Yardi® Matrix

National Office Report

March 2019

U.S. Office Property:
Rents Inch Up Despite Supply Growth

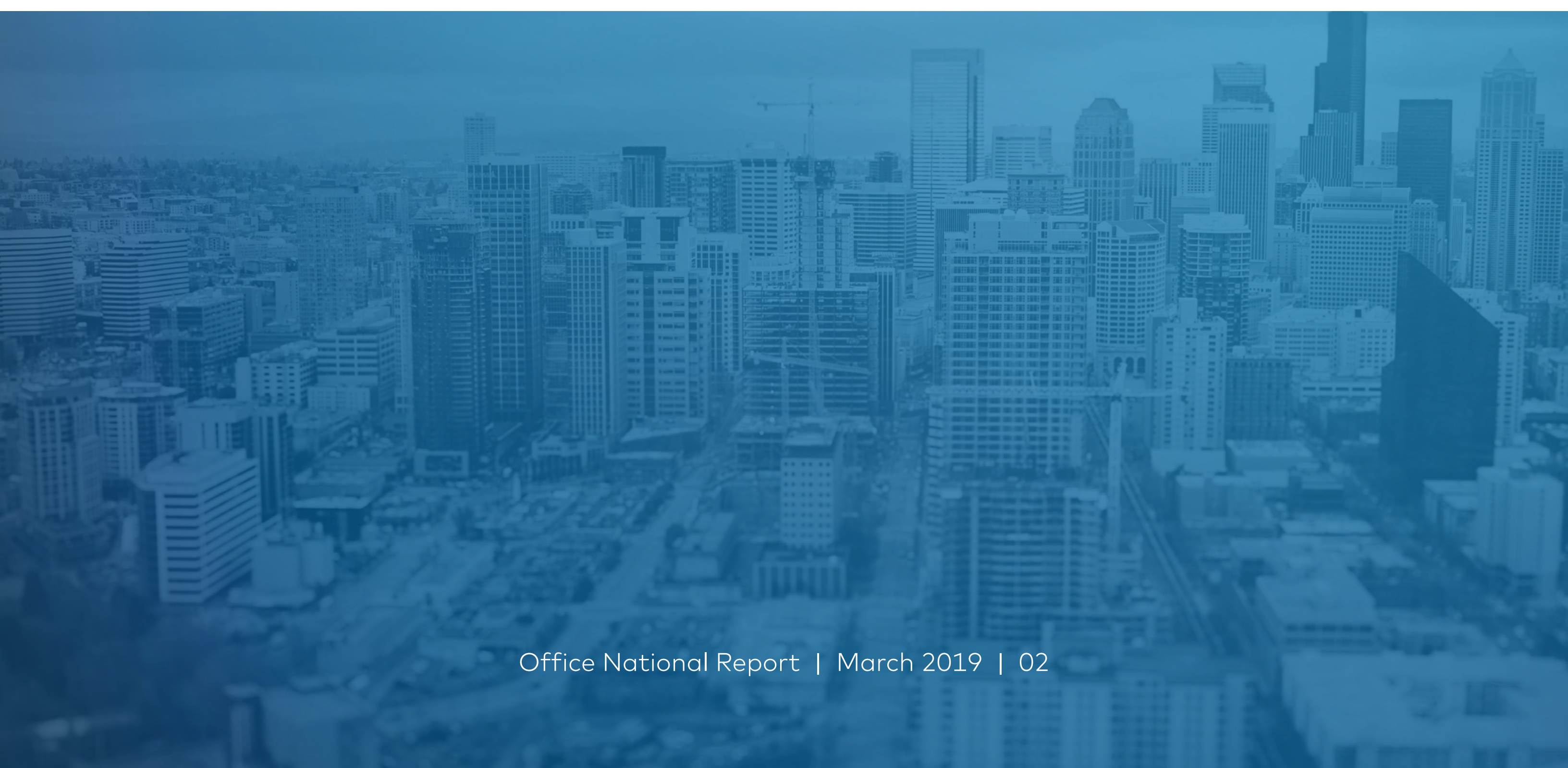
- Strong demand and absorption, particularly in the technology and coworking segments, are helping to boost office rents. Asking rents rose by 0.7% nationally over the last three months, according to Yardi Matrix's database.

