



August 2015

OFFICE MARKET OUTLOOK REPORT

- Office Segment Fundamentals
- Office Sector Metro Heatmap
- Top 5 Office Buy and Sell Markets
- Office Segment Current Trends

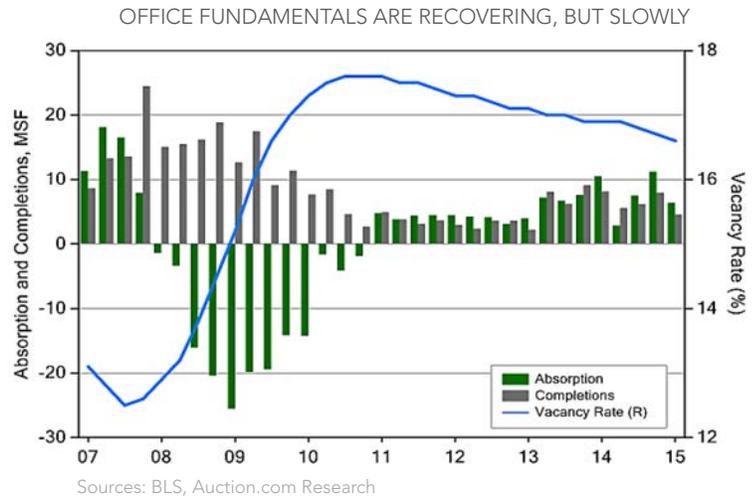
Office Market Marches Forward

■ Office fundamentals are continuing to recover, albeit slowly. Vacancies have reached a new cyclical low, 16.6%, an improvement of 30 bps from a year ago, but just 100 bps below the cyclical peak seen in 2010.

The pace of absorption has picked up in recent quarters, averaging just under 7 msf per quarter over the last four quarters, but this still doesn't reach the average net take-up levels of 14 msf per quarter in the 2000's and 18 msf per quarter in the 1990's.

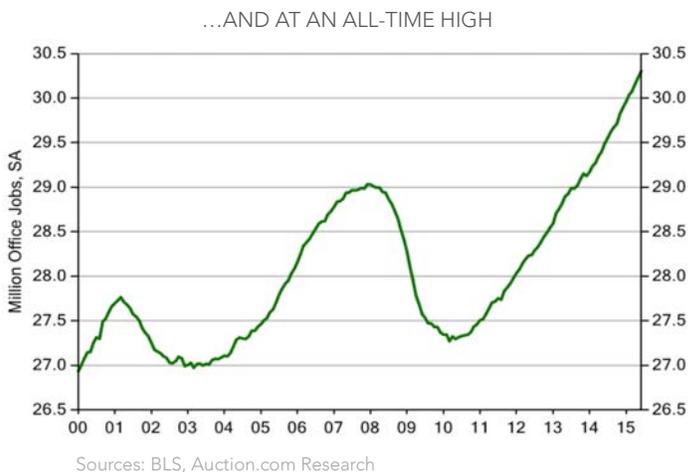
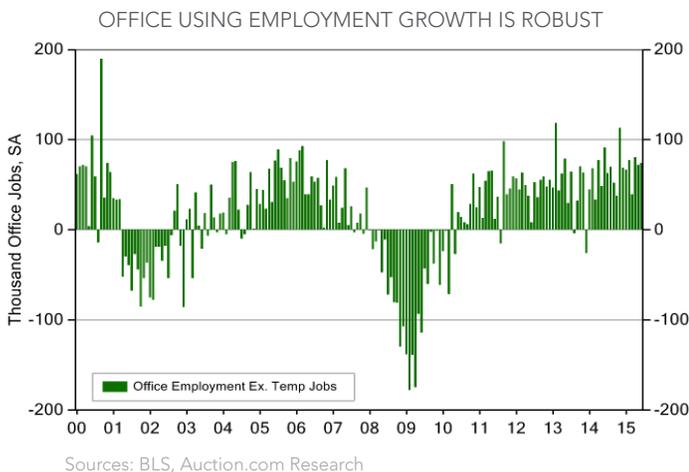
The sector continues to battle with supply additions that undercut the mild demand. While supply additions are way down this

cycle compared to the previous, they are only marginally below the absorption rates, and have helped keep availability elevated.



