This publication was prepared by Southeast Missouri State University, Institute for Regional Innovation and Entrepreneurship. The statements, findings, conclusions, and recommendations are those of the author(s) and do not necessarily reflect the views of the Economic Development Administration.

Table of Contents

PREPARED FOR

Boonslick Regional Planning Commission

PREPARED BY

Brian Tapp

Dr. James Stapleton

Dr. Bruce Domazlicky

Dr. David M. Yaskewich

Ryan Ungerank

Jakob Pallesen

Southeast Missouri State University

SPECIAL THANKS TO

Boonslick Staff

Chuck Eichmeyer, Interim Director

Steve Etcher, Former Director

Krishna Kunapareddy, Planner

Jane Cale, Office Manager

Mark Cunningham, Planner

BRPC Executive Board

Murray Bruer, Chairman

Hubert Kluesner, Vice-Chairman

Floyd Weeks, Secretary

Mark Cross, Treasurer

Ryan Poston, Member

Matt Bass, Member

Methodology

The focus of the Scope of Work consists of five key tasks identified in the contract for services. These tasks provide opportunities for considerations and evaluation of the entrepreneurism and innovative developments in the Boonslick region

INCUBATION

The first area analyzed focuses on **current conditions and development in incubation programs and institutions in Missouri**. This includes a breakdown of existing incubators in the state, as well as a general overview of types and models of incubation. These will be evaluated against best practices.

INVESTORS

The second area for **identification considers various types of investments that are typically available for emerging entrepreneurial ventures**. This presents the different approaches entrepreneurs can take to secure the needed funding to keep their business alive in the initial months or years of operations.

DATA ANALYSIS

Thirdly, **the economic foundation of the region and an evaluation of the strengths of the area will be identified**, including what clusters can be considered most suitable for entrepreneurial investments. "Suitable" here refers to the degree to which a cluster has been growing over an extended time period, where significant growth must be apparent for it to be deemed suitable for entrepreneurial investments. Additionally, an innovation index is provided and analyzed to further the understanding of the entrepreneurial ecosystem in the region. The region analyzed for this project includes the economic data for the Boonslick region, which is established following county boundaries and include: Lincoln, Montgomery, and Warren counties in Missouri.

POLICY FRAMEWORK

The fourth area considers how **entrepreneurship and small business development have been proven to be a key driver in economic recovery and growth**. To fully understand and utilize the strength of an entrepreneurial ecosystem, five strategic elements have been proposed as key drivers of ecosystem development:

- Developing a Pipeline for Educated and Skilled Entrepreneurs
- Cultivating Technology Exchange and Innovation
- Improving Access to Capital
- Promoting Awareness and Building Networks
- Optimizing the Regulatory Environment

Source: Dr. James Stapleton, 2012. *Transforming Community Economies*, Delta Regional Authority

RECOMMENDATIONS

Finally, a summary of the findings and options that were reviewed and analyzed, will be presented with **recommendations based on evaluation of data results,** highlighting key factors relating to innovation and entrepreneurism in the region. This includes identification of the top five industry clusters, and a detailed description of key strengths related to regional innovation.

Incubator Research

HISTORY AND BACKGROUND

A business incubator is an economic development concept that promotes success and encourages long-term sustainability of business ventures. These entities became prevalent in the 1980's with the investment of federal, state, and local resources providing opportunities for entrepreneurial efforts to reduce the cost of market entry and promote opportunities in their specific market. Typical incubators provide space, administrative services, training, and other programming that advances the client's learning curve and sets the foundation for the key aspects of the business.

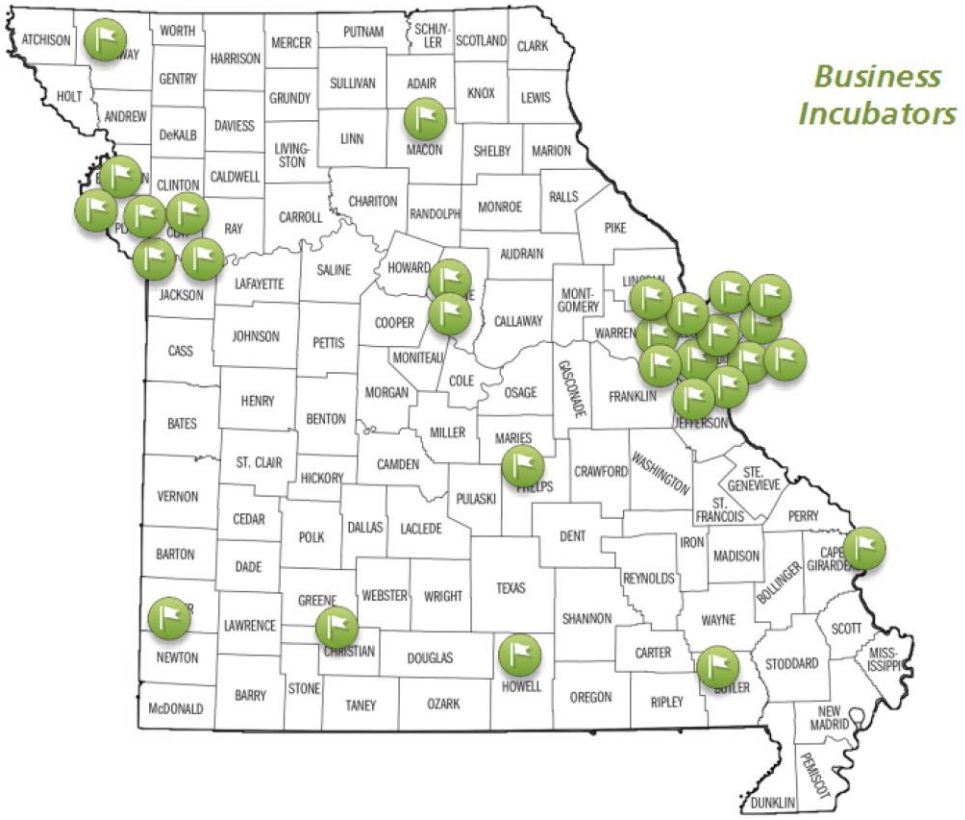
As the incubator concept progressed, the development of market specific incubators began to emerge in the 1990's in the form of life sciences, bio sciences, tech ventures, and other related organizations (mainly technical and scientific). These incubators have had success in specific markets where economic clustering occurs. **More recently, the development of the creative arts, manufacturing, and other incubators have drawn attention across the country, as the specific dynamic for their development is the communication, interaction, and fostering of new ideas and problem solving amongst a group of individual businesses**. In several cases, these Creative Accelerators will even develop retail space for clients to sell goods or services.

Evaluating the market presence of existing incubators in the state and region are also important when considering the development of a new facility. St Louis has a large selection of incubators of various types and purposes, including the Center for Emerging Technologies, T-Rex Incubator, and Midtown Enterprise Center, among others. First-hand contact with these and more incubators will provide a better understanding of how they operate and what impact they have on the entrepreneurial ecosystem they engage in.

As the graph on the following page clearly shows, the concentration of incubators across the state clearly reside within the St. Louis and Kansas City market, with minimal locations in rural sectors of the State. Boonslick has a strategic advantage based on its urbanizing and rural economies within the region.

Missouri Business Incubators		
BEGIN New Venture Center	800N. Tucker Blvd St. Louis MO 63101	(314) 802-0995
Center for Emerging Technologies	4041 Forest Park Ave. St. Louis, MO 63108	(314) 615-6900
Independent Regional Ennovation Center	1509 W. Truman Rd. Independence, MO 64050	(816) 252-5777
Joseph Newman Business and Technology Innovation Center	320 E. 4th St. Joplin, MO 64801	(417) 624-4150
Kit Bond Science and Technology Incubator	4221 Mitchell Ave. St. Joseph, MO 64507	(816) 271-5860
Life Science Business Incubation Center	1601 S. Providence Columbia, MO 65211	(573) 884-0492
Ozark Foothills Development Association	3019 Fair St. Poplar Bluff, MO 63901	(573) 785-6402
Ozark Small Business Incubator	401 Jefferson West Plains, MO 65775	(417) 257-2563
St. Charles Economic Development Center	5988 Mid Rivers Mall Dr. St. Charles, MO 63304	(636) 441-6880
Southeast Missouri Innovation Center	One University Plaza, MS 3300 Cape Girardeau MO, 63701	(573) 651-2570
St. Louis Enterprise Center- Wellston	6439 Plymouth Ave Wellston, MO 63133	(314) 615-7621
Downtown Incubators	500 East Walnut Columbia, MO 65201	(866) 870-6500
Arts Incubator of Kansas City	115 W. 18th St Kansas City, MO 64108	(816) 421-2292
T-Rex Incubator	611 Olive Street St. Louis, MO	
Hispanic Economic Development Corporation	1427 W. 9th St Kansas City, MO 64101	(816) 221-3442
18th and Vine Business Incubator	1601 E. 18th St Kansas City, MO	(816) 513-6817
Midtown Enterprise Center	3830 Washington Ave St. Louis, MO 63108	(314) 534-1818
South County Enterprise Center	315 Lemay Ferry Rd. St. Louis, MO 63125	(314) 638-5858
West County Enterprise Center	743 Spirit 40 Park Dr Chesterfield, MO 63005	(636) 519-4700
Macon County Innovation Center	902 N. Missouri St Macon, MO 63552	(660) 385-5627
Innovative Technology Enterprise at UMSL	4633 World Parkway Circle St. Louis, MO 63134	(314) 824-2000
Direct Impact Business education Center	1021 N. Grand Blvd St. Louis, MO 63108	(314) 643-7410
Northwest Missouri State University Center	1402 N. College Dr Maryville, MO 64468	(660) 562-0823
Nidus	1005 N Warson Rd St. Louis, MO 63132	(314) 812-8003
Missouri Enterprise	800 University Dr Rolla, MO 65401	(573) 364-8570
St. Charles Economic Development Center	5988 Mid Rivers Mall Dr St. Charles, MO 63304	(636) 441-6880
St. Louis County Economic Council	121 Maramec Ave St. Louis, MO 63105	(314) 615-7621
Think Big Partners	1800 Baltimore Kansas City, MO 64108	(816) 842-5244
Robert W. Plaster Center for Free Enterprise & Business Development	405 N Jefferson Ave Springfield, MO 65806	(417) 837-2600

Missouri Business Incubators



On the following pages, 23 incubators have been highlighted, with short descriptions of their type, main focus, available space, and accomplishments. This serves to give an idea of the variety of incubator types found in the state of Missouri. A general overview of incubator types is also included, providing more details on specific strengths and challenges.

CENTER FOR EMERGING TECHNOLOGIES

4041 Forest Park Ave. St. Louis MO, 63101

(314)-615-6900

http://www.emergingtech.org/

The Center for Emerging Technologies (CET) provides specialized facilities, knowledgeable support services, entrepreneur training programs, and access to capital to help establish and develop next generation medical and other advanced technology companies. CET Focuses on bio and medical technologies. CET has been a key member of a St. Louis public-private-three university partnership focused on creating all of the elements needed to commercialize innovations through new companies, grow a competitive life science industry cluster, and be a leading center of tech-based economic development.

DOWNTOWN INCUBATOR

500 East Walnut, Columbia, MO 65201

(866)-870-6500

http://www.theloi.com/downtown-incubator

The Downtown Incubator is a 24/7, shared workspace for innovators, serving as a meeting place for natural collaboration with other creative minds. Members have access to meeting rooms, two-way conferencing, business classes, and consulting, helping them to establish their startup ventures.

Members of the Downtown Incubator also have the benefit of the League of Innovators (LOI), serving as a connector between innovators and advisors. LOI focuses on sparking innovation through events, space, collaboration and building the local entrepreneurial community. The Downtown Incubator is operated by the city's Economic Development Agency (EDA) and costs $ 150 a month for space.

ST. CHARLES COUNTY ECONOMIC DEVELOPMENT CENTER (EDC)

5988 Mid Rivers Mall Drive, St. Charles, MO 63304

(636)-441-6880

www.stcc-edc.com

In order to foster entrepreneurial success, the EDC has been operating a 60,000 SF, state-of-the-art small business incubator facility since 1993. With spacious office suites and warehouse/flex space of varying sizes, the EDC incubator provides help to business owners of small and mid-sized companies so they can grow and succeed.

Home-based businesses and new start-up companies who move into the EDC incubator benefit from a dynamic and professional environment that has shared office services, staff resources, access to conference rooms, specialized training programs, and much more. Since 2000, more than 100 companies have graduated into the marketplace from the EDC business incubator and created more than 400 jobs in the process.

ST. LOUIS ENTERPRISE CENTER- WELLSTON

6439 Plymouth Avenue, Wellston, MO 63133

(314)-727-6132

www.slcec.com

St. Louis Enterprise Centers Wellston is a 10,000 SF business incubator situated on two acres within the City of Wellston. It features office and warehouse space for up to 18 companies and is located within close proximity to a MetroLink light rail station and Metropolitan Education and Training (MET) Center, a workforce training facility. Industries served include office, production, and warehouse.

MIDTOWN ENTERPRISE CENTER - ST. LOUIS

3830 Washington Avenue, St. Louis, MO 63108

(314)-534-1818

www.slcec.com

St. Louis Enterprise Centers Midtown is located in the City of St. Louis within close proximity to the downtown area. The 35,000 SF facility features office, warehouse and production space for up to 30 companies. The selection process involves an interview with our Enterprise Center vice president, filing an application with inclusion of a business plan and talking through your plans for revenue and employment growth. Final approval is then given through the St. Louis Enterprise Centers board of directors.

SOUTH COUNTY ENTERPRISE CENTER - ST. LOUIS

315 Lemay Ferry Road, St. Louis, MO 63125

(314)-638-5858

www.slcec.com

In 2000, St. Louis Enterprise Centers South County opened its doors to entrepreneurs. Located in South St. Louis County, the incubator is conveniently situated within minutes from I-55 and I-270. The 20,000 SF business incubator features office, warehouse, production, and retail space for up to 30 companies. It is the only St. Louis Enterprise Center to offer retail space to entrepreneurs.

WEST COUNTY ENTERPRISE CENTER

743 Spirit 40 Park Drive, Chesterfield, MO 63005

(636)-519-4700

www.slcec.com

Founded in 1997, St. Louis Enterprise Centers West County is conveniently located off of Chesterfield Airport Road near Spirit of St. Louis Airport. The 43,000 SF incubator features office, warehouse and production space for up to 50 companies and is noted for the number of high-tech and high-growth client companies it serves.

MACON COUNTY INNOVATION CENTER

902 N. Missouri St Macon, MO 63552

(660)-385-5627

www.maconcounty.org

The Macon County Innovation Center (MCIC) provides business services including business plan writing, feasibility studies, marketing assistance, procurement assistance, product development, and financial planning. In addition, the MCIC has office and/or manufacturing space available to new or growing businesses within the community. The MCIC is governed by a four-member committee, including the Presiding Commissioner, Associate Commissioner, City Administrator, and the Mayor. Macon County Economic Development Director serves as a consultant to the committee. Macon County Economic Development oversees the Center and together with the University of Missouri Extension office and our local Small Business Technology Development Center (SBTDC), provides the business assistance services.

INNOVATIVE TECHNOLOGY ENTERPRISES AT UMSL

4633 World Parkway Circle, Berkeley, MO 63134-3115

(314)-824-2000

www.ite-stl.org/

Innovative Technology Enterprises (ITE) at UMSL is designed to be a major force in translating innovative ideas into thriving businesses in a variety of fields — primarily chemistry, life sciences and information technology. ITE offers small offices for one- or two-person startups as well as office suites suitable for 4 to 20 people. Companies leasing office space receive full access to the amenities offered at ITE including access to university libraries, interns and faculty consultants, opportunities for faculty collaborations, and more. ITE is 53,200 SF and includes 256 parking spaces. Some businesses that incubate at ITE include Ancor Anaerobic, Biz Manualz, Medicial Chemistry Group, and Quodient.

DIRECT IMPACT BUSINESS ENTERPRISE CENTER

Saint Ann, MO 63074

(314)-882-8507

www.directimpactstl.org/

Direct Impact Business Enterprise Center was founded in January 2012, by Tracey Clark-Jeffries and Joseph Robnett. In partnership with St. Louis County Economic Council, Direct Impact is the first private owned incubator in the state of Missouri designed to incubate Women and Veteran owned small businesses. The center provides training, consulting, and resources, while incubating small business to accelerate the growth of the business. Services include loan packaging, training and professional development, business mentoring/coaching, business planning, nonprofit development, free Wi-Fi, and access to technology.

NORTHWEST MISSOURI STATE UNIVERSITY CENTER

1402 N. College Dr., Maryville, MO 64468

(660)-562-0823

www.nwmissouri.edu/cie/about.htm

Northwest has launched a regional economic development initiative, the Center for Innovation and Entrepreneurship. The center has two synergistic components: a mixed-use incubator and an academic facility. The incubator is designed to house several start-up companies; the academic facility has been programmed to house the newly approved nanotechnology baccalaureate degree program. The center is a mixed-use incubator with emphasis on technology-based, start-up companies. The center contains a total of 46,679 SF. The incubator contains three lab analysis research areas, a shared scientific instrument room, 9,000 SF of tenant office space, shipping/receiving (product distribution center), staff training room; seminar room and CIE staff offices. The academic wing contains over 16,000 SF. of highly specialized teaching and research labs and offices.

PLASTER CENTER FOR FREE ENTERPRISE AND BUSINESS DEVELOPMENT

405 N. Jefferson Ave. Springfield, MO 65806

(417)-837-2600

www.missouristate.edu/ideacommons/plastercenter.htm

The Robert W. Plaster Center for Free Enterprise and Business Development welcomes big thinkers and those with an entrepreneurial spirit. In 2009, the University purchased the former Willow Brook Facility, and in 2010 the University received a seven-figure gift from the Robert W. Plaster Foundation that led to the naming of the facility. The Robert W. Plaster Center for Free Enterprise and Business Development houses many resources for entrepreneurs in an area designated as The eFactory, which assists entrepreneurs in any stage of the business planning process and through the exhilarating start-up phase. The eFactory features 20,000 SF of leasable space, including 150 square foot offices, 550 SF office suites and 800-2,500 SF labs and manufacturing space.

BEGIN NEW VENTURE CENTER

800 N. Tucker Blvd. St. Louis, MO 63101

(314)-802-0995

www.stpatrickcenter.org/programs/employment-training/begin/

The BEGIN New Venture Center (BEGIN) is an innovative community partnership offering start-up and early-stage companies, as well as non-profit organizations daily business assistance, access to experienced service providers, guidance from an advisory board/mentor program, marketing assistance and a professional business location. The primary criteria used in evaluating prospective clients are start-up and early stage companies and nonprofit organizations, potential for future success and growth, and their commitment to the mission of St. Patrick Center. BEGIN offers two participation plans:

Resident Clients are located in the incubator and have direct access to our services while benefiting from daily face-to-face interaction with BEGIN staff and other incubator clients.

Culinary Clients benefit from a brand-new, state-of-the-art 2000 SF shared-use commercial kitchen facility in addition to the standard services & amenities offered to all BEGIN Clients.

ENNOVATION CENTER

201 N. Forest Avenue Independence, MO 64050

(816)-463-3515

www.ennovationcenter.com

The Ennovation Center Business Incubator was created with a partnership between the City of Independence, the Independence School District and the Independence Economic Development Council to promote economic development and to help people achieve their dreams of owning their own business. The Ennovation center specializes in what they call foodpreneur's which helps people start businesses in the restaurant and food industries. Ennovation Center kitchen incubator is home to more than 20 foodpreneurs. Our state-of-the-art kitchen features five kitchens, available for rent by the hour. More than just a shared kitchen, the Ennovation Center offers business services as well the equipment foodpreneurs require. They also have a biotechnology lab and business and technology incubator.

JOSEPH NEWMAN INNOVATION CENTER

320 E. 4th St. Joplin, MO 64801

(417)-624-4150

http://newmaninnovationcenter.com/

Since 2006, The Innovation Center have helped over 30 companies, creating nearly 400 jobs. The centers mission is to create a positive environment for developing, supporting and promoting entrepreneurs; with an emphasis on those pursuing innovative technology and job creation. The Innovation Center is not a traditional office space leasing program. While some offices in the Center provide a private environment, many spaces are shared, or communal in design. A shared room is typically about 400 SF in size, which allows one tenant to lease approximately 100 SF for their individual space. Communal office space encourages new business owners to share ideas and provides additional networking strengths. Communal spaces leases vary but typically start at $200 a month, which includes shared resources as listed above.

KIT BOND SCIENCE AND TECHNOLOGY INCUBATOR

4221 Mitchell Ave. St. Joseph, MO 64507

(816)-749-4012

www.wi.missouriwestern.edu/incubator/default.asp

The Science and Technology incubator opened in 2008 and houses a laboratory, conference room, operation offices and tenant spaces. Its flexible floor plan can accommodate 12-15 firms of a few persons each, or a few large firms requiring larger spaces. The location of the Incubator is conducive to fostering animal health and nutrition industries. Some tenants include the United States Animal Health Association, as well as DTS Search and Designs LLC and many more. The Institute for Industrial and Applied Life Sciences (IIALS) is a joint public/private cooperative effort to enhance life sciences training in the Midwest region and possibly beyond at Missouri Western. IIALS partners with the MWSU Christopher S. “Kit” Bond Science and Technology Incubator.

LIFE SCIENCE BUSINESS INCUBATION CENTER

1601 South Providence Road

Columbia, Missouri 65211-3460

(573)-884-0496

http://muincubator.com/index.html

The National Business Incubation Association has awarded the NBIA Soft Landings International Incubator designation to the University of Missouri Life Science Business Incubator at Monsanto Place, a business incubator operated and sponsored by the Missouri Innovation Center. Through its Soft Landings program, NBIA recognizes business incubation programs that are especially capable of helping nondomestic companies enter the incubator's domestic market. The MU Life Science Business Incubator was selected for the program because of its slate of business services for nondomestic firms and its demonstrated success at helping these firms enter the U.S. market.

OZARK FOOTHILLS BUSINESS INCUBATOR

3019 Fair Street, Poplar Bluff, MO 63901

(573)-785-6402

www.ofrpc.org/incubator.html

The Business Incubator provides new and expanding businesses with economical space and services. Its goal is to help start-ups and growing businesses through the critical period of product/process development and the establishment of markets. Located within the Business Incubator are six industrial spaces ranging in size from approximately 2,000 SF to 5,000 SF. Rent for the spaces has been established at $1.80 per SF per year. Spaces can be combined to provide larger area for companies requiring more square footage. Each unit is self-contained, separately metered, and has direct access to a loading/delivery bay area. The remaining spaces in the Business Incubator house offices for the support staff, a conference and kitchen facility, and other storage, bathrooms, etc. There are approximately 20,000 SF in the industrial area, and 5,000 SF in the office area.

