

Innovation Districts: Key in Post-COVID Economy

By Erin McLaughlin

nnovation districts are increasingly important development tools for universities in a post-COVID-19 economy, as the collaborative partnerships resulting from the districts provide new sources of funding. Referred to in a 2014 Brookings Institution paper as a "new complementary urban model" that was "now emerging," innovation districts have now emerged and are hotter than ever.

These developments aim to be hubs for startup and technology-focused companies looking to partner with universities to develop new research—generally in science, technology, engineering, and math-related fields. According to Brookings' "The Rise of Innovation Districts: A New Geography of Innovation in America" (2014), they are also "physically compact, transit accessible, and technically wired, and offer mixed-use housing, office, and retail." In particular, urban universities value the unique opportunity innovation districts represent and are working with businesses, local governments, and community stakeholders to reshape urban real estate and create buzzworthy adjacent or satellite campuses.

In every major American city, universities play a key role beyond the mission of education and research. Urban universities are increasingly anchor institutions of metropolitan regions, with ownership of significant real estate. Universities rank as the largest employers in twothirds of America's 100 largest cities, as detailed in Curbed ("Universities, Chasing the Startup Economy, Reshape Urban Real Estate," 2018). Even in New York City-a global capital of business—universities and academic medical centers make up five of the top 10 private employers, according to Slate ("City Planning 101: Why Universities Became Big-Time Real Estate Developers," 2018). Fulfilling a role as a real estate developer is not new for universities-many have been engaging in substantial urban redevelopment since the 1990s, mainly because they needed safe and attractive campuses. However, the reasons why universities are developing innovation districts is different.

For universities, innovation districts create funding streams through the innovation hubs and corresponding partnerships and research endeavors. Scott Andes, executive director of the Block Center for Technology and Society at Carnegie Mellon University's Heinz College, led a Brookings Institution study titled "Hidden in Plain Sight: The Oversized Impact of Downtown Universities" (2017) and found that urban research universities are economic development engines for this innovation hub activity due largely to the patents and licensing deals that result from the research. Andes detailed how urban universities in particular thrive under this model: "These institutions were responsible for 37 percent of startups and patents, 43 percent of invention disclosures, and 52 percent of licensing income." The economic benefit of the patent, according to Andes, is not the end goal for the university; it is the income from licensing deals that result from the contractual relationship a university forms with a firm that allows that firm to use (not own) the patented technology.

Shifts in the economy and in revenue streams—made even more dire during COVID-19—have left many universities seeking such financial partners. Universities were already feeling tapped out pre-pandemic especially public universities, which have seen tightening budgets due to loss of tax revenue during the current recession. That need has driven universities to turn to startups and tech firms, which have become larger forces in urban economies.

"Universities have always made money off the research products of their faculty—that's not new," Sharon Haar, a professor of architecture at the University of Michigan and author of *The City as Campus*, says in the Curbed article. "But increasingly, the need to monetize research has come to the fore in a way that it wasn't in the past."

The corresponding partnerships between the two—which are physically manifested and organized around the creation of the innovation districts—have helped universities see the fruits of their research labor and stay relevant in a quickly evolving tech scene. These partnerships at campuses nationwide have also decentralized technology and startup activities that were at one time only seen as possible in Silicon Valley. The accompanying table details some innovation districts in the early stages of development.



Harvard University, Cambridge and Allston, Mass.		
Project:	Enterprise Research Campus	
Scope/ Time Frame:	36-acre urban development adjacent to Harvard's new Science and Engi- neering Complex, with plans for a mix of research-focused companies, green space, residential space, a hotel, and a conference center. It is in the early stages of development, with a commercial real estate partner chosen in 2019.	
Link:	http://bit.do/Harvard-Enterprise-Research-Campus	
Drexel University, Philadelphia		
Project:	Schuylkill Yards	
Scope/ Time Frame:	5 million square feet of entrepreneurial spaces, teaching and research facilities, corporate offices, residential and retail development, and hospitality and cultural venues. A public benefit is a new 1.3-acre green space, which was the first piece to open in 2019, called Drexel Square. The project was announced in 2016 and is estimated to be completed by 2036.	
Link:	http://bit.do/Drexel-Schuylkill-Yards	
Arizona State University (ASU), Phoenix		
Project:	PBC Innovation Center at the Phoenix Biomedical Campus	
Scope/ Time Frame:	ASU is responsible for a 7-acre parcel on the city's new and developing 30-acre biomedical campus. Ground was broken on the first building in 2019, a 225,000-square-foot space to be leased half by ASU and the other half by private companies. The entire ASU parcel is planned for 1.8 million square feet, targeting clinical research that focuses on health, wellness, and nutrition.	
Link:	http://bit.do/Arizona-PBC-Innovation-Center	

Johns Hopkins University (JHU), Baltimore

Project:	Science + Technology Park within Eager Park, also referred to as the East Baltimore Development Initiative
Scope/ Time Frame:	JHU is leading an incredibly ambitious multi-decade plan (begun in 2002) to revitalize 88 acres in severely depressed East Baltimore with a new life sciences hub that hopes to rival those around Harvard and MIT. The project involves tearing down much of a distressed neighborhood, relocating 740 families, and then inviting them to return to the revitalized area.



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Link: http://bit.do/Johns-Hopkins-Science-and-Tech-Park



It Is Not Just a Recession-It Is a 'Shecession'

One has to do a double take when reading headlines like, "The U.S. Economy Lost 140,000 Jobs in December. All of Them Were Held by Women" (CNN.com, Jan. 8, 2021). Could that be right? The unfortunate answer is yes. The COVID-19 recession has not affected everyone the same—and it has been particularly bad for U.S. women. When the

Bureau of Labor Statistics (BLS) released its monthly job numbers for December, it showed that for the first time, jobs held by women disappeared at a faster clip than those held by men. December was also notable as it was the first time since April 2020 that the U.S. economy stopped adding jobs and instead shed them. According to BLS, the country lost a net 140,000 payroll jobs in December, due to 156,000 women losing their jobs and men gaining 16,000 jobs. The only other month there had been such a drastic dip was September, when 865,000 women left the labor force—four times the rate of men. Many blamed the start of the virtual school year for the September decline.

This meshes with the research the Bipartisan Policy Center (BPC) has done on the subject. In its "Impact of COVID-19 on the Workforce" survey conducted in October 2020, BPC details that among women with children under 2 years old, 42 percent have left work during the coronavirus pandemic, and women were twice as likely as men to say they left work for caregiving responsibilities due to child care provider or school closures.

For the engineering industry—which has collectively worked to incorporate women and other underrepresented groups fully into its workforce—understanding and being aware of these challenges is key.

