INNOVATION DISTRICT SUMMARY

OSU-Cascades Innovation District

"a collaboration by a *city-college-corporation* that creates a connective corridor designed specifically to foster a community network that supports innovation between a campus and collaborators."¹

OSU-Cascades innovation district (District) is a figurative handshake between academic-led instruction and research and industry-led innovation. At the same time, this home to world-class research and study will blend seamlessly with neighboring communities.

An innovation district will integrate university academic programs and research with industry and entrepreneurs. An innovation district will leverage the fast growing and entrepreneurial economy of Central Oregon with a dynamic and innovative university. Innovation districts are increasingly prevalent across the country and world. The Brookings Institute (www.brookings.edu/wp-content/uploads/2016/07/InnovationDistricts1.pdf) defined innovation districts as "geographic areas where leading-edge anchor institutions and companies cluster and connect with start-ups, business incubators and accelerators. They are also physically compact, transit-accessible, and technically-wired, and offer mixed-use housing, office and retail." These innovation districts attract companies in the knowledge economy that want to be near other companies, universities, and research labs to share ideas and spur innovation.

In addition to the innovation and economic development benefits, the innovation district will provide student internship and university research partnerships, strengthening the bonds between the private sector and OSU-Cascades. It would also heighten engagement and retention of faculty and students. The development of the District provides student experiential learning opportunities that "foster intellectual, professional and personal development to prepare OSU graduates for life and careers in a global society" (OSU Strategic Plan 3.0 goal 1). These transformational experiences would happen on-campus through innovative partners co-located with university.

The District would provide access to on-campus natural laboratory for many of our majors. Imagine our Energy Systems Engineering faculty and students studying alternative energy solutions, including solar, biomass, geothermal, and methane gas in alliance with industry to develop commercializable solutions. Business students could support market analysis and product testing or development of business cases in collaboration with local entrepreneurs across industries. Kinesiology students could partner with health care providers to design, test and market health and wellness devices. Bio-science and chemistry students could help in hands on pre-pharma research in association with a local bio-science firm. Computer science students

The District will offer the physical environment for Industry to invent and create in proximity and collaboration with other entrepreneurs. "Instead of inventing on their own in real or metaphorical garages, an array of entrepreneurs are starting their companies in collaborative spaces, where they can mingle with other entrepreneurs and have efficient access to everything from legal advice to sophisticated lab equipment. Rather than submitting to long commutes and daily congestion, a growing share of metropolitan residents are choosing to work and live in places that are walkable, bike-able, and connected by transit and technology." Industry would have access to shared resources including an incubator, funders, operational support, collaboration space, technology and high level analytical support (e.g. data analysis, market research) would be available in the District.

Regional Context

Central Oregon and OSU-Cascades' chosen location in Bend is the ideal location for an Innovation District.

¹ <u>https://www.brookings.edu/wp-content/uploads/2016/07/InnovationDistricts1.pdf</u>

And as per Steve Blank², a Contributor to Forbes (January 14, 2014), Bend is a deeply entrepreneurial community. "Bend fights way above its weight class and is professional scale for its size. Its ability to do so is tied to the deep entrepreneurial DNA that permeates the region (a very similar characteristic to Silicon Valley), originally out of necessity and now out of strategy.... Job creation in Bend is everyone's business. People who make the move [to Bend] typically need to start a business to have a job. Bend is the 16th largest metro area in the country for hightech startup density. Pretty amazing for a town with fewer than 100,000 people."

Until recently, Central Oregon was the largest region in the state without a four-year university and was considered an "education desert" that contributed to a reduced number of local students pursuing a 4-year degree. Following a 30- year quest, however, the tri-county region of Deschutes, Jefferson, and Crook opened Oregon's newest university campus in fifty years. According to the Milken Institute Bend-Redmond, OR, became the top-performing small metro in the nation. The rise from number 8 to number 1 was cited as "A growing university presence is underpinning strong high-tech job growth, and the metro benefits from low costs and plenty of recreational opportunities. It is also being recognized for developing expertise in drone technology."³

OSU-Cascades provides new opportunities for educational attainment by students and their families in a region that has lagged behind the rest of the state, especially in the rural counties of Jefferson and Crook. The following 2016 Student Population Data demonstrate the positive impact that OSU-Cascades has on our region's students:

- 70% from Central Oregon
- 50% receive federal Pell grants
- 35% first-generation university students
- 18% self-identify as U.S. minorities
- 34 students from Crook County (est. 200 high school graduates/year)
- 44 students from Jefferson County (est. 175 high school graduates/year)

During the Great Recession from 2008 to 2010, Central Oregon lost a significant number of jobs in the building materials, construction, tourism, and service sectors. Seasonally adjusted unemployment rates were far worse in Central Oregon counties as compared to the rest of the state and to the nation. As shown in Figure 1, it has also taken these distressed counties longer to recover, and even now Central Oregon falls behind much of the state. In fact, for the last 24-month period for which data is available from the Oregon Employment Department,

Central Oregon's unemployment rate was 1.5% points higher than the national rate (i.e., 7.2% as compared to 5.7%). As the region's economic hub, Bend is expected to lead the efforts to restore, stabilize, and improve the region's economic vibrancy. As a critical resource in the region's economic ecosystem, OSU-Cascades will play a key role by developing infrastructure and programs that will strive to promote economic health in our region.