OZARKS SMALL BUSINESS INCUBATOR

408 Washington Ave, West Plains, MO 65775

(417)-256-9724

http://ozsbi.com/

The Ozarks Small Business Incubator (OzSBI, pronounced OzBee) is a business support center that accelerates the successful development of new and growing companies. OzSBI is a "project" of Downtown West Plains, Inc., a 501(c)3 nonprofit, but was developed to serve a much broader region. The Incubator focuses specifically on businesses located in Douglas, Howell, Oregon, Ozark, Shannon, Texas, and Wright Counties. The OzSBI building currently contains 8 client office spaces, 4 of 200 SF, 4 of 600 SF. Each comes fully furnished with desk(s) and chairs, state-of-the-art phone, wired and wireless broadband internet. It also contains a professional Board Room, capable of seating 12 comfortably. The Meeting Room can seat 75 (or 40 with tables).

DOUGLAS C. GREENE CENTER FOR INNOVATION AND ENTREPRENEURSHIP

920 Broadway, Cape Girardeau, MO 63701

(573)-651-2929

www.semo.edu/entrepreneurship/index.htm

The Center for Innovation and Entrepreneurship stimulates entrepreneurial growth and development that improves the quality of lives, communities, and businesses in Southeast Missouri and beyond by accelerating Entrepreneurship, cultivating Innovative entrepreneurship, facilitating existing small business growth, building & strengthening networks, inspiring and educating young entrepreneurs, and building knowledge about entrepreneurship. Integrated within the Center for Innovation and Entrepreneurship is the Southeast Small Business & Technology Development Center, part of a statewide network of SBTDC programs. Our business development associates work individually with the founders of start-up and existing businesses to provide consultation and support they need to develop, sustain and grow.

ARTS INCUBATOR OF KANSAS CITY

115 West 18th Street Kansas City, MO 64108

(816)-421-2292

www.artsincubatorkc.org/

Most artists who graduate from art institutions do not have the business skills required to establish self-sustaining careers in the arts. The Arts Incubator of Kansas City is a nonprofit organization dedicated to working with these emerging artists in the development of their careers. The Arts Incubator of Kansas City works to foster emerging artists by offering affordable studio space, business development, a supportive community and exposure. The goal is to turn artistic passions into viable careers. The Incubator currently maintains 47 active artist studios in the heart of the Crossroads Arts District Installation artists, jewelry, graphic, scenic, fashion and furniture designers alongside, painters, illustrators, writers, sculptors, photographers and videographers. The incubator opened in August of 2001, but has recently closed down. While in operation it did have a significant impact on the community.

HISPANIC ECONOMIC DEVELOPMENT CORPORATION

2130 Jefferson St. Kansas City, MO 64108
(816)-221-3442
www.kchedc.org/#

The Hispanic Economic Development Corporation (HEDC) was established in 1993 as a certified 501(c) 3 not-for-profit community development corporation in Missouri. Founded for the purpose of developing and implementing economic development initiatives that would positively contribute to the quality of life for Latinos in Kansas City, HEDC utilizes its designation as a CDC to access various resources and tools that allow the organization to serve as a catalyst for change within the Latino community. HEDC offers the nationally recognized entrepreneurial training programs, First Step FastTrac and Primer Paso FastTrac (Spanish language version).

THINK BIG PARTNERS

1800 Baltimore, Kansas City, MO 64108

(816)-842-5244

www.thinkbigpartners.com

Think Big Partners is an early-stage business incubator, startup accelerator and mentorship-based collaborative network that takes ideas, opportunities and entrepreneurs and makes them big. Think Big Partners became a co-working catalyst when it opened bizperc in the summer of 2010. Whether a client decides to co-work or office in bizperc is entirely up to them. This added resource does, however, benefit startups, entrepreneurs and high-growth small businesses through the phenomenon of co-working and collaboration. Think Big Ventures focuses on early-stage, technology-focused companies that are primarily in the web services, apps, software and related opportunity space. They tend to focus on opportunities that involve proven entrepreneur teams, scalable technologies, protected intellectual property, and companies that address real problems to large, addressable markets. Think Big Coworking is a 3-floor (plus rooftop) co-working space located in the Crossroads Arts District of Kansas City and managed by Think Big Partners.

INCUBATOR TYPES

Business incubators have become more popular and widespread over time, which has naturally led to a broad spectrum of incubator types. The various types can be used as general models, each with their own strengths and challenges, and can serve as blueprints for further reviews of incubator best practices. The majority of business incubators can be categorized into two types; technology or mixed-use. Technology focused incubators usually concentrate on commercialization of new technology and technology transfer. Mixed-use incubators are intended to serve a wider range of clients, typically within a subset of industries relevant to the area where it is located. For example; a mixed-use incubator may provide space and complementary services to clients in the arts, entertainment, design, IT, and web industries. Other types of incubators may also be identified, but can, in broad strokes, be considered subcategories of the first two. Business Incubation with University relations, Agri-Business Incubation, Social Business Incubation, and Creative/Arts Incubation are among them.

Technology focused incubators have the potential to attract high-growth businesses, highly skilled individuals, and serve as a source of competitive capacity within a region. However, they come with greater risks, a more competitive market environment, and it is often harder to attract the needed financing. The market for technology focused incubators may be saturated in many areas, or more importantly the needed talent may not be available. **An example of a technology focused incubator close to the Boonslick region is the Center for Emerging Technologies, located in St. Louis.**

Mixed-use incubators are often easier to align with regional and national competitive strengths and long-term goals. They provide a better foundation for pre-incubation, education, and training, which may helped spur entrepreneurial activity in a region. The challenges associated with mixed-use incubators may be lack of competitive advantage in any specific industry, lack of comprehensive expertise in any specific industry, and difficulty in establishing and developing high growth businesses. Each type of incubator may also be set up using different ownership structures, with their own advantages and problems. The four most common structures are; Local Economic Development Incubator, Academic and Scientific Incubator, Corporate Incubator, Private Investors' Incubator, and Creative Arts Incubators. **An example of a mixed-use incubator close to the Boonslick region is the Begin New Venture Center, located in St Louis.**

Local Economic Development Incubators are commonly set up as non-profit mixed-use with the objectives of job creation, reindustrialization revitalization, economic development, specific industry support, and development of small and medium enterprises. The main problems associated with this structure are lack of resources, quality and skills of management and support, bureaucracy, and financial sustainability. **An example identified in Missouri is the Hispanic Economic Development Corporation, located in Kansas City.**

Academic and Scientific Incubators are commonly established as non-profit technology focused with the objectives of commercialization of technologies, entrepreneurial development, image, and finding new sources of project financing. The main issues associated with this structure are legal patents issues, governance and ownership rights, income distribution, and access to external resources and networks. **An example of an academic and scientific incubator close to the Boonslick region is the Life Science Business Incubation Center, located in Columbia.**

Corporate Incubators and Private Investors' Incubators are commonly set up as for-profit technology focused with the objectives of entrepreneurial development, employee retention, portfolio development, patent rights, and profits. The main issues associated with these structures are strategic positioning, integration of new technologies, conflicts about objectives between the managers of the startup and the owners of the incubator, and valuation of incubator ideas.

Creative Arts Incubators are commonly set up as not-for-profit focused on fostering creativity, artistic talents, entertainment, and new idea development. This type of incubator often provides space for collaboration and networking, tools for prototyping, and individual/private space for personal development. The biggest challenge often associated with this type of incubator is turning the creative talent and ideas into profitable goods or services. **An example of a creative arts incubator is the recently announced Creative Labs and Industries Incubator at Southeast Missouri State University in Cape Girardeau**.

CREATIVE ACCELERATORS

Five business incubators have been identified to provide examples of the various types of initiatives in the U.S., which have all demonstrated considerable success. **TechShop**, **T-Rex, and Y Combinator are technology**

focused, Detroit Corridor Center is arts and design focused (mixed-use), The Global Social Benefit Incubator is Social Business focused (mixed-use with direct university relationship).

TECHSHOP

120 Independence Dr. Menlo Park, CA 94025

1(800) 640-1975

www.techshop.ws

TechShop is a technology and manufacturing focused incubator that provides advanced high-tech equipment, office space, a kitchen, and conference/presentation room for its members to utilize. They offer classes and training for members to become proficient in using a wide variety of tools and IT equipment. They have nine locations scattered across the U.S. They charge between $125 and $175 per month for access to one of their facilities, plus the cost of materials, etc.

DETROIT CREATIVE CORRIDOR CENTER

485 W. Milwaukee Ave. Detroit, MI 48202

www.detroitcreativecorridorcenter.com

Detroit Creative Corridor Center is an arts and design focused incubator that provides work space, networking opportunities, design and business library, meeting room, and a dining area for its members. Their focus is on accelerating creative industries, attracting creative industries to the area, and advancing the local creative talent. They help connect the creative talent with corporate needs.

GLOBAL SOCIAL BENEFIT INCUBATOR

500 El Camino Real, Santa Clara, CA 95053

(408)-554-4000

www.scu.edu/socialbenefit/entrepreneurship/gsbi/

Santa Clara University's Global Social Benefit Incubator was founded in 2003 to help social entrepreneurs build their businesses and amplify their impact. Their focus has been to connect entrepreneurs with successful Silicon Valley executives, academic leaders, and

mentors to build social ventures with strong business models. Approximately 20 social entrepreneurs are invited to the campus each year to participate in the five-month program through a scholarship valued at $25,000. Based on the proximity of the Boonslick region and the various universities within the area, this incubator type might be something to look into in the future.

T-REX

611 Olive St. St. Louis, MO 63101

http://downtowntrex.com/

T-REx is a co-working space and technology incubator located in the heart of downtown St. Louis, Missouri. They have taken 80,000 SF in the historic Railway Exchange Building and converted it into a hub for the St. Louis startup scene and is now home to a growing community of entrepreneurs, developers, designers, mentors, educators and more. T-REX is the heart of the St. Louis startup community, home to Capital Innovators, ITEN, Cultivation Capital, Arch Grants, StartLouis, and 60+ startup companies.

Y COMBINATOR

320 Pioneer Way, Mountain View, CA 94041

www.ycombinator.com

Y Combinator is a high-tech focused incubator with success stories such as Dropbox, Airbnb and Reddit on its company list. It was founded in 2005 in Mountain View, California. According to Forbes this is likely to be the most valuable and successful incubator in the U.S., with an estimated value of $7.78 Billion as of 2012. This is perhaps the reason why interested entrepreneurs have to go through a rigorous and competitive application process to be allowed into the program. The primary purpose of this incubator is to help with seed funding for small startups, which is why Y Combinator itself invests a small amount in the startups they admit every year. Besides funding, the incubator helps members get to the next stage of funding by providing mentoring and guidance, helping to develop the idea, improving investor pitches, and getting a foot in the door to the right network.

Each incubator works within a unique entrepreneurial ecosystem, where the opportunities and challenges differ substantially. If the Boonslick region were to invest in the development and implementation of an incubator, further analysis should be conducted to determine which type and model would be the best fit.

BACKGROUND

Ninety percent of investments in entrepreneurial ventures that do not come from friends and family come from angel investors. Angels tend to invest smaller amounts and tend to invest in younger companies than do Venture Capital firms. Another key aspect for angels is they tend to invest close to home and can be difficult to locate, often due to their lack of formal organization of structure.

The desired investment profile for an Angel Investor:

- A novel (new) or disruptive business concept
- A well-developed, realistic business plan
- Technological superiority
- Realistic valuation

DIFFERENCE BETWEEN ANGEL INVESTORS AND VENTURE CAPITALISTS[1]

Angel Investors

Angel investors, by their very nature, are far more likely than venture capitalists to be risk takers. An angel investor (like any investor) wants to see a return on their investment, but they are also motivated by a desire to see new and perhaps innovative businesses get off the ground and succeed.

A typical angel investor will invest in a business that is part of an industry that he or she know, understand, and are possibly involved in. Angel investors also look to invest in a business in the early stages and their investment is not limited to financial capital.

An angel investor will typically want to offer advice and support to the business they have invested in, and may want to have a stake in the company, as well as some control over relevant business decisions. In a majority of circumstances a business owner can expect an investor (even an angel investor) to invest money and participate in decision making on critical capital opportunities.

[1] http://simple-answers.com/differences-between-angel-investors-and-venture-capital.html

So when seeking money from an angel investor, it is advisable have to be prepared to give them some control over the business. The amount of money one might expect from an angel investor would typically be in the range of $25,000 to $100,000 if the investor is an individual, or perhaps even more if it comes from an angel investor group. Of course, even though angel investors typically work with startups, they still expect to see a return on their investment.

Venture Capitalists

Once a business is up and running and have proven successful, it can be beneficial to start thinking about obtaining funding from venture capitalists. However, at that point it is important to understand the stage the business has reached, because venture capitalists tend to focus on different stages in the life of a business.

Some venture capitalists like to invest in a business immediately after a business has moved beyond the angel investor stage, while others prefer to wait a little longer before they invest and will only be interested in investing after a business has received a first or even second round of venture capital investments. The key is that venture capitalists are highly focused on clear-cut evidence that shows the business is or will be profitable.

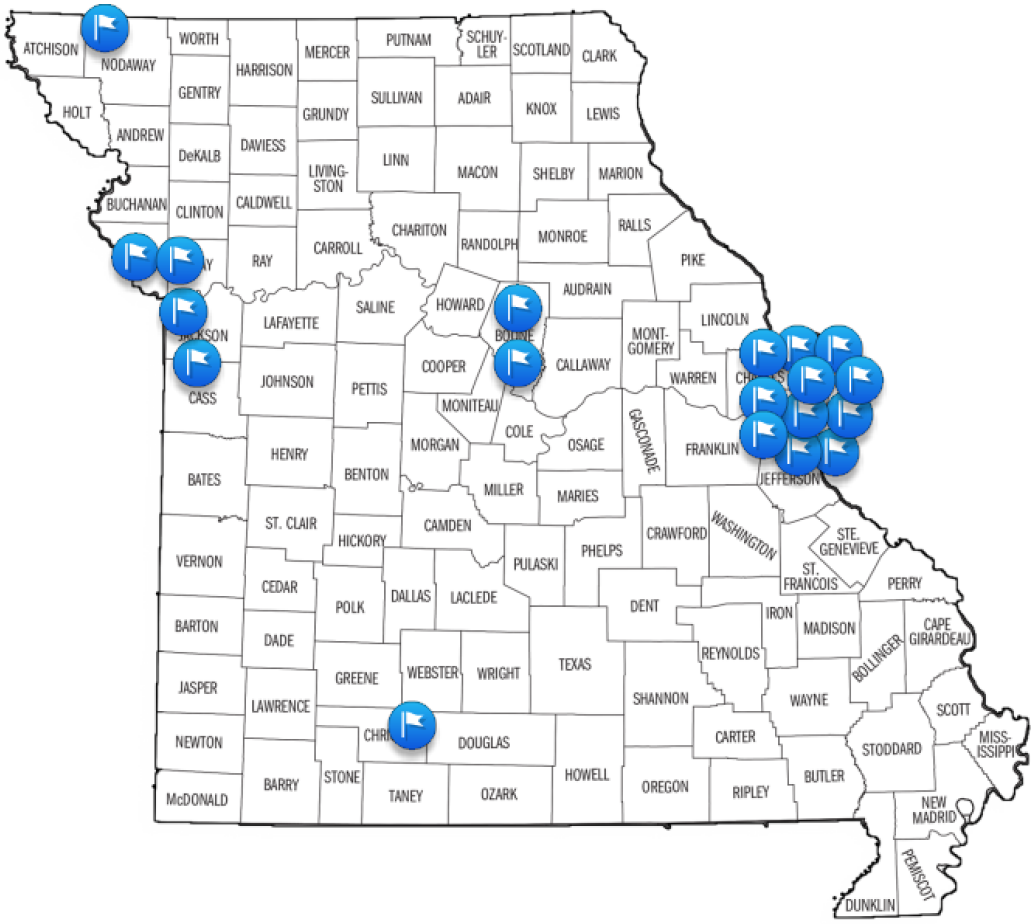
Unlike angel investors, venture capitalists are more motivated by profit than anything else, and they typically invest in businesses that will offer security and a high return on their investments. While angel investors limit their investments to relatively small amounts, venture capitalists tend to think of a starting point for funding to be around $250,000, but more often than not will invest above the million dollar mark.

It is quite likely that if a business reaches the stage where it will be attractive to venture capitalists, it should expect the investor (s) will want to exercise even more control over the business than an angel investor, and they will be very focused on defining the goals of the business and the point at which they will expect to have their original investment repaid.

The following is a list of organized angel investor groups. Other angel investors are likely to exist, but may be hard to identify and locate due to their **informal structure**.

Missouri Angel Investors		
Name	**Location**	**Phone**
Student Angel Capital Fund	813 Virginia Ave Columbia , MO 65201	(573) 882-5759
St. Louis University Billiken Angels	3674 Lindell Blvd St. Louis, MO 63108	(314) 977-3864
Centennial Investors	1601 S. Providence Rd Columbia, MO 65211	(573) 884-0467
The Springfield Angel Network	900 N. Benton Ave Springfield, MO 65802	(417) 873-6357
Show Me Angels	3550 N E Ralph Powell Rd Lees Summit, MO 64064	(816) 525-6617
St. Louis Arch Angels	St. Louis Region	(314) 444-1151
Ascension Health Ventures LLC	101 South Hanley Rd Clayton, MO 63105	(314) 733-8100
Aegis Investor Network	165 North Maramec Clayton, Mo 63105	(314) 454-9100
FinServe Tech Angels	611 Olive Street St. Louis, MO 63101	(314) 677-1132
Cultivation Capital	11756 Borman Drive St. Louis, MO 63146	(314) 216-2051
Prolog Ventures	7701 Forsyth Blvd. St. Louis, MO 63105	(314) 743-2400
RiverVest	7733 Forsyth Blvd. St. Louis, MO 63105	(314) 726-6700
Nidus	1005 North Warson Rd St. Louis, MO 63132	(314) 812-8003
St. Louis Regional Chamber	One Metropolitan Square St. Louis, MO 63102	(314) 444-1130
Global Perspective Investments LLC	800 University Drive Maryville, MO 64468	(660) 562-1704
OneKC For Women	920 Main Kansas City, MO 64105	(816) 595-1296
Advantage Capital Partners	190 Corondelet Plaza St. Louis, MO 63105	(314) 725-0800
Invest America Venture	911 Main St. Kansas City, MO 64105	(816) 842-0114
October Capital	4520 Main St Kansas City, MO 64111	(913) 362-1111
Kansas Angel Investors		
Women's Capital Connection	8527 Bluejacket St. Lenexa, KS 66214	(913) 492-5922
Mid America Angels	8527 Bluejacket Street Lenexa, KS 66214	(913) 438-2282

Angel Investors in Missouri



On the following pages we have identified 16 angel investor networks located in Missouri. In addition to the Missouri angels we have identified two potentially beneficial angel investors located in Kansas who are right outside of Kansas City. Also included are some venture capitalists in both Missouri and Kansas that may be beneficial.

ST LOUIS UNIVERSITY BILLIKEN ANGELS

3674 Lindell Blvd, St. Louis, MO 63108

(314)-977-3864

www.billikenangels.com

St. Louis University Billiken Angels also known as the Billiken Angel Network (Ban) are part of the Entrepreneurship Program of the John Cook School of Business at Saint Louis University. The goal of the BAN is to identify and invest funds and expertise in those businesses that can make a difference in the economy of the St. Louis region, and in the lives of the people living in the region and elsewhere. The BAN will consider businesses at any stage (seed, start-up, existing, growing, etc.) and in any industry (retail, wholesale, manufacturing, service, financial, internet, high-tech, etc.). BAN will invest in firms in the St. Louis region, and will consider firms outside of the region when the firm has *St. Louis University DNA (*firms owned by current or former SLU students, current or retired SLU faculty and staff, or firms using intellectual property licensed from SLU). BAN's preferred method for investing (esp. in start-ups with no other major investment structure in place) is called *convertible debt.* The method is a little more complex than a straight equity (stock) investment, but offers several advantages for the entrepreneur and the angel.

ST. LOUIS ARCH ANGELS

St. Louis Region

(314)-444-1151

www.stlouisarchangels.com

The mission of the St. Louis Arch Angels is to provide opportunities for their members to obtain outstanding financial returns by investing in early-stage companies with high growth potential in the St. Louis Region and accelerating them to market leadership. Arch Angel members provide seed and early-stage capital in the range of $250K-$1M, an investment range not generally served by venture

capitalists. They invest in solutions that address major problems for significantly large target markets (i.e. a $100+ million market). The companies they invest in must demonstrate a strategy to claim significant share of this market (i.e. 20%+).

CENTENNIAL INVESTORS

1601 S. Providence Rd. Columbia, MO 65211

(573)-884-0467

http://centennialinvestors.com

Centennial Investors was created to meet the early capital needs of university and private sector entrepreneurs. The organization will assist with bringing to market exciting ideas generated in university labs and private businesses. Centennial Investors seek promising investments in mid Missouri companies. They target technology-based start-up and early stage companies. Preference is given to firms located in Mid-Missouri. Centennial Investors' members prefer investing in deals needing $250,000 to $500,000 in equity capital.

SPRINGFIELD ANGEL NETWORK

900 North Benton Avenue,

Springfield, MO 65802

(417)-873-6357

www.springfieldchamber.com/index.php?id=1371

The Springfield Angel Network is a non-profit organization interested in introducing entrepreneurs from southwest Missouri to individuals capable of investing financially. This introductory network is designed to give accredited investors an opportunity to invest in ideas generated in university labs and private small businesses in Southwest Missouri. The institutional members of the Springfield Angel Network are: Springfield Area Chamber of Commerce, Edward Jones Center for Entrepreneurship - Drury University, and Jordan Valley Innovation Center/Springfield Innovation, Inc. - Missouri State University. Springfield Angel Network participants are under no obligation to invest in any particular opportunity, and are not subject to an annual minimum investment.

SHOW ME ANGELS

3550 NE Ralph Powell Rd. Lee's Summit, MO 64064

(816)-525-6617

www.showmeangels.com/

Show Me Angels is a membership organization of accredited private investors committed to investing in high-growth seed and early-stage companies in the Kansas City region. Angels typically invest between $25,000 and $100,000 per transaction individually, and from $250,000 to $750,000 as a group. They invest in one to four transactions per year. On average, angels are patient, with an average term for holding an investment of eight years. They invest in solutions that address major problems for significantly large target markets (i.e. a $100+ million market). They companies they invest in must demonstrate a strategy to claim significant share of this market (i.e. 20%+).They prefer to invest in first-of-a-kind new ideas, rather than incremental enhancements to common products and services. However, they approach highly complex, esoteric technologies with caution. The concept behind the technology must be proven and verifiable. Further, they avoid science projects that don't demonstrate a clear path to commercialization. Any breakthrough innovation must be accompanied by a strong business plan.

FINSERVE TECH ANGELS

611 Olive Street, St. Louis, MO 63101

(314)-677-1132

FinServe Tech Angels is a group of financial services executives and entrepreneurs who invest in early stage financial services technology companies. FinServce Tech Angels is based in St. Louis where several of the nation's largest financial services firms are located including Edward Jones, Scottrade, and Wells Fargo Advisors, etc. These industry executives invest in financial sector related technology start-ups that offer superior returns.

