

Evaluating Life Science Real Estate Markets

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On June 20, 2005, the Milken Institute released a study entitled *The Greater Philadelphia Life Sciences Cluster: An Economic and Comparative Assessment*, which ranks U.S. Life Science markets. The report's rankings of 11 top Life Science markets have received significant publicity, although the true focus of the report is Philadelphia.

Foresight Analytics believes that, when considering an investment in Life Science real estate, the definitions used in the Milken report are too broad. In the Milken study, the Life Sciences include the employment categories of biotechnology, pharmaceuticals, medical devices, associated research and development activities, and support infrastructure. Support infrastructure is broadly defined to include a myriad of industries, ranging from physicians and dentists, to hospitals, nursing homes, and drug stores.

The bulk of these support industries do not occupy Life Science real estate, which is a specialized real estate sector. It typically includes a mix of lab space (50% to 60%) and office space, and can require tenant improvements of \$100 or more per square foot. As a result, measuring the size (or growth) of markets by the broader employment categories as defined in the Milken study is not an accurate indicator of the outlook of Life Science real estate.

Even within the Life Science category, a number of industries are less likely to occupy competitive Life Science space. For example, pharmaceutical firms generally own, rather than lease lab space. So the Philadelphia area, despite its significant pharmaceutical industry, is among the smaller markets for competitive Life Science space. San Diego, on the other hand, is a larger competitive Life Science real estate market, with its preponderance of small biotech startups that lease space. The table below provides a more accurate depiction of the importance of markets from a real estate perspective.

Leased Space

Market	Square Feet
Boston	13,900,000
San Francisco	11,500,000
San Diego	9,600,000
Raleigh-Durham*	9,100,000
Philadelphia	6,400,000
New York/New Jersey	6,025,000
Los Angeles/Orange County	4,500,000
Seattle	3,300,000
Washington D.C.	1,200,000

* Leased + owner-occupied

Source: Spaulding and Slye Colliers International, 2004

When considering an investment in Life Science real estate, a more focused definition of Life Science employment should be applied. The size of the market and demand forecasts should be based on employment and growth in those businesses that occupy this type of space. Other factors will influence the demand forecasts, including local intellectual capital, venture capital funding, and IPO activity.

- The Silicon Valley (San Francisco Bay Area) and New England (including Boston), San Diego and the New York Metropolitan area lead the nation in long-term venture capital investment in biotechnology, with at least \$2.5 billion invested in each of these markets. A second tier of markets includes Philadelphia, Washington D.C., and the Los Angeles/Orange County area.

Long-Term Venture Capital Investment in Biotechnology (1995-1Q05)

Market	\$ Millions
Silicon Valley	\$6,372
New England	\$4,435
San Diego	\$3,365
New York Metro	\$2,504
Philadelphia	\$1,848
Washington D.C.	\$968
Los Angeles/O.C.	\$856

Source: PricewaterhouseCoopers Money Tree Survey

- Statistics about public companies further support the ranking of Greater San Francisco as a top Life Science market. The presence of Medtronic and St. Jude Medical bring the Minneapolis metropolitan area to

Public Company Statistics Biotechnology & Drugs + Medical Equipment & Supplies

Area	No. of Companies	Market Cap. (\$ Millions)
Greater S.F. Bay Area	89	150,384
Minneapolis-St. Paul, MN	29	91,471
Greater L.A. Area	34	82,792
Boston, MA-NH	55	74,454
Greater N.Y. Area	98	70,100
Chicago, IL	13	33,019
Greater Philadelphia Area	39	22,903
San Diego, CA	54	18,121
Washington/Baltimore Area	18	11,695
Seattle-Bellevue-Everett, WA	16	4,481
Raleigh-Durham-Ch. Hill, NC	11	1,764

Sources: Market Guide, Inc., Foresight Analytics

near the top of the list, while Amgen, based in Ventura County, contributes heavily to Greater Los Angeles' ranking.

- The metropolitan areas with the greatest populations, on the other hand, stand out in terms of their healthcare facilities. While the doctors and scientists at these facilities may contribute ideas and innovation in the Life Science industry, most employees of healthcare facilities do not directly occupy Life Science real estate.

Public Company Statistics Healthcare Facilities

Area	No. of Companies	Market Cap. (\$ Millions)
Greater L.A. Area	12	15,202
Greater N.Y. Area	18	13,217
Greater Philadelphia Area	5	4,548
Washington/Baltimore Area	6	1,413
Chicago, IL	3	588
Boston, MA-NH	3	165
Seattle-Bellevue-Everett, WA	1	143
Greater S.F. Bay Area	3	31
Minneapolis-St. Paul, MN	1	29
San Diego, CA	2	7

Sources: Market Guide, Inc., Foresight Analytics

The Milken report makes some interesting comparisons across markets at a broad level. However, a more focused approach is necessary in examining the market for competitive Life Science real estate. Real estate investors will be well-served by reading the Milken report, but should remember that focused definitions of industries and real estate product are necessary when examining supply and demand for Life Science real estate.