Job Growth and Creation in Monroe County

Prepared for the Blooming Economic Development Corporation

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Table of Contents

Executive Summary	1
Introduction	3
Chapter One: Job Creation	4
Chapter Two: Job Attraction	11
Chapter Three: Education	19
Chapter Four: Entrepreneurial Environment	26
Chapter Five: BEDC Strategic Planning	37
Conclusion	43
Appendices	44

Executive Summary

As Monroe County transitions from its smokestack chasing strategies into a knowledge economy, the Bloomington Economic Development Corporation (BEDC) will play a key role in fostering the Monroe County's growth and future success. In order to accomplish all their goals of attracting the right businesses, supporting existing businesses and nurturing local entrepreneurs, it is critical that the BEDC has a firm grasp on all available resources and opportunities in the community. This report highlights available resources and opportunities uncovered in order to guide the BEDC in shaping a more economically prosperous future for Monroe County.

While Monroe County has a better unemployment rate than the national average, the region needs to continue evolving in order to stay competitive. Job growth is a large area of focus, so Monroe County needs to concentrate efforts towards growing existing firms. In other words, the BEDC should utilize economic gardening techniques with stage two companies to address the needs of these firms in terms of human capital deficiencies. Further, the BEDC should facilitate a conversation between stage two firms and community colleges to create an apprentices program to train unskilled workers into skilled workers that fit the needs of these existing firms. Lastly, the BEDC needs to remain cognizant of Monroe County's quality of life, as community amenities are key in retaining talent.

As with many thriving communities, clusters are and will continue to be important to Monroe County's economic development moving forward. The life sciences and information technology clusters are the two major clusters that currently exist in Monroe County. The success of these clusters will play a key role in determining the level of economic success Monroe County experiences in coming years. Therefore, the BEDC should place a focus on nurturing the development of both clusters. In doing so the BEDC should advertise the high quality of life and plentiful amenities, encourage partnerships and/or apprenticeships with Indiana University and Businesses that could relocate to Monroe County and adopt a business friendly environment.

Monroe County has a wealth of education related resources, ranging from high schools and skill based programs to the presence of respected higher education institutions. In many cases these resources align to provide skilled labor to local employers, but there are some resources falling short of their potential. Specifically, the flow of students from Hoosier Hills Career Center to local employers and the perception of Ivy Tech are areas that are not meeting their potential. It is in these areas of underutilization that there is opportunity for actions to realize a large return on investment. To improve these resources, Ivy Tech needs to consider rebranding their education in order to target and recruit both traditional and non-traditional students. Lastly, targeting collaboration between HHCC students and local employers will increase the network of students, increasing their employment opportunities.

At first glance, Monroe County's entrepreneurial ecosystem is anchored by players related to Indiana



University. However, there are also a number of other resources that support the community's small businesses and startups. While the actors providing these resources are not always fully coordinated into a fully thriving entrepreneurial ecosystem, efforts by BEDC and others are improving cooperation across the various groups. In order to foster a more robust entrepreneurial ecosystem, entrepreneurs need greater access to finance—whether through networking or crowdsourcing—a process that economic development professionals can provide the necessary resources for. This information sharing is done in part by the Switchboard. The online forum has enormous potential, but the BEDC also needs to be cognizant of the important role of networking. As a result, the BEDC should offer events to bring entrepreneurs, venture capitalist, and industry stakeholders together.

In terms of strategic planning there are a number of actions that can be taken to bolster the BEDC's already exceptional performance. Firstly, the B-Start program can be strengthened and its future made more concrete through the addition of a pre-igniter workshop, the hiring of a dedicated staff member, maintain stringent acceptance standards and plan for a 75-90 percent completion rate. Second, the BEDC should create and keep physical forms of a work plan. This work plan should detail a tentative plan of action for each program within the BEDC. It will act as a guide and ensure both employees and members are all aware of the goals and plans for each program. Lastly, create metrics to track progress through the use of data. It is vital to track the success or failure of actions through well thought out metrics. By creating and using metrics to track each program's success it becomes possible to understand how well a program is doing and what changes can be made for the betterment of the community.

Monroe County, and specifically Bloomington, currently has a strong economic profile relative to the surrounding region. However, relying on previous success will not enable the community to accomplish its goals of fostering both an entrepreneur-friendly environment and a knowledge based economy. Achieving these goals will require a forward-looking economic development strategy that simultaneously capitalizes on existing resources and seeks out new opportunities to pursue. To this end, a series of strategies and tactics to guide the BEDC and related stakeholders as they move forward.

Introduction

For the later part of the twentieth century, Bloomington followed the footsteps of its home state, Indiana, and pursued an economic strategy combining unskilled workers with large capital investment. This strategy, which worked so well for Indiana in the past, made it one of the wealthiest states in the country; however, against the backdrop of globalization where cheaper labor and materials could be more easily acquired abroad, what used to be Indiana's strength has become its greatest weakness.

As a community transitioning away from the smokestack-chasing strategies that were made popular in past economic development eras, Monroe County continues to transition to a knowledge economy, with Bloomington taking the lead. Bloomington finds itself with many resources at its disposal – local employers range from well-established, internationally recognized firms to rapidly growing start-up enterprises. Some of these businesses are a result of community's effort to support entrepreneurial activity while others have been attracted to the area as a result of Monroe County's competitive advantages that it enjoys in multiple industries, from its emerging life science and technology industries to the more established industries related to the production of advanced materials and chemical products.

Underlying the business environment is a strong education system. This includes not only high performing primary and secondary schools, but also the presence of two well respected higher education institutions: Indiana University and Ivy Tech. These institutions and their student bodies represent an economic opportunity to local businesses as both a production point for skilled labor and as consumer base for the goods and services from local businesses.

