TRANSWESTERN

COMMERCIAL REAL ESTATE

U.S. MARKET | LIFE SCIENCES



Q2 2024

TRANSWESTERN



Contents

National Life Sciences Market

3 Executive Summary
4 Industry Overview
5 Employment
6 Venture Funding Overview
7 Initial Public Offerings
8 Public Markets
9 M&A Activity
10 NIH Funding

Established Markets

12 Boston
14 Chicago
16 Houston
18 New Jersey
20 Philadelphia
22 Raleigh/Durham
24 San Diego
26 San Francisco
28 Washington DC
30 Phoenix

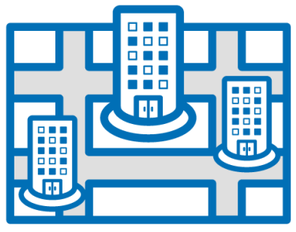
31 National Stats Summary
32 Service Line Overview

TRANSWESTERN

THE VIEW FROM HERE

Life Sciences

Q2 2024



Vacancy rates continue to tick higher, as new supply comes online with low occupancy



30% YoY growth in venture capital funding will be a tailwind for space demands



Development activity to rise in tertiary markets, adjacent to existing healthcare and academic ecosystems

NET ABSORPTION

(37,170)

Net absorption continues to trend negative.

VACANCY RATE

15.61%

Fueled by new inventory and limited demand

NATIONAL INVENTORY

311 MSF

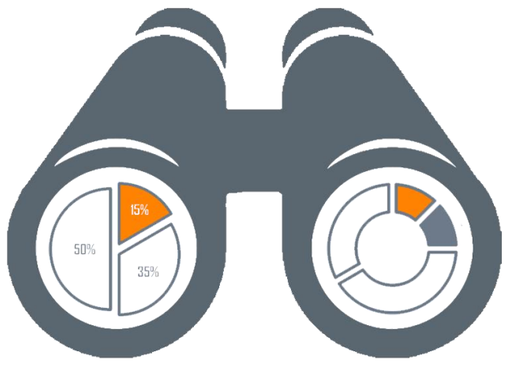
Over 12 Markets – A record 32 MSF is in the development pipeline

ASKING RENT

$56.86

Annual PSF - Last 12-months yielded a 5% rent increase

NATIONAL MARKET OUTLOOK

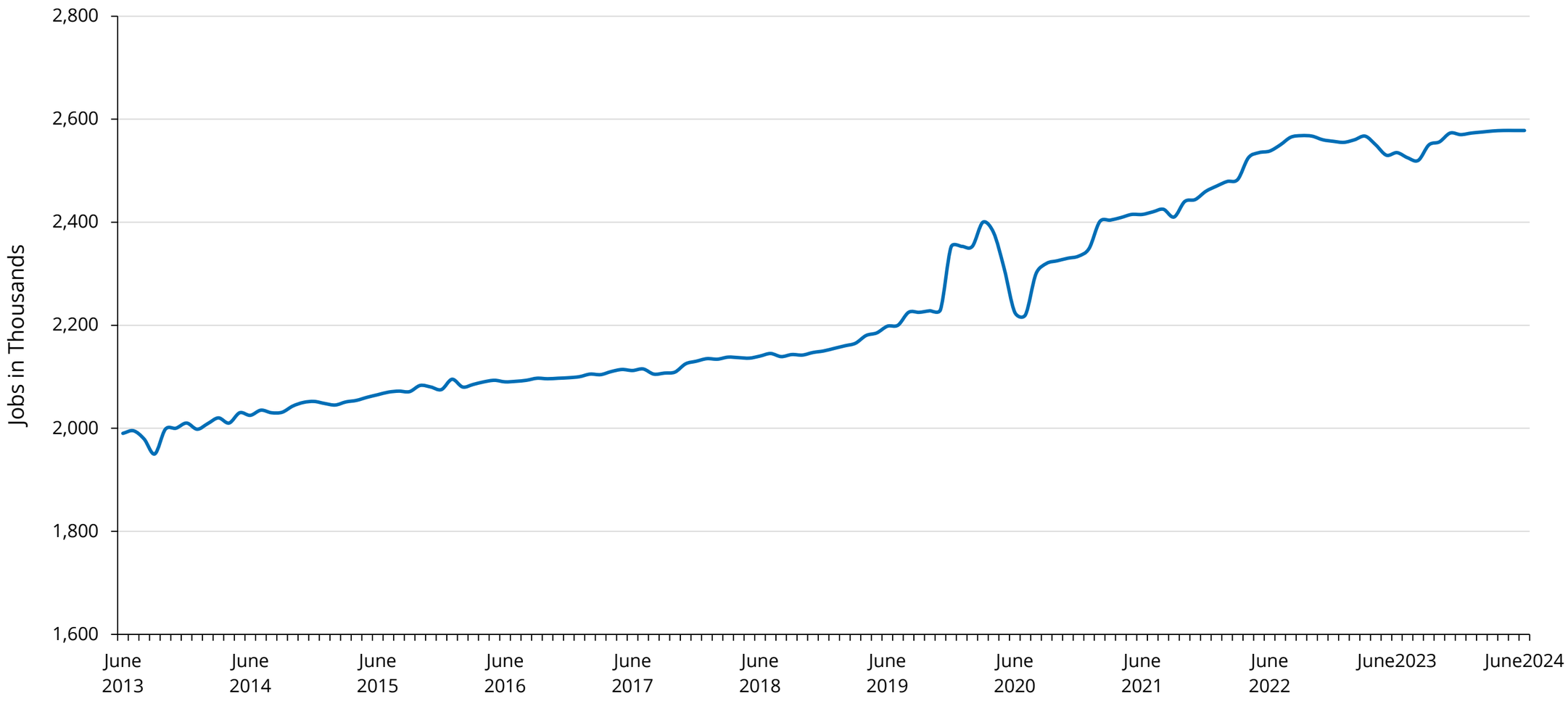


The first half of 2024 remained active for the U.S. life science market. Industry drivers and fundamentals are showing signs of strengthening, as venture funding and capital markets continue to bounce back after a turbulent 2023. Vacancy rates are being forced higher, primarily driven by the delivery of new and converted inventory. The vacancy phenomenon is being experienced throughout all major life science hubs. Despite the increased supply, average asking rates stayed stable, as the majority of product is top tier. However, concessions and commissions are becoming more competitive in over supplied markets, attracting tenants in the market. The market continues to favor developments that are adjacent to a university or hospital ecosystem, bringing the two assets' classes closer together. Secondary markets with less excess supply have had renewed interest from investment firms, as the life science asset class is more widespread than initially realized.

The public market's performance within the first half of 2024 yielded mixed results for life science firms. Initial public offerings (IPO) in Q2 fell short of the previous quarter's results. Venture funding in Q2 2024, including medical device development yielded $9.6B. The previous quarter brought more than $1.2B, a signaling that demand for investment is on the rise. M&A activity continues to be an alternative funding source for small cap and startups. Large cap firms continue to expand their portfolio and fortify supply chains. The science ecosystem fueling the surge in development is going through its own cycle, with a diverse set of challenges. Employers continue to be cautiously allocating capital investments that could add to their risk profile.

Despite the headwinds, transactions are continuing to increase, and momentum is growing steadily. Investor sentiment for life sciences remains high, given the widespread support the industry has, relative to other real estate asset classes. The relationship between the underlying real estate assets and the budding science are more connected than ever. The BioScience Act is a prime example of why this asset class is in a league of its own; advancing U.S. based biotechnology is a top government priority. The initiatives spun out of these bipartisan supported acts will serve the industry well in the long run.

LIFE SCIENCES EMPLOYMENT



- Life sciences employment has seen a continued positive trend since early 2013, adding a total of almost 877,000 jobs in the last decade. Industry employment has grown almost 20% in the last 5-year period, beating other areas of the economy. The employment curve has continued to flatten yet remain positive.
- Two recent employment surveys cite companies remain fiscally conservative in 2024. The layoffs have job seekers spending on average 1-3 months before getting rehired.
- The life sciences industry is navigating challenges surrounding funding, which in turn puts pressure on employment. Trends toward outsourcing research and early-stage manufacturing aren't necessarily the root cause of recent employment slowdowns. These shifts are reshaping the employment landscape but could ultimately widen the breadth of specialties that talent bring to the sector; data scientists have increased attention with the adoption of AI.

VENTURE FUNDING POINTS

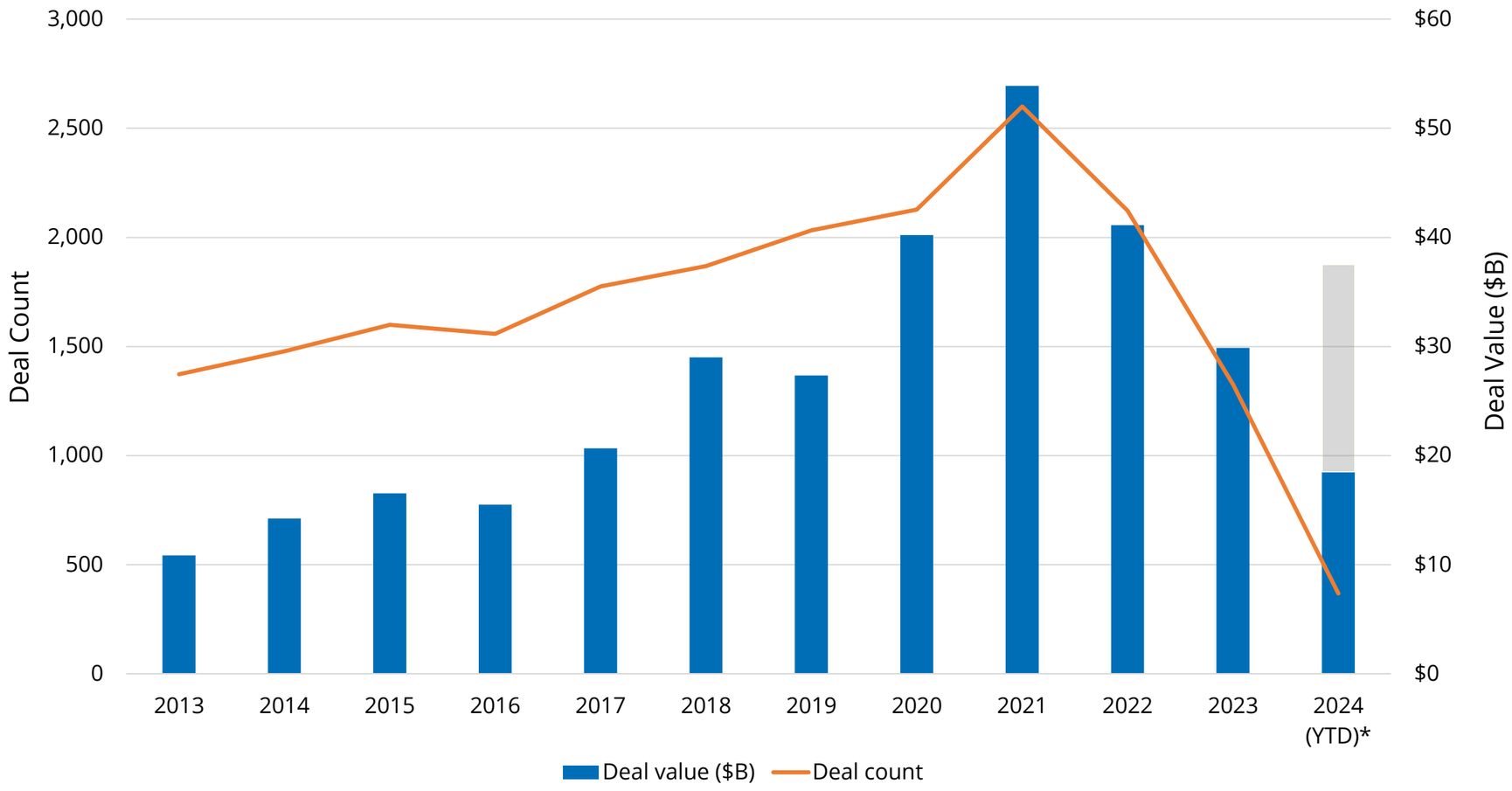
- Industry analysts forecast venture capital funding volume to reach $34.2B by year-end. This would be well above 2023 totals, but short of 2021 highs.

- Early-stage funding remained strong, with Seed and Series A fundraising totaling $5.4B across 105 rounds in the first half of the year, most of which were announced in the second quarter with substantial initial values. Notable examples include Xaira and Diagonal Therapeutics, which raised $128M.

- Continuing the trend, fundraising focused primarily on companies with clinical candidates. Phase 1 companies raised a median of $86M in the second quarter, double the figure from the same period a year ago. For phase 3 companies, the median was $100M, more than double the full-year 2023 value for late-stage companies.

- Biologics and small molecules continue to be the most popular areas for investments and licensing deals.

