Yardi® Matrix

National Office Report

January 2019

U.S. Office Property: Strong Employment Feeds Demand

- Welcome to Yardi Matrix's first monthly report on the office property market. The reports will feature Matrix's U.S. office data, which covers a wide range of data points—including leasing, development trends, transactions and more—on 6.8 billion square feet of office properties in 115 markets across the country.

- The U.S. office market's performance continues to be steady. Demand is boosted by healthy growth among office-using industries. In 2018, business professional and technical services added 286,000 jobs, while growth was also strong in accounting and bookkeeping services, computer systems design and related services, and scientific research and development services. Demand is moderated by long-term trends such as the growing number of remote workers, smaller workspaces and more collaborative space.

- Meanwhile, the amount of space dedicated to coworking is on the rise. Matrix studied 20 markets in late 2018 and found 43 million square feet of shared space leases. Manhattan led with 13 million square feet of coworking space, and the industry is growing rapidly.

- Some 157 million square feet of space is under development in the U.S. It's likely that deliveries this year will be similar to the roughly 80 million square feet that came online in 2018. The amount of office space delivered has risen fairly steadily since bottoming during the Great Recession, but remains far from the amount constructed during previous cycles.

- Office transaction volume declined to $81.91 billion in 2018, and trades have been on a slight downward trend since peaking at $106.18 billion in 2015. Capital is increasingly moving to the apartment and industrial sectors.

Lease Rate and Occupancy Trends: Small Decline in Rents

- Nationally, asking rents averaged $33.41 per square foot in December 2018, down 0.7% over the previous quarter. The national vacancy rate is 14.0%.
- Manhattan topped the list of most expensive cities at an average asking rent of $75.92, followed by San Francisco at $58.86.
- The ongoing health of the technology market is boosting demand in the Bay Area and Silicon Valley. San Francisco (5.5%) had the biggest increase in asking rents over the previous quarter, followed by the Bay Area (2.3%), San Diego (2.1%), Philadelphia (1.8%) and Los Angeles (1.7%).
- San Francisco and Brooklyn (8.4%) had the lowest vacancy rates. Manhattan (9.1%) and Seattle (9.5%) also had vacancy rates in the single digits.

Listings by Metro

Market	Dec-18 Listing Rates	3-Month Change	Total Vacancy	Top Listing	Price Per Square Foot
National–Overall	$33.41	-0.7%	14.0%		
San Francisco	$58.86	5.5%	8.4%	Quadrus Sand Hill	$154.44
Bay Area	$42.89	2.3%	15.2%	Castro Station	$120.50
San Diego	$37.40	2.1%	12.4%	Torrey Point	$66.00
Philadelphia	$28.47	1.8%	11.9%	Cira Centre	$46.79
Los Angeles	$37.66	1.7%	13.9%	The Union Bank of California Building	$101.81
Dallas	$27.53	1.7%	19.6%	Saint Ann Court	$56.71
Manhattan	$75.92	1.3%	9.0%	101 Park Avenue	$200.00
Tampa	$25.56	1.3%	11.5%	MetWest International–MetWest One	$39.00
Phoenix	$26.58	0.8%	17.3%	Hayden Ferry Lakeside I	$45.00
Nashville	$28.36	0.7%	11.2%	615 Third Avenue	$42.81
Houston	$28.57	0.6%	22.4%	Campanile South	$54.25
Atlanta	$25.69	0.6%	15.8%	Three Alliance Center	$52.98
Boston	$37.11	0.5%	10.1%	399 Binney Street	$98.72
Denver	$28.32	0.4%	14.7%	Civica Cherry Creek	$51.32
Seattle	$36.18	0.3%	9.5%	Key Center	$57.92
Miami	$37.96	0.0%	13.5%	701 Brickell	$65.00
Twin Cities	$26.14	-0.2%	11.9%	The Offices at MOA	$53.43
New Jersey	$32.52	-0.2%	20.8%	Newport–111 Town Square Place	$62.97
Orlando	$21.90	-0.5%	11.7%	University Corporate Center	$37.66
Chicago	$29.58	-0.5%	15.9%	300 N. LaSalle Drive	$60.73
Austin	$35.99	-1.1%	10.1%	San Jacinto Center	$60.83
Brooklyn	$47.94	-1.3%	8.7%	Pioneer Building	$65.00
Charlotte	$26.92	-1.8%	11.3%	Hearst Tower	$39.00
Portland	$28.39	-2.6%	12.7%	Clay Pavilion	$45.55
Washington DC	$38.87	N/A	14.7%	1000 F Street, N.W.	$83.08

Source: Yardi Matrix. Data as of 1/17/19. Listing rates are full service or "full service equivalent" rates for spaces available as of report period.