The Bloomington Economic Development Corporation (BEDC) plays a key role in the fostering of economic growth for Bloomington and Monroe County as a whole. In order to accomplish their goals of supporting existing businesses, attracting outside businesses, and nurturing local entrepreneurs, it is critical to have a firm grasp on the existing resources available in the community, and the context in which they operate. To further this goal, the following report conducts a rigorous analysis of the management and key policies related to job generation, job attraction, the contribution of the educational system to the economic performance, and the entrepreneurial ecosystem. Additional attention is paid to the role of strategic planning to improve the execution of economic development strategies.

Chapter 1: Job Creation

The Problem

Despite the fact that Monroe County's unemployment rate of 4.2 percent is on par with the Indiana's unemployment rate, and is slightly below the national average of 5.5 percent, it is lagging behind neighboring counties within the Economic Growth Region 8 (EGR 8) in regards to its competitive advantage (e.g. what makes the region more competitive than others as indicated by Location Quotients) in some of the region's most common industries (see Appendix A). In order to maintain competitiveness within the region, attention needs to be given to job creation within these sectors, while also targeting job creation efforts in the emerging industries of life sciences and information technology. Life sciences and information technology are not Monroe County's most competitive industries, and lag behind other counties in EGR 8; however, strengthening those industries will become particularly important as traditional manufacturing, part of a super-cluster that Monroe County has a strong competitive advantage in, continues to transform

Past economic development trends have focused on business attraction and expansion through the use of incentives, while more recent trends have centered on promoting growth from within. The focus of this section will be a discussion of the idea of aiming inward to create job growth. In interviews with local business owners, barriers to growth were discussed. Some of the most common among them include managing strategic growth, the talent gap, and how to retain potential talent after they receive their education.

Growing from Within

Economic gardening is the principle of looking within a community for economic growth; however, it emphasizes strategic growth for businesses that fall within a specific stage of growth: stage two. Second stage businesses are defined as those with between 10 and 99 employees, and at least \$1 million in revenue. The focus on firms this size is what makes the principles and practices of economic gardening unique—it is not just a focus on growing any and all businesses within a community, but specifically those that are already growth-oriented. While many think of start up businesses when referring to entrepreneurs, there is a difference between "lifestyle entrepreneurs," who like working for themselves but have little to no interest in creating new jobs, and growth-oriented entrepreneurs. Compared to small start-up businesses that often create minimum wage jobs, or no jobs at all, stage two companies represent mid-sized companies that contribute to increasing the middle class workforce. Nationally, these businesses make up 10 percent of all businesses, but account for 36.2 percent of the job market. They account for the largest percentage of employees in

³ Self-employed businesses represent 4.5 percent of jobs; stage one 29.1 percent; stage two 36.2 percent; stage three 15.6 percent; stage four 14.5 percent. "The Significant of Second Stage." The Edward Lowe Foundation. 2012.



¹ There are five stages of business growth according to the National Center for Economic Gardening beyond self-employment: Stage one (2-9 employees); Stage two (10-99 employees); Stage three (100-499 employees); stage five (500+ employees). "The Significance of Second Stage." The Edward Lowe Foundation. 2012.

² "Economic Gardening: An entrepreneur-oriented approach to economic prosperity." The Edward Lowe Foundation. 2012.

the job market, which is significant because it suggests that most new jobs are created by these stage two firms, which tend to bring in money from external national and/or international markets.

Stage Two in Monroe County

By moving away from competing with surrounding communities for businesses and towards growing and diversifying the businesses within a community's ecosystem, Monroe County can more tightly connect its stage two entrepreneurs to the resources and information needed to expand and create jobs.

In partnership with the Indiana Small Business Development Center (ISBDC), data was gathered on businesses in

Monroe County, including the number of employees, and North American Industry Classification Systems (NAICS) codes, the standard system used by the US government in classifying businesses for purposes for "collecting, analyzing and publishing statistical data" related to the US economy, in order to compile a breakdown of businesses by stage in the county. Figure 1 shows the breakdown of Monroe County businesses by stage.^{4,5}

At 21 percent, Monroe County has nearly double the national average of stage two companies; however, local business owners, particularly within the life sciences and technology industries, mentioned a variety of barriers that prevent them from growing and expanding. If not addressed, these barriers will hinder Monroe County's push to make those particular

Businesses by Stage

94 10

1275

Stage 1

Stage 2

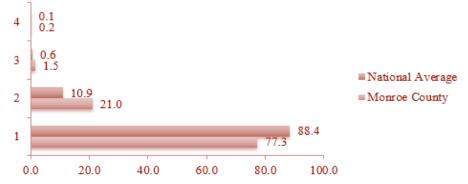
Stage 3

Stage 4

Figure 1: Bloomington

emerging industries more competitive within the region. The barriers most commonly mentioned were strategy related (e.g. funding, product promotion, marketing), and talent related (e.g. lack of qualified talent, and talent that leaves too quickly).

Figure 2: Percentage of Businesses by Stage in Monroe County and United States



One business owner mentioned that locating funding for continued growth and expansion within the state of Indiana was a challenge, and despite being able to look elsewhere, he was hoping for funding support to come from a local source. Other business owners mentioned having difficulty promoting their products locally, either due to product specialization, or to a lack of a single product user in Bloomington. These barriers are common

⁴ Note: due to how the category of number of employees was broken down in the data, separating out the self-employed businesses from stage one was not possible – they were grouped 1-9 and there was no way to separate out businesses with just one employee.

