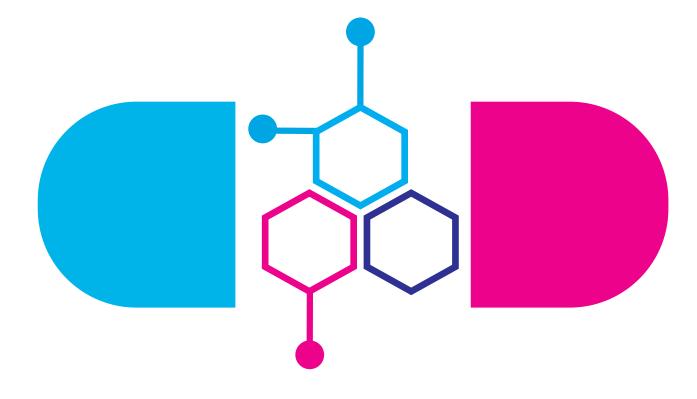
SUMMIT ISSUE 08 FALL 2021

TAPPING INTO BIOTECH



Life sciences real estate has been a "hot" property type for the past decade—and even more since the pandemic. Will all the capital targeting the space be placed where it needs to go?

targeting the space will successfully find a home.

Life sciences real estate (LSRE) has been a "hot" property type

for the past decade or so, and interest has accelerated with the advent of the COVID-19 pandemic. The sector benefits from

strong demand drivers with limited new supply (compared to demand), although new developers and investors are entering the space. Returns have been strong and capital is likely to flow to life

At the same time, the sector is relatively small and concentrated in just a few markets. In this article, we examine the main attributes of success in LSRE-and explore whether all of the capital

sciences real estate for the foreseeable future.

STRONG DEMAND DRIVERS

sector benefits from advances sciences space. in (and the convergence of) technology and medicine, changes in the delivery of healthcare—including highly targeted therapies—and an aging population that requires additional healthcare services. Significant capital sources, including the National Institute people, respectively) in 2020, of Health (NIH), venture capital, and corporate funding, support the industry's high R&D costs.

the cost of DNA sequencing is kind of medication. decreasing at a rate faster than Moore's Law.1 For example, it cost US\$3 billion to map the first human genome in 2003. By 2019, it was less than US\$1,000—and within a decade or less, the cost could be less than US\$100. The result is an acceleration in the growth of emerging platform

LSRE demand comes from technologies, such as messenger companies involved in providing RNA (mRNA), which was used products and services for the to develop the Moderna and healthcare sector. In particular, Pfizer/BioNTech COVID-19 life sciences companies are vaccines. That is just one of focused on the development the many advances that will and commercialization of new likely spur new investments and drugs and medical devices. The drive demand for additional life

America's aging population will also drive increasing consumption of health services. The population cohort of those aged 70+ and 80+ made up 11.1% and 3.9% of the US population (36.1 million and 12.8 million respectively. Those figures are projected to increase to 14.4% and 5.3% (50.5 million and 18.6 million) by 2030, representing annual growth rates of 2.7% and Advances in technology have 2.8%, respectively, significantly accelerated the pace of change outpacing general US population in biological research, leading growth of 0.8%. As the elderly to more companies with greater populations grows, so will the research funding. Emblematic prevalence of chronic health of this rapid change is that conditions that require some

By William Maher Director of Strategy & Research RCLCO Fund Advisors

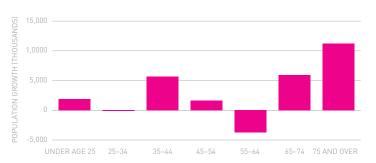
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EXHIBIT 1: POPULATION GROWTH BY AGE COHORT: 2020-2030

Source: US Census Bureau



Healthcare products account for more than half of the life sciences industry revenue, and the increasing medical needs of the aging US population drives demand for pharmaceuticals. Worldwide drug sales have grown at a compound annual growth rate (CAGR) of 3.5% over the past five years (through 2020), outpacing GDP growth of 1.5% over the same time period. As shown in Exhibit 2, drug sales growth is expected to accelerate going forward, with overall sales projected to grow to US\$1.4 trillion by \$250 2026, a CAGR of approximately 7.7%.² Future sales will require significant research and development costs in order to develop \$200 new drugs and medical products. Worldwide pharmaceutical R&D spend is forecast to grow at an annualized rate of 4.2% \$150 between 2020 and 2026. (See Exhibit 3)

