpaces Class B at widening pace

The overall vacancy rate for Class A space dipped below 10.0 percent in the third quarter and asking rental rates rose 5.1 percent year-over-year as market dynamics moved in favor of landlords in several submarkets. Asking rates for the upper tiers of the market are growing at their fastest rate in over 10 years, while slow, but steady gains for Class B space have moderated. Annapolis has experienced the most robust gains: asking rates for Class A space have jumped 8.8 percent in the submarket during the past year. In the CBD, Class A rates on Pratt Street have grown by 5.1 percent over the past year to an average of \$29.47 per square foot.

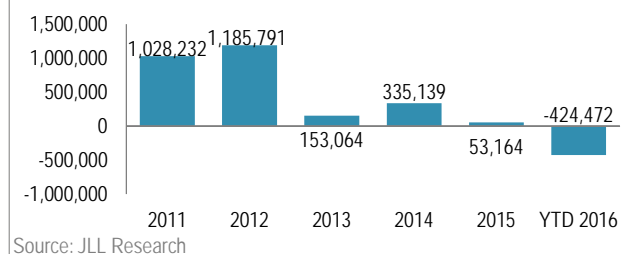
Year-over-year asking rental rate growth



Supply dips sharply in 2016 ahead of active development pipeline

In the absence of robust net new demand, a shrinking supply has aided in generating landlord favorable market conditions that have led to rental rate growth. Through the third quarter, inventory has declined by 424,472 square feet due to residential conversions of chronic vacancy in the CBD and owner/user sales in the suburbs. After securing the U.S. Army Corps of Engineers for 143,000 square feet, the new ownership of 2 Hopkins Plaza in the CBD is converting the remaining 11 floors in the building into residential, together removing 362,000 square feet of vacancy. The crunch for space is temporary, however, as the development pipeline reached 1.9 million square feet.

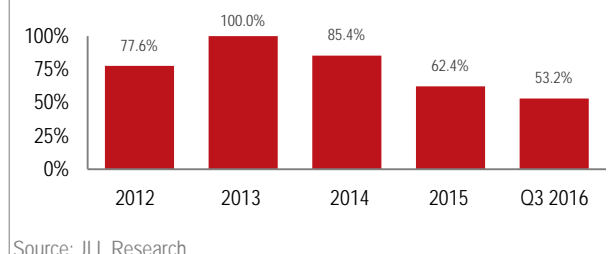
Change in supply (s.f.)



Developers moving more aggressively on groundbreakings

Developers have responded to a steadily decreasing Class A vacancy and a lack of existing large blocks of availability by moving forward on projects with fewer leases in place. Preleasing in the development pipeline has dropped 53.2 percent, which is the lowest level in five years. The trend is most prevalent in Howard County, where preleasing in the current pipeline will drop to just 30.3 percent once a 125,000-square-foot build-to-suit delivers later this year. At 10170 Junction Drive in the BWI/Howard County submarket, St. John Properties has moved forward speculatively on 100,000 square feet, which will deliver the submarket's first Class A inventory.

Development pipeline preleasing



70,843,997

Total inventory (s.f.)

118,669

Q3 2016 net absorption (s.f.)

\$23.50

Direct average asking rent

1,888,432

Total under construction (s.f.)

12.0%

Total vacancy

162,311

YTD net absorption (s.f.)

3.2%

12-month rent growth

53.2%

Total preleased

Boston



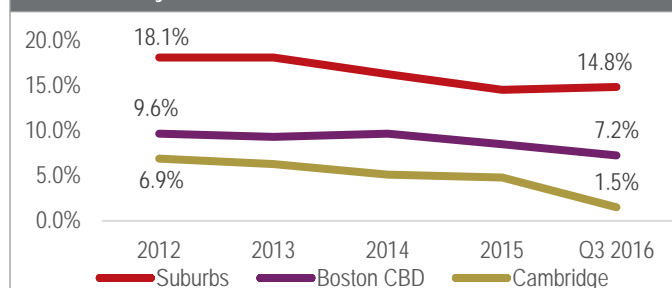
- Lisa Strobe
Vice President, Research,
New England

Quarter ends with a flurry of leasing activity

Rents hold steady as vacancy tightens across market

Office space across the Greater Boston market is becoming harder to find. With direct vacancy near 1.5 percent in Cambridge, tenants are spilling over into Boston's Downtown, the Seaport and the Back Bay as well as into amenity rich suburbs driving vacancy rates down across the market. While average asking rents for the market as a whole held steady this quarter, tenants seeking value-options in the North and South pushed suburban rents up 6.0 percent year-over-year and above previous highs. Boston's diverse economic base continues to be strong with over half of this quarter's largest leases coming from tenants looking to grow their footprint and over 30.0 percent from growing technology companies.

Direct vacancy continues decline across submarkets

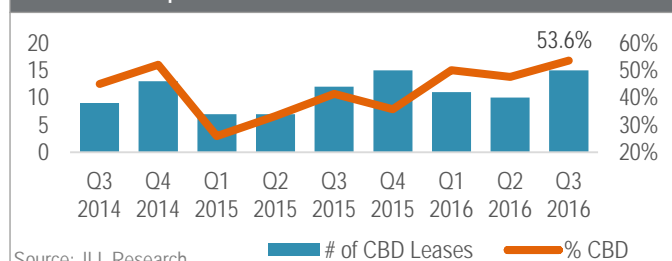


Source: JLL Research

Boston CBD sees spike in leasing

Despite a slower pace during the first half of 2016, leasing activity in Boston's Central Business District (CBD) spiked this quarter, recording 15 of the region's 28 leases over 20,000 square feet. With several transactions closing near the end of September, Boston's CBD leasing volume is up 50.0 percent year-to-date compared to this time last year. This involved a variety of tenants, including America's Test Kitchen leasing 53,000 square feet at the Innovation & Design Building in the Seaport and Red Hat Inc.'s 45,000-square-foot lease at 300 A Street in the Fort Point neighborhood. Tenant demand should keep this momentum going through the end of the year.

Transactions spike in the CBD

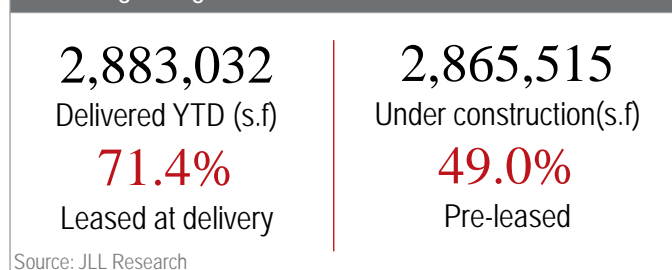


Source: JLL Research

New supply pushes absorption

During the first three quarters of 2016, 2.9 million square feet of new construction delivered in Greater Boston, nearly 72.0 percent pre-leased, pushing occupancy to new highs. With absorption at nearly 2.0 million square feet year-to-date, 2016 may hit near 2015 record highs. Notably this quarter, the first high-rise opened in the Back Bay since 2001 at 888 Boylston. The 17-story, 425,000-square-foot building commands some of the highest rents in the city and pushed Back Bay Class A rents to the highest level since 2008. At 86.0 percent pre-leased at delivery, the building's largest tenant is Natixis Global Asset Management.

Pre-leasing strong for new deliveries



Source: JLL Research

166,714,185 Total inventory (s.f.)	650,339 Q3 2016 net absorption (s.f.)	\$33.67 Direct average asking rent	2,865,515 Total under construction (s.f.)
13.5% Total vacancy	2,362,056 YTD net absorption (s.f.)	1.2% 12-month rent growth	49.0% Total preleased

Charlotte



- Patrick Byrnes
Research Analyst,
Charlotte

Despite distractions, market stays hot

Cranes becoming fixtures in Uptown

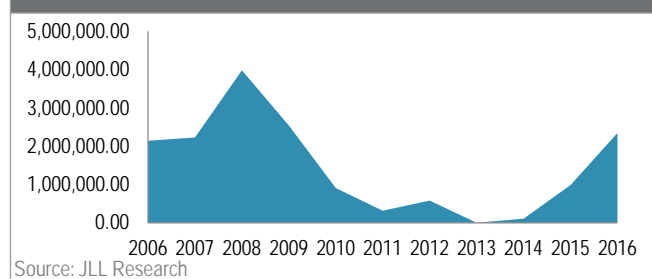
The Charlotte market has seen unprecedented construction growth since the recession in 2008. Currently, there is 2.3 million square feet of development occurring in both the urban and suburban submarkets. The majority of space coming online in the suburban submarkets over the next months will be due to build-to-suit projects. Sealed Air is nearing completion of its 300,000-square-foot research and development headquarters in the Airport submarket. They are expected to move in before the end of the year. Continuing the theme of suburban build-to-suits, CPI Security Systems is in the process of completing their 120,000-square-foot building, also in the Airport submarket. It is expected to finish in the first quarter of 2017. Ballantyne Corporate Park's lone development, The Brigham Building, is the only project under construction that is fully speculative. The 10-story, 285,000-square-foot, Class A building will deliver in the fourth quarter of 2016.

Market fundamentals continue to prove solid to close out the third quarter of 2016. The direct vacancy rate of 10.7 percent, continues its slide from 2010, where it reached a 10-year high of 17.9 percent. With vacancy rates staying relatively low, owners have the luxury of raising rates close to all time highs. Even with the economic backlash from House Bill 2, the facts continue to prove that the market is showing strength.

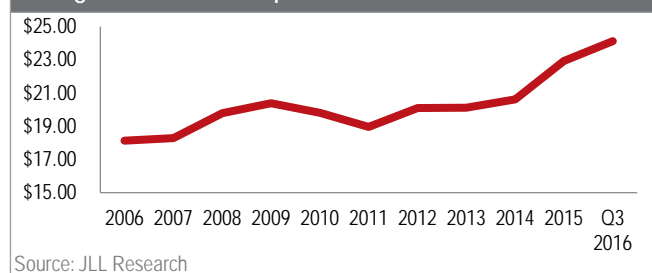
Look for strong preleasing to continue

A number of tenants have committed to big name projects in the CBD during the third quarter. Most notably, Regions Bank signed on for 63,806 square feet at 615 South College Street. Portman Holdings is developing the 381,263-square-foot, Class A speculative building in the Uptown submarket. Just outside of Uptown in the Midtown submarket, Elliot Davis Decosimo, a tax and accounting firm, has inked a deal at Beacon Partners 500 East Morehead Street for 58,600 square feet. As more groups continue to actively circle the market, look for new developments to continue with strong preleasing.

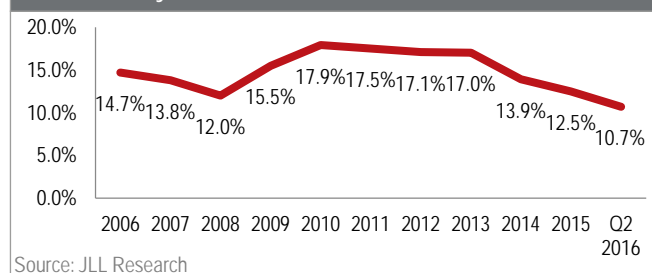
Under Construction



Asking rates continue to push



Direct vacancy



47,160,155

Total inventory (s.f.)

392,231

Q3 2016 net absorption (s.f.)

\$24.12

Direct average asking rate

2,343,472

Total under construction (s.f.)

11.8%

Total vacancy

843,060

YTD net absorption (s.f.)

2.4%

12-month rent growth

44.7%

Total preleased

Chicago (CBD)



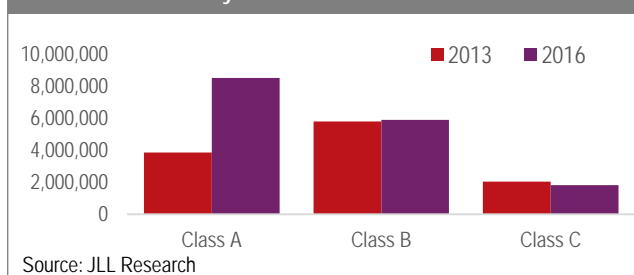
- Hailey Harrington
Research Manager
Chicago CBD

Chicago's shifting supply and demand

Steady tech demand coupled with no new supply pushing conversions

Chicago's office demand over the past five years has been driven by the growing technology sector and corporate tenants migrating downtown. Limited supply has pushed tenants to seek alternative options for office space, most notably seen in River North. Many tech tenants driving the market gravitate toward less traditional office space, preferring high ceilings and exposed brick, among other unique architectural features. As a result, conversions of showrooms and lofts into office space has quietly added 4.2 million square feet of new product in River North. Furthermore, Class B and C buildings in River North have seen 25.0 and 34.3 percent rent growth since Q3 2012, respectively, outpacing the overall market.

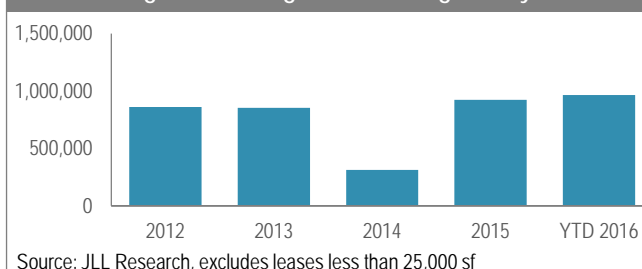
River North Inventory – Q3 2013 vs. Q3 2016



Suburban migration continues driving occupancy gains

Several large corporate relocations, including ConAgra and Motorola Solutions drove year-to-date net absorption to more than 2 million square feet. Suburban migration continues to drive absorption, accounting for approximately 6 million square feet of downtown's office space since 2010 as this urban migration phenomenon has turned into a steady stream of major employers seeing downtown Chicago as the optimal location for their talent and innovation strategies. Recent lease transactions from Duracell Batteries and Wilson Sporting Goods 100,000-square-foot commitment at Prudential Plaza – shows no signs of slowdown and points to strong net absorption over the next two years.

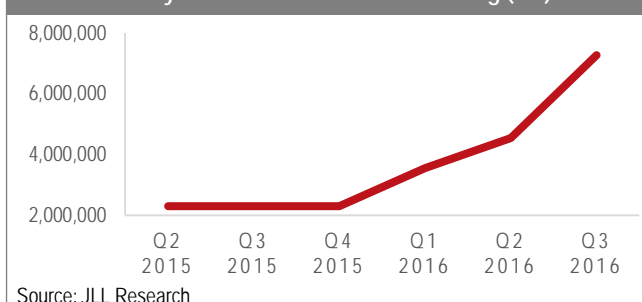
Suburban migration driving robust leasing activity



New towers rising but leasing must keep up

Construction downtown is a representation of pure pent-up demand for high-quality office space located near transit. Total vacancy set a new record low level of 10.4 percent, down 230 basis points y-o-y. The market is nearing a record low from a vacancy perspective. Looking ahead, if every proposed project moves forward, Chicago will add over 7.3 million square feet of space to the skyline by 2020, including the transformative renovation of the Old Main Post Office, delivering 2.1 million square feet of office space by Q1 2019. The question today is whether the Chicago office leasing velocity will sustain its strong pace. For now, however, both tenants and landlords are winning, with renewed vitality downtown and increased options for office space.

Office inventory under construction is climbing (s.f.)



141,946,121 Total inventory (s.f.)	332,500 Q3 2016 net absorption (s.f.)	\$37.55 Direct average asking rent	7,265,664 Total under construction (s.f.)
10.4% Total vacancy	2,096,643 YTD net absorption (s.f.)	1.8% 12-month rent growth	44.2% Total preleased

Chicago (Suburban)



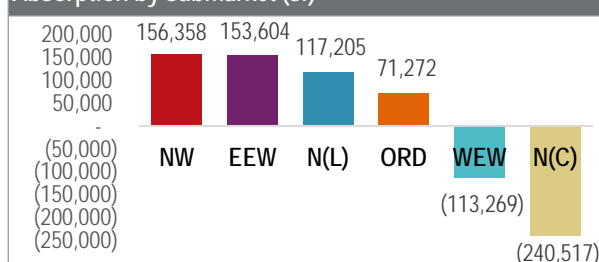
- Jack Trager
Research Analyst
Chicago Suburbs

Suburban rental rates continue slow, steady climb

Strong leasing activity drives positive absorption

Suburban tenants continue to strike while the anvil is hot, contributing to drive positive absorption in all submarkets, excepting the Western East/West and North Cook County. While at first glance it appears that both of these markets had relatively large negative absorption, those changes can be attributed to a single large move out in each submarket. In the Western East/West, ConAgra vacated 134,000 square feet at 215 W. Diehl Road, while Aon formally moved out of 289,613 square feet at 1000 Milwaukee Avenue, in North Cook County. Without these two large outliers, which have been expected for quite some time, all suburban submarkets would have shown positive net absorption this quarter.

Absorption by submarket (sf)

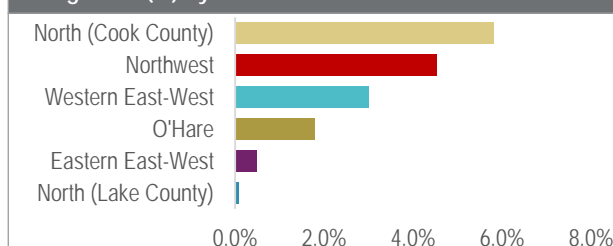


Source: JLL Research

Average rental rates eclipse \$24 /sf for the first time since 2008

As a result of the positive leasing momentum across the suburbs, rising rents were observed in all submarkets this quarter. The average rent growth across the region was on the order of 2.62 percent, with certain submarkets exceeding that rate. The new Aon vacancy comes to the market at an asking rate of \$31.00 per square foot, a 10.0 percent premium over the Q2 2016 average Class A asking rent in the vicinity, and lifting the submarket average by 5.8 percent. In the Northwest submarket, several smaller but important lease signings have proven the increased demand for space around Schaumburg. Pearson, Wistron, and DSV Air & Sea have recently executed leases and confirmed the resurgence of local office demand. Their combined leases drove the average rental rate in the Northwest submarket to jump by 4.5 percent.

Rent growth (%) by submarket

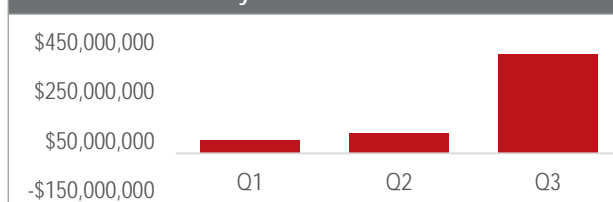


Source: JLL Research

Capital markets activity heating up

Suburban transaction volume skyrocketed in Q3 after a slow start to 2016. Zeller Realty led the way with their \$117M purchase of Commerce Plaza from Blackstone, which boasted the highest suburban sticker price of the year. They coupled it with an approximately \$73M acquisition of Woodfield Preserve from KBS Realty Advisors to further display investor confidence in the suburbs. Zeller was not the only active player as Northwestern Mutual completed a \$60M sale of Three Overlook Point to Griffin Capital. Other, smaller deals contributed as well and concluded the roughly \$402M worth of transactions in Q3.

2016 YTD sales activity



Source: JLL Research

*50,000 s.f. and higher

101,224,916 Total inventory (s.f.)	144,653 Q3 2016 net absorption (s.f.)	\$24.06 Direct average asking rent	1,111,000 Total under construction (s.f.)
18.6% Total vacancy	513,103 YTD net absorption (s.f.)	2.1% 12-month rent growth	100% Total preleased

Cincinnati



- Ross Bratcher
Research Analyst,
Great Lakes

Large absorption gains lead to big third quarter

GE Building, streetcar deliver in Q3 as CBD momentum continues

Of the numerous high-profile projects that have taken place in Cincinnati's reinvigorated urban core of the last five years perhaps none have been more highly anticipated than the Streetcar and GE Global operations center at the Banks. The third quarter saw the delivery of both projects, which were accompanied with declining vacancy and significant absorption. While GE provided the big splash, leasing activity within the CBD remained positive and market fundamentals continued to tighten. In addition, the \$106 million Fourth and Race mixed-use project commenced. These projects further solidify the CBD as a live-work-play environment and are driving downtown leasing activity.

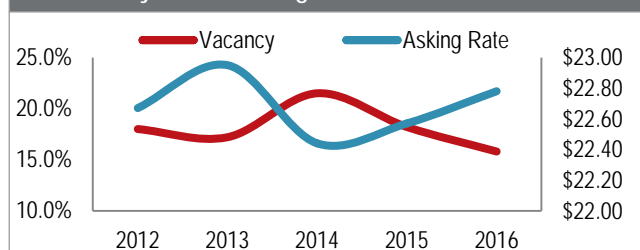
Third quarter provides bittersweet announcements for NKY Riverfront

CTI Clinical Trial and Consulting Services announced it would relocate from its Blue Ash Headquarters to RiverCenter II, a big win Covington. The company will relocate 250 employees in the first quarter of 2017 with 500 additional employees added over the next 12 years. Unfortunately, the announcement was followed by the news that the IRS will end its submission processing operation in Covington after the 2019 filing season. The mixed-bag of headlines creates a great opportunity for Covington, which contains the majority of office supply in the NKY Riverfront submarket. In the coming years landlords will have quality blocks of space available accompanied with an educated work force.

Market strengthens, developers still await commitments from large users

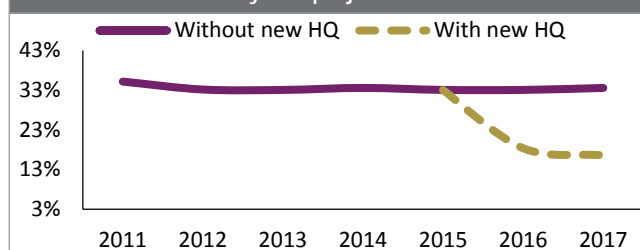
With the recent success of newly delivered speculative buildings and large build-to-suit projects, as well as organic growth within the market, vacancy rates across Cincinnati are decreasing as the market tightens. Tenant demand within the market has remained high leading to increases in rental rates. This activity has caused for a favorable environment for developers to operate in. While developers are confident in the market due to the recent activity, they are cautiously waiting to build speculative space until large users commit to prelease their projects. As the speculative space in the current pipeline is filled and the market tightens further, look for developers to become more motivated to break ground on their ambitious projects.

CBD vacancy rate vs. asking rate



Source: JLL Research

NKY Riverfront vacancy rate projection



Source: JLL Research, Excludes government buildings*

Major planned office projects

Property	Developer	Bldg s.f.
Blue Ash Airport	Al Neyer	600,000
Northpointe	Scott Street	260,000
Greens at Kenwood	Neyer Properties	250,500
Oakley Station	Vandercar	180,000

Source: JLL Research

35,264,038

Total inventory (s.f.)

623,599

Q3 2016 net absorption (s.f.)

\$19.41

Direct average asking rent

260,000

Total under construction (s.f.)

16.1%

Total vacancy

1,254,696

YTD net absorption (s.f.)

0.9%

12-month rent growth

11.0%

Total preleased

Cleveland



- Andrew Batson
Vice President, Research,,
Great Lakes

Win streak continues, Cleveland shines during RNC

Landlords list assets, look to cash in on positive PR

Cleveland shined during the Republican National Convention (RNC). The response from delegates and the media was overwhelmingly positive and each night an average of 25.2 million viewers tuned in to watch the event. Capital markets activity jumped noticeably during the timeframe surrounding the RNC as landlords saw the event as an opportunity to list their assets and cash in on all the positive PR. Two assets transferred in the second quarter and a third went under contract. Hertz purchased the North Point complex for \$109 per square foot while local residential developer K&D purchased Terminal Tower for \$66 per square foot. Meanwhile, Key Tower went under contract to Millennia Companies.

Recent capital market activity

Building	Size (s.f.)	Leased (%)	Status
Key Tower	1,442,000	81.2%	Under contract
North Point	873,000	80.1%	Sold: \$95.0M
Terminal Tower	585,000	73.3%	Sold : \$38.5M
AECOM Centre	580,000	65.5%	Listed for sale

Source: JLL Research, Real Capital Analytics

Spec construction returns to the suburbs after a six year hiatus

Two speculative office projects are currently under construction in the suburbs of Cleveland. Both development sites are located in the East submarket, arguably Cleveland's strongest suburban office market. Pinecrest, the larger of the two projects, totals 150,000 square feet of office space spread across two adjacent buildings in the center of a mixed-use development. The second project, located in the Chagrin Highlands corporate park, is a free standing 47,000-square-foot office building. While Cleveland has seen a number of build-to-suit and owner-user office developments since the recession, the Pinecrest and Chagrin Highlands projects represent the return of speculative office construction in Cleveland and the resurgence of developer confidence.

Current office construction projects

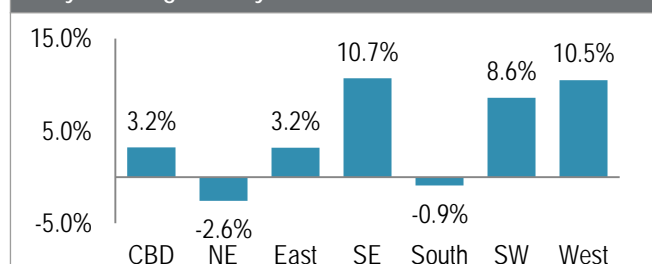
Building	Size (s.f.)	Submarket	Type
American Greetings	660,000	West	Owner-user
Pinecrest	150,000	East	Speculative
Chagrin Highlands	47,000	East	Speculative
IBM – Explorys	43,000	Midtown	Build-to-suit

Source: JLL Research

Rents are poised for growth as landlords gain leverage

Asking rents in the Cleveland office market are known for their consistency. Since 2000 the average office asking rent has wavered little, reaching a high of \$19.99 per square foot in the first quarter of 2002 and dipping to a low of \$18.46 per square foot in the first quarter of 2012. Given this historical context, the sustained rent growth recorded over the last five years is significant. Asking rents have increased \$0.80, or 4.3 percent since 2011. These gains are the product of increased tenant demand and little to no supply additions. As the market continues to tighten over the coming year, landlords will gain the necessary leverage to push rents across most submarkets and classes.

Five-year rent growth by submarket



Source: JLL Research

28,390,660

Total inventory (s.f.)

186,026

Q3 2016 net absorption (s.f.)

\$19.31

Direct average asking rent

197,000

Total under construction (s.f.)

19.7%

Total vacancy

80,282

YTD net absorption (s.f.)

0.3%

12-month rent growth

8.1%

Total preleased

Columbus



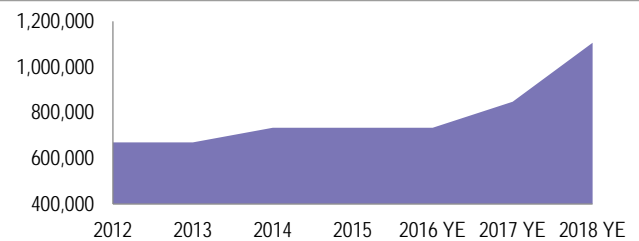
- Sam Stouffer
Research Analyst,
Great Lakes

Development activity is surging across Columbus

Developers are pushing the mixed-use pulse in Short North

The Short North district of Columbus has been presented with several recent mixed-use proposals that will effectively expand the neighborhood. Both Pizzuti and Kaufman Development have responded to demand with two separate 10-story mixed-use buildings, which would deliver more than 110,000 square feet of Class A space. Several other planned offices are in the Short North pipeline, such as mixed-use buildings from Borror Properties and Wood Schiff, primarily due to the growing popularity of working in the old arts district. The Short North is expected to see a surge of activity over the next few years, with an estimated 360,000 square feet of office space in response to this growing lifestyle.

Office space inventory rate in the Short North (s.f.)

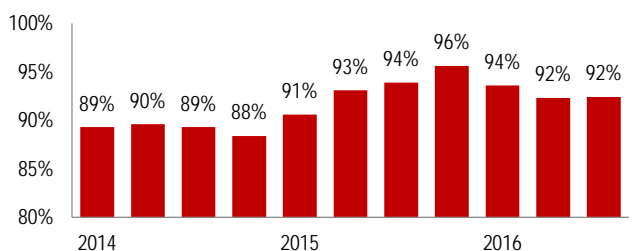


Source: JLL Research

Redevelopments are answering downtown demand for Class A space

As the downtown market for Class A office space remains tight, a number of developers have decided to respond with redevelopments and renovations of older buildings. The former Columbia Gas building was renovated to attract high profile tenants such as law firms BakerHostetler and Reminger Company, which relocated from Class B buildings. The redevelopment of the Buggyworks building in the Arena District has also received attention from notable Columbus firms including Cameron Mitchell and ODW Logistics. These redevelopments and renovations have allowed for developers to leverage existing buildings to provide unique, attractive Class A space downtown.

Downtown Class A occupancy (%)



Source: JLL Research

Investors are looking to the suburbs for growth

Activity beyond the central business district has also been growing due to the urbanization of several suburban areas. Areas like Easton have successfully established microcosms for businesses. Now, two massive suburban speculative projects are expected to bring more than 1.0 million square feet of office space to these mixed-use districts. The sprawling Bridge Park development in Dublin is expecting to welcome tenants into its first office building this fall. Additionally, the Hamilton Quarter development in New Albany is projected to begin construction in the coming months. These substantial projects are expected to develop the next suburban business districts.

Current large-scale suburban office projects

Project	Submarket	s.f.	Type	Est. completion
Hamilton Quarter	New Albany	500,000	Speculative	Q4 2018
Alliance Data	Easton	565,000	BTS	Q4 2017 (Phase 3)
Bridge Park	Dublin	388,000	Speculative	Q3 2018
Pointe at Polaris	Polaris	200,000	Speculative	Q2 2018

Source: JLL Research

28,524,196

Total inventory (s.f.)

15,858

Q3 2016 net absorption (s.f.)

\$19.18

Direct average asking rent

737,000

Total under construction (s.f.)

12.0%

Total vacancy

252,073

YTD net absorption (s.f.)

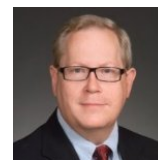
2.8%

12-month rent growth

46.0%

Total preleased

Dallas



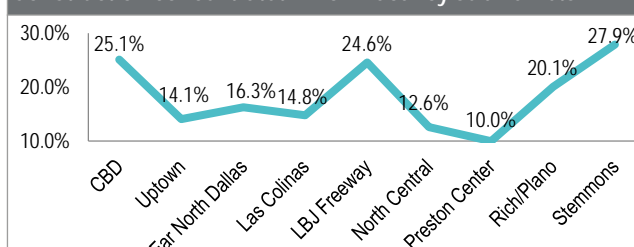
- Walter Bialas
Vice President, Research,
Dallas

New product attracting tenants, activity still high

Vacancy dips as tenants move into new construction

Net absorption started the year slow, but has moved back above the historic norm with over half a million square feet absorbed in the third quarter. Net absorption remains strong, but new construction has outpaced demand over the past year and vacancy is up slightly from last year. As previously noted, the vacancy rate is low by historic standards, but it is expected to continue to move upward as a sizable amount of new construction is delivered to the market over the next two years.

Construction concentrated in low vacancy submarkets

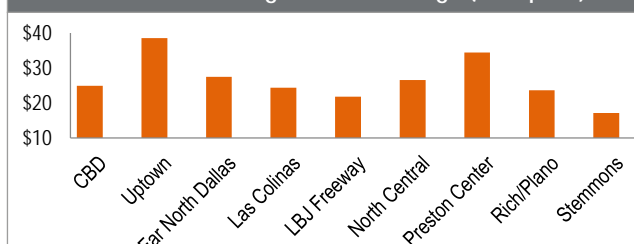


Source: JLL Research

Rate pressure remains high, new deliveries moving average to new highs

Relatively low vacancy and new construction deliveries have been moving the average asking rate to new highs for the market. Year-over-year, direct asking rates increased for Class A & B space by 7.6 percent. Rent increases ranged from less than one percent in Preston Center to almost ten percent in Uptown. Several tenants have expressed rent shock as lease terms come up for renewal. In many cases, tenants have downsized their footprints to adjust to rate pressure.