⁵ Indiana Business Research Center. (2016). Reference USA. Retrieved from http://www.referenceusa.com/

⁶ "The Significant of Second Stage." The Edward Lowe Foundation. 2012.

to stage two companies across the country, which have different needs than start-ups and larger businesses. Having moved from the initial start-up stage, stage two companies move to being "too big to be small and too small to be big," which can make it difficult for them to seek out appropriate growth-oriented resources. Many programs exist for startups, but few exist for stage two businesses specifically. This trend is exemplified in Monroe County as well. While the City of Bloomington Office of Economic Development offers a Business Academy for those interested in starting and operating a business in Bloomington, and the BEDC has B-Start, there is no specific program or initiative targeted at stage two companies directly, which represents a missing opportunity to promote their growth.

Even though Monroe County does offer resources and assistance for all businesses regardless of what stage they are in, some businesses are not be aware of them, as some local business owners indicated that they were unfamiliar with some of the resources available to them, including those offered by the BEDC. Some reasons include lack of awareness, and lack of time to get to know the resources. A strong relationship between a local economic development organization and stage two businesses is extremely important, as it can help build trust and understanding between parties. It is also important for stage two businesses to network with each other as this is how lessons learned can be shared. Developing an economic gardening program represents an opportunity to bolster relationships between the BEDC and local growthoriented businesses.

ECONOMIC GARDENING AROUND THE COUNTRY

- **SVO Group Inc.** (Indiana): Within a few months of participating in the economic gardening program with the Edward Lowe Foundation, the company more than doubled its staff from six to 14 and "significantly" increased its revenue.
- Littleton, Colorado: Economic gardening originated here after Martin Marietta (now Lockheed Martin) left the small Denver suburb of Littleton, laying off 7,800 people within an 18-month period. Determined not to let something similar happen again, Littleton focused inward on stage two companies in order to promote growth, doubling the number of jobs and tripling sales tax revenues.
- Tri-Cities program is the first Economic Gardening Pilot Program in the Pacific Northwest. Five secondstage businesses from the Tri-Cities community will be selected to participate in the pilot.
- GrowFL is the US' first state-wide economic gardening initiative, launched in 2009. As of June 30, 2014, GrowFL -assisted companies created over 3,545 direct, indirect and induced jobs across the state of Florida.

Sources: Edward Lowe Foundation, Tri-Cities Economic Gardening Program, and GrowFL website

Talent Development

In addition to the strategic needs of stage two companies, local business owners also discussed talent issues they were facing. Employers of highly educated and skilled labors expressed their concern with the amount of training employees required before being placed on job-related, revenue-creating tasks. As one stakeholder pointed out, her company no longer takes on interns because it is not worth the time it takes to train these individuals when they only stay with the

¹¹ London School of Economics and Political Science, 2010.



All stakeholder interviews are anonymous. These interviews are compromised of business representatives across multiple sectors in Monroe County, IN.

Anonymous No. 3, personal communication, March, 2016.

Anonymous No. 2, personal communication, February 2016.

¹⁰ Anonymous No. 1, personal communication, February, 2016.

company for a year.^{7,8} An engineering firm echoed that sentiment, and explained that a large barrier to the expansion of the business is a lack of qualified help, specifically engineering and machine operating skills.⁹ This stakeholder suggested that there simply are not resources available to train employees in the manufacturing sector. Many local businesses state their company would rather hire locals and recent Indiana University and Ivy Tech graduates, but cannot find applicants with the qualifications needed for their positions.¹⁰

Since many business owners mentioned needing skilled labor, and talent that will stick around for a meaningful period of time (more than the usual 1-2 years), alternative training programs that are outside the standard community college and university recruitment, such as apprenticeship programs, are a viable option. They are popular in Europe, and according to the London School of Economics and Political Science (LSE), apprenticeships are a preferred strategy among European nations, as these programs ease the difficult transition young people typically face when entering the workforce. Apprenticeship programs are typically highly regulated on the national level, with each country having different standards in terms of on-the-job hours and classroom instruction time. The United States has a similar system, which is administered by the U.S. Bureau of Apprenticeship training, which also requires job training and community college work; however, apprenticeships appear to be underutilized in this country. Of the seven countries in which the LSE analyzed, Switzerland had the highest amount of apprenticeships per 1,000 citizens, followed by Germany. Interestingly, both of these countries are seen as economic powerhouses of Europe, providing stability and security to the European Union.

One reason these apprenticeships programs are so effective in Europe is because they are strongly supported by employers. Additionally, studies have found that apprenticeship training has a significant effect on future income among young people, even when controlling for all other factors. Employers encourage such programs because "this process requires human capacities for mastering, in a concrete way, production process: capacities that include technical competencies but also relations with clientele." This suggests that businesses with apprenticeship program have strong ties with the community, which encourages said business to settle in the area. In addition, businesses benefit greatly from apprenticeships, specifically for young people, because it encourages creativity and innovation, which leads to continued business growth. It appears that the Obama Administration has recognized Europe's success, as the Administration recently allocated \$100 million to numerous apprenticeship programs throughout the country through the Department of Labor. Of the business owners who mentioned issues with acquiring and keeping talent, all of them were enthusiastic at the idea of an apprenticeship program and were eager to cultivate skilled talent that would feel invested in the success of their business.

Apprenticeship programs can benefit the local economy greatly, but there are not many of these programs in Bloomington or Monroe County. One of the largest issues is the stigma associated with technical employment. There has clearly been a push for creative class employment in recent years, but there is a large gap in the need for technical skilled employees. To address this stigma, skilled jobs need to be rebranded, and a way to accomplish this is through

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<sup>12</sup> Ibid., 3.
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¹⁹ Sarah Steinberg and Ethan Gurwitz. "Innovative Apprenticeships," Center for American Progress. (2014).



