







ABOUT THE IMD

The Illinois Medical District

is a special-use zoning district situated in the heart of Chicago's Near West Side. Home to more than 40 healthcare organizations, including four world class hospitals, two highly respected health sciences universities, educational facilities, research labs and a biotech business incubator, the IMD offers a rich ecosystem for medical and life sciences innovation. Together, IMD partners accelerate discovery and commercialization that is reshaping the practice of medicine, generating prosperity for everyone.

About Suzet McKinney DrPH, MPH



Dr. Suzet McKinney has been CEO and Executive Director of the Illinois Medical District (IMD) since 2015. The IMD is the second largest urban medical district in the United States, and Dr. McKinney is the only African-American female CEO of any major medical district in the country.

Before joining the IMD, Dr. McKinney spent 13 years at the Chicago Department of Public Health, rising to the position of Deputy Commissioner of Public Health Preparedness and Emergency Response. She also serves as Adjunct Assistant Professor in the School of Public Health of the University of Illinois at Chicago, as well as an instructor in Harvard University's Division of Policy Translation and Leadership Development.

Dr. McKinney earned her bachelor's degree from Brandeis University, master's degree from Benedictine University, and doctorate of public health from the University of Illinois at Chicago. She also held a postdoctoral fellowship at Harvard's School of Public Health.



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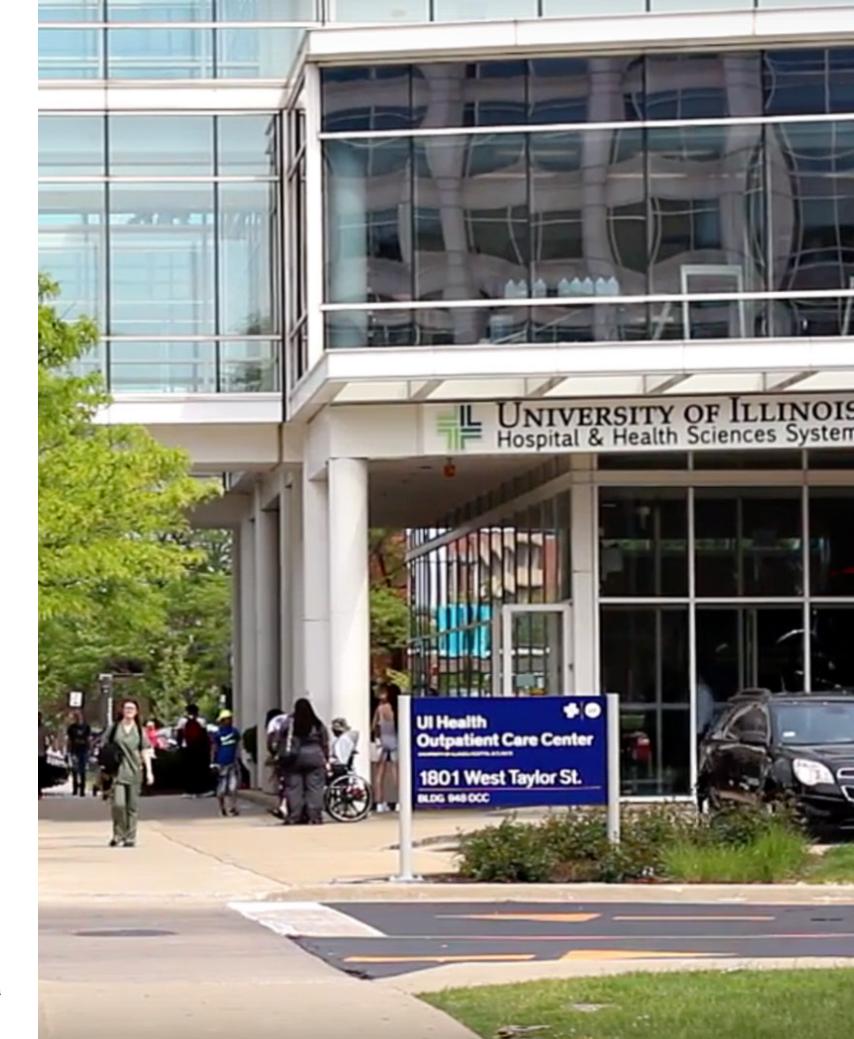
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Photos: Rush Health, IMD, CBRE







INTRODUCTION

Chicago can revitalize its struggling life sciences industry by committing to a transformative vision: establishing an innovation district that can foster a collaborative environment favorable to innovation in the life sciences.