VC DEAL & FUNDING VOLUME



	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024 (1H)
Deal value ($B)	$10.85	$14.23	$16.53	$15.50	$20.67	$29.01	$27.34	$40.21	$53.90	$41.11	$29.89	$18.46
Deal count	1,373	1,478	1,599	1,558	1,775	1,868	2,032	2,128	2,600	2,122	1,491	368

Source: TW Research, Pitchbook *Gray bar indicates annual projection based on Q1 & Q2 performance

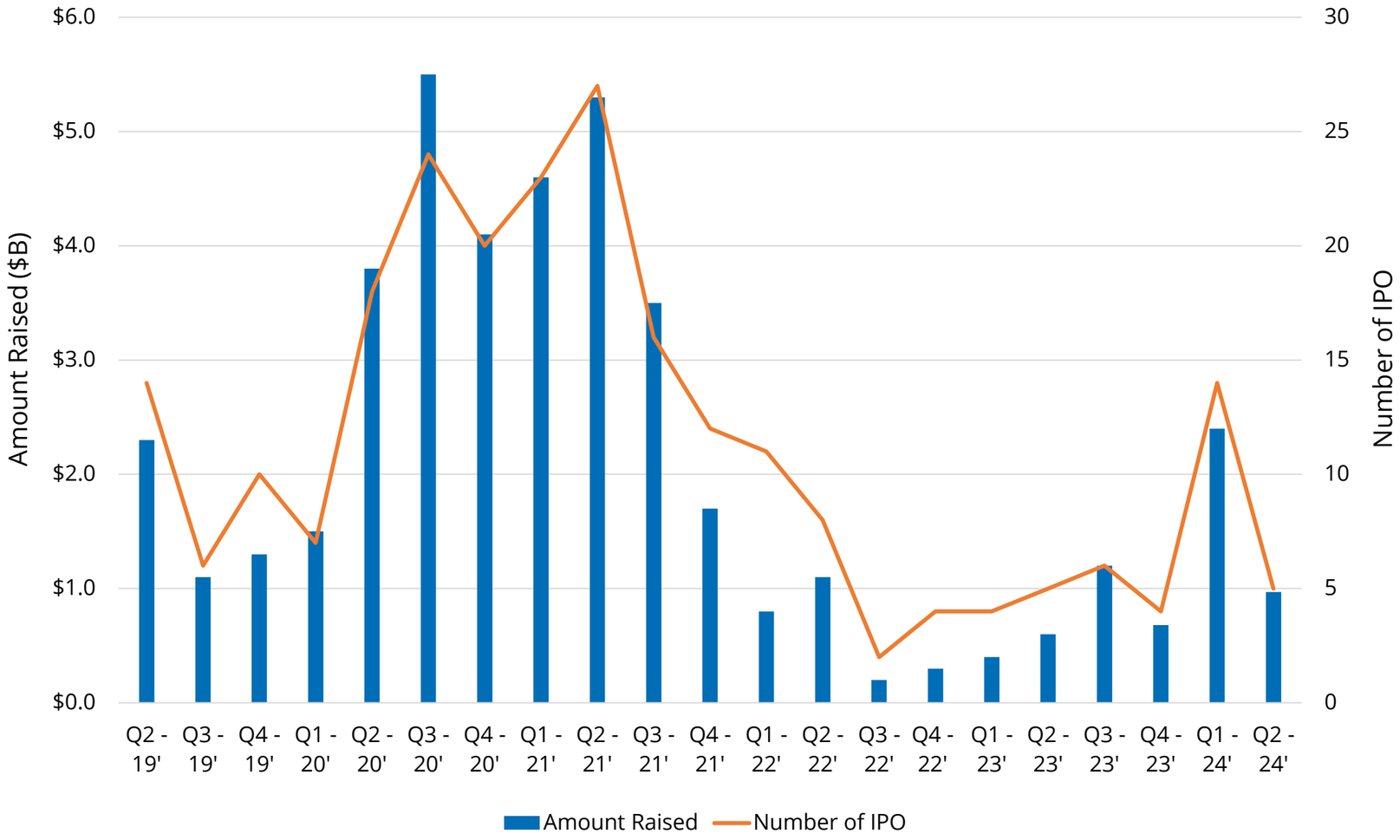
IPO MARKET SUMMARY

- The public markets play a critical role in the funding cycles within the life science industries. For the stakeholders and company, it allows talent and investors a method of receiving a return on their investment and the company receives a boost of capital to help the underlaying science thrive in the marketplace.

- The life sciences IPO market experienced another pull back in Q2, yielding a total of five companies that raised $980M. The quarter's performance is a stark difference from Q1, totaling 13 companies reaching IPO.

- Companies that launched IPOs in the last 12-month period have been met with mixed investor sentiment, 65% are below their IPO target price. In contrast, the 35% that remain above their IPO price have outpaced the market averages.

LIFE SCIENCES IPO ACTIVITY



COMPANY	FOCUS	IPO DATE	PROCEEDS	IPO PRICE	CURRENT PRICE
Boundless Bio (BOLD)	Targeted cancer treatments	4/1/24	$100M	$16.00	$3.16
Contineum Therapeutics (CTNM)	Precision small molecule therapies	4/4/24	$110M	$16.00	$17.40
Rapport Therapeutics (RAPP)	Treatment of neurological disorders	6/6/24	$136M	$17.00	$19.84
Tempus AI (TEM)	Precision medicine - Ai	6/13/24	$410M	$37.00	$38.89
Alumis (ALMS)	Immune-mediated diseases	6/27/24	$210M	$16.00	$12.54

Source: TW Research, Pitchbook & NASDAQ

MARKET FUND COMPARISION

- Health Care Select Sector SPDR Fund (XLV) – Broad base of healthcare companies, including pharmaceuticals, healthcare equipment, devices and services. Considered to be stable, bellwether names representing the entirety of the sector's exposure.

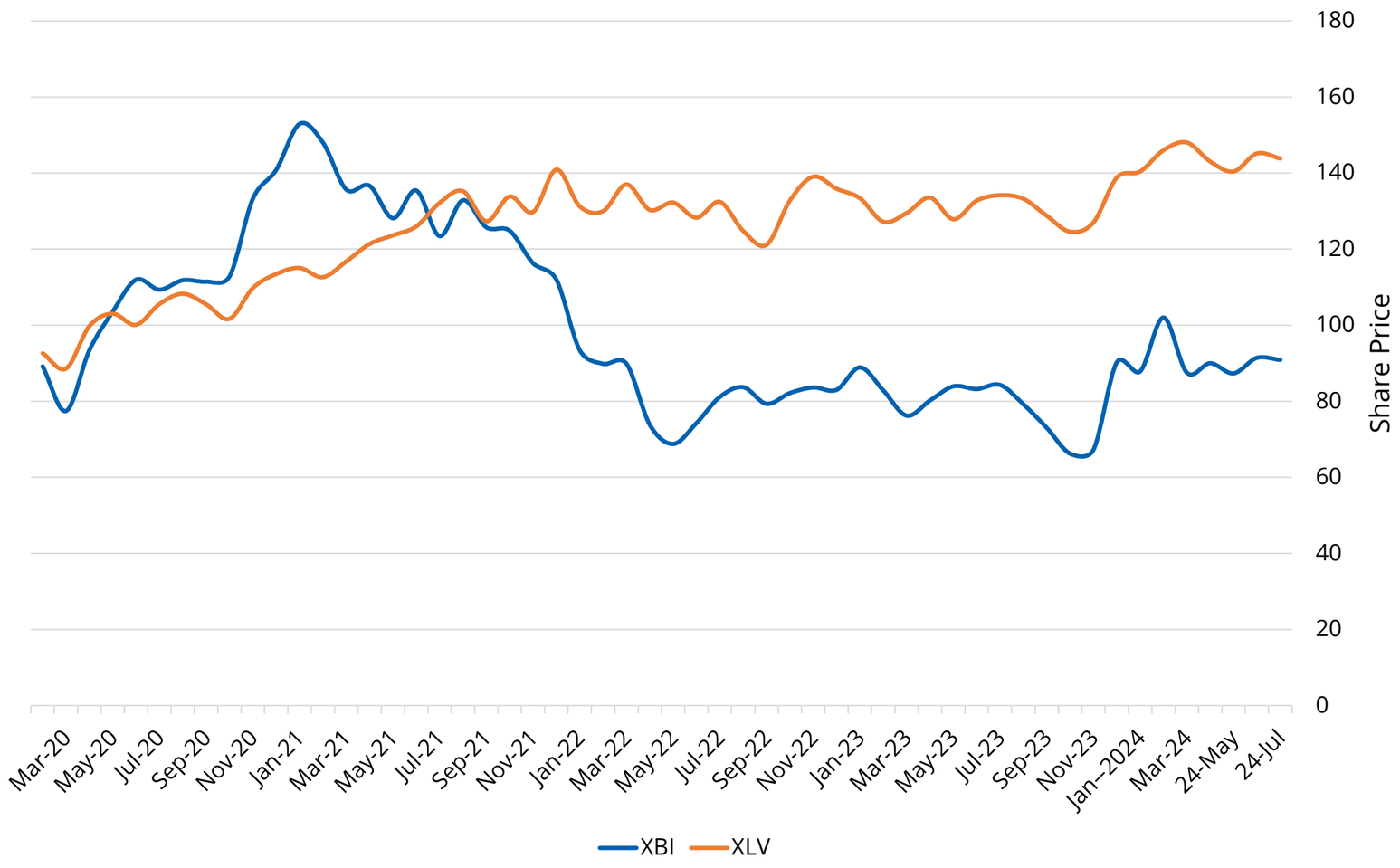
- SPDR S&P Biotech ETF (XBI) – Life sciences and biotech focused, driving innovation for the healthcare industry. Considered to be less stable, representing novel sciences still in research and development phases.

- Public companies facing clinical setbacks have successfully pursued mergers with private companies, often accompanied by significant concurrent financings.

- After a 13% decline at the start of Q2, the XBI gained 4% by quarter-end, but it still lags the Nasdaq and S&P 500 by 14% and 11% year-to-date, respectively.

- Between 2023 and YTD 2024, 14 public-private company mergers have closed, with the merged companies currently trading at an average premium of 16% at transaction announcement and 10% at close.

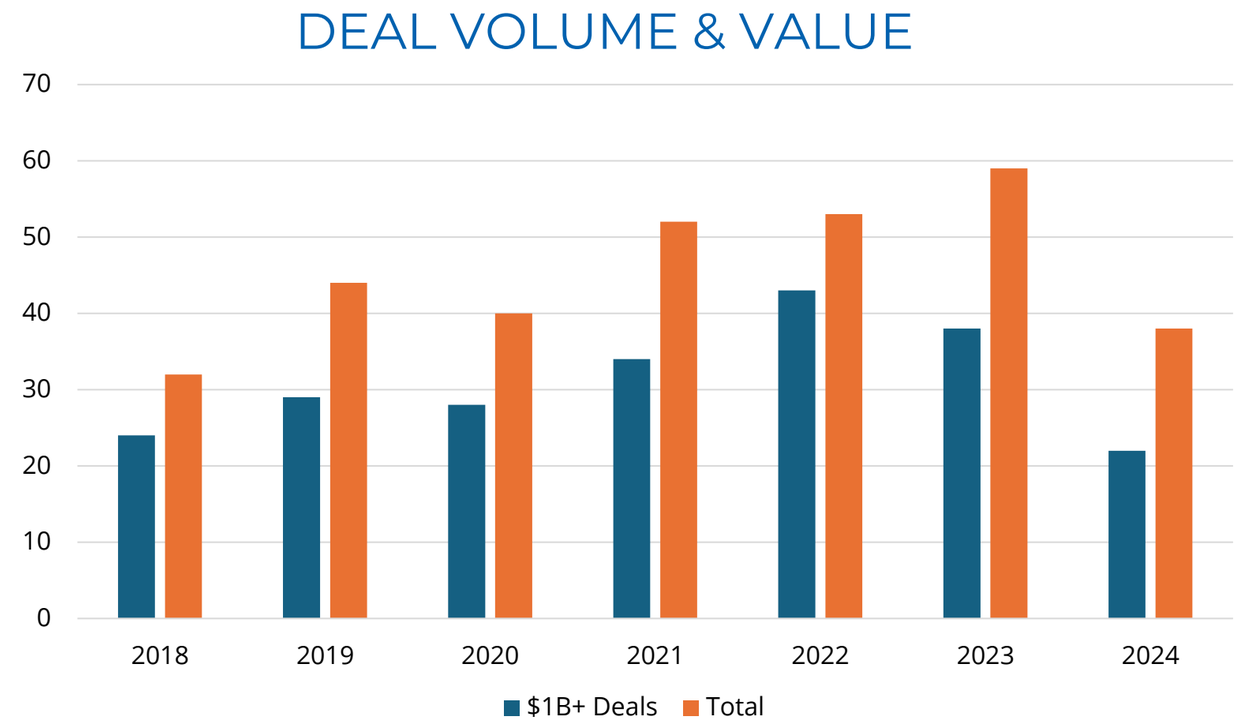
MARKET PERFORMANCE: XLV & XBI



Source: TW Research, Pitchbook & NASDAQ

M&A: TRENDS AND ACTIVITY

- Biopharma M&A activity is expected to remain high through 2024 as companies seek strategic transactions to access capital, accelerate program development, and gain external validation, especially outside the U.S.
- High-quality companies may evaluate sale transactions as an alternative to IPOs, especially in the face of recent market volatility and investor exits observed in Q2.
- Distressed publicly traded biopharma companies are likely to pursue private company mergers or cash-out transactions with financial buyers.
- Large biopharma firms will continue targeting commercial stage or clinically de-risked companies to fill revenue gaps due to patent expirations, with ongoing robust activity expected outside of mega deals.



DATE	TARGET	ACQUIRER	EQUITY VALUE	ENTERPRISE VALUE	TOTAL DEAL VALUE
04/03/24	ProfoundBio	Genmab	$1.8B	$1.8B	$1.8B
04/10/24	Alpine Immune Sciences	Vertex Pharmaceuticals	$5.150B	$4.845B	$4.845B
04/23/24	Escient Pharmaceuticals	Incyte	$750M	$750M	$750M
04/29/24	Deciphera Pharmaceuticals	ONO Pharmaceutical	$2.471B	$2.198B	$2.198B
05/02/24	Mariana Oncology	Novartis	$1.0B	$1.0B	$1.750B
05/16/24	Proteologix	Johnson & Johnson	$850M	$850M	$850
05/28/24	Calliditas Therapeutics	Asahi Kasei	$1.124B	$1.141	$1.141B
05/22/24	Human Immunology Biosciences	Biogen	$1.150B	$1.150B	$1.8B
05/28/24	Yellow Jersey	Johnson & Johnson	$1.25B	$1.25B	$1.25B
05/29/24	Eyebiotech	Merck	$1.30B	$1.30B	$3.0B
06/24/24	Alimera Sciences Inc	ANI Pharmaceuticals	$308M	$381M	$416M
06/27/24	Celsius Therapeutics	AbbVie	$250M	$250M	$250M

NIH FUNDING HIGHLIGHTS

- The 2024 budget for NIH funding was $47.1B, with $1.9B in additional provisions. Fiscal Year 2025 has a proposed budget $51.7B.