- Office employment growth remains solid and is the main driver of the demand. According to the U.S. Bureau of Labor Statistics, office-using sectors added 642,000 jobs over the 12 months ending in February. Professional and business services is the fastest-growing segment of the economy, increasing 2.6% year-over-year during that time. Within that category, the most rapid growth came from scientific and technical services (5.3%), accounting and bookkeeping (4.4%), computer systems design (3.8%), management and technical consulting (3.4%), and architectural and engineering design (2.9%).

- Among the metros with the biggest short-term increases in asking rents are tech-centric San Francisco and Silicon Valley, Boston, and Austin. Other metros with short-term growth include Philadelphia, Atlanta, Tampa and Phoenix. Despite a large amount of absorption, New York City boroughs Manhattan and Brooklyn have seen asking rents flatten or even slip a little due to an influx of new supply.

- Since bottoming in 2011 in the wake of the recession, the amount of new supply has grown each year, although it remains well below the pre-recession peak. With 171 million square feet of space under construction, deliveries in 2019 should top 2018's cycle peak of 70 million. The biggest change from past cycles is that development is increasingly concentrated in urban areas. Suburban deliveries in 2018 were 29 million square feet, compared to 139 million square feet in 2000.

- Transaction activity nationally for the first two months of 2019 was only $10.1 billion, on pace for among the lowest quarterly volume levels in several years. The average price per square foot for transactions was $259, an indication that values are holding firm.



Lease Rate and Occupancy Trends: Asking Rents Show Moderate Growth

- Asking rents in the U.S. averaged $35.91 per square foot in February, up 0.7% from three months ago. New York City—with Manhattan at $74.10 and Brooklyn at $49.97—and San Francisco—with the city proper at $59.32 and Silicon Valley at $46.16—were the highest.

- Strong demand from the tech industry continues to boost asking rents in the Bay Area (up 7.6% over three months) and San Francisco (4.1%). Large blocks are hard to find in the region. Silicon Valley, Sunnyvale and Mountain View have very low vacancies.

- Amazon's decision to put a second headquarters in Arlington, Va., will be a shot in the arm for the Washington, D.C., metro. Amazon alone is projected to add 25,000 jobs and occupy more than 4 million square feet over the next decade. The metro's vacancy rate stands at 14.8%.

- The national vacancy rate fell to 13.7%, down 30 basis points from January. Leasing was led by tech companies and coworking firms.

Listings by Metro

Market	Feb-19 Listing Rates	3-Month Change	Total Vacancy	Top Listing	Price Per Square Foot
National–Overall	$35.95	0.9%	13.7%		
Bay Area	$46.16	7.6%	14.7%	Castro Station	$120.50
Boston	$38.64	4.8%	9.9%	One Federal Street	$76.00
San Francisco	$59.32	4.1%	8.8%	Sand Hill Commons	$150.00
Philadelphia	$29.77	3.4%	12.4%	Three Logan Square	$51.57
Tampa	$25.67	3.4%	11.6%	MetWest International–MetWest Three	$40.00
Atlanta	$26.40	2.3%	15.8%	Three Alliance Center	$52.98
Phoenix	$26.92	1.5%	16.7%	Hayden Ferry Lakeside I	$46.50
Austin	$37.71	1.3%	9.3%	5th + Colorado	$66.32
Los Angeles	$37.98	1.1%	13.2%	Constellation Place	$87.71
Nashville	$28.53	0.9%	11.1%	615 3rd Avenue	$42.81
Dallas	$27.65	0.7%	19.8%	Saint Ann Court	$56.71
Washington DC	$39.27	0.7%	14.9%	1000 F Street NW	$83.08
Houston	$28.43	-0.1%	22.1%	Texas Tower	$46.00
New Jersey	$32.42	-0.1%	19.8%	Newport–111 Town Square Place	$62.97
Portland	$28.49	-0.2%	12.8%	Clay Pavilion	$45.55
Twin Cities	$25.94	-0.2%	12.2%	Offices at MOA, The	$53.43
San Diego	$37.02	-0.5%	12.9%	Torrey Point	$66.00
Orlando	$21.46	-0.7%	13.3%	GuideWell Innovation Center	$34.66
Manhattan	$74.10	-0.7%	8.8%	101 Park Avenue	$200.00
Charlotte	$27.25	-0.7%	10.7%	RailYard, The	$41.00
Miami	$37.87	-0.9%	12.9%	1450 Brickell	$67.00
Denver	$27.87	-1.1%	14.0%	Civica Cherry Creek	$51.32
Chicago	$29.39	-1.2%	15.4%	110 North Wacker	$60.78
Seattle	$37.98	-1.4%	8.7%	188 East Blaine Street	$68.66
Brooklyn	$47.97	-2.5%	9.0%	Pioneer Building	$65.00

