



MIDTOWN INNOVATION DISTRICT

INNOVATION HUB BUILDING

RICE GRADUATE STUDENT ASSOCIATION, OCTOBER 2018

THOMAS KILLIAN



Despite being the fourth largest US city, Houston's startup ecosystem is weak compared to other major American cities, especially in hi-tech

Comparably Weak Startup Ecosystem

n National rank where applicable

Growth in # companies receiving VC funding⁷
0% 2010 - 2015

Overall US Ecosystem Ranking⁶
20th (of 25)

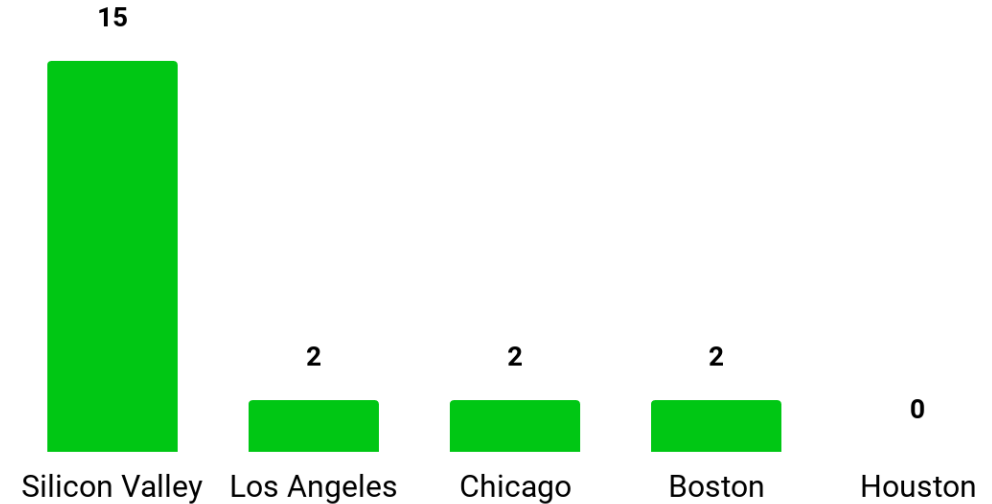
Total VC deals, 2015⁷ **20**
21 in seed, early & late stage startups

23 companies received VC funding in 2015⁷ **24**
18 Seed, early and late stage startups⁷