In May 2019, IMD made this case in a white paper, Restoring Chicago's Life Science Leadership: A State and City Partnership.

A 2019 market study by Kaufman, Hall & Associates assessed the Illinois Medical District (IMD) as a research and development ecosystem of startups, research institutions, industry stalwarts and investors. The project involved extensive secondary market research and 20 structured stakeholder interviews. This white paper sets forth key findings of this market study.

As first defined by the Brookings Institution, an innovation district is a "geographic area where leading-edge anchor institutions and companies cluster and connect with startups, business incubators and accelerators. They are also physically compact, transit-accessible and technically wired, and offer mixed-use housing, office, and retail."

To assess its suitability as an innovation district, the IMD commissioned Kaufman Hall to prepare a third-party market study with three aims:

- Evaluate the market opportunity to develop facilities related to health innovation, in alignment with the vision of the IMD.
- Identify opportunities and challenges in pursuit of IMD objective to become an innovation district.
- Explore facility development needs of the anchor providers, as well as outside organizations that could serve as potential anchor stakeholders.

The IMD appears well suited to serve as a nucleus for a life sciences innovation district, based on its existing infrastructure and opportunity to build further facilities.



EXECUTIVE SUMMARY

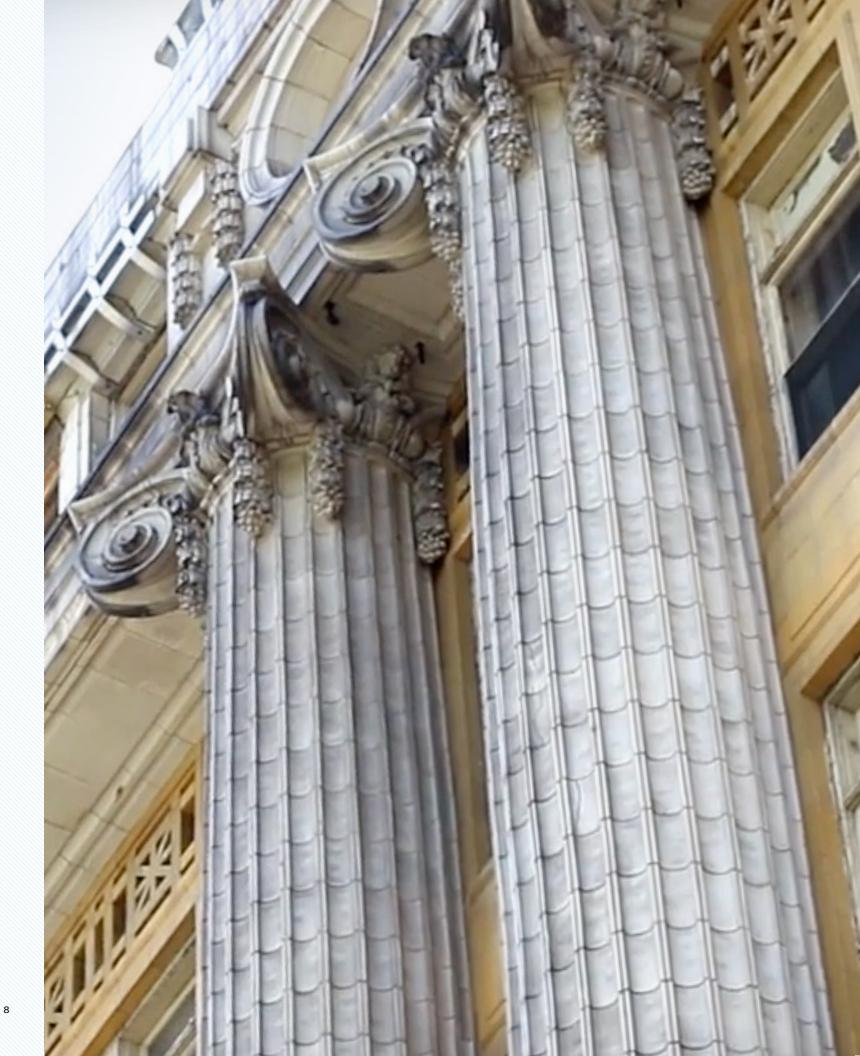
Diagnosing Opportunities and Threats

The market study validates the IMD's potential to nurture Chicago's innovation activity and advance economic development on a regional scale. Yet Chicago lags behind smaller cities in life sciences activity. The authors suggest that one impediment to growth is "lack of a coherent mission and holistic plan of action across institutions."