■ The recent uptick in absorption rates can be tied to gains in the labor market that have strengthened the backdrop for the sector. Office using employment continues to grow

at a robust pace and has reached a new all-time peak, a trend that is evident in the strong business/professional and information sectors of many of our top markets.



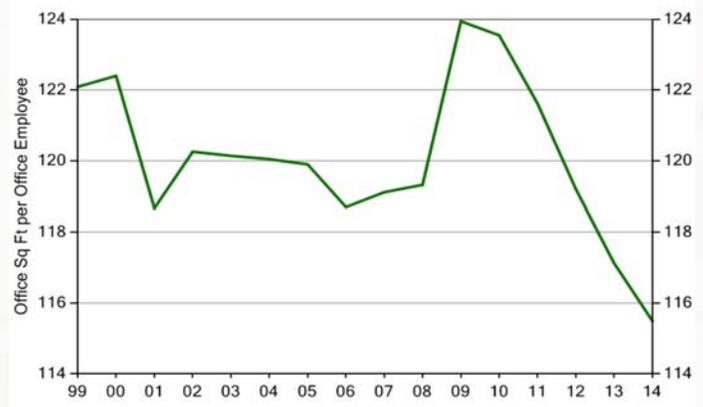
Changing Office Use Trends

■ We have previously noted that shadow vacant inventory of leased but unused space had been burned off, leaving the sector ripe for stronger gains from new office job creation and the recent uptick in absorption appears to confirm this.

Still, the office sector faces secular challenges. Office space per worker continues to decline, as more efficient floor layouts, increased remote work and cloud file storage continue to gain in prominence. These all reduce the physical space needed by employers on site, and will remain a drag on absorption figures in the coming years.

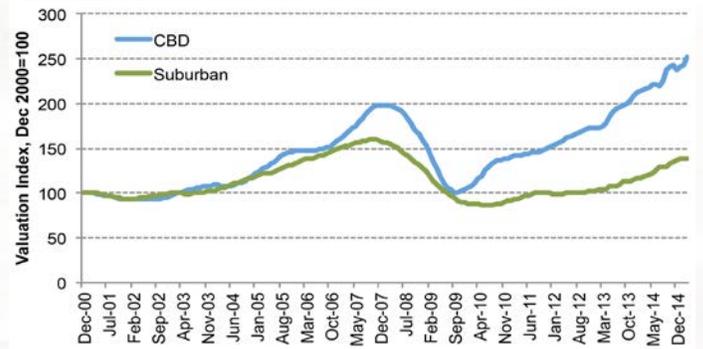
Additionally, workers increasingly prefer to be downtown and firms are recognizing the recruiting power of locating in vibrant CBDs. This is leading to a bifurcation between CBD and suburban office markets, with many suburban markets languishing with corporate campus buildings that do not match the space needs of today. Meanwhile CBDs and particularly markets perceived as harboring good talent pools are taking off.

DECLINING OFFICE USE PER OFFICE EMPLOYEE



Sources: BLS, Reis, Auction.com Research

MOODY'S/RCA CPPI OFFICE VALUATIONS – CBD VS. SUBURBAN



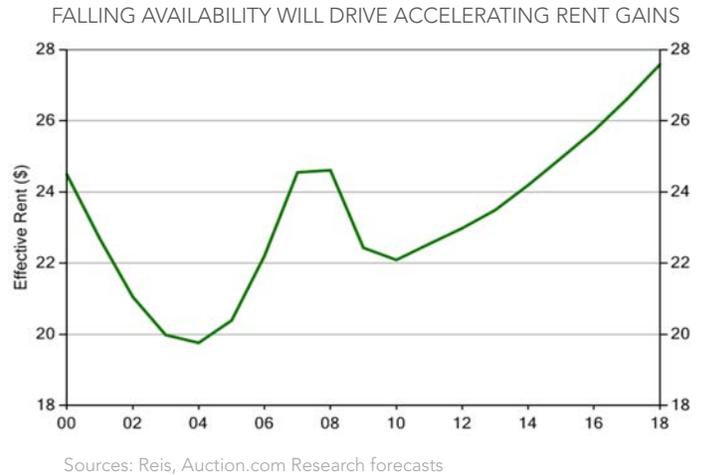
Sources: Moody's, RCA, Auction.com Research