¹³ Dougherty and Bakia, 1999.

¹⁴ London School of Economics, 3.

¹⁵ Ibid., 3.

¹⁶ Lynch,1994.

¹⁷ Crevoisier, 2004.

¹⁸ Ibid., 374.

apprenticeships. Apprenticeships are highly regulated, and provide a kind of legitimacy these sorts of careers may have previously been lacking. The apprenticeship model can be utilized across industries, but the initial focus should be in the top industries in Bloomington including life science, technology, and advanced manufacturing.

Another issue in talent development is low involvement on the part of employers, partly due to their hesitation to invest in potential employees, who many not stay with the company or in Bloomington for more than a year. Bloomington has a robust community college network, but its network and relationship with local employers could be strengthened. To counteract any hesitation from business owners, strong partnerships and encouragement are needed to develop a robust apprenticeship system, which would foster links between local employers and their future employees. Unlike internships, the apprenticeship model provides security to both employers and employees. Apprentices would benefit from knowing employment is guaranteed upon successful completion of their training, employers benefit from knowing their apprentices will be more likely to remain long-term employees. Contracts can also be signed between both parties to ensure that it is a mutually beneficial experience for both.

Case Study: The Vermont HITEC Apprentice Model

This nonprofit organization has received millions of dollars in federal grants to work with local business sponsors to educate and train apprentices in the field of medical coding, IT developers and analysts, and advanced technology machinists. Vermont HITEC selects several applicants each year to participate in the program, which includes 10 weeks of classroom training, followed by a one-year stint at a sponsoring business.

Apprentices are full-time, paid employees, and are assigned a mentor at the beginning of their tenure, during which the apprentice is continually educated and advised. While apprentices are not paid the full salary of an experienced employee in their position, they are evaluated every 6 months to determine if a salary increase is deserved. The business is thus able to utilize this cost savings to foster the mentoring and education process.

Upon the completion of the apprenticeship, individuals not only receive a Registered Apprenticeship Certificate from the Department of Labor, they also receive course credits that can be applied to an Associate or Bachelor degree.

Most of the newly graduated apprentices are promoted within companies. While this case study relates to medical-related occupations, Vermont HITEC suggests the model can be utilized across a wide range of occupations and sectors.

Steinberg and Gurwitz, 2014

Retaining Talent

Growing from within remains difficult if the educated and trained talent does not stick around. Despite the heavy university presence here, Monroe County faces the problem of brain drain. An informal survey of job-searching students, as well as others in their twenties and thirties, suggests that Bloomington is not somewhere this group is looking to stay long term. We will discuss potential reasons for this throughout this section.

While previous strategies for economic performance are firm-oriented, a novel approach – popularized by Richard Florida – focuses on making a place as a whole an attractive destination for the "creative class." Interestingly, Florida's definition of creative class is not based on the actual creativity of a person in approaching their work but rather occupational classifications. The creative class comprises of people who are employed in certain sectors that generally



require high level of creativity. Florida argues that the creative class is the key driver of a city's economic performance, and that creative people will flow to a place where three factors—technology, talent, and tolerance – converge and are in abundance.²⁰ Urban development policies to attract and retain the creative class therefore should emphasize on fostering diversity and investing in high-quality amenities.

On the surface, Bloomington seems to have a thriving creative class; however, growth is still needed to retain talent. According to Florida's ranking in 2012, the city of Bloomington is ranked 119 out of 361 metros in terms of its Creativity Index. The creative class accounts only for 30.8 percent of the city's class structure but it is likely to increase. Bloomington has the potential to improve the ranking because it possesses "a huge advantage in the Creative Economy" which is the presence of a major research university. Bloomington houses the main campus of Indiana University (IUB), a world-renowned research university, with many graduate programs ranked among the top 25 in the country.

IUB can improve the strength of the three critical factors, technology, talent, and tolerance, in interrelated and fortifying manners. First, universities serve as the focal point for state-of-the-art research that could fuel spin-off companies or entice others to relocate. Importantly, the university can serve as a policy instrument to facilitate the development of entrepreneurship. Secondly, the vibrant intellectual environment of a university attracts talented people and nurtures human capital. Lastly, a university is an atmosphere relatively more amenable to inclusion and diversity.

IUB not only has many of these aforementioned characteristics, but also demonstrates a willingness to contribute to the strategic management of the city. In addition, certain IUB fields of expertise align with the development of corresponding industries, particularly life sciences and information technology, which will help strengthen the county's competitive advantage in those two industries. Louisville, Kentucky is the latest example of how the city utilizes the presence of a research university as a knowledge hub to assist budding industries to take off.²¹ Similar to Bloomington, Louisville's economic growth used to rely mainly on physical capital. However, it shifted towards establishing services and care for the elderly as its new competitive industries. The University of Louisville plays a crucial role in developing the knowledge capital necessary to support these industries. Impressively, Louisville created 21,000 jobs between May and June of 2012, while the rest of America a suffered high rate of unemployment.²²

The role of IUB in assisting budding industries in terms of knowledge can and should be strengthened further. Although IUB has a mandate to contribute to the economic performance of the place, interviews with local experts reveal there seems to be a lack of genuine interest. Meanwhile, there is little evidence of the private sector fostering research and innovation. Bloomington houses the headquarters of Cook Group, Inc., the world's largest medical device company; however, this company chose to open its €16.5-million (\$21.9 million) R&D Innovation Centre in Limerick, Ireland in 2013.²³ This is a big loss for Bloomington and reveals that Bloomington should do more to encourage both public institutions and private firms to actively involve in moving the city towards a knowledge economy.