Supply: Development Pipeline Growing

- The development pipeline is picking up. Some 157.4 million square feet is under development, which represents 2.7% of total stock. Adding projects in the planning stage brings the total to 9.7% of existing stock.
- Not surprisingly, the bulk of new construction is located in urban (66.2 million square feet) or CBD (44.0 million square feet) areas. Manhattan (19.9 million) and Chicago (10.4 million) have the most construction by metro.
- New office space is mushrooming in Brooklyn (7.1 million square feet), which would add 24.6% to existing stock. A large number of employers want to take space closer to the borough's young and highly educated population, shorten workers' commute and reduce rents compared to Manhattan. Brooklyn rents average one-third less than Manhattan.
- Nashville (6.9%), San Francisco (6.5%), Charlotte (5.9%), Seattle (5.6%) and Austin (5.5%) also top the metro list based on percentage growth.

Supply Pipeline (by asset class and location)

National Market	Under Construction	Under Construction % Stock	Plus Planned % Stock
A+/A	145,386,222	5.0%	5.4%
B	9,888,791	0.4%	0.4%
C	459,991	0.3%	0.3%
CBD	45,047,526	3.5%	7.6%
Urban	68,208,239	5.6%	17.3%
Suburban	44,095,363	1.3%	7.8%

Source: Yardi Matrix. Data as of 1/17/19.

Supply Pipeline

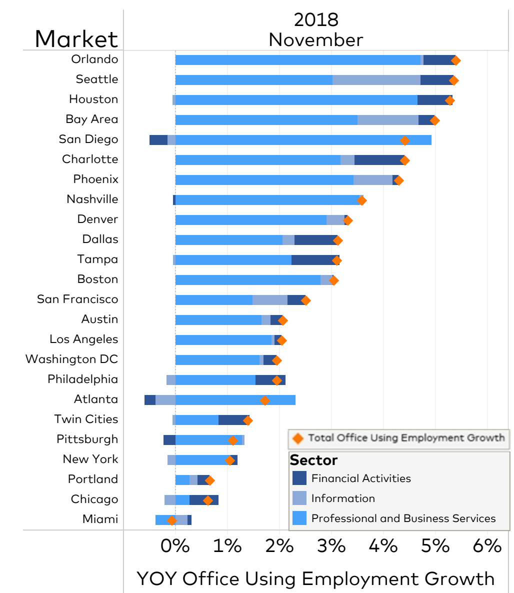
Market	Under Construction	Under Construction % Stock	Plus Planned % Stock
National–Overall	157,351,128	2.7%	9.7%
Manhattan	19,901,133	4.3%	6.6%
Chicago	10,367,040	3.9%	11.3%
San Francisco	9,252,725	6.5%	21.1%
Washington DC	9,221,495	2.7%	10.9%
Los Angeles	8,204,042	3.0%	9.7%
Seattle	7,233,334	5.6%	12.6%
Brooklyn	7,086,818	24.6%	37.9%
Bay Area	6,326,421	3.4%	20.9%
Boston	6,170,984	3.3%	15.8%
Dallas	4,220,158	1.6%	13.5%
Atlanta	3,972,552	2.2%	19.4%
Phoenix	3,847,744	3.2%	13.4%
Charlotte	3,798,370	5.9%	11.5%
Austin	3,654,942	5.5%	28.4%
Houston	3,418,643	1.5%	4.1%
Philadelphia	3,085,350	2.1%	5.7%
Nashville	2,690,803	6.9%	27.3%
San Diego	2,653,960	3.1%	10.2%
Denver	2,653,901	1.8%	4.9%
Twin Cities	1,829,389	2.0%	5.2%
Orlando	1,638,262	4.0%	15.5%
Miami	1,535,774	2.4%	19.4%
Portland	1,204,356	2.1%	8.8%
New Jersey	1,088,492	0.7%	4.3%
Tampa	429,783	0.9%	13.2%

Source: Yardi Matrix. Data as of 1/17/19.