Source: Innovation in Houston, Accenture 2017

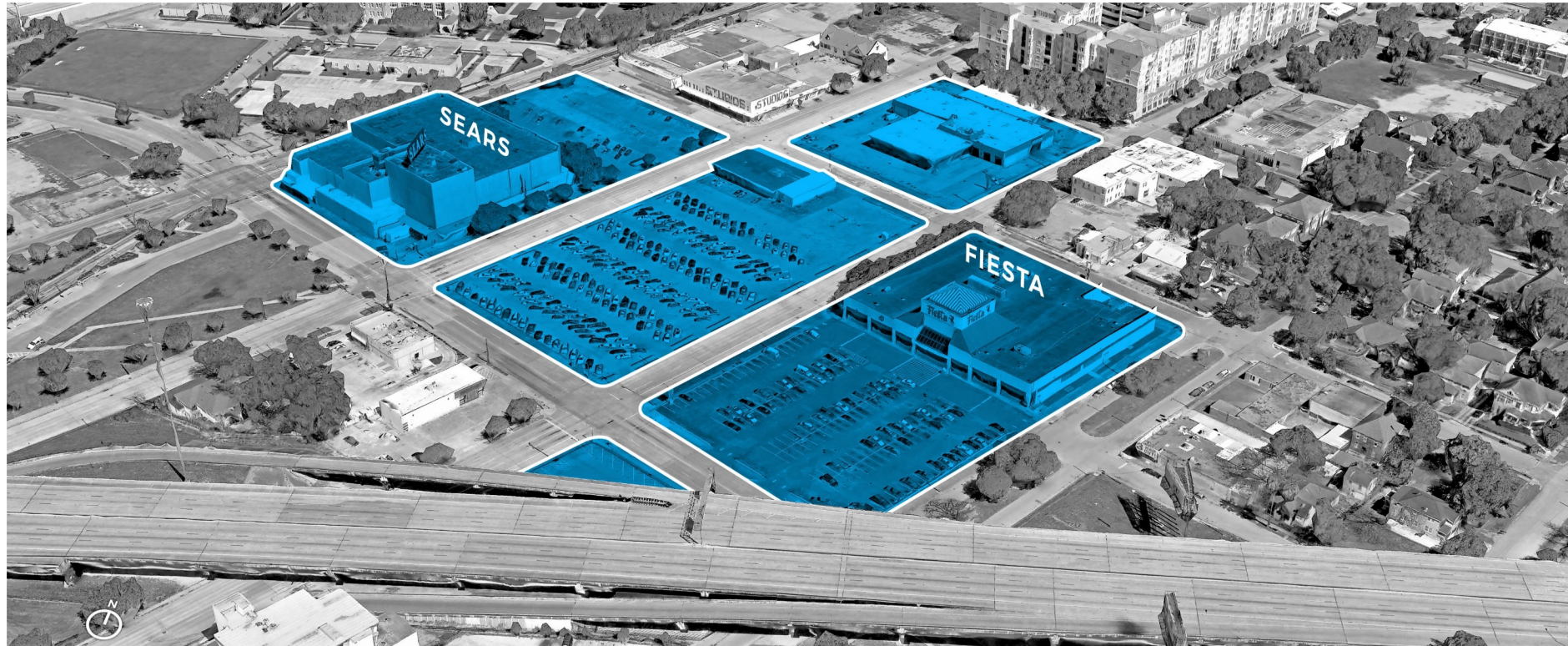
Limited Tech Presence

Hi-tech Fortune 500 firms headquarter count by city



Source: Innovation in Houston, Accenture 2017

The Rice-owned Innovation Hub will anchor the 13-acre Midtown Innovation District.

