2015 Innovation Partnership Zone Re-Designation Business Plan

Mission

"Building healthy and sustainable communities, environments, economies and people through research, technology development and commercialization."

Goals

Over the next four years, the goals of the partners engaged in the Innovation Partnership Zone, include:

- **Knowledge Discovery** - State of the art data mining and information technologies to identify trends and patterns that would result in new ways to deliver healthcare in the future
- **Community Enhancement -** Leverage existing personnel and technology assets to design new building techniques to provide high performing environments
- **Workforce Development -** Create alignment between education and workforce programs to deliver the next generations of workforce and talent
- **Healthy Community -** Improve human health through biomedical research, inter-professional health education, novel therapeutics and diagnostics and improved patient care and outcomes

Leadership/Governance

Management Team

IPZ Administrative Team:

- Robin Toth, VP of Business Development, Greater Spokane Incorporated

The IPZ Administrative Team is responsible to collect and report annual performance criteria which includes number of workers, business sites, assets, and investments. GSI also participates in the annual conference and helps to market the area as a state-designated IPZ.

University Partner for Research, Development and Commercialization:

- Dr. Lisa Brown, Chancellor, Washington State University Spokane

Washington State University Spokane campus is the main partner that fosters commercially valuable research or creates commercially applicable innovations, and also the educational institution that will provide workforce training related to the research or the commercial application of research.

City Partner

- Andrew Worlock, Associate Planner, City of Spokane

The City of Spokane provides services to the Innovation Partnership Zone and has designated the Spokane University District as a Targeted Development Area. They currently are using Local

Revitalization Funding to build out the infrastructure in the District as designated by the Washington State Legislature.

Business Accelerator, technology focused

- Bill Savitz, CEO, Ignite Northwest
- Jeff White

Ignite Northwest is a private, non-profit organization that intends to act as a business accelerator for young technology and life sciences companies.

Spokane University District/ Downtown Spokane Partnership

- Mark Mansfield, PhD, Executive Director, University District Development Association
- Mark Richards, President, Downtown Spokane Partnership

The Downtown Spokane Partnership manages the University District Development Association which serves as the catalytic organization to achieve the vision identified in the University District Master Plan.

Sector lead on private clean energy firms

- Kim Pearman-Gillman, Director, Strategic Market Development, McKinstry

Kim will represent the private clean energy firms in the SUDIPZ.

Anticipated Partner Involvement and Investment

The management team highlighted above is very involved in the growth and development of SUDIPZ through a multitude of roles.

- Health Industry Development Group
- Higher Education Leadership Group
- University District Public Development Authority
- University District Development Association, University District Marketing Communication Group, University District Advisory Council
- Academic Health Science Center (AHSC) Planning and Coordination Steering Committee
- AHSC Academic & Biomedical Research Leadership Group
- AHSC Communications & Economic Development Group
- AHSC Resource Leadership Group
- AHSC Healthcare Partnership Leadership Group
- Consortium of Local Energy and Efficiency Northwest Companies (CLEEN NW)
- Vision 2030
- Washington Clean Technology Alliance

The partners identified above provide more than $250,000 per year in actual dollar investments in the SUDIPZ and provide far more than that dollar figure in in-kind activities.

Other partners included in the IPZ:

Research

- University of Washington-WWAMI program
- Gonzaga University
- Whitworth University
- Eastern Washington University
- Community Colleges of Spokane
- Spokane County Medical Association

Private Sector

- Avista Corporation
- Baker Construction and Development
- Cowles Company
- Inland Northwest Health Services
- Kalispel Tribe
- Kiemle & Hagood
- Providence Health Care
- Red Lion Hotels Corporation
- Spokane Association of Realtors
- Spokane County
- Spokane Regional Health District
- Washington Trust Bank

Workforce Development

- Ignite NW
- Spokane Area Workforce Development Council

Sustainability plan over the next four years

With Washington State Legislature approval of an operating budget that includes funding to start the Elson S. Floyd School of Medicine on the WSU Health Sciences Campus in Spokane, we are well positioned to see growth in the IPZ over the next four years. Funding came from multiple sources including $2.5 million from the legislature and a 10-year commitment of $300 million by the WSU Regents. With the continued growth of the University of Washington's WWAMI program and the fall of 2017 start of the WSU community-based medical school, student growth in undergraduate medical education should grow 3-fold over the current number of students.