² <u>https://www.entrepreneur.com/article/223997</u>

http://www.forbes.com/sites/steveblank/2014/01/14/bigger-in-bend-building-a-regional-startup-cluster/#50a5eb4c3ba2

³ <u>http://www.best-cities.org/</u>

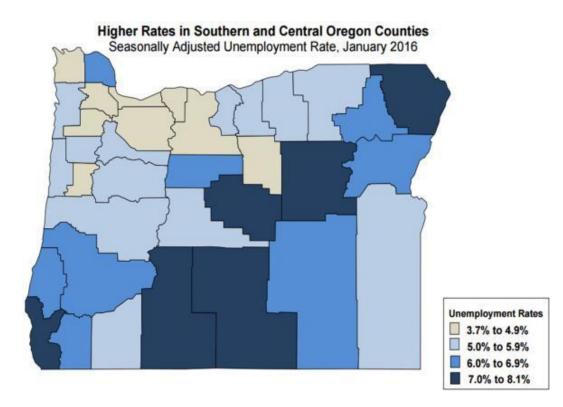
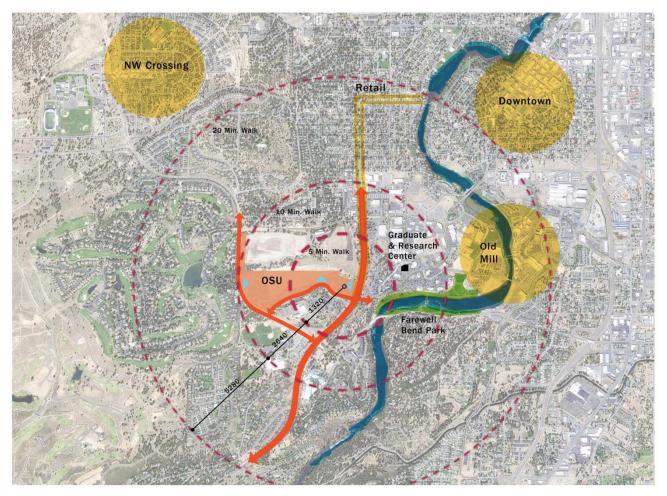


Figure 1. Seasonally adjusted Oregon county unemployment rates for January 2016 from the State of Oregon Employment Department

OSU-Cascades' Innovation District within the Master Plan has all of the elements of a successful innovation cluster – urban location, mass transit, entrepreneurs, developable space, knowledge capital and access to cultural arts. OSU-Cascades' Innovation District can be found 1.9 miles from downtown Bend, and near recreation, entertainment, athletic and medical facilities, and shopping. A major transit stop and planned future transit hub, in addition to walking, bike share and zip car provide easy access to the site. An entrepreneurial tech hub, 1001 Tech Center and Economic Development of Central Oregon (EDCO) is located with 0.3 miles of the campus. The OSU-Cascades Innovation Center for Entrepreneurs is being built at the Graduate and Research Center 0.5 miles from the proposed District. The entrepreneurial ecosystem is developing around the campus.

Master Plan

The innovation district will be integrated into the OSU-Cascades master plan. The innovation district will be over 380,000 square feet of space in 15 structures. The district will house private or public partner industry



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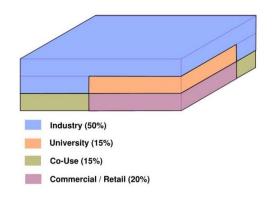
space, include university related uses, retail or other commercial space and co-use networking or research and development space. Either in one building or across the all the buildings, the space will be divided to include approximately 50% industry use, 15% university, 15% retail and 20% co-use R&D or networking.



STUDENT LIFE

ACADEMIC

PARTNERSHIP OPPORTUNITIES



An example might look like the following:

- Industry space: A local bio-sciences firm such as Grace Biolab (double the size)
- University space: pre-pharma biology or chemistry research lab and offices
- Co-use space: Shared equipment room and lab bench space or 100 person conference/classroom space
- Retail: a local coffee shop

Clusters

At a conceptual level, OSU-Cascades will prioritize District space use based on the key traded sector clusters, manufacturing in the region and OSU-Cascades academic core competencies.

- 1. High technology (software and hardware)
- 2. Biotechnology (pharma and medical device)
- 3. Recreational/outdoor equipment and apparel
- 4. Brewing and distilling
- 5. Food products
- 6. Aerospace
- 7. Tourism/hospitality ecotourism
- 8. Wood products and natural resources

Co-Use Space

Shared resources will be integrated into the innovation district to support OSU-C's research agenda and regional industry partner needs. Co-use space will include three key elements: 1) incubation/acceleration support, 2) shared services and 3) R&D space.

Incubation/acceleration space will begin with an expansion of the physical footprint our Innovation Center (ICE) for incubation of new product ideas. Expanded space will include more office space for start-ups and co-located technical support. OSU-C will seek anchor tenants from amongst our entrepreneurial eco-system in the region such as EDCO- Bend, Looking Forward, Bend Bio, Angel Fund managers and develop new support services including data analysis, project management and marketing research to co-locate within the district.

Shared services may include strategic services such as social and professional networking, legal services (e.g. business, tax, intellectual property, employment), regulatory support, venture capital, and marketing or communications. The District will also seek support services providers such as print and mailing services, video-conferencing, and graphic design.

Research and development spaces will be intermixed throughout the district. The R&D spaces will be coordinated with local industry needs and OSU-C core competencies. Currently identified regional needs include small batch manufacturing (e.g. textile for Outdoor Products), maker space, shared equipment and lab spaces for the bio-sciences research, industrial design/engineering lab (e.g. aviation or medical devices), and R&D labs for industry / academic discipline combinations such as kinesiology / medical devices or apps, computer science / software or hardware, bio-sciences and chemistry/ pharmaceutical development, engineering / aviation, etc.

In addition to the Innovation District square footage, the OSU-C master plan will include a birth to 6th grade learning center, 300+ beds of workforce housing, energy production including both a central utility plant and solar arrays, and district wide operations and maintenance including janitorial, grounds, and environmental health and safety.