Office Using Employment: Orlando Top Growth Market

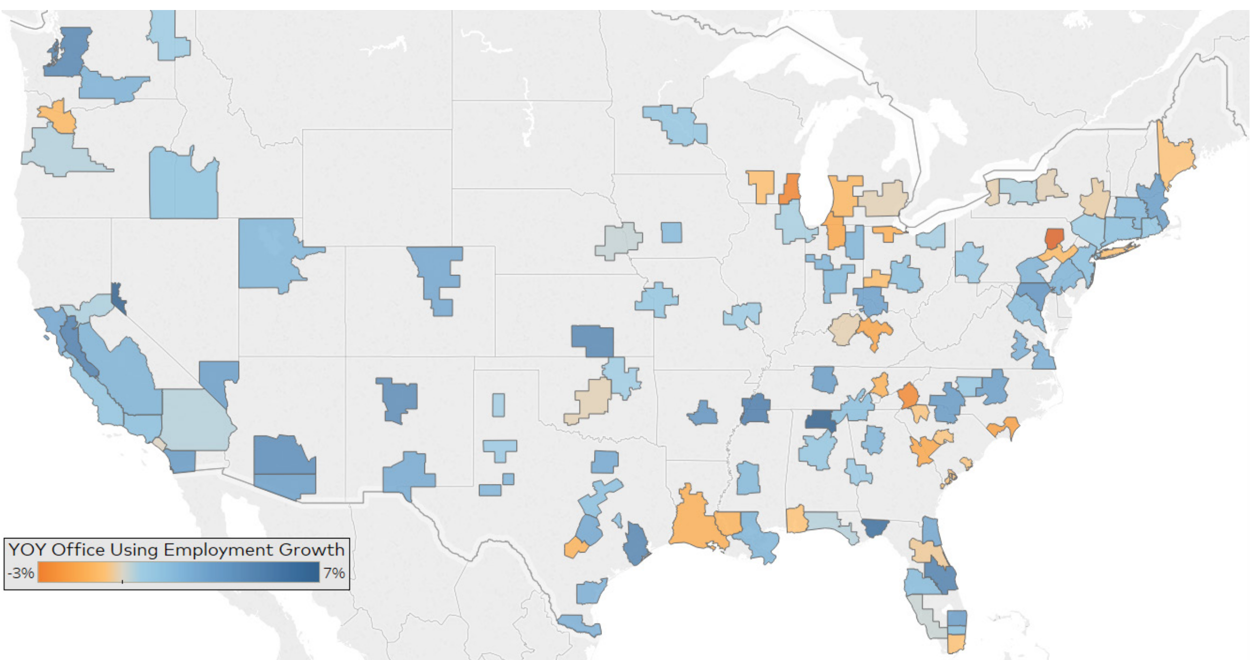
- Orlando is known as a Mickey Mouse city, but its growth is extending into the more "serious" office using employment arena. On a year-over-year basis, Orlando topped major U.S. metros with 5.4% office employment growth, led by a 4.7% increase in business and professional services.
- Seattle and Houston (both 5.3%) also exhibited robust office employment growth. Seattle was strong in all employment segments, and not surprisingly topped all metros with its increase in information jobs (up 1.7%). Houston's economy was helped by recovering energy prices.
- Charlotte was a strong 4.4% overall and led all metros in financial employment growth (up 1.0%). Tampa (0.9%) and Dallas (0.8%) completed the top three in finance gains.

