



Boston Life Science Market

Despite Positive Fundamentals Potential Headwinds are on the Horizon

The first half of 2022 was generally positive for Greater Boston's life science fundamentals, but downside risks persist. During the second quarter of 2022, the delivery of three fully leased laboratory buildings accounted for a majority of the nearly 1.3 million square feet of positive net absorption. Second-quarter leasing velocity was still favorable, with "Big Pharma" driving activity. Both Takeda Pharmaceuticals and AstraZeneca finalized large lease transactions in Kendall Square recently while Sarepta, Skyhawk Therapeutics and Sartorius inked sizable leases in the suburbs. Asking rents marched toward another historic high, increasing by 3.1% over the quarter, and life science-related investments dominated recent sale transactions within the metro area. Tumult in the public markets and increasing layoffs and sublease availabilities throughout the region are weighing on market sentiment. Venture capital funding is off from the peaks of 2021, a limited number of biotech companies went public in the first half of the year, and active requirements have reached cyclical lows. Fundamentals will remain challenged over the next 9 to 12 months, with market conditions becoming more favorable for laboratory tenants. Supply risk is ever-present; however, rising interest rates and inflationary pressures are making it difficult for projects to secure financing. Upwards of 65% of the 40 million square feet of proposed or permitted developments could be curtailed as a result. Despite current challenges, Greater Boston's eminence as a global life science hub is unrivaled and activity will likely consolidate into the top markets.

Current Conditions

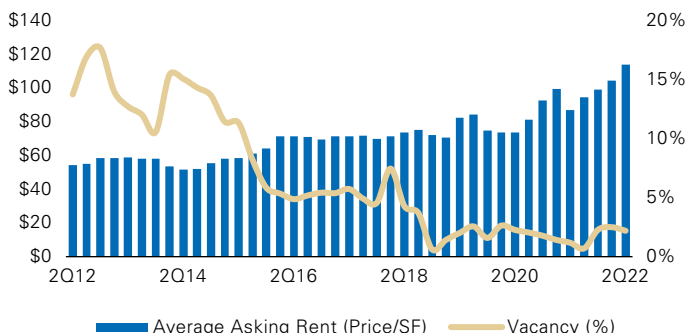
- During the first half of 2022, more than 1.5 million square feet in laboratory space has been absorbed in Greater Boston.
- Since the start of the year, roughly 1,100 layoffs have been announced by local life science companies.
- Square feet underway surpassed 11 million as a handful of development recently broke ground.
- Only eight Massachusetts-based biotech firms held IPOs in the first two quarters of 2022.

Market Summary – Cambridge Lab

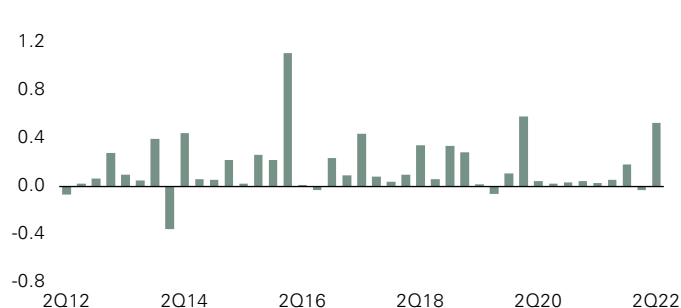
	Current Quarter	Prior Quarter	Year Ago Period	12-Month Forecast
Total Inventory (SF)	13.0M	12.5M	12.1M	↑
Vacancy Rate	2.2%	2.5%	1.2%	↔
Quarterly Net Absorption (SF)	533,282	-27,973	29,117	↔
Average Asking Rent/SF	\$114.29	\$104.81	\$87.30	↑
Under Construction (SF)	2.0M	2.5M	2.4M	↔

Market Analysis

CAMBRIDGE LAB ASKING RENT (NNN) AND VACANCY



CAMBRIDGE LAB NET ABSORPTION (SF, MILLIONS)