In addition to the undergraduate medical education growth plans, Spokane is committed to bring on 150 new residency positions to the area over the next 10 years. This effort is driven by key supporters of the growth of the Health Sciences Sector under the Vision 2030 initiative. The Spokane Teaching Health Center, within the IPZ is one primary location for this training. This facility should be completed mid-2016. Our intent to incorporate this here is that Spokane will help with the current shortfall of medical professionals.

Both private and public partners in the SUDIPZ are very engaged and have been front and center in advocating for the growth of innovation and commercialization in the region. Through a collaboration of Empire Health Foundation (EHF), the Health Sciences and Services Authority of Spokane County (HSSA), Greater Spokane incorporated (GSI) and Washington State University Spokane (WSU Spokane) solicited and launched a situation assessment of Spokane Health Sciences Commercialization through the associates at Berk, a strategy and analysis firm. The purpose was to increase the use and impact of existing commercialization funds and kickstart the Spokane Technology Center as an incubation hub for small businesses. These partners, and other organizations, believe that more aligned and intentional support for commercialization and innovation is critical to grow, attract and retain companies, which in turn will contribute to Spokane's economic growth. The study revealed six recommendations which will accelerate innovation and commercialization in the region.

1 – Establish a Life Sciences Leadership Roundtable (LSLR) to agree upon an overarching vision for life sciences and services economic development in Spokane County.
2 – Create and curate a compendium of life sciences commercialization resources which could include facilities, education and training services, inventory of companies and organizations and profiles of additional resources.
3 – Increase funding resources for life sciences and services early stage companies, primarily through HSSA and/or EHF.
4 – Recruit life sciences/services companies to Spokane and grow existing companies with a focus on medical and lab devices, companies in the nutrition/agriculture interface, hospital/health information systems, quantitative modeling for drug discovery and development, clinical trials related to rural health and commercializing IP through WSU-S centers of excellence – the Sleep and Performance center to start.
5 – Focus on leadership development and educating entrepreneurial business leaders to create a new culture of entrepreneurism in Spokane, leveraging the work done by the local universities and community colleges.
6 – Consider academic technology transfer programming

Efforts to expand the original collaboration are under way, and additional monies are being invested to complete the recommendations set forth.

An ongoing effort launched in 2011 by HSSA and EHF, with an investment plan of $12.5 million by 2021, assisted in funding four new core laboratories on the WSU-Spokane Campus. These core facilities include a microscopy & imaging core, a mass spectrophotometry core, and a pharmacogenomics core. The facilities and equipment are available to university researchers and private entities. The combination of these initial investments is expected to increase the level of health sciences research funding from the National Institutes of Health (NIH) and other federal and private funders) to $70 million annually by 2030.

A study is underway to identify and attract key companies to the region that will enhance and drive efforts in the IPZ and health sciences. This is a private sector effort driven by Avista, a Spokane based company. Tripp Umbach has begun its assessment of the region through focused research with stakeholders and similar size markets. This is a focused study that will identify the most appropriate companies to recruit to the region.

The community is invested in growing the University District and the Innovation Partnership Zone. While this information pertains directly to the healthcare sciences and services industry, there is also much growth in the energy efficiency and clean technology arena in and around the SUDIPZ.

Avista Utilities, Itron, and WSU are leading an initiative that would make the Spokane's University District a smart city laboratory/accelerator. Smart Cities are a place to implement and evaluate the best smart city strategies of today and the most promising next-generation smart city strategies for tomorrow. The goal is to leverage a key set of smart systems at the intersection of energy, water, the environment and transportation that could deliver key economic, well-being and environmental benefits to the University District and the greater Spokane region.

