United States | 2021

Research

Life Sciences Emerging Markets Index: Poised for a paradigm shift

New set of first-mover opportunities for life sciences companies and investors

The events of the past 12 months have proven without a doubt that the life sciences industry plays a unique and vital role in the economy.

By the beginning of 2020, the life sciences industry was flush with cash, the beneficiary of structural tailwinds. Years of surging research and development (R&D) funding, both public and private, had produced technological breakthroughs in therapeutics, diagnostics, medical devices and other enabling technologies, fueling growth among a wide variety of life sciences companies. Thus, the industry was as well-situated as it could be to confront the challenges posed by COVID-19. The life sciences industry did have to work through operational roadblocks; however, it also enjoyed unprecedented capital infusion in terms of both federal funding (e.g., Operation Warp Speed) and newfound investor interest.

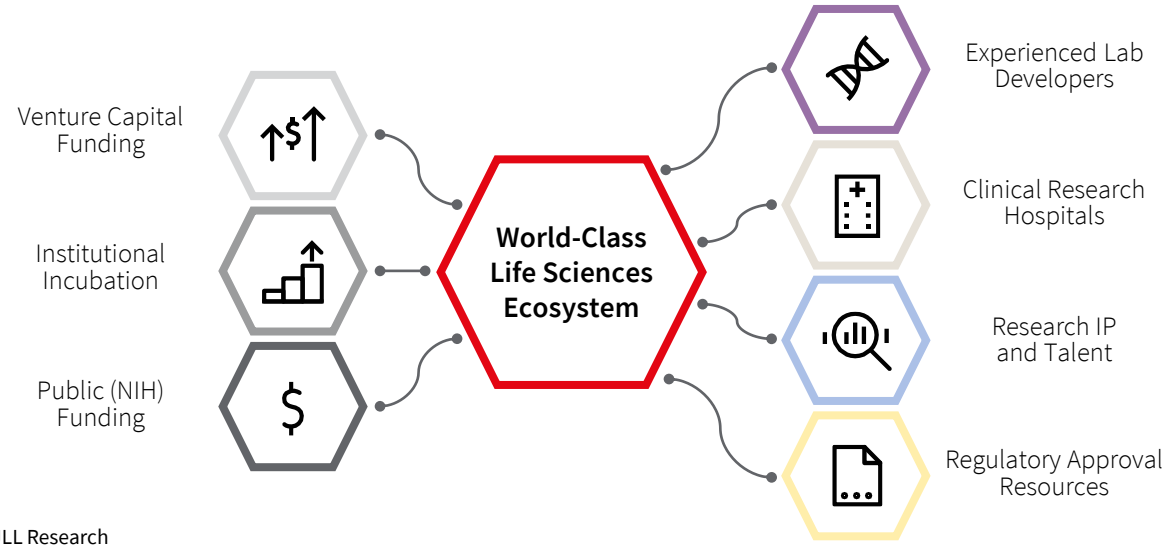
The combination of unique and structural tailwinds produced two effects on the national life sciences real estate landscape. The traditional cluster markets of Greater Boston, San Francisco and San Diego, which have traditionally been home to a disproportionately high concentration of industry activity, became increasingly fully valued, with fewer tenant leasing opportunities for companies and high barriers to entry for investors. At the same time, the compression within the major markets radically improved the relative attractiveness of nascent life sciences communities—more markets outside the established clusters began to attract both corporate and investor interest, based on the general abundance of funding as well as the relative scarcity of opportunities in the traditional cluster markets for both occupation and investment. As a result, a larger group of markets were beginning to merit a second look, many of them buoyed by friendlier cost-of-living and tax environments.

At the beginning of 2021, JLL Research expanded its lens on life sciences to capture the qualities that define this new set of emerging life sciences markets. While the traditional top markets will likely retain their positions, it is increasingly clear that the next tier of markets is poised to ascend—and offer valuable opportunities to both investors and occupiers as they build scale.

With this in mind, we present our **Emerging Life Sciences Markets Index**. Our proprietary categorization and ranking index evaluates metro areas with respect to a wide variety of metrics chosen to best reflect the most critical qualities of life sciences markets on the upswing.

What did we consider in creating our Emerging Markets Index?

Key components of a successful life sciences cluster



Source: JLL Research

We began the development process for our Emerging Life Sciences Markets Index by determining what factors would best capture the most dynamic and substantial trends within the industry. Given our deep experience within this sector, we knew that we would start with economic and demographic demand indicators to pinpoint where the real estate response should occur in the coming years. We cast a wide net, examining 110 U.S. markets to make sure we captured as many green shoots as possible.