One step towards this end is the development of a new Certified Technology Park in downtown Bloomington. This 65-acre, multiuse tech park is among many efforts by the local government to promote the growth of technology companies. The technology park and IUB could form a high-tech cluster, which could foster technology transfer and knowledge transfers.

louisville-ky-stakes-future-on-care-for-elderly.html?pagewanted=all.

23 https://www.cookmedical.com/newsroom/cook-medical-invests-16-5m-euro-in-rd-in-ireland/



²⁰ Florida, R. (2014). The Rise of the Creative Class--Revisited. Basic books.

²¹ Audretsch, D. B. (2015). Everything in its place: Entrepreneurship and the strategic management of cities, regions, and states. Oxford University Press, p.113-114 ²² Schneider, K. (2012, July 25). Louisville, KY: Stakes Future on Care for Elderly. New York Times. http://www.nytimes.com/2012/07/25/realestate/commercial/louisville-ky-stakes-future-on-care-for-elderly.html?pagewanted=all

The creative class places importance not only on the job they are doing but also the place where they live. A reasonable strategy, therefore, is to invest in lifestyle amenities. Bloomington offers a low cost of living, relative to others places in the country. However, this is not enough to draw and keep members of the creative class in town. The creative class cares about the quality of place cutting across three key dimensions: "What's there", "Who's there" and "What's going on."

Compared to other cities of the same size, Bloomington's quality of life is somewhat higher. It has a relatively large amount green spaces per capita, with 2,348 acres of parks, 30 trails, three lakes and one major national forest.²⁴ It also has some promising cultural amenities. For example, due to its proximity to IUB, which houses a nationally top-ranked music and drama schools, residents have regular access to world-class theatre and performance arts. However, its arts and entertainment industries are still less competitive than those in surrounding counties (see Appendix A). Regarding the culinary scene, a common theme emerging from a survey with current IU graduates and Bloomington residents reveals that there was a paucity in dining options, particularly a lack of upscale restaurants and coffee shops with late-opening hours and providing live performances in the city. This demand present great opportunities for entrepreneurs in the hospitality industry, especially those looking to grow and expand.

One of the major barriers towards forming a creative class in Bloomington could be "Who's there" component. In Florida's ranking, its Tolerance Index was very low, 238 out of 361. It is not racially diverse; with Caucasians still a dominant ethnicity. Its share of foreign-born people in the total population is relatively low, at only 3.9 per cent in 2000 (the national average was 11.1 percent).²⁵ Based on the employment breakdown data in Bloomington, the density of artists, writers, and performers is also low.²⁶ The city could tap in the multi-faceted diverse body of students to foster the tolerance among the bigger community.

Recommendations

Conduct outreach with stage two companies to find out what strategic barriers they are facing, and focus on strengthening relationships with and between them

- Develop resources/trainings/programs specifically targeted at stage two companies (The Edward Lowe Foundation has an abundance of resources online)
- Connect stage two businesses to needed resources, and to each other by more actively promoted The Switchboard

Gauge interest in apprenticeship model with stage two companies in Monroe County

- Work with interested businesses to pilot a multi-sector apprenticeship program their relationships with both community colleges and apprentices are crucial to program success
- Utilize US Department of Labor resources to ensure apprenticeship model standards and requirements are met (federal funding is contingent upon meeting these standards)

Engage private firms, IU and local government to improve the technology, talent and tolerance factors

- Foster partnerships between IU and private firms in key indisutries to dientify how the university can support their takeoffs effectively with relevant research, training and outreach activities
- . Work with City of Bloomington to ensure the construction of Certified Technology Park goes smoothly
- Create a stimulating environment through public places and events with high levels of cultural interplay, and provide amenities to cater to various lifestyles
- Promote the diversification of the culinary scene, to fill in supply gaps associated with demand

26 http://bloomingtonedc.com/local-data/



²⁴ http://comparebloomington.us/quality-of-life/

http://www.diversitydata.org/Data/Profiles/Show.aspx?loc=204

Chapter Two: Job Attraction

The Problem

Silicon Valley, home of technology giants such as Facebook, Google, and Apple, is credited with cultivating an entrepreneurial environment that encourages creativity and opportunity. Since some of the most influential companies in the world have started in the region, technology start-ups and dedicated entrepreneurs travel from across the nation hoping to attain the success that is synonymous with Silicon Valley.

While Silicon Valley serves as a shining example for regions to aspire to, its success has proven to be difficult to imitate. Borrowing from the success found in Silicon Valley, this chapter intends to detail the types of industries that would be most beneficial to attract to Bloomington, and what incentives and strategies should be used to cultivate an environment of opportunity and innovation that businesses can succeed in. Additionally, we will identify what clusters currently exist in Bloomington and the types of skills employees looking to work in those clusters should possess.

Current State of Bloomington

To fully understand what types of jobs will be most beneficial to Bloomington, it is necessary to observe which industries currently exist and which industries should be brought to the city. According to a report created by the Indiana Business Research Center in 2011, 84,053 residents were employed across 20 industries, ranging from government to real estate to mining. Over 70% of the city's employed residents are employed in the private sector, however, the recession caused growth in the private sector to slow considerably while a significant number of jobs were added in the public sector¹. The strongest industry growth from 2001 - 2009 occurred in the government and healthcare industries, which now account for roughly 38% of total employment in the city¹.