Office Vacancy and Rents Analysis

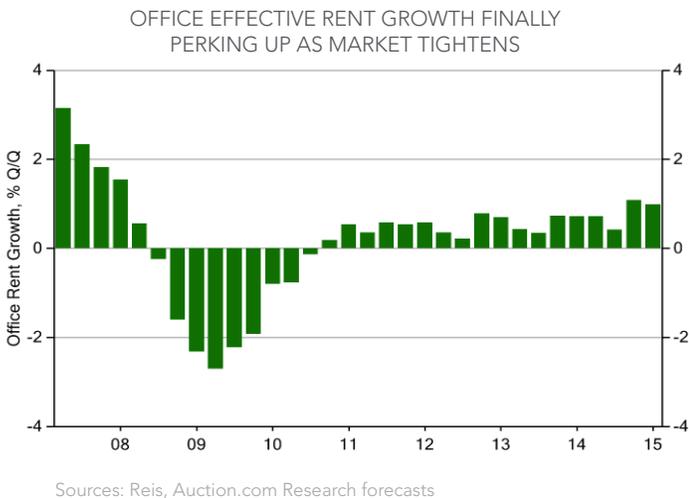
■ Our forecast calls for absorption to rise this year but a corresponding uptick in completions will limit the effect on vacancies. The pipeline is thinner after that and will allow for stronger improvements in availability. We expect vacancies to remain in the mid-16% range this year, before falling to just above 15% in 2018, slightly higher

than our previous forecast and well above the troughs in previous cycles. Vacancies fell to lows in the mid-12% range in 2007 and low-8% range in 2000. Our outlook for rents is slightly brighter than previously though, as we now expect growth to average 3.3% per annum through 2018 compared to 3.1% in our previous forecast.



■ Office rent growth has perked up in the last few quarters, with two consecutive quarters of 1% growth. This has brought effective rents 3.3%

above their year ago level to \$24.43 psf. This leaves effective rents just 2.6% below their all-time peak of \$25.07 in 2008.



See our [Top 5 Office Buy and Sell Markets](#) for rent projections in key markets.

Office Sector Heat Map

While there are a number of positive indicators for the office sector at a national level, the high contrast in our office heat map underscores the sharp differences between a handful of hot office markets and the languishing office markets in many other parts of the country. Most of the strength is on the west coast, abetted by the tech surge, which is also a key factor for New York City and Boston.

Looking across the major US office markets, however, the average score deteriorated slightly in this most recent analysis, from 3.39 to 3.47. This was the result of twice as many downgrades (8) as upgrades (4). Many markets went backwards in the most recent quarter, with negative absorption, as supply is not an issue at this time and will not be one on most markets for the foreseeable future.

The heat maps below are designed to give a quick look as to our rating of local economy and property segments by geography while also showing the size of the market by population or real estate stock for a particular segment and any upgrades or downgrades. This allows for quick analysis of trends, cluster spotting and regional strengths and weaknesses.



