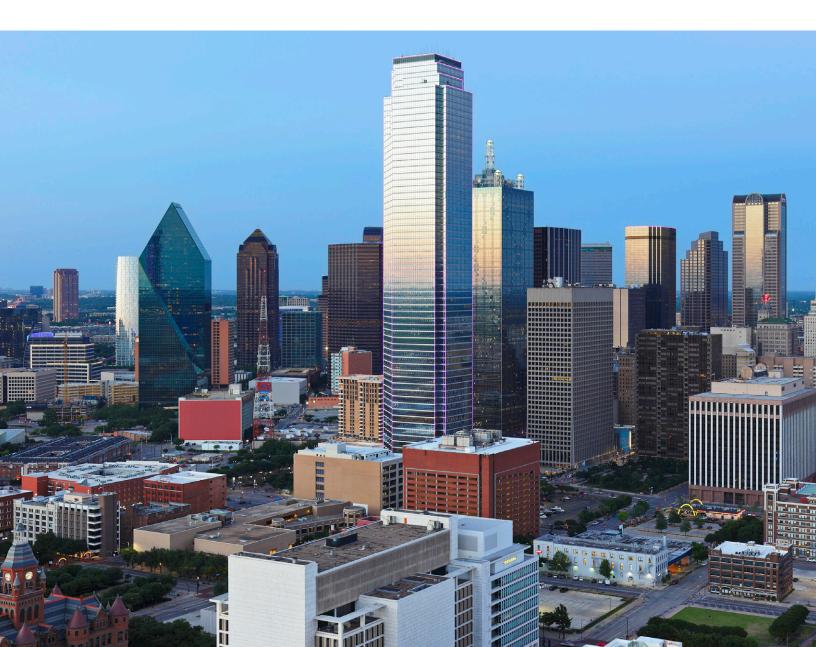
Yardi[®] Matrix

National Office Report

February 2019



U.S. Office Property: Demand for Offices Remains Steady

- The U.S. office market continued its strong performance in January, as healthy demand for space lifted asking rents by 0.5% nationally over the last three months, according to Yardi Matrix's database.
- Continued job growth in office-using industries has propelled demand for space. Office-using jobs increased by 2% year-over-year as of January. The demand has boosted absorption, as the national occupancy rate rose only 10 basis points month-over-month in January despite an acceleration of late-cycle development. Nearly 170 million square feet of office space were under construction in February, representing 2.9% of existing inventory.
- Inventory growth is generally concentrated in coastal markets such as New York City and San Francisco, and rapidly growing metros such as Austin, Nashville and Charlotte. Over the short term, the impact on asking rents is mixed. Brooklyn and Austin, which have among the highest percentage growth in supply, have seen rents cool slightly. Other high-growth metros—such as Nashville, San Francisco and Seattle—have increases in asking rents despite a fair amount of new supply set to come online.
- The development pipeline remains well stocked in the office sector as projects in the planning phase add another 6.7% to inventory. As in many other real estate sectors, office deliveries have been slowed by construction delays as a result of labor shortages; however, ample capital remains. As demand for new commercial real estate continues, many of the projects in planning phases will move forward even if they are not delivered for a few years.
- Transaction activity in the past three months has averaged roughly \$7 billion, in line with the soft decline seen throughout 2018. Investment activity climbed in December to more than \$10 billion as investors looked to close deals before year-end. Although primary markets such as Manhattan, Washington D.C., and Boston are the target of the most investor dollars, suburban transactions topped \$8 billion over the last three months, a sign that investors are also looking for value-add properties and higher yields offered by suburban markets.



Lease Rate and Occupancy Trends: Bay Area Tops 3-Month Rent Growth

- Nationwide, asking rents averaged \$36.23 per square foot in January 2019, up 0.45% over three months. Manhattan (\$74.33), San Francisco (\$58.75), and Brooklyn (\$47.86) are the markets with the highest asking rents.
- The most rapid growth over the last three months was in the Bay Area (4.8%), Philadelphia (3.3%), and Salt Lake City and Las Vegas (2.5%). In the past three months, each market's asking rate increased 2.5% or more. The Bay Area benefits from its proximity to San

Francisco. Both draw from the same pool of talent, while the average listing rate is roughly 25% less in the Bay Area.