Manufacturing, now the city's fifth largest employer, once dominated the city's economy and led the other industries in employment. Bloomington has experienced the same trends as the rest of the state and country, and employment in manufacturing has decreased significantly. Manufacturing companies have realized that labor, utilities, and other necessary resources are cheaper when they locate plants outside of the US, which further contributes to the decline of the industry throughout the nation. This highlights an important theme that illustrates the decline of traditional sectors and the rise of new sectors, such as information technology. Even though manufacturing is not as strong as it once was, Bloomington is still home to several prominent medical device and pharmaceutical manufacturers that play an important role in city's economy. In the interest of encouraging growth in these industries, it is necessary to move past placing businesses in traditional sectors and begin to observe industry clusters.

An industry cluster is "a geographic concentration of industries related by knowledge, skills, inputs, demand, and/or other linkages." Simply put, an industry cluster is a group of businesses that operate within the same sector. Cook Pharmica and IU Health, for example, fit within the broadly defined life sciences cluster, despite their differences, because their goods and services inter-connect them. Industry clusters are utilized to create economic development strategies to assess strengths and challenges specific to firms that contribute to the same industry. This allows local

BloomingtonBenchmarking2011.pdf

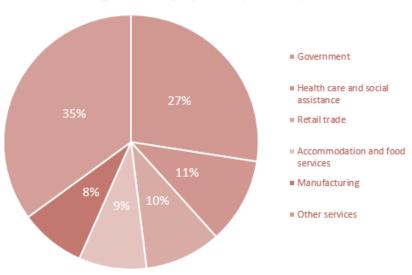
Delgado, M., Porter, M. E., & Stern, S. (2014). Defining Clusters of Related Industries. *National Bureau of Economic Reserach*, 1-48. Retrieved from http:// clustermapping.us/resource/defining-clusters-related-industries



A Look Inside the Bloomington Economy, (2011), Indiana Business Research Center, Retrieved from http://www.ibrc.indiana.edu/studies/

economic development organizations to develop policies that are specific to their region. Businesses that belong to a certain cluster are able to work together to identify their strengths and needs, and allows each cluster to tailor their business strategies to aid in their mutual growth. In Bloomington, there are two emerging industry clusters: life science and information technology. The life science cluster is typically made up of four separate components: agricultural feedstock and chemicals, drugs and pharmaceuticals, medical devices and equipment, and research, testing, and

Figure 1: Employment by Industry



laboratories. The life science cluster is particularly important to the economic environment of Bloomington as employment in the industry has more than doubled from 2001 - 2008 and now accounts for roughly 3,800 jobs throughout the county.³

The information technology cluster contains four segments consisting of information support services, interactive media, network systems, and programming and software development. Local wages in information support services within Bloomington are still slightly below the national average and Monroe County does not enjoy a high competitive advantage in this industry as compared to surrounding regions. Despite this, further development of the information technology cluster could bring more firms in the industry to the region, which would establish Bloomington as a strong location for technology firms.

How to Attract Businesses to Bloomington

Popularized by the real estate industry, the phrase "location, location, location" is becoming increasingly important to entrepreneurs. Quality of life, amenities, work-life balance, and a strong local economic environment are important factors entrepreneurs consider when searching where to place their businesses. These are important because they are consistently in the same areas as highly educated and skilled workers. In a 2014 article, Richard Florida commented that "talented workers, and the quality of life that the educated and ambitious have come to expect" are what really attract innovative entrepreneurs to a location. Endeavor, a non-profit whose goal is to develop high-impact entrepreneurship around the world, surveyed and interviewed over 150 founders of "some of country's fastest-growing companies" to discover what entrepreneurs look for first when deciding on a location. The findings supported Florida's claim that talented, educated workers are sought first.

⁶ Dill, K. (2014, August 5). The Best and Worst Cities for Work-Life Balance. Retrieved from http://www.forbes.com/sites/kathryndill/2014/08/05/the-best-and-worst -cities-for-work-life-balance/#7880c144215e



³ A Look Inside the Bloomington Economy. (2011). *Indiana Business Research Center*. Retrieved from http://www.ibrc.indiana.edu/studies/BloomingtonBenchmarking2011.pdf

⁴ Florida, R. (2014, February 11). What Cities Really Need to Attract Entrepreneurs, According to Entrepreneurs. Retrieved from http://www.citylab.com/work/2014/02/what-cities-really-need-attract-entrepreneurs-according-entrepreneurs/8349/

⁵ Endeavor Insight Report Reveals the Top Qualities that Entrepreneurs Look for in a City. (2014, February 6). Retrieved from http://www.endeavor.org/insight/endeavor-insight-report-reveals-the-top-qualities-that-entrepreneurs-look-for-in-a-city/

Since access to talent is vital not only to attracting business to an area but also to growing existing businesses as mentioned in the previous chapter, it is necessary for Bloomington to promote its quality of life and amenities educated professionals actively seek. For example, Bloomington was named the best city for work-life balance by Forbes in 2014.⁶ Additionally, Bloomington has often been quoted as the sweet spot of a small town feel with big city amenities, making it a more attractive potential location than either a large city with more competition, or a small town with fewer resources. This allows Bloomington to promote itself as the perfect location for businesses that are looking to place their roots in a location that would provide a healthy competitive environment and more strategic resources than smaller towns, as well as a great place for talented professionals to seek employment.

Bloomington already contains a large talent pool as Indiana University, a Tier 1 research institution, that has thousands of graduates each year. However, as mentioned in the previous chapter, retaining talent is not as easy as it may seem. Students are often not willing to stay in Bloomington after graduation for a variety of reasons. The same tactic used to attract professionals and entrepreneurs to the city should also be employed when enticing the students to stay. However, it is clear that simply advertising what Bloomington has to offer to its new graduates is not enough. Students already know what the city currently offers; improvements must be made to retain these potential employees. As briefly mentioned in Chapter 1, it would be beneficial for the city to invest in more lifestyle amenities and continue to grow in this area. Young, ambitious professionals are drawn to areas that are continually improving and entrepreneurs will always be drawn to areas that have this talent.