New construction moving rates to new high (A&B p.s.f.)



Source: JLL Research

Construction pipeline dips, but points to higher vacancy ahead

While the construction pipeline is not at record highs, it is above the long term average and above recent net absorption rates. Dallas traditionally has a large spec construction pipeline with about 20 percent being made up of build-to-suit projects. Currently 60 percent of the construction pipeline is made up of large build-to-suits (most of which will deliver in 2017 and early 2018). Still, for most of the current build-to-suits underway, older existing space will need to be backfilled to keep the market in balance. For the year-to-date, 3.3 million square feet of new construction has been completed. In the fourth quarter another 2 million square feet is scheduled for completion.

Spec construction set for delivery in remainder of 2016

850,000 s.f.
(vacant spec set for fourth quarter 2016)

Source: JLL Research

165,531,522 Total inventory (s.f.)	526,528 Q3 2016 net absorption (s.f.)	\$25.74 Direct average asking rent	10,947,382 Total under construction (s.f.)
18.9% Total vacancy	1,541,200 YTD net absorption (s.f.)	7.6% 12-month rent growth	68% Total preleased

Denver



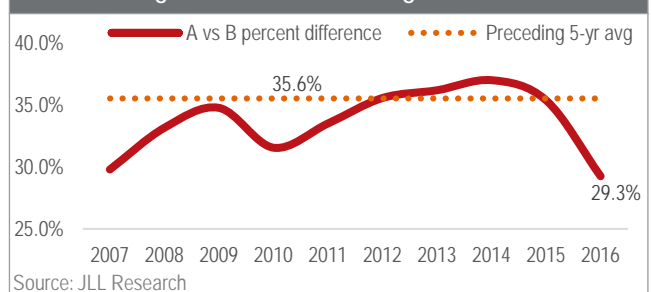
- Amanda Seyfried
Senior Research Analyst,
Denver

Rising availability provides opportunities for users

Class B rates rising as Class A rents plateau

Over the last 18 months, an increasing supply of availability throughout the market's Class A inventory has begun to stifle asking rate growth. Concurrently, Class B owners have seized the opportunity to push their rates. Equating to a 29.3 percent discount, Class B rates closed the quarter at just \$8.13 per square foot (p.s.f.) below Class A figures. This represents a narrowing gap between classes, and, ultimately, users in the market will be faced with a decision: save cash by opting to locate in a Class B property, or pay marginally more for a home within the market's top-quality product. During the quarters ahead, this flight to quality should help limit the growth of available Class A space.

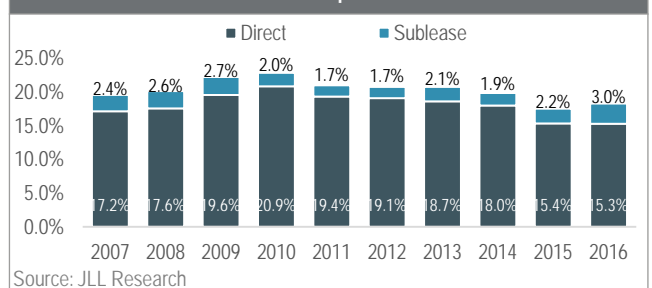
Class B asking rent discount shrinking:



Availability creeping up as subleases continue to hit market

Although not replicating its recession-era performance, space availability is again climbing. Newly available sublease space is a main culprit; direct space options in both new and long-standing buildings have remained consistent for the past year. Energy sector tenants are still giving back space thanks to stubbornly low oil pricing. This helps explain the 10-year record-high for sublease vacancy. Non-energy-related occupiers increasingly seek higher efficiency, which includes space consolidation. Furthermore, preleasing for new construction has lagged, leading to even more options. Expect availability to remain at or above current levels, which will allow tenants to regain leverage over the next 12 to 18 months.

The rise of available sublease space



Despite cloudy horizon for CRE, broader economy remains strong

Most economic indicators illustrate a remarkably robust local economy. The past five-year period alone has seen 164,000 new residents migrate to Denver. The metro's unemployment rate rests at a 15-year low point; at 3.4 percent, it marks the lowest unemployment rate of all 51 metros with a population of 1.0 million or more. Employment growth has nearly doubled the national rate over the past six years, and 130,000 net new jobs are expected by 2020. Despite this very encouraging momentum, a rising cost of living and a near-full employment labor market may curb the pace of net in-migration influx during the next several years.

Folks keeping seeking out Denver

+32,800

Average annual net migration for the last five years

Source: JLL Research, Moody's Analytics

108,018,472 Total inventory (s.f.)	165,467 Q3 2016 net absorption (s.f.)	\$26.56 Direct average asking rent	3,649,177 Total under construction (s.f.)
13.8% Total vacancy	-20,603 YTD net absorption (s.f.)	4.1% 12-month rent growth	28.5% Total preleased

Detroit



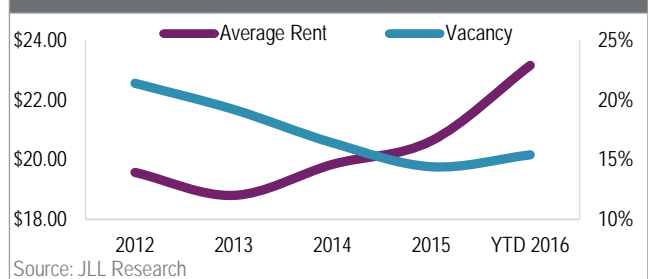
- Harison West
Research Analyst,
Great Lakes

Detroit's office market appeals beyond the usual

New office construction is on the horizon in downtown Detroit

Little Ceasars' Headquarters is the first office building to be built in the CBD since One Kennedy Square was constructed in 2006. The Ilitch family, who is responsible for the new construction, is also responsible for the new Red Wings stadium which falls inside District Detroit, a five section community connecting Midtown and Downtown. Since 2012, downtown vacancies have dropped 6.0 percent and rents have climbed 15.5 percent. As a result of tight market conditions, look for companies choosing to build their headquarters from the ground up to ensure their presence in the CBD is for the long term.

CBD rents versus vacancies



Investments sales trend upward as investors look favorably on Detroit

Redico's purchase of 150 W. Jefferson for \$81.5 million or \$166 per square foot highlighted that Dan Gilbert is not the only investor in downtown Detroit. In addition to purchasing the Class A office building from Piedmont Office Realty, Redico also developed One Kennedy Square in the CBD overlooking Campus Martius for \$54 Million in 2006. Just a few blocks away, the Buhl building was also under contract to be sold during third quarter, however the deal fell apart after the buyer could not raise the capital needed. Look for increased investment sales activity in the Detroit office market as 2016 comes to a close.

Notable recent investment sales

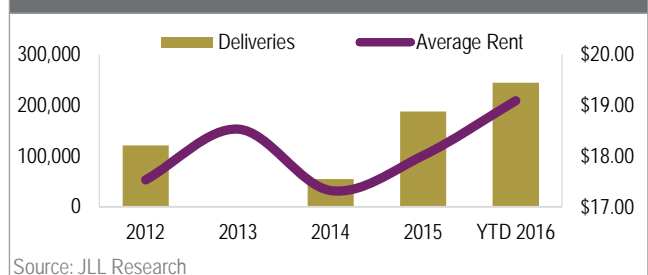
Building name	Buyer	Size (s.f.)	Sale price (\$M)
150 W Jefferson	REDICO	489,786	\$81.5
One Detroit Center	Bedrock	1,000,000	\$100.0
City Center Building	Unicorp	297,530	\$21.0
Harman Becker	ElmTree Funds	188,042	\$42.8

Source: JLL Research

Detroit suburban office market continues to prove its resiliency

During the third quarter, a number of large leases were executed in the suburbs including General Motors (88,779 s.f., Macomb submarket), Bank of America (58,613 s.f. Farmington Hills submarket) and Siemens (17,120 s.f., Washtenaw submarket). Overall the suburbs have experienced a decrease in vacancy and positive absorption. Tenant demand for Suburban Class A buildings is still solid despite rising rents, which are up 10.2 percent since 2014. The shortage of space and rising rents is causing developers and large occupiers to pursue value-add and build-to-suit opportunities to meet the demand for superior quality space.

Suburban rents and new deliveries



66,622,553 Total inventory (s.f.)	12,159 Q3 2016 net absorption (s.f.)	\$19.71 Direct average asking rent	609,980 Total under construction (s.f.)
21.0% Total vacancy	605,982 YTD net absorption (s.f.)	0.1% 12-month rent growth	100% Total preleased

East Bay



- Katherine Billingsley
Research Analyst,
Oakland - East Bay

Suburbs lead East Bay in occupancy gains

Large deals define third quarter

The I-680 Corridor boasted the largest leasing volume in the East Bay this quarter. Several large transactions in the Tri-Valley drove leasing activity. Rosewood Commons is almost at full occupancy as Ellie Mae plans to expand into 160,000 square feet in Building 3. Furthermore, the East Bay continues to lure companies from across the bridge as Rodan & Fields out of San Francisco leased over 150,000 square feet at 2600 Camino Ramon, the market's largest expansion into the East Bay this year.

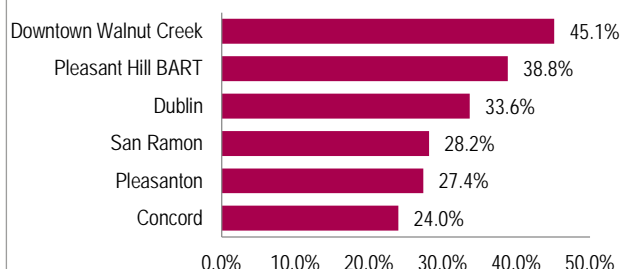
Why East Bay? Suburban live-work-play drive leasing activity

Tenant demand continues to spill over from Oakland and San Francisco, generally focused on BART-centric submarkets such as Downtown Walnut Creek, Pleasant Hill BART, Concord and Dublin/Pleasanton, which also exhibit the highest year-over-year rent growth. Interest for the suburban East Bay has grown over the past five years, driven by the shift in workplace design and the adaptation of live-work-play environments in office campuses. Moreover, the suburbs continue to suit companies looking for a viable and educated labor pool to assist in growth and productivity. Additionally, business tax rates are considerably lower in cities that command an annual flat fee such as Dublin and San Ramon.

Strong occupancy gains in the South, yet still options left for large users

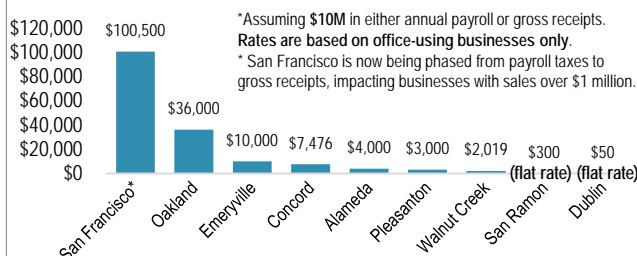
The South I-680 led the suburbs with the strongest occupancy gains this quarter, with over 200,000 square feet of positive net absorption driven mainly by Zeltiq Aesthetics at Rosewood Commons. While there are only two large block options greater than 20,000 square feet available in the North I-680, there are still large block options in the Tri-Valley. Notably, 400,000 square feet of Class A office space is available for lease at Park Place in Dublin and over 100,000 square feet available at 2600 Camino Ramon. Meanwhile, capital markets remain on the upswing as stabilized occupancies in the market have piqued investor interest in the I-680 Corridor. This year more than \$250 million of sales transactions have occurred and two Class A buildings are set to trade this year, 2999 Oak Road and 2121 N. California Boulevard. Investment activity is expected to accelerate as stabilized occupancies provide growth opportunities for investors and signify a positive outlook in the East Bay for the remainder of 2016.

5-year rent increase higher near BART stations



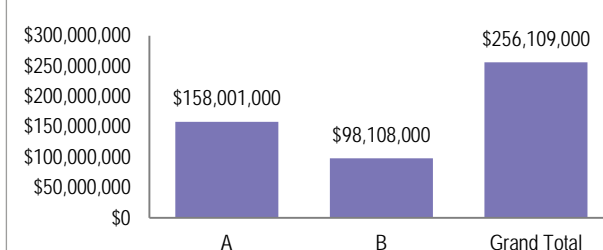
Source: JLL Research, direct avg. asking rents

Business tax climates cooler in the East Bay



Source: JLL Research, city websites, annual business tax estimates

YTD 2016 sales volume by building class



Source: JLL Research, Real Capital Analytics

28,266,307

Total inventory (s.f.)

268,806

Q3 2016 net absorption (s.f.)

\$31.75

Direct average asking rent

0

Total under construction (s.f.)

13.1%

Total vacancy

460,551

YTD net absorption (s.f.)

4.4%

12-month rent growth

0.0%

Total preleased

Fairfield County



- Dayna McConnell
Research Analyst,
Fairfield County

Greenwich office market heats up as weather cools down

Healthcare/financial services lead leasing activity in Greenwich submarkets

Leases signed in both the Greenwich CBD/Railroad and non-CBD submarkets accounted for 22.0 percent of all deals transacted in Fairfield County during the third quarter of 2016. The leading industry sector in Western Greenwich was healthcare, with Stamford Hospital taking 31,362 square feet of space at 75 Holly Hill Lane. Directly across the street at 500 West Putnam Avenue, Greenwich Hospital renewed for approximately 15,230 square feet. The Fareri Group purchased 500 West Putnam Avenue earlier this year, and it is expected that as healthcare space continues to be in high demand, the existing Class A office property will be converted for 100 percent medical use. Financial services drove leasing activity in Greenwich's CBD/Railroad submarket.

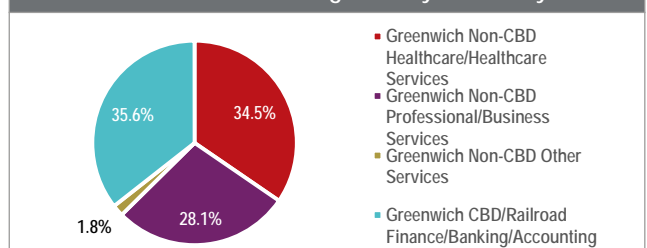
Renewals make up 34.2 percent of leasing across Fairfield County

Across all submarkets in Fairfield County, 34.2 percent of all leases transacted in the third quarter were renewals. Of approximately 610,000 square feet leased in the third quarter, 197,944 square feet were renewed by existing tenants. The largest deal was Priceline.com's renewal for 69,882 square feet at 800 Connecticut Avenue in the Norwalk I-95 submarket. New leases, predominantly in the Greenwich non-CBD submarket, comprised 19.4 percent (122,566 square feet) of signed leases. Sublease deals at 55 Railroad Avenue and 33 Benedict Place in Greenwich's CBD/Railroad submarket kept vacancy low at 1.2 percent, accounting for 7.1 percent (42,998 square feet) of all completed transactions in the County.

Danbury office leases continue in the third quarter

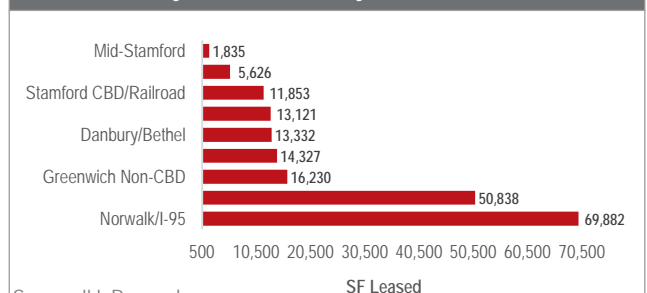
Typically quiet, the Danbury/Bethel submarket remained tight for the third quarter in a row by the end of Q3. Two of the largest lease deals transacted in the submarket include Odyssey Logistics' relocation (within building) and extension of 22,208 square feet at 39 Old Ridgebury Road, while PlusMedia LLC renewed its 10,860-square-foot lease at 100 Mill Plain Road. It is expected that Danbury will continue to be in high demand for companies in certain industry sectors; transportation and logistics, energy, and manufacturing companies receive the most bang for their buck in Northern Fairfield County.

Greenwich submarkets: leading industry sectors by s.f.



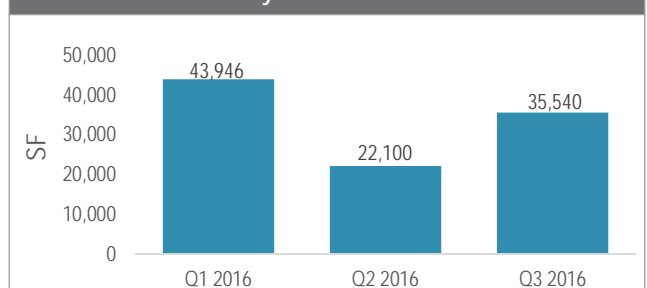
Source: JLL Research

Fairfield County – Q3 renewals by submarket



Source: JLL Research

Quarter-to-date: Danbury/Bethel lease transactions



Source: JLL Research

43,811,681

Total inventory (s.f.)

-113,153

Q3 2016 net absorption (s.f.)

\$41.86

Direct average asking rent

0

Total under construction (s.f.)

21.9%

Total vacancy

1,009,553

YTD net absorption (s.f.)

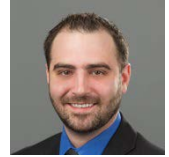
6.0%

12-month rent growth

0.0%

Total preleased

Fort Lauderdale



- Marc Miller
Research Manager,
Florida

Class A assets continue to thrive in tight market

Executive suite providers thrive in the tight downtown market

Downtown Fort Lauderdale has seen strong growth as market fundamentals continue to strengthen and the demand for executive suite space grows. The majority of tenants operating out of executive suites require deal terms not appealing to downtown landlords – typically tenants are looking for small footprints and short terms. These tenants also tend to have more immediate occupancy requirements. Most recently, Pipeline Workspaces opened a 13,100 square foot space in One Financial Plaza making them the newest operator to lease space in the market. Further, six of the 13 Class A assets have a major provider located within the building (Corporate Center, a Class B asset also has a 14,200 square foot Regus located in the building). Combined, these suites have an occupancy of 95.9 percent and the cost per desk ranges from \$380 to \$900 per month. For new providers looking to enter the market there are few options available as large blocks in the market continue to fill up.

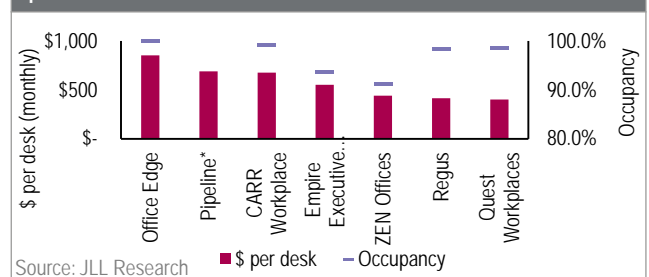
Continued growth among Class A assets in Broward County

Direct vacancy in Broward County has declined 80 basis points quarter-over-quarter to 11.9 percent, making the third quarter the strongest for vacancy decline over the previous 24-months. Propelling these trends, there has been strong absorption among Class A assets in the County – year-to-date 1.3 percent of the Class A inventory in the market has been absorbed. That is more than the annual absorption numbers seen in 2015. Downtown Fort Lauderdale and Southwest Broward are leading these trends as they have absorbed 3.5 percent and 3.0 percent of their inventory, respectively.

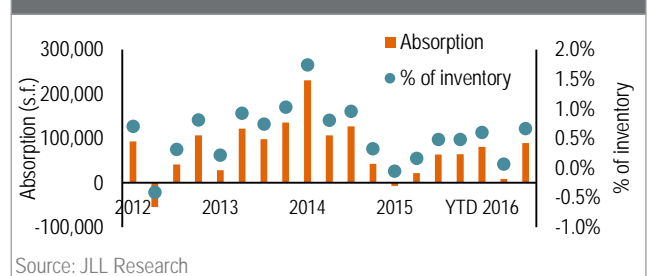
Majority of rate growth is coming from increased operating expenses

The downtown market has seen exceptional growth as base and full service rates continue to rise, up 37.7 percent and 51.3 percent, respectively from 2001 levels. However, in the suburban markets we have seen that the growth has not been as consistent. For the most part, the strongest growth is spurring from full service rates being driven by the increased operating expenses. In turn, these increases while having impacts on the tenants are not resulting in equal positive returns to owners.

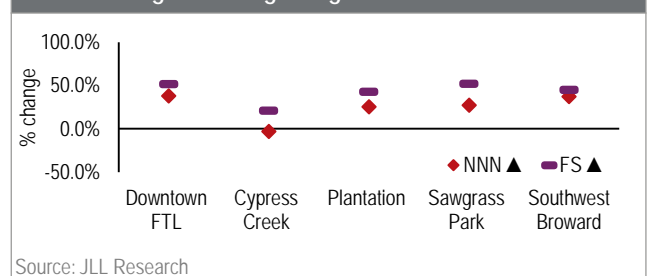
Occupancy and average desk rate by executive suite operator



Class A YTD absorption has already outpaced 2015 numbers



Class A change in asking rate growth – 2001 to current



22,806,200 Total inventory (s.f.)	120,400 Q3 2016 net absorption (s.f.)	\$28.89 Direct average asking rent	94,800 Total under construction (s.f.)
15.1% Total vacancy	216,800 YTD net absorption (s.f.)	2.5% 12-month rent growth	0.0% Total preleased

Fort Worth



- John French
Research Analyst
Fort Worth

Changing face of suburban Fort Worth

Large suburban tenants upgrading as new Class A space delivers

Many large tenants in West/Southwest Fort Worth continue to migrate from the tired Class B buildings that previously dominated the submarket into significantly upgraded spaces as new Class A office construction accelerates. In the past month alone, Smith & Nephew began building out the top two floors in 5600 Clearfork Main Street, and Lhoist North America signed a lease for several more floors in the same building. PAVLOV Advertising and Brazos Midstream also signed leases in the newly delivered 7th & University. This continues a long term trend of larger tenants flocking to Class A buildings as the face of this suburban submarket changes. In the past year, five new buildings delivered, and two more began construction, marking the biggest wave of construction since 2009.

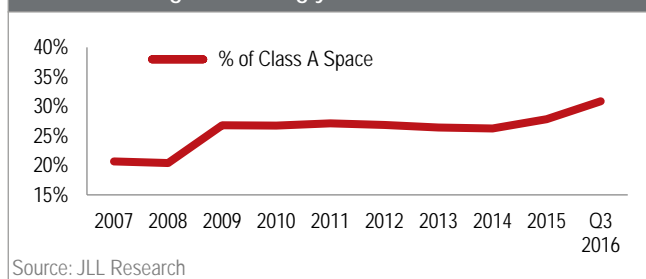
Tenant activity accelerates coming out of the summer

The fourth quarter of 2016 looks promising as multiple large tenants increase the pace of their search. To date, leasing activity in 2016 has lagged behind the previous five years. But multiple large tenants are increasing the pace of their search as they look to sign new deals by the end of the year. Certain submarkets may see more leasing activity in the fourth quarter than they have seen at any point in the past five years.

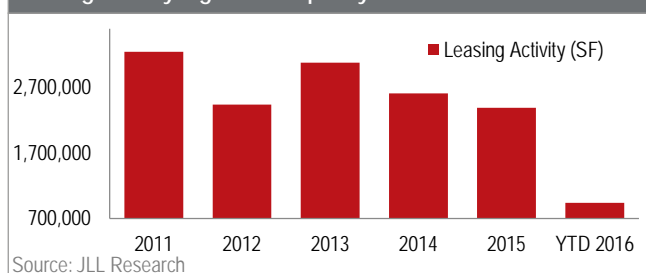
Downtown rents remain stable even as leasing activity slows

While downtown direct leasing activity is less than half of any year since 2009, Class A direct asking rents have not seen a negative adjustment. In fact, several Class A buildings have raised their rates by a dollar or more since last year. This rent stability can be attributed to at least three separate factors. First, vacancy rates have remained relatively stable, with Class A vacancy still below 15 percent and Class B vacancy still below 9 percent. These vacancy numbers are being held down by sublease absorption in many buildings downtown. Second, several large deals are anticipated to come through the pipeline, either in the fourth quarter of 2016 or the beginning of 2017. Third, many downtown landlords want to avoid branding their buildings as a budget option. The Frost Tower under construction has set the new high-water mark at \$40 per square foot, and most Class A spaces have pushed their rents near or over \$30 per square foot in response.

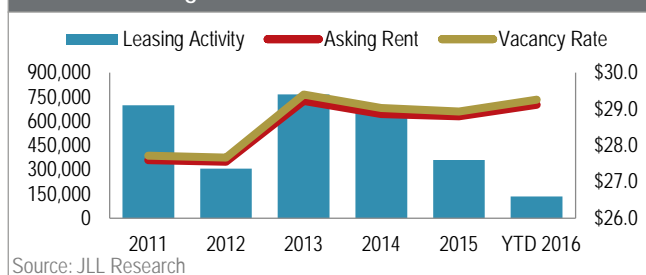
Class A buildings increasingly dominate Southwest FW



Leasing activity lags behind past years but looks to rebound



Downtown asking rents have remained stable



40,433,966

Total inventory (s.f.)

84,542

Q3 2016 net absorption (s.f.)

\$22.52

Direct average asking rent

1,222,951

Total under construction (s.f.)

14.9%

Total vacancy

224,869

YTD net absorption (s.f.)

3.7%

12-month rent growth

31.2%

Total preleased

Hampton Roads



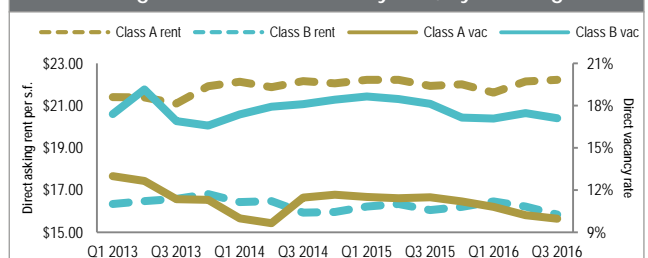
- Mike Metzger
Research Analyst
Hampton Roads

Uneven performance by class and location

Class A rents tick upwards, but Class B rents drop

While direct asking rents for Class A space rose for the second quarter in a row as the direct vacancy rate dropped to 10.0 percent, rents for Class B space dropped by \$0.38 to \$15.84 per square foot despite a decline in the vacancy rate of 40 bps. Occupancy has risen gradually (Class A vacancy has not been lower since Q2 2014, while Class B vacancy is lower now than at any point in more than five years), but for most properties asking rents have yet to reflect this improvement. A substantial amount of competitive inventory remains available, and landlords are wary of excluding themselves from property tours with high face rents.

Direct asking rent vs. direct vacancy rate, by building class

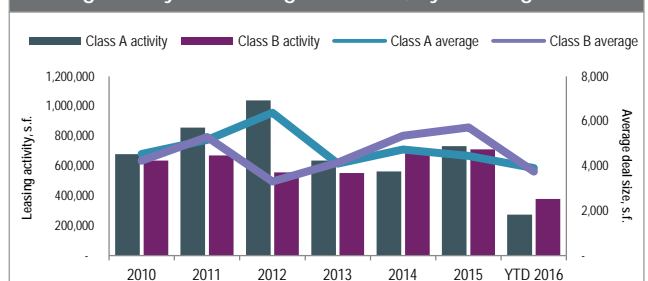


Source: JLL Research

Despite recovery, downsizing continues

Suburban or CBD, Class A or Class B, properties have seen occupiers continue to reduce the size of their premises, whether or not they are under fiscal stress. Unsurprisingly, fewer contracts and less secure funding drives defense contractors to cut back, but professional occupiers such as law firms and financial companies whose business has rebounded continue to take advantage of technological advances that reduce the number of employees working in the office at a particular time and the amount of space required for paper documents in libraries and file cabinets. Average deal sizes for both classes of office space have declined noticeably across the region—more so on the Southside—which is a significant reason why office occupancy and absorption have lagged behind other economic indicators since recovery from the recession began.

Leasing activity and average deal size, by building class



Source: JLL Research

Absorption varies by submarket and building class

This year the keywords have been location and building class. Class A net absorption has outpaced Class B in 2016, both on the Peninsula (0.5% of inventory versus 0.2%) and the Southside (0.7% versus 0.4%.) Both classes performed well in the Virginia Beach CBD and Battlefield/Greenbrier, while older buildings in Newtown/Witchduck and tech-oriented space in Coliseum/Hampton Roads Center suffered. Value-priced Class A product outperforms Class B in Lynnhaven, but Class B outperformed Class A in Downtown Norfolk, driven by the NRHA's first-quarter lease of 42,000 square feet.

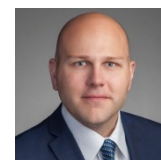
YTD net absorption as share of inventory, by building class



Source: JLL Research

17,825,417 Total inventory (s.f.)	-12,687 Q3 2016 net absorption (s.f.)	\$18.27 Direct average asking rent	287,858 Total under construction (s.f.)
14.0% Total vacancy	104,475 YTD net absorption (s.f.)	-0.2% 12-month rent growth	100% Total preleased

Houston



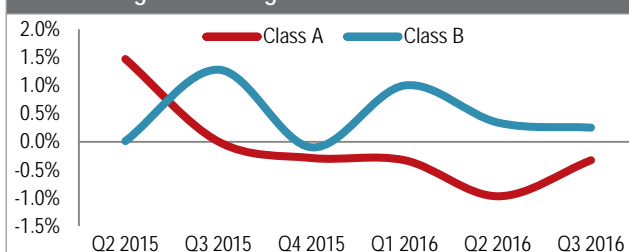
- Eli Gilbert
Vice President, Research,
Houston

Market unable to shake the grip of sublease inventory

Spread between Class A & B rental rates tightens

Since the second quarter of 2015, the spread between Class A and B direct asking rental rates has decreased by 778 basis points. Over that time, Class A rents have posted negative growth in four out of five quarters while Class B rents have seen positive growth in four out of five quarters. Underpinning the divergent rental rate movements of these two classes is the fact that 77.3 percent of the 12.2 million square feet of sublease space on the market is comprised of Class A space. As a result, Class A landlords must compete with subleases for tenants more so than Class B landlords. Moving forward, this trend is likely to continue as leasing activity within the Class A inventory remains subdued.

Q-o-Q asking rental rate growth: Class A v. Class B

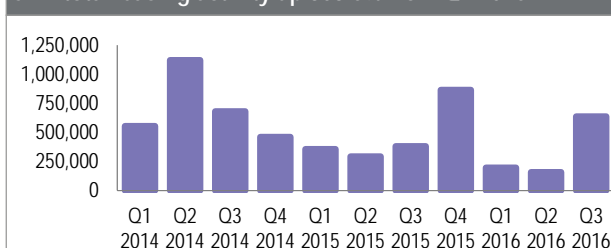


Source: JLL Research

CBD leasing activity rebounds following tepid Q2 performance

Buoyed by United Airlines' 237,000-square-foot lease at 609 Main, the CBD experienced a significant uptick in leasing activity during the third quarter, as total volume increased from 158,000 square feet in Q2 to 637,000 square feet. Other notable CBD lease transactions include Orrick, Herrington & Sutcliffe's 57,000-square-foot lease at 609 Main, Hogan Lovells' 43,000-square-foot lease also at 609 Main, Edison, McDowell & Hetherington's 27,000-square-foot sublease at 1001 Fannin, and Tellurian Investments' 25,000-square-foot renewal at 1201 Louisiana.