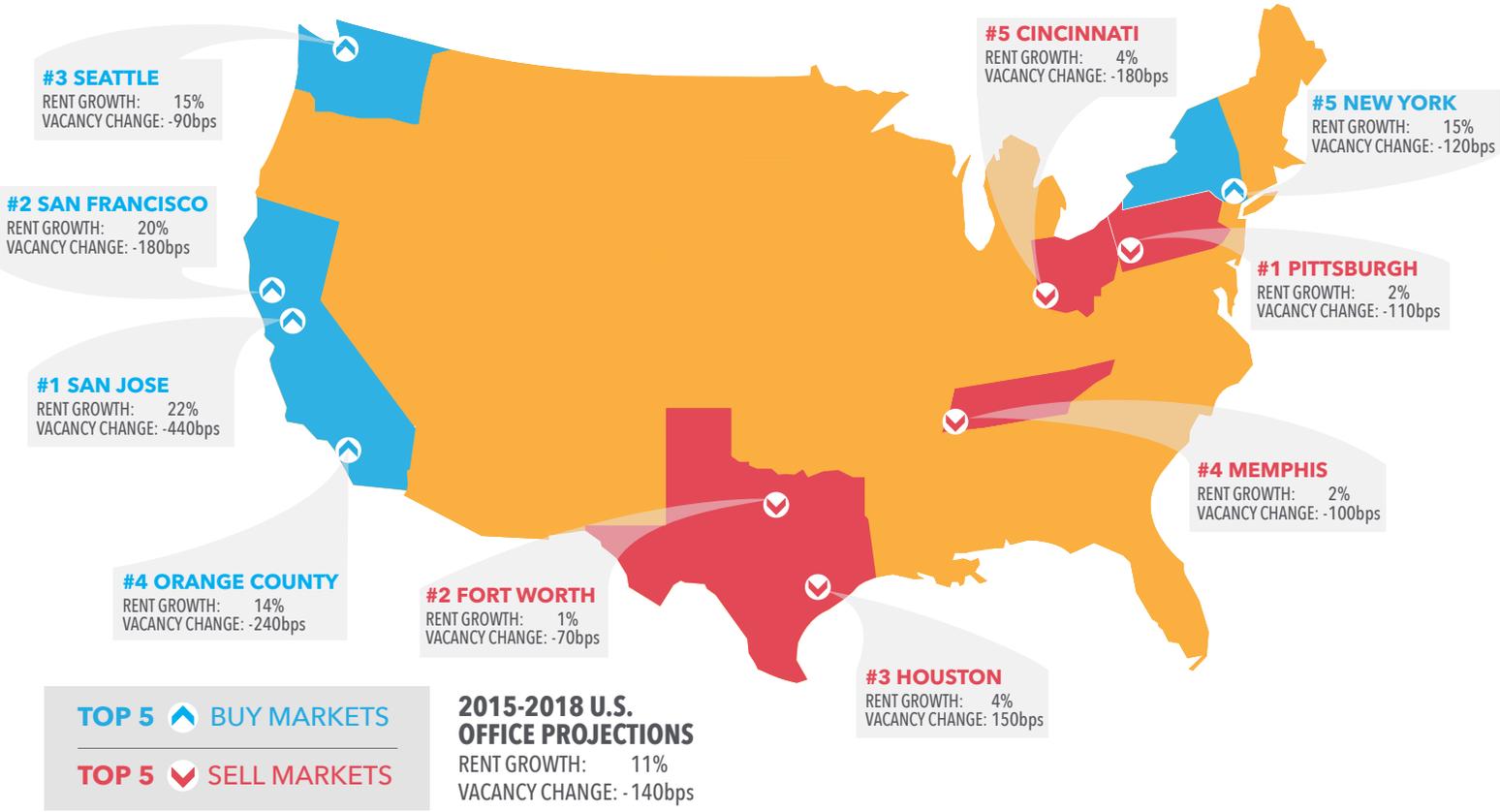
Sources: Auction.com Research



Top 5 Office Buy and Sell Markets

It's not difficult to see what is boosting demand for office space in our top 5 Buy Markets. Strong and improving demographics, one or more booming business sectors, and the accompanying payroll growth are common factors among our top 5 buy markets. Conversely, declining population, dependence on the energy sector, and sliding payrolls are characteristics of our top recommended sell markets.

Auction.com Research chooses top buy and sell markets based on projected NOI growth, vacancy improvement, rent growth, and valuations as reflected in the Auction.com Research Long Term Forecast.



2015-2018 US OFFICE PROJECTIONS

Top 5 Buy Markets	2015 Rents (psf)	2018 Rents (psf)	Change in Rents (%)	2015 Vacancies (%)	2018 Vacancies (%)	Change in Vacancies (bps)
San Jose, CA	29.53	36.10	22%	17.2	12.8	-440 bps
San Francisco, CA	41.52	49.69	20%	10.8	9.0	-180 bps
Seattle, WA	27.11	31.26	15%	11.6	10.7	-90 bps
Orange County, CA	22.73	26.01	14%	15.9	13.5	-240 bps
New York, NY	55.34	63.70	15%	9.3	8.1	-120 bps

Top 5 Sell Markets	2015 Rents (psf)	2018 Rents (psf)	Change in Rents (%)	2015 Vacancies (%)	2018 Vacancies (%)	Change in Vacancies (bps)
Pittsburgh, PA	18.12	18.43	2%	16.3	15.2	-110 bps
Fort Worth, TX	16.54	16.73	1%	16.8	16.1	-70 bps
Houston, TX	23.49	24.51	4%	16.3	17.8	150 bps
Memphis, TN	14.99	15.31	2%	24.1	23.1	-100 bps
Cincinnati, OH	15.31	15.88	4%	20.9	19.1	-180 bps

US	2015 Rents (psf)	2018 Rents (psf)	Change in Rents (%)	2015 Vacancies (%)	2018 Vacancies (%)	Change in Vacancies (bps)
US	24.95	27.58	11%	16.5	15.1	-140 bps

Top Buy Markets

Investors considering purchasing office properties should consider these markets.