We started with the employment landscape. Where are life sciences jobs growing the most, and how was that reflected in life sciences wage growth?

Next, we evaluated the talent pipeline across markets. What markets have risen to the top with respect to an accelerating concentration of science, technology, engineering and math (STEM) professionals?

Finally, we created a measure of potential, which is designed to reflect transformational upside with respect to the life sciences industry in a given market and includes relevant demographic indicators that will enable the market to mature into long-term national prominence.

The result of this research is a three-pronged model:

Momentum:
measures the size of the life sciences employment base and the industry's momentum

Talent:
measures educational attainment and demographic tailwinds

Potential:
measures forecasted growth of key market performance indicators such as millennial population, median household income growth and housing availability

Momentum

The goal of the emerging life sciences momentum index is twofold: to capture **employment acceleration** and **wage positioning**, from both the employee and the company perspective. Employment growth acceleration suggests that a market is maturing and attracting more activity. Given the significance of the network effect on life sciences markets, increased activity kicks off a virtuous cycle, making the market in question more relevant to the industry and improving its ability to attract and retain an all-important robust talent base. Wage positioning can be construed two ways: wages above industry average are an enticement to talent, while wages below industry average could be a positive for value-conscious employers.

Employment acceleration

Metropolitan area	Acceleration, 5 yr. vs. 10 yr.
WA: Seattle-Tacoma-Bellevue	**3.1%**
GA: Atlanta–Sandy Springs–Alpharetta	**3.0%**
FL: Orlando-Kissimmee-Sanford	**2.9%**
TX: Dallas–Fort Worth–Arlington	**2.8%**
WI: Madison	**2.7%**
AR: Little Rock–North Little Rock–Conway	**2.6%**
FL: Miami–Fort Lauderdale–Pompano Beach	**2.4%**
SD: Sioux Falls	**2.4%**
NC-SC: Charlotte-Concord-Gastonia	**2.2%**
KY-IN: Louisville/Jefferson County	**1.9%**

Sources: Emsi, JLL Research

The employment acceleration metric measures the difference in compound average growth in life sciences employment between 2010–2015 and 2015–2020; a higher employment acceleration value means that life sciences hiring is gaining steam. Seattle benefits from a favorable combination of an existing tech presence and a lower cost of living than the Bay Area. Atlanta, Miami and Dallas benefit from advantageous overall migration trends, as Sun Belt markets constitute a high share of job growth overall; given already-positive underlying trends, their life sciences ascent should be of great interest to potential investors and occupiers alike.

Wage positioning

Metropolitan area	Indexed median wage
CA: Los Angeles–Long Beach–Anaheim	**1.11**
MN: Minneapolis–St. Paul **WI:** Bloomington	**1.04**
NC: Durham–Chapel Hill	**1.04**
WA: Seattle-Tacoma-Bellevue	**1.03**
CA: Sacramento-Roseville-Folsom	**1.03**
NC: Raleigh-Cary	**0.99**
CA: Riverside–San Bernardino–Ontario	**0.98**
TX: Houston–The Woodlands–Sugar Land	**0.96**
TX: Dallas–Fort Worth–Arlington	**0.94**

Sources: Emsi, JLL Research

Wages falling within 10 percent of the national median are a sweet spot for life sciences markets—on the high end, the premium can encourage talent migration, while on the lower end, companies can capitalize on the comparative savings. The Raleigh-Durham, Dallas and Seattle areas are boosted by lower cost of living than the more established life sciences markets. Los Angeles benefits from its prominence within the medical device industry, which enjoys tailwinds from the increased prominence of diagnostics, remote patient monitoring, and robotics. Fortunate wage positioning and employment acceleration reinforce each other, magnetizing the market's clustering effect.

Talent

Nothing is more important to the success of a local life sciences industry than a strong and reliable talent base. A sturdy talent base provides potential employees on the scale necessary to ensure that enough life sciences companies flourish so that they can reinforce each other, collaborate and attract funding.

