Yardi[®] Matrix

National Office Report

December 2019



U.S. Office Property: Clusters of Supply and Demand Growth

- The average U.S. office asking rate increased 2.3% year-over-year in November to \$37.77. The average national vacancy rate decreased 10 basis points from the previous month to 13.6%. Demand for office space remained solid, as office-using employment increased 1.6% year-over-year.
- Markets where year-over-year listing rate growth was the highest were Tampa (27.1%), San Francisco (21.5%) and Brooklyn (13.5%). For same-store listing rate growth, San Francisco (12.4%), Manhattan (10.3%) and Tampa (8.4%) led the way.
- 67 million square feet of space was delivered by November 2019, with another 156 million under construction. Deliveries have increased steadily each year during the economic recovery, but are still much lower than pre-recession levels. From 2000-2008, new deliveries averaged 118 million square feet annually. From 2009-2019, that number is only 57 million.
- New construction is also notably clustered in just a handful of metros. 125 million square feet (80.1%) of office space is under construction in the top 25 metros tracked by Yardi Matrix. This is also marks a noteworthy uptick. From 2000-2008, the top markets accounted for only 57% of new development on average. From 2009-2019, the average increased to 65%.
- Similarly, growth in demand for office space, as measured by office-using employment, remains strong nationally, but job creation is heavily concentrated in just a handful of metros. From October 2018 through October 2019, 509,000 office-using jobs were added. 325,690 of those jobs (64%) were in the top 20 markets tracked by Yardi Matrix. While accounting for nearly two thirds of all office-using employment growth, these 20 markets made up only 42.2% of all employment growth nationwide in the previous 12 months.
- After a slow start to the year, transaction volume picked up in the second half and totaled \$82.2 billion through the end of November. We expect this number to come close to matching or exceeding 2018's volume of \$93 billion once fourth-quarter transactions are completed and collected by our research team.



Lease Rate and Occupancy Trends: Navy Yard Property Boosts Brooklyn's Rates

- National listing rates averaged \$37.77 in November, a 2.3% increase from the same period a year prior. The national vacancy rate was 13.6%, 10 basis points lower than October.
- Nationally, same-store rates grew 3.5%. San Francisco (12.4%), Manhattan (10.3%), and Tampa (8.4%) led the country once again in same-store listing rate growth.
- Brooklyn has seen its average rate spike recently, with a 13.5% increase over the last 12 months. By all listing-rate growth metrics,

the borough is currently a strong market, with same-store growth over the last 12 months at a solid 4.2%. However, much of that 13.5% increase is due to the Brooklyn Navy Yard's newly completed Dock 72, which currently lists nearly a half-million square feet at an average full-service rate of \$64.51 per square foot, with some spaces going as high as \$73.00 per square foot. A transit-oriented development with large amenity spaces and views of the Manhattan skyline across the East River, Dock 72 is betting it can find tenants to take on the highest rates in Brooklyn.

Listings by Metro

Market	Nov-19 Listing Rate	12-Month Change	Total Vacancy	Top Listing	Price Per Square Foot
National	\$37.77	2.3%	13.6%		
Tampa	\$31.42	27.1%	11.7%	1001 Water Street	\$55.70
San Francisco	\$70.85	21.5%	7.8%	2180 Sand Hill Road	\$152.44
Brooklyn	\$59.54	13.5%	12.1%	Brooklyn Navy Yard-Dock 72	\$73.00
Manhattan	\$85.25	12.4%	7.6%	550 Madison Avenue	\$210.00
Bay Area	\$47.45	9.4%	14.1%	444 Castro	\$120.67
Miami	\$41.78	8.8%	13.0%	830 Brickell Plaza	\$73.00
Twin Cities	\$27.49	5.6%	12.0%	The Offices @ MOA	\$41.00
Atlanta	\$27.20	4.7%	16.3%	Three Alliance Center	\$53.98
Austin	\$40.88	4.5%	8.4%	100 Congress	\$76.83
San Diego	\$38.40	3.6%	12.1%	Molecular and Experimental Medicine Building	\$72.74
Phoenix	\$27.33	3.4%	18.2%	The Watermark-Phase I	\$45.00
Dallas	\$28.56	2.7%	17.8%	Saint Ann Court	\$56.71
Houston	\$29.41	2.6%	21.7%	Campanile South	\$54.29
Los Angeles	\$38.76	2.5%	12.6%	100 Wilshire	\$96.00
Charlotte	\$28.20	2.3%	11.0%	Duke Energy Center	\$42.00
Nashville	\$30.47	1.8%	11.5%	Peabody Plaza at Rolling Mill Hill	\$50.81
Washington DC	\$38.95	0.8%	14.6%	900 Sixteenth Street	\$81.43
Philadelphia	\$28.98	0.7%	13.5%	Three Logan Square	\$51.57
New Jersey	\$31.96	0.3%	21.0%	10 Exchange Place	\$57.30
Denver	\$28.11	0.2%	13.0%	The William Building	\$59.67
Portland	\$29.16	-0.3%	11.8%	Broadway Tower	\$46.16
Orlando	\$21.15	-2.4%	12.5%	Lake Nona Town Center-Phase II	\$36.41
Seattle	\$37.45	-4.6%	8.2%	The Atrium	\$79.77
Chicago	\$28.32	-6.5%	14.8%	300 North LaSalle Drive	\$61.46
Boston	\$34.74	-7.9%	10.1%	301 Binney Street	\$78.78