#1 San Jose

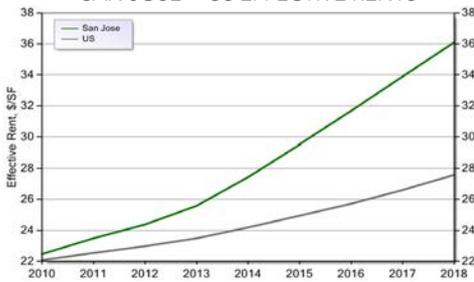
■ San Jose’s economy continues to expand at a torrid pace, driven primarily by the supercharged growth of the tech industry.

- Overall employment’s steep rise in the post-recessionary period persists and is currently up a substantial 12.4% from its prior cyclical peak and an impressive 5.6% from a year ago.
- Payrolls stand at an all-time high on the heels of massive 15.3% year-over-year growth.
- Significant downside risks exist should a hitch arise in the booming tech sector.
- Unemployment has trended below the national average since 2012, falling into the low-4% range.

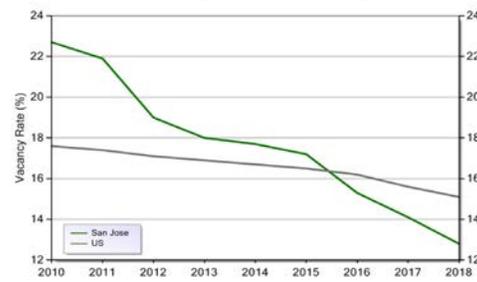
■ San Jose’s office market remains on fire.

- REIS data shows over 450,000 square feet were added in the first quarter but robust demand has been easily able to absorb it.
- Rent growth currently measures a seemingly insane 7.2% year over year. As supply evens out, we expect vacancies to fall below 13% in 2018 from their current level of 17 percent.
- Effective rents will continue to see very strong growth, generating robust NOI gains.
- San Jose remains one of the strongest office markets in the country, though we remain vigilant that its growth driver is very volatile.

SAN JOSE vs US EFFECTIVE RENTS



SAN JOSE vs US VACANCIES



#2 San Francisco

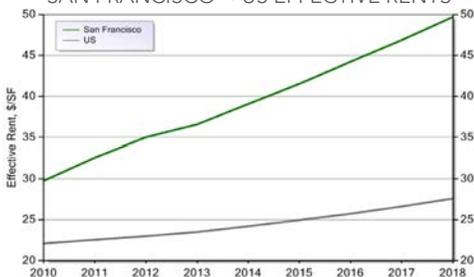
■ Another tech darling, San Francisco’s economy is maintaining its profound post-recessionary surge. While still strong, this market’s fortunes could change quickly if the tech industry experiences trouble.

- Total employment risen sharply, surpassing its 1990s tech bubble to a new record high, and recently clocking in 4.5% year-over-year growth.
- The information and business/professional sectors continue to post excellent employment gains with both at or above previous record peak set back in 2000.
- Unemployment continues to tumble downward at a margin well below the US average, falling into the mid-3% range.
- Above-average population growth continued in 2014, measuring at 1.2%.

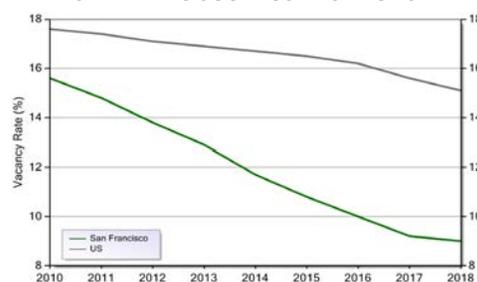
■ The San Francisco office market remains one of the most exceptional in the country, exhibiting a robust expansion in fundamentals.

- Absorption has dominated in recent years due to the robust economy, causing vacancies to drop or hold constant for seven successive quarters.
- Development is constrained in the metro, and we project continued robust absorption to outpace completions in each of the next four years, pulling vacancies down to 9% by yearend 2018.
- Effective rents are skyrocketing, and currently measure 6.1% higher than one year ago. We forecast rent growth to average similar 6.2% annual growth over the next four years, as market growth continues unabated, spurring 7% annual NOI growth over the same span.