EXHIBIT 2: WORLDWIDE PRESCRIPTION DRUG SALES AND FORECAST, 2016-2026

Source: Evaluate Pharma



EXHIBIT 3: WORLDWIDE PHARMACEUTICAL R&D SPEND (US\$ BILLIONS)

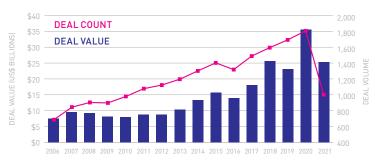
Source: Evaluate Pharma



This outsized growth has brought a substantial influx of capital from both public and private sectors. Life sciences venture funding flowed at a historic pace in 2020, and 2021 is on pace to set an all-time high for both deal volume and capital raised (Exhibit 4).

EXHIBIT 4: US VENTURE CAPITAL DEAL ACTIVITY IN LIFE SCIENCES

Source: Pitchbook Venture Monitor; as of 30 June 2021



SPECIALIZED KNOWLEDGE REQUIRED

Investment in life sciences Additionally, relationships are regarding tenants lab space. Some of the additional systems, cleanrooms, more an established operator. plumbing capacity throughout the building, higher power capacity, and higher floor-tofloor heights.

drivers: reusability. Freshly years—creating ample room tenant credit. for second-generation leases at a high net effective rent, for a fraction of the upfront TI requirements. However, tenant build outs must be designed to offer the greatest flexibility second (and later) generation tenants.

real estate requires a deep key in the life science space, understanding of the sector particularly in attracting and specialized knowledge tenants. LSRE is typically and mission-critical space for operations. Expertise in lab most tenants, who therefore design and implementation place a premium on leasing is crucial, creating a barrier space from a reliable operator. to entry for traditional office Relationships are even operators trying to develop or more crucial in speculative convert existing office space into developments, which must cater to a wide array of tenants, physical requirements include and build-to-suit projects, increased building ventilation where the tenant will rely on

of the tenant also requires specialized knowledge. Life science tenants range from Another important reason for start-ups to growth companies specialized knowledge is one of to established, publicly traded the asset type's greatest value pharmaceutical companies. Many of the start-up and delivered life sciences space has growth companies are cash flow an average use-life of around negative with a limited history, fifteen years before renovation making the understanding is required, while the average of products and financial lease term is only around 7–10 backers key to underwriting

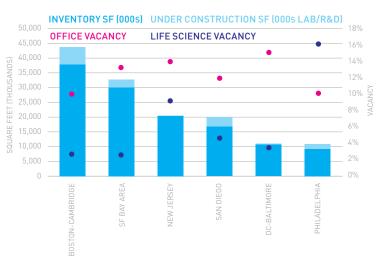
PREFERRED MARKETS

Life sciences tenants have concentrated in cities with an educated workforce, access to key industry scientists, highly ranked schools, a sizeable high-tech workforce, and access to funding. Evaluating the credit quality The top three life sciences markets are Boston, San Francisco, and San Diego, which comprise more than half of all life sciences space in the US. These cities provide access to quality graduates in biological and biomedical sciences as well as PhDlevel candidates from nearby academic institutions and hospitals. Other markets with significant life sciences sectors include New Jersey, Philadelphia, and Washington, DC, while markets such as Raleigh/Durham and Seattle could develop sizable life sciences clusters over the next decade.

> Market fundamentals for life sciences and lab space are attractive, both historically and expected going forward. While life sciences inventory is still a fraction of traditional office inventory, at approximately 4% of office inventory, LSRE makes up more than 10% of office inventory in Boston, New Jersey, and San Diego. Vacancy rates in the top life sciences markets are well below office vacancy rates (with the exception of Philadelphia), as shown in Exhibit 5. Rental rate growth has nearly averaged double digits over the past five years, significantly outpacing rental rate growth across most other property types. With demand expected to outstrip supply for the short and intermediate term. Green Street forecasts that LSRE NOI growth will outpace both gateway office and commercial real estate over the long term.3

EXHIBIT 5: TOP SIX US LIFE SCIENCE MARKETS BY INVENTORY

Source: CBRE; Q1 2021



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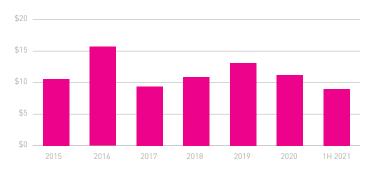
Investor interest coming out of the pandemic has led to record volume so far in 2021.