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:
Core Cities Lead Development Pipeline

- Some 171.4 million square feet of space was under construction nationwide as of February. Properties under construction represent 2.9% growth in total inventory. The total amount of space in the pipeline represents 9.7% of stock.

- By themselves, Manhattan and the San Francisco metro represent more than 20% of the total amount of space under construction in the U.S. In Manhattan, 20.7 million square feet of space has broken ground, with about 40% of that in the Hudson Yards development on the Upper West Side. San Francisco has 11.8 million square feet under development, while Silicon Valley has 6.3 million square feet.

- The Hudson Yards complex officially opened this month, to a great amount of fanfare. The complex will eventually encompass more than 10 million square feet of office space, along with apartments and condominiums, retail, lodging and entertainment. It also represents somewhat of a game changer for the country's largest office market. Finance companies and white-shoe tenants such as law firms are already starting to migrate from Midtown, attracted by the newest buildings with the latest technology and amenities. Consequently, building owners in other parts of the city will be forced to backfill tenants.

Supply Pipeline (by asset class and location)

National Market	Under Construction	Under Construction % Stock	Plus Planned % Stock
A+/A	158,949,429	5.5%	5.8%
B	11,348,359	0.4%	0.4%
C	530,233	0.3%	0.3%
CBD	47,262,904	3.7%	8.0%
Urban	73,201,880	5.9%	17.0%
Suburban	50,923,351	1.5%	7.7%

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

Supply Pipeline (by metro)

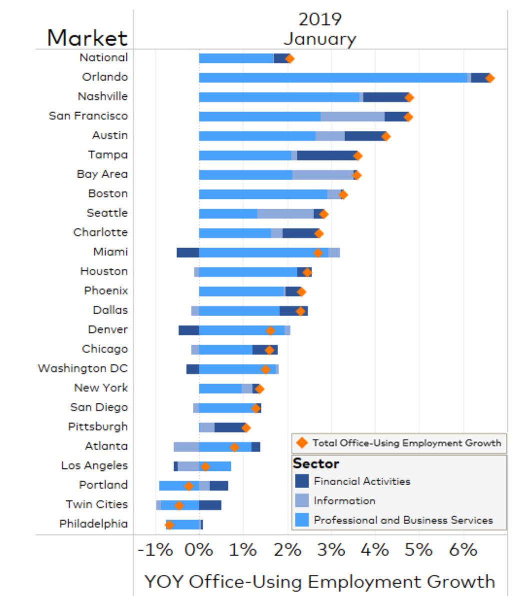
Market	Under Construction	Under Construction % Stock	Plus Planned % Stock
National–Overall	171,388,135	2.9%	9.7%
Brooklyn	6,954,666	24.3%	43.9%
Austin	6,141,347	9.1%	34.2%
San Francisco	11,840,453	8.3%	21.3%
Nashville	2,990,803	7.6%	29.7%
Seattle	8,585,502	6.6%	13.5%
Charlotte	3,662,585	5.7%	12.2%
Manhattan	20,680,633	4.4%	6.9%
Chicago	10,304,335	3.9%	11.4%
Boston	6,912,499	3.6%	14.8%
Bay Area	6,238,493	3.4%	20.6%
Orlando	1,784,845	3.4%	16.6%
Los Angeles	8,650,519	3.2%	9.5%
Phoenix	3,634,000	3.0%	14.7%
San Diego	2,603,453	2.9%	10.1%
Washington DC	9,408,741	2.8%	9.8%
Atlanta	4,917,665	2.7%	19.2%
Miami	1,697,221	2.6%	17.7%
Denver	3,144,943	2.1%	8.0%
Dallas	4,737,478	1.8%	14.2%
Twin Cities	1,616,655	1.8%	4.6%
Portland	1,022,317	1.8%	7.4%
Tampa	785,783	1.3%	11.0%
Houston	2,964,858	1.3%	3.9%
Philadelphia	1,697,035	1.0%	3.7%
New Jersey	1,088,492	0.7%	4.2%