GLOBAL PERSPECTIVE INVESTMENTS, LLC

800 University Drive, Maryville, MO 64468

(660)-562-1704

A local group of individuals have banded together to form a unique partnership. Global Prospective Investment LLC (GPI) is a newly formed angel investment group interested in developing value added products and technologies. Currently, focused on Nodaway County, the group has sincere interest in helping to support and promote business development in cooperation with Northwest Missouri State University's Center for Innovation and Entrepreneurship (CIE) and Nodaway County Economic Development. GPI's mission is to promote northwest Missouri's people, products and services to create jobs and develop value-added technologies.

OTHER NOTABLES/VENTURE CAPITAL

INVEST AMERICA VENTURE GROUP

911 Main Street, Kansas City, MO 64105

(816)-842-0114

www.investamericaventure.com/

InvestAmerica is a nationally recognized private equity/venture capital investment management group with over 100 cumulative years of fund management experience. The InvestAmerica group is headquartered in Cedar Rapids, Iowa with regional offices in Kansas City, Missouri; Vancouver, Washington; Fargo, North Dakota and St. Paul, Minnesota. InvestAmerica will consider opportunities with particular interest in companies with sales typically ranging from $10 million to $50 million and with strong growth potential. InvestAmerica's funds typically invest in management buyouts, ownership changes and later-stage growth opportunities. InvestAmerica will invest across a range of manufacturing, service, distribution and technology companies throughout the United States. Ideally, companies will be seeking less than $10 million with InvestAmerica funds typically participating at the $1 million to $2 million level in the first round of the financing.

OCTOBER CAPITAL

4520 Main St. Kansas City, MO 64111

(913)-362-1111

www.octobercapital.com

Since opening in 1999 October Capital has provided seed money and expansion capital to more than 15 companies in diverse industry segments. October Capital seeks investment opportunities in companies that are bringing transformational change to existing markets or are creating new markets where none previously existed. October Capital is interested in technology-driven solutions that are transformative in nature. October Capital is interested in investing in deep experienced teams, as well as ideas that boldly address inefficiencies in traditional markets.

ASCENSION HEALTH VENTURES

101 South Hanley Road, Clayton, MO 63105

(314)-733-8100

www.ascensionhealthventures.org

AHV is a strategic healthcare venture fund with $550 million in capital under management. Their limited partners are some of the most respected, values-driven nonprofit healthcare systems in the US. As a strategic investor, AHV adds value by sharing its portfolio companies' solutions across its limited partner base. The work they do at AHV generates returns to their limited partners that help support their missions to provide care to the poor and vulnerable. Their diligence process leverages the intellectual resources and insight of professionals across their limited partner base. In addition to financial return, opportunities are evaluated for fit with strategic priorities of their limited partner health systems and potential to improve clinical outcomes, reduce costs, and/or enhance the experience of patients, families, and caregivers. AHV targets venture and growth equity investments in healthcare information technology services, and medical devices and diagnostics up to $10 million per round and $15 million per company. They prefer early to late stage within three to five years of a potential liquidating event. They prefer businesses that have a sustainable competitive advantage with compelling benefit sufficient to influence market adoption. They also look for opportunities with an established team that has demonstrated relevant experience, depth and capability to build the business to scale and attract customers. AHV typically requests a board seat or board observation rights for each portfolio company.

AEGIS INVESTOR NETWORK

165 North Meramec, Clayton, MO 63105

(314)-454-9100

http://aegisps.com/

AEGIS strives to uphold the tradition of the aegis by offering inter-related lines of advisory services- Legal, Consulting, Mergers & Acquisitions, and Capital Sourcing- to individuals, entrepreneurs, and businesses of all sizes throughout the United States. Our offices in St. Louis, Missouri (Primary) and Chicago, Illinois (Satellite) are staffed with professional attorneys, accountants, and other advisors who bring a rich diversity of backgrounds, experiences, and specialized talents to the work they do on behalf of their clients. Recently, some of the lawyers of AEGIS have participated in the development of a unique, alternative investment product for early-stage companies, the iSelect Fund (www.iSelectFund.com). This private equity fund is designed to connect private, accredited investors to early-stage investment opportunities

CULTIVATION CAPITAL

11756 Borman Drive, St. Louis, MO 63146

(314) 216-2051

http://cultivationcapital.com/

Cultivation Capital invests in young technology and life sciences companies whose ideas have the potential to disrupt the way we live and work. Cultivation Capital is a venture capital firm managed by team of serial entrepreneurs. Cultivation Capital has a track record of investing in successful technology companies across the Midwest. Their goal is to take businesses to the next level with their help, expertise, guidance and funding. Their portfolio represents the best growth opportunities throughout the Midwest. Some companies Cultivation Capital has invested in include, Lockerdome, Hatchbuck, Yurbuds, Food Essentials, and TrakBill, etc.

NIDUS

1005 North Warson Road,

St. Louis, MO 63132

(314)-812-8003

http://niduspartners.com/

Nidus Partners LP is a unique collaboration between experienced entrepreneurs and strategic corporations to identify and commercialize innovative technologies broadly impacting the energy markets. The partnership provides seed funding, entrepreneurial experience and market input to identify and manage the key risks in advancing early technology towards commercialization. Nidus focuses on innovations in energy including renewables, storage and bioconversion. Once selected, technologies enter a three-stage process that identifies and addresses and reduces key risks associated with commercializing early technology. Phase one ($5,000-$10,000) consists of early-stage intellectual property assessment, technology validation, and an interview of the principal investigator or inventor. Nidus seeks to retain the principal investigator as a consultant and the option to license any technology with sufficient potential to advance to Phase Two. Phase two ($50,000-$75,000) entails construction of a detailed intellectual property strategy, including freedom-to-operate strategy, a regulatory assessment with corporate partners, and in-depth analysis of the commercial opportunity, including engaging technical and business experts to identify barriers to commercialization and best market opportunities. Phase Three ($150,000-$200,000) involves a make-or-break experiment, prototype fabrication, or other tangible evaluation of the technology. At the end of this process the technology is well positioned to emerge investment-ready, as a start-up or license opportunity.

ADVANTAGE CAPITAL PARTNERS

190 Carondelet Plaza, St. Louis, MO 63105

(314)-725-0800

http://www.advantagecap.com/

Advantage Capital Partners invests in entrepreneurial small businesses in communities that are underserved by traditional sources of capital. The firm has built a strong and successful track record of public-private partnerships with state and federal economic development organizations, creating thousands of jobs and facilitating the flow of billions of dollars of investment capital into these communities. Advantage

Capital provides equity and debt capital, along with strategic and operational counsel, to businesses that have the potential for both superior investment returns and meaningful community impact. The firm uses this double bottom line to measure its success. Advantage Capital focuses on companies that develop or apply innovative technologies or approaches to products, systems and services. They invest in a range of industries, including the Communication, Information Technology, Life Science, Business Services, Manufacturing and Energy sectors and occasionally other opportunities will be considered. Advantage Capital Partners have significant expertise in the area of structured finance, having raised more than $1.6 billion of venture funding and small business lending capital utilizing pioneering structured finance techniques.

PROLOG VENTURES

7701 Forsyth Blvd, St. Louis, MO 63105

(314)-743-2400

http://www.prologventures.com/

Prolog Ventures is a venture capital firm specializing in life sciences. Since their launch in 2001, they have supported more than 30 young companies. They invest in traditional healthcare opportunities as well as emerging areas — such as nutrition, wellness, and green technology — in which they have built one of the largest portfolios in the country. Prolong Ventures was created by people with both investment know-how and direct experience in getting new ventures off the ground. They use this expertise to invest in what they know best: exceptional opportunities in their early stages.

RIVER VEST

7733 Forsyth Boulevard, St. Louis, MO 63105

(314)-726-6700

http://rivervest.com/

RiverVest Venture Partners® focuses exclusively on innovations in life sciences, a field in which their team has significant research, clinical, operational and investment expertise. The team's deep domain experience allows them to identify, found and actively incubate promising life science companies, particularly in the medical device and biopharmaceutical industries. They provide practical advice and strategic leadership to help entrepreneurs drive early-stage companies forward. RiverVest also invests in

select later-stage life science companies to diversify risk and maximize portfolio returns. In every case, they take a hands-on investment approach, preferring to be represented on the boards of our portfolio companies. Established in 2000, RiverVest has funded 29 innovative life science companies and currently has assets under management of $208 million.

In the following section, a detailed analysis of economic factors related to entrepreneurship and innovation in the Boonslick region is provided. These analyses are intended to establish the foundation for understanding how the Boonslick region has fared with respect to innovation and entrepreneurial development.

Entrepreneurial Job Creation

NETSDATA

Changes in the makeup of commercial establishments and employment has been analyzed for a 21 year period, 1990-2011, to provide insight into where new companies and jobs are coming from. The data was analyzed using the National Establishment Times Series (NETS). The data has been analyzed based on five different metrics; firm size, industries, ownership type, location, and openings vs. closings based on firm size (See Appendix 1 for additional analysis and data tables).

FIRM SIZE

The first metric breaks establishment size down by number of employees as follows:

- Self-employed
- 2 to 9 employees
- 10 to 99 employees
- 100 to 499 employees
- 500 or more employees

When we look at the Boonslick region NETS data this way, several trends become clear. **In any given year between 1990 and 2011, self-employed and establishments with 2 to 9 employees, accounted for 86.8% to 93.54% of all establishments operating.** In actual numbers, self-employed establishments went from 740 in 1990 to 3,147 in 2011. Establishments with 2 to 9 employees went from 1,449 in 1990 to 3,762 in 2011.

Establishments with 10 to 99 employees ranged from 6.10% to 12.34% of total establishments operating in a given year. Notably, this size of establishments saw a small increase in real numbers of establishment operating, but as a ratio to the total number of establishments they declined from 11.12% in 1990 to only 6.10% in 2011.

The majority of employment came from establishment with 2 to 9 and 10 to 99 employees. In a given year these ranged from accounting for 66.75% to 72.08%. In concrete numbers establishments with 2 to 9 employees went from 5,053 employees in 1990 to 10,817 employees in 2011. Establishments with 10 to 99 employees went from 6,898 employees in 1990 to 11,030 employees in 2011.

INDUSTRY CHANGES

Establishments in the Boonslick region were broken down by NAICS codes to determine which industries saw growth or decline over the period of time studied. When the data is analyzed several industries experienced positive trends. As noted, industries experienced **growth in total number of establishments** from 1990 to 2011, **but remained stable as a proportion of total number of establishments.** These industries include construction, manufacturing, wholesale, transportation and warehousing, retail, information, finance and insurance, real estate, health care and social assistance, arts/entertainment/recreational, other services, and public services. **Two industries stand out of having both experienced actual and relative growth. Professional, scientific, and technical services grew from 99 firms in 1990 to 444 in 2011. In relative terms this means that the industry accounted for 3.65% of total firms in 1990, but grew to account for 5.93% in 2011**. **The second industry, administrative and support and waste management and remediation services, saw an even higher level of growth. This industry went from 58 firms in 1990 to 2011 firms in 2011. This translates into 2.33% of total firms in 1990 to 26.84% in 2011**. A very significant increase over the period of time.

In addition to number of establishments, we also looked at actual employment changes in each industry. Here again we find several industries with strong positive growth trends. The following industries saw significant growth in actual number of jobs, while remaining stable as a proportion of total number of jobs from 1990 to 2011; construction, wholesale, retail, transportation and warehousing, information, finance and insurance, real estate, educational services, health care and social assistance, art/entertainment/recreational, and other services. Three industries saw significant growth in both actual and relative numbers of jobs. **Professional, scientific, and technical services went from 310 in 1990 to 934 in 2011, or 1.81% of total jobs in 1990 to 3.03% in 2011. Administrative and support and waste management and remediation services went grew from 327 jobs in 1990 to 3,454 total jobs in 2011. Or, 1.91% of total jobs in 1990 to 11.21% in 2011. Public services grew from 446 jobs in 1990 to 1,312 in 2011, or 2.61% in 1990 to 4.26% in 2011.**

OWNERSHIP TYPE

The ownership type metric breaks down establishments by the following types:

- Publicly traded
- Private
- Non-Commercial

When the data is analyzed we find that the vast majority of establishments and jobs are within privately held companies. **In 2011 privately held establishments accounted for 97.2% of all operating establishments. And, 84.8% of all employment was within privately held establishments in 2011. In real numbers that turns into 6,996 private establishments out of 7,493 total establishments in 2011. And, actual jobs accounted for 26,131 out of 30,803 total jobs in that year.** In the years prior to 2011 the story is almost identical. Private establishments and jobs within private establishments consistently account for the majority of total establishments and jobs.

LOCATION

The location metric breaks down establishments by four categories, as follows:

- Standalone firm (only one location in Boonslick)
- Headquartered in Boonslick (with other locations outside of Boonslick)
- Branch with in-state headquarter
- Branch with out-of-state headquarter

When the data is analyzed for establishment and employment changes based on the type of location we find that the clear majority of establishments are standalone firms within the Boonslick region**. In 2011 standalone establishments accounted for 94.6% of all establishment types, while employment in standalone establishments accounted for 66.5%.**

OPENINGS VS. CLOSINGS

This metric looks at the total changes in establishments and employments based on firm size (as described above). Instead of just considering total number of establishments and jobs in a given year, it is important to evaluate any potential trends and variations in new jobs and lost jobs. When we analyze the data using this metric we find several important trends**. Self-employed and firms with 2 to 9**

employees accounted for 3,130, or 98.9%, of net new establishments from 1991 to 2010. Self-employed and firms with 2 to 9 employees accounted for 5,423, or 88%, of net new jobs from 1991 to 2010. Firms with 10-99 employees also saw moderate additions to the number of firms and employees. **Medium sized firms, with 100-499 employees saw declines in both number of firms and number of employees in the 1991 to 2010 period.**

These changes clearly show that not only do small and medium firms account for the majority of establishments and employment in the Boonslick region, but they are also responsible for generating the majority of actual new firms and jobs. **It is this kind of dynamic change that allows a region to stay competitive and innovative throughout the years**.

Industry Cluster Analysis

Cluster analysis is a concept first promoted by Dr. Michael Porter of Harvard University. It recognizes that industries in related sectors tend to cluster together geographically. A cluster will include the core or driver industries that produce related or similar goods. Upstream industries include suppliers of inputs to the core industries. A cluster will also include support industries that offer various specialized services to the core industries. These services could include research and development, labor training, specialized legal services, consulting, etc. Some industries require crucial infrastructure that needs to be developed such as waste management and remediation in the biomedical field. Finally, a cluster will include downstream industries, which are the ultimate customers of the core industries. These typically include wholesale and retail establishments. Figure 5 presents the various components for the biomedical/biotechnical cluster.

Cluster analysis recognizes that businesses operate in a global economy where technological change is the default position. Firms must learn to innovate or perish. It is also true that competitive advantages are not permanent, but are constantly being eroded by new firms with new ideas. Consider the dominant position of Microsoft in the PC industry just ten years ago and how quickly new competitors have become strong competitors for some of its products, particularly Google-based and Apple-based tablets that have reduced the demand for Windows-based PCs and laptops.

For regions, this means that it is imperative that they develop based on their competitive strengths or they will quickly be left behind in the race to attract new and growing firms. Cluster analysis also implies that a multiregional approach to economic development is necessary as firms, customers, and workers do not respect political boundaries. A new major employer in a region is a coup for the county in which it decides to locate, but surrounding counties will benefit as well as their residents work there and their businesses are potential suppliers of goods and services to the new firm.

Industry cluster definitions that are used in this study are due to the Indiana Business Research Center. Under a grant from the Economic Development Administration, the Center identified 22 industry clusters. They are listed in Table 1. A complete listing of the industry sectors that are included in each cluster can be found in their full report, “Unlocking Rural Competitiveness: The Role of Regional Clusters.”

Figure 1. Example Biomedical/ Biotechnical

In the Boonslick region the biomedical/biotechnical cluster grew from a LQ in 2001 of 0.459 to a LQ of 0.523 in 2011. Actual employment numbers grew by 73.9%, from 1,049 in 2001 to 1,825 employees in 2011. These employees would have been spread across companies in similar categories as shown in figure 1.

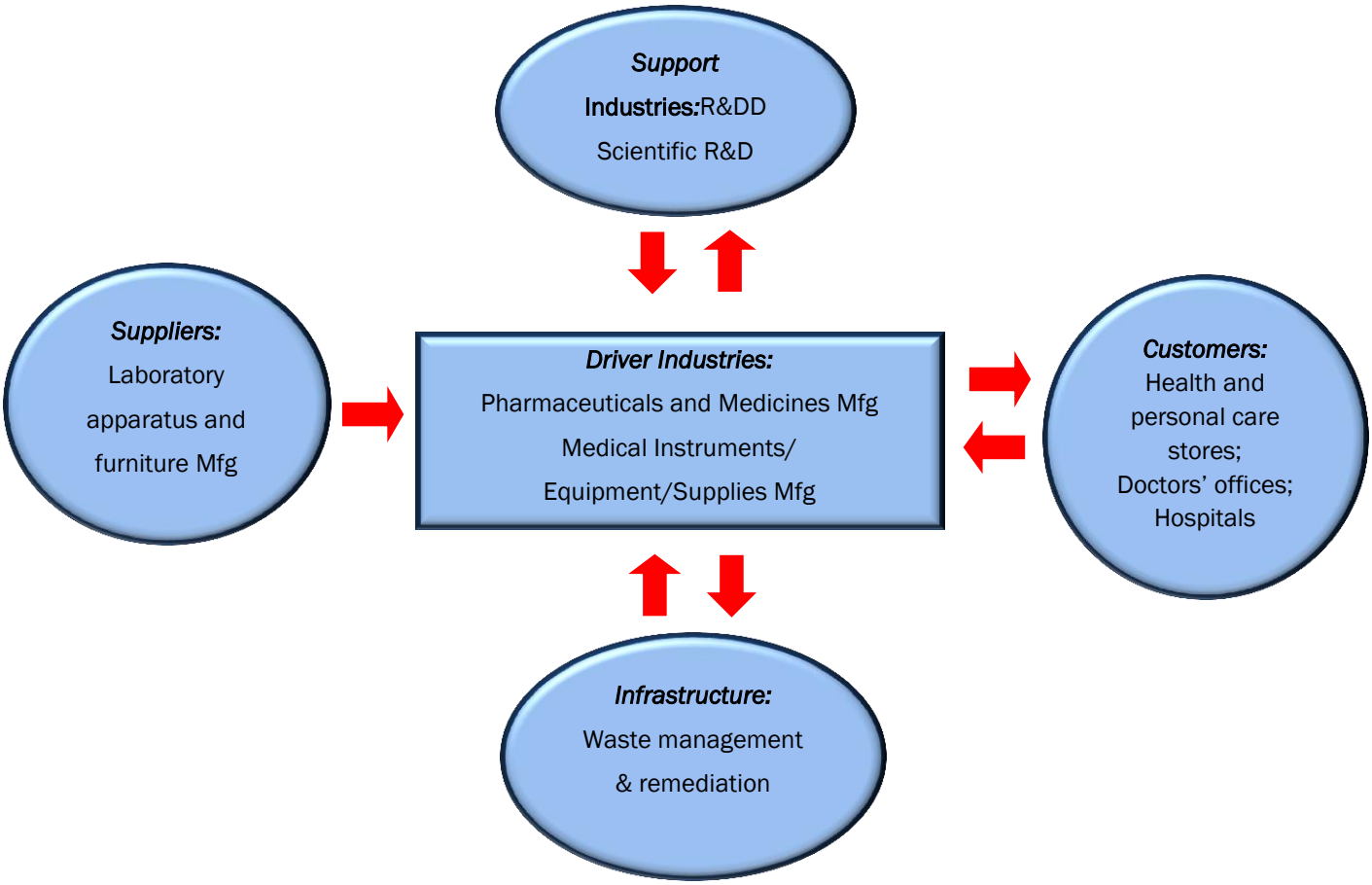


TABLE 1. INDUSTRY CLUSTERS

Advanced Materials	Glass & Ceramics
Agribusiness, Food Processing, & Technology	Information Technology & Telecommunications
Apparel & Textiles	Transportation & Logistics
Arts, Entertainment, Recreation & Visitor Industries	Mining
Biomedical/Biotechnical	Printing & Publishing
Business & Financial Services	Primary Metals Manufacturing
Chemicals & Chemical-Based Products	Fabricated Metal Product Manufacturing
Defense & Security	Machinery Manufacturing
Education & Knowledge Creation	Computer & Electronic Products Manufacturing
Energy	Electrical Equipment, Appliance & Component Manufacturing
Forest & Wood Products	Transportation Equipment Manufacturing

Source: www.statsamerica.org

Industry clusters are important to a region because they create a competitive advantage for a region. **The competitive advantage derives from four factors: 1) factor or input conditions, 2) demand conditions, 3) related and supporting industries, and 4) firm strategy, structure and rivalry**. Every cluster in a region will have unique characteristics, but these four conditions will be important to all clusters and the ultimate ability of its component firms to compete in the global economy.

The identification of clusters within a region begins with the concept of the location quotient (LQ). It is defined thusly:

$$LQ = \frac{\text{Fraction of a region's employment in industry cluster A}}{\text{Fraction of the nation's employment in industry cluster A}}$$

If the LQ for a cluster is greater than one in a region, the region is said to have a competitive advantage in that cluster, which has the potential to be an important driver of regional growth and development. As an example, suppose that a region employs 15% of its workforce Cluster A while nationally, 10% of employment is in Cluster A. Then the LQ for the region in industry Cluster A is

$$\mathbf{LQ = 0.15/0.10 = 1.5,}$$

This, as stated above, indicates a regional competitive advantage in Cluster A.

When studying cluster analysis within a region, the analyst will look at several items. **First and foremost, of course, is the size of the LQ in a cluster. Does the LQ indicate that the region has a competitive advantage in that cluster? Second, the change in the LQ over some time period (usually at least over the past five years and a longer period of, say, 10 years is preferred) is important. Is the region's competitive advantage improving or eroding?** If the latter, the cluster is not likely to be a major driver of regional growth going forward. Also note, **that arising LQ over time, even if the LQ is currently less than one, indicates a cluster that bears watching as the region's competitiveness in that cluster is improving, thus indicating that it could become an important source of employment growth over time.** Finally, the size of the cluster as measured by employment is important. If the LQ is greater than one, but the employment in the cluster is relatively small, the cluster is not likely to be an important source of employment in the future. Table 2 presents the results of the cluster analysis for the Boonslick region for the period 2001-2011. The change in the location quotient (LQ) and the change in the employment are given for each cluster.