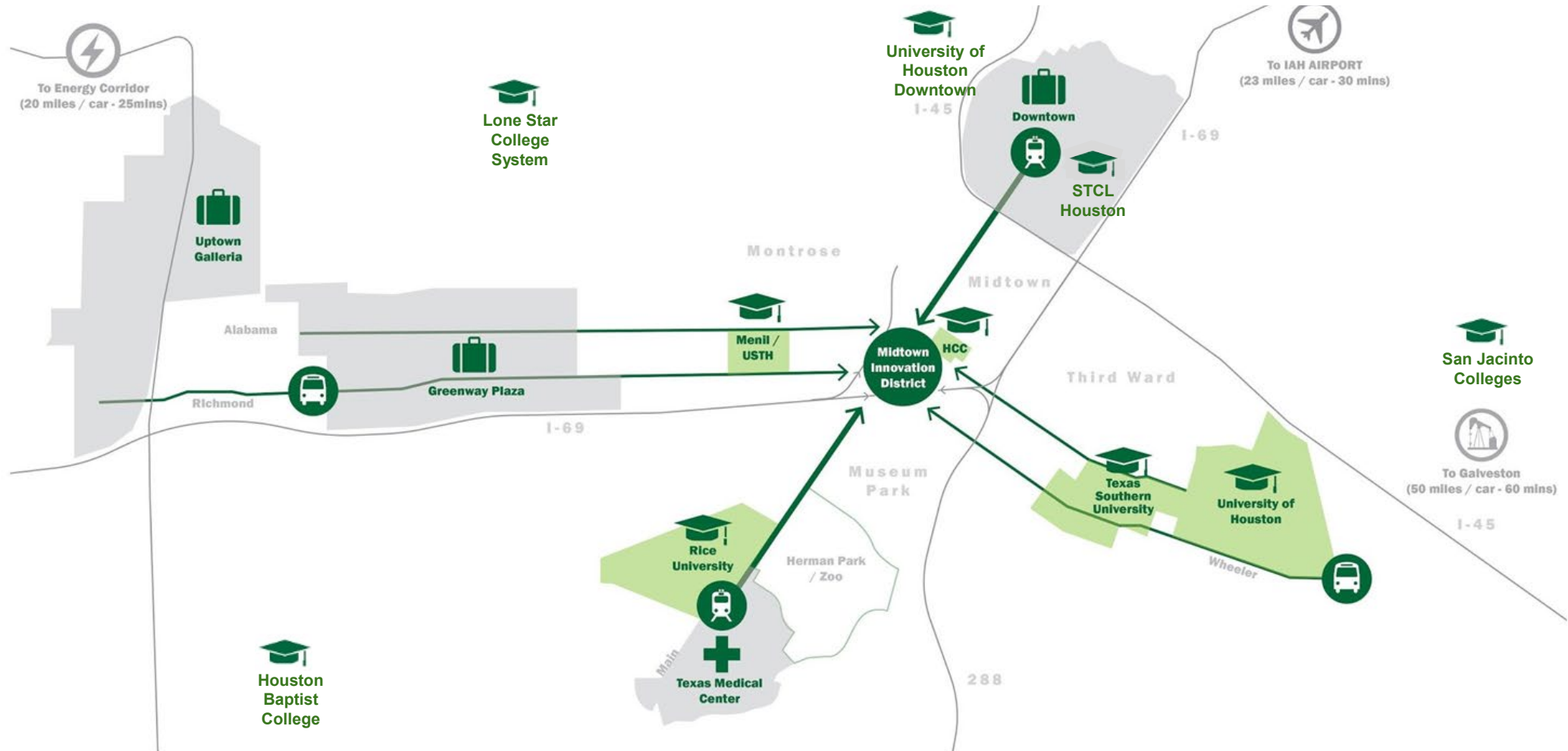


An investment by Rice for all of Houston
Managed by the Rice Management Company

Houston academic institutions, government, and industry are joining together to address this problem with the Midtown Innovation District, starting with the Innovation Hub Building



The district is close to existing knowledge and employment centers and will be the epicenter of Houston's innovation ecosystem.



Cities around the world have created successful innovation hubs for tech and innovation.



The Innovation Hub in Houston will support all stages of the innovation lifecycle.