Source: Yardi Matrix. Data as of November 2019. Listing rates are full service or "full service equivalent" rates for spaces available as of report period.

Supply: Music City Emerges as Office Boomtown

- 67 million square feet of office stock was delivered through the end of November 2019. After hitting a low of 33.4 million square feet in 2011, deliveries have increased nationally every year since, with 2018 seeing 72.9 million square feet completed. Whether 2019 continued the trend likely came down to the wire.
- With 156 million square feet of new stock currently under construction, we expect that national deliveries will level off in the 70 million-square-foot range we have seen the last two years. Although volume remains high overall, most new stock under construction is concentrated in a relatively small number of markets. 119.9 million square feet (76.9%) is located in one of the 20 most active metros monitored by Yardi Matrix.
- One of those 20 is Nashville, which has the second-largest construction pipeline as a percentage of existing stock, trailing only Austin. Having delivered 6.9 million square feet since 2016, Music City has 4.9 million square feet of office space under construction. That is a larger absolute number than much bigger metros like Atlanta and Houston and represents 9.6% of Nashville's existing inventory. Nearly all the stock under construction (95.4%) is A or A+ properties, a share that closely matches the national profile.

Supply Pipeline (by asset class and location)

National Market	Under Construction	Under Construction % Stock	Plus Planned % Stock		
A+/A	141,462,655	4.8%	5.0%		
В	12,795,291	0.4%	0.4%		
С	607,195	0.2%	0.2%		
CBD	39,628,613	3.0%	3.8%		
Urban	69,066,818	5.2%	6.7%		
Suburban	47,317,153	1.3%	1.8%		

Source: Yardi Matrix. Data as of Nov. 30, 2019

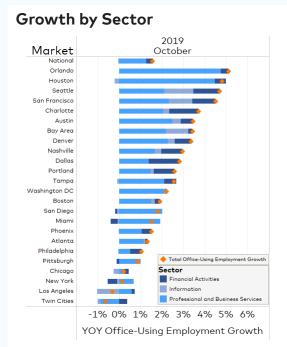
Supply Pipeline (by metro)

Market	Under Construction	Under Construction % Stock	Plus Planned % Stock		
National	156,012,584	2.5%	3.2%		
Austin	7,338,007	10.5%	13.5%		
Nashville	4,912,055	9.6%	13.8%		
Brooklyn	3,122,675	8.7%	10.2%		
San Francisco	8,186,929	5.5%	6.6%		
Seattle	7,022,376	5.2%	6.0%		
Charlotte	3,459,707	5.1%	7.5%		
Boston	9,700,210	4.2%	5.2%		
Manhattan	19,639,844	4.1%	4.5%		
Bay Area	7,029,117	3.6%	5.1%		
Chicago	8,932,148	3.0%	4.4%		
Los Angeles	8,143,762	3.0%	3.2%		
Miami	1,783,952	2.7%	3.1%		
Atlanta	4,412,712	2.4%	2.9%		
Tampa	1,475,252	2.4%	3.5%		
Dallas	6,202,670	2.3%	3.1%		
Twin Cities	2,394,218	2.1%	2.6%		
Washington DC	7,998,876	2.1%	2.8%		
Phoenix	2,228,049	1.8%	2.5%		
Portland	1,054,613	1.8%	2.5%		
Orlando	885,301	1.7%	2.8%		
Denver	2,332,641	1.5%	2.6%		
San Diego	1,340,762	1.5%	2.2%		
Houston	2,947,403	1.3%	1.9%		
Philadelphia	2,127,786	1.2%	1.5%		
New Jersey	285,527	0.2%	0.2%		