RESEARCH Q2 2022

Cambridge

Cambridge laboratory fundamentals ended the first half of 2022 on solid footing as “Big Pharma” continues to drive market activity. The delivery of Sanofi’s new office and laboratory campus at Cambridge Crossing drove much of the net absorption in the second quarter of 2022, which totaled more than 530,000 square feet. Takeda Pharmaceuticals executed a lease for the entirety of BioMed Realty’s 585 Third St. development in Kendall Square, with plans to consolidate most of the company’s Cambridge footprint. Takeda also announced plans to take an additional two floors at 650 East Kendall St., adjacent to the new facility. AstraZeneca also announced plans for a new R&D center and headquarters for its subsidiary, Alexion, in East Cambridge. The company has agreed to lease 570,000 square feet at Boston Properties’s Binney St. development in Kendall Square. The closure and sale of the existing Waltham research facility combined with the relocation of Alexion’s Seaport offices will be the bulk of the move. Pricing for existing Cambridge laboratory space continues to reach record-high lease rates. Asking rents on existing space ended the second quarter of 2022 above \$114.00/SF NNN. Class A rents are nearing \$116.00/SF NNN on a direct basis. Cambridge’s competitive leasing environment should keep laboratory rents elevated, but peak growth trends are likely in the past.

Despite current conditions, instability in the public markets will lead to some softening in near-term market fundamentals and shift some leverage back toward tenants. Sublease availabilities are rising in Cambridge as early-stage biotech companies look to preserve cash and extend runways. Tenant demand is also waning, with active tenant requirements down more than 50% from the peak. Cambridge’s laboratory supply forecast should be monitored closely as a result, given the expectations for inventory growth over the next couple of years. Nearly 57% of the 3.5 million square feet of space currently under construction or renovation throughout Cambridge is pre-leased or committed. Moreover, inflationary pressures and rising interest rates could ultimately reduce supply-side risks as laboratory projects are harder to finance given the economic climate. Given that Cambridge is the epicenter of the region’s life science industry, any market correction will be less pronounced here as demand and investment seek less risky, core locations.

Boston and Suburbs

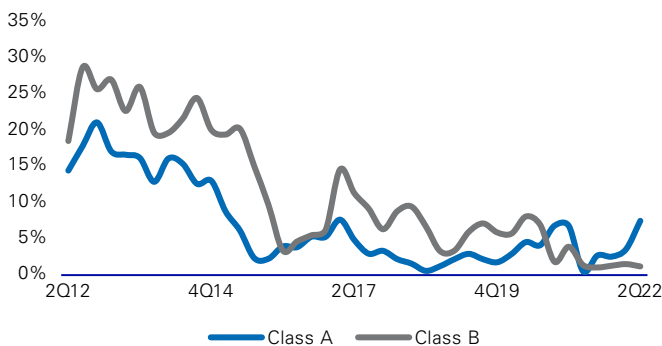
Conditions in Boston’s laboratory market remained positive through

the second quarter of 2022. Net absorption posted its sixth consecutive positive quarter, and vacancies declined by another 270 basis points. The delivery of Vertex’s expansion space at Innovation Square, totaling 250,000 square feet, drove much of this quarter’s net absorption. Leasing activity was more subdued with only a small number of transactions below 25,000 square feet executed in recent months. Increasing bearishness in the biotech sector is weighing on new laboratory demand and near-term leasing activity will likely trail recent growth trends. Square feet of purpose-built space under construction ended the second quarter of 2022 at 4.3 million. Combined with conversion activity, Boston’s laboratory inventory is expected to more than double over the next couple of years. Average asking rents increased slightly over the quarter, reaching \$105.11/SF NNN. Proposals on select developments are \$108.00/SF NNN to \$112.00/SF NNN. Investors are still somewhat active in the Boston market, with the recapitalization of laboratory conversion at 451 D St. in the Seaport representing one of the largest transactions of the second quarter. GI Partners acquired an interest in the property for \$700.0 million, or \$1,467/SF. Related Beal will maintain a minority ownership in the asset. Despite such positive fundamentals, Boston is not immune to the potential headwinds facing the broader life science sector.