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

Office-Using Employment: Office Jobs Lead in Growth

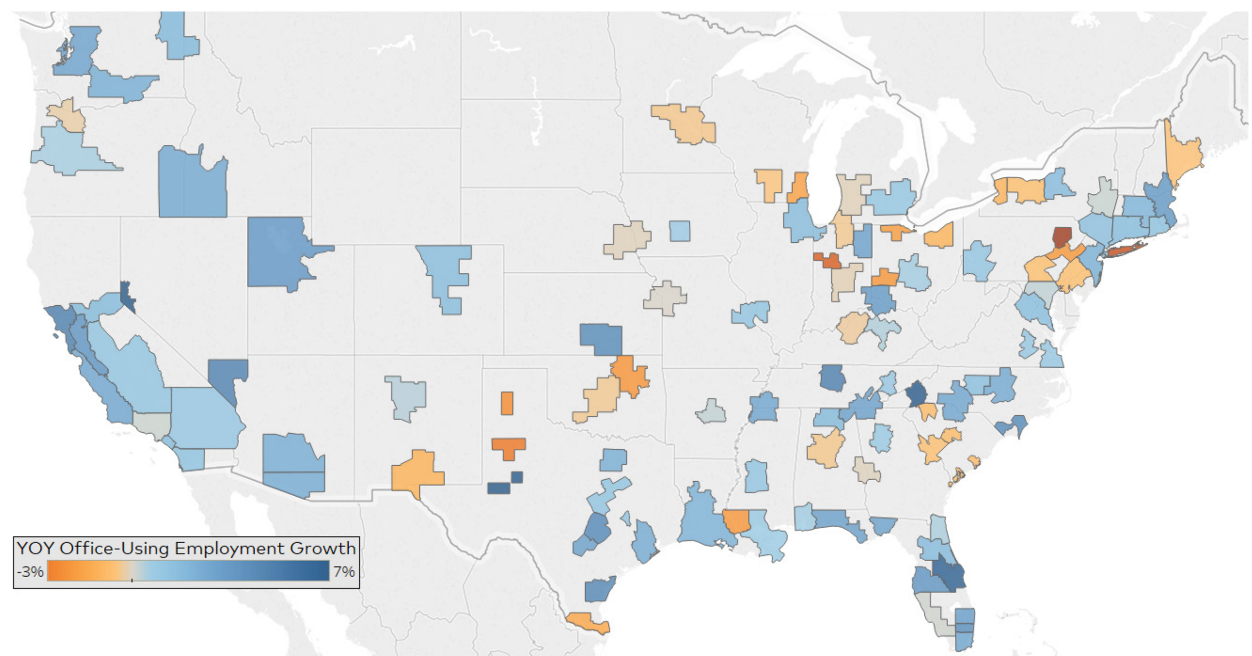
- Office-using employment grew 2.1% on a year-over-year basis nationwide as of January, making it the fastest-growing segment of the employment market.
- Metros with the highest year-over-year growth in office-using jobs are Orlando (6.6%), Nashville (4.8%), San Francisco (4.8%), Austin (4.3%), Tampa and the Bay Area (3.6%). Their exceptional growth represents expansion in specific industries, such as technology or energy, and general migration of businesses and population to affordable, livable parts of the country.
- San Francisco and Boston (3.3%) had the highest growth rate among core markets. Chicago (1.6%); Washington, D.C. (1.5%); Manhattan (1.4%); and Los Angeles (0.2%) grew more slowly than the national average but are still generating jobs and demand.