The national vacancy rate increased to 14.1%, up 10 basis points from December. Corporate expansions and relocations have fueled growth in markets such as Salt Lake City and Las Vegas, increasing the demand for high-quality office space. Meanwhile, very little new office development has been delivered in Las Vegas in the past five years.

Market	Jan-19 Listing Rates	3-Month Change	Total Vacancy	Top Listing	Price Per Square Foot
National-Overall	\$36.23	0.5%	14.0%		
Bay Area	\$44.82	4.8%	15.3%	Castro Station	\$120.50
Philadelphia	\$29.13	3.3%	12.9%	Cira Centre	\$48.79
Miami	\$38.41	1.9%	13.4%	701 Brickell	\$65.00
San Francisco	\$58.76	1.7%	9.5%	Sand Hill Commons	\$150.00
Phoenix	\$27.13	1.2%	17.5%	Hayden Ferry Lakeside I	\$46.50
Chicago	\$29.77	0.9%	15.5%	300 North LaSalle Drive	\$60.73
Seattle	\$37.49	0.7%	9.3%	Key Center	\$57.92
Boston	\$37.69	0.7%	10.2%	One Federal Street	\$73.00
Houston	\$29.03	0.6%	22.1%	Campanile South	\$54.25
Nashville	\$28.37	0.6%	11.7%	615 Third Avenue	\$42.81
Denver	\$27.96	0.4%	14.2%	Block 162	\$51.11
Orlando	\$21.56	0.4%	13.3%	Guidewell Innovation Center	\$34.66
Twin Cities	\$26.01	0.3%	12.2%	Offices at MOA, The	\$53.43
Los Angeles	\$37.69	0.2%	13.6%	Constellation Place	\$87.71
Tampa	\$25.30	0.0%	11.2%	MetWest International-MetWest One	\$39.00
Dallas	\$27.54	0.0%	20.0%	Saint Ann Court	\$56.71
Charlotte	\$27.24	-0.1%	11.3%	The RailYard	\$40.00
New Jersey	\$32.29	-0.1%	20.4%	Newport-111 Town Square Place	\$62.97
Manhattan	\$74.33	-0.1%	9.0%	101 Park Avenue	\$200.00
San Diego	\$37.02	-0.2%	13.1%	Torrey Point	\$66.00
Washington DC	\$39.11	-0.3%	15.0%	1000 F Street, NW	\$83.08
Atlanta	\$25.71	-1.2%	16.1%	Three Alliance Center	\$52.98
Austin	\$35.32	-1.9%	9.9%	San Jacinto Center	\$60.83
Portland	\$28.22	-2.5%	12.9%	Clay Pavilion	\$45.55
Brooklyn	\$47.87	-3.5%	8.6%	Pioneer Building	\$65.00

Listings by Metro

Source: Yardi Matrix. Data as of 2/19/19. Listing rates are full service or "full service equivalent" rates for spaces available as of report period.

Supply: Development Pipeline Growing

- New office development continues to increase. Roughly 170 million square feet of space was under construction in February nationwide. Properties under construction represent 2.9% growth in total inventory. Strong development interest remains in the sector, as properties in the planned and under construction phase represent nearly 10% of stock.
- Manhattan, Chicago and San Francisco lead all markets in absolute square footage under construction, each with more than 10 million square feet currently being built.
- High growth markets remain evenly balanced between primary and secondary cities. Brooklyn (23.8% of stock) and San Francisco (8.3%) are the fastest-growing markets, followed by tech hubs Austin (7.1%) and Seattle (5.7%), as well as rapidly growing Southeastern markets Nashville (6.8%) and Charlotte (6.3%). Nashville has been driven by a robust and diversifying economy, with health care and tech leading local growth. The growing presence of Amazon will likely drive office absorption in the metro and encourage developers to complete much of the stock currently in planning phases.

National Market	Under Construction	Under Construction % Stock	Plus Planned % Stock
A+/A	156,179,738	5.4%	5.8%
В	11,760,852	0.4%	0.4%
С	530,233	0.3%	0.3%
CBD	46,143,384	3.6%	7.6%
Urban	73,371,190	5.9%	17.4%
Suburban	49,915,972	1.5%	7.5%

Supply Pipeline (by asset class and location)

Source: Yardi Matrix. Data as of 2/19/19.