Laboratory fundamentals remain favorable in Greater Boston’s suburban markets. Vacancies ended the second quarter of 2022 at 4.5%, which is well below historical norms. The delivery of 225 Wyman St. in Waltham contributed to the more than 400,000 square feet of positive net absorption reported over the quarter. Near-term net absorption will be bolstered by the remaining tenants take occupancy in the new building. The price of suburban laboratory space has increased substantially in recent years. Average asking rents remain elevated near \$71.00/SF NNN across the region and are more than 30% above year-ago levels. Urban Edge clusters such as Watertown, Somerville and Charlestown, have been strong performers, boasting asking rents ranging from \$90.00/SF to \$100.00/SF NNN and limited vacancies. Leasing momentum also remained positive during the second quarter, with Sarepta Therapeutics and Skyhawk Therapeutics executing large leases in Bedford and Waltham, respectively. Enanta Pharmaceuticals also leased 73,000 square feet at the Arsenal on the Charles in Watertown, with plans to relocate from 500 Arsenal St. in 2024. Biomanufacturing continues to expand in Greater Boston’s suburbs.

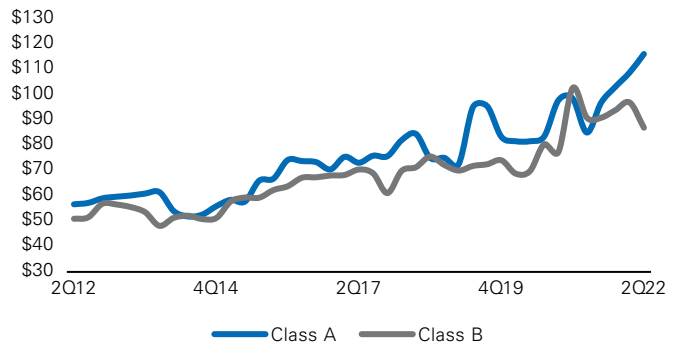
Total Availability Rates – Cambridge Laboratory

AVAILABILITY RATES BY CLASS



Asking Rent by Class – Cambridge Laboratory

AVERAGE ASKING RENT (\$/SF NNN)



RESEARCH Q2 2022

Azzur Cleanrooms on Demand became the first cGMP tenant to lease space at King Street Properties' speculative life science development in Devens. While market conditions are still positive, available sublease space more than doubled during the second quarter. At 3.4%, the sublease availability rate has reached a two-year peak. Increasing recessionary pressures will likely weigh on tenant demand throughout the remainder of 2022. The suburban development pipeline consists of more than 8.0 million square feet of projects under construction or renovation, which represents nearly 70% of existing inventory. Investors continue to target alternative assets, including retail space, for repositioning to life science use. Hudson's Bay Co. recently announced plans to convert three vacant Lord & Taylor stores along Route 128 to laboratory space. That said, any potential market correction could curtail numerous projects that are not beyond the initial planning phases.

Capital Markets

Investment volumes during the first half of 2022 were muted compared to vigorous activity experienced in 2021. Roughly \$3.2 billion in office and laboratory assets changed hands throughout Greater Boston, which represents 52.5% of total investment during the first two quarter of 2021. Growing recessionary pressures, rising interest rates and inflationary conditions have led to hesitancy in the marketplace, limiting capital flows. Once again, life science-related transactions dominated investment activity throughout Greater Boston. Most recently, key assets in the Seaport and Cambridge were recapitalized and Alloy Properties and Anchor Line Properties acquired a suburban laboratory portfolio from Alexandria Real Estate Partners. Barings Real Estate Advisors

acquired 1 Patriots Park, a laboratory conversion, in Bedford from Jumbo Capital during the second quarter of 2022. Progress Software vacated its headquarters at 14 Oak Park Dr. in Bedford and the new ownership plans to reposition the building for laboratory use. Given the tenuous financial climate, Greater Boston's investment landscape will likely remain challenged for the next 12 to 18 months. Investors may focus on top life science hubs during these uncertain times, and the longer-term forecast is more positive as the region is still a top destination for capital.