Development is spread across the Chicago market, limiting its impact. Other cities have a single anchor institution that makes a substantial investment in development and community engagement. As a result, their innovation plans are more cohesive and scalable.

Other key findings:

- The Qualified Opportunity Zone within the IMD is the ideal area for development due to readily available private capital. To extend favorable tax treatment to its investors, developers must make substantial direct investments in designated low-income census tracts. This capital has the potential to create the mixed-use, after-hours scene that attracts wider local and national attention. However, the designation exists only for a limited time.
- Needs of current anchor providers represent the strongest near-term opportunity to catalyze mixed-use development.
- The IMD is eager to work with its development partners to support the growth and development of its anchor providers. However, more specifics on the amount and type of space are needed to formulate proposals.





SECTION I

Culture for Wet Lab Development

A healthy life science and biotech ecosystem relies on strong R&D capabilities, access to lab facilities, small-business incubators and investment capital. It is empowered by clustering. The Brookings Institution defines industry clusters as "geographic concentrations of interconnected businesses, suppliers, and associated institutions." Their limited availability has been a serious drag on the Chicago life science sector. Startups and biotech companies in need of facilities have been forced to move elsewhere to find suitable lab space.

Chicago can and must work to close these gaps in infrastructure and funding if it wants to compete in the 21st century life science sector. The clustering effect has been beneficial to a number of cities' life science sectors. Chicago is still considered an important mid-tier cluster, alongside the likes of Denver and Seattle, and Illinois' life sciences sector is still one of the largest in the nation, employing more than 85,000 people and contributing more than \$98 billion (12% of GDP) in annual economic output. However, leading biotech companies Takeda and Shire have opted to move their R&D operations to industry clusters with stronger R&D ecosystems.

Wet labs - research and commercial laboratories designed to handle hazardous chemicals - is essential to life sciences research. Wet labs require considerable physical space and significant financial investment. Due to a dearth of investment, the supply of wet lab space is currently highly constrained in Chicago. Small tenants find it difficult to obtain lab space, according to a February 2019 CBRE report, with most incubators near capacity. CBRE lowered its estimate of Chicago metro lab inventory, to about 3 million square feet, with a 3.5% vacancy rate.

With high and growing demand for wet lab space, investors and developers have moved to close the gap between demand and supply:

- Scheduled to open in late 2019, Sterling Bay's Prysm Life Sciences development will add a 120,000-square-foot medical research facility, 20,000 square feet of life sciences incubator space and a startup accelerator program.
- The University of Chicago's Polsky Center for Entrepreneurship and Innovation will add 280,000 square feet of new lab and office space by early 2020.
- Sterling Bay's Lincoln Yards mega-development on the former Finkl Steel site and Farpoint's Burnham Lakefront project on the former Michael Reese Hospital campus promise to add millions of square feet for medical labs, science and tech startups, data centers, apartments and retail, including a 75,000-square-foot incubator in the former Michael Reese psychiatric building.

As a special zoning district of Illinois, the IMD enjoys a unique legal position as a state-chartered body, giving it full zoning authority in its territory, including the ability to accelerate construction and development plans. The IMD boasts 31 acres of land available for development, much of which has been classified as a Qualified Opportunity Zone for investment tax incentives.



Nutrients of a Sustainable R&D Ecosystem

The importance of incubators was clearly expressed in the market study: Chicago "considerably lags" other startup ecosystems. One component that the authors found important in Boston, San Francisco and San Diego clusters was incubator and co-op space, which "often serves as the foundation for entrepreneurial activity in the fields of science and technology."

The demand for local incubators and co-op space was reflected in stakeholder interviews. Current IMD stakeholders expressed a desire for more local incubators, and one expressed interest in collaborating with the IMD in incubator development. If these stakeholders are to be brought on board, they will likely want to collaborate in the selection of companies to occupy the space.