Supply Pipeline (by metro)

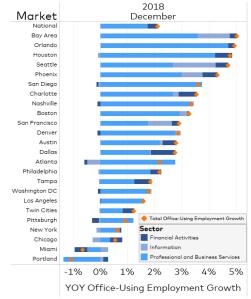
Market	Under Construction	Under Construction % Stock	Plus Planned % Stock
National- Overall	169,430,546	2.9%	9.6%
Brooklyn	6,873,097	23.8%	41.5%
San Francisco	11,831,981	8.3%	21.2%
Austin	4,776,809	7.1%	30.4%
Nashville	2,666,803	6.8%	28.3%
Charlotte	4,045,585	6.3%	11.5%
Seattle	7,337,142	5.7%	12.5%
Manhattan	20,473,133	4.4%	6.6%
Chicago	10,872,832	4.1%	11.5%
Boston	6,753,984	3.6%	14.8%
Bay Area	6,217,314	3.4%	20.9%
Orlando	1,758,129	3.4%	16.5%
Los Angeles	8,909,089	3.3%	9.8%
Miami	2,048,307	3.2%	17.9%
Phoenix	3,789,630	3.1%	13.5%
San Diego	2,628,989	3.0%	10.4%
Washington DC	10,183,059	3.0%	10.7%
Atlanta	4,905,152	2.7%	19.3%
Philadelphia	3,524,744	2.4%	5.8%
Portland	1,022,317	1.8%	9.0%
Twin Cities	1,616,655	1.8%	4.6%
Denver	2,463,455	1.6%	5.0%
Dallas	3,938,478	1.5%	13.7%
Houston	3,084,128	1.3%	3.8%
Tampa	485,783	0.8%	11.0%
New Jersey	1,088,492	0.7%	4.2%

Source: Yardi Matrix. Data as of 2/19/19.

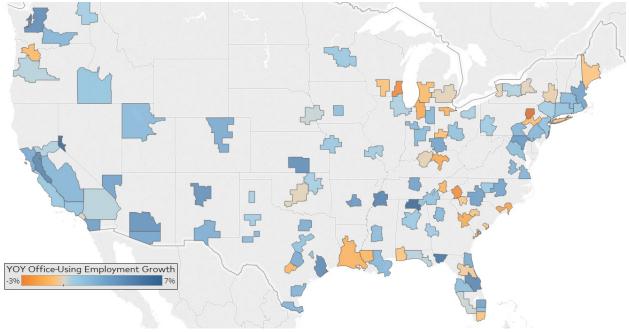
Office-Using Employment: Southern Metros See Growth in Financial Services

- Office-using employment continues to outpace overall job gains as the current cycle nears the 10-year mark. Office-using employment nationwide grew more than 2% on a year-over-year basis in December.
- Financial activities grew fastest in Southern markets including Dallas (0.9%), Charlotte (0.7%), and Tampa and Houston (0.6%). Many large and regional banks and financial institutions are expanding their offices in secondary markets, as a strong talent pool combined with lower cost of labor makes business expansion comparatively more attractive than in some gateway markets.
- Professional and business services remains the fastest-growing office-using employment sector nationwide, increasing 1.7% year-over-year.

Growth by Sector



Sources: Bureau of Labor Statistics and Moody's Analytics



Office-Using Employment Growth

Sources: Bureau of Labor Statistics and Moody's Analytics

Transactions: Strong December Boosts Sales Volume

Sales Activity

Austin

Houston

Nashville

Orlando

Phoenix

Atlanta

Tampa

Dallas

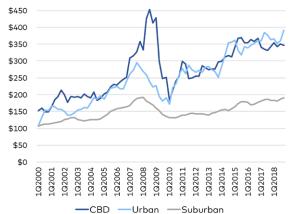
Twin Cities

New Jersey

Philadelphia

- Monthly sales volume over the past three months has averaged roughly \$7 billion, aided by a strong year-end in which more than \$10 billion of office properties changed hands. Transaction activity has remained steady, with interest rates flattening and ample capital available for investment.
- Transactions were almost evenly split between central business districts and suburban areas over the past three months. Suburban districts had \$2.8 billion in sales, compared to \$2.7 billion in CBDs.