Outlook

Macroeconomic headwinds continue to increase and will likely curtail growth in the local laboratory market. Rising interest rates, inflationary pressures, and heightened recessionary risks are weighing on sentiment in the public markets. The lingering global health crisis and other socio-economic challenges are also stressing the markets. With several layoffs reported by local biotech companies, limited IPO activity, and more calculated leasing decisions among tenants, the next 12 months will likely trail recent growth trends. Growth could consolidate within more established nodes as landlords, tenants, and investors become more risk-averse in the coming quarters. With that, fundamentals in Greater Boston's laboratory market remain quite healthy, and in previous recessions, the biotech sector has outperformed the market as a whole. Stock prices for publicly traded life science companies faced a shallower decline when compared to the S&P 500, and job losses were more subdued. The metro's long-term outlook for recovery remains encouraging as Boston's preeminence as a global tech and biotech hub is only expected to strengthen.

Select Lease Transactions

Tenant	Building / Address	Submarket	Type	Square Feet
Takeda Pharmaceuticals	585 Third Avenue, Cambridge	East Cambridge	Direct Lease	600,000
AstraZeneca	290 Binney Street, Cambridge	East Cambridge	Direct Lease	570,000
Sarepta Therapeutics	100 Crosby Drive, Bedford	West – Route 128	Direct Lease	288,000
Skyhawk Therapeutics	180 CityPoint, Waltham	West – Route 128	Direct Lease	120,000
Enanta Pharmaceuticals	AOTC Building 2, Watertown	Urban Edge	Direct Lease	73,000
Korro Bio	60 First Street, Cambridge	East Cambridge	Direct Lease	48,000

Select Sale Transactions

Building / Address	Submarket	Sale Price	Price/SF	Square Feet
451 D Street, Boston*	CBD – Seaport	\$700.0M	\$1,467	477,132
Alexandria RE Portfolio	West & North – Route 128	\$292.0M	\$782	373,457
Park 9 Campus, Wellesley	West – Route 128	Confidential	Confidential	375,058
One Patriots Park, Bedford	North – Route 128	\$132.0M	\$920	143,553
1 Hampshire Street, Cambridge*	East Cambridge	\$120.0M	\$1,129	106,286
14 Oak Park Drive, Bedford	West – Route 128	\$27.0M	\$157	171,580

*Recapitalization

RESEARCH Q2 2022

Submarket Statistics

	Total Inventory (SF)	Under Construction (SF)	Total Vacancy Rate	Qtr Absorption (SF)	YTD Absorption (SF)	Class A NNN Asking Rent (Price/SF)	Class B NNN Asking Rent (Price/SF)	Total NNN Asking Rent (Price/SF)
Cambridge Total	13,049,722	1,985,616	2.2%	533,282	505,309	\$115.99	\$86.90	\$114.29
East Cambridge	8,669,000	1,659,000	2.7%	556,887	556,887	\$120.92	-	\$120.92
Mid Cambridge	2,951,620	-	1.0%	-	-29,562	\$118.40	\$110.00	\$118.10
West Cambridge	1,429,102	326,616	1.7%	-23,605	-22,016	\$105.38	\$75.00	\$100.68
Boston Total*	3,766,055	4,303,135	13.0%	313,010	386,831	\$105.00	\$110.00	\$105.11
Boston – Seaport	2,534,712	3,272,569	19.3%	313,010	386,831	\$105.00	-	\$105.00
Boston – Fenway/LMA	1,117,000	750,342	0.0%	-	-	-	-	-
Inner Suburbs/Urban Edge	2,659,193	3,247,650	1.2%	-20,500	174,022	\$101.00	\$93.00	\$93.42
Route 128 Total**	7,793,850	1,339,700	5.8%	460,796	450,843	\$70.68	\$74.43	\$72.52
North – Route 128	1,519,275	456,000	11.8%	34,104	-18,958	\$75.00	\$68.57	\$69.55
West – Route 128	5,847,730	883,700	4.7%	426,692	469,801	\$70.39	\$78.00	\$73.35
Route 495	1,146,323	-	3.5%	-	17,150	-	\$31.36	\$31.36
Market	28,415,143	11,110,002	4.6%	1,286,588	1,534,155	\$101.26	\$72.88	\$93.84

* No direct space available for lease within these submarkets. These figures represent the highest achievable rents in these submarkets assuming direct availability, and are not factored into the submarket and market average calculations.