- The established academic institutions with noteworthy research arms continue to remain the top recipients of NIH grants. Academic institutions support their post-grad ecosystem with increased investment in incubator and graduation space.

Additional governmental institutions that contribute to the advancement of life sciences:

Department of Energy (DOE)
Research budget $8.1B

Federal Drug Administration (FDA)
Research budget $1.2B

National Institute of Allergy and Infectious Diseases (NIAID)
Research budget $5.1B

YTD 2024 NIH FUNDING I TOP RECIPIENTS

ORGANIZATION	CITY	STATE	AWARDS	FUNDING
Johns Hopkins University	Baltimore	MD	1,130	$656,960,995
University Of California, San Francisco	San Francisco	CA	1,113	$576,933,128
University Of Michigan At Ann Arbor	Ann Arbor	MI	1,099	$564,119,944
University of Pennsylvania	Philadelphia	PA	981	$506,800,206
University of Pittsburgh	Pittsburgh	PA	944	$492,634,516
Yale University	New Haven	CT	890	$486,046,216
Massachusetts General Hospital	Boston	MA	826	$460,482,101
Stanford University	Stanford	CA	858	$447,924,709
Washington University	Saint Louis	MO	887	$447,275,691
Columbia University Health	New York	NY	761	$442,037,621
University of California, San Diego	La Jolla	CA	792	$403,734,010
University of North Carolina	Chapel Hill	NC	809	$401,639,983
University of Washington	Seattle	WA	769	$389,411,289
University of California, Los Angeles	Los Angeles	CA	662	$388,546,184
Duke University	Durham	NC	743	$343,574,278

Source: TW Research, NIH, DOE, FDA & NIAID

NATIONWIDE TOP OCCUPIERS



Source: TW Research, ZoomInfo & CoStar

TRANSWESTERN

KEY MARKET POINTS

- Leasing activity within the Boston Market has slowed, reaching lows experienced during 2020.
- Preleasing has seen an uptick, rising from 23% at the end of 2023 to 36% at the end of Q2 2024.
- Vacancy jumped over 300 basis points, due to vacant inventory deliveries.
- 1.4 MSF of new inventory was delivered in Q2 2024, much of which was delivered with low vacancy.

TRENDLINES	Q2 2024	Q2 2023	ONE-YEAR TREND	ONE-YEAR FORECAST
INVENTORY (MSF)	69.29	65.99	↑	↑
NET ABSORPTION (THOUSANDS SF)	(246.50)	386.90	↓	↔
VACANCY RATE	17.81%	13.58%	↑	↑
UNDER CONSTRUCTION (MSF)	19.36	20.11	↓	↓
ASKING RENT, NNN (PSF)	$57.85	$52.38	↑	↔
YTD NIH STATE GRANTS (BILLIONS)	$2.47	$2.39	↑	↔

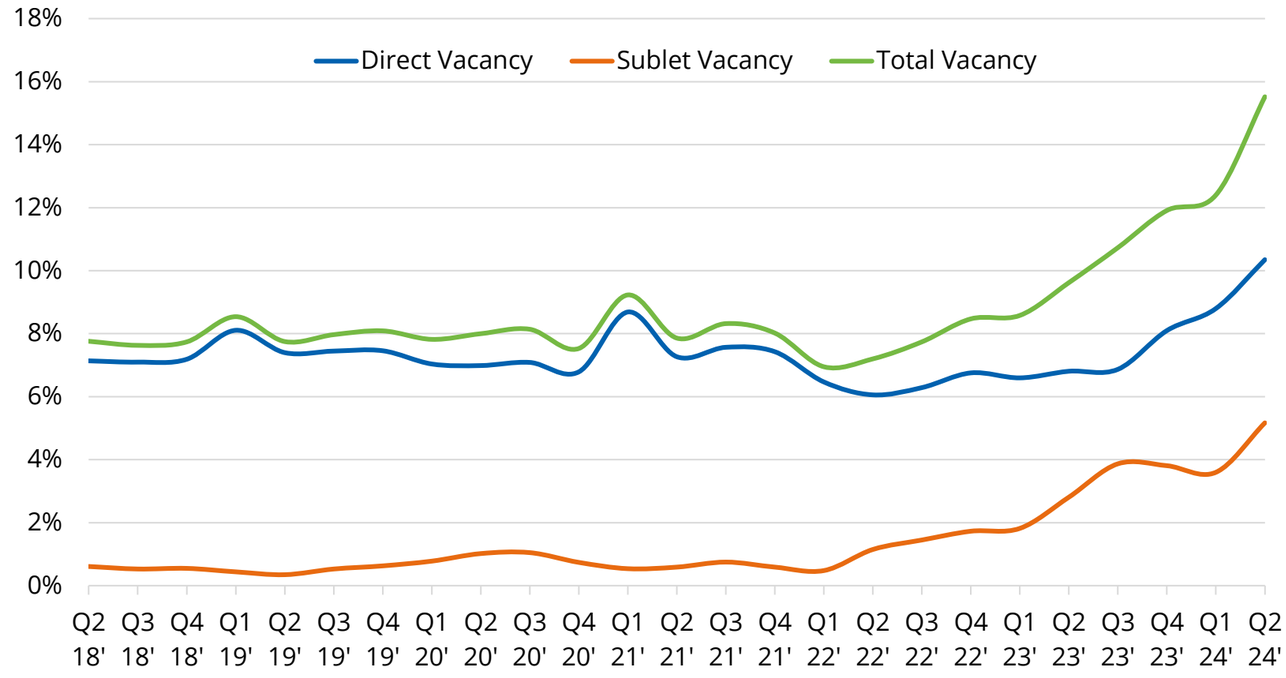
MARKET OVERVIEW

The largest of the life sciences markets, the greater Boston market approaches 70 MSF of inventory. Local supply and demand dynamics are still being stretched as new inventory keeps the landscape competitive. The trend toward favoring quality continues, with transit and neighborhood synergy is being preferred. Suburban buildings not situated on the Route 128 corridor have seen additional headwinds in the market.

Two noteworthy speculative projects have been halted, awaiting leasing progress. 15 McGrath Highway in Somerville, citing changing market dynamics. Additionally, the 200,000 SF Wuxi biologics venture in Worchester has been shelved for the time being. The Route 128 corridor has seen a 120% inventory increase over the last five years.

One sale transaction was recorded in Q2. The 45,000 SF building located at 23 Elm Street in Watertown sold for 10,000,000. The buyer, Shannon Life Sciences is a venture capital firm focused on neuroscience.

TOTAL VACANCY RATE

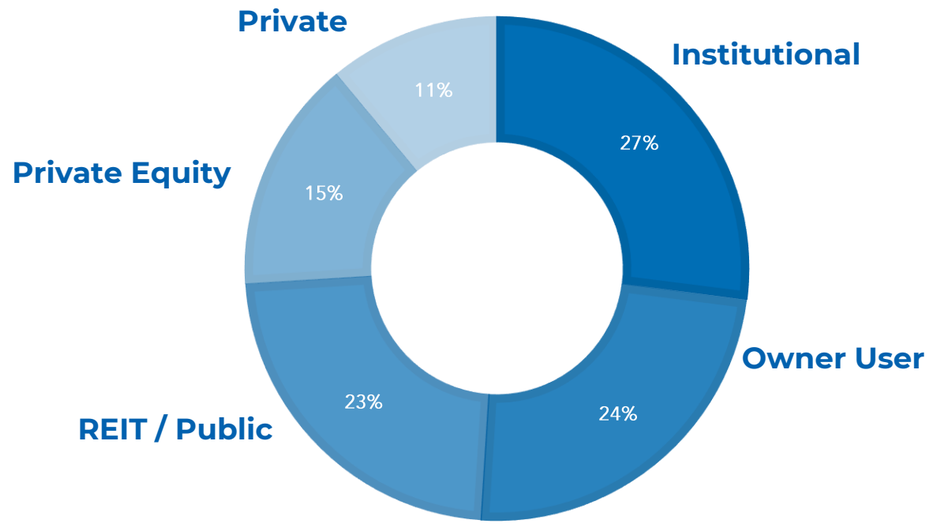


Source: TW Research. CoStar, NIH

LOCAL NIH FUNDING | YTD 2024

ORGANIZATION	AWARDS	FUNDING	CITY
Massachusetts General Hospital	826	$460,482,101	Boston
Brigham And Women's Hospital	535	$306,236,108	Boston
Boston Children's Hospital	362	$194,748,655	Boston
University of Massachusetts Medical School	283	$142,399,689	Worcester
Harvard School of Public Health	211	$124,618,189	Boston
Broad Institute, Inc	69	$118,254,874	Cambridge
Dana-Farber Cancer Institute	179	$113,402,293	Boston
Beth Israel Deaconess Medical Center	171	$93,502,121	Boston
Massachusetts Institute of Technology	169	$82,163,694	Cambridge
Tufts University	95	$58,360,702	Boston

INVENTORY BUILDING OWNERSHIP



TOP OWNERS:

ALEXANDRIA

Blackstone

LEASE I Q2 2024

TENANT	TYPE	ADDRESS	SIZE	MARKET
Regeneron Pharmaceuticals	Sublease	60 Binny St	160,000	Cambridge
Scholar Rock	Renewal	310 Binny St	51,500	Cambridge
Moderna Therapeutics	New	211 2nd St	27,850	Waltham
Novo Nordisk	New	65 Hayden Ave	26,600	Lexington
Pace Analytics	Renewal	19-21 Presential Way	24,500	Woburn

SALE I Q2 2024

ADDRESS	TYPE	SIZE	PRICE	MARKET
23 Elm Street	Office	74,000	$45,000,000	Watertown

Source: TW Research. CoStar
*Portfolio sale

TRANSWESTERN

KEY MARKET POINTS

- Leasing activity in Chicago's life sciences market remained muted throughout Q2 2024. Historically, Chicago's inventory is anchored by owner users, which dampers quarter-to-quarter leasing activity.
- Direct availability continues to be the primary driver of the of the vacancy rate, as sub-lease space remains limited.
- Chicago consistently ranks 4th for life science education programs, with 37 insinuations feeding a robust talent pipeline.

TRENDLINES	Q2 2024	Q2 2023	ONE-YEAR TREND	ONE-YEAR FORECAST
INVENTORY (MSF)	11.92	11.92	↑	↑
NET ABSORPTION (THOUSANDS SF)	(24.91)	0	↑	↑
VACANCY RATE	11.3%	11.2%	↑	↑
UNDER CONSTRUCTION (THOUSAND SF)	810	810	↓	↑
ASKING RENT, NNN (PSF)	$45.80	$41.78	↑	↑
YTD NIH STATE GRANTS (BILLIONS)	$.894	$.661	↑	↓

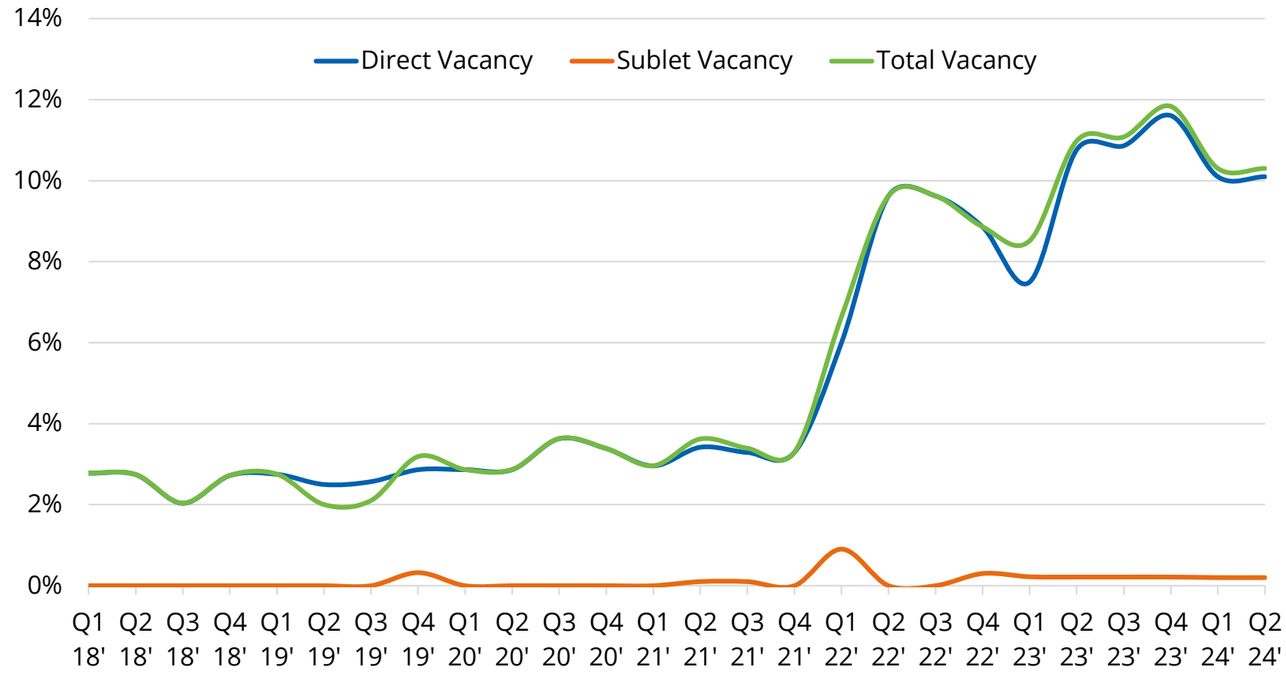
MARKET OVERVIEW

Chicago is swiftly emerging as a key hub for life sciences companies, anchored by owner-occupied spaces that collectively span seven million square feet. The city's remaining four million square feet of leased space is divided between North Chicago and the Central Business District, with approximately 1.3 million square feet added since 2018.