PROGRAMMING AND EVENTS



COWORKING



INCUBATOR AND ACCELERATOR



ACADEMIC PRESENCE



PROTOTYPING



CROSS-INDUSTRY COLLISIONS

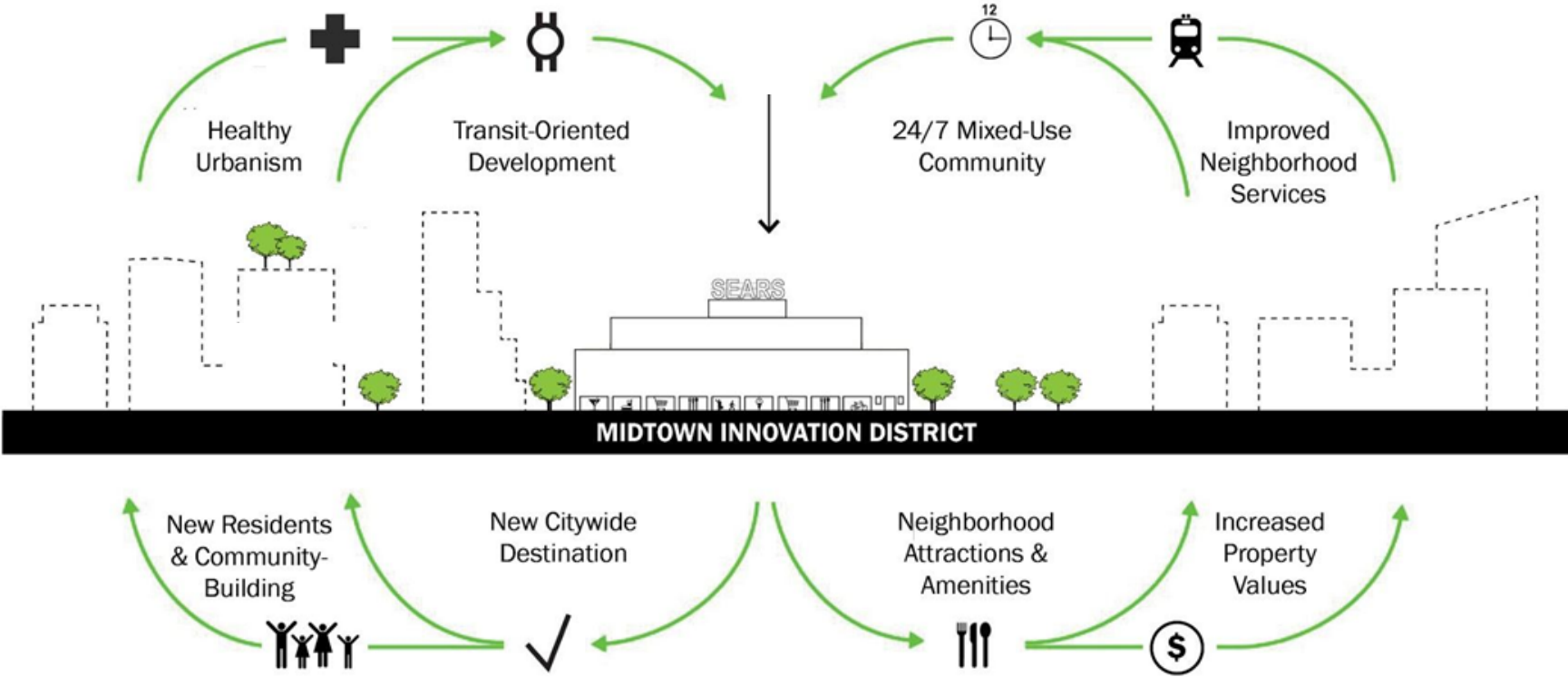


CORPORATE INNOVATION



FOOD & ENTERTAINMENT

The Innovation Hub will drive urban revitalization



The Innovation Hub is an opportunity to address the pervasive challenges of **discrimination, gender inequality, and other challenges in Houston and create pathways to opportunity**



Why do Academic Institutions Get Involved?

- Create new opportunities for students, alumni, faculty and staff
 - develop entrepreneurship and leadership skills
 - grow ideas into successful ventures
 - employment opportunities/career training
 - connect with local and national leaders
- Expand academic offerings
- Promote brand
- Support project with potential to transform their communities
 - economic, urban renewal



Innovation Hub Academic Partnership Network



- Will develop a coordinated strategy for academic participation in the building based on objectives and interests expressed by members of the network
- Discussions in the fall, draft by end of calendar year 2018
- Innovation Hub Project at an early stage; input can affect design of spaces and program organization

My Role

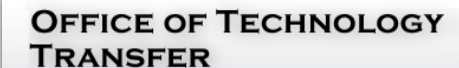
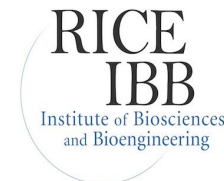
- **Lead Academic Partnership Network discussions feeding into the strategy for academic participation**
 - **organize several meetings with Network representatives throughout the fall**
- **Be Rice's liaison to the Academic Partnership Network**
 - **coordinate discussions on campus to inform Rice community of the project and the opportunities it offers**
 - **collect Rice ideas and interests and channel them into the strategy for academic participation**
- **Midtown Innovation District Project is at an early stage so input can affect design of spaces and program organization**

Conversations with Programs with direct connection to entrepreneurship

Academic Units



Programs



Full Campus Community

- Faculty Senate
- Faculty: Series of open lunches late October and early November
- Students: SA and GSA
- Focused meetings with any constituency that requests it
- Goal: identify interests, priorities, objectives for Rice engagement with the Innovation District
- Invite submissions describing ideas and objectives
 - Short < 1 page
 - November 16th submission date
- For more information, contact me (Killian@rice.edu)

Discussions

- Cohen House,
 - 4 lunches
 - 15 spots per lunch
 - Filled
 - Duncan Hall 3092
 - Monday (10/29) and Tuesday (10/30) 3-4 pm
 - <https://doodle.com/poll/vn96x535bykvsr2c> for updates
- Reach out to me for more information (Killian@rice.edu)

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1871 | Chicago, IL



1871 office space and conference rooms

OVERVIEW

Owned/operated by Chicagoland Entrepreneurial Center (CEC), 1871 offers coworking, private offices, and meeting space, to industry specific incubators, tech talent schools, and venture capital firms. 1871 is one of the nation's leading entrepreneurship spaces and since its founding in 2012 it has catalyzed a thriving digital and fintech startup community in downtown Chicago and become a preeminent center for WMBE small business growth.

KEY FACTS

- 500+** companies
- 1,500+** members
- 8** accelerators
- 8** academic partners
- 1,000+** public and private events per year
- 8,000** jobs created since opening



Campus 1871 student competition



Community networking event

1871 | Chicago, IL



1871 office space and conference rooms



Campus 1871 student competition



Community networking event

ACADEMIC ENGAGEMENT

- Universities have co-located to **sponsor and occupy conference rooms** along a “university row”.
- 1871 hosts the annual **Campus 1871 startup competition** for university students to take startup 101 courses and pitch ideas.
- The University of Chicago launched an **evening masters degree program** at 1871 which offers a part time MA in Public Policy.
- 1871 and The University of Chicago co-host an **8-week coder apprenticeship program** for high school students.
- Tel Aviv University and Istanbul Technical University partnered with 1871 to temporarily host **accelerator programs for international startups** launching in the U.S.