Apart from access to educated and ambitious workers, major transportation networks were also considered a key factor in location decisions. Major transportation networks are crucial because they allow the business to be connected to other cities. Fortunately for Monroe County, I-69, the 142 mile interstate extension from Evansville to Indianapolis, is currently being constructed. The interstate is being marketed as "a key component to the future vitality of southwestern Indiana [that] will connect an entire region with improved access to jobs, education, and healthcare." Four of six segments have been completed and the fifth segment is expected to be completed by the end of 2016, but construction is still expected to continue for several years. Despite the fact the I-69 might not be finished until 2020, the long-term benefits greatly outweigh the short-term inconveniences. The extension is designated one of six Corridors of the Future, which will ultimately extend I-69 from Mexico to Canada. This should be a major selling point for entrepreneurs as their businesses would be located on "a primary north-south artery for the movement of goods and services within the U.S."

Challenges to Business Attraction

A study of the Bloomington business environment, as well as interviews with several stakeholders revealed that there are several challenges that Monroe County faces when attracting businesses. One of the biggest challenges the county faces is restrictive zoning regulations, that make locating businesses in the area difficult. Under these regulations, a business that wants to locate in the city has to put forth a great deal of effort to get the necessary permits.

Monroe County is not as business friendly as other parts of the state. 2015 was a record year for the Indiana Economic Development Corporation in terms of the number of relocation deals, but none of these relocations occurred within Monroe County. The previously mentioned study by Endeavor revealed that business-friendly policies and attitudes,

⁷ I-69 Evansville to Indianapolis. (n.d.). Retrieved from http://www.in.gov/indot/projects/i69/



while not among the top five factors, does play a role when entrepreneurs are looking for a new location. Since Monroe County is not perceived as business friendly state-wide, it will be difficult to convince companies to move here. Entrepreneurs look for areas that readily encourage and foster economic growth, not ones that attempt to stall it.

While it will be difficult and time-consuming to change this existing mentality, the county must begin to encourage growing the city's economy and work towards doing so. A great place to start would be the zoning regulations. Allowing businesses to obtain permits more easily would help to show that Monroe County is working towards becoming more business friendly.

While the BEDC is fully aware of these challenges and working with county and city authorities to change the existing culture, its work can be further strengthened by utilizing *economic impact analysis* (EIA), a quantitative technique used to estimate economic benefits of a new development project. In the case of job attraction, EIA can be used to estimate the economic and fiscal benefits of a business locating in Monroe County. This tool is quite common among economic development professionals and has been used by Develop Indy, an economic development organization in Indianapolis, to evaluate impact of new investments.

EIA estimates direct and indirect benefits of a new business through several measures, including output (i.e. value of sales); direct, indirect and induced job creation, quality of jobs, job creation income impacts, and changes in the tax base. After determining the impact of a new business on the local economy, one can consider different types of incentives that the city can offer. It is recommended to consider different incentive scenarios in order to identify the proposal that would be the most beneficial to the community and a relocating company.

The EIA tool will ultimately help the BEDC demonstrate to county and city officials how a specific project will benefit the community and what amount of incentives, if any, is reasonable to offer.

Developing the Information Technology Cluster

The following section is devoted to the video game industry, one of the fastest growing industries in the United States that is particularly attractive to Bloomington. In the following section we present an industry profile and an overview of measures used by the states to attract video game companies.

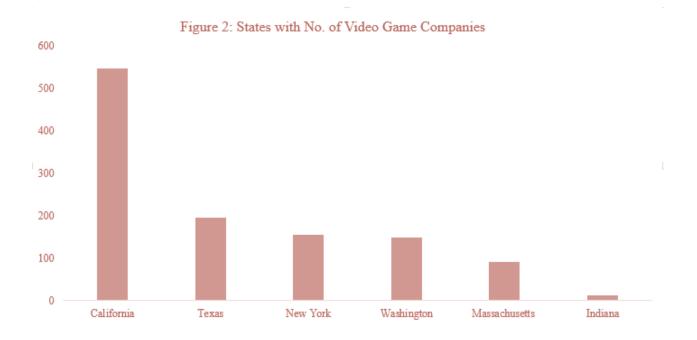
Industry Profile

The video game industry is one of the fastest growing sectors in the U.S. economy. From 2009 to 2012, the interactive entertainment software industry grew at an annual rate of nearly 10 percent. In 2014, video game companies generated more than \$22 billion in revenue, up from \$2.6 billion in 1996⁸. It is estimated that the video game industry directly employs 42,000 people in 36 states. The total U.S. employment, both direct and indirect, that depends on the industry now exceeds 146,000 workers.

There are 1,641 video game companies throughout the country. The top five states with the highest number of video game company locations are California (546), Texas (196), New York (154), Washington (149) and Massachusetts (92). Indiana is home to 13 companies, which are located in Indianapolis (4), Bloomington (3, *RareSloth*, *Studio Cypher*, and *Half Full Nelson*), Fort Wayne (1), Sellersburg (1), North Liberty (1), Fishers (1), Yorkville (1), and Charleston (1).

⁸ "Video Games in the 21st Century." The Entertainment Software Association. 2014.





Across the country, 406 universities and colleges offer undergraduate degrees and certificates in video game design and development, and 40 universities offer master's degrees. In Indiana, Indiana University Bloomington offers a Bachelor of Science in Game Design through its Media School. Indiana Tech in Fort Wayne also offers a degree in software engineering with concentration on game development.

According to Gamasutra, the online version of Game Developer Magazine, the average salary of game developers in the U.S. was \$83,060 in 2013⁸. The table below displays regional variation in salaries by discipline.