Trammell Crow Co. released new details on the 1.8 MSF mixed-use campus featuring four buildings with a total of 660,000 square feet dedicated to lab and office space. Dubbed "Fulton Park Campus" it will include 368 luxury apartments and 35,000 SF of retail. The development is boasting a 2.5 MSF public park to enhance the green space around the campus.

The local life sciences ecosystem is supported by four key incubators—Portal Innovations, mHub, Helix51, and Chan Zuckerberg Biohub Chicago. These incubators are nearing full capacity, reflecting the growing wave of innovation in Chicago's life sciences market.

VACANCY RATE



Source: TW Research. CoStar

LOCAL NIH FUNDING | YTD 2024

ORGANIZATION	AWARDS	FUNDING	CITY
Northwestern University	548	$289,475,098	Chicago
University Of Chicago	384	$205,406,093	Chicago
University Of Illinois At Chicago	298	$122,904,534	Chicago
University of Illinois at Urbana-Champaign	136	$53,099,274	Champaign
Rush University Medical Center	70	$45,787,749	Chicago
National Opinion Research	7	$38,528,070	Chicago
Northwestern University	79	$31,682,727	Chicago
Lurie Children's Hospital	45	$25,845,348	Chicago
Loyola University Chicago	47	$16,779,325	Maywood

TOP OWNERS: Sterling Bay | Trammell Crow Company

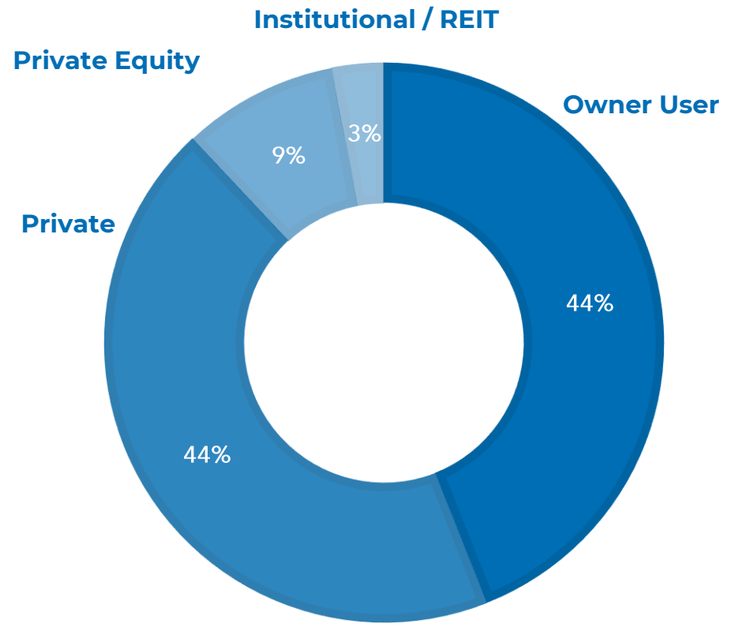
SALE | Q2 2024

ADDRESS	TYPE	SIZE	PRICE	MARKET
-	-	-	-	-

LEASE | Q2 2024

TENANT	TYPE	ADDRESS	SIZE	MARKET
-	-	-	-	-

INVENTORY BUILDING OWNERSHIP



DEVELOPMENT SPOTLIGHT: HYDE PARK LABS



302,388 RSF
Total Square Footage

13 Stories
14’ – 15’ Ceiling Heights

35,000 RSF
Floor Plates

9 Stories
Dedicated Lab Space

40,000 RSF
Amenity Space

125 Spaces
Underground Parking

Slated to be delivered October 2024

Trammell Crow Company & Beacon Capital Partners

Source: TW Research, CoStar. Beacon Capital Partners & NIH

TRANSWESTERN

KEY MARKET POINTS

- Houston's life science growth continues to gain momentum, anchored by the renowned Texas Medical Center.
- Houston continues to receive the largest share of NIH funding in the state, 2024 YTD hit a record $1.38B.
- The employment talent pool is robust, backed by top tier local academic institutions.

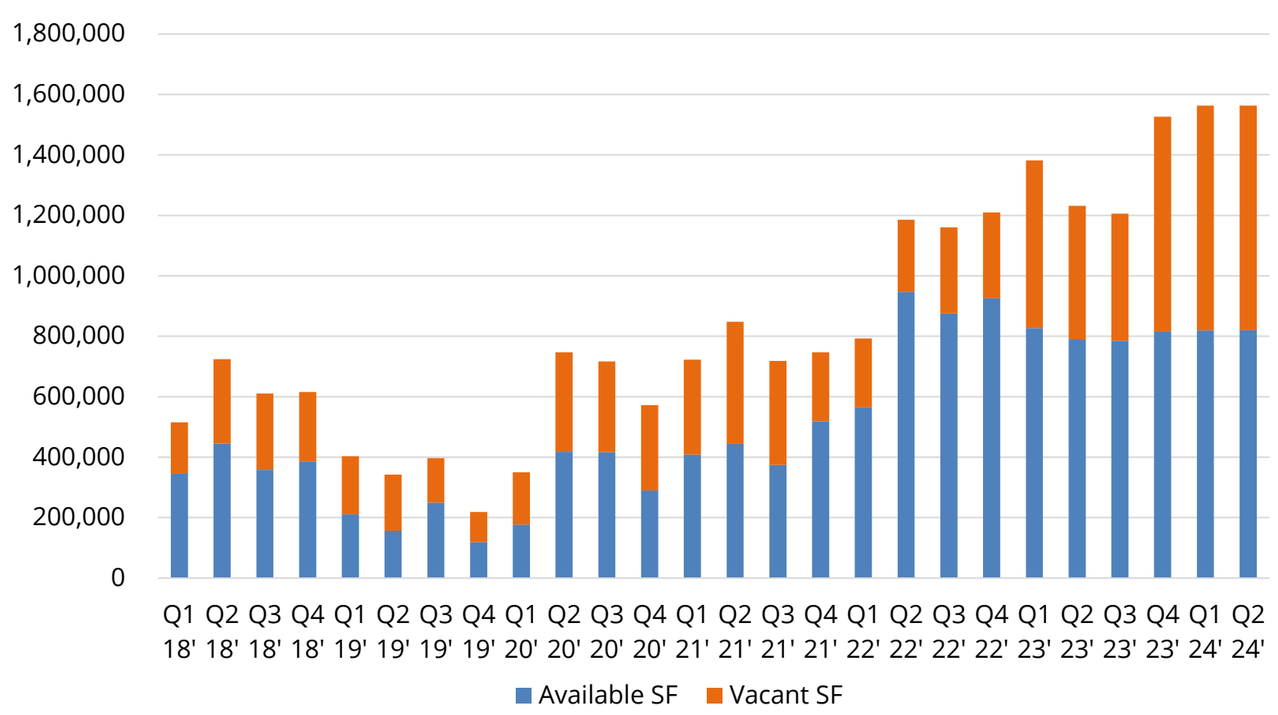
TRENDLINES	Q2 2024	Q2 2023	ONE-YEAR TREND	ONE-YEAR FORECAST
INVENTORY (MSF)	4.41	3.43	↑	↑
NET ABSORPTION (THOUSANDS SF)	(21.46)	113.67	↓	↑
VACANCY RATE	19.30%	12.35%	↑	↑
UNDER CONSTRUCTION (THOUSAND SF)	.350	.350	↑	↓
ASKING RENT, NNN (PSF)	$47.24	$44.98	↑	↑
YTD NIH STATE GRANTS (BILLIONS)	$1.38	$.995	↑	↑

MARKET OVERVIEW

Houston's life sciences real estate market is steadily expanding, maintaining stability in an ever-changing environment. Anchored by the Texas Medical Center (TMC), the city's life sciences ecosystem thrives on collaboration, bolstered by world-class academic institutions that drive innovation and cultivate a growing pool of talent. The efforts of BIOHouston and the Greater Houston Partnership play a key role in connecting and strengthening the local life sciences community.

Rice University recently launched its Launchpad accelerator, further energizing Houston's life sciences sector. Existing accelerators in the area continue to expand, positioning Houston as a rising hub in the industry. New developments continue to gather traction, as future developments expand their phased expansion plans. Compared to other life sciences hubs across the country, Houston's market outlook remains optimistic, indicating a strong trajectory for future growth.

AVAILABLE INVENTORY

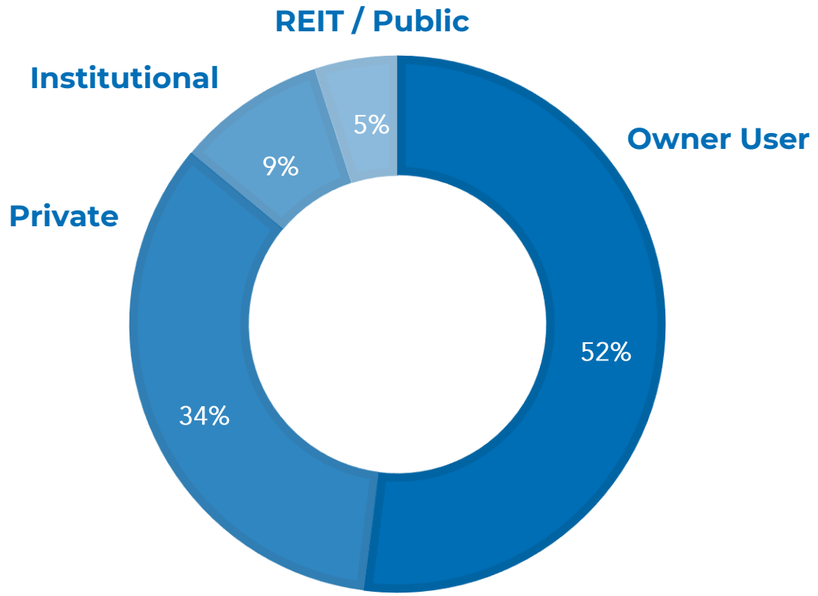


Source: TW Research. CoStar

LOCAL NIH FUNDING | YTD 2024

ORGANIZATION	AWARDS	FUNDING	CITY
Baylor College Of Medicine	480	$241,562,262	Houston
University Of Texas – Southwestern Medical Center	462	$227,701,894	Dallas
University Of Texas – MD Anderson Cancer Center	270	$135,768,894	Houston
University Of Texas – Health Science Center	257	$121,994,641	Houston
University of Texas – Medical Galveston	117	$116,763,025	Galveston
University of Texas – Austin	210	$109,903,709	Austin
Methodist Hospital Research Institute	71	$36,992,805	Houston
University of Houston	65	$25,799,843	Houston
Texas A&M University Health Science Center	71	$24,624,154	College Station
Texas A&M University	51	$21,717,912	College Station

INVENTORY BUILDING OWNERSHIP



TOP OWNERS:

TMC TEXAS MEDICAL CENTER

BEACON CAPITAL PARTNERS

LEASE | Q2 2024

TENANT	TYPE	ADDRESS	SIZE	MARKET
PranaX	New	Levit Green's Phase I	7,400	TMC
BrYet Pharma	New	2450 Holcombe Blvd	8,921	TMC

DEVELOPMENT SPOTLIGHT: NIMBLE BIOSPACEST

McCord Development

Owner & Developer

67,200 RSF
Total Square Footage

6 cGMP Suites
Fully Turn-Key

March 2025
Anticipated Delivery



Source: TW Research, CoStar. NIH
*No recent sale activity.

TRANSWESTERN

KEY MARKET POINTS

- New Jersey continues to be a hub for biopharmaceutical manufacturing, hosting a significant presence from eight of the world's top 10 pharmaceutical companies.
- World-class infrastructure and connectivity, facilitating efficient delivery of goods and customer access through Newark Liberty International Airport, the Port of New York and New Jersey, and the highest railroad density in the nation. This ensures that businesses in New Jersey have easy access to major markets both domestically and globally.
- Leasing activity has ebbed, dipping below 100,000 SF for the first time in 18-months.