SAN FRANCISCO vs US EFFECTIVE RENTS



SAN FRANCISCO vs US VACANCIES



#3 Seattle

■ Seattle’s strong expansion continues, as robust growth occurs in many areas of its local economy.

- Total employment has surged to a new all-time high, and is up 5.9% from its prior cyclical peak.
- The professional/business services sector has been a key part of this trend, with payrolls at a record high and a superb 5.3% higher from a year ago.
- Unemployment has hovered well below the national average since 2011 and population growth is still more than double the US average, providing a foundation for economic gains.

■ While Seattle’s office market continues to grapple with supply, the robust local economy should be able to absorb this growth.

- We predict that vacancies will drop to just below 11% in 2017 where they will plateau.
- Effective rent growth is currently robust, and we expect the strong gains to continue, with rents averaging growth of over 5% per year through 2018.
- This will drive robust NOI growth of nearly 6% per year through 2018.



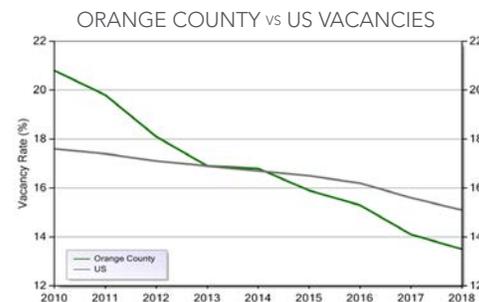
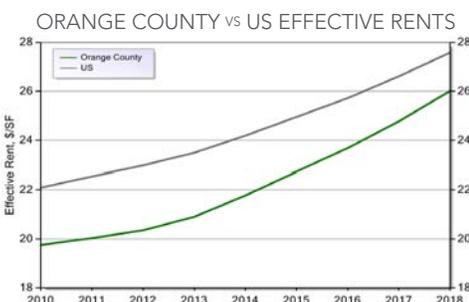
#4 Orange County

■ Orange County’s economic recovery has shifted to expansion as employment makes solid gains and total employment recently surpassed its prior cyclical peak.

- The local job count has reached a new all-time high and grew 3.8% on the year.
- Payrolls in the business/professional services sector have surged 21.2% since bottoming out in 2009 while payrolls in the leisure/hospitality sector have ballooned to over 11% from their pre-recession peak and are up 3.3% from a year ago.
- These positive employment gains have allowed the unemployment rate, which has hovered below the national average since mid-2012, to plummet into the mid-4% range.
- However, population growth has decelerated for three consecutive years, accelerating enough to keep the economy moving forward but a sign that the revived housing market may once again be pricing people out.

■ Orange County’s office market has grappled with supply additions over the last three quarters and faces a moderate supply pipeline, but the strong local economy should easily generate enough absorption to tighten the market further.

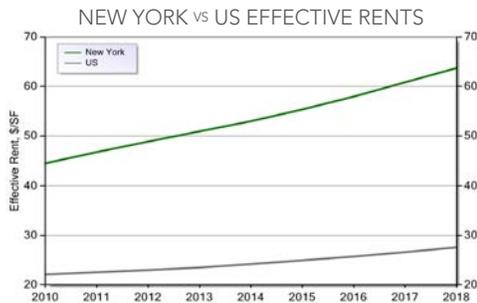
- REIS data shows vacancies have remained flat from a year ago just below 17% despite continued demand.
- Effective rents have risen 4.4% from a year ago. We expect vacancies to fall below 14% in 2018 due to this demand. Effective rents will continue to see annual rent gains just shy of 5%, which will help drive robust NOI growth in the coming years.



#5 New York

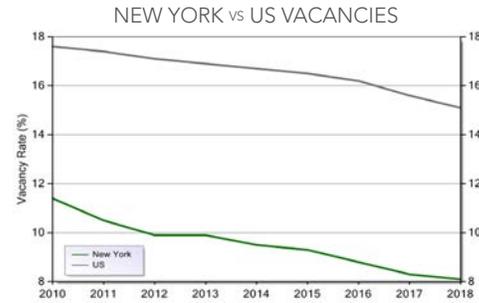
■ New York City's economy, much like its skyline, continues to reach new heights.

- Employment in the metro is at an all-time peak, having risen some 2.7% from the year prior.
- Despite very middling gains in the financial services sector, the city's economy has been boosted by robust gains in education, business services and hospitality, all of which boast employment at all-time peaks.
- New York City's population growth lags the national average, measuring 0.6% in 2014, though this is to be expected for such a large and mature market.