CBD total leasing activity up 303.6% from Q2 2016

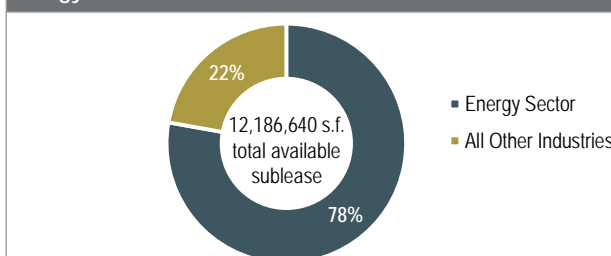


Source: JLL Research

Move-outs in sublease space pushes net absorption deeper into the red

Following the decision of several energy sector companies like BG Group, Freeport McMoRan, and Phillips 66 to vacate blocks of space at their available subleases, net absorption remained negative during the third quarter at -789,872 square feet. In fact, these three companies alone accounted for nearly a quarter of the total negative net absorption in Q3. Additionally, Shell recently announced that they will be vacating their namesake tower in the CBD, with their entire 877,000-square-foot space remaining available for sublease. With the energy sector responsible for 77.8 percent of available subleases market-wide, much of which is still officially listed as occupied, sublease outflows are anticipated to contribute toward negative net absorption for quarters to come.

Energy sector accounts for 77.8% of available subleases



Source: JLL Research

163,614,884 Total inventory (s.f.)	-789,872 Q3 2016 net absorption (s.f.)	\$30.47 Direct average asking rent	3,307,513 Total under construction (s.f.)
19.7% Total vacancy	-874,064 YTD net absorption (s.f.)	-1.0% 12-month rent growth	54.0% Total preleased

Indianapolis



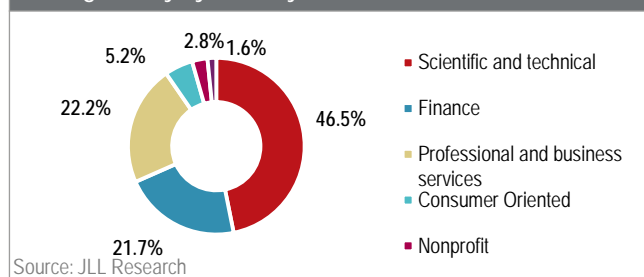
- Mike Cagna
Senior Research Analyst,
Indianapolis

Leasing, construction and investment activity continues

Robust leasing activity drives Indianapolis office market

Indianapolis continues to see strong leasing velocity this year. One of the key drivers for this activity remains the scientific and technical industry, accounting for almost half of the office leasing that has occurred in 2016. More specifically, the technology sector has taken off locally as of late. In fact, from Q3 2015-Q2 2016 Indianapolis ranks as a top-10 market nationally in terms of tech leasing activity by square footage. With Salesforce planting its flag in downtown Indianapolis last quarter, look for the Indy tech scene to continue to grow, especially in the CBD.

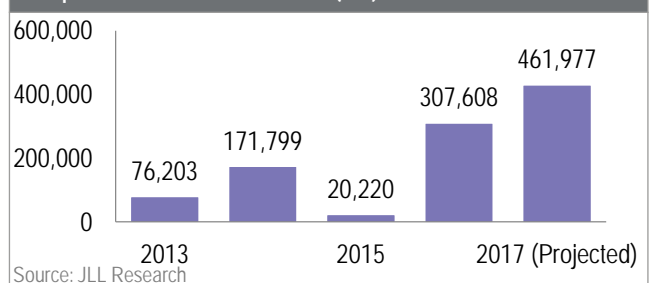
Leasing activity by industry



Construction activity increasing

2016 has already seen four office construction projects completed totaling more than 300,000 square feet. This is more than the last five years combined. Demand for this space is high as the buildings were delivered nearly three-quarters preleased. Construction will continue into next year as over 400,000 square feet remains under construction or in the planning stages. This would mark the highest two year total of construction in Indianapolis since nearly 852,000 square feet was delivered between 2008-2009. The projects currently under construction will also deliver with the majority of space already preleased.

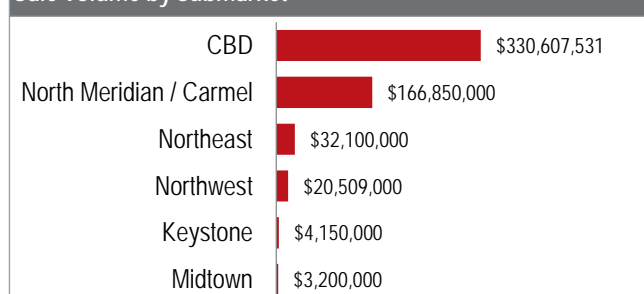
Completed office construction (s.f.)



Investment activity taking place across entire MSA

Investment activity is occurring at an elevated rate in Indianapolis. To date, 17 investment transactions have already closed in 2016 with another two currently under contract. These transactions have mostly centered around the urban core with nearly 60.0 percent trading in the CBD. This includes nearly half of Indianapolis' Skyline properties changing hands. However, this quarter activity branched out into the northern suburbs as Parkwood Crossing, Castle Creek III-VI and Woodland Corporate Park I-III among others traded.

Sale volume by submarket



31,818,290 Total inventory (s.f.)	30,649 Q3 2016 net absorption (s.f.)	\$19.68 Direct average asking rent	372,977 Total under construction (s.f.)
15.0% Total vacancy	279,502 YTD net absorption (s.f.)	4.1% 12-month rent growth	76.2% Total preleased

Jacksonville



- Drew Gilligan
Senior Research Analyst,
Central Florida

Downtown Jacksonville enjoying a revitalization

City of Jacksonville focusing on developing the urban core

Redeveloping the urban core continues to be a point of focus for the City of Jacksonville and the region. There are numerous development projects underway downtown utilizing both public and private funding. More than \$700 million has been invested into completed and active developments since 2015, with other developments expected to break ground soon including three multi-family developments totaling 1,200 units. Jacksonville was recently named the number 2 city where Americans are moving right now by Realtor.com, many of which are millennials who are seeking an all-in-one environment where they can live, work, and play.

Multiple potential developments around the urban core

\$1.6 billion

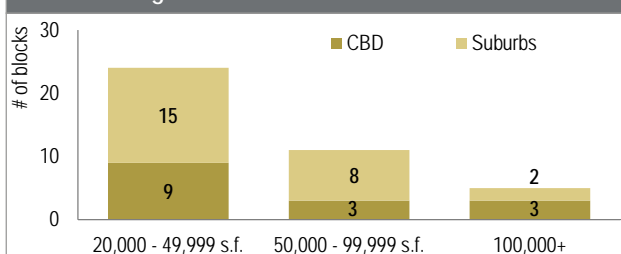
Total Investment downtown since 2015
(Includes completed, active and proposed developments likely to break ground by 2017)

Source: JLL Research, Downtown Vision Inc.

Few large vacancies left in the suburban submarkets

The Jacksonville suburban office market continues to be attractive to large back-office operators but the lack of large available blocks has become an issue. There are only two options currently available in the Southside and Butler Boulevard submarkets greater than 100,000 square feet and only ten spaces larger than 50,000 square feet. Replacement costs are currently too high to drive speculative developments, leaving larger tenants with limited options since many require high parking ratios.

Number of large blocks: CBD vs Suburbs



Source: JLL Research

Parking requirements remains a sticking point for tenants

The low parking ratios and extra costs associated with moving downtown is creating a barrier to entry for the larger tenants seeking space in the market. Thus, many of the large back-office locations and call centers in the Jacksonville area call the suburbs home, where landlords are able to provide adequate free parking. Of the tenants currently seeking space in the market, many would ideally command six spaces per 1000 square feet leased, but few of the buildings are able to provide such a high ratio. Only three buildings with vacancies larger than 50,000 square feet can offer parking ratios greater than six per thousand square feet.

Historical suburban vacancy



Source: JLL Research

20,165,959

Total inventory (s.f.)

-115,146

Q3 2016 net absorption (s.f.)

\$19.58

Direct average asking rent

0

Total under construction (s.f.)

14.8%

Total vacancy

204,043

YTD net absorption (s.f.)

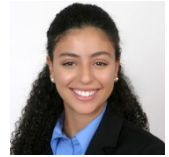
3.5%

12-month rent growth

0%

Total preleased

Long Island



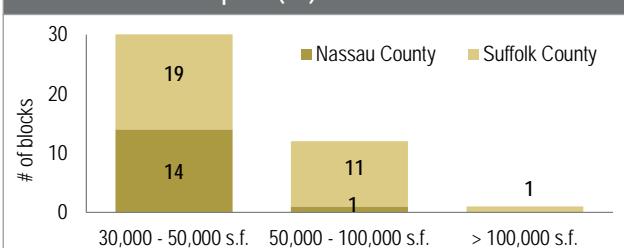
- Sarah Bouzarouata
Research Analyst,
Long Island

Suffolk County on the radar of larger occupiers

Suffolk County houses nearly 70.0 percent of large available blocks

Flight to quality throughout Long Island has left a limited supply of large Class A availabilities in the market, particularly in the Western and Central Nassau submarkets where the relatively low vacancy rates remain within the low teens amid heightened demand. Suffolk County accounted for more than 67.0 percent of the large blocks of space marketed for lease during the third quarter—24.0 percent of which are greater than 100,000 square feet. Also in Suffolk County, transit-focused build-to-suits are currently proposed to attract the younger workforce. Among these include a 112,000-square-foot office building proposed at 20 Station Drive as part of the Wyandanch Village revitalization project, and a proposed 100,000-square-foot build-to-suit at Route 347 in Setauket.

Available blocks of space (s.f.)

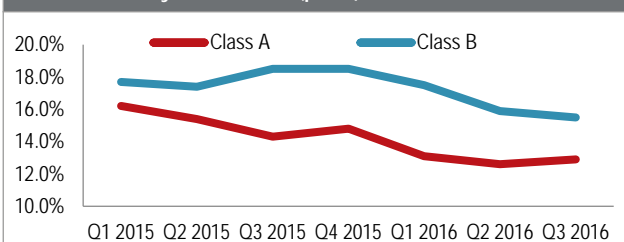


Source: JLL Research

Vacancy rates continue downward trend despite sluggish start to quarter

Despite experiencing the typical slowing of market activity during the summer months, Long Island saw healthy tenant activity toward the end of the quarter which allowed the overall vacancy rate to decline 10 basis points from mid-year to 14.3 percent during the third quarter. Significant transactions of the quarter include Commonwealth Partner's lease of approximately 44,000 square feet at 70 Maxess Road in Melville, and Morrit Hock & Hamroff's renewal of 31,500 square foot at 400 Garden City Plaza in Garden City. Merrill Lynch Wealth Management also renewed its lease of 28,522 square feet at 1305 Walt Whitman Road in Melville.

Overall vacancy rate trends (p.s.f.)

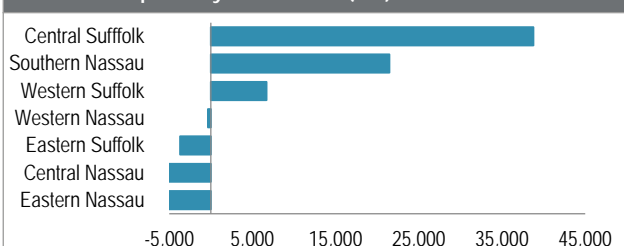


Source: JLL Research

Focus shifts to Suffolk County as companies look to expand

The Long Island market posted a total of 33,096 square feet of positive net absorption after nearly 510,000 square feet of space was absorbed just three months prior. The continued run of strong performance was largely due to the consistent demand seen in both the Western and Central Suffolk submarkets in recent months. Companies continued to shift east in search of larger blocks of space, including LBI Software, which plans to relocate from their current office at 600 Jericho Turnpike in Woodbury to 999 Walt Whitman Road in Melville. The software firm plans to lease 9,000 square feet of space, and expand as the company grows.

Q3 net absorption by submarket (s.f.)



Source: JLL Research

41,983,140

Total inventory (s.f.)

33,096

Q3 2016 net absorption (s.f.)

\$26.22

Direct average asking rent (p.s.f.)

338,885

Total under construction (s.f.)

14.3%

Total vacancy

582,156

YTD net absorption (s.f.)

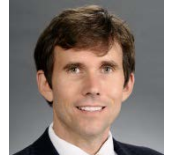
0.5%

12-month rent growth

68.7%

Total preleased

Los Angeles



- Henry Gjestrum
Senior Research Analyst,
Los Angeles

Los Angeles emerges from a sluggish summer

Rent growth in key micro-markets bolsters broader Los Angeles trend

The Los Angeles market saw a 7.6 percent year-over-year growth in asking rental rates. This increase has been propelled by sharp rental rate increases in technology and media heavy micro-markets within the Westside. Coming in at 41.0 percent over the Los Angeles market average asking rents, at \$53.70, the Westside remains the most expensive area of Los Angeles. Micro-markets within the Westside, including Santa Monica, Beverly Hills and West Hollywood have overall asking rates in excess of \$60.00 per square foot, annually. As the overall market emerges from a lackluster summer, multiple large tenants in the creative industries are touring high priced space options in the Westside market. With the potential inking of these deals, the market will quickly rebound from any perceived slump.

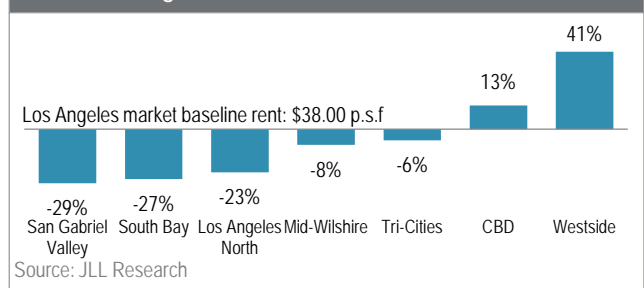
Quarterly leases demonstrate stability and measured growth

In the wake of a sluggish summer, renewals dominated leasing activity. Despite a slowdown in volume, the majority of tenants opted to maintain their footprint, and a handful of transactions were inked by tenants who are growing their presence in the market. Tenants opting to grow include Oracle, WeWork, Kite Pharma and Just Fab. These leases were concentrated on the Westside and within creative buildings in the South Bay, and were primarily concentrated in the technology and media industries. Growth and expansions from tenants such as these are expected to continue, which could be a sign that the slowdown experienced this summer will not persist throughout the year.

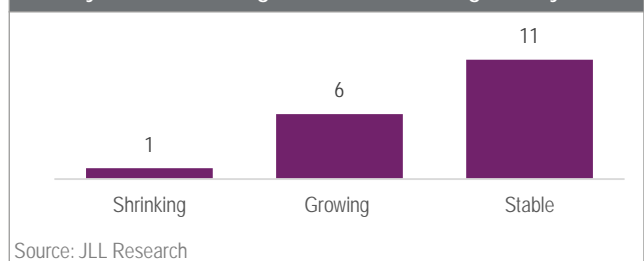
Summer doldrums aren't deterring investors

Los Angeles average pricing per square foot continues to ascend to new highs. During the third quarter, average pricing reached a new cyclical peak of \$457 per square foot. Year-to-date sales volume totaled \$5.2 billion, more than double that of 2015. As the year draws to an end, we anticipate a large number of trades. Investors are increasingly recognizing Los Angeles' underlying strengths and the region's affordability as a gateway market.

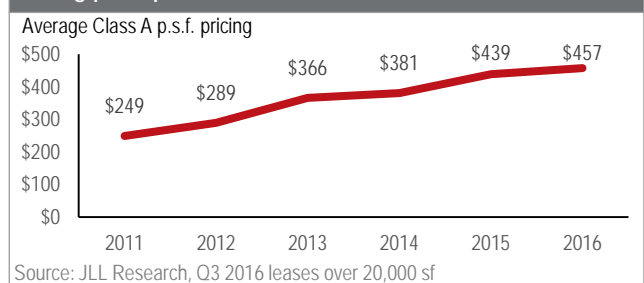
Westside rent growth carries the market



Stability and measured growth drives leasing activity



Pricing per square foot increases



188,975,967

Total inventory (s.f.)

493,136

Q3 2016 net absorption (s.f.)

\$38.00

Direct average asking rent

2,092,795

Total under construction (s.f.)

14.8%

Total vacancy

1,148,262

YTD net absorption (s.f.)

7.6%

12-month rent growth

12.5%

Total preleased

Louisville



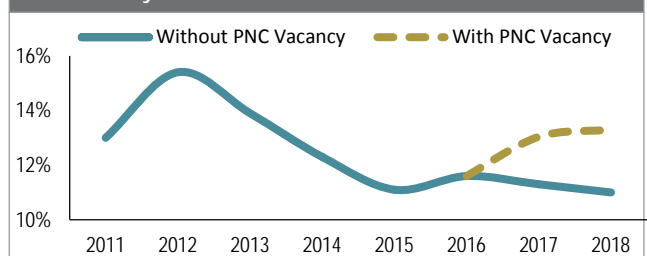
- Ross Bratcher
Research Analyst,
Great Lakes

Leasing activity slows, outlook remains positive

Consolidations grow CBD employment, raise vacancy rates

Humana's second quarter announcement was another win for the Central Business District as over 1,000 employees will relocate downtown from the suburbs. However, PNC's announcement that it will vacate PNC Plaza in 2017 to consolidate its operations into the National City Tower will leave over 150,000 square feet of space vacant at PNC Plaza. While PNC's consolidation will raise CBD vacancy, downtown momentum continues with retail, office, residential, and hospitality projects currently under construction totaling \$1.2 billion in investment. Upcoming vacancy within the market should provide attractive opportunities for employers looking to bolster their downtown presence.

CBD Vacancy Forecast

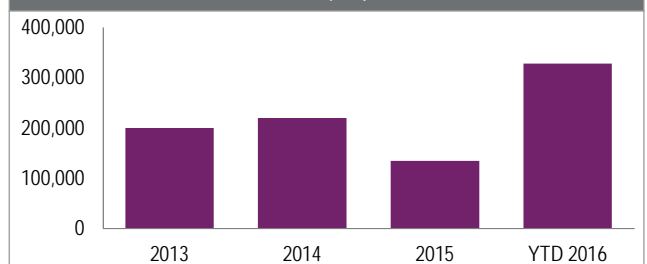


Source: JLL Research

Developers continue to fill the pipeline with speculative space

The first half of the year saw multiple speculative projects reach completion across the market with newly delivered space coming online in three different submarkets. With positive leasing activity in those recently delivered buildings, as well as high tenant demand for Class A office space, developers remain bullish on the market. This sentiment was echoed during the third quarter as two speculative projects were announced totaling over 260,000 square feet. Since it appears new product will begin to fill the pipeline, the question for Louisville remains the same. Will the newly developed space be absorbed by new-to-market tenants or relocations within the market?

Office construction deliveries (s.f.)



Source: JLL Research

East End Bridge drives growth in surrounding submarkets

The long-awaited East End Bridge will be delivered in the fourth quarter, opening up Southern Indiana and the Northeastern portion of Louisville for rapid growth and development. While Southern Indiana has seen the vast majority of development skewed towards industrial product, the bridge has spurred unprecedented office development in the Middletown/Eastpoint submarket. The Old Henry Road corridor has seen the most activity, with over 300,000 square feet of space delivered or under construction in 2016. With a shortage of developable sites inside the Gene Snyder, it is projected that office development will continue to take place in the far Northeast. The increased traffic in these submarkets from the new bridge should spur further commercial development.

Recently announced projects

Property	Bldg s.f.	Acres
Jefferson Development – Old Henry	160,000	107
Jefferson Development – Lexington Road	100,000	22
Schroering Co. – Eastpoint	32,500	3.4
Evergreen Real Estate – Anchorage	10,800	4.6

Source: JLL Research

20,045,621

Total inventory (s.f.)

120,533

Q3 2016 net absorption (s.f.)

\$16.67

Direct average asking rent

0

Total under construction (s.f.)

11.8%

Total vacancy

20,647

YTD net absorption (s.f.)

-4.6%

12-month rent growth

0.0%

Total preleased

Marin-Sonoma: North San Francisco Bay



Katherine Bilingsly
Research Analyst,
Oakland-East Bay

Markets attract investors' attention across the bridge

Regional job growth continues and unemployment rates to drop, year-over-year

As of August, total jobs in Marin and Sonoma Counties increased 2.5 percent year-over-year to 327,000, with unemployment rates decreasing, sitting at 3.5 percent and 4.1 percent, respectively. Marin County rents exceed Sonoma's by 63 percent, \$34.44 compared to \$21.12, with lower vacancy rates in Southern Marin pushing rental rates even higher to \$42.36. While Southern Marin is the most expensive submarket of the North Bay market, it still provides cheaper alternatives to rates in San Francisco's cheapest submarket, at discounts over 30.0 percent.

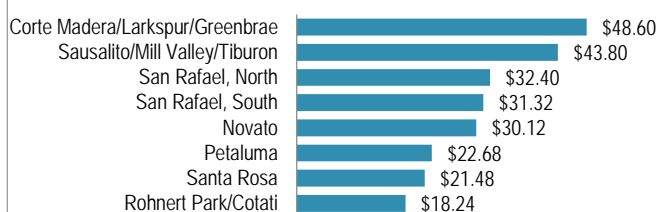
Planned housing and transportation projects will cater to commuter population in near future

Professional offices in both Marin and Sonoma Counties have highly skilled employee labor pools to draw from. In addition to the nearby workforce in San Francisco and the East Bay, 65 and 42 percent of Marin and Sonoma's own residents have Associate's, Bachelor's, or graduate degrees. Planned projects in Sonoma County's pipeline, such as new housing developments and the SMART line, will cater to the 119,000+ employees currently commuting into the area for work. Marin and Sonoma submarkets along Highway 101 can expect a future uptick in rental rates as properties nearby the SMART line stops will likely leverage the highly valued transportation proximity and command higher rents.

Almost 80 percent of the North Bay's Q3 leasing activity was concentrated in Marin and Sonoma County

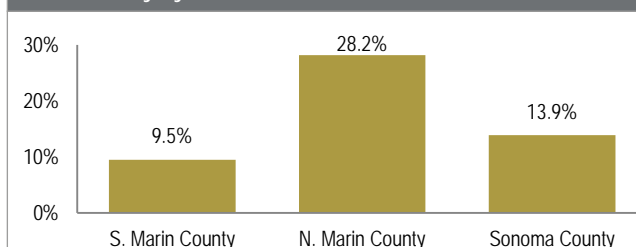
Leasing activity totaled 134,137 square feet this quarter, comprising 79.0 percent of the leased square footage for the entire North Bay office market. Meanwhile, year-to-date office sales activity has exceeded \$233.9 million totaling 20 transactions for Marin and Sonoma Counties. The overall average price per square foot year-to-date, sits at \$268, with Marin's average sitting higher at \$317 and Sonoma's at \$182. As prices in San Francisco, Oakland, and Silicon Valley continue to climb, investors seeking higher yields in tertiary markets will drive sales activity through the end of 2016.

Average asking rent across all markets



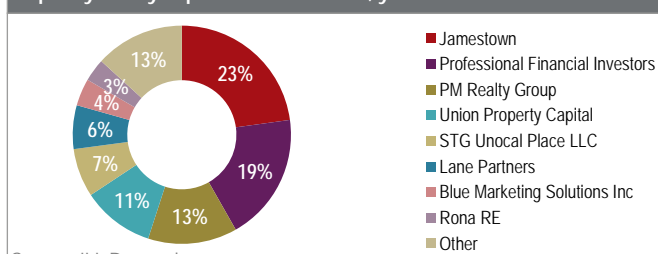
Source: JLL Research

Total vacancy by submarket



Source: JLL Research

Top buyers by square foot volume, year-to-date



Source: JLL Research

19,032,162

Total inventory (s.f.)

8,601

Q3 2016 net absorption (s.f.)

\$34.44

Direct average asking rent
Marin County

0

Total under construction (s.f.)

21.0%

Total vacancy
Marin County

13.3%

Total vacancy
Sonoma County

-157,900

YTD net absorption (s.f.)

\$21.12

Direct average asking rent
Sonoma County

0.0%

Total preleased

Miami



- Tim Powers
Research Analyst,
Miami

Miami-Dade maintains momentum amidst changing dynamics

Leasing activity

Miami-Dade County's office market maintained a strong pace of leasing activity, as 170 transactions of a median 1,800 square were executed across the County's nine major office submarkets. While this acceleration represents the second straight quarter of material improvement from the muted activity witnessed at the year's outset, the County's commercial office market remains subdued relative to historical norms (comparatively, 2011-2015's third quarters averaged 10.0 percent more deal activity and 30.0 percent more total square footage leased). Nonetheless, countywide total square footage leased improved 15.0 percent quarter-on-quarter, driven largely by the Brickell submarket where 210,000 square feet of transactions occurred. This represented the submarket's most robust quarterly performance in more than three years.

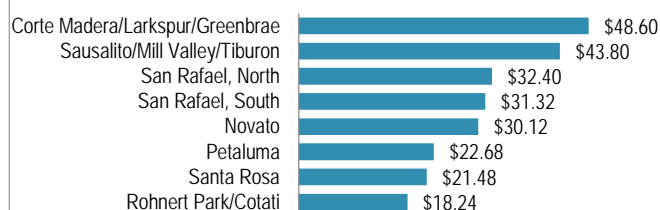
Suburban deal size dynamics

In contrast to the CBD, leasing activity in Miami's major suburban submarkets remains bound by ever-tightening supply-side constraints and the reduced size requirements of bread-and-butter demand. The Miami Airport submarket (9.3 percent direct vacancy) executed just 42 transactions totaling 170,000 square feet (vs. 2011-2015's Q3 average 62 transactions totaling 270,000 square feet). More vitally, however, the Airport's Q3 2016 median deal size of 1,600 square feet is roughly one-third the size of median transactions between 2006-2015 (the long-term historical average). Likewise, Coral Gables (10.1 percent direct vacancy) executed 22 transactions for a total of 55,000 square feet in Q3, registering a 2,200 square foot median deal size (three-quarters the size of long-term historical medians). Whether a result of the trend toward improved efficiency or an indication of the changing makeup of local tenants in the market, the ability of bread-and-butter demand to bolster leasing activity in the interim between execution of large/outsize deals has been at least marginally diminished.

Confidence considerations

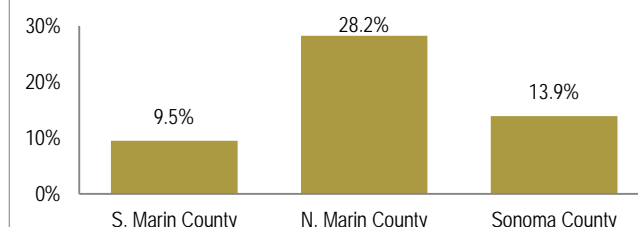
Countywide, landlord confidence shows little signs of softening, as total weighted average direct asking rates rose for a tenth consecutive quarter, up 1.2 percent quarter-on-quarter (4.9 percent year-on-year). Rate changes to pre-existing availabilities (330 in number across 66 buildings) increased an average \$1.50 per square foot, driven largely by adjustments to Class A availabilities in both the CBD and Suburbs. Just one submarket subclass - Downtown Miami Class B - saw weighted average changes to direct asking rates on existing availabilities reduced (15 availabilities across 6 buildings registered rate changes, averaging \$2.30 per square foot).

Average asking rent across all markets



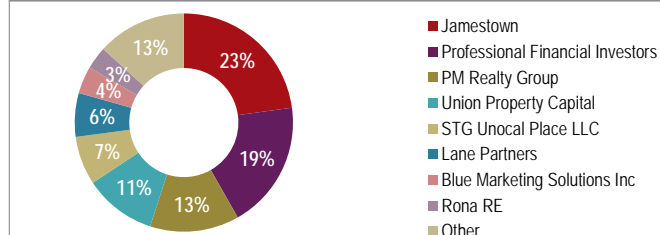
Source: JLL Research

Total vacancy by submarket



Source: JLL Research

Top buyers by square foot volume, year-to-date



Source: JLL Research

37,526,325

Total inventory (s.f.)

35,651

Q3 2016 net absorption (s.f.)

\$36.90

Direct average asking rent

989,041

Total under construction (s.f.)

13.3%

Total vacancy

-48,542

YTD net absorption (s.f.)

4.9%

12-month rent growth

36.1%

Total preleased

Milwaukee



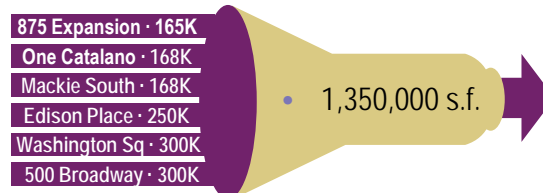
- Kyle Koller
Research Analyst,
Milwaukee

Milwaukee: An evolving office landscape

Office proposals continue to pile up, potential for another tower

While newly delivered 833 E Michigan brought another 358,000 square feet of office inventory to the market, Milwaukee is still a pace behind historical office tower development patterns. In fact, Milwaukee could likely sustain another office tower of roughly 300,000 square feet – and there are quite a few to choose from. A handful of developers have proposed multiple office towers and are waiting for a committed anchor tenant to break ground. A 50,000+ square foot tenant looking for options over the next year can add potential built-to-suit options to their list.

Proposed downtown office developments

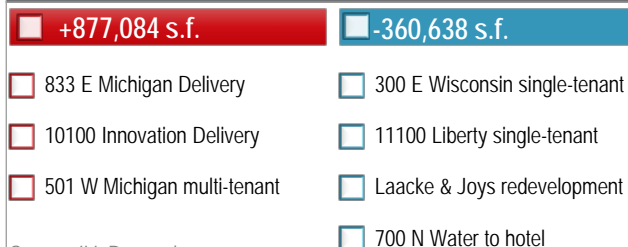


Source: JLL Research

Office environment keeps inventory fluid

Milwaukee's office activity extends beyond the delivery of new product. A recent focus has been the opportunity to repurpose under-utilized office buildings downtown. In 2016 alone, over 360,000 square feet of tracked inventory has been taken off the market as high vacancy buildings begin or prepare for conversion. While untracked (non-competitive) inventory has been targeted for conversion to residential uses, tracked inventory conversions have been made up of single-tenant users looking for an alternative to a ground up venture, a dilapidated office building demolished for new development, or as in the recent case of 700 N Water - a proposed hotel use.

YTD Inventory Adjustments

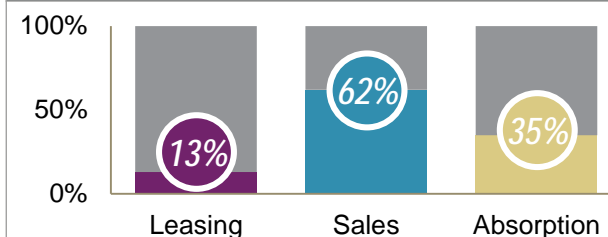


Source: JLL Research

Skyline continues to drive absorption and sales activity

In terms of leasing activity, sales, and construction, 2016 has been one of the most active years for Milwaukee's Skyline in over a decade. So far this year, 358,000 square feet has been delivered, three buildings have traded hands to the tune of \$170 million, and over 190,000 net square feet has been absorbed. What's more, the Skyline accounts for roughly 62.0 percent of total Milwaukee office sales (in \$) and 35.0 percent of total net absorption. Such interest has left increasingly fewer blocks of Class A space in downtown east, with multiple full floors claimed over the past three quarters.