Growth by Sector



Sources: Bureau of Labor Statistics and Moody's Analytics

Office Using Employment Growth

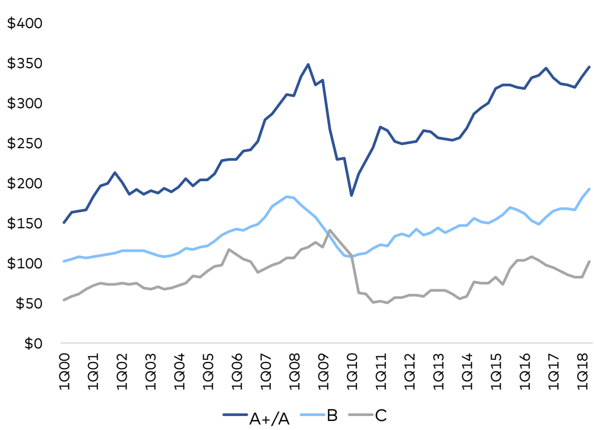


Sources: Bureau of Labor Statistics and Moody's Analytics

Transactions:
Sales Volume Slips From Peak

- Nationally, sales volume slipped in 2018 to just over $80 billion, down from roughly $90 billion in 2017. Sales per square foot were up slightly, despite a flattening of capitalization rates.
- Manhattan ($13.5 billion) and Washington, D.C. ($6.9 billion) led all metros in activity. Volume for the six primary markets (which also included Chicago, Boston, Los Angeles and San Francisco) rose slightly to $37.6 billion in 2018. Activity was weak in suburban markets such as Tampa ($520 million) and Orlando ($550 million).

Sales by Asset Class (price per square foot)



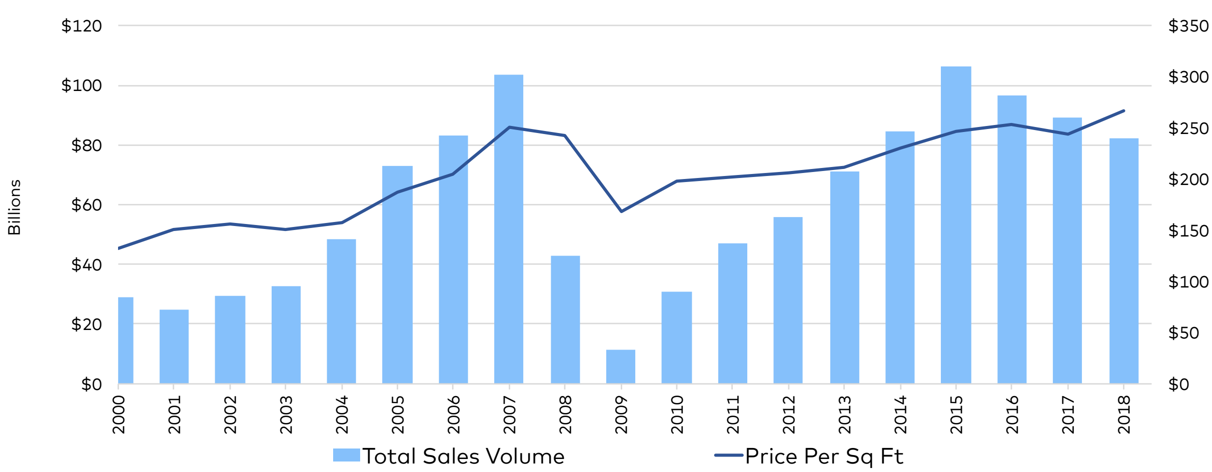
Source: Yardi Matrix; Data as of 1/17/19

Sales Volume by Metro (billions)

Market	2017 Total	2018 Total
National–Overall	$89.1	$81.9
Manhattan	$9.8	$13.5
Washington DC	$7.0	$6.9
Bay Area	$5.8	$5.1
Chicago	$3.1	$4.9
Boston	$4.5	$4.8
Los Angeles	$8.1	$4.1
Seattle	$3.4	$3.8
San Francisco	$4.7	$3.5
Denver	$2.0	$3.0
Dallas	$2.5	$2.3
Atlanta	$3.4	$2.2
Phoenix	$2.3	$2.0
San Diego	$2.2	$1.6
Houston	$1.4	$1.4
Philadelphia	$1.9	$1.4
Twin Cities	$1.0	$1.3
Charlotte	$1.7	$1.2
New Jersey	$2.0	$0.9
Portland	$1.3	$0.8
Austin	$0.9	$0.7
Nashville	$0.5	$0.7
Miami	$0.9	$0.7
Orlando	$0.8	$0.6
Tampa	$0.6	$0.5
Brooklyn	$0.8	$0.1

Source: Yardi Matrix. Data as of 1/17/19.

Total Sales



Source: Yardi Matrix. Data as of 1/17/19.

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.

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