TABLE 2 BOONSLICK REGIONAL CLUSTER ANALYSIS

Cluster	LQ2001	LQ2011	Change (%)	Emp2001	Emp2011	Change (%)
Adv. Mat	0.958	1.943	102.8	1,532	1,753	14.4
Agr.	3.789	4.365	15.2	3,915	4,186	6.9
Apparel	0.108	0.412	281.5	55	62	13.6
Arts	0.429	0.393	-8.4	499	683	36.7
Biomed	0.459	0.523	13.9	1,049	1,825	73.9
Business	0.610	0.387	-36.6	2,415	1,919	-20.5
Chemicals	1.756	1.136	-35.3	755	392	-48.1
Defense	0.265	0.321	21.1	383	368	-5.1
Education	0.673	0.788	17.1	1,609	2,255	40.1
Energy	0.845	0.761	-9.9	1,576	887	-43.7
Forest	3.289	1.319	-59.9	1,688	677	-59.9
Glass	7.204	3.402	-52.8	823	291	-64.6
IT	0.186	0.133	-28.5	292	189	-35.2
Prim Metals	5.624	7.998	42.2	572	604	5.5
Fab Metals	1.048	0.998	-4.8	310	263	-15.0
Machinery	0.848	0.824	-2.8	208	168	-19.0
Elect Eq	0.297	0.859	189.2	29	61	106.8
Computers	0	0	0	0	0	0
Trans Mfg	1.338	3.295	146.3	459	875	90.5
Mining	2.054	1.349	-34.3	193	89	-54.0
Printing	0.671	0.280	-58.3	446	207	-53.5
Trans Log	0.959	1.037	8.1	929	1,094	17.8

Source: www.statsamerica.com

For the Boonslick region **the agricultural cluster** (Agr.) stands out as one in which the region has a competitive advantage that is also growing. The sector is clearly an important one for the region and will continue to be important as the region moves forward. However, the employment growth in the agricultural cluster was very modest over the past decade (6.9%) and is unlikely to increase employment the next decade. **The advanced materials cluster** (Adv. Mat) stands out for the large increase in its location quotient (more than doubling), indicative of an increase in the region's competitiveness. Similar to the agricultural cluster, the cluster is an important one given the size of its employment; however, also similar to agriculture, employment growth was somewhat modest over the past decade (14.4%). **Transportation manufacturing** also experienced a significant increase in its location quotient (1.338 to 3.295) over the previous decade with rapid employment growth (90.5%); it is still a relatively

minor cluster with only 875 employees in 2011, but it is a cluster that bears watching. One cluster that also saw modest growth in both employment and its location quotient is **Transportation and Logistics** (Trans Log). The LQ increased slightly to a little over 1 and employment now amounts to almost 1,100. **Given the location of the region and its access to good north-south and east-west transportation, this is a cluster that should continue to contribute to regional growth in the next decade**. Two additional clusters show promising growth both with respect their LQ and employment, **these are the biomedical and education clusters. While both have LQ's below 1, the growth may indicate that they can move towards becoming competitive advantages in the future.**

The region is clearly losing competitiveness is some clusters. These include the chemicals cluster, forest & wood products, glass, and mining. These sectors are also declining at the national level, and based on current dynamics are not likely to be major contributors to regional growth going forward.

Industry Cluster Recommendations

RECOMMENDATIONS FOR INDUSTRY CLUSTER

Based on the analysis of the industry clusters, from 2001 to 2011, we have identified 4 primary clusters with sufficient growth in their location quotient (LQ) (highlighted grey in table 2). These clusters are the most likely to provide a strong competitive advantage so that it is advisable to invest in them from an entrepreneurial standpoint. As described in the industry cluster analysis segment, a cluster includes the driver industry as well as supplementary and complimentary industries, i.e. suppliers, support, customers, and infrastructure. This may allow the potential entrepreneur to take advantage of a unique position within a growing cluster, where he can fulfill a necessary role for the cluster to be whole. Two clusters have been identified as having potential future value to the regions entrepreneurial ecosystem and they share a fifth place. However, it is still too early to say that it will be of great relevance, but continued analysis should be considered for this cluster.

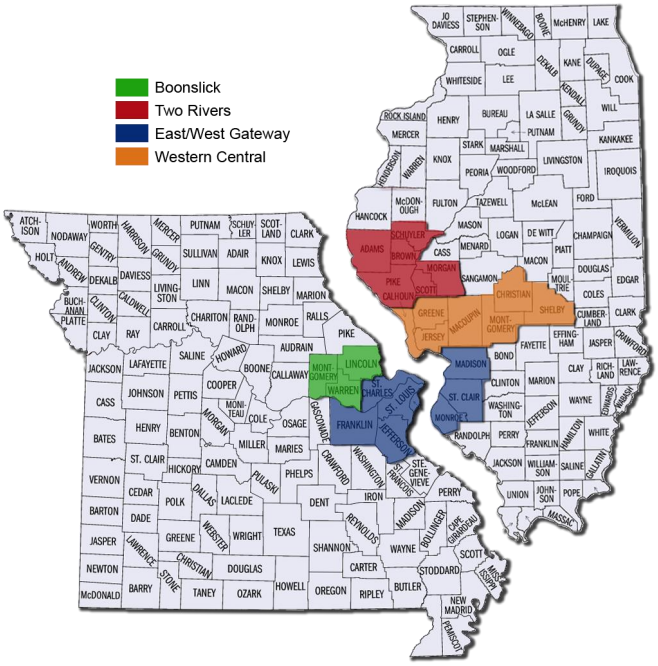
If an incubator is eventually developed and implemented our recommendation is that the incubator take advantage of the growth in LQ in the following clusters, by providing helpful and relevant tools for entrepreneurs to invest in them. The clusters are; **1) advanced materials; 2) agriculture; 3) transportation manufacturing; 4) transportation and logistics**. Each cluster has shown significant growth over the ten-year period measured, making them the most likely clusters to provide the right circumstances for potential entrepreneurial success and subsequent employment opportunities. As mentioned above, two clusters share the fifth place, and these are the **biomedical and educational clusters**. Both of these clusters show promising growth and with strong investments they may become competitive advantages for the region.

There are numerous ways in which an incubator can help foster the continued growth in these clusters. For an incubator to be beneficial in this respect it is likely that the most helpful way of supporting entrepreneurship in these clusters will come from providing necessary tools to promote support activities in the clusters. Examples include web/software development and technical assistance related to specific company needs, research and development of new tools, knowledge, or innovative business solutions, and customer support functions that allow for easier and better customer relationships.

Innovation Index

Analysing regional innovation is important when determining the outlook of the entrepreneurial ecosystem. The market structure, presence, and the ability to maintain entrepreneurial activities is driven by the review and consideration of key regional data that projects what further study and investment are needed. Without this foundation the opportunity for creating a well-functioning ecosystem is greatly diminished and can be demonstrated by lack of entrepreneurial activities and investments.

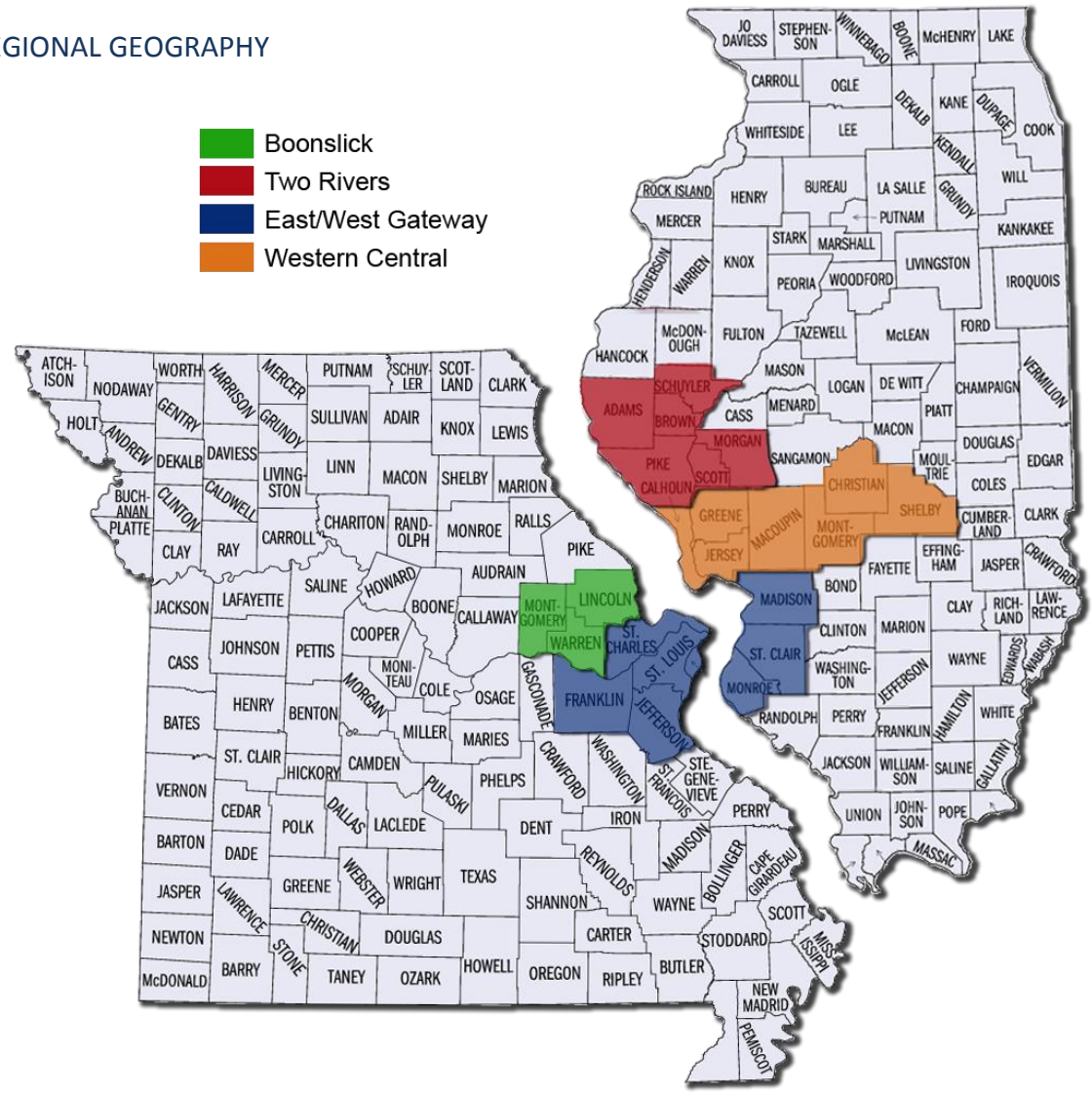
Evaluating the entrepreneurial environment for the region is the first step in reviewing the business climate. This data is derived from a partnership with the U.S. Department of Commerce, the Purdue Center for Regional Development, and the Indiana Business Research Center and referred to as the Innovation Index. As noted, **"The Innovation Index is designed to highlight factors that indicate a region is more or less ready to participate in the knowledge economy"**2.

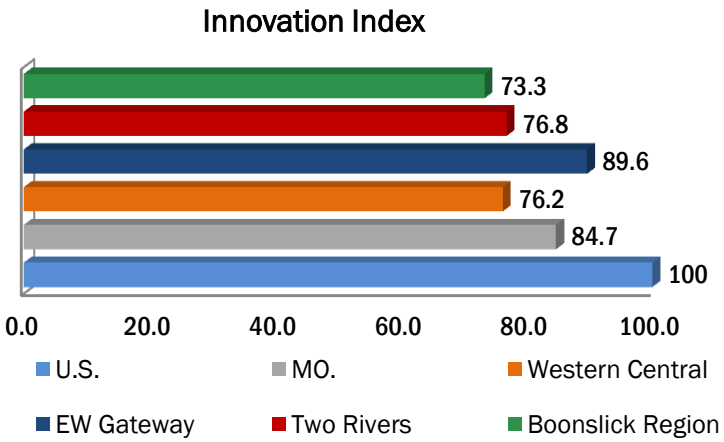


The analysis in this section will compare the Boonslick region to three other contiguous areas near the Missouri-Illinois border (Map on next page), which will include the counties of the Two Rivers Regional Council of Public Officials, the West Central Illinois Valley Regional Planning Commission, and the East-West Gateway Council of Governments. As a whole, the Boonslick region has a population density that is comparable to the Two Rivers and Western Central regions. The East-West Gateway region includes the city of St. Louis and is more densely populated.

[2] www.statsmaerica.org/innovation/guide/

REGIONAL GEOGRAPHY



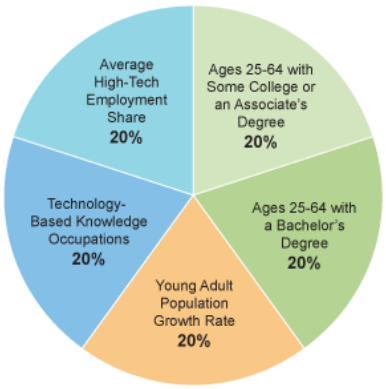


The chart shows the values for each region's Innovation Index. The Innovation Index is an index number for which a value of 100 would represent the national average. Values greater than 100 would indicate that a region has an innovative capacity that is greater than national average. The Boonslick region has an index value equal to 73.3, which suggests that the current innovative capacity of the region is below the national average by 26.7%. Compared to the surrounding areas used in the analysis, the Boonslick region has the lowest value for the Innovation Index. The index value for the Boonslick region is slightly below the values for the Two Rivers and Western Central regions and is significantly below the value for the East-West Gateway region.

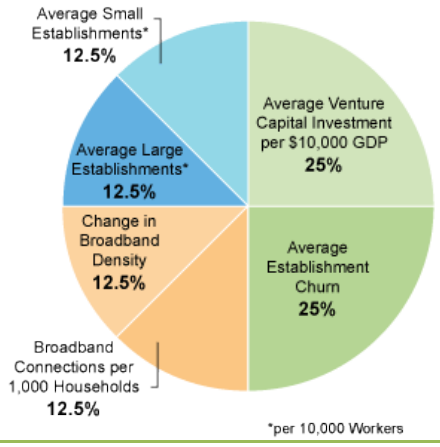
The following sections will describe the details of how the Innovation Index of a region is calculated. Several indicators of economic performance are used in the calculations and the values for the Boonslick region will be discussed throughout the analysis. It will be shown that the Boonslick region's relatively low index value is largely explained **by having fewer college graduates and fewer employment opportunities requiring advanced college degrees**. In other areas of economic performance, such as income growth and net inward migration, the Boonslick region has performed quite well.

The Innovation Index is composed of four overall components, each with its own level of weight being factored towards the total Innovation Index, as well as each being made up of their own sub-components with individual weights. As shown below in the table, Human Capital, Economic Dynamics, and Productivity & Employment each count for 30%, while Economic Well-Being only makes up 10% of the total Innovation Index result.

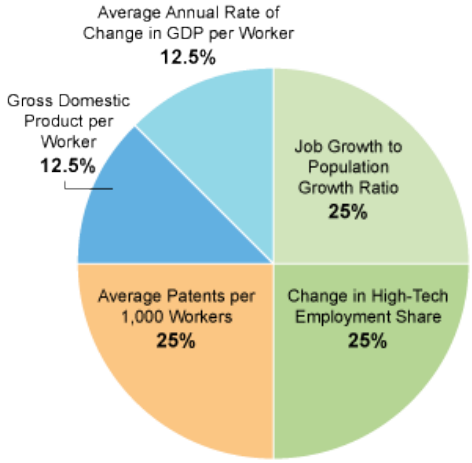
Human Capital – 30%



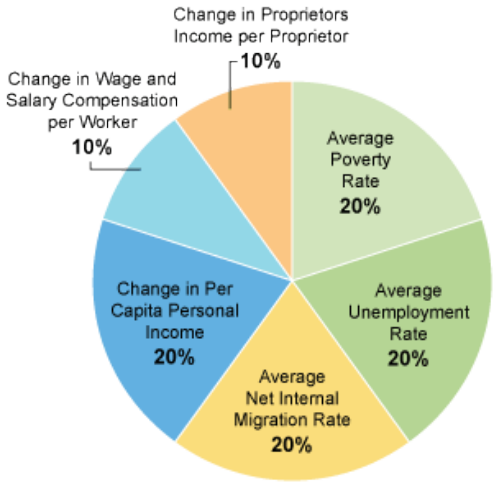
Economic Dynamics – 30%



Productivity and Employment – 30%



Economic Well-Being – 10%

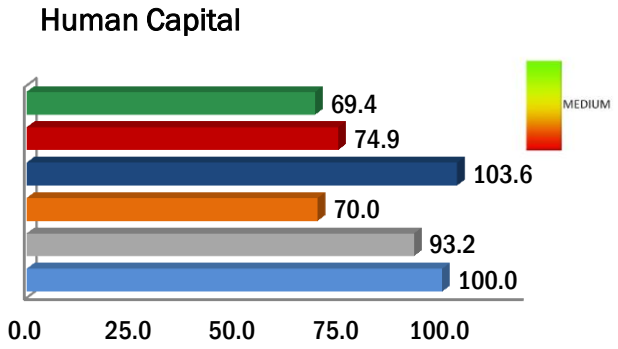


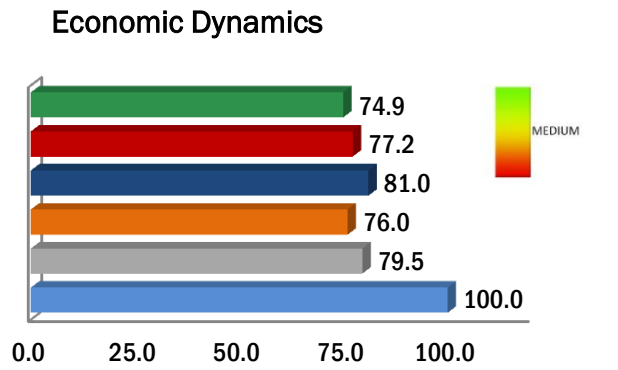
Source: www.statsamerica.com

To help visualize the areas where the Boonslick region might have a competitive advantage, or is simply doing well, we have developed a rating system. This will help identify areas for which the region is lagging behind the averages for both the state of Missouri and the United States. The rating system is made up of three "grades", high, medium, and low and uses data to identify each grade.

INPUTS + (STATE) + OUTPUTS = INNOVATION INDEX

The first attribute calculated toward the Innovation index is the Inputs and Capacity data which reviews the ability of the population and labor force to innovate per the defined geography.

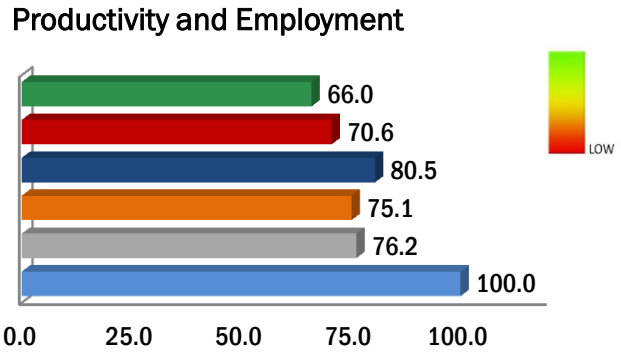


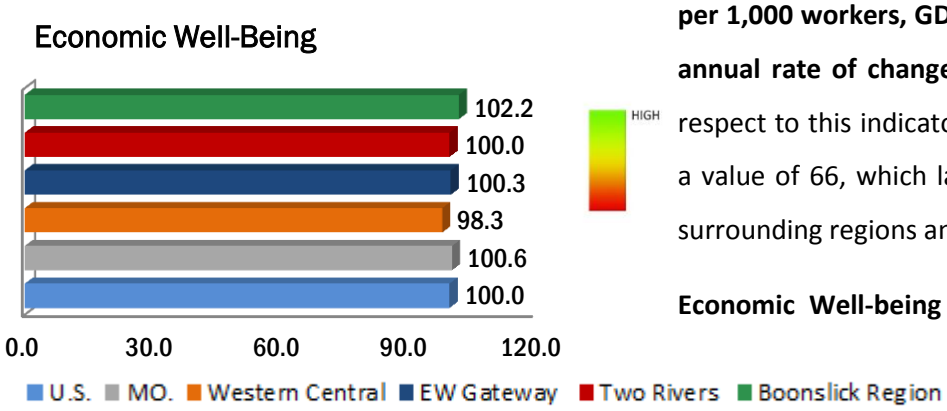


Human Capital is very important in entrepreneurial communities, and based on the research by the Economic Development Administration, estimates show that in an overall economy, 30% of Human Capital is calculated toward the overall Innovation Index. As you can see from the Inputs and Capacity Chart, the Boonslick region scores at 69.4 out of 100 for this segment, which is lower than the index values for the surrounding areas. **Factors included in this calculation include the average high tech employment share, the fraction of people between ages 25-64 with some college or an associate's degree, the fraction of people between ages 25-64 with a bachelor's degree, the young adult population growth rate, and technology based population growth models.** Additional detail will follow with a breakout per region.

Economic Dynamics serves as another input into the Innovation Index. Criteria reviewed and considered with this 30% input, **include the average number of small establishments, average venture capital investment for $10,000 GDP, average establishment churn, broadband connections per 1,000 households, change in broadband density and the average number of large establishments.** The indicator for the Boonslick region is below the index values of the surrounding areas and trails behind the state average for Missouri by almost five percentage points.

OUTPUTS





A strong level of **Productivity and Employment** are two key elements of having an entrepreneurial and innovative region. Thirty percent of the overall Innovation Index comes from productivity and employment factors. **Factors included in this variable include job growth to population growth ratio, change in high-tech employment share, average patents per 1,000 workers, GDP per worker, and average annual rate of change in GDP per worker.** With respect to this indicator, the Boonslick region has a value of 66, which lags significantly behind the surrounding regions and the state of Missouri.

Economic Well-being accounts for the smallest factors influencing the Innovation Index, with only being weighted by 10%**. Factors included here are average poverty rate, average unemployment rate, average net migration, change in per capita personal income, change in wage and salary earnings, and change in average proprietors' income.** The Boonslick region's indicator of economic well-being has a value of 102.2, which is slightly above the index values for the surrounding areas and the national average.