Strengths of the IPZ

Technology

The original IPZ applications included a long list of technology advancements within the SUDIPZ. Connectivity within the SUDIPZ continues to grow, based on new investments by the Universities and other entities. Technology isn't an afterthought any longer; it is embedded in everything on the University District campus. And it is application based.

- **Angel Learning** - Advanced solutions offered include course backup, minimizing student email volumes, using macros, following student progress with agents, and exporting course content such as gradebooks or multiple assignment submissions.

- **Digital Media Portal** - Add, move, or delete video content from the Digital Media Portal site, enabling instructors and students to access and stream relevant course material on demand. The Digital Media Portal is available 24 hours a day, 7 days a week and is accessible anywhere a user has access to the Web.

- **Lecture Capture** - Assistance with recording a lecture in a classroom (with or without a student audience), recording using the Instructional Media Studio, or recording using a personal computer. We can also offer multiple playback options, including scheduled recordings uploaded to Angel, on-demand videos and audio podcasts, and linked or embedded videos using our Digital Media Portal service.

- **Videoconferencing** - Videoconferencing is an essential service for a campus engaged in distance learning and is a core function at the University District. Our videoconferencing technologies are state-of-the-art and allow our classrooms and conference rooms to synchronously connect to others on our network – effectively creating a shared learning experience between students, faculty, and staff, regardless of their physical location.

- **Computer Lab** - The computer lab contains standard Windows-based desktop computers offering online access and essential software – including Microsoft Office, Outlook, Silverlight, and SharePoint.

- **Instructional Design** - Adapting a traditional course for online application can be a daunting task. Our team can simplify the process – explaining all of our options to develop an effective lesson plan and offering instructors our expertise in learning management systems, video and audio streaming, lecture capture, and educational technology and software.

- **Teleconferencing** - Teleconferencing is a service that connects one or more participants in shared audio conference via an analog or VoIP telephone. Teleconferencing is a more sophisticated and manageable way of conferencing in a voice-only format than a simple telephone conference or three-way call.

- **Web conferencing and collaboration** - Web conferencing and collaboration allows students, faculty, and staff to connect on the web and participate in a shared collaborative space. This

service enables participants to interact in real-time as well as the ability to share presentation material, slides, or other files.

- **Desktop & Mobile Videoconferencing** - Desktop and mobile videoconferencing is made possible through a client-based software application that allows users to join distance learning classes and videoconferences on the network. Currently, this application is only available to our graduate students, faculty, guest lecturers, and staff.

- **Instructional Media Studio** - The Instructional Media Studio (IMS) is a dedicated recording studio for digital videos and presentations, featuring high definition cameras, digital microphones, monitors, and a SMART Podium for electronic annotation.

The Smart Cities initiative will also incorporate the utilization of technology. By focusing efforts on these 770 acres, we could create a Smart City proving ground *within* the City of Spokane. This urban campus is currently home to more than 54,000 residents and daily commuters, is flanked by two regional health systems, and is ideally located adjacent to the city's core, on the banks of the scenic Spokane River.

Even better -- less than half of the University District's total acreage has been fully developed, providing a blank canvas of opportunities for developers, entrepreneurs, researchers and community partners to prototype whatever Smart City applications they may envision. We see this district becoming a living laboratory at the frontier of the next generation of smart city applications -- driven by the citizens who will use them and driving efficiencies and momentum by leveraging the backbone of a planned Avista smart grid implementation.

Focusing the scope on the University District – within the Innovation Partnership Zone, while leveraging the Health Sciences focus of the campuses and the Health Care concentration of the regional economy, creates a manageable, community-scale living laboratory that has the ability to enhance resident well-being, and we are focusing on its potential as a smart city for health. It's an obvious application, given the existing expertise in Health Sciences. And we believe that as new businesses and developers are recruited, even more Smart City applications and possibilities will evolve through synergy.

