

LIFE SCIENCE: THRIVING AS NEVER BEFORE

Life science real estate, along with data centers and industrial real estate, has thrived enormously over the past two years of the pandemic. As the world economies transition to a new phase, where COVID-19 is understood to be in an endemic state, there are no signs that demand for this fast-growing niche in commercial real estate is diminishing. In fact, the demand for lab space is only intensifying. This report will identify and explain the trends causing the increased demand for life science buildings.

A majority of the work performed by pharmaceuticals and other life science firms requires specialized equipment and building infrastructure that cannot be replicated at home. As a result, life science space has enjoyed exceptionally high occupancy rates in contrast to traditional office space.

For example, the Boston-Cambridge area has the highest amount of spec construction at 9.3 million square feet, also has the tightest lab vacancy rate at 1.1 percent, and the highest amount of space being sought by tenants at 6 million square feet.¹

The rapid growth of life science research during the pandemic triggered a record boom in the development of new lab space and offices serving these companies.

Before the pandemic, the development of buildings geared toward biotechnology, pharmaceutical, and other laboratory firms was already rising. The demand for this space intensified as billions of dollars of venture capital and NIH funding poured into research and development of a COVID-19 vaccine and other therapies for the virus. Venture capital funding, for instance, stood at more than \$8 billion at the end of 2021.

Accordingly, as of last year's fourth quarter, including ground-up construction and conversions, more than 31 million square feet of life sciences space was under development, a record high.²

The life science-development windfall reflects major technological shifts that have been taking place in the sector over the past decade. Research and development used to be controlled by big pharmaceutical manufacturers and other major corporations.

However, small entrepreneurial companies backed by venture capital have been responsible for numerous breakthroughs in research and new therapies in recent years. These firms are often founded by people at top research schools and hospitals. As a result, they are often more nimble than large corporations, and they have had an enormous appetite for specialized office and lab space.

In past years, life science development was localized to the big three life science markets: Boston, San Francisco, and San Diego. However, development is spreading across multiple markets, including markets that were merely considered emerging as recently as five years ago, such as Los Angeles, New York, Raleigh-Durham, Maryland, and Houston.



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The life science sector is not without its risks. For instance, owners who think they can easily convert their office space into life science buildings to increase occupancy are in for a rude awakening. Life science buildings are more expensive than regular office buildings because they need special systems for ventilation, cooling, and moving equipment.

Moreover, in terms of ground-up development, buildings serving life sciences firms are being developed with very little or no preleasing, and their tenants are often startups that have yet to prove themselves. If the capital sources for these firms dry up, the building owner is left holding the bag, so to speak.

Due to these considerations, it is vital that life science buildings are developed in thriving life science ecosystems, i.e., locales that combine and harness the resources of universities, NIH, and venture capital funding, and a governmental regulatory environment that is conducive to the industry.

"With the low vacancy rate and the high demand for space in the Boston-Cambridge area, our team keeps a running inventory of new and potential convertible lab options in neighboring submarkets. This allows us to provide viable, competitive options for growing life science organizations," says Eric Solem, a Managing Principal and President of the Lee & Associates Boston office.

According to Solem, this is precisely one of the reasons that Boston and other key hubs have become premier locations for many firms. Any location catering to the life science sector must have universities that cultivate the necessary talent and ideas, along with an attractive regulatory environment highly attuned to the needs of life science firms.

One of the perennial headwinds the industry faces is the lack of employees and talent to sustain the sector. A recent study found that 51 percent of CEOs of life sciences and pharma companies admit to more significant difficulties in attracting and retaining the right people, more than any other industry in the study.³ Even while facing this constraint, the life science sector is thriving as never before, and there is no foreseeable end to its success.