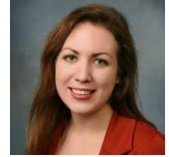
Skyline share of YTD office activity



Source: JLL Research

27,760,927 Total inventory (s.f.)	91,491 Q3 2016 net absorption (s.f.)	\$19.46 Direct average asking rent	110,000 Total under construction (s.f.)
17.1% Total vacancy	551,318 YTD net absorption (s.f.)	6.3% 12-month rent growth	53.6% Total preleased

Minneapolis



- Carolyn Bates
Senior Research Analyst,
Minneapolis

BTS developments usher in negative absorption rates

Xcel Energy and Wells Fargo employees relocate to new digs

This quarter saw unprecedented levels of negative absorption due to some new build-to-suit (BTS), single-tenant buildings. Opus delivered Xcel Energy's headquarters at 401 Nicollet Mall last quarter and Q3 saw the consolidation of employees formerly spread across multiple buildings. Wells Fargo has also begun moving 5,000 employees into the company's new 1.1 million square feet of owner-occupied office towers. The first round of relocations is largely coming from the Minneapolis CBD, but expect future negative absorption across the metro as Wells Fargo fills out its \$300 million twin towers in Downtown East. What remains to be seen is the future of the Class B Baker Center (comprising Investors, Roanoke Buildings, Baker and the 730 Building), which will soon have nearly half a million vacant square feet in Wells Fargo's wake. Fortunately, RSP Architects has begun a \$20 million renovation of the Baker Center, to be completed by January 2017.

Rent goes up in the CBD; Class B rent goes down in the suburbs

The most popular suburban submarkets are seeing their Class A rent increase and Class B rental rates decrease. Demand is outstripping supply among Class A properties and landlords are negotiating higher rents. Among Class B inventory, the most attractive buildings and suites are being quickly absorbed, so what remains are the less desirable and therefore lower-cost options. The Minneapolis CBD is also coping with escalating gross rental rates; between 2015 and 2016, average taxes per square foot, per year jumped from \$5.32 to \$6.07—a significant 14.0 percent increase. At least the increase is due to healthy and growing office property values, while the property tax rate remains relatively stable. Pass-through expenses are further pushed upwards by building owners investing in renovations to remain competitive, resulting in greater operating expenses.

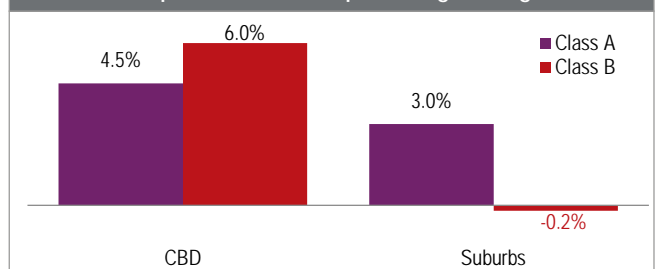
2016 office sales slow in Q3 but transaction value per square foot spikes

Although the third quarter of 2016 only saw four transactions for office buildings at least 50,000 square feet in size, the average price per square foot increased 82 percent quarter-over-quarter. This is largely due to the sale of Ameriprise Financial Center, which sold for \$200 million to Florida-based Morning Calm Management at the end of August. The transaction is the largest deal of the year, surpassing the \$82 million sale of PwC Plaza (formerly known as Plaza Seven) back in June.

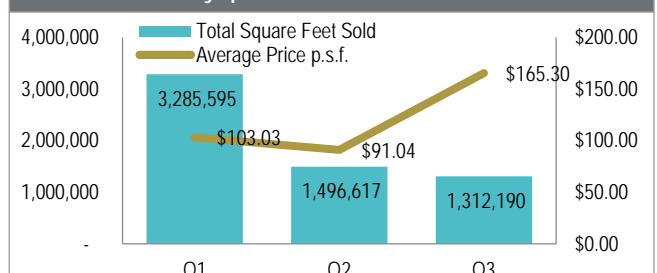
CBD buildings with significant negative quarterly absorption

Investors Building Wells Fargo vacated	-248,525 square feet
Marquette Plaza Xcel vacated	-111,000 square feet
Roanoke Building Wells Fargo vacated	-30,983 square feet

Quarter-over-quarter rental rate percentage change



2016 office sales by quarter



68,998,682

Total inventory (s.f.)

-156,182

Q3 2016 net absorption (s.f.)

\$26.25

Direct average asking rent

249,500

Total under construction (s.f.)

15.2%

Total vacancy

232,221

YTD net absorption (s.f.)

2.4%

12-month rent growth

36.1%

Total preleased

Napa-Solano: North San Francisco Bay



Katherine Bilingsly
Research Analyst,
Oakland-East Bay

Thriving economies boost office demand

Economic growth driving office demand

Napa and Solano County both exhibited strong employment rates as of August 2016, signifying their growing economies. Meanwhile, the unemployment rates decreased in both counties, year-over-year, sitting at 4.1 percent in Napa and 5.7 percent in Solano. Combined jobs totaled 215,200, largely comprised of the wine, healthcare, government, education, and tourism industries which continue to feed the local economies and drive tenant demand. In downtown Napa, growing demand for retail space and wine tasting rooms has increased competition for office tenants in the area requiring space 2,500 square feet and smaller. As rental rates push upwards, tenants have continued migrating south—particularly those in need of over 5,000 square feet of space—in search of additional options and more affordable rental rates.

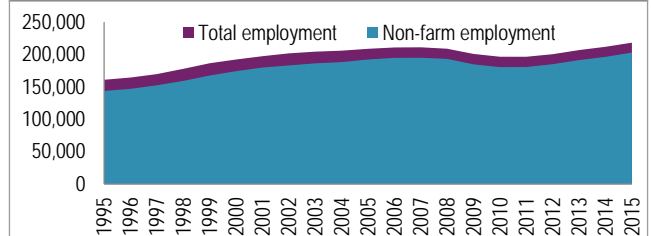
Regional tenants take notice of Green Valley location in Fairfield

The healthcare industry continues to drive tenant demand in Solano County, as indicated by Partnership Health Plan breaking ground in Fairfield this September. The 104,000-square-foot, three-story office building is situated in Green Valley Corporate Park, a location with easy access to the I-680, I-80, and Highway 12, along with a selection of nearby housing, ranging from high-end to more affordable options. These amenities have made the Green Valley region as a whole increasingly appealing to regional tenants, tightening available space between 2,000-5,000 square feet.

Strong tenant demand continues to drive uptick in market lease rates

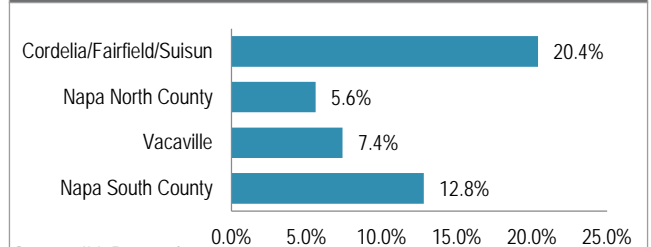
There was a total of 35,662 square feet leased this quarter, 74.2 percent of which took place in Solano County. Notably, 2320 Courage Drive sold in Fairfield this August for \$2.7 million, at \$126 per square foot. While overall deal activity somewhat slowed this quarter, Napa and Solano continue to experience healthy doses of tenant demand and upticks in rental rates from 2015. Class A rental rates currently sit at \$31.32 per square foot in Napa County compared to \$24.36 per square foot in Solano County, on a FSG basis. With healthy economic activity driving tenant demand, and only one development currently under construction, the Napa/Solano market maintains a positive outlook for the rest of 2016.

Total employment hits new high



Source: JLL Research

Napa/Solano vacancy by submarket



Source: JLL Research

Average asking rents by submarket (\$ p.s.f.)



Source: JLL Research

6,066,647

Total inventory (s.f.)

-14,481

Q3 2016 net absorption (s.f.)

\$25.32 FS

Direct average asking rent
Napa County

104,000

Total under construction (s.f.)

9.7%

Total vacancy
Napa County

15.9%

Total vacancy
Solano County

-4,415

YTD net absorption (s.f.)

\$22.20 FS

Direct average asking rent
Solano County

0.0%

Total preleased

Nashville



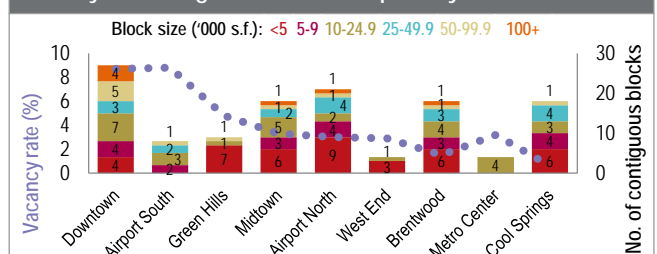
- Hensley Loeb
Research Analyst,
Nashville

Historic occupancy defines the city and its growth

Lack of inventory bars entry to market, creating surge in developer activity

Nashville has gained national recognition for being the office market with the lowest vacancy rate. This quarter maintains that accolade. Vacancy dropped another 50 basis points, landing at 4.6 percent at the end of Q3 2016. Class A space is the most competitive with 2.1 percent vacancy, compared to last quarter's 2.4 percent. As tenants consider existing available space in the market, options drop further due to the quantity of contiguous blocks of A and B product. There are 30 availabilities between 10,000 to 24,999 square feet, and since 2015, the average lease size has been 18,846 square feet. As a result, tenants are competing for the same space in the market. Nashville is a landlord favorable market and will remain one until enough inventory comes back online.

Vacancy vs. contiguous blocks of space by submarket



Source: JLL Research

Surges in leasing activity trigger investor and developer activity

Nashville's pipeline boasts 10.1 million square feet (proposed projects and under construction). This activity would grow the market by 30 percent of its existing inventory, or 1.3 times its current size should all those projects deliver. By the end of 2020, the CBD alone could grow by 5 million square feet. Before the resurgence of Downtown, the core was historically known as a ghost town past 5pm. Today, it is an epicenter that draws nearly a million tourists per month and where roughly 1.1 million employees go to work every day. The CBD used to be a small radius that circled Church Street, and now, the entire interstate loop is filling with new office buildings. The gateway sites highlighted to the right are becoming mixed-use campuses of urban walkability, which will further attract vibrancy to the city's core.

Map of gateway sites encapsulating downtown

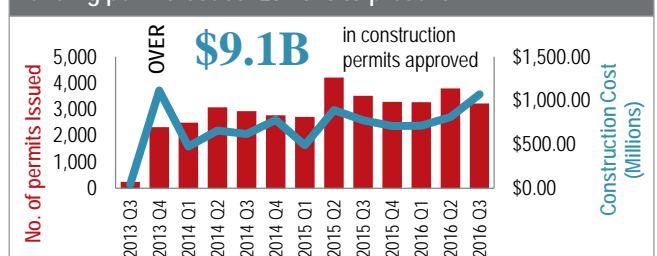


Source: JLL Research

Construction permits as an economic indicator of strong growth

In the 2015-2016 fiscal year, 13,878 permits were issued, totaling \$3.0 billion. Compared to the \$2.8 billion of construction permits issued in the 2014-2015 fiscal year, the 2015-2016 fiscal year experienced an 8.2 percent increase in construction activity approved by the metro government. The increase in applications and approved construction permits by the metro government enable Nashville's crane-filled horizon to exist. As the city continues to grow and as businesses continue to open, relocate and expand, construction permits will be an indicator of economic growth. These construction permits have been significantly on the rise since Q3 2014. Year-to-date, \$2.6 billion of building permits have been approved. This activity used to be predominately locally driven; however, today national and international investors have joined the mix.

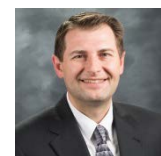
Building permit issued Q3 2013 to present



Source: JLL Research | Data.Nashville.gov

33,678,562 Total inventory (s.f.)	343,240 Q3 2016 net absorption (s.f.)	\$23.67 Direct average asking rent	3,775,918 Total under construction (s.f.)
4.6% Total vacancy	818,920 YTD net absorption (s.f.)	12.7% 12-month rent growth	72.0% Total preleased

New Jersey



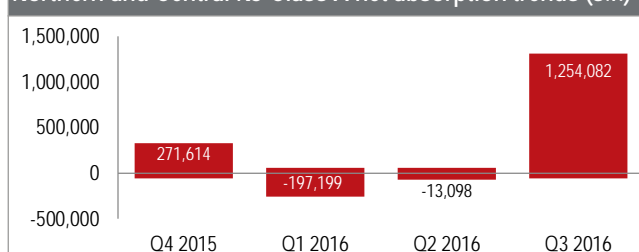
- Steve Jenco
Vice President, Research,
New Jersey

Surging Class A demand pulls vacancy rate lower

Class A absorption shifts into a higher gear during third quarter

Following a sluggish first half of 2016 which was defined by 210,300 square feet of negative net absorption, a rebound in Northern and Central New Jersey Class A tenant office requirements unleashed nearly 1.3 million square feet of positive net absorption three months later. The Class A vacancy rate subsequently retreated 30 basis points from mid-2016 to 24.1 percent in the third quarter. Furthermore, while demand for Class A space in mass-transit oriented submarkets had previously generated headlines, suburban-centric markets garnered the recent spotlight as the Lower 287, Monmouth and Route 24 submarkets each posted more than 200,000 square feet of positive absorption.

Northern and Central NJ Class A net absorption trends (s.f.)

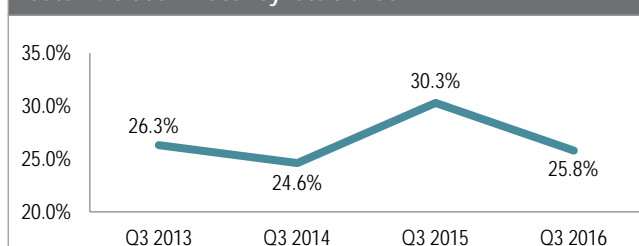


Source: JLL Research

Route 24 Class A vacancy rate falls to lowest level in two years

After ranging above the 30.0 percent level since year-end 2014, the Route 24 Class A vacancy rate plunged six percentage points from mid-2016 to 25.8 percent in the wake of nearly 450,550 square feet of positive net absorption. This represented the largest volume of absorption in the Northern and Central New Jersey Class A office market during the third quarter. Pharmaceutical company Allergan's decision to consolidate its Bridgewater, Jersey City and Parsippany offices into a 431,495-square-foot building at 5 Giralda Farms in Madison was a leading factor behind the dramatic decline in the Route 24 Class A vacancy rate.

Route 24 Class A vacancy rate trends

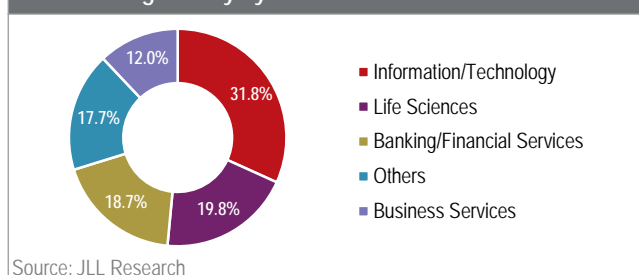


Source: JLL Research

Information/technology companies drive office demand

While banking and financial services and pharmaceutical/life sciences have historically accounted for a large portion of Northern and Central New Jersey office demand, information and technology companies recently stepped into the batter's box. The sector accounted for nearly one-third of leasing activity during the third quarter compared to less than 10.0 percent of transactions one year ago. Contributing to the latest uptick was iCIMS' 350,000-square-foot lease at the redeveloped Bell Works site in Holmdel. In addition, iconectiv absorbed 115,000 square feet at Somerset Corporate Center I in Bridgewater. Proximity to Manhattan and a skilled workforce replenished by graduates from the state's universities will help keep New Jersey on the radar screen of tech companies.

Office leasing activity by sector - Q3 2016



Source: JLL Research

159,871,576

Total inventory (s.f.)

1,514,656

Q3 2016 net absorption (s.f.)

\$25.47

Direct average asking rent

170,445

Total under construction (s.f.)

24.0%

Total vacancy

1,279,045

YTD net absorption (s.f.)

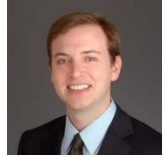
1.2%

12-month rent growth

100%

Total preleased

New York



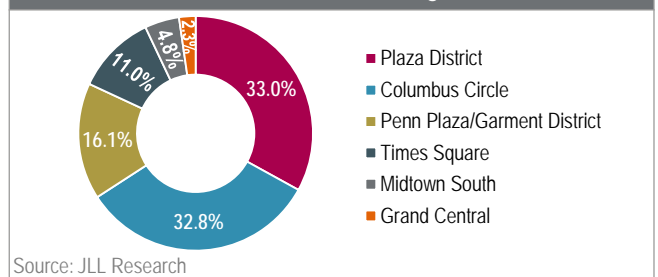
- Tristan Ashby
Vice President, Research,
New York City

Vacancy rises amid slower leasing activity

Hudson Yards lures tenants mostly from elsewhere in Midtown

With 6.2 million square feet of office space under construction and 1.7 million square feet already completed, Hudson Yards and Manhattan West have been successful at drawing tenants from elsewhere in Midtown, particularly the Plaza District and Columbus Circle submarkets. In total, over 95 percent of tenants relocating to Hudson Yards are coming from Midtown. Several notable tenants have contributed to over a 62 percent pre-commitment including L'Oreal, Skadden, Boston Consulting Group, Time Warner, KKR and Wells Fargo.

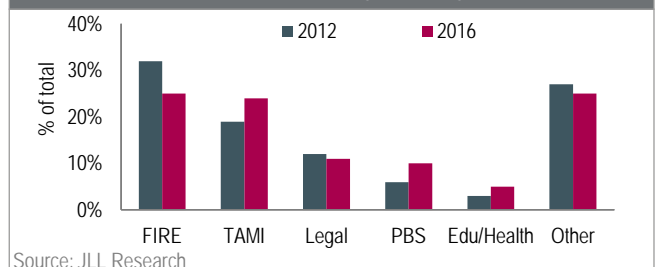
Where are Hudson Yards tenants coming from?



FIRE's real estate footprint falls

Manhattan's FIRE (financial services, insurance and real estate) sector has still not fully recovered since the recession. While FIRE continues to be Manhattan's largest occupier, its share in just four years has significantly fallen from 32 percent to 25 percent—a decline of almost 11 million square feet. In contrast, TAMI (technology, advertising, media and information), a key demand driver since 2008, has seen its share of occupied square feet increase five percentage points to 24 percent. Business services and education/healthcare, which have both added a sizeable number of jobs to the market in recent years, also posted increases in occupancy.

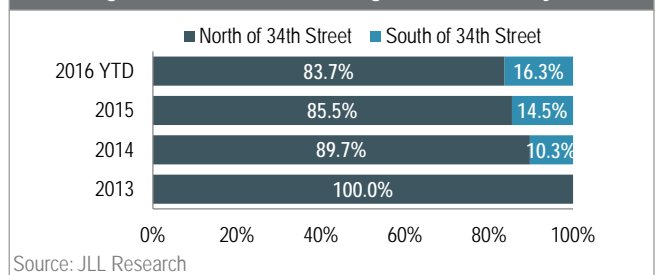
Manhattan occupied square feet by industry



Top-tier leases (\$100+) are moving south

Leases with a starting rent of \$100 per square foot or greater—historically concentrated in the Plaza District—have spread south and west as rents have pushed to record highs in Midtown South amid tight availability. The increase below 34th Street also marks a shift in the composition of industries paying top-tier rents. While financial services continues to pay the highest rents, established TAMI names have recently made a mark. Year-to-date, financial services has accounted for 62 percent of top-tier leasing, compared with 90 percent in 2012. In contrast, the TAMI sector changed from only 4.5 percent in 2012 to 34.1 percent in 2016.

Percentage of leases with a starting rent of \$100+ by location



449,872,906 Total inventory (s.f.)	1,169,184 Q3 2016 net absorption (s.f.)	\$73.51 Direct average asking rent	11,567,853 Total under construction (s.f.)
10.0% Total vacancy	-123,068 YTD net absorption (s.f.)	4.5% 12-month rent growth	41.2% Total preleased

Northern Virginia



- Robert Sapunor
Research Analyst,
Northern Virginia

Tenant growth by Metro while other areas struggle

Incremental growth but vacancy still high

The diversification of the Northern Virginia tenant base has boosted the market to six straight quarters of positive net absorption. However, decreases in government spending have limited Northern Virginia's recovery. Total vacancy has only fallen 0.9 percent since Q1 2015. While government contractors and agencies signed 13 of the 30 leases above 20,000 square feet, only three of those leases involved growth. Meanwhile, 10 of the 17 leases signed by tenants in other industries involved growth. While this diversification will continue to chip away at vacancy, Northern Virginia will remain a tenant-favorable market until there is increased federal spending.

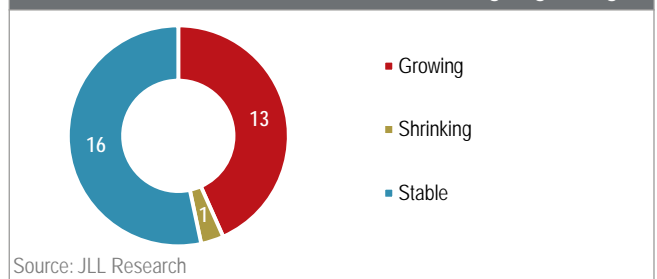
Tenants continue to relocate and expand along the transportation spine

The 2014 opening of the Silver Line to Tysons and Reston corresponded with a shift in tenant preferences to metro-accessible locations. 22 of the 30 leases signed over 20,000 square feet this quarter were in buildings situated along the Silver Line Corridor between Rosslyn and Herndon and included the largest tech and creative deals. APT signed a 98,786-square-foot lease at 4250 N Fairfax Drive and WeWork signed a 92,517-square-foot lease to open a new location at 1775 Tysons Boulevard. Those submarkets also accounted for 81.7 percent of the positive net absorption in Northern Virginia this quarter.

Construction activity picks up

Three new projects broke ground during the third quarter, bringing the total amount of space under construction to over 4.0 million square feet. Meridian broke ground on the Boro in Tysons. The first phase will include 677 apartments, 250,000 square feet of retail-including a Whole Foods and a movie theater-and a 436,813-square-foot office tower. 8350 Broad Street is 19.3 percent preleased to Tegna. Construction also began on 4097 Monument Corner Drive in Fairfax Center. Apple Federal Credit Union will occupy 62.0 percent of the 150,000-square-foot building. Carr Properties began construction on 2311 Wilson Boulevard in Courthouse. Opower will occupy 45,000 square feet in the 175,000-square-foot building.

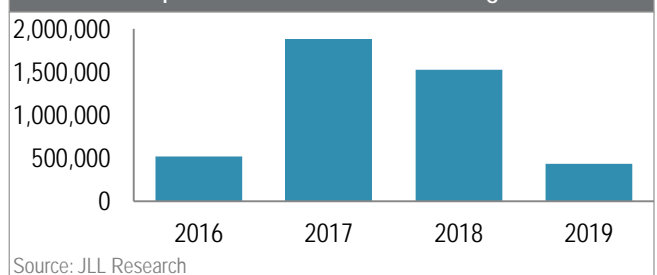
The balance has shifted from tenants shrinking to growing



Q3 2016 net absorption shows the migration to Metro



Deliveries will peak in 2017 with seven buildings scheduled



148,207,028 Total inventory (s.f.)	165,378 Q3 2016 net absorption (s.f.)	\$33.12 Direct average asking rent	4,360,274 Total under construction (s.f.)
20.1% Total vacancy	270,538 YTD net absorption (s.f.)	0.3% 12-month rent growth	73.1% Total preleased

Oakland



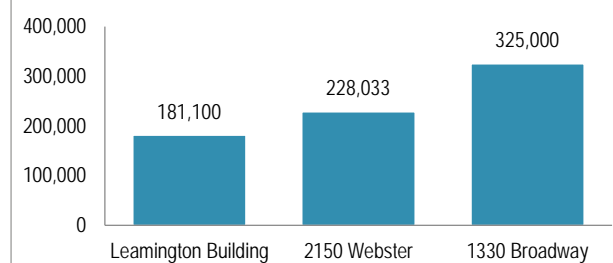
- Katherine Billingsley
Research Analyst,
Oakland - East Bay

Non-CBD submarkets see highest occupancy gains

Full-floor crisis averted, abundance of Class A floors available

Leasing activity in Oakland CBD was relatively light in the third quarter. However, major occupancies took place, notably AECOM's relocation from 1333 Broadway to nearly 100,000 square feet at 300 Lakeside, in addition to KTG's occupancy at the Leamington Building. Vacancy continues to trend downward to nearly 3.0 percent with new office development under construction. Despite low vacancies, tenants have several full floor options available in top tier Class A assets, including 1111 Broadway, 1333 Broadway, and 1901 Harrison. Oakland landlords continue to reposition Class B buildings to fit the preferred workplace environment of open-plan, collaborative space. Currently, several buildings over 700,000 square feet are under renovation, slated to deliver in the next 24 months.

Select CBD buildings (s.f.) currently under renovation

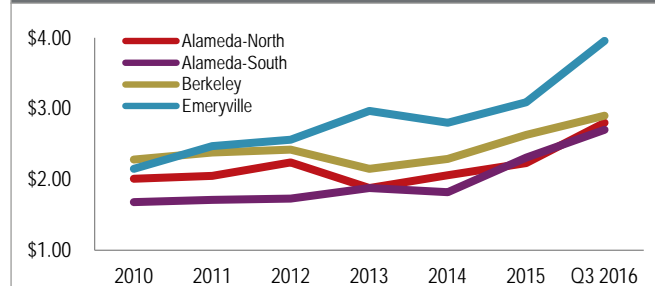


Source: JLL Research

Peripheral markets see activity from Oakland

Surrounding submarkets are tightening as a result of low vacancies in Oakland. Alameda-North saw the largest net absorption this quarter with over 100,000 square feet, driven by Cost Plus in Marina Village. Furthermore, one of Oakland Metro's largest leases was signed by Velodyne, taking 17,000 square feet at 1080 Marina Village Parkway. The total vacancy has dipped to 12.6 percent from 21.9 percent last quarter, and limited availabilities have resulted in a 12.0 percent increase in asking rates in the last three months. In Emeryville, Wareham Development began construction on EmeryStation West, a 250,000 square-foot Class A building located in the heart of the city, complete with access to transit accommodations and retail amenities. This is the only Class A building under construction in Oakland Metro and is being built speculatively, expected to deliver sometime next year.

Declining CBD vacancies push rents in nearby markets

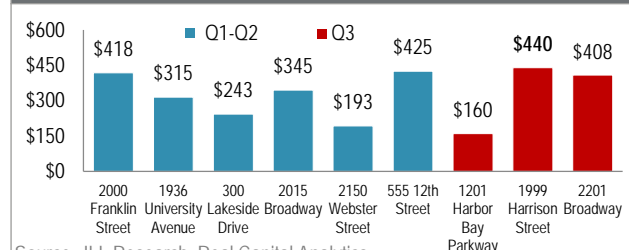


Source: JLL Research, y-o-y direct avg. rents

High watermark sales reach new peak in Q3

Capital markets remain on the upswing as more than \$800 million in investment sales activity occurred so far this year, totaling over 2.4 million square feet. High watermark pricing peaked in the third quarter with the sale of 1999 Harrison Street at \$440 per square foot. Because the market remains tight with no new office development breaking ground in the CBD, high occupancy rates and strong market fundamentals should continue to attract investors to the Oakland Metro.

2016 building transactions, sale price psf



Source: JLL Research, Real Capital Analytics

24,496,701 Total inventory Oakland Metro (s.f.)		151,867 Q3 2016 total net absorption (s.f.)		\$51.99 CBD direct average asking rent		250,000 Total under construction (s.f.)	
3.2% Total vacancy Oakland CBD	11.6% Total vacancy Non-CBD	404,296 YTD total net absorption (s.f.)		31.7% 12-month rent growth		0.0% Total preleased	

Orange County



- Jared Dienstag
Senior Research Analyst,
Orange County

Small and mid-size deals lead positive demand

Lack of large transactions does not halt occupancy gains

Despite the Orange County office market witnessing a lighter number of large lease transactions during the third quarter, the market continues to record positive net absorption. The Airport Area, South County, West County and North County submarkets recorded quarterly and year-to-date occupancy gains, demonstrating positive demand for office space throughout most of the Orange County market. Direct vacancy for the market is a stable 11.1 percent, representing a 10 basis point increase compared to one year ago. The slight increase is due to the fact that most of the 425,044 square foot 200 Spectrum Center tower, delivered earlier in the year, remains vacant. However, space is filling up which will pull down vacancy. Excluding the 200 Spectrum Center tower, direct vacancy would be 10.8 percent.

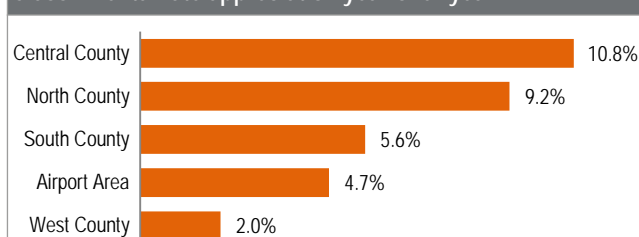
Quarterly rent growth in pockets of the market

While the Orange County office market recorded significant year-over-year rent growth of 9.6 percent, substantial quarterly rent increases occurred in select micro markets. Costa Mesa, Santa Ana, Laguna Hills/Aliso Viejo and Brea/La Habra micro markets experienced strong rent growth from the previous quarter. Although monthly average asking rents have risen 34.9 percent since the end of 2012 to \$2.63 per square foot, full service gross, this remains below the 2007 peak rate of \$2.74 per square foot, leaving room for additional growth. While overall asking rents continue to increase, moderation in leasing activity can slow down the pace of rent growth.

Strong local job growth provides positive fundamentals for the market

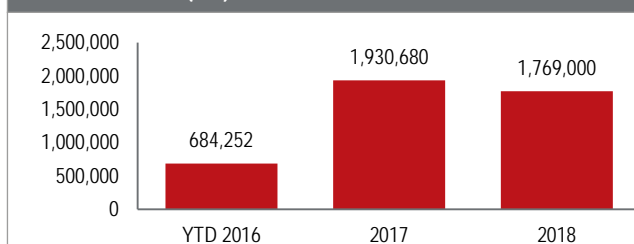
According to the California EDD, Orange County gained 39,000 jobs (+2.5 percent) over 12 months as of August 2016. The largest office using sector, professional and business services, added 11,900 jobs for 4.0 percent growth. This job creation is being led by the following three subsectors: legal services, management, scientific and technical consulting, and administrative support services. Job growth from a diverse set of industries not only demonstrates a healthy economy, but also spurs positive demand for office space.

Class B rental rate appreciation year-over-year



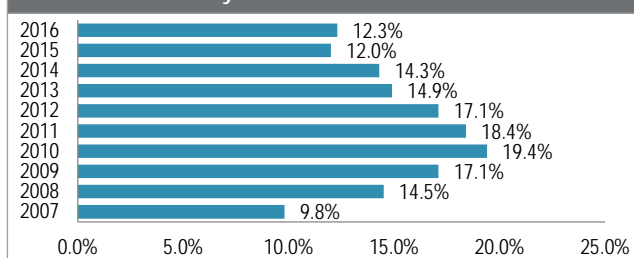
Source: JLL Research

Office deliveries (s.f.)



Source: JLL Research

Class A total vacancy



Source: JLL Research

95,769,930

Total inventory (s.f.)

249,156

Q3 2016 net absorption (s.f.)

\$31.59

Direct average asking rent

1,930,680

Total under construction (s.f.)

11.4%

Total vacancy

670,004

YTD net absorption (s.f.)