According to the Pritzker administration's "Plan to Revitalize the Illinois Economy and Build the Workforce of the Future," published in October 2019, total R&D activity in Illinois has grown just 1.8% annually since 2011, compared with 4.6% nationally. In the life sciences, major players have relocated to coastal hubs, while little investment locally has prevented the emergence of rich collaborative or startup activity. The state economic plan set out a number of objectives and promised targeted funding to organizations that can help jumpstart local life science R&D. Two of its goals specifically address the R&D ecosystem:

- Invest in facilities that encourage collaboration between researchers and industry and commercialization of cutting-edge healthcare products in communities across the state.
- Build wet lab space and co-locate corporations, university researchers and startups.

With more than 40 healthcare organizations, including four teaching hospitals, two highly respected health sciences universities, educational facilities, research labs and a biotech business incubator, the IMD is already a rich ecosystem for medical and life sciences innovation and a natural location to develop additional lab, co-op and incubator infrastructure. With 31 acres of developable land, there is plenty of room to build lab space and shared facilities in the IMD.

High demand for wet lab space suggests that a life science incubator could potentially be "layered on" to wet lab space development in the IMD. Startups may need sweeteners to differentiate the incubator's value from the offerings of other innovation-focused programs. For example, an IMD-centered incubator or accelerator could stand out by offering access to capital.

In addition to startups, a high-quality co-op development among the IMD's four hospitals could serve well as satellite R&D space for a major biotech company that currently does not have a presence in Chicago, increasing the IMD's vibrancy and the scope of its ecosystem. Such facilities would serve well alongside labs; life sciences startups could share lab space, research and collaborate with larger industry partners, as well as with anchor research institutions.



SECTION III

A Lively Local Habitat

A successful innovation district must be nested in a vibrant community. According to a 2012 study by the Federal Reserve Bank of Philadelphia, geographic density is a key determinant of successful knowledge sharing and its resultant boost to innovation and economic activity. High levels of proximity and connectivity have been shown to result in greater amounts of private capital and grant funding, as well as higher rates of startup formation.

Building a connected, vibrant environment in and around an innovation district requires investment beyond lab space and infrastructure. In its review of "some of the most successful innovation districts," including San Francisco, San Diego and Boston, the IMD's market study found that a key to activating an innovation district community is to create a "work, live, play" area in which all stakeholders – workers, locals, commuters, communities – can actively engage with one another and with the district's initiatives. These "vibrancy enablers" may include restaurants, parks, shops and other amenities.

A consistent refrain in stakeholder interviews was that the IMD has lacked these vibrancy enabling features. As one stakeholder put it, "We need to 'activate' the West Side, make it more vibrant ... make it a place where people want to congregate."

Working with key anchor institutions, a developer could build a lively shopping and entertainment center that would enhance the local community and keep students and staff in the district from traveling elsewhere. The 9.5-acre Gateway development represents a key first step in the expansion of the IMD's cultural vibrancy. The development, located in the northern section of the district, features mixed-use construction for offices, labs, restaurants and affordable housing. Several prominent retail vendors already have opened for business at Gateway, with more expected in 2020.

Activating the southern section of the IMD has proven more challenging. This is the part of the IMD designated as an Opportunity Zone. While parks and restaurants may be easier located in central and northern areas, the southern section of the IMD has the potential to host high-demand developments of low-cost housing options for resident physicians in the community, other staffers and local employees of both current institutions and potential entrants. Combined with the efforts of the West Side United civic group, a development focused on affordable or workforce housing could find considerable synergy. Such an initiative stands to enhance profits and mitigate risk.

SECTION IV

Challenges to IMD's Growth Need to be Managed

The market report notes not only the IMD's current and potential strengths but also a number of challenges that are far from insurmountable:

- · A lack of visibility, both locally and nationally.
- A supportive but noncommittal attitude among stakeholders.
- · A competitive local environment, including several other would-be life science innovation districts.

These are all legitimate challenges to the IMD's vision of becoming the home of Chicago's life science innovation. But they are far from insurmountable. The study cites Boston, New Jersey, San Diego and San Francisco as markets that have demonstrated life sciences as a driver of jobs as well as healthcare discovery.