Human Capital

Communities provide many types of assets for residents. Some are based on the physical landscape of the region- providing natural resources to live and survive. Others are built infrastructure- moving people, goods and information from place to place. Lastly, there are the kinds of assets that are necessary for a community to thrive and to prosper by creating or reacting to change. Human capital and social capital are such assets to a region. They promote goodwill, trust, and cooperation between members and groups of a community.

Human capital is the notion that all people have the ability to be great and do great things. All members of a society have the ability to function as a working part of the economic system within their community and to foster ideas, innovation and services for the better good of society. Economic vitality is 100% dependent on human capital. Without hard-working people exerting their skills and knowledge, societies become stagnant at best.

Social capital is an asset that can be leveraged to create deals and relationships, build teams and community, moderate disagreement, inspire innovation and change, enter new markets, and attract businesses and citizens to a community. It is the strength of social capital, in the form of leadership, partnerships, esprit de corps, and community spirit that drives economic growth and development. The Spokane University District Innovation Partnership Zone is rich in all these elements, which are critical to economic growth and vitality. The community is particularly noted for its collaborative culture and interconnected social networks that enable talented workers, entrepreneurs, investors, community volunteers, and leaders to tap into the community's resources.

Infrastructure

The 770 acre Spokane University District Revitalization Area was created by ordinance in August 2009. This is a local revitalization financing district, a form of tax increment financing, authorized by the legislature in 2009. The proposed public improvements have an estimated value of just under $40 million dollars and were drawn from adopted plans and an extensive public participation process. The public improvements include water and sewer upgrades, stormwater and drainage systems, transit facilities, streetscape and safety enhancements and other projects throughout the SUDIPZ.

Street improvements by the City of Spokane have totaled more than $24 million, and includes improvements to Division Street, Spokane Falls Blvd, Third Avenue, Martin Luther King Way, Second Avenue, Browne and Division Street Couplet, Hamilton and Nevada Streets, Arthur Street, Ben Burr Trail, and Erie Street.

Campus buildouts by Gonzaga University and Washington State University have amounted to more than $414 million, providing more educational capacity for programs and students. More than $123 million in private investments have grown housing, retail, commercial and entertainment venues.

Significant projects which have occurred over the past four years include:

- Pharmaceutical and Biosciences Building – WSU
- Boone Avenue Retail
- Ruby Street Apartments
- Matilda Building
- Spokane Teaching Health Clinic
- Ruby Suites
- John J. Hemmingson Center - Gonzaga

Long-Term Market Growth for the Technology

Health Sciences and Services

A recent analysis of the Riverpoint Campus and health and biomedical programs estimated potential community and economic growth over the next 20 years. This analysis considered:

- Expansion to a four-year research-intensive medical school
- Expansion of clinical clerkships
- Expansion of residence positions at hospitals
- Expansion of other health science programs – dentistry, pharmacy, nursing, allied and public health
- Expansion of healthcare programs and services
- Expansion of research
- Related commercial spinoffs

The assumptions from the analysis incorporated both expansion of medical education and recruiting and retaining high-quality faculty who compete successfully for funding from national and international sources.

As the SUDIPZ has a focus on research and innovation, it is important to include the types of medical research that are currently occurring. Contributing research activities are:

- Molecular biology research
- Mental health research and training
- Nursing research
- Pharmacy clinical research
- Health education research
- Sleep and performance research
- Health informatics

This 2009 analysis found that growth in research and biosciences in Eastern Washington is estimated to grow from $32.4 million in 2009 to $656 million in 2030. However, four years about the original analysis, Tripp Umbach found that the 2013 numbers were approaching 2017 estimates, encouraging those entities making investments in the Innovation Partnership Zone that their efforts were accelerating the economic impact substantially ahead of schedule. Additional efforts are occurring in the 2015 timeframe as well to gauge the economic impact and create a revised plan going forward.