9.6%

12-month rent growth

0.0%

Total preleased

Orlando



- Valerie Mnayarji
Research Analyst,
Central Florida

Orlando's office market steady in uncertain times

The political uncertainty unsettles government-related tenants

The upcoming presidential election has many on edge, particularly those tenants in Orlando's Research Park. This submarket is the area south of the University of Central Florida, west of the city. The Research Park has a strong government and military-related tenant mix, with Agencies such as the Naval Support Activities (NSA) and contractors like Lockheed Martin, who are waiting for clarity from Washington, as the Park's office market could be materially affected by the election results. There has already been movement among these tenants to negotiate for shorter lease terms, and early termination options ahead of the election.

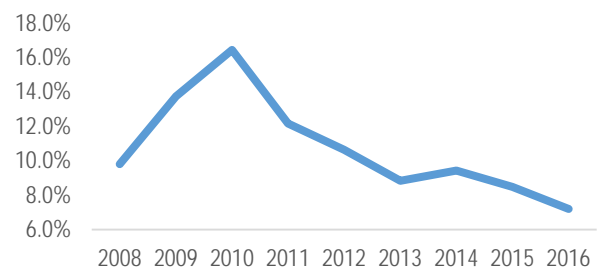
Construction nears completion in Lake Mary

A significant office project has been under construction since 2011, and is set to deliver next quarter. The 135,000-square-foot 500 TownPark building in Lake Mary is 79.0 percent pre-leased by CNA Insurance (105,000 square feet). This is a symptom of demand for Class A space in the area. This development is part of the TownPark Commons development, owned by Piedmont Office Realty Trust, that includes 400 TownPark and two other proposed office buildings totaling 800,000 square feet. The return of development, as well as the significant size of the pre-leasing activity speak not only to the stability of the office market, but the lack of large blocks currently on the market.

Brexit has potential to pound Orlando tourism

The immediate aftermath of Brexit has resulted in a drop in the Pound (gbp) from the \$1.45/gbp range to \$1.30/gbp, a downward trajectory that can have a significant impact on the Orlando economy given its heavy dependence on tourism. According to the Orlando Sentinel, more than 1.7 million U.K. residents visited Florida, 15.0 percent of all visitors to the state in 2015 and one of the nations top destinations for British tourists. While the drop in the market will likely not affect short-term tourism, there may be a drop in the intermediate term. Since theme parks lease considerable office space in the Orlando area and many have recently expanded, a drop in tourism could result in more space being put back on the market.

Research Park Vacancy Rate



Source: JLL Research

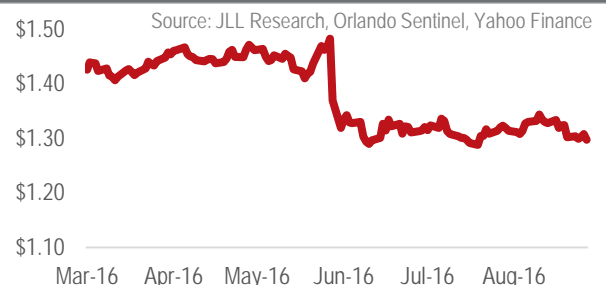
Office space in construction demand

79.0%

Class A office Space pre-leased in Lake Mary

Source: JLL Research

Six month GBP/USD conversion rate



Source: JLL Research, Orlando Sentinel, Yahoo Finance

29,249,000

Total inventory (s.f.)

81,300

Q3 2016 net absorption (s.f.)

\$21.09

Direct average asking rent

135,000

Total under construction (s.f.)

13.2%

Total vacancy

309,330

YTD net absorption (s.f.)

1.7%

12-month rent growth

79.0%

Total preleased

Philadelphia (CBD)



- Clint Randall
Research Analyst,
Philadelphia

Rent growth continues despite weak absorption, new deliveries add vacancy but expand options

CBD absorption close to flat with uneven activity across submarkets

University City leads the CBD in net absorption, as the University of Pennsylvania and other tenants begin to occupy space at the new FMC Tower. Runner-up Market East has grown organically through mostly smaller deals as a wider tenant base sees the area as a viable and appealing location. The Public Ledger Building, The Curtis, the Independence Collection, and the Cast Iron building all welcomed new tenants. Market West saw several larger firms give back space or relocate, building on last quarter's FMC relocation to produce nearly 400,000 square feet of negative absorption. A swing back is likely Aramark's arrival, major rollovers in 2017-2019, and organic tenant growth.

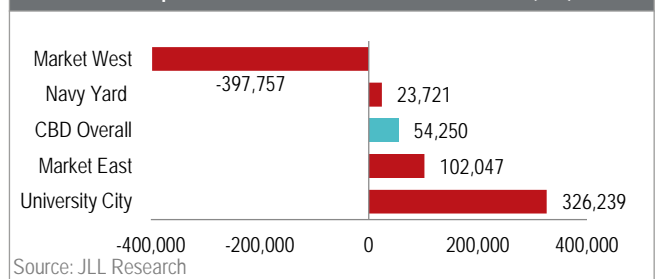
Rent growth also uneven across submarkets as new deliveries settle

Rent growth at the Navy Yard reflects the availability of a large block of Class A space at the new 1200 Intrepid, as well as recently available Class B space in a submarket with near-zero availability for several years. FMC's delivery explains the majority of University City's increase, while Market East's impressive second-place position is a combination of extensive repositioning across older buildings and new creative and boutique options near Midtown Village. With no recent deliveries or major renovations, Market West's 3.5 percent growth is indicative of baseline growth. With quality spaces limited and out-of-market interest increasing, the market can expect to see this type of rent growth even without significant investments from landlords.

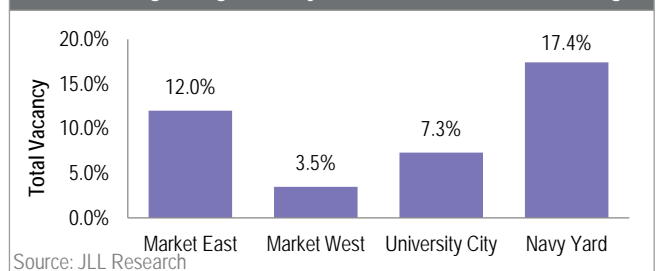
Some submarkets see first new spec space in years as pipeline expands

The arrivals of 1200 Intrepid (Navy Yard) and 34 S 11th (Market East) bring the first Class A spec spaces in years to their respective submarkets. Both buildings have stolen tenants from nearby CBD properties while commanding market-topping rents. The corresponding uptick in vacancy is welcome in ultra-tight University City and The Navy Yard, but premium rates mean that value-conscious tenants are unlikely to feel relief. After delays, 2400 Market is kicking off in earnest with a 300,000-square-foot commitment from Aramark. Approximately 200,000 square feet remain available in the project. With build-to-suits dominating the near-term pipeline, tenant options remain constrained.

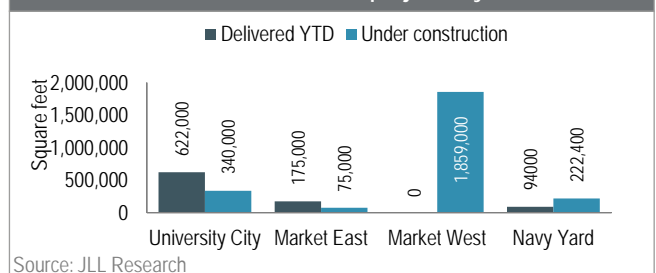
YTD net absorption: CBD submarkets and overall (s.f.)



Overall asking rent growth by submarket (12-month change)



Office deliveries and construction projects by submarket



44,708,491

Total inventory (s.f.)

-32,377

Q3 2016 net absorption (s.f.)

\$30.35

Direct average asking rent

2,421,400

Total under construction (s.f.)

10.6%

Total vacancy

54,250

YTD total net absorption (s.f.)

9.6%

12-month rent growth

891,000

Total deliveries YTD

Philadelphia (Suburban)



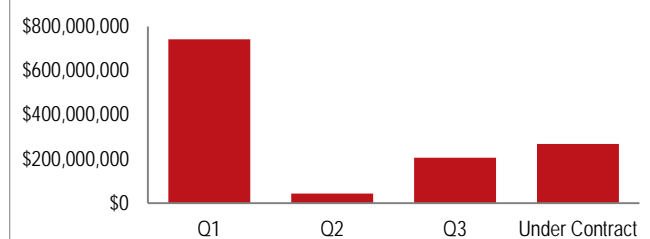
-Gina Lavery
Research, Analyst
Philadelphia

New construction and major transactions show core suburbs still attracting investment

Workspace moves on more suburban properties in Malvern / Exton

After entering the Philadelphia market in late 2015 by purchasing a portion of Liberty Property Trust's Horsham/Willow Grove portfolio, Workspace Property Trust is working on its next deal, again with Liberty, to solidify its place as the suburbs' new dominant landlord. Workspace is under contract to acquire more than 100 properties, including 15 office buildings in the Malvern/Exton submarket. This second major purchase indicates that the suburbs—despite a recent surge in urban activity—are not dead. Properties in strategically located or under-capitalized submarkets, such as Horsham/Willow Grove, King of Prussia/Wayne, and Malvern/Exton, are still favorable among investors.

Suburban investment sales



Source: JLL Research

Three construction projects break ground, two others already underway

Five new office projects are currently underway and will add 568,545 square feet of Class A office to the Philadelphia suburban market upon completion. Among the projects are three new starts, two of which are build-to-suit: 5 Hillman Drive for Franklin Mint and 955 First Avenue for Highway to Health. A 108,000-square-foot speculative project at 135 S Bryn Mawr Avenue will feature a mix of healthcare tenants. Following the trend to upgrade and amenitize older, lower quality building stock, 279,064 square feet of Class B space is currently being renovated—785 Arbor Way and 300 Willowbrook Lane—reducing the availability of inexpensive options for tenants.

Suburbs see slight uptick in new construction starts

568,545 s.f.

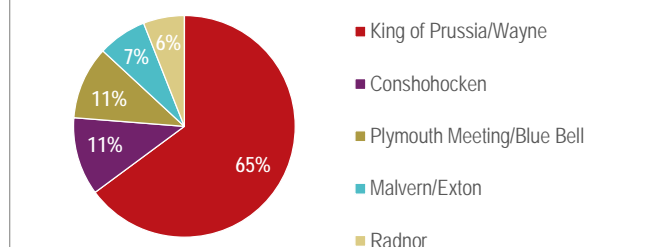
Total square footage under construction or under renovation in the suburbs

Source: JLL Research

King of Prussia leads core suburbs in leasing activity in slow quarter

King of Prussia/Wayne continues among the suburbs' core submarkets in leasing activity for the year after another quiet quarter for new deals. Big leases at 150 S Warner (Cigna's 35,172-square-foot sublease), 610 Freedom Business Center Drive (21,431 square feet), and 1000 1st Avenue (19,708 square feet), all which will occupy in the fourth quarter, may enable the submarket to be an outlier in the suburbs with year-end positive absorption. The suburbs have seen record low vacancy rates in 2016, but the recent drop in leasing signals an overall slowdown in the market.

Leasing activity in core submarkets



Source: JLL Research

52,944,291 Total inventory (s.f.)	-192,692 Q3 2016 net absorption (s.f.)	\$25.73 Direct average asking rent	124,000 YTD delivered construction (s.f.)
14.5% Total vacancy	308,864 YTD net absorption (s.f.)	4.3% 12-month rent growth	63% Total preleased

Phoenix



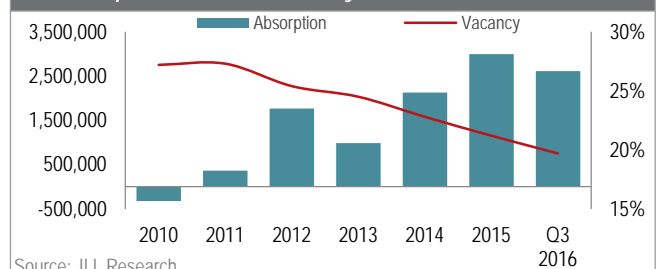
- Keeley Byer
Research Analyst,
Phoenix

Vacancy dips below 20 percent, lowest since 2008

Office vacancy reaches 8-year low

Total vacancy in Metro Phoenix decreased to 19.7 percent in the third quarter of 2016, down 240 basis points from one year prior and down 840 basis points from the recessionary peak of 28.1 percent set in 2011. This marks the first time since the recession that the vacancy rate has been under 20 percent, signaling continued improvement in the Phoenix office market. Total positive net absorption has surpassed 2.6 million square feet through September and is projected to exceed 3.0 million square feet for the year. At its current pace, this would be the highest level of absorption since 2005 when 4.0 million square feet of space was absorbed.

Net absorption and total vacancy

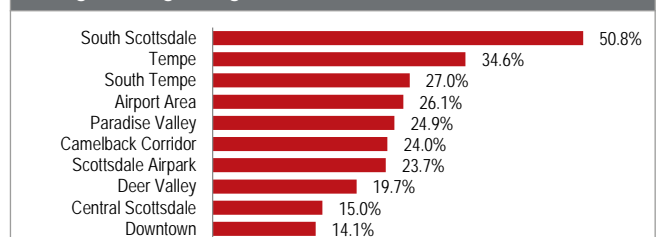


Source: JLL Research

Largest rent growth in South Scottsdale

The South Scottsdale submarket recorded the largest percentage gain in average asking rent rates in Metro Phoenix over the past five years. Asking rents in South Scottsdale have increased 50.8 percent, rising from \$20.73 per square foot, full service gross) in 2011 to \$31.26 in the third quarter of 2016. The Tempe submarket ranked second with average asking rates growing from \$21.63 to \$29.12, or 34.6 percent, over the same time period. Located in Downtown Tempe, Hayden Ferry Lakeside currently has the highest asking rent in the entire Valley at \$45.00 per square foot.

Average asking rent growth (2011 – Q3 2016)

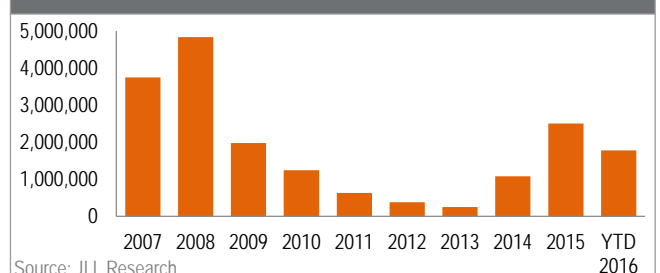


Source: JLL Research

Phoenix office deliveries to surpass 2.0 million square feet

Nearly 1.8 million square feet of office space has been delivered in Metro Phoenix through the third quarter of 2016 and is projected to reach 2.3 million square feet by the end of the year. In 2015, more than 2.5 million square feet of new office space was delivered in the Valley, the highest total since 2008 when over 4.8 million square feet was constructed. Even with nearly 5.4 million square feet of new office space delivered since 2014, the overall vacancy rate in the Valley has decreased 390 basis points. Strong job growth combined with expansions and relocations in the Phoenix office market should allow for further improvement in this current economic growth cycle.

New office deliveries



Source: JLL Research

84,035,044

Total inventory (s.f.)

1,123,129

Q3 2016 net absorption (s.f.)

\$24.22

Direct average asking rent

1,692,140

Total under construction (s.f.)

19.7%

Total vacancy

2,611,611

YTD net absorption (s.f.)

3.1%

12-month rent growth

37%

Under construction preleased

Pittsburgh



- Tobiah Bilski
Research Analyst
Great Lakes

Renovations increase as market favorability shifts

Building renovations trending up in the urban submarkets

While steadily increasing rental rates have not yet reached the threshold to warrant new development (~\$40.00 p.s.f.), landlords have found a way to mitigate risk by renovating older buildings. The Terminal Building in the Fringe submarket – one of the largest buildings in Pittsburgh – is being redeveloped to include 100,000 square feet of retail space with an additional 500,000 square feet of office. Allegheny Center, the once 1.2 million-square-foot mall in North Side also underwent a \$200 million conversion into office space. More than 20 buildings in Pittsburgh totaling over 3.0 million square feet are undergoing some type of renovation or being converted into hotels, apartments, or even mixed-use office buildings.

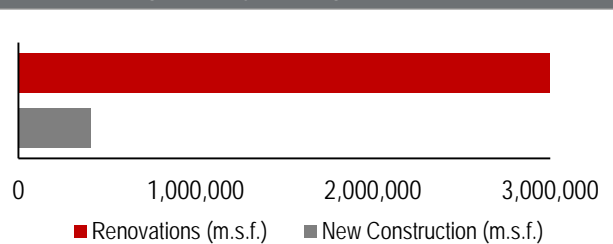
Market favorability shifts – demand fades for suburban submarkets

Current wages have declined in the Pittsburgh region by 5.8 percent over 2015 numbers. Although the region has experienced positive job growth since the beginning of 2016, jobs have netted a loss since August 2015. Suburban submarket leasing activity has been quiet, while vacancy remains higher than the urban submarkets. Demand is in the urban submarkets, but pending moves by large tenants downtown will soften market conditions. Most recently, the Art Institute announced plans to move out of their turn-of-the-century 175,000-square-foot building, freeing up space in a market where the repositioning of older buildings is the current trend. As demand focuses on the urban submarkets and supply increases, the positioning of assets is gaining significance.

Office demand from the energy industry is stuck in a rut

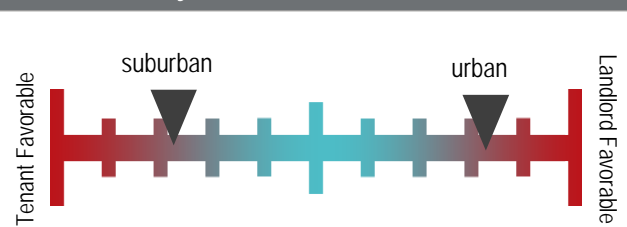
The downturn in the energy market has caused office demand from energy companies to diminish. Activity in Pittsburgh's energy mecca submarket, Southpointe, has been quiet. Under 3.0 percent of current tenants in the market are related to energy, a disproportionately low figure. The recent 135,000-square-foot relocation of Peoples Natural Gas to 375 North Shore Drive was the largest energy-related lease signed this year. Other office activity this year included Shell's new 75,000 square foot lease at 4301 Dutch Ridge Road in the North submarket, close to its planned cracker plant in Beaver County. Until the cracker plant begins construction, office demand from energy-related companies is not forecasted to pick back up in Pittsburgh.

Renovations significantly outweigh new construction



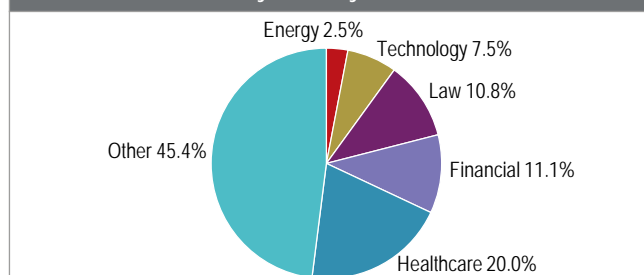
Source: JLL Research

Market favorability turns as market softens



Source: JLL Research

Tenants in the market by industry



Source: JLL Research

50,355,528 Total inventory (s.f.)	19,968 Q3 2016 net absorption (s.f.)	\$22.95 Direct average asking rent	412,000 Total under construction (s.f.)
15.8% Total vacancy	372,592 YTD net absorption (s.f.)	3.3% 12-month rent growth	55.4% Total preleased

Portland



- Tim Harrison
Research Analyst,
Portland

Market demand takes a breather

Third quarter lull

Leasing activity in the third quarter was lackluster, falling to its lowest level since the third quarter of 2009. Net absorption came in lower than new deliveries for the quarter, pushing vacancy up 20 basis points. The decrease in overall leasing activity may raise questions as to whether this is a start of a trend or whether outside factors, such as the uncertainty of an election year, are at play. However, the number of tenants seeking space is up 5.4 percent year-on-year with almost 1 million square feet being sought in the 4th quarter of 2016, suggesting that third quarter numbers may just be a hiccup in an otherwise strong year for Portland, as the market is on pace to see net absorption equal or better than 2015.

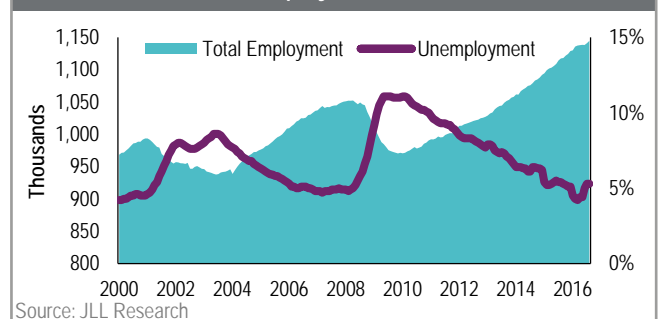
Significant price increases

Historically, Portland's rental rates have not risen according to traditional supply demand fundamentals due to the high level of local ownership in the market. These owners were reluctant to push rents even though vacancy was falling because of their very low cost basis. This is no longer the case as ownerships have transferred to institutions who have in turn pushed rents in response to market dynamics and in an effort to maximize their ROI. This, coupled with low vacancy and deliveries of new quality product in the urban core, is pushing Portland office rents to new highs and overall direct rents are now \$26.00 per square foot, up 8.0 percent, with new product asking as much as \$46.00 per square foot, full service gross.

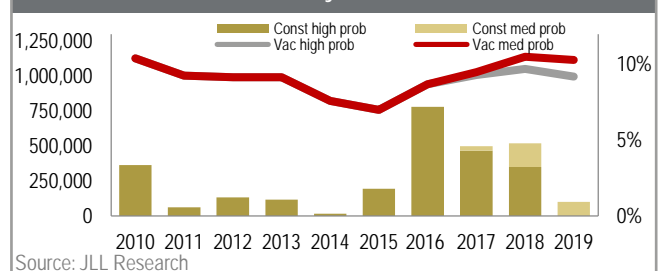
Sublease space

Mirroring a national trend, sublease space availabilities are up 50.5 percent year-on-year to 940,528 square feet. A main driver of the increase in available sublease space is the push for profitability in the tech sector as venture capital becomes harder to come by. Firms that originally banked space for future expansion are finding that they need to scale back to contain costs. However, these available spaces are being filled fast and sublease vacancy is only 271,882 square feet or 0.5 percent of inventory. Tenants see an opportunity to get into mostly built-out space for a shorter term, offering flexibility for smaller tech tenants. Landlords are finding that they may be competing with sublease space for new tenants.

Portland metro area unemployment rate



CBD construction and vacancy forecast



Demand from tenants in the market

3,189,600 s.f.

Demand from tenants in the market

Source: JLL Research

59,614,334

Total inventory (s.f.)

232,341

Q3 2016 net absorption (s.f.)

\$26.00

Direct average asking rent

1,605,421

Total under construction (s.f.)

9.0%

Total vacancy

599,080

YTD net absorption (s.f.)

8.0%

12-month rent growth

30.0%

Total preleased

Raleigh-Durham



- Ashley Lewis
Senior Research Analyst
Raleigh-Durham

Morrisville's Lenovo sublease taken over by direct deal with UNC-Healthcare

This time last year, Lenovo announced the consolidation of its team at the Morrisville campus in order to improve their space utilization. The first space of 70,000 square feet was vacated late 2015 and leased by Credit Suisse. The remaining 183,000 square feet remained on the market for the better part of 2016 until the third quarter. UNC-Healthcare announced its plans to take over the sublease in a 12-year direct lease with Starwood Capital Group. UNC-Healthcare's Chapel Hill campus is at capacity and has minimal room for expansion. As a result, the Morrisville expansion is to house administrative functions, including: ISD, Human Resources and analytical groups. The accessibility to both UNC Hospital systems within the network of Chapel Hill, Raleigh, Johnston County, Rocky Mount, Goldsboro and Siler City is another advantage of the new location.

Three suburban ground breakings in third quarter

In September, Raleigh-Durham saw three groundbreakings in the suburban submarkets of West Raleigh, Cary and South Durham. Meridian Business Park broke ground mid-September on their speculative building anchored by medical device developer, MED-EL. The Durham-based company signed-on to take 75 percent of the property. Lease commencement is expected for September 2017. Highwoods' fifth building at Cary's CentreGreen Business Park broke ground this past quarter as well. Highwoods moved forward with CentreGreen Three without secured tenants. Deutsche Bank occupies thirty percent of the office park; however, it recently announced plans to halt hiring due to North Carolina's HB2 legislation. Lastly, Wade IV in West Raleigh broke ground end of September.

Office trades continue to rise as five Class A assets sell

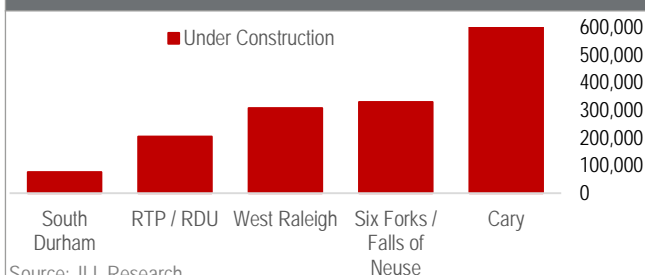
As reported in the previous quarter, 2016 is seeing a high number of large portfolio owners bringing properties to market. Third quarter alone saw five Class A assets trade and one Class B, 100-percent-leased flex building sell. Spreading across an array of suburban submarkets, these five assets saw an average sale cost of \$174.14 per square foot. These sales included large institutional buyers such as Ventas, Inc, CapRidge Partners and The Simpson Organization. Ventas, Inc is purchasing all 23 properties from The Blackstone Group LP's medical and life science real estate portfolio.

Square feet of sublease space off the market

183,000 s.f.

Source: JLL Research

Suburban development pipeline



Third quarter office sales

6 assets 518,280 square feet
averaging 89% occupied

Source: JLL Research

44,213,459

Total inventory (s.f.)

230,775

Q3 2016 net absorption (s.f.)

\$21.76

Direct average asking rent

1,833,068

Total under construction (s.f.)

11.0%

Total vacancy

815,852

YTD net absorption (s.f.)

5.5%

12-month rent growth

37.1%

Total preleased

Richmond



- Geoff Thomas
Senior Research Manager,
Richmond

Consolidations break streak of occupancy gains

Consolidations creating the bulk of negative net absorption YTD

After several years ending in positive net absorption, the Richmond market lost 229,921 square feet of occupancy year to date. Nearly 60.0 percent of which stemmed from Capital One consolidating their leased footprint to their owner-occupied campus in the West Creek submarket. In contrast, downsizes in the Downtown submarkets tapered and a spurt of new leasing volume should continue to offset occupancy loses in the suburbs over the next 12 months, or least until two new CBD towers deliver in 2018 and 2019. With suburban office construction at a minimum and the lack of suburban Class A space (8.2 percent beginning this year), this increase in vacancy was welcomed as many firms' real estate plans remained expansionary.

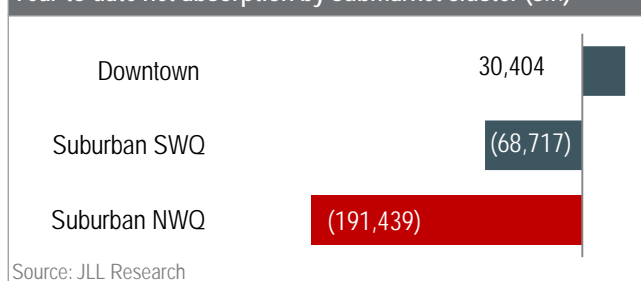
Office development back on track, but mainly in CBD

Over the next three years, Richmond's current development pipeline is concentrated in the CBD. Site demolition began for Dominion Resources' new, owner occupied 607,000-square-foot tower at 111 S 6th Street with an estimated delivery in the first half of 2019. However, work on SunTrust's new CBD headquarters has yet to begin with no signs of construction at 321 S 10th Street. The mixed-used development had a target completion of Q1 2018 to coincide with their suburban office consolidation to Westmark One. Given most CBD tower projects are completed within a minimum two-year window, this may delay the completion by several quarters, possibly into 2019.

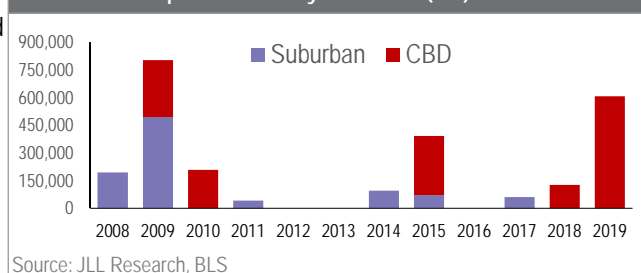
Rent growth still dominated by suburban submarkets, particularly in the NWQ

Innsbrook and Stony Point/Huguenot submarkets led Class A rent growth in the third quarter due to low availability rates and portfolio ownership with aggressive rate hike strategies. In comparison, lack of leasing velocity and inflated vacancy in the CBD produced reduced rates for some of the key Class A assets Downtown. Rising availability in the Class B inventory Downtown may also place pressure on Class A rates as SunTrust's relocation from 919 E Main nears. This move will place over 250,000 square feet back on the market in the Class B segment in addition to over 300,000 square feet vacated by law firms in the Class A inventory since 2015.

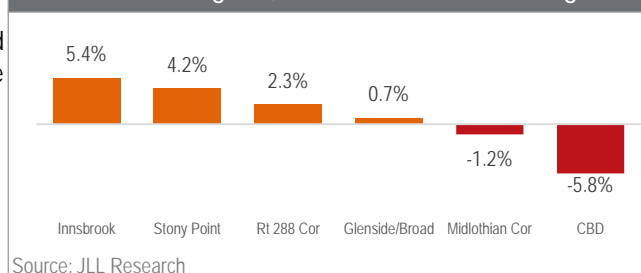
Year to date net absorption by submarket cluster (s.f.)



Current development delivery schedule (s.f.)



Submarkets with highest, lowest Class A annual rent growth



24,354,135

Total inventory (s.f.)

-66,425

Q3 2016 net absorption (s.f.)

\$19.18

Direct average asking rent

60,000

Total under construction (s.f.)

14.5%

Total vacancy

-229,752

YTD net absorption (s.f.)

5.8%

12-month rent growth

40.0%

Total preleased

Sacramento



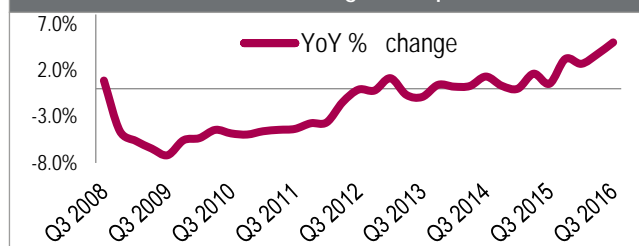
- John Sheaffer
Senior Research Analyst,
Sacramento

Core submarkets humming, others following suit

Strong rent growth persists and poised to accelerate

After the better half of a decade, Sacramento landlords are regaining leverage, exhibited by sustained rental rate hikes and dwindling concessions. During the past 12 months, the average asking rate increased by 5.0 percent year-over-year. Leading into 2016, previously underperforming submarkets such as Point West had become a drag on the overall market's rent growth rate. As of Q3 2016, the average asking rent among Point West buildings increased by 4.8 percent year-over-year. While rents will continue to rise across the board, competition for the remainder of available space downtown—nearly 1.0 million square feet priced at a premium relative to the overall market—will disproportionately propel the overall average asking rate upward.

Sacramento market annual rent growth spikes

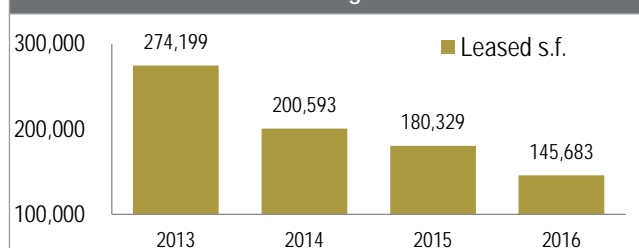


Source: JLL Research

Why is healthcare leasing activity on the decline?