T-Rex | St. Louis, MO



OVERVIEW

T-Rex is a growing non-profit startup incubator in St. Louis that supports early stage entrepreneurs and programming for the community. It was founded in 2011 to create jobs that would revitalize downtown and slow the city’s “brain drain”. It offers flexible enterprise space and meeting space for accelerators, and venture capital firms, and a SBA-funded resource center.

KEY FACTS

200+ companies

400+ members

29% startups run by minorities

21% startups run by women

6 academic partners

3,500 jobs created since opening



T-Rex | St. Louis, MO



T-Rex Incubator announcement



Coworking desk space



Student networking event

ACADEMIC ENGAGEMENT

- Washington University in St. Louis sponsors conference space in exchange for branding; Others sponsor smaller amenities like coffee stations and happy hours.
- Webster University provides in-kind cyber security services to T-Rex member companies.
- SIEU English department faculty use the space to hold meetings and office hours with students.
- T-Rex sends regular student email blasts of startup job openings and most universities offer college credit for internships.
- University students frequently use the space as a study area and a real-world laboratory for classroom assignments.



Cortex Innovation Community | St. Louis, MO



Academic and corporate partner signage



Exterior view of Cortex



BioGenerator Labs

OVERVIEW

Cortex is a premiere innovation center for bioscience and agri-tech research in St. Louis that supports R&D and commercialization. It was founded in 2002 as the anchor of a new 200-acre mixed use technology district close to downtown. Cambridge Innovation Center offers coworking space and programming is provided by the Center for Emerging Technologies.

KEY FACTS

250+ companies

500+ members

3 academic partners

3 tech and bioscience incubators & accelerators

3 wet lab and maker spaces

13,000 jobs created since opening

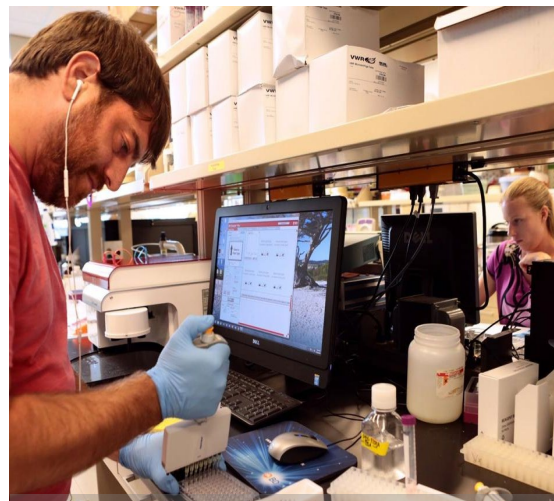
Cortex Innovation Community | St. Louis, MO



Academic and corporate partner signage



Exterior view of Cortex



BioGenerator Labs

ACADEMIC ENGAGEMENT

- Cortex formed because of an initial **\$29 million** investment primarily sourced from the 3 academic partners.
- Washington University in St. Louis research and tech transfer offices **lease space** in the @4240 building.
- Washington University in St. Louis also provides **office and lab space** in Cortex to nearly 60 startups founded by university faculty and alumni.
- University **faculty use Cortex lab space** like BioGenerator Labs to advance their research and collaborate with industry experts.
- The Center for Emerging Technologies partners with non-profit IDEA Labs STL and the universities to provide **educational programming**.



Kitchener-Waterloo | Kitchener, ON



Exterior of Tannery Building



Velocity Garage workspace



Corporate partner event

OVERVIEW

Kitchener-Waterloo is a leading innovation ecosystem in Canada in between Toronto and Detroit that is a hub for established tech firms and a growing list of high tech startups. It was founded in a former industrial warehouse district in close partnership with the University of Waterloo. The facility offers a workspace, discovery labs, educational programming, a non-profit innovation center Communitech, and a robust university startup incubator program.

