



THE UNIVERSITY CITY SCIENCE CENTER:
**An Engine of Economic Growth
for Greater Philadelphia**

Prepared for the University City Science Center by the Economy League of Greater Philadelphia.





EXECUTIVE SUMMARY

Growing yesterday's industrial manufacturing economy demanded roads, bridges, and rail to move goods and finished products. Growing today's knowledge economy demands a new sort of infrastructure to bring together the ideas and people that drive innovation.

The Impact of Innovation

The University City Science Center has played this role in Philadelphia for nearly a half-century, accelerating technology commercialization and the market availability of life-enhancing scientific breakthroughs by bringing together innovations, scientists, entrepreneurs, funders, and business service providers into a gathering place.

Established in 1963, the Science Center was the first, and remains the largest, urban research park in the United States. Throughout its history, the Science Center has provided services that range from mentoring and business advice, to incubator space with fully-equipped laboratories and "plug 'n play" offices for entrepreneurs, to path-breaking programs designed to demonstrate, nurture, and sustain new technology businesses and bring their benefits to the region and the world.

This report focuses on the impact of the Science Center's incubation services on the Greater Philadelphia region's economy by looking at the companies and organizations that received incubator services and other early-stage businesses that received a ben-

efit from being located at the Science Center as they grew. For the purposes of this study, these "graduates" include organizations that received discrete incubator services and/or benefits from their location at the Science Center.

Creating Jobs

The Science Center's supportive capacity has helped to leverage Greater Philadelphia's world-renowned cluster of university and research institutions, spurring technology-based regional economic development. The organizations that have originated at, passed through, and received mentorship from the Science Center have created tens of thousands of jobs, hundreds of millions in earnings, and billions in output for the regional economy. Of the 350-plus graduate organizations referenced in this study, the 93 that remain in the region employ 15,512 people; the Science Center's 37 current incubator residents employ another 174. These highly skilled jobs command an average wage of \$89,000,¹ contributing \$22.0 million to the City of Philadelphia in wage taxes

and \$42.5 million to the Commonwealth of Pennsylvania in income taxes annually. In addition to taxes paid by employees, many of these organizations pay state and local business taxes. Each employee also supports an additional 1.68 jobs throughout the region due to indirect and induced economic demand.

Catalyzing Commercialization

And yet, economic impacts predicated on business incubation, while noteworthy, only tell part of the Science Center's story. Its presence and programs create capacity for innovation and collaboration, facilitating the transfer of new technologies into the marketplace. These services are critical to Greater Philadelphia's technology-driven life sciences sector, which accounts for 15 percent of the region's economy.

The region's robust life sciences activity is sustained by networks of support like the Science Center. (Indeed, organizations such as BioAdvance and Ben Franklin Technology Partners have also supported some Science Center incubator residents and graduates.) The 449 patents (72 percent in the life sciences) obtained by all Science Center-incubated and graduate organizations have strengthened connections between the region's mix of university research institutions, hospitals, and start-up organizations, reinforcing the innovation pipeline that creates new opportunities for economic growth.

Clearly, the Science Center has been on the front lines of Greater Philadelphia's economic development over the past half-century. Future growth will depend on the region's ability to build upon this foundation. The Science Center provides Greater Philadelphia with resources to thrive in a 21st century knowledge economy. Leveraging this asset will help to ensure that Greater Philadelphia sustains its economic momentum.

Summary of Impact of Science Center Business Incubation in Greater Philadelphia (2009)

Category of Economic Impact	Science Center-Incubated Organizations
Employment	
Direct	15,686
Total	42,021
Employment Multiplier	2.68
Labor Income (\$ millions)	
Direct	\$1,669.6
Total	\$3,218.0
Average Wage	\$89,204
Value Added (\$ millions)	
Direct	\$2,590.6
Total	\$4,976.4
Output (\$ millions)	
Direct	\$5,086.5
Total	\$9,384.6
Tax Revenues (\$ millions)	
City Wage Tax	\$22.0
State Income Tax	\$42.5

Source: Minnesota IMPLAN Group

¹ Source: Minnesota IMPLAN Group. Please see Appendix B for more information on methodology.



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