Regional healthcare systems continue to expand, adding an additional 6,300 jobs to the local economy during the past 12 months. However, the steady decline of leasing activity among medical office users during the past several years seems to belie the strong industry employment gains. In reality, nearly every healthcare system in the area is growing, but these companies are seeking build-to-suit options rather than expanding into existing space. The Roseville submarket, where the vacancy rate has fallen to 9.0 percent, is an epicenter of this growth. For example, Adventist Health plans to consolidate six existing offices into a 280,000 square foot project on Eureka Road, while two other medical players are rumored to be seeking similar opportunities within the same vicinity.

Historical healthcare-user leasing volume

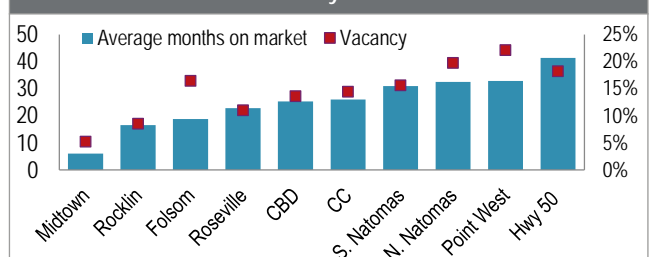


Source: JLL Research

Time on market figures signal activity pickup for previously lagging submarkets

The vacancy rate among all submarkets continues to trend downward and closely corresponds with the average amount of time available space spends on the market, relative to other submarkets. In submarkets like Point West and Folsom, the gap between time spent on the market and the vacancy rate indicates a heat-up. Additionally, the average months on the market figure in both submarkets falls below their respective 5-year averages. Leasing activity along the Highway 50 Corridor continues to lag behind the overall market. However, a disproportional number of contiguous blocks are located along the corridor and a few deals could quickly tip the scales.

Time on the market vs. vacancy rate



Source: JLL Research

43,877,872 Total inventory (s.f.)	455,415 Q3 2016 net absorption (s.f.)	\$1.96 Direct average asking rent	239,770 Total under construction (s.f.)
14.0% Total vacancy	882,062 YTD net absorption (s.f.)	5.0% 12-month rent growth	55% Total preleased

Salt Lake City



Sean Eaton
Research Analyst,
Salt Lake City

Have office rates reached their peak? Not likely

Salt Lake metro continues to have strong fundamentals

The office market has experienced consistent growth for nearly a decade, with 2016 absorption on pace to be the highest since 2007. Total vacancy is a low 7.3 percent and average asking rates have risen 10.4 percent over the last 12 months. Tenant demand has kept pace with a growing supply of inventory and with new construction, as well: see elevated preleasing rates. JLL's latest "U.S. Technology Outlook" shows Salt Lake to be the most affordable metro in the western U.S. for tech companies when considering employee and real estate costs. The past year has seen financial, professional and business service industries lead the way in the metro's growing economy.

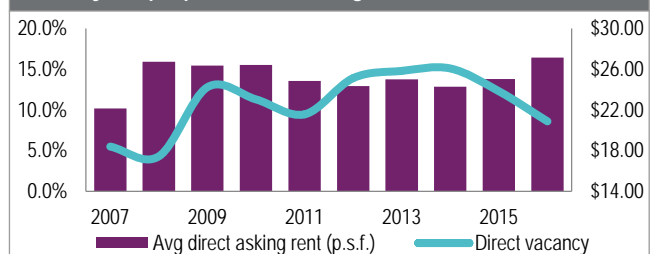
Developers take advantage of strong tenant demand

The metro has experienced decreasing vacancy and rising asking rents since 2013, and developers have taken notice. Over 2.2 million square feet (m.s.f.) of new product has been delivered this year, with another 1.1 m.s.f. set for delivery by year-end. This will almost triple the delivered square feet of either 2014 or 2015. Further still, 2017 should deliver another 1.5 m.s.f. based on current sites under construction. Despite this flurry of new development, total vacancy remains low, and nearly three-quarters of all inventory delivered in 2016 is already leased. What remains available is asking an average rent of \$26.34 per square foot—equating to a 17.0-percent premium over the overall metro's figure.

Office-using industries spearhead economic growth

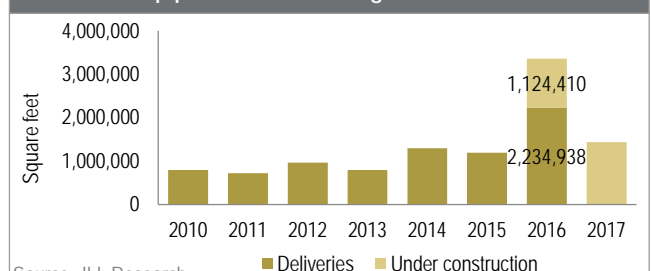
Salt Lake's economy continues to grow, and unemployment rests at 3.6 percent, which is the third lowest among large U.S. metros. The two market segments spearheading this growth are the financial and professional and business service industries—leading sectors boasting the largest increase in new employees over the last 12 months. Combined, strong economic growth (especially in office-using industries), continued absorption of new space and rising rental rates all point towards a thriving office market.

CBD Skyline properties: advantage, owners



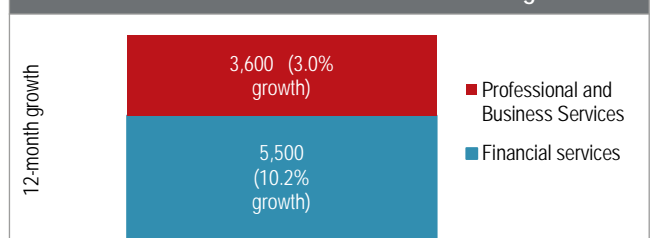
Source: JLL Research

Construction pipeline shows strength of market



Source: JLL Research

Finance and Professional service industries lead growth



Source: JLL Research, Bureau of Labor Statistics

49,442,083 Total inventory (s.f.)	708,309 Q3 2016 net absorption (s.f.)	\$22.50 Direct average asking rent	1,856,270 Total under construction (s.f.)
7.3% Total vacancy	1,247,276 YTD net absorption (s.f.)	10.4% 12-month rent growth	50.9% Total preleased

San Antonio



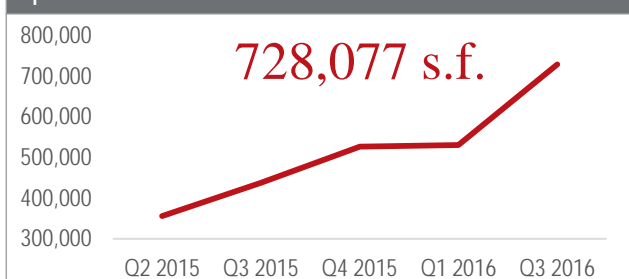
- Emily Hunt
Research Analyst,
Austin

When you're hot, you're hot: Northwest still thriving

No pause in Northwest leasing and development activity

The Northwest submarket continues to lead the charge in leasing activity and new development for the San Antonio region. Essentially all of the space that has been absorbed across the San Antonio market this year has been in the Northwest. Four of the top five lease transactions of Q3 were also in the Northwest and they are evidence that the large development projects underway could be well positioned, despite the vast amount of space that is set to be delivered in 2017. Collectively, there are now over 728,000 square feet under construction in San Antonio, all located in the Northwest.

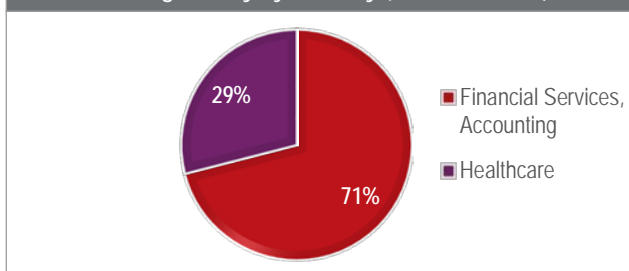
Square feet under construction in the Northwest submarket



Financial services dominating leasing activity

A look at the largest leases of Q3 illustrates the importance of the financial services and insurance sector to the local real estate market. Seven of the top 10 largest leases were signed by finance, insurance, and accounting firms, and together they represented over 462,000 square feet of expansionary leasing activity. USAA alone was responsible for 295,000 square feet of leasing, with the majority of their activity concentrated in the Northwest. SWBC, RSM, and UBS also made large commitments to the market, proving San Antonio's position as an operations hub for finance and accounting. Beyond finance, the healthcare sector represented substantial leasing activity as well, led by Centene in the Far West submarket and The Center for Healthcare Services (Northwest).

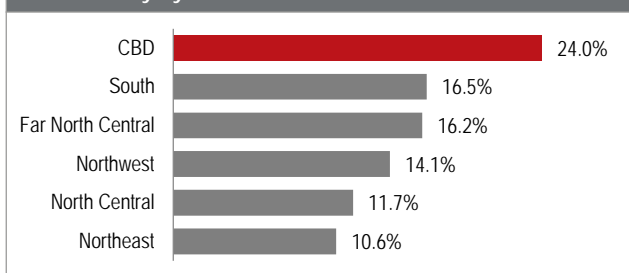
Q3 2016 leasing activity by industry (leases > 20k sf)



A tale of two cities downtown

While the San Antonio CBD vacancy rate remains elevated at 24 percent, the market is sharply divided among Class A and Class B product. The Class B vacancy rate is among the highest in the nation, at 30 percent, while Class A vacancy is now 13 percent and still falling. This gap highlights the demand for high-quality offices, and also the challenge facing landlords with functionally obsolete buildings. Excitement around the development of Frost Tower indicates that interest in Trophy space is strong and downtown San Antonio may be on the verge of the urban renewal wave that has revitalized many urban cores across the country.

Total vacancy by submarket



26,681,851 Total inventory (s.f.)	191,784 Q3 2016 net absorption (s.f.)	\$22.90 Direct average asking rent	728,077 Total under construction (s.f.)
15.1% Total vacancy	672,978 YTD net absorption (s.f.)	2.3% 12-month rent growth	63.1% Total preleased

San Diego



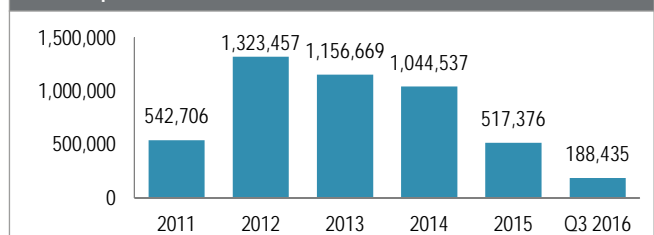
- Josh Brant
Senior Research Analyst,
San Diego

San Diego market getting its second wind

Office supply pipeline is slowing down

The 188,435 square feet of office under construction at the end of the third quarter is the lowest level of office property under construction in the past six years. Just over one million square feet of speculative office projects have delivered since the start of 2015, and 680,000 square feet, or 67.3 percent of that office space remains available. The current lull in new office supply should give opportunity for these recent office deliveries to lease up. A 50,000-square-foot portion of the Markers Quarter offices is likely the next project to break ground, as the first speculative office development in Downtown since the recession.

Office square feet under construction



Source: JLL Research

Residential developers very active in the office arena

Bosa Development and Hammer Ventures, both known locally for residential development, have been among the most active investors in San Diego offices of late, adding additional competition to the office buyer pool. Hammer's acquisition of 1010 2nd Avenue was the second largest office acquired for investment thus far in 2016. Meanwhile, Bosa was the buyer in two of the top-10 2016 office transactions by sale price. Additionally, Bosa bought 1.4 acres at 820 W. Broadway from The Irvine Company. The site had been approved for a 685,000-square-foot office development, however Bosa is now proposing a 45-story residential condo tower.

Significant 2016 office acquisitions by residential developers

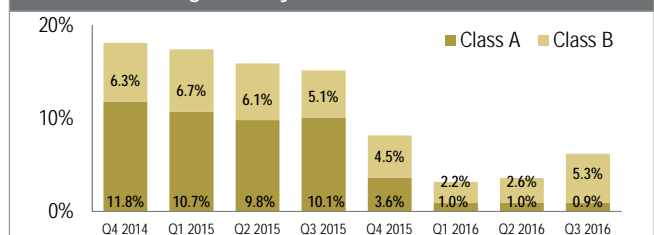
1010 2 nd Ave.	324k sf	\$54.4M
530 B St.	233k sf	\$53.3M
401 Mile of Cars	193k sf	\$42.8M
820 W. Broadway	1.4 Acres	\$66.5M

Source: JLL Research

Class B office rent increases are now outpacing Class A

The countywide average Class B asking rental rate in the third quarter was \$28.80 per square foot on a full service basis. This was 25.0 percent lower than the average Class A rental rate of \$38.40 per square foot. Over the past four quarters the difference between the average Class B rental rate versus Class A rental rates has decreased 3.1 percentage points due to the dramatic decrease in the rate of gains for Class A rents, while Class B rent increases have decreased to a lesser extent. Class A rents are now only 0.6 percent below the previous peak level reached in 2007. Class B rents are 3.2 percent below their previous peak level.

Y-o-Y rental rate growth by class



Source: JLL Research

77,876,436 Total inventory (s.f.)	708,413 Q3 2016 net absorption (s.f.)	\$31.20 Direct average asking rent	188,435 Total under construction (s.f.)
12.9% Total vacancy	1,251,630 YTD net absorption (s.f.)	5.7% 12-month rent growth	0.0% Total preleased

San Francisco

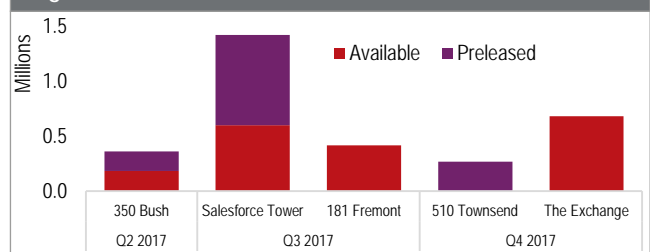


- Jack Nelson
Research Analyst,
San Francisco

New construction supply hinges on pre-leasing activity

Twitch.tv signed the largest deal of the quarter, pre-leasing 180,000 square feet at 350 Bush, the North Financial District's largest development. The lease, however, was the only deal for new construction since Q1 2016. Pre-leasing sits at 39.5 percent, with 1.9 million square feet of available space set to deliver by year-end 2017. However, developers remain confident, as several large users in the market are focusing on new developments, a majority of which are local expansionary requirements. If pre-leasing stagnates, delivery of vacant space will stabilize the supply demand imbalance, driving vacancy up and rents down.

Large blocks of new construction to deliver in 2017

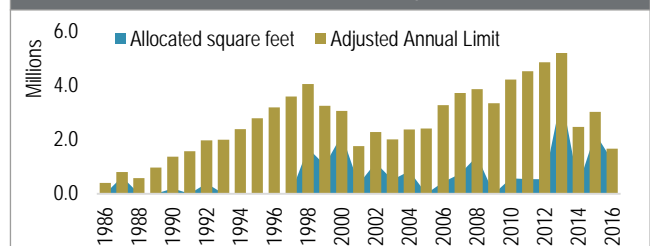


Source: JLL Research

Development constrains Prop M levels

Prop M allocation hit its lowest level since its origination in 1986, with the approval of Oceanwide Center, a 1-million-square-foot mixed-use development at 1st and Mission. The city's annual limitation on office space has only 440,000 square feet available for allocation with more than 1.1 million square feet of pending projects. The draft Central SOMA Plan was finalized in mid-August calling for a 450 percent increase in commercial development capacity and 300 percent for housing within the area. With more than 3.8 million square feet of Central SOMA office developments in the pipeline, competition for Prop M allocation will be substantial.

Market sees pinch in Prop M availability

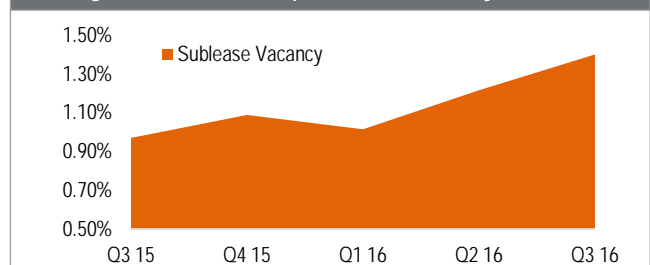


Source: JLL Research

Sublease concern mitigated by demand

The velocity of sublease availabilities declined in Q3, decreasing by 266,000 square feet, despite a large addition from Twitter at both 1355 Market Street and 1 Tenth Street. Twitter's subleases have garnered a lot of attention, being the only 100,000 square foot block with a top tier creative build out that is ready for occupancy. The market will continue to see availabilities from tech firms feeling the squeeze of a tightening VC funding environment and increased competition. However, demand for space with limited capital exposure will continue to trend up as firms focus on profitability and construction costs remain high.

Few large move outs tick up sublease vacancy



Source: JLL Research

76,335,189 Total inventory (s.f.)	217,785 Q3 2016 net absorption (s.f.)	\$73.59 Direct average asking rent	4,435,830 Total under construction (s.f.)
8.3% Total vacancy	742,491 YTD net absorption (s.f.)	10.2% 12-month rent growth	39.5% Total preleased

San Francisco Mid-Peninsula



- Eduardo Romero
Research Analyst,
Silicon Valley

Flurry of acquisitions boost property values

Cheap money poured heavily into safe haven real estate assets in the Mid-Peninsula in 2016

The pace of acquisitions accelerated in the second half of 2016 averaging \$425 per square foot for Class A assets. Buyers varied from owner-users such as Google and Facebook to seasoned institutional investors seeking a safe place to park excess liquidity. At least one of the transacted properties have changed owners more than once in the past two years. In the midst of persistently low vacancy rates and lofty rental rates for Class A office space, an increasing number of investors are willing to sacrifice returns for the sake of security ahead of long-expected increases in interest rates.

Small tenants seeking to enter the Mid-Peninsula should consider subleasing

Spaces for sublease are usually priced at below-market rents providing a unique opportunity to enter highly coveted markets like the Mid-Peninsula. This year, many oversubscribed tenants have started shedding excess space, releasing plenty of opportunities in the 10,000-30,000 square foot range. The average asking rent for sublease space was \$49.56 per square foot per year on a full service gross basis, representing a 14.3 percent discount to market rents. The total amount of space for sublease peaked at the beginning of 2016 with approximately 800,000 square feet; however, it has gradually decreased to less than 640,000 square feet in Q3 2016 due to an increase leasing activity.

Developers likely to bring more projects online, concerns on market timing

With new projects breaking ground every quarter in the past two years, the Mid-Peninsula office inventory is increasing at an accelerated pace. Being only 35 percent the size of the San Francisco office inventory, the square footage of all projects delivered and under constructions in 2016 is roughly half that of San Francisco. Strong pre-leasing activity, decreasing vacancy rates, and all-time high rental rates have signaled a severely undersupplied market in need of quality Class A office space. Currently, there are more than 3.6 million square feet of proposed office space that could potentially break ground at any time; however, the possibility of a market reversal could dampen constructions plans.

Year-to-date total volume of sales activity

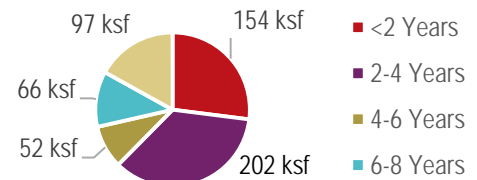
\$1.2 B

in 13 transactions involving office assets greater than 50,000 square feet.

Source: JLL Research

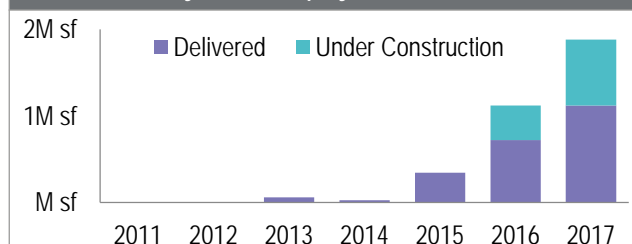
Plenty of opportunities to secure space at below-market rates

Sublease Space Expiration Schedule



Source: JLL Research

Class A inventory boosted up by new construction in 2017



Source: JLL Research

27,100,522

Total inventory (s.f.)

73,597

Q3 2016 net absorption (s.f.)

\$57.85

Direct average asking rent

1,215,839

Total under construction (s.f.)

12.1%

Total vacancy

504,719

YTD net absorption (s.f.)

8.2%

12-month rent growth

41.4%

Total preleased

Seattle-Bellevue



- Alex Muir
Research Manager,
Seattle-Bellevue

Seattle remains one of the hottest U.S. markets

As flight to quality continues, available new construction space disappears. Seattle-Bellevue has evolved into a major engineering hub for both local and out-of-state companies, and tenant demand remains sky high. This has led to rampant development, as 7.2 million square feet of product is currently under construction. While this space is 41.3 percent preleased, there are several major deals in negotiations, and based on preleasing trends we expect buildings to continue delivering with limited available space. Six of the 10 largest leases signed in 2016 have involved new construction, and the three buildings that delivered in Q3 – Urban Union, 200 Occidental and University Center – were fully leased to single tenants. Premium office space is a key differentiator for companies competing for local talent, and this flight to quality trend should continue.

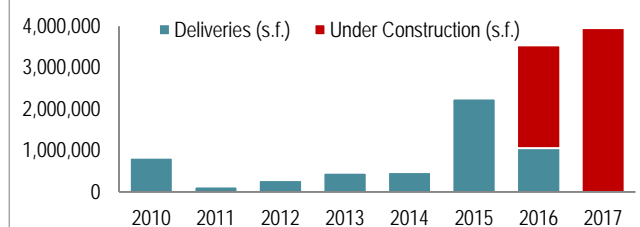
Seattle remains one of the tightest office markets in the country

For the fourth consecutive year the Seattle-Bellevue market has experienced more than 2.0 million square feet of positive net absorption. 952,375 square feet of space was taken down in Q3, bringing the 2016 total to nearly 2.3 million square feet. Subsequently, average asking rents are up 4.7 percent year-over-year, to the current rate of \$35.29 per square foot, full service. Total vacancy has declined to 8.3 percent, which makes Seattle the third tightest market in the United States, behind only Salt Lake City and Nashville. Eight of the 10 largest leases signed in 2016 have been executed by tech tenants, as the sector continues driving the market.

Foreign investors flock to Seattle pushing sales volume over \$2.5 billion

More than \$2.5 billion in office investment transactions have occurred in Puget Sound this year. While sales volume will not surpass 2015's staggering total, the market is on pace to exceed \$3 billion, which would far exceed the 10-year average. Global interest in Seattle real estate has perhaps never been stronger. Following a year in which foreign buyers were responsible for the two largest office trades, 2016 has seen the three largest transactions of the year include foreign buyers. Most recently, Mirae Asset Global Investments, a South Korean-based group, along with Metzler, acquired Amazon Phase VIII for \$246.8 million, or \$777 per square foot.

Historical completions and upcoming deliveries



Source: JLL Research

Vacancy continues falling



190 bps

Regional vacancy is down 190 basis points year-over-year

Source: JLL Research

Percentage of 2016 sales volume from foreign capital

Foreign investors have accounted for 45 percent of year-to-date office sales volume.

45%

Source: JLL Research

93,393,360 Total inventory (s.f.)	952,375 Q3 2016 net absorption (s.f.)	\$35.29 Direct average asking rent	7,159,557 Total under construction (s.f.)
8.3% Total vacancy	2,262,660 YTD net absorption (s.f.)	4.7% 12-month rent growth	41.3% Total preleased

Silicon Valley



- Christian Basconcello
Research Manager,
Silicon Valley

Occupancy gains slow, but demand remains strong

Demand for Class A ongoing despite cooling in leasing activity

Leasing activity continues to push overall vacancy levels lower as tech tenants are still focused on newer space availabilities. Google, Cloudera, Ford, and AMD led the market with the largest deals this quarter, removing a combined total of 1.2 million square feet of available Class A product. However, when compared to 2015, there have been fewer transactions greater than 150,000 square feet and occupancy gains this quarter were at the lowest levels since 2013. Including the aforementioned deals, there is still approximately 3.0 million square feet of large tenant move-ins that are expected to take place within the next 12 months. However, it raises the questions as to what market conditions will look like when large tenants like Google slow their appetite for space.

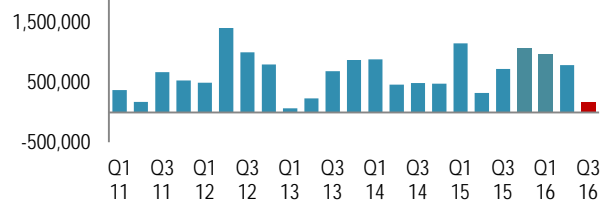
Large blocks of space released to market, but it's not all doom and gloom

Another 425,000 square feet of office construction broke ground this quarter in Santa Clara and more shovels are expected to hit the dirt in the greater San Jose region. However, there has been a significant release in large blocks of space, especially within the Golden Triangle. Several full building availabilities have hit the market while pre-leasing activity for new development has slowed. Volatility in the global markets, the upcoming election, and another potential interest rate hike has many decision makers taking a more cautious outlook on large real estate decisions. Demand has taken a short pause, but there is still plenty of sizeable active requirements. Tenants are likely to take time to evaluate their position in the market rather than get caught in a frenzied wave of activity.

Valley is still a top investment market; foreign capital circling

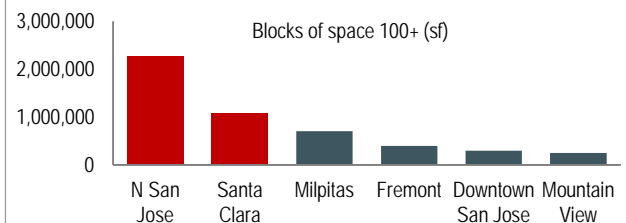
Investors are still circling the Valley for potential buys as the borrowing rate of capital remains at historic lows. Foreign capital, notably Chinese investors, have been active players in the market seeking opportunities throughout the Bay Area. There are still plenty of offerings hitting the market, but with the current upswing in its 6th year, many are beginning to take a step back from aggressive underwriting. Fully stabilized assets on the market are expected to attract plenty of attention and it is expected that the Valley will continue to see stable levels of investment until the cycle reaches a tapering off period.

Occupancy growth still positive despite summer lull



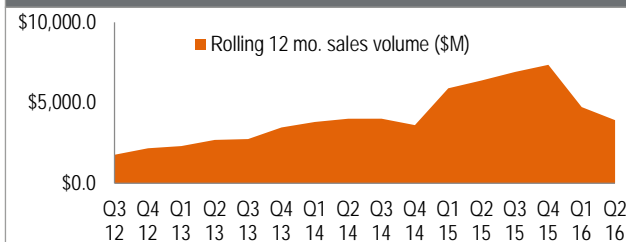
Source: JLL Research

Golden triangle still has plenty of space opportunities



Source: JLL Research

Investors scouting market, some cooling



Source: JLL Research, RCA

69,533,923

Total inventory (s.f.)

172,610

Q3 2016 net absorption (s.f.)

\$46.18

Direct average asking rent

5,581,376

Total under construction (s.f.)

11.8%

Total vacancy

1,785,954

YTD net absorption (s.f.)

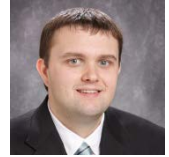
19.5%

12-month rent growth

55.1%

Total preleased

St. Louis



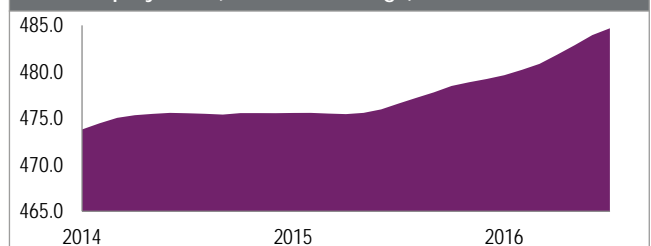
- Blaise Tomazic
Senior Research Manager,
St. Louis

Employment gains signal further growth

Office employment surges ahead to new highs

Office employment is continuing a very strong run in 2016. Year-over-year employment gains have averaged 9,300 jobs per month, nearly triple the 2015 average. This growth further strengthens the outlook for the office market. Professional and business services (PBS) and financial activities have both reached all-time highs this year, averaging more than 3.0 percent in annual employment gains; each is considerably above prior years. Companies to announce hiring plans this quarter include: MOHELA, The St. Louis Federal Reserve, and law firm Tucker Ellis.

Office employment (12-month average): St. Louis

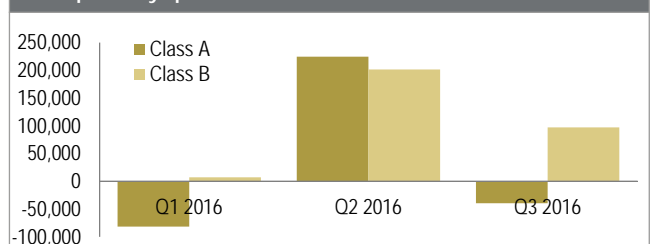


Source: JLL Research, BLS

Occupancy gains shifting to Class B properties

Vacancy across the region is down 180 basis points from the third quarter of last year. Much of the gains have come in Class B properties, which have absorbed three times more square footage in 2016 than Class A properties. This does not mean that Class A properties are struggling. Several vacant suburban buildings have been purchased by users this year, removing 230,000 square feet from Class A inventory. Two of the properties were in St. Charles, and one was located in West County. Asking rates have started to move up as well; Class B asking rates in St. Charles and West County have increased nearly 4.0 percent compared to last year.

Absorption by quarter

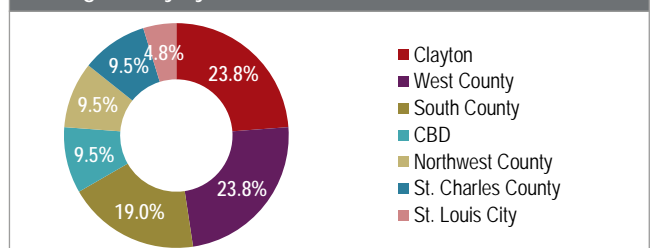


Source: JLL Research

Leasing activity continues to rise

The third quarter had the highest leasing activity in 2016. Leases by Hub Group, Siemens and Cigna led the way. Hub Group is expanding by a full floor at Park 270 and will now occupy 80,000 square feet. The Federal Reserve is expanding by a full floor in the CBD and will now occupy four full floors at 500 Broadway; the building is adjacent to its branch. With strong leasing activity continuing, the probability of new development further increases. Clayton has several projects in the planning stages, and other suburban submarkets have ground that is ready if an anchor tenant is signed.

Leasing activity by submarket



Source: JLL Research

42,154,174 Total inventory (s.f.)	58,016 Q3 2016 net absorption (s.f.)	\$19.44 Direct average asking rent	125,000 Total under construction (s.f.)
13.2% Total vacancy	403,925 YTD net absorption (s.f.)	-1.2% 12-month rent growth	60.0% Total preleased

Suburban Maryland



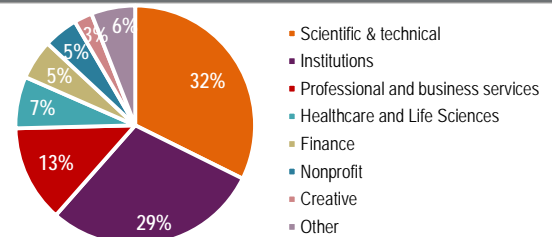
- Sara Hines
Senior Research Analyst,
Suburban Maryland

Science and technology tenants energize the market

Life science tenants take space in the third quarter

The Suburban Maryland office market has experienced a large volume of leasing activity in the science and technology sector over the last two years. In the third quarter, leasing activity matured into absorption. GlaxoSmithKline (GSK) moved its new global center for vaccine research and development to 14200 Shady Grove Road, taking a 150,000-square-foot sublease off the market. Wellstat Biologics Corporation was also on the move as the company expanded into 115,255 square feet in the same building as GSK. These two large move-ins helped catapult absorption in the third quarter to a year-to-date total of 987,439 square feet. The increase in absorption decreased total vacancy rates by 170 basis points to 18.4 percent, which is the lowest vacancy in 11 quarters.