■ New York City's office market remains strong, as vacancies remain in the mid-9% range.

- Effective rents are seeing robust growth due to the tightening market and strong local economy, currently measuring 5.1% higher than a year ago.
- While the city still faces supply additions, we predict vacancies will continue to fall to 8% in 2018.
- The combined gain in rents and occupancy will result in robust NOI growth of greater than 5% per annum, one of the strongest in the office sector.

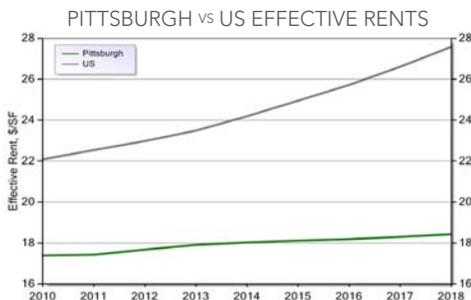


Top Sell Markets

Owners of office property in these markets might consider selling.

#1 Pittsburgh

- Pittsburgh's economic recovery had been eroding slightly on the heels of the decline in oil.
 - Total employment has curled downward in recent months, falling 0.5% from its all-time peak set earlier in the year.
 - Pittsburgh's professional/business services has been caught in the middle of this regression, and payrolls for this sector have now fallen 2.3% after reaching a record high last year.
 - A bright spot for this market has been the leisure/hospitality segment however, which saw employment rise to new all-time peak even amid the recent turmoil and is up 3.2% on the year.
 - Unemployment shot up 70 bps from late 2014, to 5.4%. And the demographic picture continues to deteriorate, as population declined by 0.2% in 2014.

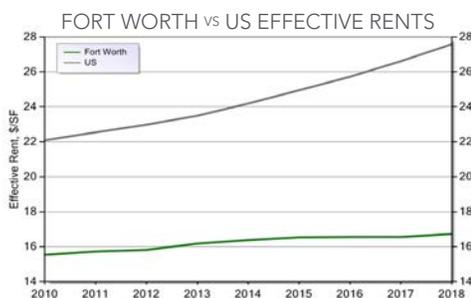


- Pittsburgh's office market continues to struggle as the local economy has been unable to keep pace with construction.
 - Further supply additions this year and next will keep vacancies above 16% through 2016, before seeing a modest improvement thereafter.
 - Effective rent growth will remain constrained as the market grapples with a local economy losing the tailwind of fracking and high availability.
 - NOI growth may be negative or non-existent in the coming years.

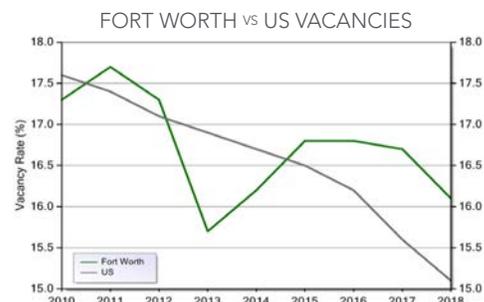


#2 Fort Worth

- Fort Worth is beginning to show some cracks from the fall in oil prices.
 - Employment has stumbled in two of the first three months of 2015 but is still just off an all-time peak and 2.6% higher than a year ago.
 - The professional/business services sector is concerning; payroll has fallen in each of the last three months and is now 0.7% below its year-ago level.
 - Still, population growth remains solid, measuring double the US rate at 1.6% in 2014, providing support to the economy in opposition to the impact of low oil.

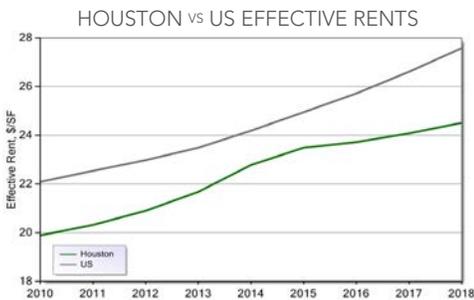


- Fort Worth's office market remained stable in the first quarter, but the drop in the energy sector will affect future demand.
 - Currently, REIS data shows vacancies are just below 16%, bringing them 200 bps below their cyclical peak.
 - Effective rents are still showing very modest growth, rising just 1.4% from a year ago.
 - The market faces solid supply additions this year before the pipeline cools, but with our modest demand expectations, vacancies will remain above 16% through 2018.
 - The high availability will cause rent growth to slow, averaging under 1% per year through 2018.