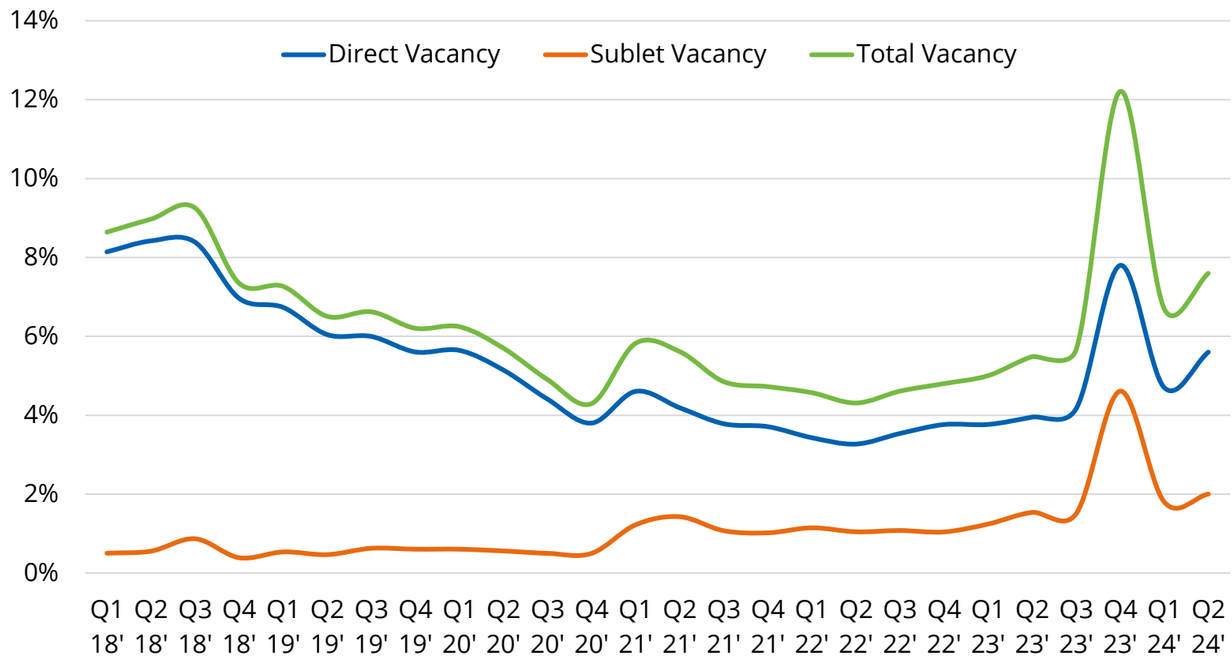
TRENDLINES	Q2 2024	Q2 2023	ONE-YEAR TREND	ONE-YEAR FORECAST
INVENTORY (MSF)	32.10	33.07	↔	↑
NET ABSORPTION (THOUSANDS SF)	217.08	(155.91)	↓	↑
VACANCY RATE	9.54%	9.66%	↑	↑
UNDER CONSTRUCTION (MSF)	1.70	1.61	↔	↔
ASKING RENT, NNN (PSF)	$36.45	$34.31	↑	↑
YTD NIH STATE GRANTS (MILLIONS)	$279	$215	↑	↑

MARKET OVERVIEW

New Jersey known as the birthplace of immunotherapy and home to over 3,500 life sciences businesses employing 415,000 professionals. New Jersey consistently has a low number of deals, unlike activity from neighboring hubs; largely because New Jersey has larger campus style developments. The legacy manufacturing facilities are foundational to the regions ongoing success. Future adoption of efficient manufacturing practices are likely to continue bringing New Jersey into the light again, as onshoring becomes a growing concern. Most notability, Cellares who purchased a former Pfizer facility and recently raised $245M series C round. The firm aimed to open a first of a kind, Integrated Development and Manufacturing Organization (IDMO); outfitted for both pilot and industrial manufacturing.

The flight to quality seems to just be starting, as local firms look to trade outdated sprawling offices for more modern and efficient footprints. In 2023, two out of the top five office deals done were with life science firms seeking a newer space.

TOTAL VACANCY RATE

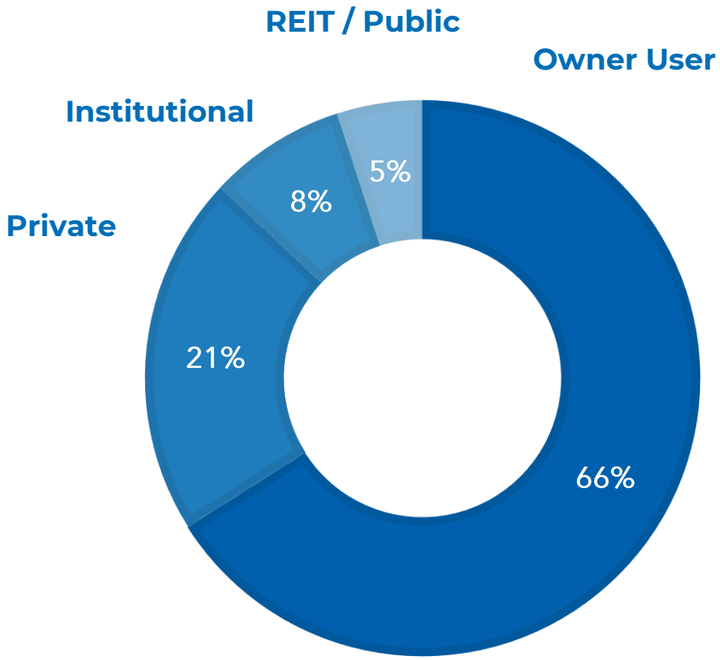


Source: TW Research. CoStar

LOCAL NIH FUNDING | YTD 2024

ORGANIZATION	AWARDS	FUNDING	CITY
Rutgers Biomedical Health and Sciences	267	$147,494,990	Newark
Rutgers, The State University	84	$38,259,699	Piscataway
Princeton University	87	$36,073,243	Princeton
Hackensack University	23	$15,343,047	Hackensack
Cornell Institute Medical	8	$7,156,232	Camden
Rutgers (Newark)	16	$6,633,559	Newark
New Jersey Institute of Technology	11	$3,298,509	Newark
Kessler Foundation, Inc.	8	$2,817,999	East Hanover
Rowan University	9	$2,527,803	Glassboro
Prokaryotics, Inc.	3	$1,949,510	Union

INVENTORY BUILDING OWNERSHIP



TOP OWNERS: MERCK Bristol-Myers Squibb Johnson & Johnson

LEASE | Q2 2024

TENANT	TYPE	ADDRESS	SIZE	MARKET
Bracco Diagnostics	Renewal	305 College Rd	35,100	Princeton
Elite Pharmaceuticals Inc	Renewal	140 Ludlow Ave	33,600	Northvale
Intra Cellular	Renewal	135 Route 206	28,000	Bedminster
Pierre Fabre Labs	New	500 Plaza Dr	23,500	Secaucus
Quagen Pharmaceuticals	New	55 Passaic Ave	15,000	Fairfield
Galapagos	New	600 College Rd	13,250	Princeton
Biocon Biologics	New	685 US Highway 202	9,600	Bridgewater

DEVELOPMENT SPOTLIGHT: BeiGene Campus

400,000 RSF
Total Square Footage

42 ACRES
Total Space

16,000 liters
Manufacturing Capacity

LATE 2024
Expected Delivery



Source: TW Research. CoStar, NIH
*No sales activity noted

TRANSWESTERN

KEY MARKET POINTS

- Leasing activity ebbed over a strong start to 2024, largely led by the University of Pennsylvania.
- Vacancy rates continue to tick upward, yet a slower rate than the nation's average.
- Top academic institutions provide the market with a healthy qualified talent pool.
- The construction pipeline is set to deliver large blocks of space in late 2025.

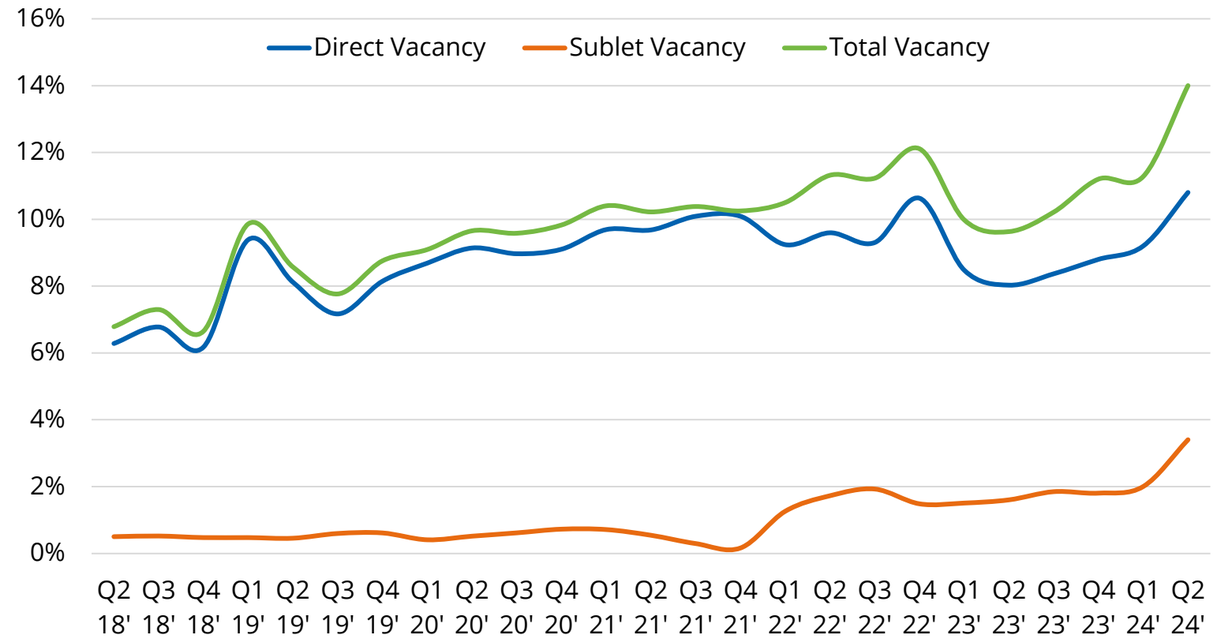
TRENDLINES	Q2 2024	Q2 2023	ONE-YEAR TREND	ONE-YEAR FORECAST
INVENTORY (MSF)	23.16	23.06	↑	↑
NET ABSORPTION (THOUSANDS SF)	(27.04)	306.90	↓	↔
VACANCY RATE	13.73%	11.28%	↔	↔
UNDER CONSTRUCTION (MSF)	6.0	7.33	↓	↓
ASKING RENT, FULL SERVICE (PSF)	$41.34	$38.99	↑	↑
YTD NIH STATE GRANTS (BILLIONS)	$1.60	$.85	↑	↑

MARKET OVERVIEW

Philadelphia's life science ecosystem continues to grow, becoming a top recipient of NIH grant funding. The region's research focus is rooted in oncology treatments, being driven by University of Pennsylvania. Offshoots from higher education have increased the demand for incubator and graduation space. Fueling the demand is the local venture capital activity, topping $500M for the first half of 2024.

The once defunct Hahnemann University Hospital has successfully been repositioned as a life science building, with a first tenant in tow. The project that launched back in 2021, when Iron Stone Real Estate Investments bought the campus to capture the activity from Drexel University, located adjacent to the campus.

VACANCY RATE

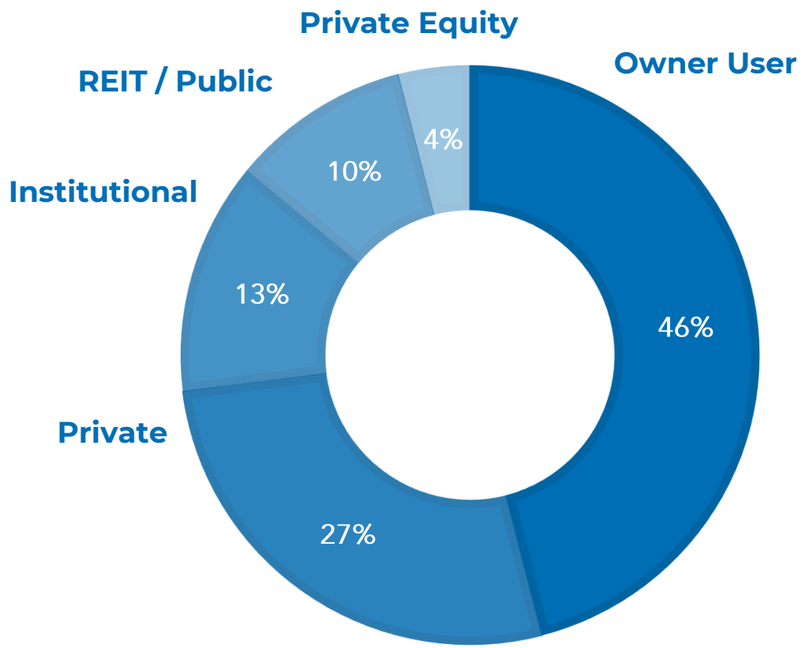


Source: TW Research. CoStar

LOCAL NIH FUNDING | TYD 2024

ORGANIZATION	AWARDS	FUNDING	CITY
University Of Pennsylvania	981	$506,800,206	Philadelphia
University Of Pittsburgh At Pittsburgh	944	$492634,516	Pittsburgh
Children's Hosp Of Philadelphia	216	$107,226,478	Philadelphia
Pennsylvania State University	155	$71,419,626	University Park
Pennsylvania State Univ Hershey Medical	115	$$60,666,139	Hershey
Thomas Jefferson University	133	$58,875,291	Philadelphia
Temple University	132	$57,491,264	Philadelphia
Drexel University	113	$40,962,513	Philadelphia
Wistar Institute	38	$31,549,845	Philadelphia
NRG Oncology Foundation	4	$27,561,803	Philadelphia

INVENTORY BUILDING OWNERSHIP



TOP OWNERS:

WEXFORD SCIENCE&TECHNOLOGY, LLC
A WEXFORD EQUITIES COMPANY

MLP VENTURES, LLC

brandywine REALTY TRUST

LEASE | Q1 2024

TENANT	TYPE	ADDRESS	SIZE	MARKET
University of Pennsylvania	Renewal	100 Campus Park	121,000	University City
DSM Biomedical	New	400 Devon Park	75,750	Valley Forge
Lincare	New	14 E. Stow Rd	7,898	Wilmington

SALE | Q2 2024

ADDRESS	TYPE	SIZE	PRICE	MARKET

Source: TW Research. CoStar, NIH

TRANSWESTERN

KEY MARKET POINTS

- Fujifilm Diosynth Biotechnology slated to spend $4.8B over next 12-years, bringing increased activity to the hub.
- Vacancy rates tick upward, as supply outpacing demand.
- 2024 NIH funding has outpaced 2023 totals, fueling local research insinuations.
- Large owner-user developments are forecasted to keep the spotlight on the local ecosystem