Total STEM degrees

Metropolitan area	Total STEM degrees (pop. 25+)
NY-NJ-PA: New York–Newark–Jersey City	**1,183,889**
CA: Los Angeles–Long Beach–Anaheim	**683,770**
IL-IN-WI: Chicago-Naperville-Elgin	**539,328**
DC-VA-MD-WV: Washington-Arlington-Alexandria	**493,367**
CA: San Francisco–Oakland–Berkeley	**461,090**
TX: Dallas–Fort Worth–Arlington	**412,309**
TX: Houston–The Woodlands–Sugar Land	**409,354**
MA-NH: Boston-Cambridge-Newton	**386,862**
Ontario: Toronto	**373,110**
GA: Atlanta–Sandy Springs–Alpharetta	**354,902**

Sources: Emsi, JLL Research

The top three life sciences markets—Boston, San Francisco and San Diego—were all nourished in the beginning by the strength of their local university systems, which continue to generate cutting-edge industry expertise. Over the past 10 years, the national life sciences industry has advanced enough through prodigious research and technological process to broaden the overall industry knowledge base, enabling more institutions to contribute. Therefore, not just the concentration but the sheer number of STEM degrees is an important factor in life sciences success.

New York, Los Angeles and Chicago have not historically had the same life sciences employment concentration as the top three clusters. However, in an age of unprecedented expansion for the life sciences industry, this is no longer as critical, and given technological advances, all three of these markets are now more valuable based on the size of their talent pools. The Washington, Dallas and Houston areas also benefit from the potential scale they offer in terms of hiring potential.

Potential

For an emerging life sciences market to reach full maturity, talent and momentum must combine and synthesize. The best way to ensure that is to provide the foundation for an appealing long-term lifestyle for young professionals, so that they will put down roots and spend their prime career years nurturing the local life sciences ecosystem. To capture potential, we examined a combination of recent GDP growth, which sets the stage for a healthy metro economy, and projections for millennial population, income and housing stock growth, all of which would attract and retain life sciences professionals.

Metropolitan area	Score	Metropolitan area	Score
NC-SC: Charlotte-Concord-Gastonia	**93.00**	**ID:** Boise City	**85.20**
WA: Seattle-Tacoma-Bellevue	**88.30**	**NC:** Raleigh-Cary	**84.44**
CO: Denver-Aurora-Lakewood	**87.54**	**TX:** Dallas–Fort Worth–Arlington	**83.84**
TX: Austin–Round Rock–Georgetown	**87.23**	**GA:** Atlanta–Sandy Springs–Alpharetta	**83.33**
TN: Nashville-Davidson-Murfreesboro-Franklin	**85.72**	**FL:** Orlando-Kissimmee-Sanford	**83.32**

Sources: Bureau of Economic Analysis, Esri, JLL Research

Sun Belt markets with a tech presence, such as Charlotte, Denver, Seattle and Austin, fared well in this analysis; these markets have a critical mass of educated millennial professionals that will draw in additional talent (and perhaps provide jobs for the other half of two-income couples). These markets tend to occupy a sweet spot with respect to cost of living between established coastal/gateway markets and true secondary markets, a positive for both migration and hiring. Many Sun Belt markets enjoy a relative tax advantage as well, which is a significant draw for corporations of all kinds.

2021 state corporate tax rates	
California	**8.8%**
Massachusetts	**8.0%**
Georgia	**5.8%**
Utah	**5.0%**
Arizona	**4.9%**
Colorado	**4.6%**
Florida	**4.5%**
North Carolina	**2.5%**
Texas	**0.0%**
Washington	**0.0%**

Sources: Tax Foundation, JLL Research

Funding tends to be "sticky" in that established research institutions tend to draw an outsized share. However, significant growth in higher education R&D expenditure in life sciences among emerging market states is a harbinger of future outperformance, as the research infrastructure there is fortified.

Higher education R&D expenditures
(By state, FY 2019, $ in thousands)

State	Life sciences
California	**6,680,159**
New York	**4,604,502**
Texas	**3,607,009**
Pennsylvania	**2,858,845**
North Carolina	**2,430,220**
Maryland	**2,092,165**
Massachusetts	**1,752,052**
Illinois	**1,636,524**
Michigan	**1,595,533**
Ohio	**1,519,526**

Sources: National Science Foundation, JLL Research

Poised for a paradigm shift

Though Boston, San Francisco and San Diego will always occupy a vaulted place within the life sciences pantheon, the incredible dynamism of the industry is jump-starting new markets that are of growing interest to life sciences investors and companies alike thanks to their lifestyle, cost of living and demographic advantages. Prompt entry into these markets offers a robust upside as they evolve toward drawing significant public and private funding. Forward-thinking organizations have the opportunity to take action on this data early, elevating organizational momentum, gaining access to top talent and activating their real estate potential.

To learn more about JLL's Emerging Markets Index and how it can propel your organization's growth, contact our JLL Life Sciences experts. Click here or call +1 872 201 4265.

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About JLL Life Sciences

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