Historical leasing activity by industry sector

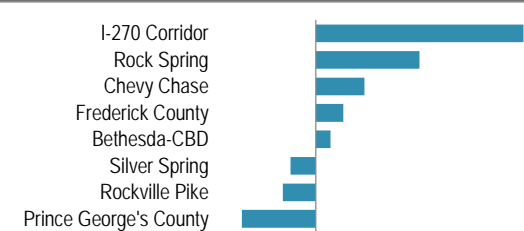


Source: JLL Research. Leasing since Q3 2014. Leases over 20,000 s.f.

Large absorption gains occurred in non-Metro submarkets

The majority of positive absorption in the third quarter was located in submarkets that lack Metro access, primarily the I-270 Corridor and Rock Spring submarkets. There were two large move-ins that occurred in each submarket. In the I-270 Corridor, GSK and Wellstat moved into 14200 Shady Grove Road. In the Rock Spring submarket, the National Institute of Child Health and Human Development moved into 93,576 square feet at 6710 Rockledge Drive and Total Wine moved into 6600 Rockledge Drive for 25,766 square feet. Prince George's County's office market has never fully recovered from the consolidations that occurred in the mid-2000s and continues to show signs of softness, as National Center for Health Statistics gave back 24,817 square feet at 3311 Toledo Road. Frederick County had modest absorption gains, mainly from smaller tenant activity.

Q3 2016 Absorption by submarket

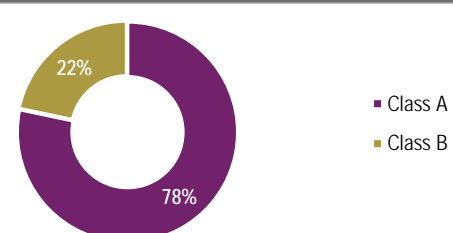


Source: JLL Research.

Class A sector dominate expansions

For the past two years, over two-thirds of expansions have occurred in Class A buildings, as tenants who have expanded prefer more amenities, newer product and more creative space, which are found in Class A buildings. Along with expansions, the majority of space absorbed this quarter was from private sector tenants in Class A buildings. The Class A sector captured 350,076 square feet of absorption compared with the Class B sector with negative 13,449 square feet and the Class C sector with 5,464 square feet.

Historical expansions in Class A vs. Class B



Source: JLL Research. Expansions in building or in market. Leasing since Q3 2014. Leases over 20,000 s.f.

65,109,258 Total inventory (s.f.)	342,091 Q3 2016 net absorption (s.f.)	\$26.61 Direct average asking rent	258,888 Total under construction (s.f.)
18.4% Total vacancy	987,439 YTD net absorption (s.f.)	-0.3% 12-month rent growth	0.0% Total preleased

Tampa



- Drew Gilligan
Senior Research Analyst,
Central Florida

Multiple large developments beginning to take shape

Numerous development projects around Tampa Bay now underway

Urbanization continues to be a primary driver for growth in Tampa Bay as multiple multi-family developments are underway and another eight-story development was recently announced last quarter. Strategic Property Partners has recently broken ground on a \$35 million roadway reconstruction project in the Channelside area, which will set up new grids, allowing for an urban-like shopping and pedestrian area. The entire project is going to be completed in multiple phases with the first phase of SPP's plans set to be finished by 2020. A mixed-use development, which is the first of its kind, recently broke ground in Channelside. The project features 22 stories with 323 units and a Publix grocery on the ground floor, which will take up 36,700 square feet, and will be Publix's first location downtown.

As flight to suburban space continues landlords are pushing rents

The majority of the leasing activity in 2016 has occurred in the suburban submarkets due to the lack of available large blocks of space and all-time high asking rates in the CBDs. Subsequently, landlords of suburban product have been taking advantage of the increased leverage and have driven asking rates over the past few quarters considerably. The majority of growth has occurred in Class A buildings across the market, having experienced a 5.6 percent growth year-over-year in asking rates.

Tampa Bay MSA continues to grow

According to the Florida Department of Economic Opportunity, the Tampa Bay MSA gained 38,200 jobs (+3.1 percent) over the past 12 months. The office using sectors accounted for 41.6 percent of the total number of jobs added, primarily in the professional and business services sector. The unemployment rate is the lowest it has been in Tampa Bay since 2008, with the all time low occurring a decade ago. Market conditions are expected to remain strong as groups continue to expand and move into the region.

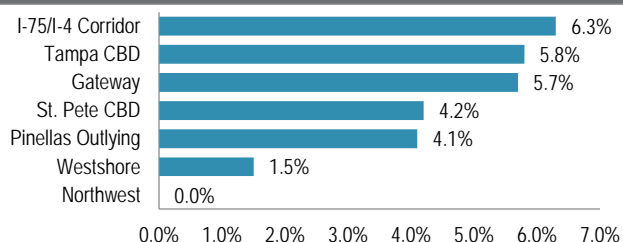
Multi-family development surging

2,798 units

Number of multi-family units delivered or under construction downtown since 2015

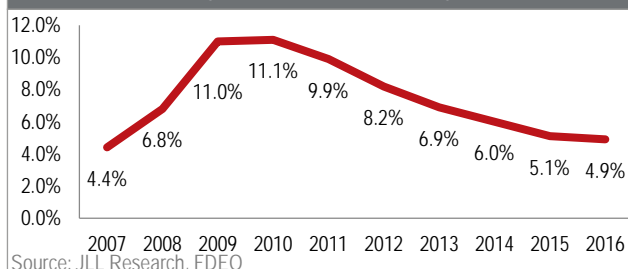
Source: JLL Research, CoStar

Year-over-year asking rate change for Class A buildings



Source: JLL Research

Historical unemployment rate – Tampa Bay MSA



Source: JLL Research, FDEO

34,404,015

Total inventory (s.f.)

-83,563

Q3 2016 net absorption (s.f.)

\$23.54

Direct average asking rent

0

Total under construction (s.f.)

13.6%

Total vacancy

442,126

YTD net absorption (s.f.)

2.9%

12-month rent growth

0%

Total preleased

Washington, DC



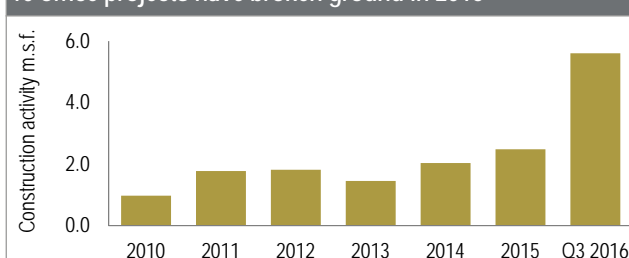
- Carl Caputo
Senior Research Analyst,
Washington, DC

Trophy and Class B segments outperforming Class A

Return of speculative construction is increasing risks of oversupply

Over the past 12 months, development activity throughout Washington, DC has ramped up and at the end of the third quarter, 5.6 million square feet were under construction, 3.3 million square feet of which remained available. In the core, 2.5 million square feet of space under construction was available, with 1.0 million square feet of availability at Property Group Partners' Capitol Crossing project alone. The recent groundbreakings and the plans for proposed projects such as JBG's 1900 N Street, NW and Vornado's 1700 M Street, NW have materialized largely to target large law firms with leases expiring in the 2020-2024 time frame given limited near-term demand.

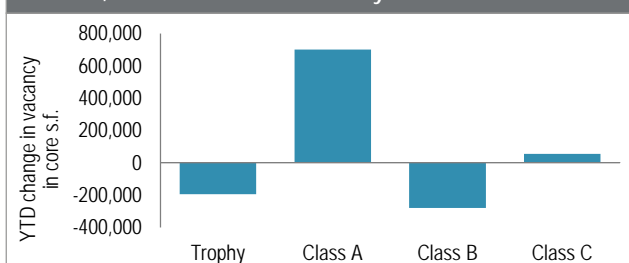
10 office projects have broken ground in 2016



New deliveries and law firm rightsizings softening Class A segment of core

Vacancy within the Class A (non-Trophy) segment of the core rose 120 basis points over the third quarter to 17.8 percent, well above the 10-year average of 12.4 percent. While preleasing activity among new Class A supply has become more limited and the recent delivery of largely vacant buildings such as 2001 M Street, NW and 1800 K Street, NW has caused vacancy to swell, law firm rightsizings and mergers have also created holes in second-generation Class A buildings such as 1301 K Street, NW, where Dentons recently vacated 100,000 square feet to merge with McKenna Long, and 1625 Eye Street, NW, where O'Melveny & Myers gave back 50,000 square feet through a renewal.

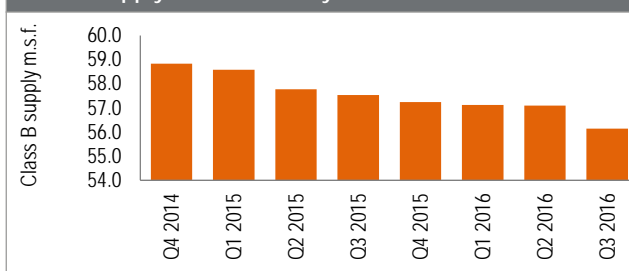
Over 700,000 s.f. of Class A vacancy has hit the core in 2016



Class B segment tightening with dwindling supply and strong demand

In contrast to the Class A market, the Class B market in Washington, DC continued to see limited space options as buildings were taken out of supply to be repositioned to Trophy or Class A, and growing demand as emerging sectors such as tech, media, healthcare and education continued to generate occupancy gains. With demand outpacing supply, Class B vacancy dropped 130 basis points over the third quarter to 8.9 percent. Limited availabilities among product in the core priced below \$55.00 full-service will likely drive demand for off-core markets in DC and well located buildings in Northern Virginia and Suburban Maryland.

Class B supply has declined by 2.7 m.s.f. since start of 2015



114,178,253

Total inventory (s.f.)

-227,419

Q3 2016 net absorption (s.f.)

\$55.64

Direct average asking rent

5,605,736

Total under construction (s.f.)

12.2%

Total vacancy

-562,033

YTD net absorption (s.f.)

3.9%

12-month rent growth

41.8%

Total preleased

West Palm Beach



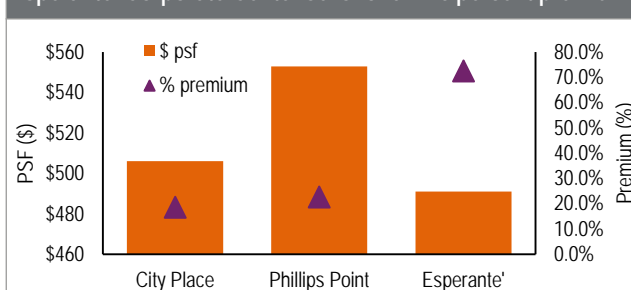
- Ilyssa Shacter
Research Analyst,
Fort Lauderdale

Strong investment in Downtown West Palm Beach

Trophy assets in Downtown are trading for record numbers

With current Trophy occupancy sitting at 93.9 percent and full service asking rates sitting at \$64.44 per square foot (26.6 percent above peak levels), investment in assets has also peaked. Since 2014, all four Trophy assets in Downtown West Palm Beach have traded. Most recently, Esperante' Corporate Center, a 256,000-square-foot Trophy building that is 98.4 percent occupied sold late in the third quarter. RedSky Capital purchased the building from Crocker Partners for \$125.8 million (\$491 per square foot). Previously, Esperante' Corporate Center traded for \$71.0 million in 2013 when the property was just 72.6 percent occupied making the recent sale a 77.1 percent premium compared with the previous. Further, CityPlace and Phillips Point traded earlier in the cycle for \$506 and \$553 per square foot, respectively. This amounted to a 18.6 percent and 22.7 percent premium, respectively, on their previous sales prices.

Esperante' Corporate Center sells for a 72.6 percent premium

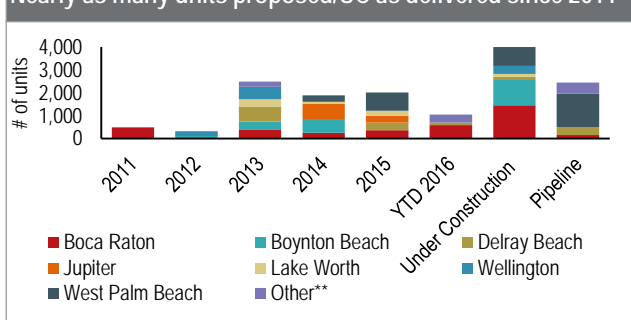


Source: JLL Research

Pipeline for multifamily continues to grow

Multifamily development has stayed at the forefront in terms of investment in new construction during this cycle. Boca Raton and West Palm Beach are where the majority of activity is focused, as they account for 30.4 percent and 28.0 percent of the inventory under construction, respectively. These markets are also where the majority of office inventory in the county sits – combined these markets account for 67.8 percent of the office inventory. As investment in multifamily grows, there is increasing appeal for companies to locate in these markets to attract the growing workforce residing there. As such, West Palm Beach and Boca Raton have experienced strong growth – Class A office occupancy has increased 660 basis points to 84.1 percent and 710 basis points to 86.0 percent, respectively, since 2013, when development begun picking up.

Nearly as many units proposed/UC as delivered since 2011*



* Data is based on projects with 100 or more units

** Other is comprised of cities with a total number of delivered/UC/proposed units under 750

Rate growth has averaged 1.4 percent over the past decade



Positive rent growth across the board, led by the downtown core

Over the previous 12-months full service asking rates have increased 3.1 percent to \$30.92 per square foot in Palm Beach County. Comparably, over the past ten years, the rates have been increasing just 1.4 percent annually on average. Recent trends are being propelling by decreased vacancy and large rate hikes in West Palm Beach (Core CBD) and North Palm Beach, while rates have increased 7.9 percent and 4.6 percent, respectively over the past year. Further, during the previous 12-months direct vacancy in the overall county decreased 230 basis points to 15.5 percent (this compares to an average 60 basis point annual decline over the past ten years).

20,790,400 Total inventory (s.f.)	178,200 Q3 2016 net absorption (s.f.)	\$30.92 Direct average asking rent	0 Total under construction (s.f.)
16.0% Total vacancy	243,900 YTD net absorption (s.f.)	3.1% 12-month rent growth	0 Total preleased

Westchester County



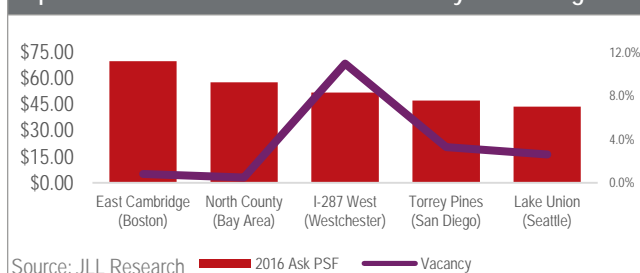
- Dayna McConnell
Research Analyst,
Fairfield County

Biotech booms in Westchester County

Regeneron announces major expansion plans

Headquartered in the I-287 West Corridor submarket, biotechnology giant Regeneron has announced more plans for a major expansion adjacent to their current location at 777 Old Saw Mill River Road in Tarrytown. Currently occupying 1.1 million square feet at its HQ in Tarrytown, the company plans to expand by another 1.0 million square feet and hire an additional 5,000 employees in the coming months. This submarket serves as a hotbed for the life sciences market in the Hudson Valley, boasting the third highest asking rent per square foot when compared to all life sciences clusters in the United States. In 2017, secondary markets like Westchester County are expected to garner more interest from developers as tenant demand increases and availability decreases.

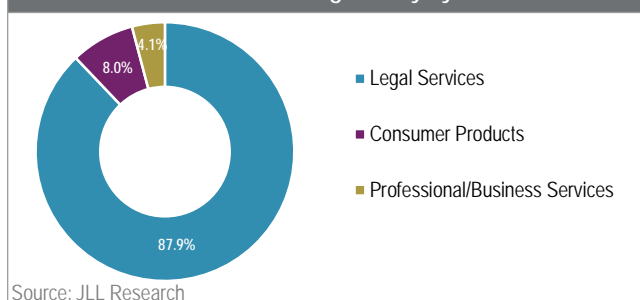
Top 5 U.S. Life Sciences Clusters – vacancy and asking rent



Law firms dominate leasing activity in the White Plains CBD

The White Plains CBD submarket recorded a 20.6 percent vacancy rate in Q3, slightly lower than the 22.4 percent overall vacancy rate across Westchester County. 215,000 square feet was leased in Westchester County during the quarter, with the highest concentration of activity centered in the White Plains CBD. Lease renewals accounted for 98.0 percent of transactions inked, and for the second quarter in a row the legal services industry dominated activity in the submarket. The two largest renewals were transacted by Cuddy & Feder and Greenberg Traurig; each law firm renewed leases for 26,356 square feet (52,712 total square feet) at 445 Hamilton Avenue.

White Plains CBD Office leasing activity by sector



Retail redevelopment expected to increase office demand in 2017

Despite stagnant activity in recent months, the future of the office market remains optimistic. Transit-oriented office buildings, especially in the CBD, will become more desirable to millennials and tenants in the market as new development and construction slated to begin in the new year deliver best-in-class amenities. Most recently, Pacific Retail Capital acquired the Galleria Mall in White Plains as part of a \$200 million, three-property portfolio. The company plans to renovate the 870,000-square-foot downtown White Plains building to better serve office workers, visitors, and residents.

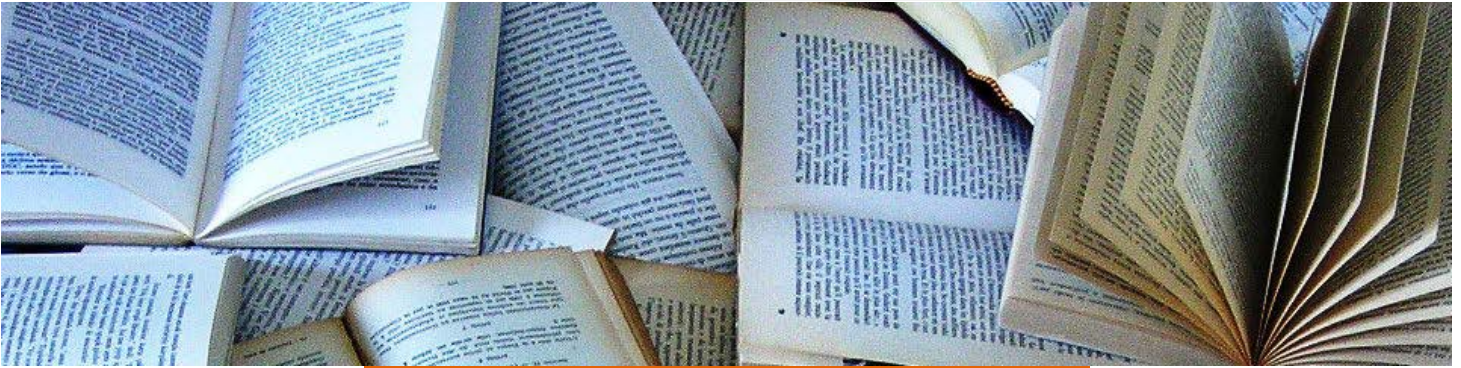
Redevelopment close to transit and business district

870,000 sq. ft.
of retail space at 100 Main Street in White Plains, will be renovated by new ownership to create the ideal "live-work-play" lifestyle for young professionals in Westchester County.

Source: JLL Research

31,734,296 Total inventory (s.f.)	113,538 Q3 2016 net absorption (s.f.)	\$26.95 Direct average asking rent	0 Total under construction (s.f.)
22.7% Total vacancy	328,325 YTD net absorption (s.f.)	11.0% 12-month rent growth	0.0% Total preleased

Appendix



Stats
Employment
Rankings
Leases
Sales
Developments

UNITED STATES Office statistics

Market totals (CBD and Suburban)	Inventory (s.f.)	Quarterly total net absorption (including subleases)	YTD total net absorption (including subleases)	YTD total net absorption (% of inventory)	Direct vacancy (%)	Total vacancy (%)	Current quarter average direct marketed rent (\$ p.s.f.)	Quarterly percent change	YTD Completions / deliveries (s.f.)	Under construction (s.f.)	Under construction as % of inventory
Atlanta	133,225,416	447,245	1,108,278	0.8%	16.0%	17.0%	\$23.64	1.5%	0	3,781,397	2.8%
Austin	49,920,997	397,142	1,178,343	2.4%	10.3%	11.3%	\$34.05	-0.7%	859,266	2,221,861	4.5%
Baltimore	70,843,997	118,669	162,311	0.2%	11.6%	12.0%	\$23.46	1.5%	170,500	1,888,432	2.7%
Boston	166,093,356	270,646	1,980,363	1.2%	11.0%	13.5%	\$33.38	-1.0%	2,883,032	1,867,642	1.1%
Charlotte	47,160,155	392,231	843,060	1.8%	10.7%	11.8%	\$24.12	2.6%	0	2,491,211	5.3%
Chicago	243,171,037	477,153	2,605,746	1.1%	12.8%	13.9%	\$29.96	0.7%	0	8,376,664	3.4%
Cincinnati	35,264,038	623,599	1,254,696	3.6%	15.5%	16.1%	\$19.41	1.7%	786,000	260,000	0.7%
Cleveland	28,390,660	186,026	80,282	0.3%	19.0%	19.7%	\$19.29	2.9%	0	197,000	0.7%
Columbus	28,524,196	15,858	252,073	0.9%	11.7%	12.0%	\$19.18	1.2%	530,400	737,000	2.6%
Dallas	165,531,522	526,528	1,541,200	0.9%	18.0%	18.9%	\$25.74	2.0%	3,339,784	10,947,382	6.6%
Denver	108,018,472	165,467	-20,603	0.0%	12.5%	13.8%	\$26.56	1.1%	452,452	3,649,889	3.4%
Detroit	66,622,553	12,159	605,982	0.9%	19.8%	21.0%	\$19.71	7.6%	0	418,334	0.6%
Fairfield County	43,811,681	137,249	1,009,553	2.3%	20.8%	22.6%	\$36.36	0.0%	0	0	0.0%
Fort Lauderdale	22,806,197	120,410	216,761	1.0%	14.3%	15.1%	\$28.89	0.6%	0	94,817	0.4%
Fort Worth	40,433,966	84,542	224,869	0.6%	14.2%	14.9%	\$22.52	0.0%	394,275	1,222,951	3.0%
Hampton Roads	17,825,417	2,663	104,475	0.6%	13.4%	14.0%	\$18.27	-1.1%	26,900	287,858	1.6%
Houston	163,614,884	-789,872	-874,064	-0.5%	16.8%	19.7%	\$30.47	0.0%	3,992,574	3,224,356	2.0%
Indianapolis	31,818,290	30,649	279,502	0.9%	14.8%	15.0%	\$19.68	2.0%	307,608	372,977	1.2%
Jacksonville	20,410,788	-119,952	198,736	1.0%	14.5%	14.8%	\$19.58	1.1%	0	0	0.0%
Long Island	41,983,140	33,096	582,186	1.4%	13.0%	14.3%	\$26.22	0.6%	0	0	0.0%
Los Angeles	188,975,967	493,136	1,148,262	0.6%	14.0%	14.8%	\$38.00	0.6%	558,327	2,092,795	1.1%
Louisville	20,045,621	187,890	20,647	0.1%	11.3%	11.8%	\$16.67	-4.3%	328,400	0	0.0%
Miami	37,526,325	35,651	-48,542	-0.1%	12.8%	13.3%	\$36.90	1.2%	266,832	989,041	2.6%
Milwaukee	27,760,927	91,491	551,318	2.0%	16.3%	17.1%	\$19.46	0.8%	506,924	110,000	0.4%
Minneapolis	68,998,682	-156,182	232,221	0.3%	14.7%	15.2%	\$26.25	1.9%	254,666	249,500	0.4%
Nashville	33,678,562	343,240	818,920	2.4%	4.5%	4.6%	\$23.67	5.2%	378,884	3,981,918	11.8%
New Jersey	159,871,576	1,514,656	1,279,045	0.8%	21.2%	24.0%	\$25.47	-0.1%	315,000	170,445	0.1%
New York	449,872,906	1,169,184	-123,068	0.0%	8.4%	10.0%	\$73.51	1.2%	2,884,528	11,567,853	2.6%
North SF Bay	25,069,273	-5,880	-162,315	-0.6%	15.1%	16.1%	\$26.82	2.5%	175,221	0	0.0%
Oakland-East Bay	52,763,008	370,264	809,484	1.5%	10.0%	10.6%	\$35.97	7.1%	0	250,000	0.5%
Orange County	95,769,930	249,156	670,004	0.7%	11.1%	11.4%	\$31.59	0.6%	684,252	1,930,680	2.0%
Orlando	29,164,038	71,701	309,330	1.1%	13.2%	13.5%	\$21.09	-0.1%	0	135,000	0.5%
Philadelphia	131,376,394	-149,654	702,616	0.5%	12.4%	12.9%	\$26.15	8.9%	1,348,465	3,866,458	2.9%
Phoenix	84,035,044	1,123,129	2,611,611	3.1%	18.7%	19.7%	\$24.22	1.2%	1,803,410	1,692,140	2.0%
Pittsburgh	50,355,528	19,968	372,592	0.7%	14.1%	15.8%	\$22.95	-1.2%	701,000	412,000	0.8%
Portland	59,614,334	232,341	599,080	1.0%	8.6%	9.0%	\$26.00	1.2%	969,999	1,605,421	2.7%
Raleigh-Durham	44,213,459	230,775	815,852	1.8%	9.8%	11.0%	\$21.76	1.9%	313,655	1,833,068	4.1%
Richmond	24,354,135	-66,425	-229,752	-0.9%	12.7%	14.5%	\$19.18	0.4%	0	60,000	0.2%
Sacramento	43,877,872	455,415	882,062	2.0%	13.7%	14.0%	\$23.52	0.6%	0	239,770	0.5%
Salt Lake City	49,442,083	708,309	1,247,276	2.5%	6.3%	7.3%	\$22.68	6.6%	2,234,938	2,122,795	4.3%
San Antonio	26,618,851	191,784	672,978	2.5%	14.8%	15.1%	\$22.90	-0.7%	252,000	728,077	2.7%
San Diego	77,876,436	708,413	1,251,630	1.6%	12.0%	12.9%	\$31.20	3.6%	425,341	188,435	0.2%
San Francisco	76,335,189	217,785	742,491	1.0%	6.9%	8.3%	\$73.59	0.7%	768,077	4,435,830	5.8%
SF Peninsula	27,100,522	73,597	504,719	1.9%	9.9%	12.1%	\$57.84	0.6%	721,086	1,215,839	4.5%
Seattle-Bellevue	93,393,360	952,375	2,262,660	2.4%	7.9%	8.3%	\$35.29	1.2%	1,056,672	7,159,557	7.7%
Silicon Valley	69,533,923	172,610	1,785,954	2.6%	9.8%	11.8%	\$46.20	-7.6%	2,665,404	5,581,376	8.0%
St. Louis	42,154,174	58,016	403,925	1.0%	12.7%	13.2%	\$19.44	-0.1%	0	125,000	0.3%
Tampa Bay	34,404,015	-83,563	442,126	1.3%	13.0%	13.6%	\$23.54	1.1%	176,089	0	0.0%
Washington, DC	327,494,539	280,050	695,944	0.2%	16.3%	17.0%	\$37.37	1.6%	1,942,511	10,224,898	3.1%
West Palm Beach	20,790,445	178,213	243,939	1.2%	15.5%	16.0%	\$30.92	-0.7%	0	0	0.0%
Westchester County	31,734,296	113,538	328,325	1.0%	20.6%	22.4%	\$26.95	0.0%	0	0	0.0%
United States	4,055,153,445	12,813,427	35,229,644	0.9%	13.3%	14.5%	\$32.35	1.0%	35,474,472	105,033,151	2.6%

UNITED STATES Employment

Market	Total nonfarm jobs 12-month net change (000s)	Total nonfarm jobs 12-month percent change	Office jobs* 12-month net change (000s)	Office jobs* 12-month percent change	Unemployment (2016)	Unemployment (2015)	12-month unemployment change (bp)
Atlanta	71.0	2.7%	16.9	2.3%	5.0%	5.6%	-60
Austin	30.9	3.2%	8.9	3.6%	3.5%	3.4%	10
Baltimore	31.1	2.3%	9.5	2.9%	4.8%	5.5%	-70
Boston	56.7	2.1%	11.7	1.6%	3.5%	4.3%	-80
Charlotte	28.6	2.6%	11.5	3.9%	4.9%	5.6%	-70
Chicago	62.2	1.3%	8.9	0.7%	5.4%	5.6%	-20
Cincinnati	19.4	1.8%	1.4	0.6%	4.1%	4.1%	0
Cleveland	14.9	1.4%	-1.4	-0.6%	5.3%	4.3%	100
Columbus	17.2	1.6%	5.1	1.8%	3.9%	3.8%	10
Dallas	100.4	4.2%	33.7	4.5%	4.0%	4.0%	0
Denver	45.6	3.2%	8.6	2.1%	3.2%	3.4%	-20
Detroit	38.9	2.0%	23.6	4.5%	6.0%	6.4%	-40
Fairfield County	7.5	1.8%	1.0	0.8%	5.4%	5.4%	0
Fort Lauderdale	34.8	4.4%	12.0	5.6%	4.6%	5.2%	-60
Fort Worth	16.9	1.7%	7.2	4.0%	4.3%	4.3%	0
Hampton Roads	2.4	0.3%	3.3	2.1%	4.7%	4.8%	-10
Hartford	6.9	1.2%	2.5	1.7%	5.7%	5.7%	0
Houston	14.2	0.5%	-8.2	-1.2%	5.8%	4.9%	90
Indianapolis	18.2	1.8%	1.1	0.5%	4.2%	4.2%	0
Jacksonville	24.9	3.8%	4.8	2.8%	4.7%	5.5%	-80
Long Island	15.1	1.1%	0.7	0.3%	4.1%	4.5%	-40
Los Angeles	73.9	1.7%	29.5	2.9%	5.3%	6.7%	-140
Louisville	14.3	2.2%	6.3	4.5%	4.1%	4.4%	-30
Miami	11.7	1.0%	5.8	2.3%	5.6%	6.4%	-80
Milwaukee	5.8	0.7%	-2.0	-1.0%	4.7%	4.9%	-20
Minneapolis	35.2	1.8%	8.5	1.7%	3.6%	3.2%	40
Nashville	32.6	3.6%	7.4	3.2%	3.9%	4.6%	-70
New Jersey	65.9	1.6%	10.2	1.0%	5.3%	5.3%	0
New York	83.9	2.0%	13.4	1.0%	5.4%	5.2%	20
North Bay	3.5	3.1%	1.1	3.9%	3.5%	3.6%	-10
Oakland-East Bay	25.8	2.3%	1.0	0.4%	4.7%	4.9%	-20
Orange County	39.0	2.5%	10.8	2.5%	4.4%	4.6%	-20
Orlando	51.6	4.4%	6.2	2.1%	4.4%	5.1%	-70
Philadelphia	60.7	2.2%	22.4	3.2%	5.7%	5.4%	30
Phoenix	42.9	2.3%	14.0	2.7%	5.0%	5.6%	-60
Pittsburgh	-1.9	-0.2%	-1.7	-0.6%	6.3%	5.3%	100
Portland	32.2	2.9%	8.4	3.2%	5.3%	5.4%	-10
Raleigh-Durham	14.5	2.5%	6.7	4.1%	4.3%	5.0%	-70
Richmond	21.4	3.3%	9.3	5.6%	4.2%	4.6%	-40
Sacramento	24.0	2.6%	1.3	0.7%	5.5%	5.7%	-20
Salt Lake City	20.7	3.1%	8.5	4.4%	3.2%	3.5%	-30
San Antonio	18.1	1.8%	4.5	2.0%	4.1%	3.9%	20
San Diego	25.1	1.8%	5.3	1.6%	5.0%	5.2%	-20
San Francisco	25.9	2.4%	10.2	2.5%	3.4%	3.5%	-10
Seattle-Bellevue	70.7	3.7%	20.6	4.4%	4.5%	4.9%	-40
Silicon Valley	37.5	3.6%	18.9	5.7%	4.1%	4.2%	-10
St. Louis	27.3	2.0%	10.3	3.2%	5.2%	4.9%	30
Tampa	38.2	3.1%	15.8	4.5%	4.6%	5.2%	-60
Washington, DC	77.0	2.4%	19.7	2.0%	4.0%	4.4%	-40
West Palm Beach	13.2	2.3%	5.1	3.2%	5.1%	5.5%	-40
Westchester County	9.0	1.3%	-0.8	-0.6%	4.2%	4.5%	-30
United States	2,447.0	1.7%	605.0	2.0%	4.9%	5.1%	-20