Clean Technology

The clean technology analysis from 2010 is still appropriate to mention. While not scientific, it certainly showed a wealth of knowledge in this area could be an impetus for new companies and activities. The Smart Cities initiative mentioned previously is a prime example of taking an area of the community and leveraging green and clean technologies to advance data analytics. Most significantly, the 770 acres of mixed use urban land adjacent to downtown Spokane can leverage the utility infrastructure investments already in place and those currently planned to demonstrate how the utility backbone can be utilized for customer-driven, smart city applications which can be developed upon a wealth of data sets and will drive a wide range of data analytics capabilities.

Entrepreneurial Climate in the Proposed Zone

The entrepreneurial ecosystem in the Innovation Partnership Zone has grown substantially since the last update four years ago. Multiple players have assumed roles to grow commercialization and new companies.

Ignite Northwest is the only accelerator in the Eastern Washington region, **serving** a wide range of technology related enterprises, with an emphasis in the bioscience technologies, energy innovation and aerospace fields. Our comprehensive, 12-week curriculum equips entrepreneurs with resources and prepares them for the next stages of business growth in 11 functional areas:

- Product-Market Fit
- Market Planning and Strategy
- Go-To-Market Strategies
- Financial Reporting
- Legal
- Value Proposition
- Intellectual Property
- Marketing Tactics
- Revenue Models
- Team/Leadership Development
- Growth Financing Options

Entrepreneurs receive customized mentoring based on their company's needs to guide them through the challenges of growing a business. Additionally, entrepreneurs receive valuable access to community contacts and funding resources and become integrated into a vibrant entrepreneurial ecosystem in the region.

Ignite Northwest's Program offers entrepreneurs a wide range of support in addition to weekly classroom material.

- Space in the Ignite Northwest – WSU Center for Innovation facility to conduct work.
- Access to support from the Technology Growth Fund (TGF), a revolving loan fund able to provide $50k to $250k loans.
- Diverse advisors and a growing alumni network with regular events and a private online community to keep entrepreneurs well connected long after graduation.
- Access and training for Washington State University's library and research databases for in-depth market analysis, competitive landscape scans, sector research, industry profiles, and finance charts.

The WSU Center of Innovation is located at the east end of Main Street and provides technical assistance and applied research to new businesses and those who have great ideas and would like to become the region's newest businesses. The Center works with WSU faculty, staff, and students to develop new ideas, and with individuals and businesses from the community and the state of Washington who wish

to take new ideas forward. Currently, we serve clients from the West Side, Vancouver area, and Eastern Washington.

The University Center is funded by the Economic Development Administration with a matching contribution from WSU Spokane. Director Michael Ebinger also is the WSU Spokane contact for the WSU Office of Commercialization.

The Toolbox is a private, for-profit manufacturing accelerator with a public-access makers space provided through a local non-profit makerspace, Spokane Create. For those ideas selected for acceleration, The Toolbox creates a team and assists that team with creating a business plan, manufacturing a final prototype, securing financing and forming a company. The Toolbox provides the companies it incubates with access to manufacturing space and ongoing mentorship.

The Toolbox is one of the most unique and collaborative innovation centers in the Inland Northwest. Their mission is to develop and foster jobs, economic development and business leadership within our region. Our goal is to create an environment for our startups and tenants that is focused on LEAN manufacturing ideas, strategy and execution.

Startup Spokane, a program of Greater Spokane Incorporated, was developed with one reason in mind – to be the hub of all things entrepreneurship in the Inland Northwest. Offering one-on-one assistance to our region's budding entrepreneurs, co-working space for Spokane's top talent, or events to engage the startup community, Startup Spokane is geared to be your home to all things entrepreneurship in Spokane and beyond.

Programs at Startup Spokane include entrepreneur and mentor assistance, events and a co-working space, Startup Spokane Central.