INVESTMENT CONSIDERATIONS

The growth of the life sciences industry coupled with a limited new supply has attracted the attention of commercial real estate investors. While sales activity has been relatively stable over the past six years (with the exception of 2016 and 2019), investor interest coming out of the pandemic has led to record volume so far in 2021. Transaction volume through June totaled US\$9.0 billion (Exhibit 6), on track to exceed the prior peak in 2016 when Blackstone took Biomed Realty Trust private.

EXHIBIT 6: LIFE SCIENCE SALES VOLUME (US\$ BILLIONS)

Source: Newmark Research

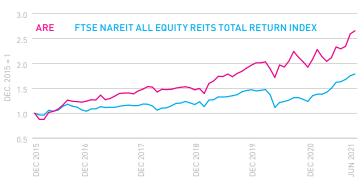


LSRE cap rates have decreased from 8.6% in 2010 to 6.1%, a record low, according to Real Capital Analytics. Cap rates for the sector have historically tracked office cap rates but are now approximately 40 BPS lower, reflecting declining investor interest in traditional office and increasing investor interest in life sciences. Relative to industrial and multifamily, two more in-demand property types, life sciences cap rates remain between 30 to 110 BPS above these property types, respectively. Despite a lower cap rate than traditional office, LSRE cash flows are expected to be higher, as compared to traditional office, LSRE typically has higher tenant renewal rates and lower tenant improvement costs.

Investment returns in the private market are difficult to track as life sciences makes up a small component of major real estate return indices such as NPI and NFI-ODCE.4 However, the performance of the one LSRE REIT that is publicly trade—Alexandria Real Estate Equities (ARE)—compared to the overall REIT benchmark shows clear outperformance over the past 5+ years (Exhibit 7).

EXHIBIT 7: ARE VS. NAREIT ALL EQUITY REITS (TOTAL RETURN); GROWTH OF US\$1

Source: NAREIT



Investing in LSRE is not a risk-free proposition. As discussed above, many life sciences companies have little or no revenue, and they are therefore reliant on positive research results to have continued access to capital. As a small sector, new supply is always a risk, particularly in the current environment when high general office vacancy rates may lead to an increase in conversions. Finally, the biotech and pharmaceutical industries are highly regulated and dependent on government agencies for both drug approvals and pricing power.

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Strong demand for space from biotech and other companies should continue to drive rent growth and total returns despite the low cap rates.

WHAT'S NEXT FOR LSRE

Investor interest in life sciences real estate is robust, leading to rich William Maher is Director of Strategy & Research; Ben Maslan pricing and record low cap rates and high transaction volumes. is Managing Director; and Cecilia Galliani is Vice President for New entrants have entered the market to capitalize on the strong RCLCO Fund Advisors (RFA). RFA is an affiliate of RCLCO investor interest, contributing to an increase in supply. However, (formerly Robert Charles Lesser & Co.), which has been the "first the strong demand drivers should continue to lead to absorption call" for real estate developers, investors, the public sector, and keeping pace with supply. Cap rates are at record lows, but that is non-real estate companies and organizations seeking strategic the case with most real estate sectors.

Life sciences real estate is priced at spreads that are similar to other property types with strong demand drivers and keen investor interest. Strong demand for space from biotech and other companies should continue to drive rent growth and total returns NOTES despite the low cap rates. Although the overall size of the sector is limited, institutional investors that can develop relationships with operators with expertise in the right markets should continue to find opportunities and generate attractive returns.



ABOUT THE AUTHORS

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- ¹ Moore's law is the observation that the number of transistors in a dense integrated circui
- ² Evaluate Pharma, "World Preview 2021, Outlook to 2026," Evaluate Pharma, July 2021 https://info.evaluate.com/rs/607-YGS-364/images/WorldPreviewReport_Final_2021.pdf
- ³ Green Street, s.v. "Life Sciences Insights," Accessed July 15, 2021.
- ⁴ National Council of Real Estate Investment Fiduciaries, s.v. "Property Index, Accessed July 15, 2021; National Council of Real Estate Investment Fiduciaries, s.v. "Fund Index, Open End Diversified Core Equity," Accessed July 15, 2021.