Source: JLL Research, Bureau of Labor Statistics

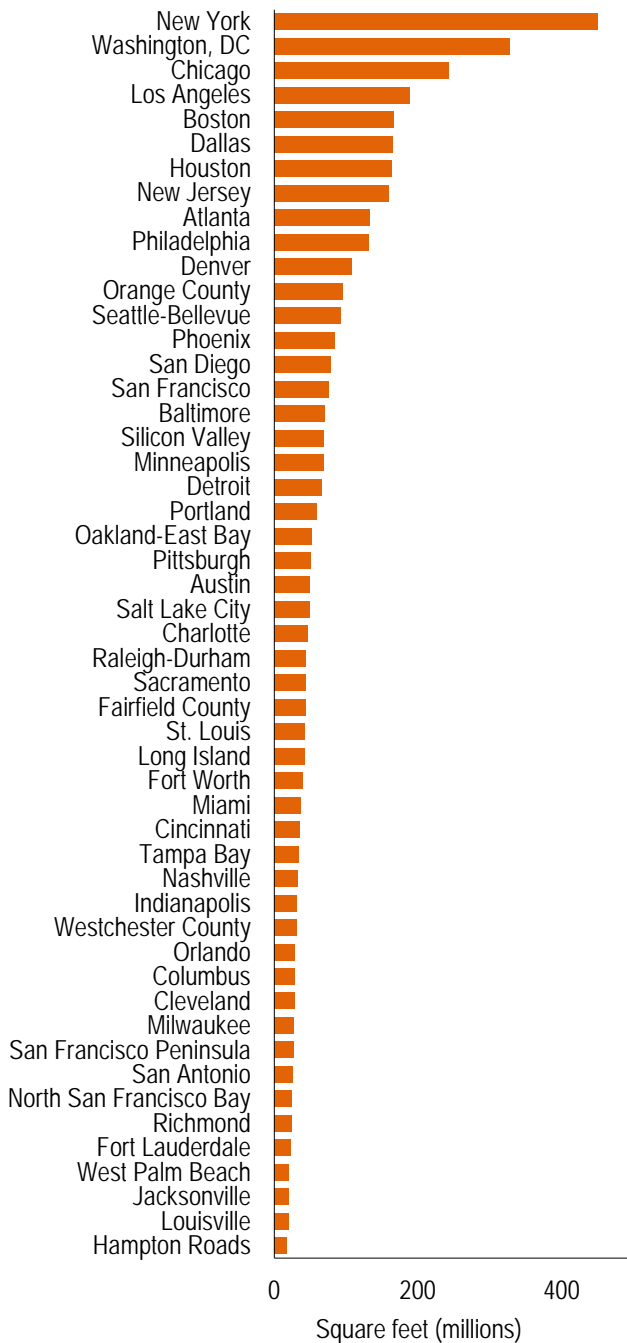
* Office jobs includes professional and business services, information and financial activities sectors

* United States totals represent national employment, not sum of markets above

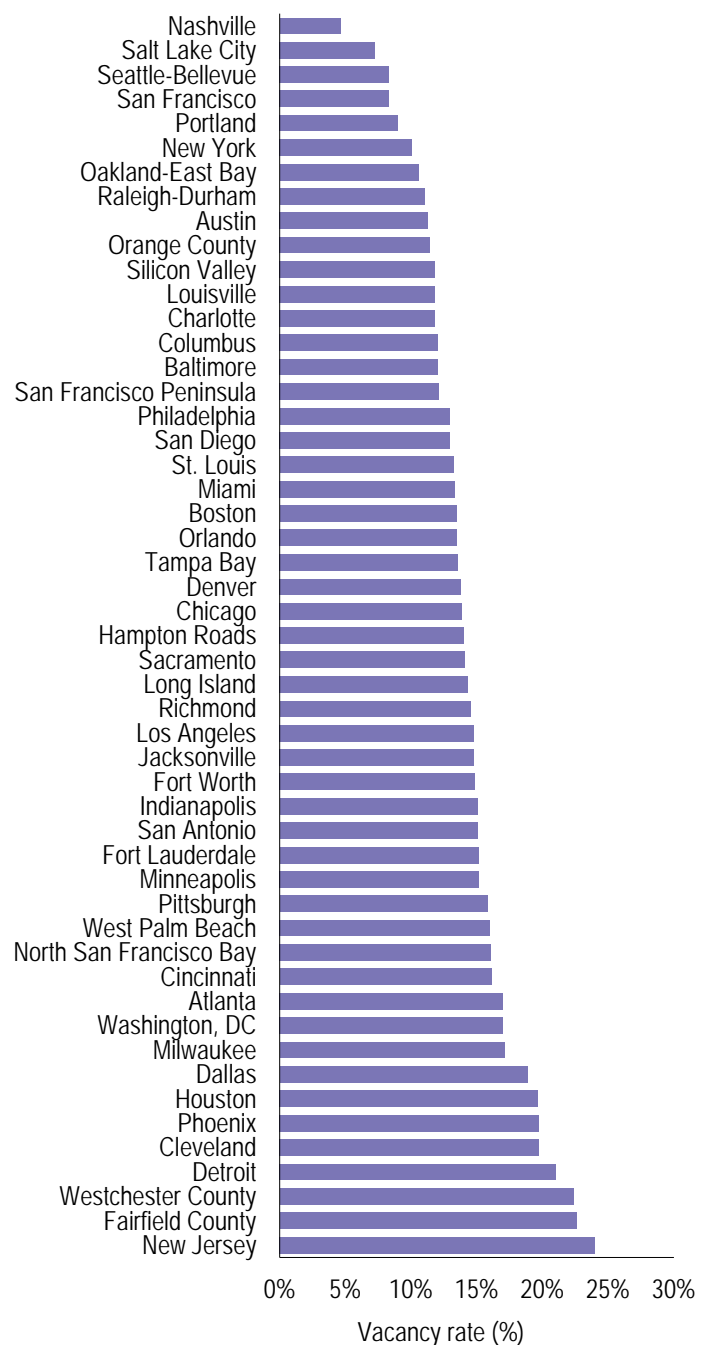
United States

Office rankings

Inventory



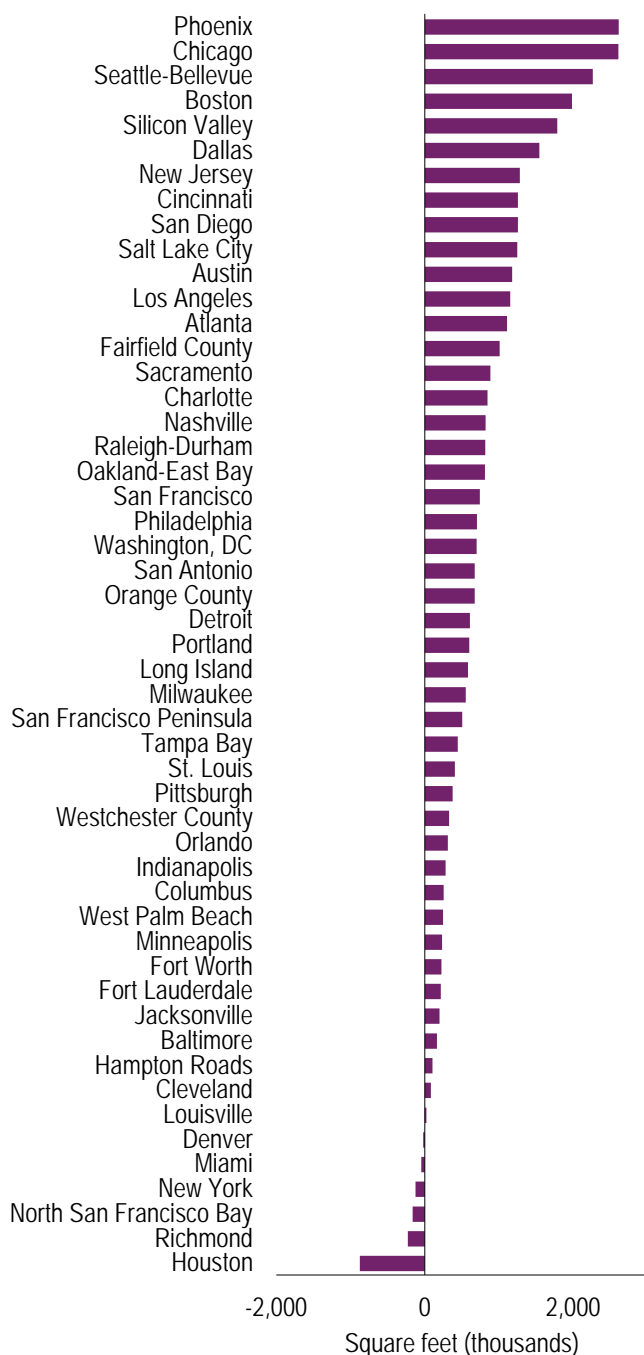
Total vacancy rates (including sublease)



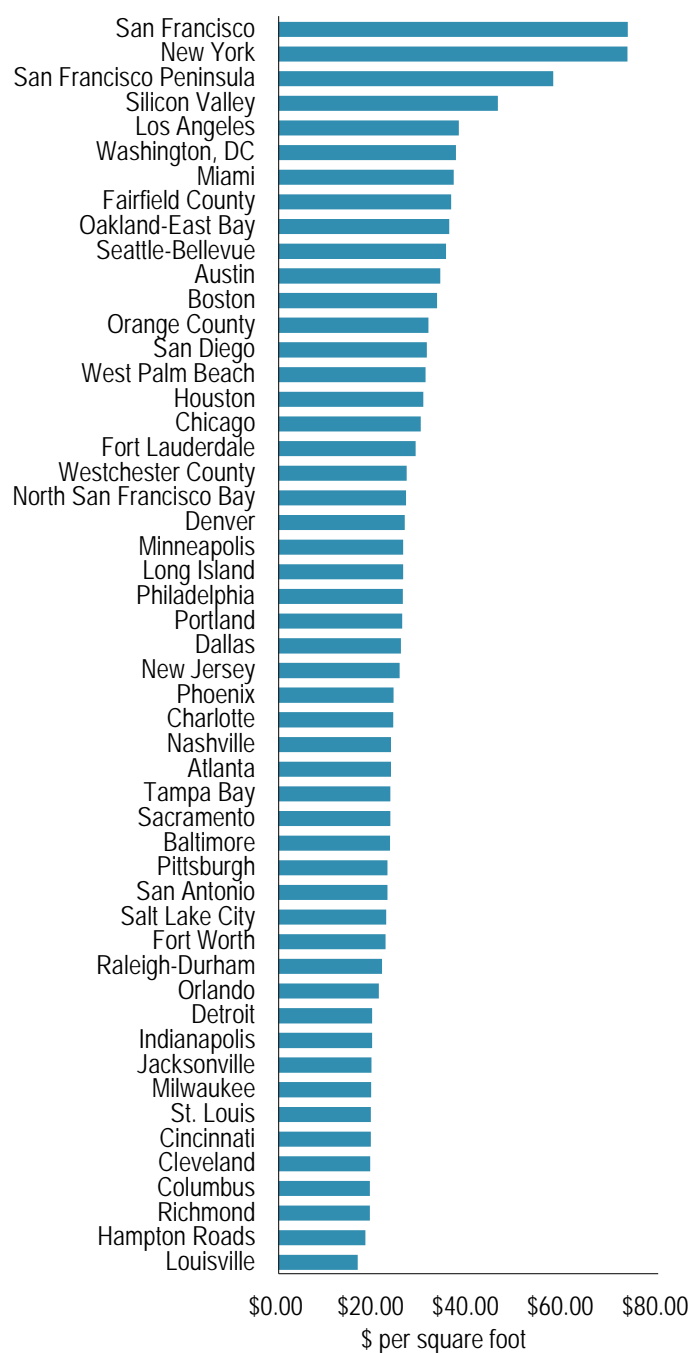
United States

Office rankings

YTD total net absorption (including sublease)

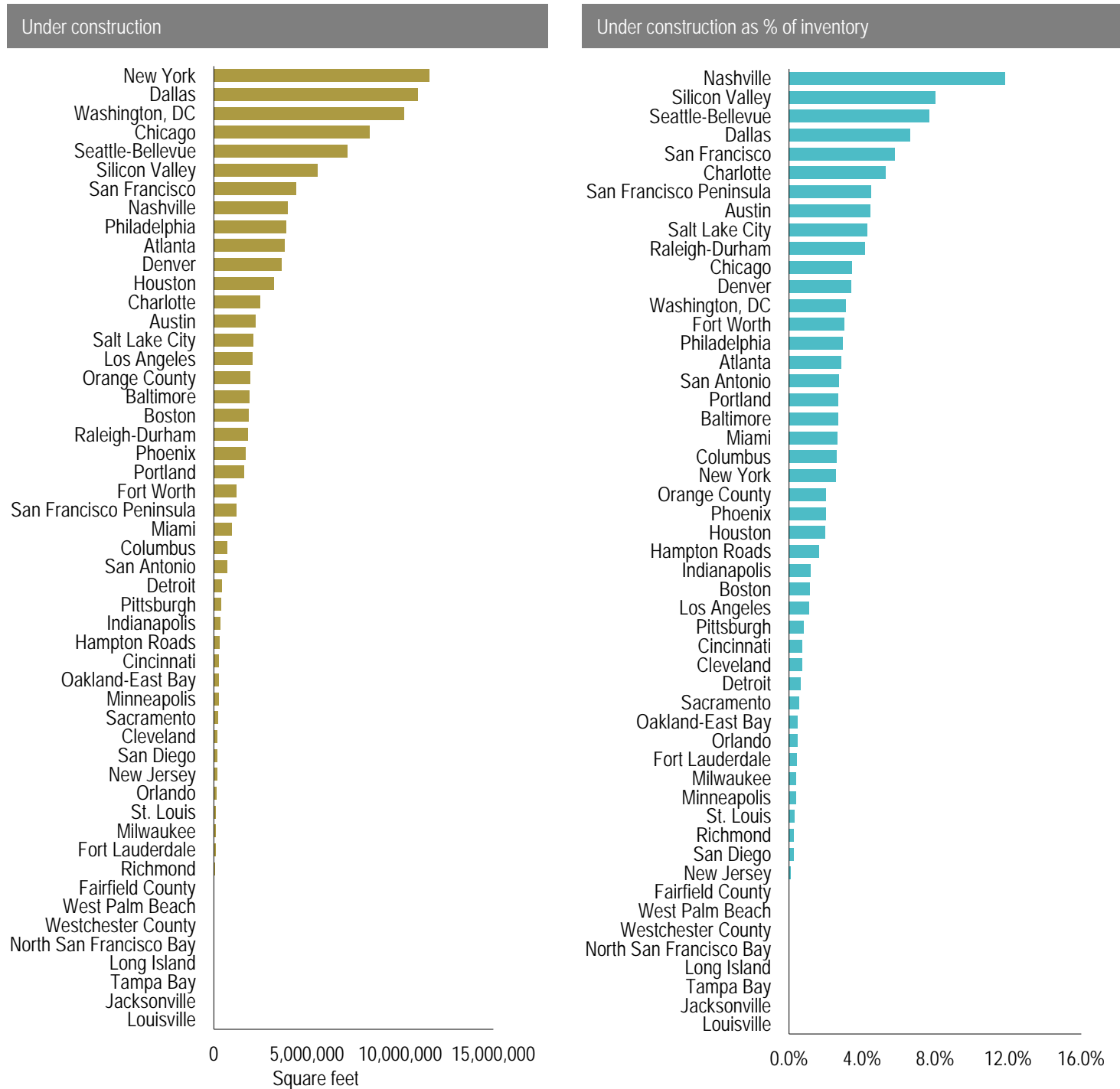


Marketed rents



United States

Office rankings



Select large leases

> 100,000 square feet

Sorted by lease size and completed during Q3 2016

Market	Tenant	Address	Size (s.f.)	Lease type
Chicago	Publicis	35 W Wacker Drive	642,545	Extension (< 36-month term)
New York	Penguin Random House	1745 Broadway	603,605	Renewal
Silicon Valley	Google	1225-1265 Crossman Avenue	597,848	Expansion in market
Dallas	Verizon	600 Hidden Ridge	576,138	Renewal
New Jersey	Allergan	5 Giralda Farms	431,500	New to market
Chicago	Winston & Strawn	35 W Wacker Drive	430,000	Renewal
Seattle-Bellevue	Microsoft	21925-21933 SE 51st Street	396,039	Renewal
New Jersey	iCIMS	101 Crawfords Corner Road	350,000	Relocation within market
San Diego	Illumina	4775-4785 Executive Drive	316,262	Expansion in market
Minneapolis	Capella Education	225 S 6th Street	307,094	Renewal
Oakland-East Bay	Ellie Mae	4420-4430 Rosewood Drive	280,684	Expansion in market
Philadelphia	Aramark	2400 Market Street	279,300	Relocation within market
Atlanta	NCR	864 Spring Street	260,421	Relocation within market
Houston	United Airlines	609 Main Street	237,708	Relocation within market
Dallas	EPA	1201 Elm Street	229,000	Relocation within market
Silicon Valley	Cloudera	395 Page Mill Road	224,854	Relocation within market
Seattle-Bellevue	Valve	400 Bellevue Way NE	223,785	New to market
Washington, DC	U.S. Department of Justice	1100 L Street NW	217,000	Relocation within market
Seattle-Bellevue	AT&T	7277 164th Avenue NE	205,766	Renewal
New York	Bloomberg	919 Third Avenue	204,442	Expansion in building
Atlanta	Troutman Sanders	600 Peachtree Street	200,000	Renewal
Seattle-Bellevue	WeWork	2031 3rd Avenue	200,000	Expansion in market
New York	Dentons	1221 Avenue of the Americas	191,108	Renewal
Seattle-Bellevue	Davis Wright Tremaine	505 Madison Street	188,500	New to market
New Jersey	Jaguar	1 Sharp Plaza	187,000	Relocation within market
New York	New York City Department of Finance	375 Pearl Street	182,750	Relocation within market
Raleigh-Durham	UNC Healthcare	1025 Think Place	180,000	Expansion in market
San Francisco	Twitch.tv	350 Bush Street	177,826	Expansion in market
Nashville	Schneider Electric	6700 Tower Circle	175,000	Relocation within market
New Jersey	EY	121 River Street	168,160	New to market
Northern Virginia	Boeing	460 Herndon Parkway	168,154	Renewal
Silicon Valley	Raytheon	430-490 W California Avenue	162,550	Renewal
New York	WeWork	12 E 49th Street	159,306	Expansion in market
Northern Virginia	Hilton Worldwide	7930 Jones Branch Drive	153,806	Renewal
Orange County	Nationstar Mortgage	1600 E Saint Andrew Place	152,828	Relocation within market
Atlanta	FBI	2600 Flowers Road S	151,066	Relocation within market
San Antonio	USAA	13805 IH-10 W	150,735	Expansion in market
Oakland-East Bay	Rodan & Fields	2600 Camino Ramon	150,190	New to market
Silicon Valley	Ford	3201-3251 Hillview Avenue	150,000	Expansion in market
New Jersey	Mallinckropt	1405 & 1425 Route 206	144,800	New to market
Northern Virginia	Confidential	2121 Crystal Drive	141,761	Extension (< 36-month term)
Charlotte	Westinghouse	3730 / 3735 Glen Lake Drive	141,656	Renewal
Atlanta	Merrill Lynch	3455 Peachtree Road NE	141,375	Renewal
New Jersey	Marsh & McLennan	121 River Street	138,000	Renewal
San Francisco Peninsula	Confidential	Confidential	135,000	Expansion in market
New York	Zurich	4 World Trade Center	131,876	Relocation within market
Pittsburgh	Peoples Natural Gas	375 North Shore Drive	130,000	Relocation within market
San Antonio	USAA	15935 La Cantera Parkway	129,015	Expansion in market
Atlanta	Cox	223 Perimeter Center Parkway	127,823	Extension (< 36-month term)
Silicon Valley	Tivo	2160 - 2190 Gold Street	127,124	Renewal

Select large sales

> 100,000 square feet

Sorted by total sales price and completed in Q3 2016

Market	Building	RBA (s.f.)	Sale price \$	Price per square foot (\$ p.s.f.)	Buyer	Seller
New York	1095 Avenue of the Americas	1,036,534	\$1,152,970,000	\$2,270	HKMA	Ivanhoe Cambridge/Callahan
New York	11 Madison Avenue	2,285,846	\$1,040,000,000	\$1,137	PGIM	SL Green
New York	10 Hudson Yards	1,809,073	\$946,000,000	\$1,188	Allianz	KIA/Coach
San Francisco	760 Market Street	298,124	\$374,000,000	\$1,200	TBD	Thor Equities
Chicago	321 N Clark Street	896,000	\$358,000,000	\$400	Diversified Real Estate Capital	Hines
San Francisco	303 2nd Street	747,000	\$319,800,000	\$973	Kilroy JV Norges	Kilroy
Chicago	1000 W Fulton Street	531,190	\$305,000,000	\$574	American Realty Advisors	Sterling Bay
New Jersey	800 Scudders Mill Road	761,824	\$305,000,000	\$400	Hana	LCOR JV Ivy
Boston	245 First Street	278,212	\$295,000,000	\$1,060	Clarion	Jamestown
New York	1619 Broadway	172,000	\$295,000,000	\$1,715	Conway Capital	Brickman JV Allied
Silicon Valley	1101 W Maude Avenue	397,510	\$285,961,215	\$719	LinkedIn	Google
Dallas	2200 Ross Avenue	1,248,230	\$273,000,000	\$219	Fortis	Hines
New York	275 Madison Avenue	336,077	\$273,000,000	\$812	RPW Group	RFR Realty
Atlanta	1125 Sanctuary Parkway	1,541,723	\$265,000,000	\$172	Rubenstein	JPMorgan Chase
San Francisco	123 Mission Street	345,595	\$255,000,000	\$738	HNA	Great Eagle
Seattle-Bellevue	325 9th Avenue N	317,804	\$246,800,000	\$777	Metzler JV Mirae Asset Global Investments	Vulcan
Chicago	435 N Michigan Avenue	940,000	\$240,000,000	\$255	CIM	Tribune Media
Oakland-East Bay	1999 Harrison Street	535,253	\$235,500,000	\$440	Clarion	DivcoWest
New Jersey	111 River Street	521,410	\$235,000,000	\$451	Mack-Cali	Equity Commonwealth
Dallas	600 Hidden Ridge	1,150,000	\$231,168,605	\$299	Mesirow	Verizon
Dallas	2000 McKinney Avenue	442,355	\$225,836,000	\$511	Unilmmo	ADIA JV Lincoln JV Corrigan
Fort Lauderdale	401 East Las Olas Boulevard	408,064	\$219,946,496	\$539	Deutsche Bank	JPMorgan Chase
Washington, DC	1100 1st Street NE	348,967	\$217,500,000	\$623	UNIZO	Mitsubishi JV Rockefeller
Minneapolis	707 2nd Avenue S	848,000	\$200,000,000	\$236	Morning Calm JV Axar	Founders
San Francisco	100 1st Street	466,000	\$190,900,000	\$931	Kilroy JV Norges	Kilroy
Atlanta	2475 Northwinds Parkway	1,037,678	\$186,900,000	\$180	Brookdale	Blackstone
Dallas	2323 Victory Avenue	436,253	\$184,000,000	\$422	Clarion	Hines JV Estein
Silicon Valley	1 AMD Place	362,000	\$175,000,000	\$483	Irvine Company	WP Carey
Los Angeles	12777 W Jefferson Boulevard	268,563	\$165,000,000	\$614	Rockwood	Vantage
Indianapolis	Parkwood Crossing	1,202,076	\$162,900,000	\$136	Rubenstein JV Strategic Capital Partners	Duke
Indianapolis	111 Monument Circle	1,121,763	\$161,900,000	\$144	Hertz	Equity Commonwealth
Nashville	801-840 Crescent Centre Drive	699,208	\$153,825,760	\$220	Stockbridge	JPMorgan Chase
Atlanta	10 10th Street	421,417	\$150,500,000	\$357	Union JV Metzler	Banyan JV Oaktree
New York	125 West 25th Street	138,000	\$150,000,000	\$1,087	AFIAA	Normandy JV Waterbridge JV NTT
Boston	40 Broad Street	285,980	\$150,000,000	\$525	Invesco	TIAA-CREF
Philadelphia	801 Lakeview Drive	652,199	\$143,000,000	\$219	Spear Street Capital	COPT
Washington, DC	820 1st Street NE	298,533	\$140,500,000	\$471	UNIZO	Migdal JV Harbor Group

Select developments under way > 100,000 square feet

Sorted by square feet and under way as of Q3 2016

Market	Submarket	Building	Construction type	RBA s.f.	Preleased %	Expected delivery year
New York	World Trade Center	3 World Trade Center	Speculative	2,861,402	5.8%	2018
New York	Penn Plaza/Garment	30 Hudson Yards	Speculative	2,600,000	66.7%	2019
Chicago	South Loop	433 W Van Buren Street	Speculative	2,450,000	0.0%	2019
New York	Penn Plaza/Garment	1 Manhattan West	Speculative	2,088,941	33.7%	2019
New York	Penn Plaza/Garment	55 Hudson Yards	Speculative	1,556,136	56.7%	2018
San Francisco	South Financial District	415 Mission Street	Speculative	1,420,081	57.8%	2017
Dallas	Far North Dallas	Dallas North Tollway & Street	BTS	1,400,000	100%	2018
Philadelphia	Market Street West	1800 Arch Street	BTS	1,334,000	100%	2018
Chicago	West Loop	150 N Riverside Plaza	Speculative	1,229,064	95.1%	2017
Chicago	West Loop	444 W Lake Street	Speculative	1,073,100	97.2%	2017
Houston	CBD	609 Main Street	Speculative	1,056,658	38.1%	2016
Dallas	Far North Dallas	Legacy & Headquarters Drive	BTS	1,050,000	100%	2017
Dallas	Far North Dallas	Legacy & Headquarters Drive	BTS	1,050,000	100%	2017
Northern Virginia	Tysons Corner	Capital One Drive N	BTS	975,000	100%	2018
Washington, DC	East End	1100 15th Street NW	BTS	868,721	91.9%	2018
New York	Grand Central	390 Madison Avenue	Speculative	862,154	6.7%	2017
Chicago	West Loop	151 N Franklin	Speculative	825,000	51.5%	2018
Silicon Valley	Santa Clara	222 N Wolfe Road	Speculative	777,170	100%	2018
Seattle-Bellevue	Seattle CBD	811 5th Avenue	Speculative	766,779	32.2%	2017
Washington, DC	East End	655 New York Avenue NW	BTS	761,024	85.4%	2018
Seattle-Bellevue	Seattle CBD	505 Madison Street	Speculative	754,000	25.0%	2017
San Francisco	South Financial District	250 Howard Street	Speculative	751,500	0.0%	2018
Seattle-Bellevue	Renton/Tukwila	1101 Lake Washington Boulevard	Speculative	730,000	0.0%	2018
Seattle-Bellevue	Bellevue CBD	400 Bellevue Way NE	Speculative	724,693	41.5%	2016
Northern Virginia	Eisenhower Avenue	2415 Eisenhower Avenue	BTS	700,000	100%	2017
San Francisco	Mission Bay/China Basin	1800 Owens Street	Speculative	680,000	0.0%	2017
Chicago	Fulton Market	1045 W Randolph	BTS	670,000	92.2%	2018
Denver	West CBD	1144 15th Street	Speculative	670,000	0.0%	2018
New York	Plaza District	425 Park Avenue	Speculative	670,000	68.0%	2018
Charlotte	CBD	300 South Tryon	Speculative	638,459	54.4%	2016
Houston	Galleria	1500 Post Oak Boulevard	BTS	600,000	100%	2016
Washington, DC	Capitol Hill	250 Massachusetts Avenue NW	Speculative	559,921	0.0%	2019
Dallas	Far North Dallas	Lebanon Road @ North Dallas Tollway	Speculative	552,883	25.3%	2017
Dallas	Far North Dallas	Lebanon Road	Speculative	552,883	25.3%	2017
Northern Virginia	Rosslyn	1201 Wilson Boulevard	Speculative	552,781	64.6%	2018
Dallas	Far North Dallas	Legacy Drive & Headquarters Drive	BTS	550,000	100%	2017
Dallas	Far North Dallas	Legacy Drive & Headquarters Drive	BTS	550,000	100%	2017
Orange County	Airport Area	The Boardwalk	Speculative	537,224	26.0%	2017
Washington, DC	CBD	2000 L Street NW	Speculative	536,019	10.3%	2018
Philadelphia	Market Street West	2400 Market Street	Speculative	525,000	38.6%	2018
Dallas	Uptown	2121 N Pearl Street	Speculative	516,093	37.1%	2017
Nashville	Downtown	200 4th Avenue	BTS	514,000	100%	2017
Boston	495/Mass Pike	1 Boston Scientific Pl - Bldg 3	BTS	510,878	70.6%	2017
Atlanta	Buckhead	3560 Lenox Road NE	Speculative	506,647	16.0%	2017
Austin	CBD	500 W. 2 nd	Speculative	489,404	52.3%	2017
Atlanta	Midtown	864 Spring Street	BTS	485,000	100%	2018
Nashville	Downtown	1104 Charlotte Avenue	BTS	475,000	100%	2016
Chicago	Clybourn Corridor	4000 W Diversey	Speculative	450,000	33.3%	2018
Phoenix	Tempe	600 E Rio Salado Parkway	BTS	443,000	100%	2017
Northern Virginia	Tysons Corner	8350 Broad Street	Speculative	436,813	19.3%	2019



"As long as employment continues to grow, occupancy in the office market should continue to expand. That said, primary markets welcoming new supply are nearing an inflection point as supply begins to catch up to demand."



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JLL's research team delivers intelligence, analysis and insight through market-leading reports and services that illuminate today's commercial real estate dynamics and identify tomorrow's challenges and opportunities. Our more than 400 global research professionals track and analyze economic and property trends and forecast future conditions in over 60 countries, producing unrivalled local and global perspectives. Our research and expertise, fueled by real-time information and innovative thinking around the world, creates a competitive advantage for our clients and drives successful strategies and optimal real estate decisions.

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