HUMAN CAPITAL

The first indicator is Human Capital which identifies the labor force's ability to participate in innovative initiatives. Regions with high levels of Human Capital will be defined as those who have high values for the following indicators:

- Educational Attainment
- Growth in Younger Age Brackets of the Workforce
- High Percentage of Innovation Related Occupations in the overall Labor Force

Educational Attainment

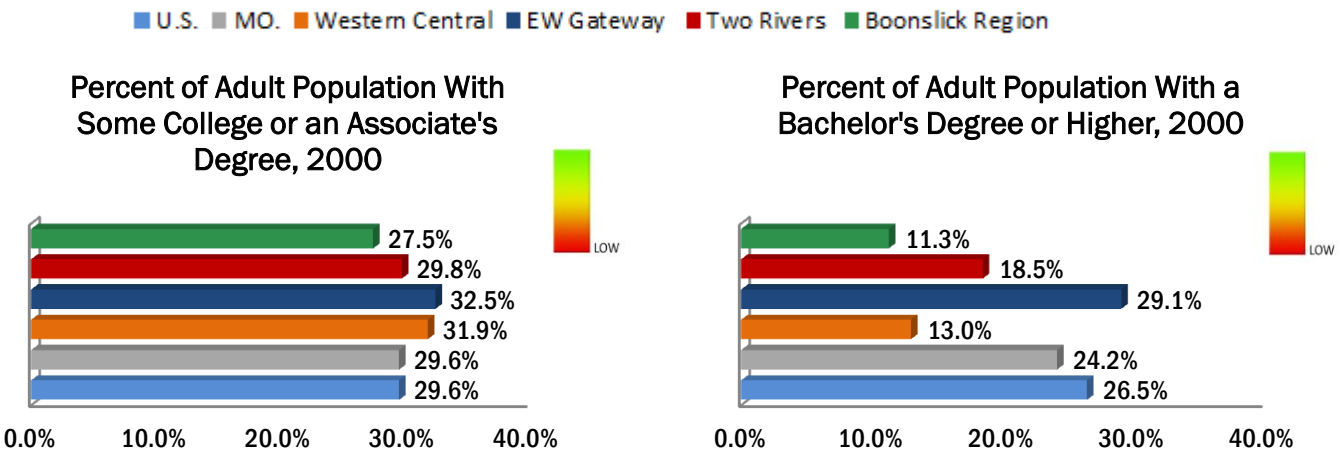
The following is a breakdown of the factors affecting Human Capital in the Boonslick region with comparisons to the surrounding areas, the state of Missouri, and the national average.

EDUCATIONAL ATTAINMENT

A well-educated workforce is needed to generate the innovation required to create new products, firms, and jobs. Educational attainment is a form of human capital investment that is measured by the level of formal schooling completed by an individual. This analysis considers two measures of educational attainment, which include the proportion of the population who have completed an associate's degree or some college and the proportion of the population who have completed a bachelor's degree or higher. In order to focus on the prime working-age population, the proportions will be reported based on area's population between ages 25 and 64. Research shows that some college/associate's degree indicator has a significant effect on GDP per worker growth.

Based on data from 2000, the Boonslick region had 27.5% of its population with an associate's degree or some college and 11.3% with a bachelor's degree or higher. Compared to the national average, the Boonslick region had a similar fraction with an associate's degree or some college, but had a significantly lower proportion with a bachelor's degree.

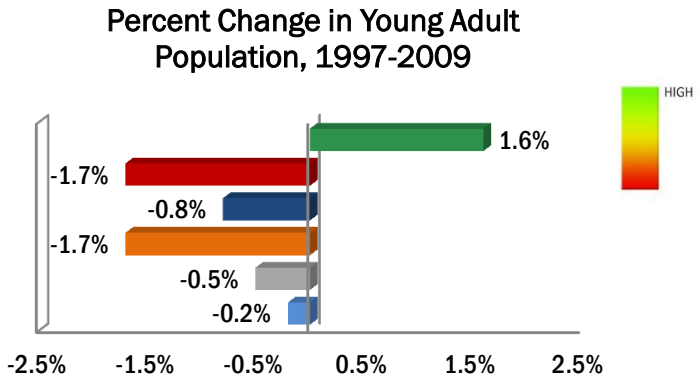
Because the Innovation Index uses data from 2000, we have identified the 2005-2009 average for these two variables. This will not affect the outcome of the Innovation Index, but ensure that the interpretation of the Boonslick region is still valid. The percent of adults with some college or associates degree is 27.3% and the percent of adults with a bachelor's degree or higher is 12.1%, which is similar to the 2010 data with minimal changes in the bachelor's degree statistic.



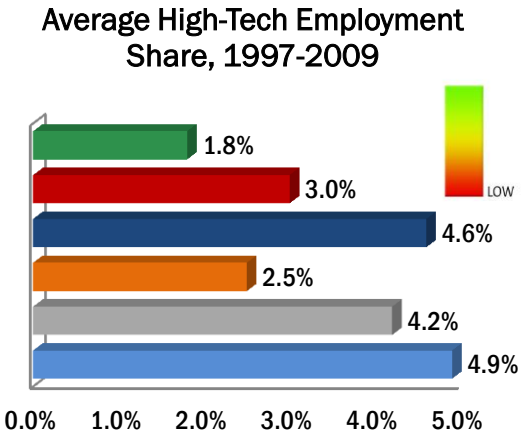
POPULATION GROWTH RATES

Fast-growing populations can be signs of innovative economies. **High population growth rates result from strong labor markets with growing opportunities**. Geographic regions with struggling economies often experience population declines, especially among younger age groups. **Research shows that this indicator has a significant effect on GDP per worker growth.**

This report examines the changes in young adult populations between 1997 and 2009. For the purpose of this analysis, a "young adult" is defined as someone between the ages 25 and 44. The U.S. and the state of Missouri both experienced declines in their young adult populations while the Boonslick region experienced growth at a rate of 1.6%. This ranked as a **major strength** for the Boonslick region.

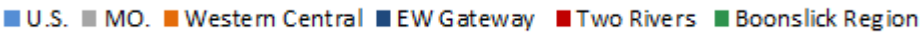


HIGH-TECH EMPLOYMENT SHARE



High-tech sectors require educated and skilled workers**. Innovative economies with significant endowments of human capital are expected to have a larger share of employment in high-tech sectors.** The average share of high-tech employment from 1997 through 2009 is shown in the accompanying chart. High-tech employment in the Boonslick region represented, on average, 1.8% of overall employment, which was smaller the surrounding areas.

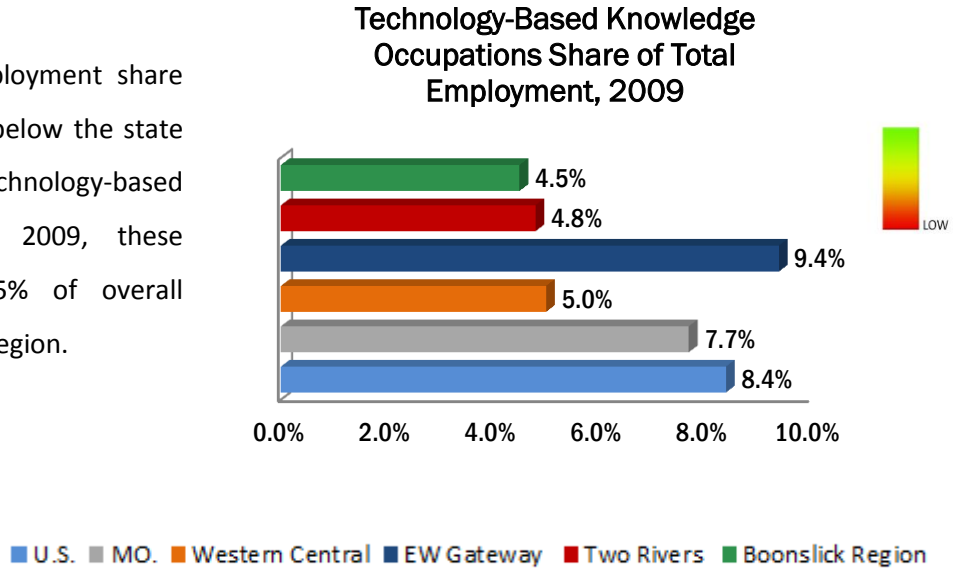
This metric measures the point in time innovative capacity of the region as opposed to the growth of innovative capacity in the productivity and employment index.



TECHNOLOGY BASED KNOWLEDGE OCCUPATIONS

Technology-based knowledge occupations are defined by six occupation clusters, which include **information technology; engineering; health care and medical science practitioners and scientists; mathematics, statistics, data and accounting; natural science and environmental management; and postsecondary education and knowledge creation**. Occupations within these categories require significant human capital investment and have a higher propensity to be involved with the production of innovations.

Similar to the high-tech employment share data, the Boonslick region is below the state and national averages for technology-based knowledge occupations. In 2009, these occupations represented 4.5% of overall employment in the Boonslick region.



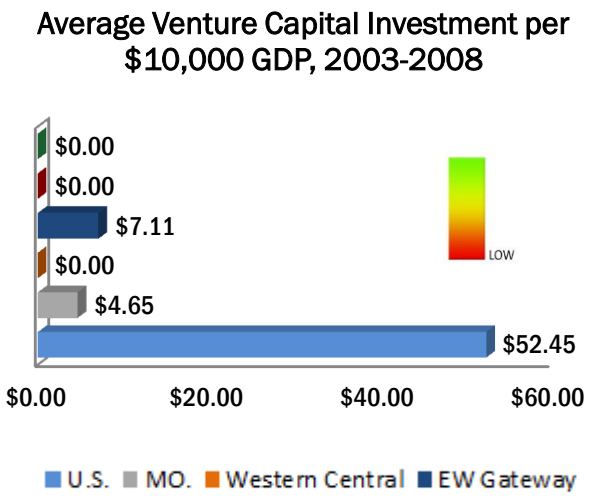
ECONOMIC DYNAMICS

The second indicator is Economic Dynamics which identifies economic factors that influence local business conditions and resources available to entrepreneurs and businesses. Those regions with strong economic dynamics are those who have the following indicators:

- Venture Capital Investments
- Internet Access
- New Firm Entries

The following is a breakdown of the factors affecting Economic Dynamics, with comparisons to surrounding areas, the state of Missouri, and the national average.

AVERAGE VENTURE CAPITAL



Average Venture Capital invested into a region indicates how will the region is doing in terms of attracting financial investors. A high level of Venture Capital tends to be associated with a high level of entrepreneurship and innovation. **Areas without much cash inflow from investors may not be low on innovation, but is less likely to be able to bring the same level of new ideas to market.**

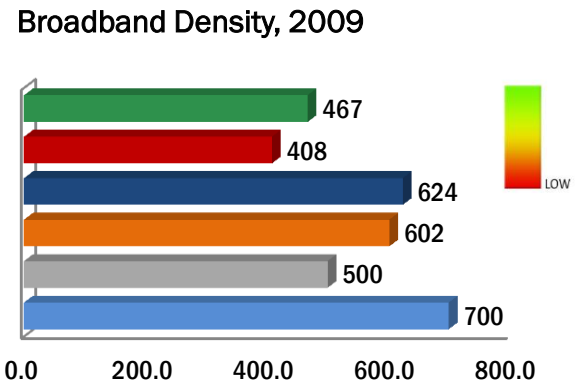
The Boonslick region sees close to no Venture Capital invested in the region. This may be seen as a sign that the area is not being considered attractive by outside investors. However, an area can still have a thriving entreprenurial culture without much interest from outside investors, provided there are other sources for entrepreneurs to find financing.

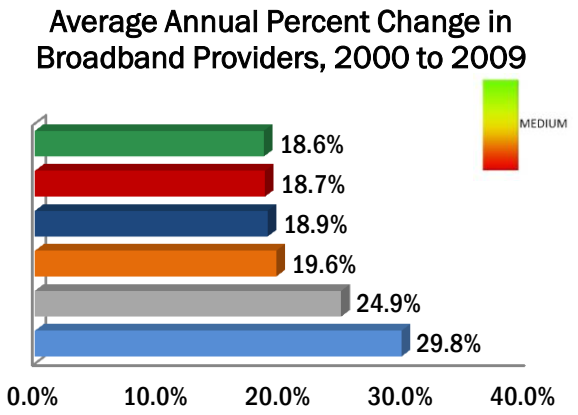
BROADBAND DENSITY AND PENETRATION

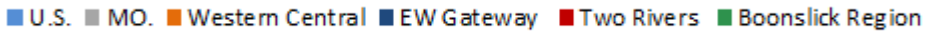
Broadband density refers to the level of Internet access in the region. **Internet accessibility is generally considered important in fostering entrepreneurship and innovation because it provides access to information, knowledge, ideas, broad communication, and ecommerce.** As well as serve as the most effective and efficient marketing tool for low budget entrepreneurs.

There are two measures, both from the Federal Communication Commission (FCC), to gauge Internet usage. One measure is the level of Internet penetration, or broadband density. This measure is residential broadband fixed connections per 1,000 households in 2009, a new data series the FCC first released in early 2010. The FCC reports these data in ranges, not as a specific number of connections per 1,000 households in a particular county. The midpoint in the range is graphically presented here. The second measure is a proxy for the rate of Internet adoption. This indicator is defined as the change in the number of broadband providers available to residents in a given county from 2000 to 2009.

With respect to broadband density the Boonslick region is slightly behind the average for the state of Missouri and further away from the national average. Boonslick has also been lagging behind on seeing new implementation for broadband providers, causing it to fall behind on overall accessibility. This may potentially make it more difficult to develop effective communication channels with the local area.



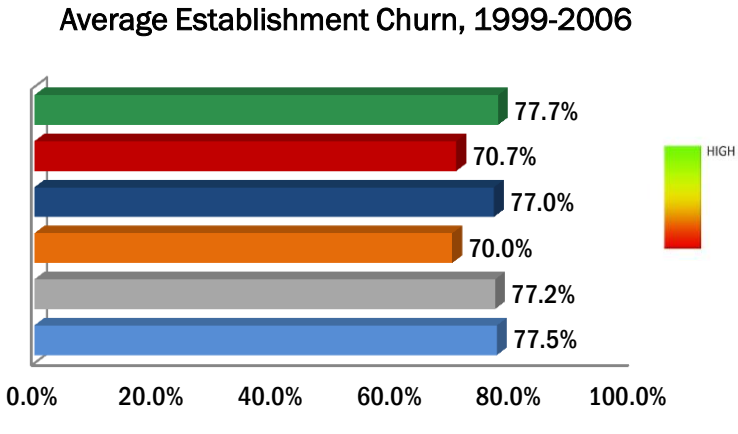


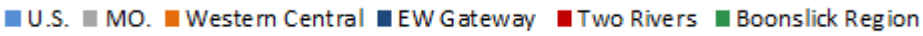


ESTABLISHMENT CHURN

"Churn" is a term used in economics to refer to the creation and destruction of either jobs or businesses. Dynamic economies can have a substantial amount of churn as new products, services, and production techniques replace obsolete ones.

In this analysis, churn is measured by taking the total number of establishment openings and closures, and expansions and contractions, as a proportion of the total number of firms in the region in a given year. A higher proportion would indicate a more dynamic and innovative economy.



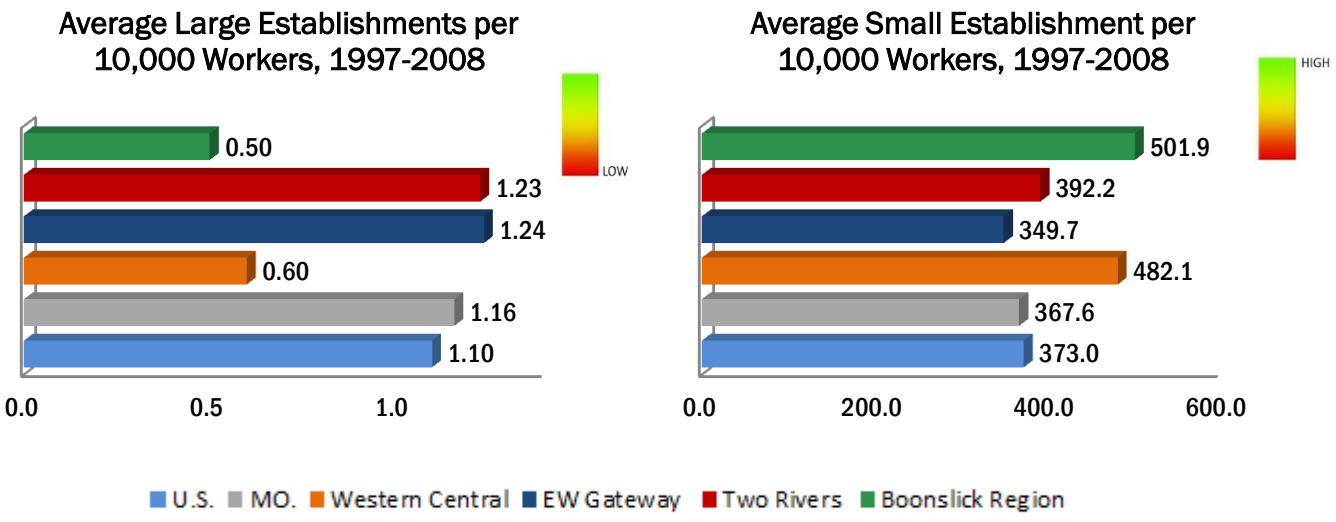


The accompanying chart shows that the average annual rate of churn for the Boonslick region from 1999 through 2006 was 77.7%, which was similar to the state and national averages. This demonstrates a positive entrepreneurship attribute and strength to build upon.

ESTABLISHMENT SIZES

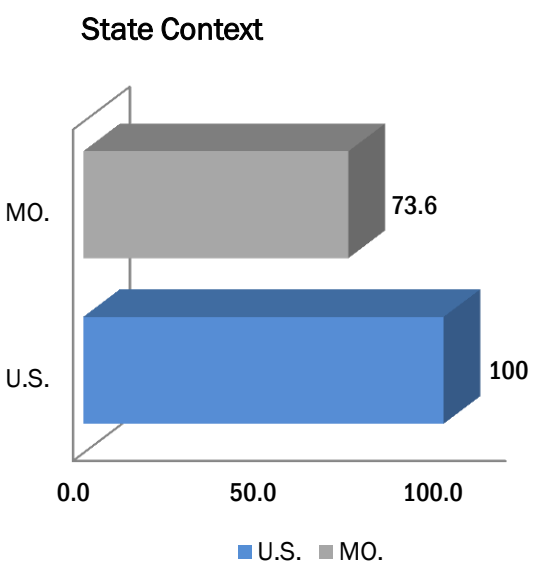
Having a wide range of establishment sizes may have its benefits and downsides. The most relevant aspect is to understand that **smaller firms tend to have an easier time adapting and innovating to meet new market challenges. Having a high degree of small and medium sized firms is a good indicator of how competitive a region is with respect to being entrepreneurial and innovative**. A strong presence of an incubator may help foster growth of more smaller and medium sized establishments and as such provide the foundation for more entrepreneurship and innovation in the region. Research shows that the average share of small establishments has a significant effect on GDP per worker growth.

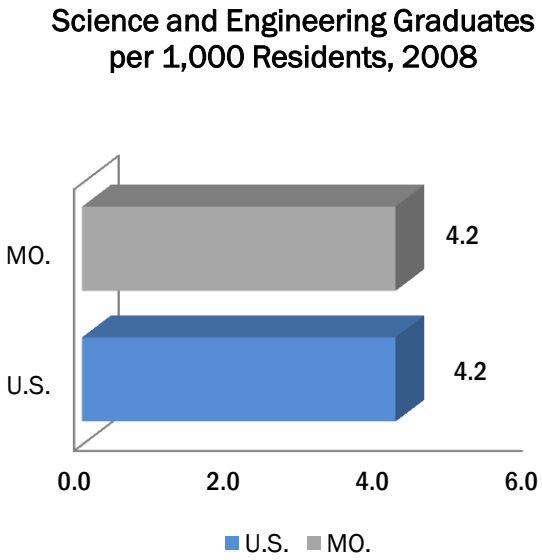
The Boonslick region has a strong level of small establishments in the area, indicating a healthy environment for entrepreneurs. The potential downsides of not having many large organizations in an area are mostly concerned with the lack of capital available for research, innovation, and development.



STATE CONTEXT

The State Context is a measure of the resources available in a state to entrepreneurs and businesses. This data is maintained at the state and national levels and do not include local incentives and support that may be included at the regional or local level. Missouri is well below the national level. To put it in a broader context, California is at 144.7, whereas Alabama is at 28.3. This number is calculated by analysing research and development spending along with the number of science and technology graduates per 1,000 residents to measure the state's investment in support of innovation strategies.



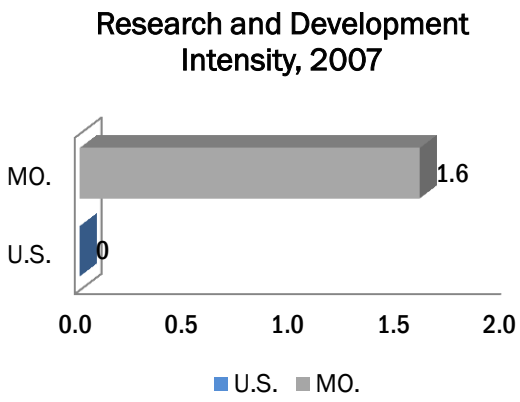


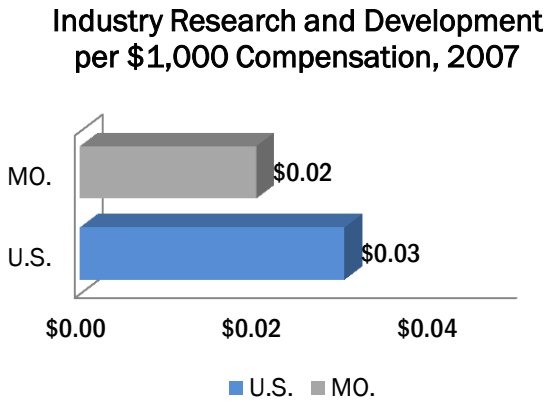
SCIENCE AND ENGINEERING GRADUATES

The number of graduates from science and engineering programs within a given state increases the supply of individuals trained to meet growing demands on the skilled labor force. This indicator is provided as graduates per 1,000 members of the population.

RESEARCH AND DEVELOPMENT

Research and development (R&D) investment yields product innovations, adds to the knowledge base of industry, and is a key economic growth driver. R&D intensity is defined by the amount of state R&D expenditures as a percent of state Gross Domestic Product (GDP). Private-sector firms provide just under two-thirds of all R&D funding. Even though non-industry investment in R&D is only about one-third as large as industry R&D, a substantial amount of innovation could result from federal, state, university, and nonprofit investments in R&D. Non-industry R&D often lays the foundation for profitable future private-sector research.





PRODUCTIVITY AND EMPLOYMENT

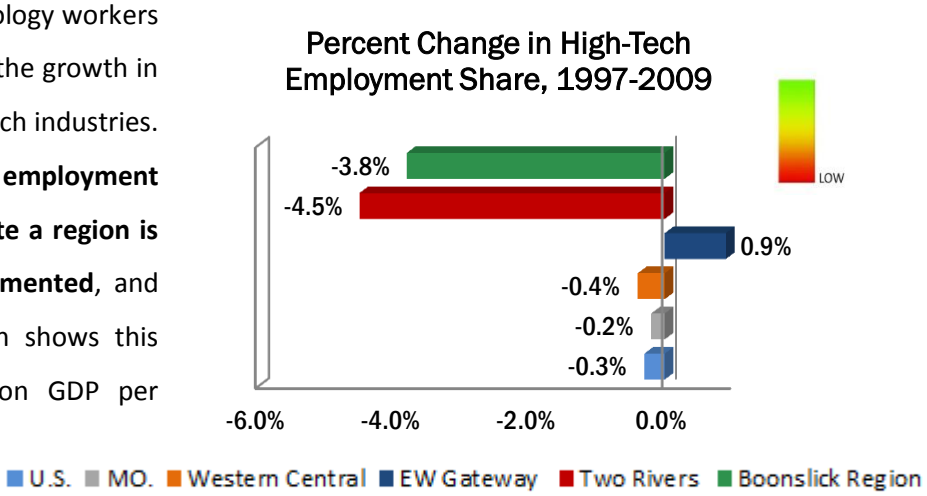
The third indicator is Productivity and Employment which identifies economic growth, regional attractiveness, and direct outcomes of innovative activity. Those regions with a strong level of productivity and employment are those who have the following indicators:

- High Share of High-tech Employment
- Job Growth Compared to Population Growth
- Patent Applications

The following is a breakdown of the factors affecting productivity and employment, with comparisons to surrounding regions, the state of Missouri, and the national average.

