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## Operating Costs for Regional Clusters

### A Closer Look at 34 Major and Emerging Biotech Hubs

John Boyd

A new corporate location study compares the cost of doing business for the bioscience industry in 34 U.S. and Canadian cities. The study, prepared by the The Boyd Company ([www.theboydcompany.com](http://www.theboydcompany.com)), focuses on all the major cost drivers for this sector. These include salaries for employees with advanced degrees in the life sciences, wages for workers in other laboratory and administrative support positions, fringe benefits, utilities, lease rates, construction costs, and other geographically variable operating costs.

Comparative locations in the Boyd analysis include major market centers of current and emerging life sciences industry activity. The survey included U.S. metropolitan areas with populations of approximately two million or greater. It also looked at current industry clusters within or proximate to metropolitan areas that employ at least 15,000 bioscience workers, according to latest Bureau of Labor Statistics data.

Emerging bioscience centers are those major market locations identified in "Bioscience 2007, Growing the Nation's Bioscience Sector: A Regional Perspective" published by Battelle Memorial Institute and the Biotechnology Industry Organization. They are situated within metropolitan areas having bioscience sector employment ranging from 500 to 5,000 and job growth rates exceeding 20% during the recent four-year period.

#### Quantitative vs. Qualitative Factors

Comparative locations featured in the study include long-standing centers of bioscience industry such as Boston, San Francisco, San Diego, and Montgomery County, MD, as well as emerging hubs of investment like Las Vegas, Palm Beach County, FL, St. Louis, MO, and Sacramento, CA. The study also looks at New York City, which is striving to capture a greater share of commercial life sciences activity.

Today, operating costs are the white hot issue in the boardrooms of bioscience companies. Owing to the competitive forces of global free trade, rising energy and drug production costs, soaring civil litigation and regulatory expenses, and a lean and mean message being sent by the post dot-com crash venture capital community, quantitative factors focusing on the cost of doing business are trumping qualitative lifestyle factors when it comes to siting new bioscience facilities. For many firms, start-ups especially, the only way to improve the bottom line is by reducing expenditure, and there is little help on the revenue side of the ledger.

Operating cost differentials between an acceptable city and an optimum bioscience site can be very substantial, running into the millions of dollars per year.

In the Boyd study, annual operating expenses under a new construction assumption in the

U.S. range from a high of \$11.4 million in New York to a low of \$9.7 million in Las Vegas. In Canada under the same assumption, annual operating costs range from a high of \$8.1 million in Vancouver to a low of \$7.3 million in Saskatoon, home of the University of Saskatchewan and a flourishing agribio sector.

Under a lease assumption in the U.S., annual operating costs range from a high of \$10.9 million in New York to a low of \$9.6 million in Las Vegas. In Canada under this assumption, annual operating costs range from a high of \$8 million in Vancouver to a low of \$7.1 million in Saskatoon. All amounts are scaled to a hypothetical 22,000-sq-ft bioscience laboratory employing 110 workers.

States like Texas, Florida, and Nevada that have no state personal income tax provide additional relocation benefits to biotech transferees and start-ups by enabling them to keep more of what they earn. Lowest cost Las Vegas has neither a personal nor a state corporate income tax.

Canada continues to offer a low-cost environment for the bioscience industry, even with the double digit rise in the Canadian dollar versus the U.S. greenback during the past year. Biotech companies enjoy lower labor expenses in the area of fringe benefits due to Canada's nationalized healthcare system.

Boyd biotech clients in the U.S. typically shell out about 35–40% of their payroll toward benefits, mostly healthcare-related. In Canada, however, companies spend between 15% and 20%. This cost disparity facing U.S. multinational firms, both in and out of the life sciences industry, will likely be a key talking point as the U.S. once again revisits the topic of national healthcare during the upcoming election cycle.

### **Redevelopment through Bioscience: New York and Las Vegas**

In both the highest and lowest cost cities in the Boyd study—New York and Las Vegas—strong mayors are leveraging public-private partnerships to spur bioscience investment in their urban centers. In New York, Mayor Michael Bloomberg is championing the East River Science Park located on the Bellevue Hospital campus on the east side of Manhattan. Long term, over 800,000 sq. ft. of laboratory, office, and conference space is planned for the Park.

In and around the Park's location are a number of renowned healthcare institutions such as Memorial Sloan Kettering, NYU Medical Center, Mount Sinai Hospital, Beth Israel Medical Center, and Rockefeller University. High operating costs, space limitations, housing constraints for entry-level researchers, and a difficult business climate have historically hampered New York's efforts to capture its fair share of commercial life sciences investment despite the city's tremendous scientific and medical assets. The city's East River Science Park initiative is being developed to overcome these hurdles.

In Las Vegas, bioscience as a redevelopment tool has seen early success with the attraction of two major research institutions to this high-growth metropolitan area. Ground breaking on the Lou Ruvo Brain Institute took place in February within Las Vegas' 61-acre Union Park urban development zone, a project being led by Mayor Oscar Goodman aimed at revitalizing downtown Las Vegas and diversifying its economy.

The five-story Lou Ruvo Brain Institute was designed by architect Frank Gehry and will house clinical, research, and outpatient exam rooms for brain disease patients. The Keep Memory Alive Foundation, a nonprofit that supports research into Alzheimer's, Parkinson's, and other brain disorders, is funding the \$70-million construction. The project builds on the city's

emerging biomedical research community led by the \$52-million Nevada Cancer Institute and ongoing research initiatives at the UNLV Medical School funded by the National Institute of Neurological Disorders and Stroke.

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