To build a top life science innovation district, Chicago will have to put its money and resources where its mouth is. New York offers a prime example, which has launched an ambitious program to rejuvenate its life sciences through a state and city partnership, establishing a \$500 million program to fund the sector. To truly succeed, Chicago must demonstrate similarly aggressive and coordinated action.

A public-private development partnership would involve government at all levels – state, county, city – and key private agents, including life science and pharmaceutical companies, hospitals and universities, investors and community organizations. All of these groups must be coordinated, preferably by a single state-appointed chair and steering committee. Buy-in will be critical from institutions and organizations outside of the IMD, even if the IMD is designated the nucleus of an innovation district.





SECTION V

A More Fertile Incubator

The IMD has already made major strides toward overcoming challenges during the past two years. The element of competition is very important. From a developer's standpoint, there is acceptable risk to investment in wet labs, R&D infrastructure and the like. Incoming supply could pose a potential threat to investors and developers in the IMD, especially in the case of wet labs; high-quality lab facilities are almost always "purpose built," meaning that if tenants are unavailable, it is extremely difficult to repurpose the facilities to other uses.

However, even with 12.5 million square feet of commercial lab space in use already, Chicago still needs millions more simply to meet projected demand in the coming years. If Chicago commits to a strategy of fostering a life science innovation district, whether in the IMD or somewhere else, the demand will only increase. Consequently, the market study concludes that the risk of supply saturation is limited: "With the strong need for space and robust industry demand" the authors conclude, "life sciences could be an ideal development opportunity for the district."

The IMD has taken a more active role in discussions of the future of Chicago's life science industry, both in public forums and as a convener and mediator among institutions in the district. Years of inactivity, as well as stops and starts in development projects, have caused many stakeholders to question the IMD's capacity to lead a long-term, multi-faceted industry transformation. Many of these problems stemmed from the IMD's debt burden as a landholder and a lack of coherent, long-term focused leadership. Over the past 18 months, however, the IMD has seen a return to financial health, redeeming \$40 million in bonds, whose servicing had consumed more than half of the district's annual revenue.

By retiring its debt, the IMD has been able to refocus on improving public health outcomes for the residents of the West Side, accelerate the Gateway project and enter contention to serve as the home to Chicago's life science innovation district. Still, while these recent positive developments have not been lost on key stakeholders and IMD-based institutions, a "wait-and-see" approach is still evident.

Interviews for the market study indicated a common concern that IMD might not be able to sustain its newfound energy. To activate action from anchor institutions, the IMD may have to start relatively small in order to facilitate buy-in. One method suggested by the market study is to encourage the development of new shared facilities that could enhance inter-institutional collaboration, foster confidence in the IMD's mission and reduce expenses.

"Allowing Rush, UIC, VA, and Stroger to share services such as central sterilization, transportation, and others could help them cut as much as 10-to-15% of related costs, according to some estimates," the study says. "Provided that a transportation system could be established between the property and the providers sharing the resource(s), the location is ideal because it is in the neighborhood but at a reasonable distance from patient access points."

SECTION VI

Conclusion: Sequencing Next Steps

The IMD has everything needed to support a large and thriving health innovation district, the Kaufman Hall study concludes, "including influential and visionary leadership, strong anchor partners, and willing development partners." However, Chicago's fragmented market gives the IMD development competition and constrains the city's growth as an innovation center.

"That said," the report concludes, "there appears to be a strong opportunity to further develop the IMD, create scale around Chicago's innovation activity, and evolve toward a more impactful source of growth and economic development for the City of Chicago and the State of Illinois."



The Opportunity Zone within the IMD can attract private capital to build an attractive mixed-use, "live-work-learn-play" environment. The strongest opportunities would support the needs and growth of the IMD's anchor provider organizations.

To formulate development proposals, the amount and type of space needs to be articulated. Development opportunities highlighted in the report include:

- More capacity to support life sciences and discovery;
- Life sciences incubators "layered on" wet lab space;
- A purpose-built data center or collaborative education space; and
- Analytical training and retraining for healthcare workers.

Noting the IMD's low public visibility and emergence of other life-science developments, the study identifies a need for continued public exposure. The IMD can raise its profile by educating stakeholders about infrastructure plans and neighborhood safety, and can make a compelling case for public funds. By widening its base of support, the IMD and its development partners can realize the vision of an innovation district.





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