CHANGE IN HIGH-TECH EMPLOYMENT

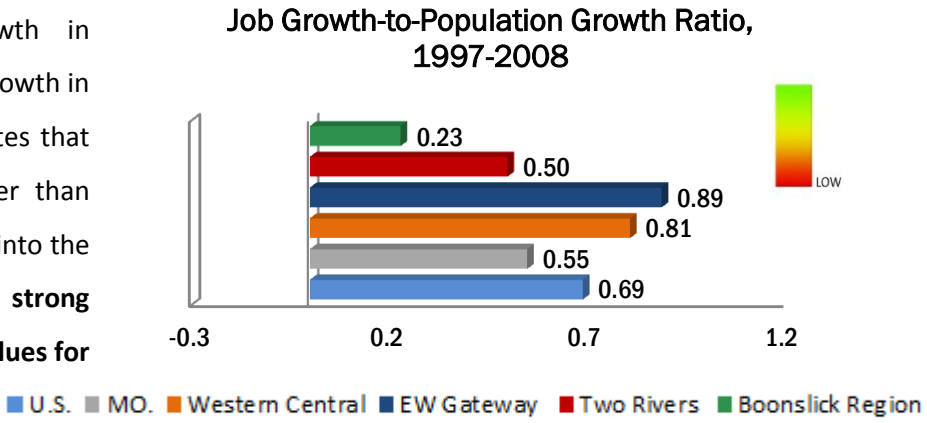
Just as having a strong pool of technology workers available, it is important to consider the growth in actual employment related to high-tech industries. **A high level of growth in high-tech employment is a good indicator of how up-to-date a region is with new technologies being implemented**, and thus how innovative it is. Research shows this indicator has a significant effect on GDP per worker growth.



In this analysis we find that the Boonslick region has seen a relatively large drop in high-tech employment compared to the averages for Missouri and the US.

JOB GROWTH

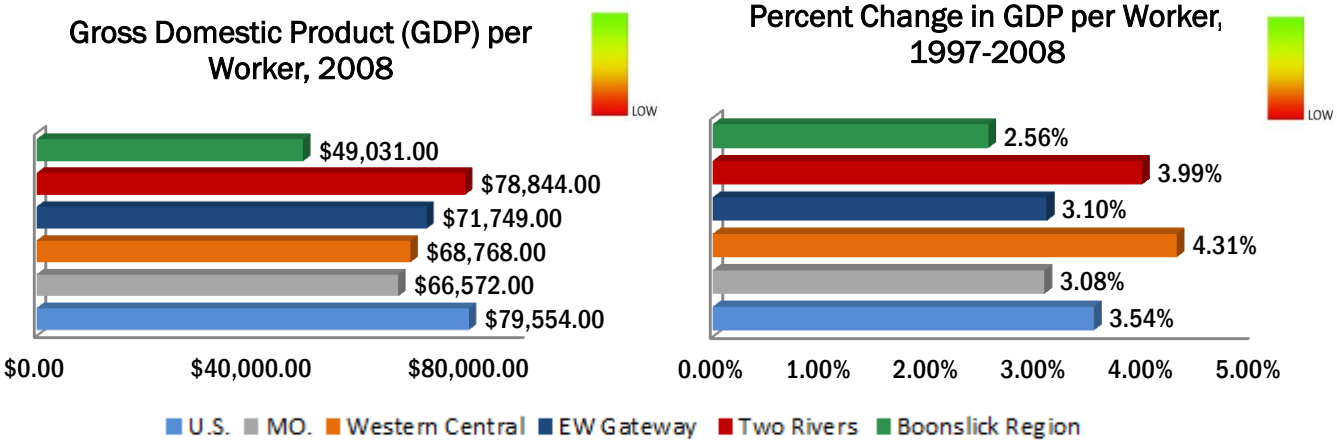
In this analysis, "job growth" is measured as the ratio of the rate of growth in employment relative to the rate of growth in the population. A high value indicates that job opportunities are growing faster than the rate at which people are moving into the region. **Innovative economies with strong growth are expected to have high values for this ratio.**



Between 1997 and 2008, the Boonslick region experienced a job growth-to-population growth ratio equal to 0.23, indicating that job growth was lower than population growth. This is much lower compared to the averages for the comparison regions. Part of the explanation may be attributed to a high level of out migration during the workday as residents travel to nearby metro areas for employment.

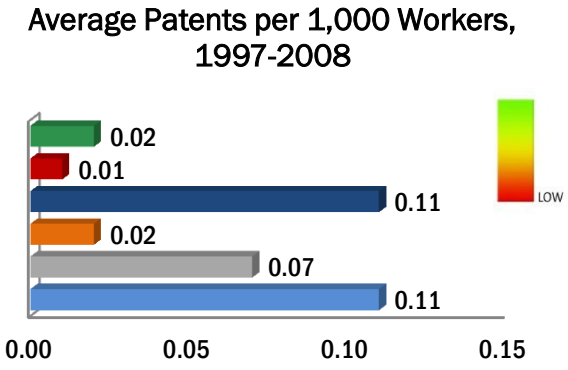
GDP PER WORKER

Gross domestic product per worker is a measure of output per worker, or worker productivity. **Innovative economies with a highly-skilled labor force are expected to be more productive**. The accompanying charts show the level of worker productivity in 2008 and the rate at which productivity grew between 1997 and 2008. In 2008, GDP per worker was $49,031 in the Boonslick region, which grew by 2.6% since 1997.



PATENTS PER 1,000 WORKERS

The number of Individuals or companies filing for new patents is a good estimate of how many new proprietary ideas are being developed in a region. **It can generally be assumed that if a patent has been filed for and granted, there is an underlying belief that it will generate profits.**



However, entrepreneurship and innovation may still have a strong existence without a high level of new patents per worker. The Boonslick region does not have a high level of patents per 1,000 workers. One of the growing trends over the past decade that allows for high levels of innovation without any patent application is the development of open-source applications and user generated information. These are software applications that allow users to edit and control the content. Perhaps the most noteworthy open-source software is the operating system Linux. Other major brands related to open-source and/or user-generated content are Wikipedia, Pintrest, and Youtube.

ECONOMIC WELL-BEING

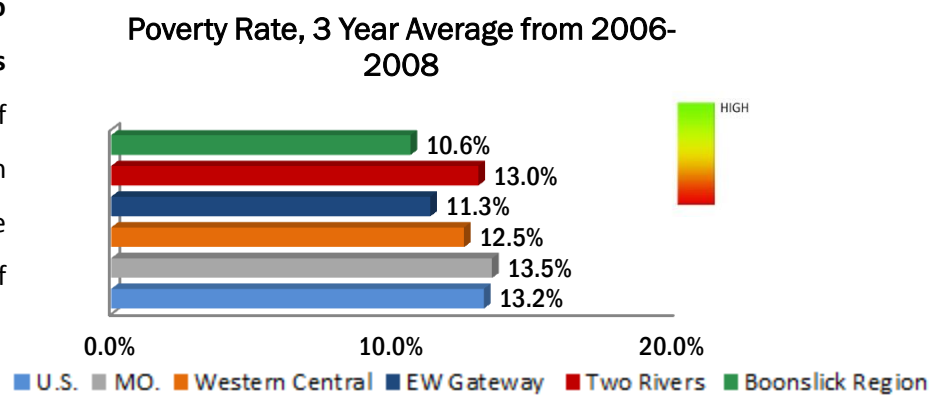
The fourth indicator is the Economic Well-being of the region, which identifies poverty levels, employment levels, compensation levels, and migration levels. Those regions with good economic well-being are those who have the following indicators:

- Low Poverty Rate and Good Compensation
- Low Unemployment
- Attracts Newcomers

The following is a breakdown of the factors affecting economic well-being, with comparisons to the surrounding regions, the state of Missouri, and the national average.

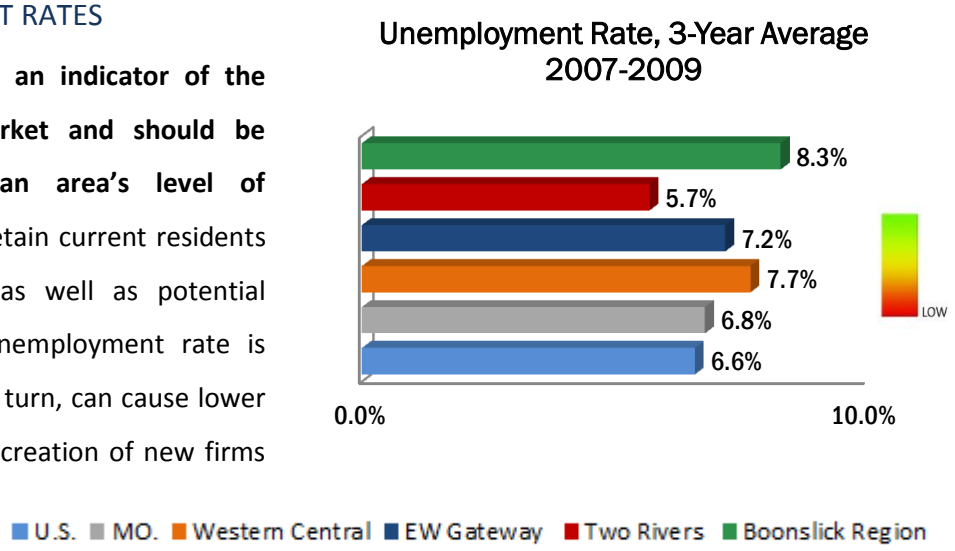
AVERAGE POVERTY RATE

A region's poverty rate is expected to have a negative correlation with its level of innovation. The direction of causality in this relationship can work in both directions. A higher poverty rate can be the cause of less innovation if low income levels discourage the development of new firms and the expansion of existing ones while encouraging would-be entrepreneurs to move out of the area. At the same time, weak levels of innovative activity can cause weak job growth and contribute to a higher poverty rate**. The Boonslick region's poverty rate is about three percentage points below the average for the state of Missouri**.



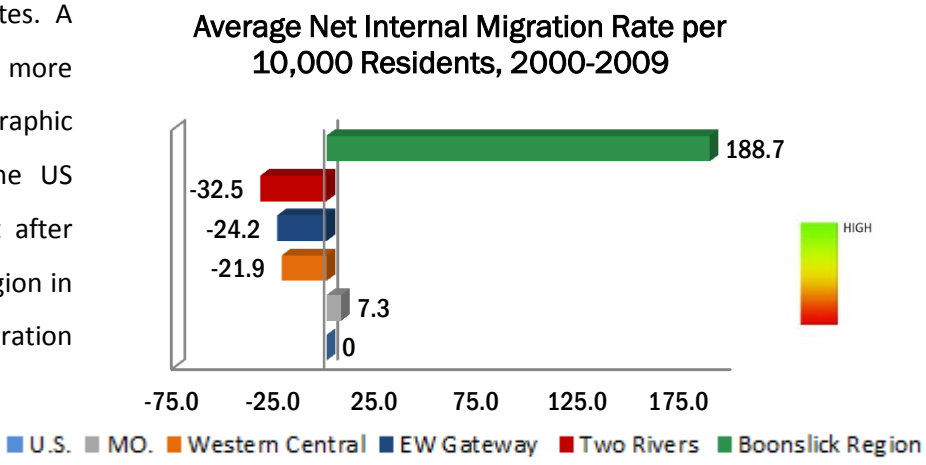
AVERAGE UNEMPLOYMENT RATES

The unemployment rate is an indicator of the strength of the labor market and should be negatively related with an area's level of innovation. It is easier to retain current residents and attract new workers as well as potential entrepreneurs when the unemployment rate is low. Innovative activities, in turn, can cause lower unemployment through the creation of new firms and job opportunities. The unemployment rate in the Boonslick region has been higher than the state average by one to two percentage points.



AVERAGE NET MIGRATION

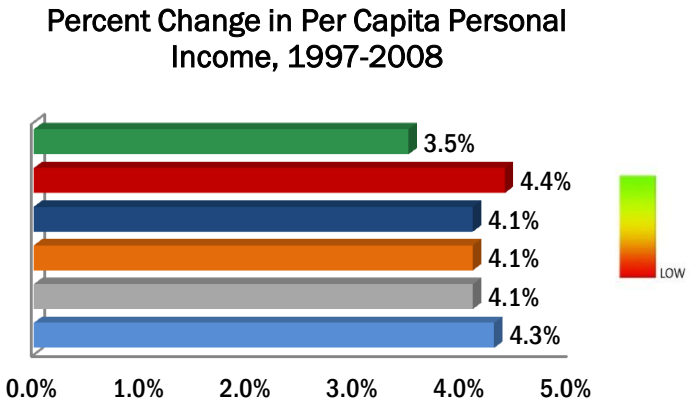
By expanding employment opportunities, highly innovative economies are more likely to attract new residents compared to economies that are less innovative. The chart below reports the average net internal migration per 10,000 residents between 2000 and 2009. The term, "internal migration," refers to migration within the United States. A negative (positive) value means more (fewer) people leave the geographic region for another region in the US compared to those who enter it after moving away from some other region in the US. Since only internal migration within the US is considered, the national value will be zero.



Between 2000 and 2009, the Boonslick region experienced a net inflow of residents at a rate of 188.7 residents per 10,000 people in the total population. This average net migration rate can be compared to the values for the surrounding regions, which experienced net outflows by between 21.9 and 32.5 per 10,000 residents, and the state of Missouri, which experienced a net inflow by 7.3 per 10,000 residents.

GROWTH PER CAPITA INCOME

Per capita personal income measures the average income received by all residents. In addition to wage and salary income, personal income also includes any income received from asset ownership and government transfer payments. This makes it a broad measure of income and a better indicator of the purchasing power of a typical resident.

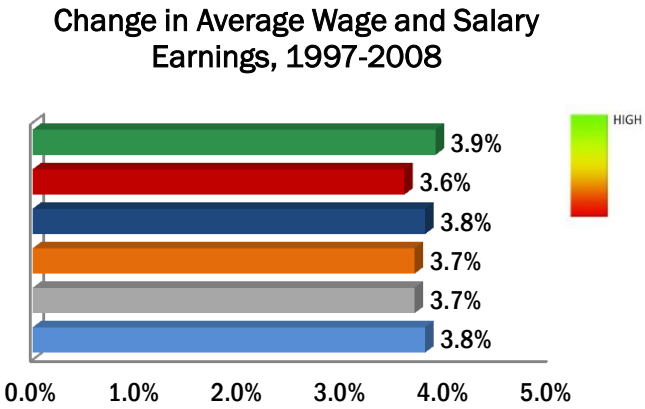


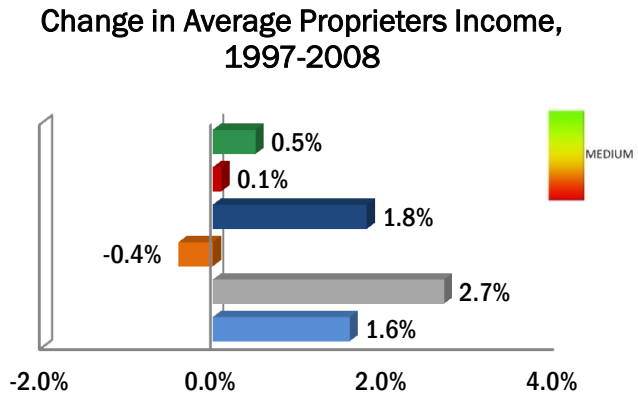
Between 1997 and 2008, the Boonslick region had an average annual growth rate in per capita personal income equal to 3.5%. This was similar to the state and national averages, but slightly below them.

U.S. MO. Western Central EW Gateway Two Rivers Boonslick Region

GROWTH IN AVERAGE COMPENSATION

Besides per capita personal income, worker **compensation is another indicator of resident purchasing power**. However, worker compensation is a more desirable measure of worker productivity and labor market performance. This analysis will look at two measures of compensation, which include wage and salary earnings and proprietors' income. Based on data between 1997 and 2008, the average growth rates for these measures are reported in the chart below.





U.S. MO. Western Central EW Gateway Two Rivers Boonslick Region

The Boonslick region experienced wage and salary growth at an average annual rate of 3.9%, which was similar to the state and national averages. During the same time period, growth in proprietors' income was well below the national average (0.5% vs. 1.6%) and was further below the growth rate for the state of Missouri (2.7%)

INNOVATION INDEX SUMMARY

From the detailed analysis of each variable considered in the Innovation Index **we can conclude that the Boonslick region is indeed a viable area with significant entrepreneurial attributes**. The region may not presently rank high overall, but this is precisely why an incubator is needed. The Boonslick region has the potential to become much stronger with respect to innovation, job creation, and firm development. It is clear from the Innovation Index that the region is doing very well in terms of overall economic well-being, while also doing comparatively well in regards to Economic Dynamics and Productivity and Employment.

Below is an overview of all key variables from the Innovation Index.

Regional Key Factors Comparison – OVERVIEW						
	Innovation Index	Human Capital	Economic Dynamics	Productivity and Employment	Economic Well Being	State
Boonslick	73.3	69.4	74.9	66.0	102.2	n/a
Two Rivers	76.8	74.9	77.2	70.6	100	n/a
EW Gateway	89.6	103.6	81.0	80.5	100.3	n/a
West. Central	76.2	70.0	76.0	75.1	98.3	n/a
Missouri	84.7	93.2	79.5	76.2	100.6	73.6
U.S.	100	100	100	100	100	100

Source: www.statsamerica.com

Regional Key Factors Comparison – HUMAN CAPITAL					
	% of Adult Population with Some College	% of Adult Population with Bachelors	% Change in Young Adult Population	High Tech Employment Share	Technology Based Occupations
Boonslick	27.5%	11.3%	1.6%	1.8%	4.5%
Two Rivers	29.8%	18.5%	-1.7%	3.0%	4.8%
EW Gateway	32.5%	29.1%	-0.8%	4.6%	9.4%
West. Central	31.9%	13.0%	-1.7%	2.5%	5.0%
Missouri	29.6%	24.2%	-0.5%	4.2%	7.7%
U.S.	29.6%	26.5%	-0.2%	4.9%	8.4%

Regional Key Factors Comparison – ECONOMIC DYNAMICS						
	Average Venture Capital 2003-2008	Broadband Density 2009	% Change in Broadband Providers 2000-2009	Establishment Churn 1999-2006	Avg. Small Establishments Per 10,000 Workers 1997-2008	Average Large Establishments Per 10,000 Workers 1997-2008
Boonslick	$0.00	467	18.6%	77.7%	0.50	501.9
Two Rivers	$0.00	408	18.7%	70.7%	1.23	392.2
EW Gateway	$7.11	624	18.9%	77.0%	1.24	349.7
West. Central	$0.00	602	19.6%	70.0%	0.60	482.1
Missouri	$4.65	500	24.9%	77.2%	1.16	367.6
U.S.	$52.45	700	29.8%	77.5%	1.10	373.0

Regional Key Factors Comparison – STATE CONTEXT				
	State	Science and Engineering Graduates Per 1,000 Students 2008	Research and Development Intensity 2007	Industry R&D per $1,000 Compensation 2007
Missouri	73.6	4.2	1.6	$0.02
U.S.	100	4.2	0.0	$0.03

Regional Key Factors Comparison – PRODUCTIVITY AND EMPLOYMENT					
	Change in High Tech Employment 1997-2009	Job Growth 1997-2008	Gross Domestic Product Per Worker 2008	% Change in GDP Per Worker 1997-2008	Average Patents Per 1,000 Workers 1997-2008
Boonslick	-3.8%	0.23	$49,031	2.56%	0.02
Two Rivers	-4.5%	0.50	$78,844	3.99%	0.01
EW Gateway	0.9%	0.89	$71,749	3.10%	0.11
West. Central	-0.4%	0.81	$68,768	4.31%	0.02
Missouri	-0.2%	0.55	$66,572	3.08%	0.07
U.S.	-0.3%	0.69	$79,554	3.54%	0.11

Regional Key Factors Comparison – ECONOMIC WELL-BEING						
	Poverty Rate, 3-Year Average from 2006-2008	Unemployment Rate, 3-year Average, 2007-2009	Average Net Internal Migration Rate per 10,000 Residents, 2000-2009	% Change in Per Capita Personal Income, 1997-2008	Change in Average Wage and Salary Earnings, 1997-2008	Change in Average Proprietors Income, 1997-2008
Boonslick	10.6%	8.3%	188.7	3.5%	3.9%	0.5%
Two Rivers	13.0%	5.7%	-32.5	4.4%	3.6%	0.1%
EW Gateway	11.3%	7.2%	-24.2	4.1%	3.8%	1.8%
West. Central	12.5%	7.7%	-21.9	4.1%	3.7%	-0.4%
Missouri	13.5%	6.8%	7.3	4.1%	3.7%	2.7%
U.S.	13.2%	6.6%	0.0	4.3%	3.8%	1.6%

Additional regional data breakdowns will be provided in Appendix 1.

FRAMEWORK

Based on the analyses throughout this report, a series of recommendations and considerations can be applied to the policy framework that will help drive the region towards a more entrepreneurially friendly ecosystem. This will help spur job growth, innovation, and create regional competitive advantages. Each component of the framework provides insight into what is currently happening in the Boonslick region, as well as what can be done now and in the future. These components should be considered as a roadmap for taking action towards creating a strong entrepreneurial ecosystem.

Developing a Pipeline for Educated and Skilled Entrepreneurs

A high level of focus on providing education and training for potential and existing entrepreneurs has been a proven way to advance the entrepreneurial ecosystem. The educational component should exist on all levels of formal and informal education, from the elementary school classroom, to college majors and minors, to publicly available support programs, to local networking groups. Providing resources for individuals to learn and apply the knowledge and skills necessary to succeed as an entrepreneur, is a key component of creating an entrepreneurial ecosystem that can create new jobs, attract new industries, and spur economic growth.

The foremost important aspect of cultivating a high level of educated and skilled entrepreneurs and professionals is access to higher education. The Lincoln County Extension Center in Troy is the only link between county residents and the University of Missouri. This means that Boonslick residents must attend college in neighbour counties, which puts the region at higher risk of losing educated residents to other counties or states. While it may be impracticable to invest in a four-year college institution within the region, it is advisable that the region consider advancing a community college as a way to provide new and continuous education for its current residents. Additionally, it is highly recommended that the region establish a direct entrepreneurship training program, potentially as a partnership with an SBTDC, where existing and potential entrepreneurs can learn and improve their knowledge and skills. Furthermore, a network of business experts and professionals should be made available for existing and potential entrepreneurs to access. This may be in the form of mentoring programs or networking events. The goal would be to connect the entrepreneurs with individuals of complementary skills and knowledge that will help ensure long-term successful growth of new and existing business ventures.