KEY FACTS

120+ companies

1 academic partner

50,000 SF incubation space

1,500 startups incubated

C\$650M total investment

1,300 jobs relocated to the area

Kitchener-Waterloo | Kitchener, ON



Exterior of Tannery Building



Velocity Garage workspace



Corporate partner event

ACADEMIC ENGAGEMENT

- The University of Waterloo houses the innovative **Waterloo Velocity Program** in the Kitchener-Waterloo Tannery Building.
- Science faculty participate in the Velocity Science program offering **mentoring and coaching** to students who are life science entrepreneurs.
- The Velocity Fund provides **seed funding** from the university to growing startups at Kitchener-Waterloo.
- The university created Velocity Garage and Velocity Start where faculty, students, and alumni can access a **makerspace** and **free coworking areas**.
- The university's most aspiring entrepreneurs live in the **Velocity Residence dorms** at Kitchener-Waterloo.
- Faculty and industry experts frequently **collaborate to curate educational programming** to help members build successful businesses.



Purdue Research Park | West Lafayette, IN



The Purdue Foundry entrepreneurship and commercialization hub



Student fellowship program



Exterior of park building

OVERVIEW

Purdue Research Park is the largest university affiliated incubation complex in the country and a hub for life sciences entrepreneurship and commercialization in Indiana. The 720-acre park is comprised of 7 campus locations with different research specialty areas. The complex offers a business incubation complex to nurture startups, a non-profit coworking space, a university investment fund, fabrication laboratories, and university educational programming

KEY FACTS

244+ companies

3,200 workers

1 academic partner

26,000 SF coworking space

327,000 SF incubation space

8 university startups incubated in 2018

Purdue Research Park | West Lafayette, IN



The Purdue Foundry entrepreneurship and commercialization hub



Student fellowship program



Exterior of park building

ACADEMIC ENGAGEMENT

- Purdue University **coordinates programming** at the park for business plan competitions, jobs fairs, mentoring, and internship and fellowship programs.
- The University offers an affiliate program to park members which provides participating companies **access to university resources** like libraries and printing services.
- Purdue University created Purdue Foundry and the \$12M Foundry **Investment Fund** to help faculty and student entrepreneurs create and grow startups.
- University **faculty and researchers collaborate with industry partners** to advance commercialization of research.
- The University created the Purdue Railyard **coworking space** and the Purdue Artisan and **Fabrication Laboratory** to benefit faculty, students, and community members.

Research Triangle Park | Raleigh, NC



OVERVIEW

Research Triangle Park (RTP) is one of the longest running research campuses and was initially formed to spur collaboration between industry and the three major universities in the North Carolina Triangle region. The 7,000 acre park is home to multinational corporate research campuses and a growing startup community. Managed by the Research Triangle Park Foundation, the Park offers corporate office space, community event and coworking space, educational and social programming, and collaborative university research space.

KEY FACTS

264+ companies

60% companies are startups

50,000 workers

3 academic partners

3,000 patents awarded



Friday food truck rodeo at the Frontier

Networking social event

Research Triangle Park | Raleigh, NC



Aerial view of Research Triangle Park



Friday food truck rodeo at the Frontier



Networking social event

ACADEMIC ENGAGEMENT

- The three founding universities are deeply **ingrained in the governance and leadership** of RTP.
- University faculty **provide coaching and host workshops** for executives and employees of RTP companies.
- RTP companies frequently **outsource contract research and clinical trials** to university partners.
- The universities formed (TUCASI) Triangle Universities Center for Advanced Studies Inc. to **facilitate joint university research** in the park.
- TUCASI offers **grant funding** to multi-institutional research teams and allocates office space in the park to ongoing joint-university projects.
- The three universities briefly **maintained office space** for a **consolidated intellectual property office** in RTP.



THE UNIVERSITY
of NORTH CAROLINA
at CHAPEL HILL

NC STATE UNIVERSITY

Specific examples of academic institutions engagement with innovation hubs

Skills Growth

- Student/alumni/faculty access to district programming and entrepreneurial resources
- Mentoring programs (providers and consumers)
- Student/faculty/early-stage-company project-based partnerships

Additional Space & Programming

- Location for existing and new entrepreneurial resources and programs
- Location for workforce training programs
- Dedicated workspaces and meeting spaces
- Premiere event venue and programming space

Connection to Industry, Capital, Gov't

- Networking opportunities (career placement, startup funding, B2B, etc.)
- Internships and career placement services
- Research & capstone projects and curriculum integration
- Access to gov't services (SBA, veteran, etc.)

Research Collaboration

- Research sponsorship
- Industry collaboration and partnership
- Cross disciplinary research