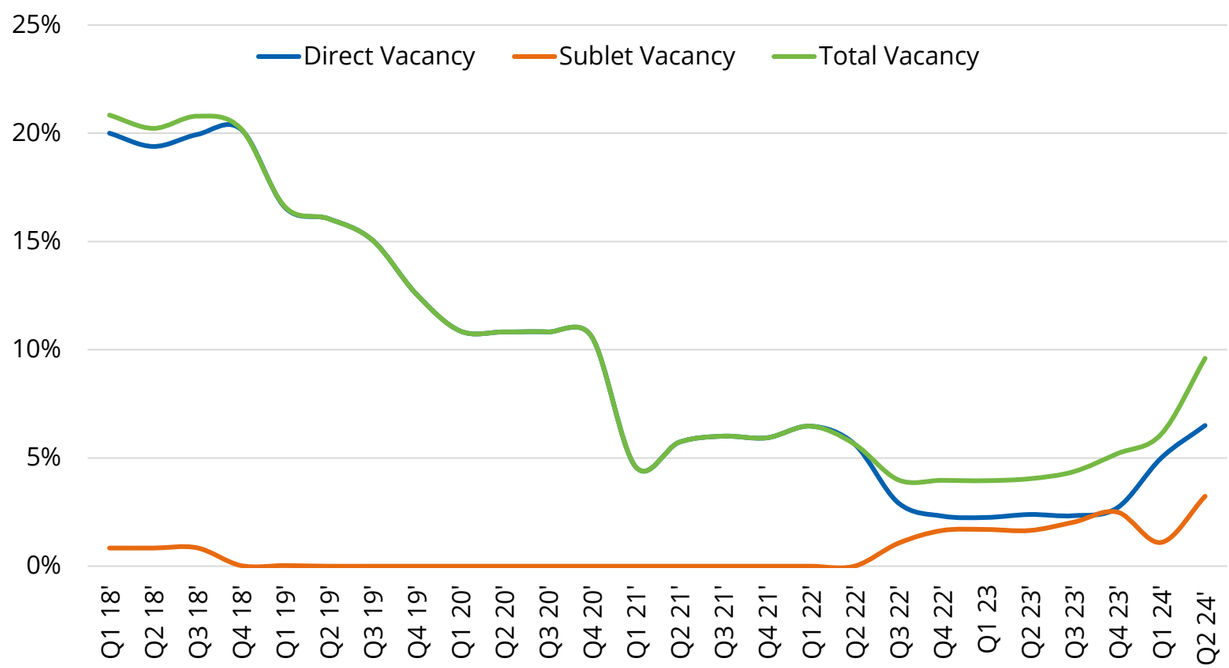
TRENDLINES	Q2 2024	Q2 2023	ONE-YEAR TREND	ONE-YEAR FORECAST
INVENTORY (MSF)	10.49	10.31	↑	↔
NET ABSORPTION (THOUSANDS SF)	(19.87)	(9,970)	↓	↔
VACANCY RATE	11.50%	7.24%	↑	↑
UNDER CONSTRUCTION (MSF)	6,65	5.62	↓	↔
ASKING RENT, NNN (PSF)	$30.06	$27.93	↑	↑
YTD NIH STATE GRANTS (BILLIONS)	$1.45	$1.17	↑	↑

MARKET OVERVIEW

The Raleigh-Durham research triangle is the Mid-Atlantic hub for the life sciences sector. The region primarily serves the agricultural industries, with a growing population of biotechnology firms gravitating toward the ecosystem. The area is highly concentrated with the Research Triangle Park, accounting for 650 companies, out of the entire region's 850 companies.

In June, Novo Nordisk released their plans to invest in a 1.4 MSF manufacturing facility. The plant is expected to deliver in 2028, costing $1.4B to complete. The investment into the local ecosystem is expected to yield 1,000 permanent jobs.

VACANCY RATE

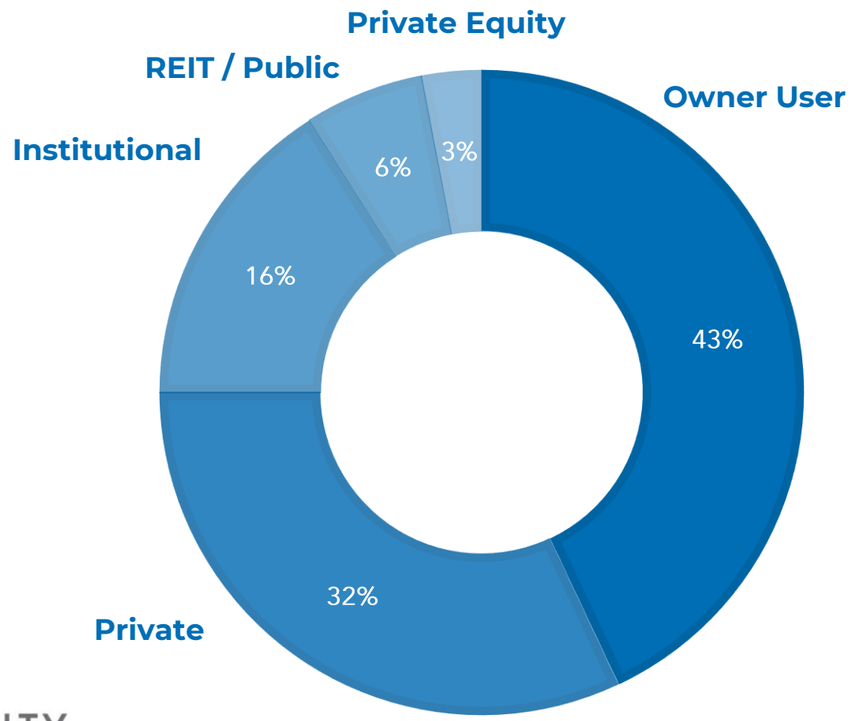


Source: TW Research. CoStar

LOCAL NIH FUNDING | YTD 2024

ORGANIZATION	AWARDS	FUNDING	CITY
Univ Of North Carolina Chapel Hill.	809	$403,734,010	Chapel Hill
Duke University	743	$1388,546,184	Durham
Research Triangle Institute	47	$343,574,184	RTP
Wake Forest University Health	182	$107,929,021	Winston-Salem
North Carolina State University	89	$35,640,842	Raleigh
Family Health International	1	$25,449,117	Durham
RHO Federal Systems Div	3	$18,147,139	Durham
PPD Development LP	1	$9,000,121	Wilmington
University of North Carolina – Charlotte	26	$8,782,119	Charlotte

INVENTORY BUILDING OWNERSHIP



TOP OWNERS:

ALEXANDRIA

LONGFELLOW

TRINITY CAPITAL

LEASE | Q2 2024

TENANT	TYPE	ADDRESS	SIZE	MARKET
Nhanced	New	800 Perimeter Park Dr	55,000	RTP
Metabolon	Renewal	598 Airport Blvd	54,500	RTP
Solvias	Renewal	2400 Perimeter Park Dr	50,000	RTP
Kincell Bio	New	20 Alexander Dr	32,500	RTP

SALE | Q2 2024

ADDRESS	TYPE	SIZE	PRICE	MARKET

Source: TW Research. CoStar, NIH

TRANSWESTERN

KEY MARKET POINTS

- Future development in San Diego's life science market is has paused, as recently delivered developments strain to find tenants. Preleasing efforts at IQHQ's 1.7 MSF development in Downtown San Diego hasn't landed any significant leases.
- In June, San Diego hosted the Bio International life sciences conference, attracting 27,000 attendees.
- Upcoming development set to deliver, Campus Horton's 396,000 SF development by Stockdale Capital.
- Proximity to South California's mature transportation infrastructure makes the market attractive for future manufacturing firms.

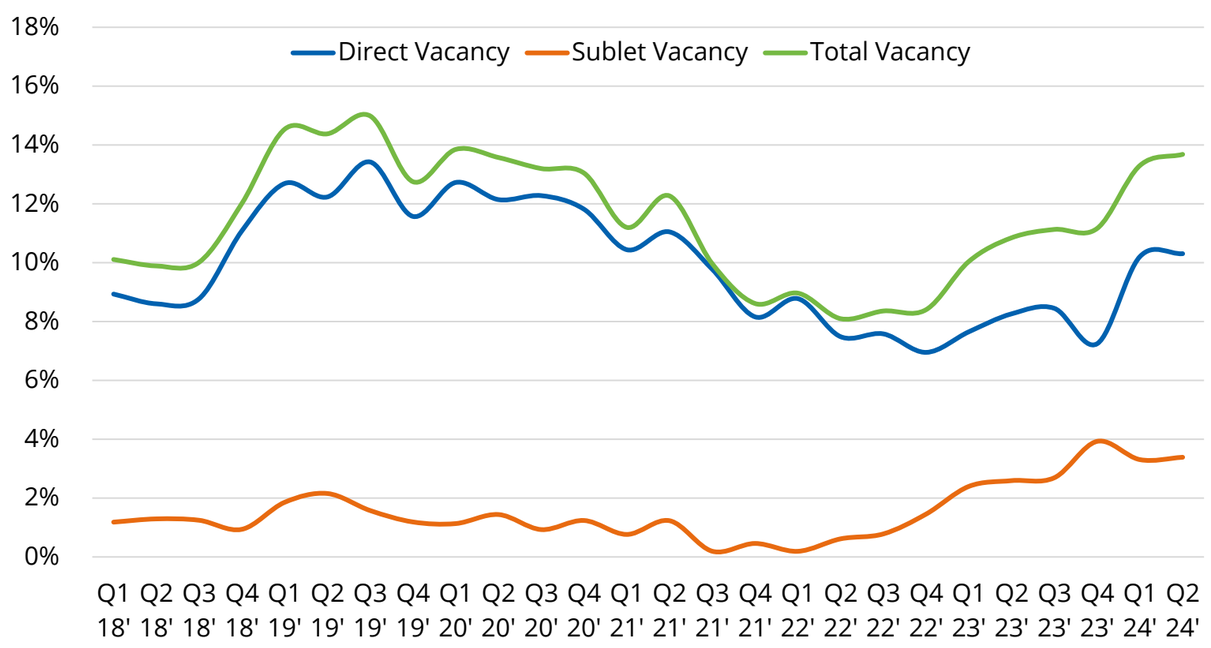
TRENDLINES	Q2 2024	Q2 2023	ONE-YEAR TREND	ONE-YEAR FORECAST
INVENTORY (MSF)	18.87	17.59	↑	↑
NET ABSORPTION (THOUSANDS SF)	335.29	(14.38)	↑	↓
VACANCY RATE	14.64%	12.21	↑	↑
UNDER CONSTRUCTION (MSF)	4.45	6.92	↓	↓
ASKING RENT, NNN (PSF)	$52.84	$48.99	↑	↓
YTD NIH STATE GRANTS (BILLIONS)	$.748	$.612	↑	↑

MARKET OVERVIEW

The San Diego life sciences market continues to solidify its position as the third largest hub in the nation, with Torrey Pines, Sorrento and Carlsbad leading the charge with activity. Downtown San Diego has struggled to gain traction. The REITs are notability driving the development and revitalization of key properties to ensure tenants stay within the portfolio, consolidating footprints to build an ecosystem. Coupled with strategic tenant balancing, has contributed to the sector's resilience and ongoing expansion.

San Diego's academic partnerships focused on healthcare and technology are helping to drive the hub's growth. These collaborations are increasingly supported by public funding, which has surged in recent years to bolster research efforts. This influx of capital is not only advancing scientific discovery but is also giving rise to a wave of early-stage biotech firms, further enriching the region's innovation.

VACANCY RATE

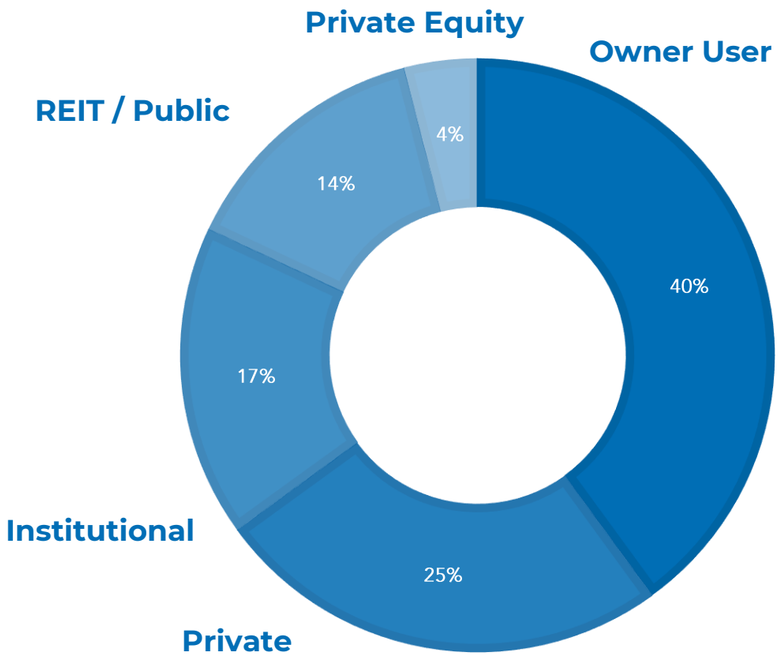


Source: TW Research. CoStar

LOCAL NIH FUNDING | YTD 2024

ORGANIZATION	AWARDS	FUNDING	CITY
University of California, San Diego	792	$428,820,866	La Jolla
Scripps Research Institute	142	$129,998,872	La Jolla
Salk Institute for Biological Studies	59	$52,940,660	La Jolla
Sanford Burnham Prebys Medical	47	$38,510,570	La Jolla
San Diego State University	68	$24,800,575	San Diego
La Jolla Institute for Immunology	34	$23,294,662	La Jolla
San Diego Biomedical Research Institute	10	$4,489,249	San Diego
Scintillon Institute for Photobiology	7	$3,285,225	San Diego
Arima Genomics, Inc.	2	$2,997,924	San Diego
Veterans Medical Research	10	$2,799,664	San Diego
Big Eye Diagnostics	3	$2,558,135	San Diego

INVENTORY BUILDING OWNERSHIP



TOP OWNERS:

Blackstone

Healthpeak PROPERTIES

ALEXANDRIA

LEASE | Q2 2024

TENANT	TYPE	ADDRESS	SIZE	MARKET
Vivdion Therapeutics (Bayer)	New	10075 Barnes Cayon Rd	127,000	Sorrento Mesa
Avidity Biosciences	Sublease	3020 Callen Rd	106,000	Torrey Pines
Cibus	New	6455 Nancy Ridge Dr	52,500	San Diego
Blossom Hill Therapeutics	New	10255 Science Center Dr	47,250	Torrey Pines
BPS Bio	Renewal	10628 Science Center Dr	23,300	Torrey Pines
Endeavor Biomedicines	Sublease	11575 Sorrento Valley Rd	8.950	Sorrento Mesa

-

SALE | Q2 2024

ADDRESS	SIZE	PRICE	MARKET

Source: TW Research. CoStar, NIH, *Portfolio Sale

KEY MARKET POINTS

- Net absorption in Q2 dipped negative due to a large influx of new supply being delivered.
- As vacancy jumped to 21.5%, driven by soft deal activity and new inventory delivered to the inventory.
- The Genentech Campus recently went into contract for $1.2B. The buyer Lonza Pharmaceuticals plans $600M expansion.
- NIH grant funding is up over 2023 mid-year reporting, an influx of capital to help propel local research efforts.