Sales by Location (price per square foot)



Source: Yardi Matrix; Data as of 2/19/19

Average Monthly **Average** Price Volume in Millions Market per Square Foot (3-mo rolling avg) National \$292.81 \$7,015.66 San Francisco \$906.51 \$229.58 Manhattan \$820.85 \$1,181.50 Boston \$640.83 \$633.43 Bay Area \$450.58 \$362.91 Seattle \$426.80 \$357.50 Brooklyn \$421.32 \$102.70 \$387.16 \$131.12 Miami Washington DC \$344.04 \$850.71 Los Angeles \$340.10 \$425.28 San Diego \$335.41 \$109.66 \$277.13 \$327.34 Chicago Charlotte \$274.45 \$153.84 Portland \$246.55 \$41.93 Denver \$241.44 \$314.18

\$231.31

\$217.46

\$214.60

\$203.08

\$189.97

\$167.00

\$145.86

\$141.32

\$125.94

\$111.07

\$108.97

\$63.68

\$110.23

\$27.78

\$54.75

\$54.03

\$160.19

\$116.22

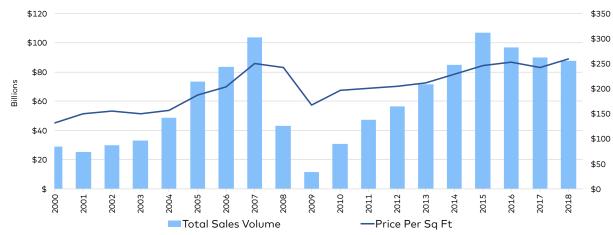
\$186.77

\$97.39

\$76.53

\$72.93

Source: Yardi Matrix. Data as of 2/19/19.



Total Sales

Source: Yardi Matrix. Data as of 2/19/19.

Definitions

This report covers office buildings 50,000 square feet and above. Yardi® Matrix subscribers have access to 25,000-square-foot and larger buildings for a continually growing list of markets.

Yardi® Matrix collects listing rate and occupancy data using proprietary methods.

- Listing Rates—Listing Rates are full-service rates or "full-service equivalent" for spaces that were available as of the report period. Yardi[®] Matrix uses aggregated and anonymized expense data to create full-service equivalent rates from triple-net and modified gross listings. Expense data is available to Yardi[®] Matrix subscribers.
- *Vacancy*—The total square feet vacant in a market, including subleases, divided by the total square feet of office space in that market. Owner-occupied buildings are not included in vacancy calculations.

A and A+/Trophy buildings have been combined for reporting purposes.

Stage of the supply pipeline:

- Planned—Buildings that are currently in the process of acquiring zoning approval and permits but have not yet begun construction.
- Under Construction—Buildings for which construction and excavation has begun.

Office-Using Employment is defined by the Bureau of Labor Statistics as including the sectors Information, Financial Activities, and Professional and Business Services. Employment numbers are representative of the Metropolitan Statistical Area and do not necessarily align exactly with Yardi[®] Matrix market boundaries.

Sales volume and price-per-square-foot calculations do not always include portfolio transactions or those with unpublished dollar values.

To learn more about Yardi® Matrix and subscribing, please visit www.yardimatrix.com or call Ron Brock, Jr., at 480-663-1149 x2404.

Contacts

Jeff Adler

Vice President & General Manager of Yardi Matrix Jeff.Adler@Yardi.com (800) 866-1124 x2403

Jack Kern

Director of Research & Publications Jack.Kern@Yardi.com (800) 866-1124 x2444

Paul Fiorilla

Director of Matrix Research Paul.Fiorilla@Yardi.com (800) 866-1124 x5764

Chris Nebenzahl

Institutional Research Manager Chris.Nebenzahl@Yardi.con (800) 866-1124 x2200

Peter Kolaczynski

Manager, Commercial Peter.Kolaczynski@Yardi.com (800) 866-1124 x2410

Justin Dean

Senior Research Analyst Justin.Dean@Yardi.com (800) 866-1124 x2071

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