** Route 128 Total statistics include several laboratory buildings located in the South - Route 128 market. Boston Total statistics include several laboratory buildings located outside of the Seaport and Fenway/LMA

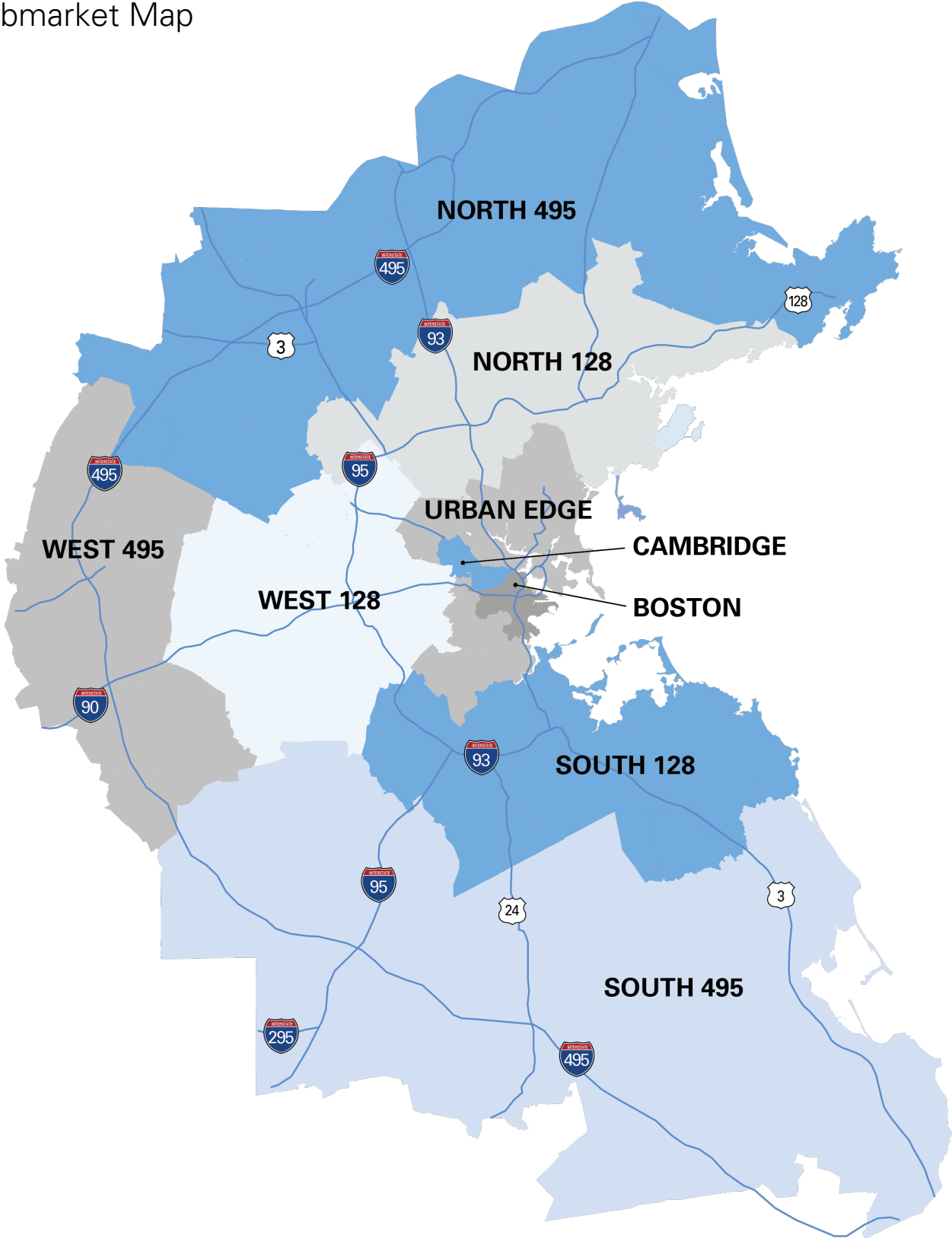
Cambridge Laboratory Statistics – Class A