MARKET OVERVIEW

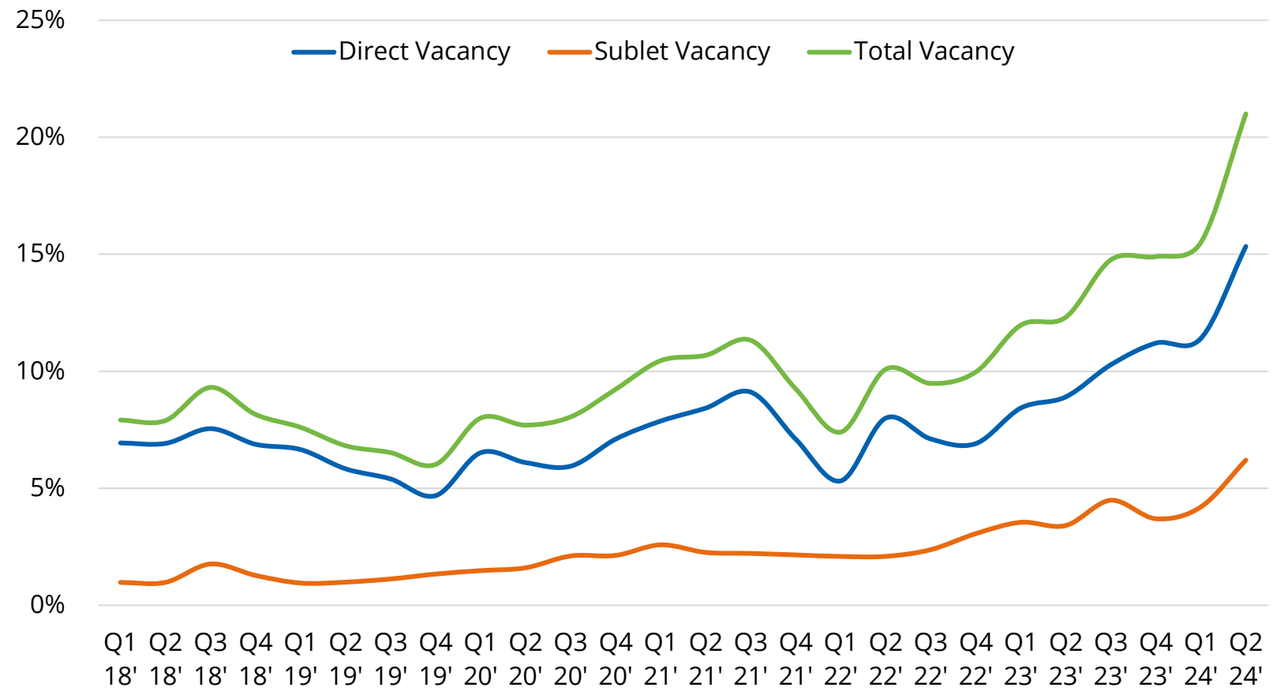
The life sciences market within the San Francisco area have proven to be stable despite ongoing industry headwinds. The most noteworthy shift quarter-to-quarter is the vacancy rate increase, which has long been expected given the robust construction pipeline. Completion of numerous developments have been putting pressure on the market, as leasing activity hasn't matched deliveries. Despite this new supply impacting the market statistics, the new inventory had been fielding pre-leasing efforts, keeping the market dynamics unchanged.

The local market experienced a negative net absorption of -262,300 SF in Q2 2024. Which was a decrease over the previous quarter of -689,700 SF. Asking rates remained somewhat flat over the last three quarters. The PSF asking rate dipped slightly in Q2, $61.88. The market sentiment on asking rates remains positive, supported by new inventory with the latest capabilities and technology. The obsolete lab inventory continues to be challenged, given the numerous options users have on first generation direct and sub-lease markets.

Preparation for the next market cycle continues, as planning and entitlement traction are stable. With new construction starts down 70% YOY, the focus has begun shifting toward future supply and demand, as the once robust pipeline will no longer have new supply for users.

TRENDLINES	Q2 2024	Q2 2023	ONE-YEAR TREND	ONE-YEAR FORECAST
INVENTORY (MSF)	46.18	44.30	↑	↑
NET ABSORPTION (THOUSANDS SF)	(262,09)	(154,25)	↑	↑
VACANCY RATE	21.50%	11.36%	↑	↑
UNDER CONSTRUCTION (MSF)	8.69	10.82	↓	↓
ASKING RENT, NNN (PSF)	$61.88	$59.12	↓	↑
YTD NIH STATE GRANTS (BILLIONS)	$1.07	$0.86	↑	↑

VACANCY RATE

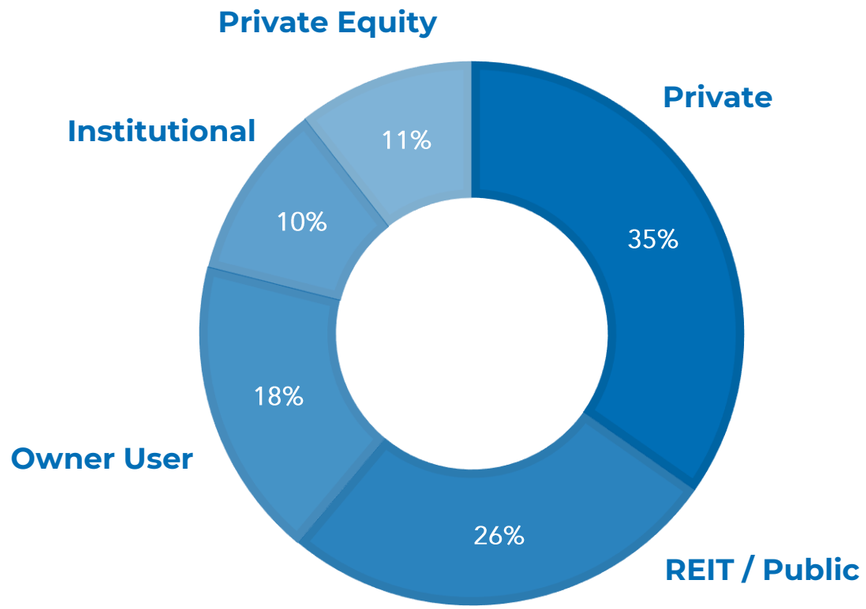


Source: TW Research. CoStar

LOCAL NIH FUNDING AWARDS I YTD 2024

ORGANIZATION	AWARDS	FUNDING	CITY
University Of California, San Francisco	1113	$576,933,128	San Francisco
Stanford University	858	$447,924,709	Stanford
University Of California, Davis	439	$218,947,750	Davis
University Of California, Berkeley	269	$125,730,456	Berkeley
Kaiser Foundation Research Institute	84	$70,866,994	Oakland
J. David Gladstone Institutes	40	$25,120,890	Oakland
Buck Institute for Research Aging	34	$19,805,000	Novato
Northern California Institute	18	$10,322,590	San Francisco
Lawrence Berkeley Lab	14	$9,585,310	Berkeley
Palo Alto Veterans Institute for Research	19	$9,324,588	Palo Alto
SRI International	8	$5,995,253	Menlo Park

INVENTORY BUILDING OWNERSHIP



TOP OWNERS:

Healthpeak PROPERTIES

ALEXANDRIA

Blackstone

LEASE | Q2 2024

TENANT	TYPE	ADDRESS	SIZE	MARKET
Terns Pharmaceuticals	Renewal	1065 Hillside Blvd	115,600	South San Francisco
Complete Genomics	Renewal	2904 Orchard Parkway	79,000	Silicon Valley
Sutter Health	New	4480 Willow Rd	65,000	Pleasanton
Protagonist Therapeutics	Renewal	7707 Gateway Blvd	57,250	Newark
Gen Edit	New	3000 Marina Blvd	13,600	South San Francisco

SALE | Q2 2024

ADDRESS	SIZE	PRICE	MARKET
6200-6230 Stonebridge Mall Rd*	595,000	$135M	Pleasanton

Source: TW Research, CoStar. NIH
*Mixed Use Property – Including lab & office

TRANSWESTERN

KEY MARKET POINTS

- The I-270 Corridor continues to top NIH funding records, with 2024 YTD grants totaling $1.27B. The amount represents a 20% increase over 2023 mid-year levels.
- The development pipeline remains poised to undergo a stable absorption; other national life science hubs are experiencing an imbalance with supply outpacing demand.
- Healthy tenant improvement allowances have relieved external pressures on tenants to focus out of area searches. Asking rates have yet to be affected, largely due to the responsible supply and demand dynamics.

TRENDLINES	Q2 2024	Q2 2023	ONE-YEAR TREND	ONE-YEAR FORECAST
INVENTORY (MSF)	11.05	10.29	↑	↑
NET ABSORPTION (THOUSANDS SF)	116.54	(40.98)	↑	↔
VACANCY RATE	14.50%	10.41%	↑	↔
UNDER CONSTRUCTION (MSF)	1.67	1.90	↓	↓
ASKING RENT, NNN (PSF)	$53.72	$49.93	↑	↓
YTD NIH DMV GRANTS (BILLIONS)	$1.27	$.93	↑	↑

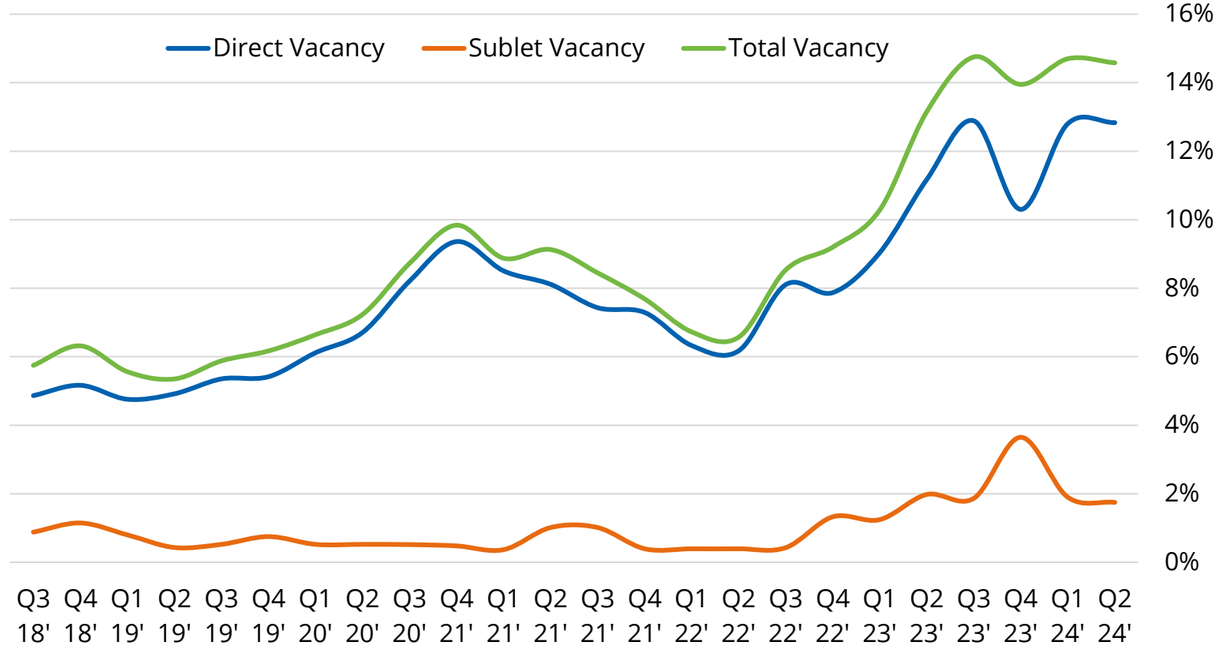
MARKET OVERVIEW

The Greater Washington DC has been resilient despite the nationwide slowdown in the life sciences sector. This region's life sciences ecosystem is uniquely positioned to withstand industry challenges, due to its proximity to key government agencies and world-class academic institutions. The steady stream of funding, talent, and collaboration opportunities that are critical for innovation and growth.