Cultivating Technology Exchange and Innovation

To help foster an innovative economy a region must understand and invest in technological advances and opportunities. This must happen through collaboration among educational institutes, companies, and entrepreneurs. The exchange of new knowledge and ideas is a key factor in creating the optimal circumstance for economic growth among small and medium sized establishments. The entrepreneurial ecosystem benefits in many ways from a high level of technology exchange and innovation, among which is the ability to attract and grow new competitive industries that will meet future market demands. It is recommended that the region consider working with telephone cooperatives, broadband providers, and other identified technology firms, to build a consortium to advance this cultivation.

Improving Access to Capital

A regions ability to provide the needed funding for new ventures, as well as growing companies, is essential to a healthy entrepreneurial ecosystem. Access to traditional bank financing is only one way to help entrepreneurs develop and grow. Attracting investors, whether they are angel investors, venture capitalists, or larger companies looking for new ideas, is also an important factor in ensuring the right type of funding can be accessed by entrepreneurs.

At least two types of economic development loans have been identified to be available in the Boonslick region. These are a maximum $25,000 Microenterprise Loan program, and a maximum $150,000 EDA-Revolving Loan Funds. Additionally, the city of Troy has a Façade Improvement Program, and all counties are eligible for Community Development Block Grants. To help foster the entrepreneurial ecosystem a highly focused effort must be put in place, to identify how the region can assist existing and potential entrepreneurs in financing their ventures. Small businesses are at high risk of failing for many reasons, but among the most common factors is the difficult in keeping the venture financed in its initial years. Financial distress in small businesses is often caused by lack of initial cash to invest in long-term growth, revenue often being highly cyclical and high stress levels of meeting debt obligations on time. The Boonslick region must be able to help meet the needs of small business ventures, for there to be continuous job gains through new and growing establishments. As the Innovation Index showed, the Boonslick region has seen $0 invest from VCs. While VCs are not necessary for a region to have a thriving entrepreneurial environment, it may be wise to consider how the region could become more attractive to VC firms. A recommendation of these specific areas should be pursued under this

framework element. They include: Research the opportunities for developing a formalized venture capital group; to evaluated projects that are advancing and inject regional resources; to formalize an Angel Investor program regionally or perhaps partner with an established network in the St. Louis metro market; and to evaluate the feasibility of working with banks in the region to develop a Seed Grant pool to invest in emerging businesses. These micro-grants could be funded annually with a review committee and a formal application process.

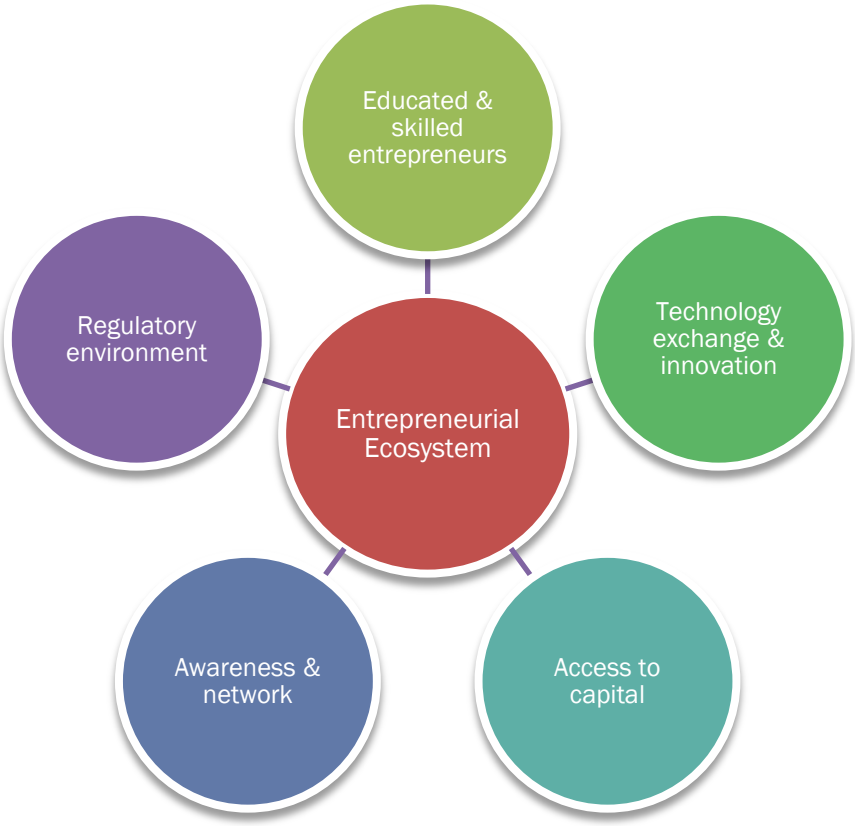
Promoting Awareness and Advancing Market Opportunities

Promoting an entrepreneurial culture where entrepreneurs are valued and the community is willing to support local establishments is another key aspect for a successful entrepreneurial ecosystem to grow. This may be achieved through developing local networking opportunities, creating mentorship programs, (through chambers of commerce, economic development groups, and main street programs.), informing the public about the social and economic impact of entrepreneurship, and engaging entrepreneurs to address the region's greatest opportunities. Several approaches may be taken to help promote awareness and advance market opportunities within the region, with some of the more effective ones being business plan competitions, networking events, seed grants, and public awareness campaigns. A business plan competition is exactly what it sounds like. Potential entrepreneurs submit their business ideas and a group of professionals evaluate the potential success of the ideas based on basic business metrics (i.e. market potential, growth potential, economies of scale, etc.). One or more winners are selected to win monetary prizes to help fund their business ideas. Seed grants are small amounts of money, $500 - $1,000 that may be distributed to individuals with small and simple ideas, yet with potential to have positive impact on the local economy and entrepreneurial ecosystem. Networking events should be arranged on a continuous basis (every month, every two month, or whatever interval works best for the region). These events should bring together entrepreneurs, potential entrepreneurs, investors, local politicians, and other people with the ability to impact the entrepreneurial ecosystem. The main goal is the bring individuals together than can benefit from each other's unique knowledge, skills, or access to resources. And, a public awareness campaign should be developed to help inform the public about the importance of entrepreneurship within the region.

Optimizing the Regulatory Environment

Helping entrepreneurs navigate and succeed within legal boundaries is the final key driver of a strong entrepreneurial ecosystem. This means that entrepreneurs should have easy access to information and help with understanding regulations and policies that affect their businesses. And, it also means that public officials should investigate the potential barriers that exist for entrepreneurs to thrive. A dialogue must be cultivated where both entrepreneurs and policy makers can meet and understand each other's needs and wants. The first and most important step to take is to develop a survey for measuring actual versus perceived barriers for entrepreneurs. This should be done from the perspective of the entrepreneurs themselves, as well as from the policy makers' perspective. Such a survey should help identify key barriers, both real and perceived, that must be considered in order to help foster an entrepreneurial ecosystem.

Entrepreneurial Ecosystem Framework Matrix



Source: Dr James Stapleton, Transforming Community Economies, Delta Regional Authority, Small Business and Entrepreneurship Policy Framework

When proposing the following recommendations a major focus has been placed on the previous graphic that displays five critical elements that are essential to developing and expanding a region's entrepreneurial activity. All of these elements have been addressed with specific strategies recommended for each framework element.

Opportunities & Recommendations

OPPORTUNTIES

The Boonslick region has the opportunity to strategically invest in fostering the entrepreneurial ecosystem. Based on the analyses provided in the report it is clear that the region must actively pursue a strategy focused on developing continuous opportunities for entrepreneurship to thrive. Several opportunities are currently present, while others may present themselves as the region develops its entrepreneurial ecosystem. **From the National Establishment Time Series (NETS) data we saw that it was primarily regional residents who were responsible for creating new firms and jobs within the region**. The importance of this cannot be understated and should be considered one of the greatest assets the region has. Having so many residents actively engaging on the local economy should be considered a high-impact opportunity for investing in entrepreneurial training and education. **Educating current and potential entrepreneurs may be accomplished through entrepreneurship training programs, an incubator program with a mentorship component, or through a more traditional academic route**. Additionally, having an entrepreneurial community in place also provides for investing in creating strategic high-impact partnerships, both between regional entrepreneurs and interest groups, but also between state and national interest groups that may be of assistance to the regions entrepreneurs.

From the cluster analysis we saw that **the region has several strong clusters, which include advanced materials, agriculture, transportation manufacturing, transportation/logistics, biomedical, and educational cluster**. These clusters present themselves as key components in creating economic growth and each should be considered an opportunity for long-term investment by both the public and private sector.

The Innovation Index presents the region with both challenges and opportunities. Most importantly **the region scores high on its economic well-being component**. This is primarily due to low poverty rates, high net internal migration, and reasonably high increase in average wage and salary earnings. This should be taken as an indicator that the region has a workforce that is ready to participate in the regional economy. **What looks to be the biggest challenge laying ahead of the region is the low percentage of college degrees**. A key factor in fostering a strong entrepreneurial ecosystem is having access to a well-educated workforce. Another challenge looks to be the lack of high-tech employment.

Technological development does not have to be at a level of Silicon Valley, but it is a key component of almost any healthy and successful entrepreneurial ecosystem.

So based upon the analysis, data, and research, the Boonslick region should consider the following recommendations to advance entrepreneurship in the region.

RECOMMENDATIONS

Developing a Pipeline for Educated and Skilled Entrepreneurs

1. Develop and host a Regional Entrepreneurship Conference to educate and promote entrepreneurship in the Boonslick Region
    a. Practitioner Track – Chambers of Commerce, Economic Development Groups, Public Officials
    b. Entrepreneur Track – Current and prospective businesses
2. Implement and Entrepreneurship Training Program that engages
    a. Business Feasibility – Entry Level
    b. Business Concept Development – Mid Level
    c. Business Modeling – Focused on testing the market and nearing business launch
3. Engaging Small Business Technology Development Center Staff
    a. Consider regional financial investments to support additional SBTDC resources for the region
    b. Resource for Entrepreneurship education and training
    c. SBTDC may staff and develop regional resource group for all entrepreneurship resources
4. Partner and Cooperate with Existing Resources to Develop the Skills for Success
    a. Evaluate strengths of current entrepreneurship offerings in the region and adjacent Community Colleges and evaluate best practices and highest return on investment
    b. Look to collaborate with all public and private organizations to implement training programs that will assist in the pipeline development of entrepreneurs

5. Targeting Efforts Should Include a Tiered Investment Approach (Time, Effort, Money) Toward Pipeline Development
    a. NETS data demonstrates significant financial growth in firms who are self-employed and from 2-9 employees during the time period from 2001 -2010. Focus Investments with firms who are within one of the identified clusters that include: Advanced Materials, Agriculture, Transportation Manufacturing, Transportation Logistics, Biomedical, and Education
    b. Focus investments on creativity, innovation in educational settings to include K-12, and post-secondary for entrepreneurship curriculum and training. In some areas of the region this may be taking place, but focused investment should provide greater opportunity for success.
    c. Embrace a culture that failed establishments are part of the churn and acceptable when developing the entrepreneurial framework for rural, urbanizing, regions. These failures may have a short term negative connotation, but they demonstrate a healthy environment for creativity and innovation.

Cultivating Technology Exchange

1. Identification of the Key Technology Leaders in the Region
    a. Host regional forum for the "State of Technology in the Boonslick Region" to discuss the strengths and weaknesses in the technology infrastructure
    b. Engagement of key resources and talent toward Information Technology in the region and host networking events to engage ideas, creativity, and exposure to those in the region
    c. Consider the partnering with adjacent resources and conducting peer exchanges at the TREX facility in St. Louis to garner insight and potential guidance on the development of tech exchange opportunities and events

Improving Access to Capital

1. Promote existing microloan and revolving loan funds programs
    a. Evaluate if seed grants are possible ($5,000 or less) to initiate new business start ups
    b. Determine marketing efforts and the recent use of the funds for the region
    c. Consider partnering with the St. Charles CDC to develop new SBA loan opportunities for the region. Although this is an adjacent county, it is one of the best performing CDC's in the Country.
2. Host an Access to Capital Conference
    a. Include in the Agenda the various organizations who may participate with funding including, SBA, USDA, RLF's, CDC's, and other agencies whose mission it is to support and enhance business opportunity and success
    b. Also include a credit building seminar for those who may need additional credit building prior to launching their business venture
    c. Finally, including lenders from the region at this event is critical but also consider the junior lenders who are interacting with projects on a daily basis

Promoting Awareness and Building Networks

1. Creating networking events that may include maker and tech events that consist of various age groups (similar to science fairs or hacker events)
2. Develop a business plan competition – (give some detail)
3. Develop and awareness campaign about the role of the entrepreneur in the regional economy

Optimizing the Regulatory Environment

1. Establish a direct dialogue between entrepreneurs and policy makers
2. Administer survey focused on the actual versus perceived barriers for market entry by entrepreneurs and new business start ups

Appendix 1 - NETS

FIRM SIZE - ESTABLSIHMENTS

	Establishments operating in Boonslick (based on firm size)					
	Self employed	**2 to 9**	**10 to 99**	**100 to 499**	**500 or more**	**Total**
1990	740	1449	277	26		2492
1991	764	1481	285	25		2555
1992	787	1455	295	26		2563
1993	844	1610	305	26	1	2786
1994	884	1652	323	26	1	2886
1995	952	1724	336	24	3	3039
1996	976	1665	350	23	3	3017
1997	1053	1738	366	25	2	3184
1998	1102	1749	390	24	3	3268
1999	1218	1837	411	28	3	3497
2000	1278	1853	445	28	3	3607
2001	1264	1944	453	30	3	3694
2002	1269	2231	458	30	5	3993
2003	1409	2170	480	29	5	4093
2004	1426	2174	487	27	5	4119
2005	1584	2342	503	27	4	4460
2006	2101	2806	500	27	4	5438
2007	2287	3054	500	26	3	5870
2008	2499	3288	483	25	2	6297
2009	2666	3589	489	26	2	6772
2010	2379	3319	468	26	2	6194
2011	3247	3762	457	25	2	7493

FIRM SIZE – ESTABLISHMENT PERCENTAGES

	Establishments operating in Boonslick (based on firm size)					
	Self employed	**2 to 9**	**10 to 99**	**100 to 499**	**500 or more**	**Total**
1990	29.70%	58.15%	11.12%	1.04%	0.00%	100.00%
1991	29.90%	57.96%	11.15%	0.98%	0.00%	100.00%
1992	30.71%	56.77%	11.51%	1.01%	0.00%	100.00%
1993	30.29%	57.79%	10.95%	0.93%	0.04%	100.00%
1994	30.63%	57.24%	11.19%	0.90%	0.03%	100.00%
1995	31.33%	56.73%	11.06%	0.79%	0.10%	100.00%
1996	32.35%	55.19%	11.60%	0.76%	0.10%	100.00%
1997	33.07%	54.59%	11.49%	0.79%	0.06%	100.00%
1998	33.72%	53.52%	11.93%	0.73%	0.09%	100.00%
1999	34.83%	52.53%	11.75%	0.80%	0.09%	100.00%
2000	35.43%	51.37%	12.34%	0.78%	0.08%	100.00%
2001	34.22%	52.63%	12.26%	0.81%	0.08%	100.00%
2002	31.78%	55.87%	11.47%	0.75%	0.13%	100.00%
2003	34.42%	53.02%	11.73%	0.71%	0.12%	100.00%
2004	34.62%	52.78%	11.82%	0.66%	0.12%	100.00%
2005	35.52%	52.51%	11.28%	0.61%	0.09%	100.00%
2006	38.64%	51.60%	9.19%	0.50%	0.07%	100.00%
2007	38.96%	52.03%	8.52%	0.44%	0.05%	100.00%
2008	39.69%	52.22%	7.67%	0.40%	0.03%	100.00%
2009	39.37%	53.00%	7.22%	0.38%	0.03%	100.00%
2010	38.41%	53.58%	7.56%	0.42%	0.03%	100.00%
2011	43.33%	50.21%	6.10%	0.33%	0.03%	100.00%

FIRM SIZE – TOTAL EMPLOYMENT

	Total employment in Boonslick (based on firm size)					
	Self employed	**2 to 9**	**10 to 99**	**100 to 499**	**500 or more**	**Total**
1990	740	5053	6898	4406		17097
1991	764	5145	6990	4040		16939
1992	787	5047	7466	4152		17452
1993	844	5553	8108	4200	750	19455
1994	884	5718	8273	4119	750	19744
1995	952	6002	8501	3279	1900	20634
1996	976	5808	8674	3196	1850	20504
1997	1053	6031	8807	3754	1250	20895
1998	1102	6097	9677	3674	1760	22310
1999	1218	6365	10022	4358	1840	23803
2000	1278	6473	10702	4366	1877	24696
2001	1264	6752	11019	4701	1877	25613
2002	1269	7622	11213	4522	3590	28216
2003	1409	7212	11538	4260	3590	28009
2004	1426	7276	11315	4033	3590	27640
2005	1584	7687	11719	4635	2880	28505
2006	2101	8770	11322	4575	2880	29648
2007	2287	9368	11452	4287	1923	29317
2008	2499	9981	11307	4484	1330	29601
2009	2666	10678	11372	4546	1330	30592
2010	2379	9908	11023	4577	1330	29217
2011	3247	10817	11030	4379	1330	30803

FIRM SIZE – TOTAL EMPLOYMENT PERCENTAGES

	Total employment in Boonslick (based on firm size)					
	Self employed	**2 to 9**	**10 to 99**	**100 to 499**	**500 or more**	**Total**
1990	4.33%	29.55%	40.35%	25.77%	0.00%	100.00%
1991	4.51%	30.37%	41.27%	23.85%	0.00%	100.00%
1992	4.51%	28.92%	42.78%	23.79%	0.00%	100.00%
1993	4.34%	28.54%	41.68%	21.59%	3.86%	100.00%
1994	4.48%	28.96%	41.90%	20.86%	3.80%	100.00%
1995	4.61%	29.09%	41.20%	15.89%	9.21%	100.00%
1996	4.76%	28.33%	42.30%	15.59%	9.02%	100.00%
1997	5.04%	28.86%	42.15%	17.97%	5.98%	100.00%
1998	4.94%	27.33%	43.38%	16.47%	7.89%	100.00%
1999	5.12%	26.74%	42.10%	18.31%	7.73%	100.00%
2000	5.17%	26.21%	43.33%	17.68%	7.60%	100.00%
2001	4.93%	26.36%	43.02%	18.35%	7.33%	100.00%
2002	4.50%	27.01%	39.74%	16.03%	12.72%	100.00%
2003	5.03%	25.75%	41.19%	15.21%	12.82%	100.00%
2004	5.16%	26.32%	40.94%	14.59%	12.99%	100.00%
2005	5.56%	26.97%	41.11%	16.26%	10.10%	100.00%
2006	7.09%	29.58%	38.19%	15.43%	9.71%	100.00%
2007	7.80%	31.95%	39.06%	14.62%	6.56%	100.00%
2008	8.44%	33.72%	38.20%	15.15%	4.49%	100.00%
2009	8.71%	34.90%	37.17%	14.86%	4.35%	100.00%
2010	8.14%	33.91%	37.73%	15.67%	4.55%	100.00%
2011	10.54%	35.12%	35.81%	14.22%	4.32%	100.00%

OWNERSHIP TYPE - ESTABLISHMENTS

	Establishments			
	Publicly Traded	**Private**	**Non-Commercial**	**Total**
1990	25	2324	143	2492
1991	24	2383	148	2555
1992	26	2382	155	2563
1993	27	2585	174	2786
1994	28	2659	199	2886
1995	32	2792	215	3039
1996	38	2761	218	3017
1997	51	2908	225	3184
1998	54	2982	232	3268
1999	58	3198	241	3497
2000	57	3289	261	3607
2001	63	3360	271	3694
2002	65	3595	333	3993
2003	68	3685	340	4093
2004	68	3719	332	4119
2005	72	4055	333	4460
2006	72	5036	330	5438
2007	71	5454	345	5870
2008	70	5869	358	6297
2009	69	6346	357	6772
2010	66	5769	359	6194
2011	65	6996	432	7493

OWNERSHIP TYPE - EMPLOYMENT

	Employment			
	Publicly Traded	**Private**	**Non-Commercial**	**Total**
1990	1151	14914	1032	17097
1991	1123	14695	1121	16939
1992	1147	15121	1184	17452
1993	1482	16644	1329	19455
1994	1279	16959	1506	19744
1995	1319	17718	1597	20634
1996	1289	17522	1693	20504
1997	1439	17747	1709	20895
1998	1507	18907	1896	22310
1999	1248	20442	2113	23803
2000	1204	21242	2250	24696
2001	1346	21941	2326	25613
2002	1540	23497	3179	28216
2003	1911	23024	3074	28009
2004	1797	22697	3146	27640
2005	2055	23952	2498	28505
2006	2059	25266	2323	29648
2007	2034	24868	2415	29317
2008	2035	24989	2577	29601
2009	2024	26021	2547	30592
2010	1962	24641	2614	29217
2011	1970	26131	2702	30803

LOCATION TYPE -ESTABLISHMENTS

	Establishments				
	Standalone	Headquarter	Branch w. in-state HQ	Branch w. out-of-state HQ	Total
1990	2295	116	40	41	2492
1991	2353	114	50	38	2555
1992	2357	112	57	37	2563
1993	2538	109	92	47	2786
1994	2603	112	100	71	2886
1995	2740	111	109	79	3039
1996	2710	106	111	90	3017
1997	2860	101	119	104	3184
1998	2926	97	132	113	3268
1999	3124	100	147	126	3497
2000	3206	99	160	142	3607
2001	3269	97	183	145	3694
2002	3555	95	187	156	3993
2003	3637	95	196	165	4093
2004	3672	96	189	162	4119
2005	4007	95	190	168	4460
2006	4986	94	193	165	5438
2007	5399	93	209	169	5870
2008	5828	95	206	168	6297
2009	6314	95	202	161	6772
2010	5750	96	197	151	6194
2011	7048	94	201	150	7493

OWNERSHIP TYPE - EMPLOYMENT

	Employment				
	Standalone	Headquarter	Branch w. in-state HQ	Branch w. out-of-state HQ	Total
1990	11668	2866	915	1648	17097
1991	11960	2826	675	1478	16939
1992	12191	3051	860	1350	17452
1993	13169	2823	1505	1958	19455
1994	13147	2847	1581	2169	19744
1995	13594	2981	1806	2253	20634
1996	13726	2834	1544	2400	20504
1997	13974	2648	1702	2571	20895
1998	14239	2791	2531	2749	22310
1999	15044	3177	2692	2890	23803
2000	15778	3121	2594	3203	24696
2001	16050	3117	2980	3466	25613
2002	17190	3024	4241	3761	28216
2003	16331	3094	4474	4110	28009
2004	16309	3185	4285	3861	27640
2005	16536	3107	4376	4486	28505
2006	18000	3021	4145	4482	29648
2007	18694	3039	3541	4043	29317
2008	19508	2991	3463	3639	29601
2009	20513	3030	3557	3492	30592
2010	18979	3371	3545	3322	29217
2011	20494	3392	3634	3283	30803