	Total Inventory (SF)	Under Construction (SF)	Total Vacancy Rate	Qtr Absorption (SF)	YTD Absorption (SF)	Class A NNN Asking Rent (Price/SF)
East Cambridge	7,450,160	1,659,000	3.2%	533,221	533,221	\$120.92
Mid Cambridge	2,151,818	-	1.4%	-	-29,562	\$118.40
West Cambridge	1,041,424	326,616	2.3%	-23,605	-23,605	\$105.38

Cambridge Laboratory Statistics – Class B

	Total Inventory (SF)	Under Construction (SF)	Total Vacancy Rate	Qtr Absorption (SF)	YTD Absorption (SF)	Class B NNN Asking Rent (Price/SF)
East Cambridge	1,218,840	-	0.0%	23,666	23,666	-
Mid Cambridge	799,802	-	0.0%	-	-	\$110.00
West Cambridge	387,678	-	0.0%	-	1,589	\$75.00

Submarket Map



For more information:

Liz Berthelette

Director, Research

elizabeth.berthelette@nmrk.com

Mike Laccavole

Senior Data Analyst

Mike.Laccavole@nmrk.com

Connell Chamberlain

Research Analyst

connall.chamberlain@nmrk.com

nmrk.com

ALABAMA

Birmingham

ARIZONA

Phoenix

ARKANSAS

Fayetteville

Little Rock

CALIFORNIA

El Segundo

Irvine

Los Angeles

Newport Beach

Pasadena

Sacramento

San Francisco

San Jose

San Mateo

Santa Rosa

COLORADO

Denver

CONNECTICUT

Stamford

DELAWARE

Wilmington

DISTRICT OF COLUMBIA

FLORIDA

Boca Raton

Jupiter

Miami

Palm Beach

Tampa

GEORGIA

Atlanta

ILLINOIS

Chicago

INDIANA

Indianapolis

KENTUCKY

Louisville

LOUISIANA

New Orleans

MARYLAND

Baltimore

Salisbury

MASSACHUSETTS

Boston

MICHIGAN

Detroit

MINNESOTA

Minneapolis

MISSOURI

St. Louis

NEVADA

Las Vegas

Reno

NEW JERSEY

Rutherford

East Brunswick

Morristown

NEW YORK

Buffalo/Amherst

New York

NORTH CAROLINA

Charlotte

Raleigh

OHIO

Cincinnati

Cleveland

Columbus

OKLAHOMA

Oklahoma City

OREGON

Portland/Lake

Oswego

PENNSYLVANIA

Allentown

Philadelphia

Pittsburgh

TEXAS

Austin

Dallas

Houston

UTAH

Salt Lake City

VIRGINIA

Tysons Corner

WASHINGTON

Seattle

WISCONSIN

Milwaukee

Newmark has implemented a proprietary database and our tracking methodology has been revised. With this expansion and refinement in our data, there may be adjustments in historical statistics including availability, asking rents, absorption and effective rents. Newmark Research Reports are available at ngkf.com/research.

All information contained in this publication is derived from sources that are deemed to be reliable. However, Newmark has not verified any such information, and the same constitutes the statements and representations only of the source thereof not of Newmark. Any recipient of this publication should independently verify such information and all other information that may be material to any decision the recipient may make in response to this publication and should consult with professionals of the recipient's choice with regard to all aspects of that decision, including its legal, financial and tax aspects and implications. Any recipient of this publication may not, without the prior written approval of Newmark, distribute, disseminate, publish, transmit, copy, broadcast, upload, download or in any other way reproduce this publication or any of the information it contains. This document is intended for informational purposes only, and none of the content is intended to advise or otherwise recommend a specific strategy. It is not to be relied upon in any way to predict market movement, investment in securities, transactions, investment strategies or any other matter.