#3 Houston

- Houston is starting to feel the pinch of low oil prices, as payrolls have declined in each of the past two months. That said, employment is still 2.9% higher than a year ago.
- The mining sector has seen losses in two of the last three months, though it too remains well above its year ago level.
- The large professional/business services sector has also seen a soft start to 2015, with annual growth slowing to 2.4% after measuring close to 4% through 2014.
- Low oil prices are likely to drive more job losses in the near-term, but after recalibrating Houston should resume its robust growth due to its strong demographics.

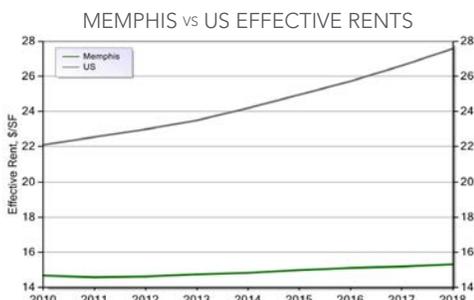


- Houston’s office market saw vacancies jolt higher in the first quarter, as demand cratered and a large supply addition came to market.
- REIS data shows vacancies jumped 70 bps to 15.1% in the quarter, bringing them just 30 bps below their cyclical peak. This was due to a 1.3 msf completion in the quarter while absorption was virtually flat.
- Effective rents continued to see strong gains in the quarter, but this will not last as availability rises and market sentiment shifts. With a massive supply pipeline of over 13 msf in the next four years, and demand cratering due to low oil prices, Houston office vacancies will rise to and stabilize around 18%. We expect effective rents to see modest gains over this time, but the rise in availability precludes any significant NOI growth.



#4 Memphis

- Memphis’ economy continues to struggle, as the important transportation/utilities sector (outsized due to the presence of FedEx) softened in early 2015, with two large monthly losses in a row.
- Employment in the metro is still 3.7% below its pre-recession peak.
- Growth has been slow and inconsistent, with payrolls currently only 1.2% higher than a year ago.
- Unemployment remains above the national average, measuring 6.5%.
- Population growth has been stagnant in each of the last two years, a marked deceleration from year’s prior.



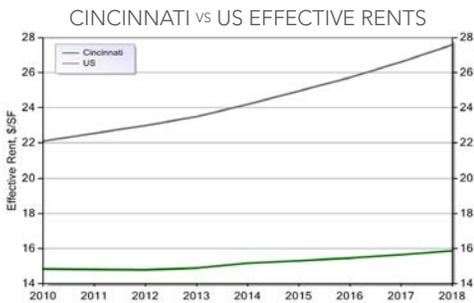
- Memphis’ office market remains weak, as a poor local economy is failing to drive absorption.
- The lack of demand has resulted in vacancies that remain at their cyclical peak just below 24% according to REIS data.
- This very high availability is stunting rent gains, which have only risen 1% from a year ago and remain well off their pre-recession level.
- Memphis faces supply additions this year and in 2017, which coupled with still weak absorption will keep vacancies above 23% throughout the forecast period.
- The high availability will result in anemic rent growth averaging less than 1% per year. The outlook for NOI gains in Memphis is quite low.



#5 Cincinnati

■ Cincinnati’s economy is finally shifting into expansion, as employment in the metro is marginally above its pre-recession peak.

- Employment in the metro has risen 1.4% over the past year, aided by rare growth in manufacturing.
- Manufacturing employment has risen 1.6% from a year ago and 8% from its cyclical trough, but it remains more than 8% below its pre-recession level.
- The professional/business services sector has been the real growth driver, with employment at an all-time peak some 3.7% higher than a year ago.
- Cincinnati continues to have subpar demographics, with population growth measuring 0.5% in 2014, below the US rate, this provides little stimulus to the local economy and portends mediocre growth in the coming years.



■ Cincinnati’s office market continues to weaken, as REIS data shows vacancies hit a new cyclical high in the first quarter.

- Negative absorption lifted vacancies to just below 21%, and effective rent growth remains anemic.
- Mild completions this year and next will overmatch middling demand, resulting in vacancies reaching a peak for the cycle above 21% in 2016. Vacancies will barely drop below 20% by the end of the forecast period.
- Effective rent growth will remain poor as availability weighs on the market, averaging just 1.2% growth per year through 2018.



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