OPENINGS VS. CLOSEING (BASED ON FIRM SIZE)

	Establishment Openings					
	Self employed	**2 to 9**	**10 to 99**	**100 to 499**	**500 or more**	**Total**
1991	34	99	5			138
1992	39	76	12	1		128
1993	87	256	26	4	1	374
1994	44	125	19	1		189
1995	81	223	19			323
1996	55	112	22			189
1997	92	229	28			349
1998	67	132	18			217
1999	176	174	22	1		373
2000	108	155	26	2		291
2001	68	208	24	2		302
2002	93	424	15	1	2	535
2003	132	185	19	1		337
2004	96	151	8	1		256
2005	260	295	21	1		577
2006	620	590	13			1223
2007	300	293	10			603
2008	261	300	9			570
2009	335	285	5			625
2010	284	246	10			540

OPENINGS VS. CLOSINGS ESTABLISHMENTS

	Establishment Closings					
	Self employed	**2 to 9**	**10 to 99**	**100 to 499**	**500 or more**	**Total**
1991	16	109	7	1		133
1992	29	105	10			144
1993	8	92	10	2		112
1994	18	148	2			168
1995	28	161	10	1		200
1996	32	142	13			187
1997	35	101	6			142
1998	39	92	14	2		147
1999	64	116	9	4		193
2000	90	115	23	2		230
2001	96	140	18	2		256
2002	58	178	8	2		246
2003	91	138	24	1		254
2004	87	150	14		1	252
2005	119	118	22	1		260
2006	80	92	11	1	1	185
2007	41	74	16	1		132
2008	54	71	11			136
2009	518	568	37	2		1125
2010	209	238	25	1		473

OPENINGS VS. CLOSINGS ESTABLSIHMENT NET CHANGE

	Establishment Net change					
	Self employed	**2 to 9**	**10 to 99**	**100 to 499**	**500 or more**	**Total**
1991	18	-10	-2	-1	0	5
1992	10	-29	2	1	0	-16
1993	79	164	16	2	1	262
1994	26	-23	17	1	0	21
1995	53	62	9	-1	0	123
1996	23	-30	9	0	0	2
1997	57	128	22	0	0	207
1998	28	40	4	-2	0	70
1999	112	58	13	-3	0	180
2000	18	40	3	0	0	61
2001	-28	68	6	0	0	46
2002	35	246	7	-1	2	289
2003	41	47	-5	0	0	83
2004	9	1	-6	1	-1	4
2005	141	177	-1	0	0	317
2006	540	498	2	-1	-1	1038
2007	259	219	-6	-1	0	471
2008	207	229	-2	0	0	434
2009	-183	-283	-32	-2	0	-500
2010	75	8	-15	-1	0	67
Total	**1520**	**1610**	**41**	**-8**	**1**	**3164**

OPENINGS VS CLOSINGS – NEW EMPLOYEES

	New Employees					
	Self employed	**2 to 9**	**10 to 99**	**100 to 499**	**500 or more**	**Total**
1991	34	328	95			457
1992	39	224	438	150		851
1993	87	844	731	596	750	3008
1994	44	414	430	100		988
1995	81	754	468			1303
1996	55	392	395			842
1997	92	746	616			1454
1998	67	427	349			843
1999	176	559	555	100		1390
2000	108	529	660	270		1567
2001	68	648	588	291		1595
2002	93	1264	294	100	1560	3311
2003	132	472	470	400		1474
2004	96	447	172	100		815
2005	260	738	473	400		1871
2006	620	1397	167			2184
2007	300	699	305			1304
2008	261	730	220			1211
2009	335	651	82			1068
2010	284	596	343			1223

OPENINGS VS CLOSINGS – LOST EMPLOYEES

	Lost Employees					
	Self employed	**2 to 9**	**10 to 99**	**100 to 499**	**500 or more**	**Total**
1991	16	355	137	250		758
1992	29	344	242			615
1993	8	305	271	273		857
1994	18	485	66			569
1995	28	519	253	150		950
1996	32	462	382			876
1997	35	321	121			477
1998	39	308	498	320		1165
1999	64	345	188	470		1067
2000	90	378	559	241		1268
2001	96	436	390	205		1127
2002	58	544	266	550		1418
2003	91	405	664	102		1262
2004	87	458	348		710	1603
2005	119	347	661	100		1227
2006	80	285	310	150	850	1675
2007	41	246	288	110		685
2008	54	215	224			493
2009	518	1533	825	246		3122
2010	209	665	389	120		1383

OPENINGS VS CLOSINGS – EMPLOYMENT NET CHANGE

	Employment Net Change					
	Self employed	**2 to 9**	**10 to 99**	**100 to 499**	**500 or more**	**Total**
1991	18	-27	-42	-250	0	-301
1992	10	-120	196	150	0	236
1993	79	539	460	323	750	2151
1994	26	-71	364	100	0	419
1995	53	235	215	-150	0	353
1996	23	-70	13	0	0	-34
1997	57	425	495	0	0	977
1998	28	119	-149	-320	0	-322
1999	112	214	367	-370	0	323
2000	18	151	101	29	0	299
2001	-28	212	198	86	0	468
2002	35	720	28	-450	1560	1893
2003	41	67	-194	298	0	212
2004	9	-11	-176	100	-710	-788
2005	141	391	-188	300	0	644
2006	540	1112	-143	-150	-850	509
2007	259	453	17	-110	0	619
2008	207	515	-4	0	0	718
2009	-183	-882	-743	-246	0	-2054
2010	75	-69	-46	-120	0	-160
Total	**1520**	**3903**	**769**	**-780**	**750**	**6162**

Appendix 2 – Innovation Index

HUMAN CAPITAL

Percent of Adult Population with Some College or an Associate's Degree, 2000

Region	Percent of Population Ages 25 to 64 with Some College or an Associate's Degree	Population Ages 25-64 with Some College or Associate's Degree	Total Population Ages 25-64
Boonslick	27.5%	10,689	38,926
Two Rivers	29.8%	21,012	70,560
EW Gateway	32.5%	421,134	1,295,540
Western Central	31.9%	28,691	89,983
MO	29.6%	853,416	2,878,868
U.S.	29.6%	43,521,981	147,232,667

County	Percent of Population Ages 25 to 64 with Some College or an Associate's Degree	Population Ages 25-64 with Some College or Associate's Degree	Total Population Ages 25-64
Lincoln, MO	26.7%	5,311	19,904
Montgomery, MO	22.9%	1,390	6,068
Warren, MO	30.8%	3,988	12,954

Source: www.statsamerica.com

Percent of Adult Population with a Bachelor's Degree or Higher, 2000

Region	Percent of Population Ages 25 to 64 with a Bachelor's Degree or Higher	Population Ages 25-64 with a Bachelor's Degree or Higher	Total Population Ages 25-64
Boonslick	11.3%	4,413	38,926
Two Rivers	18.5%	13,035	70,560
EW Gateway	29.1%	376,813	1,295,540
Western Central	13%	11,687	89,983
MO	24.2%	695,491	2,878,868
U.S.	26.5%	39,078,598	147,232,667

County	Percent of Population Ages 25 to 64 with a Bachelor's Degree or Higher	Population Ages 25-64 with a Bachelor's Degree or Higher	Total Population Ages 25-64
Lincoln, MO	10.8%	2,147	19,904
Montgomery, MO	11.4%	693	6,068
Warren, MO	12.1%	1,573	12,954

Source: Statsamerica.com

Percent Change in Young Adult Population, 1997-2009

Region	Average Annual Change in Young Adult Population	Young Adult Population 2009	Young Adult Population 1997
Boonslick	1.6%	25,269	20,911
Two Rivers	-1.7%	32,882	40,220
EW Gateway	-0.8%	693,316	767,313
Western Central	-1.7%	41,300	50,935
MO	-0.5%	1,554,391	1,649,753
U.S.	-0.2%	83,096,278	85,573,378

County	Average Annual Change in Young Adult Population	Young Adult Population 2009	Young Adult Population 1997
Lincoln, MO	2.6%	14,926	10,988
Montgomery, MO	-1.9%	2,501	3,160
Warren, MO	1.2%	7,842	6,763

Source: www.statsamerica.com

Average High-Tech Employment Share, 1997-2009

Region	Average High-Tech Employment Share, 1997-2009	Average High-Tech Employment Share, 1997-2002	Average High-Tech Employment Share, 2003-2009
Boonslick	1.8%	2.1%	1.6%
Two Rivers	3%	3.5%	2.7%
EW Gateway	4.6%	4.4%	4.6%
Western Central	2.5%	2.5%	2.4%
MO	4.2%	4.2%	4.1%
U.S.	4.9%	5.1%	4.6%

County	Average Annual Change in Young Adult Population	Young Adult Population 2009	Young Adult Population 1997
Lincoln, MO	2.3%	2.9%	1.9%
Montgomery, MO	1.5%	1.7%	1.3%
Warren, MO	1.3%	1.3%	1.2%

Source: www.statsamerica.com

Technology-Based Knowledge Occupations Share of Total Employment, 2009

Region	Technology-based Knowledge Occupation Cluster Share of Total Employment, 2009
Boonslick Region	4.5%
Two Rivers	4.8%
EW Gateway	9.4%
Western Central	5%
MO	7.7%
U.S.	8.4%

County	Technology-based Knowledge Occupation Cluster Share of Total Employment, 2009
Lincoln, MO	4.7%
Montgomery, MO	3.4%
Warren, MO	4.8%

Source: www.statsamerica.com

Average Venture Capital Investment per $10,000 GDP, 2003-2008

Region	Average Venture Capital Investment per $10,000 GDP
Boonslick	$0.00
Two Rivers	$0.00
EW Gateway	$7.11
Western Central	$0.00
MO	$4.65
U.S.	$52.45

County	Average Venture Capital Investment per $10,000 GDP
Lincoln, MO	$0.00
Montgomery, MO	$0.00
Warren, MO	$0.00

Source: www.statsamerica.com

Broadband Density, 2009

Region	Midpoint - Weighted Connections per 1,000 Households, 2009	Residential Fixed Connections per 1,000 Households, 2009
Boonslick	467	401-600
Two Rivers	408	401-600
EW Gateway	624	601-800
Western Central	602	601-800
MO	500	401-600
U.S.	700	601-800
County	**Midpoint - Weighted Connections per 1,000 Households, 2009**	**Residential Fixed Connections per 1,000 Households, 2009**
Lincoln, MO	500	401-600
Montgomery, MO	300	201-400
Warren, MO	500	401-600

Source: www.statsamerica.com

Average Annual Percent Change in Broadband Providers, 2000 to 2009

Region	Average Annual Percent Change 2000-2009	Broadband Providers 2000	Broadband Providers 2009
Boonslick Region	18.6%	6.0	32.0
Two Rivers			
EW Gateway	18.9%	34.0	187.0
Western Central			
MO	24.9%	11.0	103.0
U.S.	29.8%	106.0	1,543.0

County	Average Annual Percent Change 2000-2009	Broadband Providers 2000	Broadband Providers 2009
Lincoln, MO	18.9%	2.0	11.0
Montgomery, MO	19.9%	2.0	12.0
Warren, MO	16.7%	2.0	9.0

Source: www.statsamerica.com

Average Establishment Churn, 1999-2006

Region	Average Establishment Churn
Boonslick	77.7%
Two Rivers	70.7%
EW Gateway	77%
Western Central	70%
MO	77.2%
U.S.	77.5%

County	Average Establishment Churn
Lincoln, MO	80.4%
Montgomery, MO	68.6%
Warren, MO	79.1%

Source: www.statsamerica.com

Average Small Establishments per 10,000 Workers, 1997-2008

Region	Average Small Establishments per Worker
Boonslick	501.9
Two Rivers	392.2
EW Gateway	349.7
Western Central	482.1
MO	367.6
U.S.	373.0

County	Average Small Establishments per Worker
Lincoln, MO	492.5
Montgomery, MO	494.3
Warren, MO	521.1

Average Large Establishment per 10,000 Workers, 1997-2008

Region	Average Large Establishments per Worker
Boonslick	0.50
Two Rivers	1.23
EW Gateway	1.24
Western Central	0.60
MO	1.16
U.S.	1.10

County	Average Large Establishments per Worker
Lincoln, MO	0.48
Montgomery, MO	0.00
Warren, MO	0.83

Source: www.statsamerica.com

Percent Change in High-Tech Employment Share, 1997-2009

Region	Rate of Change in High-Tech Employment Share, 1997-2009	High-Tech Employment Share, 1997	High-Tech Employment Share, 2009
Boonslick	-3.8%	2.4%	1.5%
Two Rivers	-4.5%	4%	2.3%
EW Gateway	0.9%	4.3%	4.8%
Western Central	-0.4%	2.6%	2.5%
MO	-0.2%	4.2%	4.1%
U.S.	-0.3%	4.9%	4.7%
County	**Rate of Change in High-Tech Employment Share, 1997-2009**	**High-Tech Employment Share, 1997**	**High-Tech Employment Share, 2009**
Lincoln, MO	-5.2%	3.4%	1.8%
Montgomery, MO	-5%	1.9%	1.1%
Warren, MO	-1.2%	1.5%	1.3%

Source: www.statsamerica.com

Job Growth-to-Population Growth Ratio, 1997-2008

Region	Job Growth to Population Growth Ratio	Total Employment (1997)	Total Employment (2008)	Total Population (1997)	Total Population (2008)
Boonslick	0.23	28,450	34,330	70,709	95,749
Two Rivers	-0.50	78,861	80,689	140,670	137,004
EW Gateway	0.89	1,507,837	1,627,207	2,442,306	2,576,597
Western Central	0.81	75,162	70,746	180,774	175,331
MO	0.55	3,327,521	3,625,330	5,407,113	5,951,844
U.S.	0.69	154,541,200	179,644,900	267,783,607	304,059,724
County	**Job Growth to Population Growth Ratio**	**Total Employment (1997)**	**Total Employment (2008)**	**Total Population (1997)**	**Total Population (2008)**
Lincoln, MO	0.28	12,856	17,689	35,224	52,695
Montgomery, MO	-3.57	6,085	5,878	11,801	11,859
Warren, MO	0.17	9,509	10,763	23,684	31,195

Source: www.statsamerica.com

Percent Change in GDP per Worker, 1997-2008

Region	Average Annual Change in GDP per Worker	GDP per Worker, 1997	GDP per Worker, 2008
Boonslick	2.6%	36,991	49,031
Two Rivers	4%	50,818	78,844
EW Gateway	3.1%	51,031	71,749
Western Central	4.3%	42,811	68,768
MO	3.1%	47,451	66,572
U.S.	3.5%	53,917	79,554
County	**Average Annual Change in GDP per Worker**	**GDP per Worker, 1997**	**GDP per Worker, 2008**
Lincoln, MO	3%	34,287	47,789
Montgomery, MO	2.1%	39,402	49,903
Warren, MO	2.3%	39,105	50,596

Source: www.statsamerica.com

Average Patents per 1,000 Workers, 1997-2008

Region	Average Patents per 1,000 Workers
Boonslick	0.02
Two Rivers	0.02
EW Gateway	0.45
Western Central	0.04
MO	0.29
U.S.	0.45
County	**Average Patents per 1,000 Workers**
Lincoln, MO	0.07
Montgomery, MO	0.00
Warren, MO	0.00

Source: www.statsamerica.com

Gross Domestic Product (GDP) per Worker, 2008

Region	GDP per Worker
Boonslick	$49,031
Two Rivers	$78,844
EW Gateway	$71,749
Western Central	$68,768
MO	$66,572
U.S.	$79,554
County	**GDP per Worker**
Lincoln, MO	$47,789
Montgomery, MO	$49,903
Warren, MO	$50,596

ECOMOMIC WELL BEING

Poverty Rate, 3-Year Average from 2006-2008

Region	Average Poverty Rate	Number in Poverty, 2006	Number in Poverty, 2007	Number in Poverty, 2008
Boonslick	10.6%	9,427	9,402	10,496
Two Rivers	13%	16,533	16,733	17,007
EW Gateway	11.3%	292,764	278,957	286,310
Western Central	12.5%	20,707	20,764	21,758
MO	13.5%	783,101	758,844	774,937
U.S.	13.2%	38,757,253	38,052,247	39,108,422

County	Average Poverty Rate	Number in Poverty, 2006	Number in Poverty, 2007	Number in Poverty, 2008
Lincoln, MO	9.7%	4,504	4,768	5,438
Montgomery, MO	14.5%	1,658	1,711	1,677
Warren, MO	10.6%	3,265	2,923	3,381

Source: www.statsamerica.com

Unemployment Rate, 3-Year Average 2007-2009

Region	Unemployment Rate 3-year Average 2007-2009	Unemployment 2007	Unemployment 2008	Unemployment 2009	Labor Force 2007	Labor Force 2008	Labor Force 2009
Boonslick	8.3%	2,682	3,686	6,002	48,859	50,010	50,610
Two Rivers	5.7%	3,400	4,048	5,425	76,608	75,697	74,610
EW Gateway	7.2%	70,495	83,947	130,849	1,332,809	1,328,646	1,326,815
Western Central	7.7%	5,226	6,364	8,701	88,810	88,292	86,835
MO	6.8%	153,836	180,310	288,988	3,048,607	3,050,218	3,067,659
U.S.	6.6%	7,078,000	8,924,000	14,265,000	153,124,000	154,287,000	154,142,000
County	**Unemployment Rate 3-year Average 2007-2009**	**Unemployment 2007**	**Unemployment 2008**	**Unemployment 2009**	**Labor Force 2007**	**Labor Force 2008**	**Labor Force 2009**
Lincoln, MO	8.4%	1,484	2,057	3,322	26,484	27,195	27,613
Montgomery, MO	8.1%	332	427	738	6,151	6,166	6,150
Warren, MO	8.1%	866	1,202	1,942	16,224	16,649	16,847

Source: www.statsamerica.com

Average Net Internal Migration Rate, 2000-2009

Region	Average Net Internal Migration Rate per 10,000 Residents
Boonslick	188.7
Two Rivers	-32.5
EW Gateway	-24.2
Western Central	-21.9
MO	7.3
U.S.	N/A

County	Average Net Internal Migration Rate per 10,000 Residents
Lincoln, MO	243.8
Montgomery, MO	-29.6
Warren, MO	190.2

Source: www.statsamerica.com

Percent Change in Per Capita Personal Income, 1997-2008

Region	Average Annual Growth in Per Capita Personal Income (PCPI)	PCPI , 1997	PCPI, 2008
Boonslick	3.5%	$20,820	$30,730
Two Rivers	4.4%	$21,060	$34,221
EW Gateway	4.1%	$27,995	$44,170
Western Central	4.1%	$21,202	$33,339
MO	4.1%	$24,104	$37,738
U.S.	4.3%	$25,654	$40,947
County	**Average Annual Growth in Per Capita Personal Income (PCPI)**	**PCPI , 1997**	**PCPI, 2008**
Lincoln, MO	3.2%	$20,451	$29,190
Montgomery, MO	4.3%	$19,664	$31,684
Warren, MO	3.6%	$21,996	$32,861

Source: www.statsamerica.com

Percent Change in Average Wage and Salary Earnings, 1997-2008

Region	Average Annual Change in Wage and Salary Earnings per Worker	Wage and Salary Employment, 1997	Wage and Salary Employment, 2008	Wage and Salary Disbursements, 1997 (000s)	Wage and Salary Disbursements, 2008 (000s)
Boonslick	3.9%	19,299	22,801	$389,274	$706,501
Two Rivers	3.6%	61,381	63,697	$1,418,291	$2,193,465
EW Gateway	3.8%	1,323,119	1,362,869	$41,302,293	$64,365,624
Western Central	3.7%	52,596	49,617	$1,094,114	$1,546,416
MO	3.7%	2,741,302	2,896,954	$75,536,712	$119,327,361
U.S.	3.8%	128,681,000	143,009,000	$3,872,441,000	$6,546,600,000
County	**Average Annual Change in Wage and Salary Earnings per Worker**	**Wage and Salary Employment, 1997**	**Wage and Salary Employment, 2008**	**Wage and Salary Disbursements, 1997 (000s)**	**Wage and Salary Disbursements, 2008 (000s)**
Lincoln, MO	4.2%	8,591	11,749	$176,602	$382,203
Montgomery, MO	3.6%	3,891	3,573	$70,848	$97,071
Warren, MO	3.4%	6,817	7,479	$141,824	$227,227

Source: www.statsamerica.com

Percent Change in Average Proprietors Income, 1997-2008

Region	Average Annual Change in Proprietors' Income per Proprietor	Proprietors' Employment, 1997	Proprietors' Employment, 2008	Proprietors' Income 1997 (000s)	Proprietors' Income 2008 (000s)
Boonslick	0.5%	6,581	9,221	$95,880	$142,335
Two Rivers	0.1%	12,454	13,559	$206,360	$227,597
EW Gateway	1.8%	178,363	259,000	$4,325,192	$7,656,191
Western Central	-0.4%	16,099	16,424	$224,133	$219,604
MO	2.7%	474,332	632,186	$10,104,335	$18,083,671
U.S.	1.6%	23,648,200	34,732,900	$595,645,000	$1,046,135,000
County	**Average Annual Change in Proprietors' Income per Proprietor**	**Proprietors' Employment, 1997**	**Proprietors' Employment, 2008**	**Proprietors' Income 1997 (000s)**	**Proprietors' Income 2008 (000s)**
Lincoln, MO	0.7%	3,154	4,995	$48,150	$82,224
Montgomery, MO	0%	1,359	1,571	$21,770	$25,148
Warren, MO	0.4%	2,068	2,655	$25,960	$34,963

Source: www.statsamerica.com

References

Dr. James Stapleton, Transforming Community Communities, Delta Regional Authority, 2013

Y Combinator- http://ycombinator.com/

Tech Shop- www.techshop.ws

Detroit Creative Corridor- www.detroitcreativecorridorcenter.com

Global Social Benefit Incubator- www.scu.edu/socialbenefit/entrepreneurship/gsbi/

T-Rex- http://downtowntrex.com/

Stats America- http://www.statsamerica.org/

University Information

Southeast Missouri State University
920 Broadway, Cape Girardeau MO, 63701
(573) 651-2929

PREPARED BY

Brian Tapp

Dr. James Stapleton

Dr. Bruce Domazlicky

Dr. David M. Yaskewich

Ryan Ungerank

Jakob Pallesen

www.eda.gov

U.S. Department of Commerce
1401 Constitution Avenue, NW
Suite 71014
Washington, DC 20230

Phone: (202)-482-2900