Source: Yardi Matrix. Data as of Nov. 30, 2019

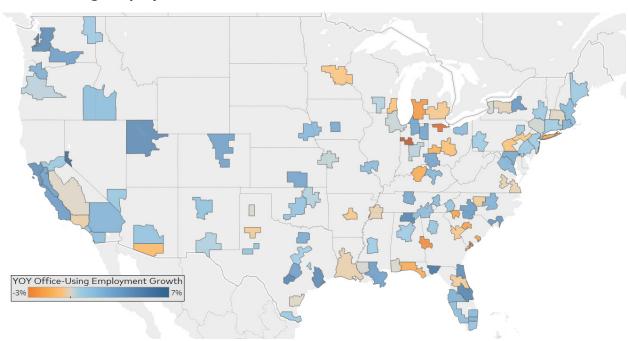
Office-Using Employment: There's More to Orlando Than Tourism

- Office-using employment increased 1.6% year over year during the twelve months ending in October. That continues the trend of the officeusing category outpacing overall employment growth during the recovery.
- Most of the 509,000 new office jobs came from professional and business services, which added 413,000 positions. Financial activities added 106,000 and the information sector decreased by 10,000 over the last 12 months.
- Orlando led all major markets in year-over-year office-using employment growth by adding 19,540 jobs, good for a 5.1% increase. For the last few years, Orlando has had one of the strongest employment growth markets, and while the metro's economy is known for its reliance on tourism, office-using employment plays an outsize role in job creation. More than a third (37.6%) of the 52,000 jobs added in the last year were in office-using sectors.



Sources: Bureau of Labor Statistics and Moody's Analytics

Office-Using Employment Growth

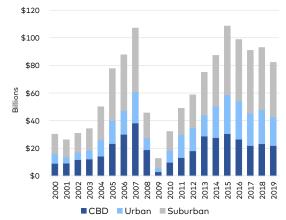


Sources: Bureau of Labor Statistics and Moody's Analytics

Transactions: Pace Picks Up in the Second Half

- Office transactions for the U.S. reached \$82.2 billion through November, putting the year on pace to match or exceed 2018's \$93 billion once fourth-quarter transactions are accounted for.
- After dropping as low as 1.5% in September, the 10-year Treasury rate has rebounded slightly in recent weeks to the 1.9% range, but is still well below the 2.6% level where it began in 2019. Lower borrowing costs may have helped accelerate activity after a slow first half.

Sales by Location



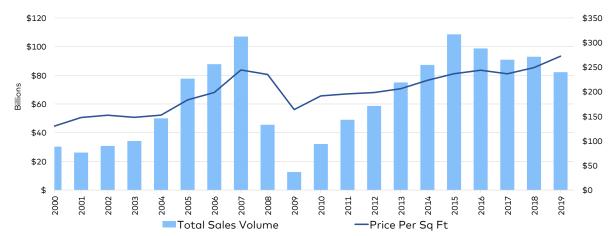
Source: Yardi Matrix; Data as of Nov. 30, 2019

Sales Activity

Market	YTD Sales Price PSF	YTD Sales (Mil, as of 11/31)
National	\$272	\$82,164
Manhattan	\$891	\$9,251
Washington DC	\$262	\$6,814
Seattle	\$512	\$6,522
Bay Area	\$480	\$6,521
San Francisco	\$767	\$5,169
Los Angeles	\$446	\$4,360
Boston	\$322	\$4,031
Denver	\$202	\$2,472
Atlanta	\$191	\$2,430
Houston	\$228	\$1,912
Chicago	\$160	\$1,868
San Diego	\$396	\$1,833
Charlotte	\$272	\$1,796
Phoenix	\$178	\$1,784
Dallas	\$229	\$1,763
New Jersey	\$149	\$1,713
Philadelphia	\$192	\$1,668
Austin	\$375	\$1,231
Twin Cities	\$149	\$1,165
Portland	\$301	\$1,064
Miami	\$312	\$949
Nashville	\$216	\$939
Tampa	\$192	\$887
Orlando	\$162	\$522
Brooklyn	\$379	\$80

Source: Yardi Matrix. Data as of Nov. 30, 2019

Total Sales



Source: Yardi Matrix. Data as of Nov. 30, 2019

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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