Growth by Sector



Sources: Bureau of Labor Statistics and Moody's Analytics

Office-Using Employment Growth



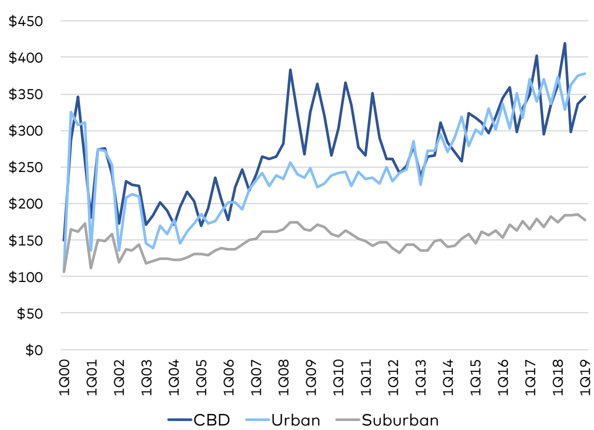
Sources: Bureau of Labor Statistics and Moody's Analytics. Due to BLS benchmarking, office-using employment data for the following markets reflect Dec-18 values: Boston, Bridgeport-Newhaven, Portland ME, and Worcester-Springfield

Transactions:
Volume Tepid, Prices Holding Up

- Transaction activity started the year somewhat slowly, as $10.1 billion of sales closed in the U.S. through February. The three-month average of $6.3 billion is down slightly from the $7.0 billion rolling average of a month ago.

- Sales tend to be lumped at year-end and near the end of quarters, so it's too early to draw conclusions from the decline. The price per square foot so far in 2019 is $259, a statistically insignificant change from the $264 average in 2018.

Sales by Location (price per square foot)



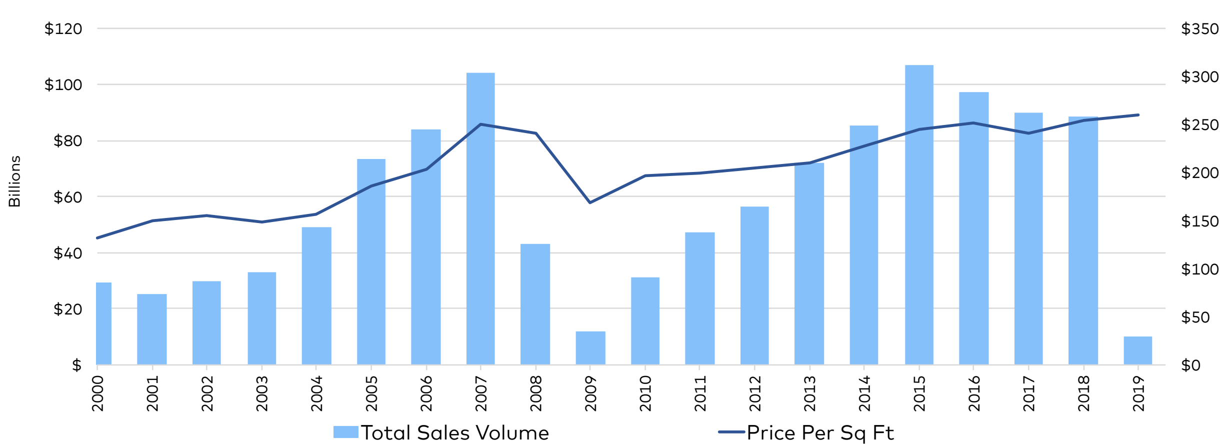
Source: Yardi Matrix; Data as of 2/19/19

Sales Activity

Market	Average Price per Square Foot	Average Monthly Volume in Millions (3-mo rolling avg)
National	$268.19	$6,349.33
San Francisco	$903.86	$479.92
Manhattan	$779.94	$995.18
Bay Area	$437.66	$314.52
Boston	$435.95	$557.33
Brooklyn	$421.32	$102.70
Seattle	$390.89	$325.21
Miami	$387.16	$131.12
Charlotte	$364.80	$141.60
Los Angeles	$354.04	$393.11
San Diego	$290.50	$69.56
Chicago	$277.13	$327.34
Portland	$271.27	$71.43
Washington DC	$261.93	$704.86
Austin	$231.31	$63.68
Denver	$209.33	$315.68
Phoenix	$203.15	$162.97
Nashville	$200.98	$48.30
New Jersey	$195.76	$87.95
Orlando	$177.15	$60.98
Twin Cities	$176.63	$166.00
Philadelphia	$175.72	$63.29
Dallas	$148.75	$191.39
Atlanta	$148.20	$204.77
Houston	$134.52	$35.31
Tampa	$103.55	$61.73

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.

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