The DC market's development pipeline renews the desire to emulate other life science hubs that have steered toward urban campuses, utilizing the surrounding neighborhood and infrastructure. The I-270 corridor largely being suburban have turned to bridging the gap, by bringing amenity rich and transit focused campus style developments. Both types have a common goal to foster collaboration amongst the users and tenants.

Two notable spec lab conversions were delivered in Q2 totaling 80,000 SF. Altus Realty's office/lab reposition located at 1550 Research Blvd in Rockville; and Alexandria Real Estate Equities, Inc. at 55 W Watkins Mill Rd in Gaithersburg.

TOTAL VACANCY RATE

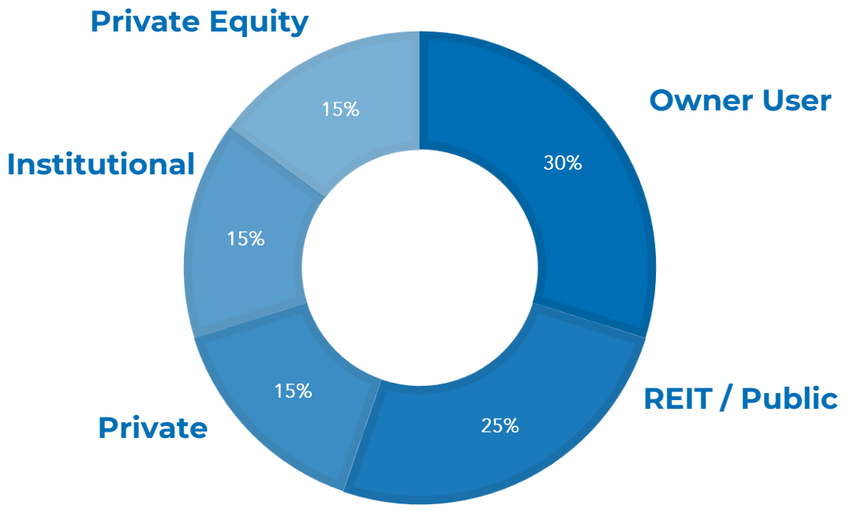


Source: TW Research. CoStar

LOCAL NIH FUNDING AWARDS I 2024

ORGANIZATION	AWARDS	FUNDING	CITY
Johns Hopkins University	1130	$656,960,995	Baltimore
University Of Maryland Baltimore	320	$147,646,167	Baltimore
George Washington University	95	$61,375,118	Washington
University Of Maryland, College Park	115	$48,381,838	College Park
Georgetown University	100	$44,626,129	Georgetown
University of Delaware	75	$32,765,454	Newark
Children's Research Institute	58	$26,386,887	Washington
Westat, Inc.	3	$23,059,979	Rockville
Henry M. Jackson	32	$14,135,242	Bethesda
Hugo W. Moser Research Institute	26	$12,807,761	Baltimore
Alfred I. Du Pont Hospital for Children	12	$6,922,142	Wilmington

INVENTORY BUILDING OWNERSHIP



TOP OWNERS:

ALEXANDRIA

AstraZeneca

MATAN

LEASE I Q1 2024

TENANT	TYPE	ADDRESS	SIZE	MARKET
Westat Inc	New	7501 Wisconsin Ave	182,000	Bethesda
Precision for Medicine	Renewal	8415 Progress Dr	79,000	Frederick
Catalent Pharma Sol	Renewal	801 W Baltimore St	60,500	Baltimore
Precision for Medicine	Expansion	8415 Progress Dr	41,250	Frederick
uBriGene	New	20400 Century Blvd	10,350	Germantown

Top Construction Pipeline Developments

ADDRESS	SIZE	MARKET	DELVERY
4 MLK	250,000	University BioPark	Q4 2024
Research Square	89,640	Rockville	Q3 2024
Fuse at Mason	345,000	Washington	Q1 2025
Belward Campus*	750,000	Rockville	TBD
Pike & Rose*	260,000	Bethesda	TBD

Source: TW Research. CoStar, NIH (*Permitted w/ construction TBD)

PHOENIX - KEY POINTS

- Phoenix's Bioscience Core has planned 6 MSF of future development, expanding the downtown life science presence.
- Employment data supports a growing life science ecosystem, growing 6% YOY.
- Mayo's Discovery Oasis development continues to progress on their 220-acre parcel.
- In June, University of Arizona's Health Science Center received $20M in funding from Phoenix City Counsel, supporting the expansion of the Bioscience Core.

TRENDLINES	Q2 2024	Q2 2023	ONE-YEAR TREND	ONE-YEAR FORECAST
INVENTORY (MSF)	2.29	2.29	↑	↑
NET ABSORPTION (THOUSANDS SF)	(0.87)	23.44	↑	↑
VACANCY RATE	6.6%	7.2%	↓	↓
UNDER CONSTRUCTION (MSF)	0.35	0.50	↓	↑
ASKING RENT, NNN (PSF)	$41.75	$40.39	↑	↑
YTD NIH DMV GRANTS (BILLIONS)	$0.25	$0.18	↑	↑

MARKET OVERVIEW

Since the early 2000s, the life sciences sector in Phoenix has experienced steady growth, bolstered by a solid foundation that has facilitated the success of new entrants. Over the past decade, this growth has accelerated significantly. Central to this expansion is the Phoenix Bioscience Core (PBC), a 30-acre hub located in downtown Phoenix. This site is now home to the highest concentration of bioscience and research tenants in Arizona. Phoenix's commitment to advancing the life sciences sector is evident from the support expressed by Mayor Kate Gallego. In her 2023 State of the City address, she emphasized the city's dedication to this industry, stating, "The city and I want to show that we are prioritizing this (industry) and that we are part of the vision to make sure it succeeds."

The region's collaborative environment, which includes robust public and private partnerships, strengthens its potential for future growth. Notably, three major academic institutions: Arizona State University, Northern Arizona University, and the University of Arizona. These institutions have established a presence within the PBC, aligning with the ecosystem's collaborative ethos.

LOCAL NIH FUNDING AWARDS I YTD 2024

ORGANIZATION	AWARDS	FUNDING	CITY
University of Arizona	237	$121,574,458	Tucson
Arizona State University	97	$42,545,172	Tempe
Mayo Clinic Arizona	41	$18,825,788	Scottsdale
Banner Health	4	$12,372,919	Phoenix
Northern Arizona University	8	$8,604,024	Flagstaff
St. Joseph's Hospital & Medical Center	10	$6,271,094	Phoenix
Translation Genomics Research Inst	7	$5,097,043	Phoenix
Fibronox, LLC	2	$1,241,420	Tucson
Ceria Therapeutics, Inc.	1	$1,006,408	Tucson
Precision Epigenomics, Inc.	1	$1,004,107	Tucson
Bmseed, LLC	1	$861,339	Tempe

Market	Inventory Square Feet	Overall Vacancy Rate	Net Absorption*	12-Month Net Absorption*	Asking Rents*	Annual Rent Change	Under Construction
Boston	69,294,880	17.80%	(246.5)	(685.7)	$59.85	2%	16,360,000
Chicago	12,005,750	11.30%	(24.9)	73.4	$45.80	3%	810,000
Houston	4,423,800	19.30%	(21.4)	118.8	$47.24	6%	350,000
New Jersey	32,180,000	9.54%	217.0	(358.1)	$36.46	3%	1,700,000
New York	3,643,800	27.69%	(29.3)	151.5	$55.91	1%	850,000
Philadelphia	23,190,500	13.73%	(27.0)	145.9	$41.34	2%	6,000,000
Raleigh/Durham	10,4290,700	11.50%	(19.8)	(137.7)	$30.06	4%	6,650,000
Phoenix	2,290,500	6.6%	(.87)	34.9	$41.75	3%	350,000
San Diego	18,870,500	14.64%	335.2	225.1	$52.84	6%	4,200,000
San Francisco	46,180,000	21.50%	(262.0)	(1,201.8)	$61.88	2%	8,690,000
Washington DC	11,050,000	14.56%	116.5	410.0	$53.72	2%	1,670,000
TOTAL	311,957,680	15.61%	(37.1)	(1,223.7)	$56.86	4%	32,320,000

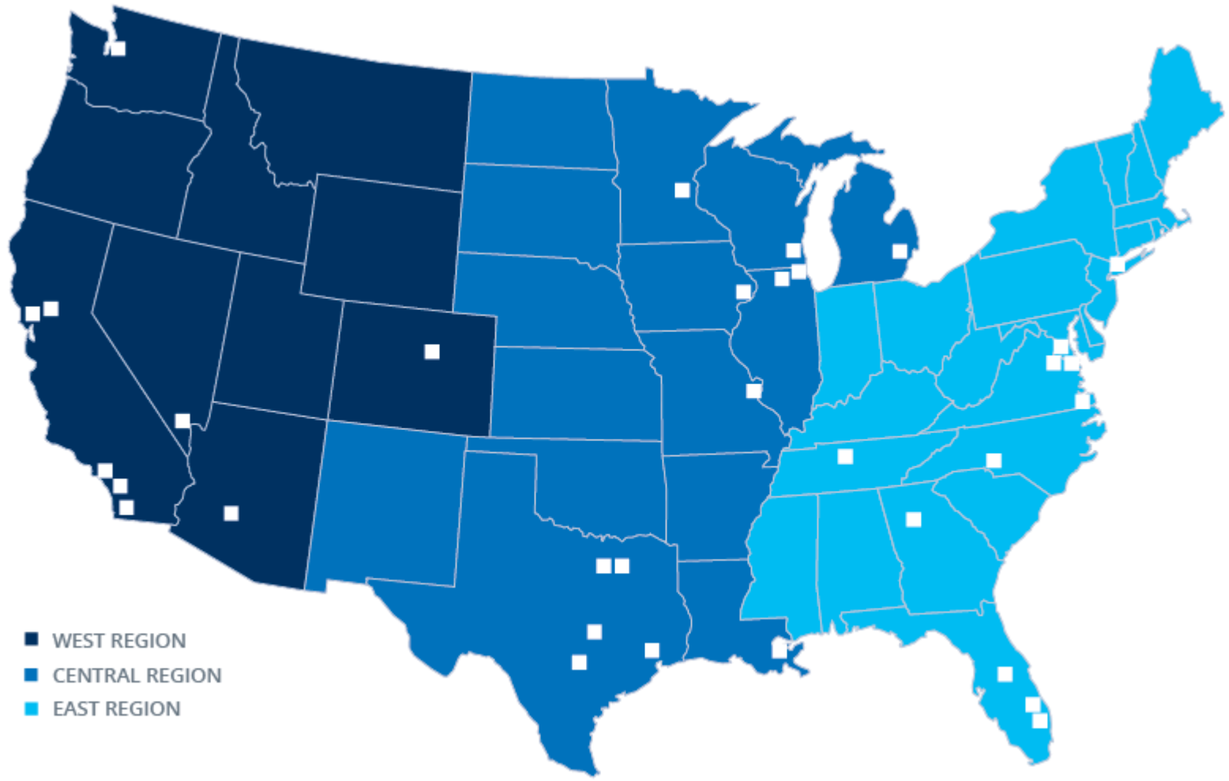
Source: TW Research. CoStar *Net Absorption in thousands- Base rent only

National Coverage

33 Offices – 3 Regions

Transwestern's research team has sorted through tens of thousands of buildings to amass a qualified building inventory. Our aim is to identify the entire life sciences market inventory by including owner users, suburban markets and outliers that are vital to understanding the entire ecosystem.

At Transwestern, our insights are rooted in granular data that is evaluated and envisioned to identify, execute and deliver tangible value for our clients and industry partners. Please feel free to connect with our team, as we embrace industry collaboration within the life sciences community.



REAL ESTATE SERVICES (TRS)

- Agency Leasing
- Asset Services
- Capital Markets
- Tenant Advisory + Workplace Solutions
- Research & Investment Analytics

INVESTMENT GROUP (TIG)

- Separate Accounts
- Discretionary Funds
- Non-Discretionary Accounts
- Investment Analysis

DEVELOPMENT COMPANY (TDC)

- Speculative
- Build-to-Suit
- Fee Development

HOSPITALITY GROUP (THG)

- Hospitality Integration
- Asset Repositioning
- Boutique Hotel Development & Investment



PRIMARY AUTHOR

Alex Browne
Life Science Research Director
Alex.Browne@transwestern.com
415 489 1785

FOR MORE INFORMATION

Elizabeth Norton
Sr. Managing Director
Research Services
Elizabeth.Norton@transwestern.com
202 775 7026

ABOUT TRANSWESTERN

Four dynamic, integrated companies make up the Transwestern enterprise, giving us the perspective to think broadly, deeply and creatively about commercial real estate. Clients and investors rely on us for expertise that spans institutional and opportunistic investment, development, hospitality, and brokerage and asset services. Our award-winning, collaborative culture empowers team members with resources and independence to work across boundaries in pursuit of innovative solutions, reinforcing a reputation for service excellence that translates to measurable results. Through offices nationwide and alliance partners around the globe, we positively impact the built environment and our communities while fostering a work climate that champions career vitality for all. Learn more at transwestern.com and @Transwestern.

RESEARCH METHODOLOGY

The information in this report is a compilation of life science properties including office, industrial and flex. Qualified properties must include one of the following spaces, laboratory, cleanroom, dry laboratory or GMP space. All properties are in select U.S. metropolitan areas. Government and on-campus academic owned buildings are excluded from analysis. All rents are reported as triple net and can be skewed, in some cases, due to factors including, but not limited to, the level of new construction and the amount of available space with no listed asking rents.

Copyright © 2024 Transwestern. All rights reserved. No part of this work may be reproduced or distributed to third parties without written permission of the copyright owner. The information contained in this report was gathered by Transwestern from CoStar and other primary and secondary sources believed to be reliable. Transwestern, however, makes no representation concerning the accuracy or completeness of such information and expressly disclaims any responsibility for any inaccuracy contained herein.