Entrepreneur and mentor assistance are invaluable to individuals looking to start and run a company. Startupspokane.com has an online database of resources that are willing and able to help those new entrepreneurs be successful.

In addition, there are a number of events each month that entrepreneurs can connect with to ease their entrée into the business world. These includes pitch panels, pitch clinics, executive breakfasts and after hours get togethers – all combining to provide a full menu of activities to help assist folks with a new idea.

Located on the ground floor of the Spokane Entrepreneurial Center, Startup Spokane Central offers a comfortable shared work environment that gives entrepreneurs, startups and freelancers the opportunity to work, meet, share and learn through collaboration. Being a member of Startup Spokane Central means not only a great shared work environment with other like-minded people, but access to business services and events that makes Startup Spokane Central a unique offering for those looking to take their business or idea to the next level.

Members of Startup Spokane Central have full access to:

- First-come 24/7 secure access to our large shared workspace area.
- High-speed WIFI with wireless printer. Free use of reservable meeting rooms with projector.
- Use of kitchen, personal lockers, and private phone booths.

- Discount parking through Diamond Parking.
- Free access to mentorship office hours and in-house business consultation with Gonzaga New Venture Lab, WSU University Center for Innovation, Spokane Public Library, Kairos Law, and more.
- Free access to community networking and education event put on by Startup Spokane and community partners.

Commercialization Plan

Dependent upon the type of research, a commercialization plan may vary from company to company. The following is a fairly standard commercialization plan outline to ready the technology for market.

a. Statement of Intention
    a. Summarize type of license, patents associated with license, and the desired field of use
    b. Describe how the technology will apply to a particular commercial sector and how it will be marketed to prospective customers.

b. Justification
    a. Explain the activities of the company, what type of company, what markets is serves, partners it works with and the development of new products.
    b. Describe the scope of supply, plants and locations and recent production numbers.
    c. Describe recent market share estimates and rankings, and any recent market developments.
    d. Describe short- and long-term company strategies and objectives and how the licensing of the technology fits into these plans.

c. Target Markets, Values and Sizes
    a. Provide an analysis of the potential market size, the monetary value of the market, current market position, and potential market penetration.

d. Value of Technology is Each Specific Market Place
    a. Describe how incorporating the technology into various market places will be attractive to customers and clients.
    b. Give examples.

e. Specific Marketing Steps for Each Market

a. Describe how the company will go about establishing the market and attracting customers.

f. Potential R&D Milestones

a. Discuss any steps that must be taken in the area of R&D to allow the technology to be fully ready for commercialization or for followon applications or enhancements.

g. Timeframe to Market

a. Identify the schedule for bringing the technology to market
b. Include all necessary steps such as acquiring the license, entering and conducting an agreement to fully develop the technology
c. Identify market planning and development

Accomplishments/Progress to Date

There have been many accomplishments in the Innovation Partnership Zone to create the appropriate environment for research, innovation and commercialization.

The October 2015 University District Magazine includes a complete overview of the district, including a map with investments in the IPZ since 2002. The look and feel of the magazine also provides much easier and more interesting reading with numerous authors and articles that capture the excitement of the district.

Plan for measuring and reporting

Greater Spokane Incorporated uses a variety of sources for reporting on jobs, companies, innovations, activities and infrastructure for a wide variety of grants, public funding, investments, etc. In addition, we utilize the industry standard IMPLAN economic impact software to calculate direct, indirect and induced jobs, tax revenues and annual economic impact.

As the administrator of the SUDIPZ, we will continue to track the following information for the annual report:

- Number of startup companies, jobs, payroll and private investments
- Number of new and recruited companies, jobs, payroll and private investments
- Number of retained and expanded companies, jobs, payroll and private investments
- Number of licenses and patents
- New activities of innovation
- Revenue increase by company – if not deemed confidential
- Products or services developed from research or in the lab
- Media coverage and marketing activity