Table 1. Average Salary by U.S. Region by Discipline, 2013

	East	Midwest	South	West
Programming	\$84,460	\$76,538	\$81,882	\$99,851
Art and Animation	\$72,236	\$68,928	\$64,705	\$79,948
Game Design	\$72,717	\$64,318	\$64,939	\$77,906
Production	\$78,571	\$69,500	\$84,464	\$83,478
Audio	\$58,500	\$75,000	\$67,500	\$112,500
Quality Assurance	\$52,500	\$60,833	\$41,388	\$58,310
Business/Management	\$96,000	\$66,785	\$95,700	\$109,681

Source: Gamasutra Salary Survey 201,4 available at http://www.gamasutra.com/salarysurvey2014.pdf

States' Efforts to Attract Video Game Companies

In the past decade there has been an increase in interest among some state governments and economic development organizations in attracting video game developers. States like Louisiana, Texas, and South Carolina have focused much



of their efforts on growing local video game industry. They do so primarily by offering tax incentives and developing educational infrastructure.

At the moment, 21 states have tax incentive programs targeted at video game and digital media firms. Appendix B, located at the end of this report, provides an overview of these programs. Most payroll tax credits and rebates only cover wages paid to residents, with non-resident pay being incentivized at a reduced rate, or not at all. There are similar restrictions on what production expenses can qualify for these programs, with some programs stipulating that projects purchase whatever they need locally whenever possible.

There can also be limits on the size of the projects that can be funded. Some incentives are designed for game development firms with large teams and long development times; others are intended to support smaller projects. Some states also offer sales tax exemption for certain production expenses, or have different rules on when companies can actually claim benefits.

Indiana does not currently offer tax incentives to video game companies. The Media Production Expenditure Tax Credit, which was enacted in 2008, expired in 2012 and has not been renewed since then.

Tax incentives play an important role in attracting video companies. In the last six years, dozens of video game developers relocated to Texas in response to the state's tax incentive program. A CEO of a video game developer that relocated to Austin, TX spoke on the importance of tax incentives saying, "We don't have to be here in Austin. We can be anywhere else".

While tax incentives appear to play an important role in a company's decision to relocate, another important factor is access to a pool of educated professionals. In addition to tax incentives, many states also invest in creating or improving existing programs in video game design. Below is an overview of programs that were implemented by Louisiana, Massachusetts and Texas.

Louisiana: Louisiana Economic Development Corporation collaborated with Louisiana State University (LSU) and Electronic Arts (EA), a major video game publisher, to establish the 94,000-square-foot Louisiana Digital Media Center. The Center houses LSU's Center for Computation and Technology and nearly 200 video game developers, with employment expected to grow up to 600 people in the years ahead. In addition to housing EA and LSU's Center for Computation & Technology, the center will be home to the new AVATAR initiative at the university, which will unite faculty and students to research and develop programs in the fields of digital art and technology.

In addition to the partnership with LSU, the Louisiana government offers a customized workforce recruitment and training program to new and expanding companies, including those in video game industry. The program is free for eligible companies, and is often used as a part of an incentive package offered to businesses that consider relocating to Louisiana. In 2015, inXile, a video game developer, made the decision to relocate to New Orleans after it was offered an incentive package that included the services of the FastStart program.

Massachusetts: the state Economic Development Administration provided a \$1.4 million federal grant to Becker College and the Massachusetts Digital Games Institute to help build a \$2.8 million video game incubator and training center in Worcester. The Institute aims for academic cooperation, entrepreneurship, and economic development across the Massachusetts digital technology and video games ecosystem.

⁹ Walters, E. (2013). Game Firms Get Great Tax Deals, Maybe Too Great. New York Times.



Texas: The University of Texas at Austin has partnered with two video game industry leaders to create Denius-Sams Gaming Academy, a video game program that is taught by gaming industry executives. The program is focused on building the skills required to lead teams and develop games from concept to completion.

Opportunities for Video Game Companies in Bloomington

Lack of tax incentives for video game and digital media firms in Indiana may make the task of attracting an established video game developer more challenging. Nevertheless, our analysis indicates that Bloomington has a number of important advantages that can be particularly attractive for the industry. There are a growing number of professionals with skills in video game design and programming, as well as a high quality of life, and low cost of living.

One of Bloomington's main assets is its workforce. In 2015, IU Media School started a bachelor's program in video game design. The first 15 students will graduate with this degree in May 2016. In 2017, this number is expected to go up to 36 students. According to Media School faculty, a company expanding or relocating to Bloomington will be able to recruit employees with almost all necessary skills: programmers, designers, writers, voice acting professionals, and composers. The only skill gap that currently exists is in digital art. However, the Media School has recently hired a faculty member with expertise in this area, which close this skill gap by the end of 2017. Although Ivy Tech does not have a program related to video game design, a video game company can hire its graduates for quality assurance testing and IT support.

Video game professionals whom we interviewed, and who have worked in the industry for 20 years, pointed out that Bloomington's high quality of life and low cost of living could be very instrumental in helping bring a game company to the city. In this respect, Bloomington has an advantage over the Bay Area where many employees have to endure long commutes and a higher cost of living.

Growing Video Game Companies Locally

We believe that there is potential to grow video game companies locally. Hoosier Games, an IUB-based club for video game development, can be used as a platform to help start video game studios. Hoosier Games, which currently has 70 members, has developed and successfully published eight games since its inception in 2010. The club plays an important role in cultivating a pool of creative and skilled video game designers. In addition to helping students get hands-on experience in game design, it has a marketing-oriented component, teaching its members how to market and pitch their games to possible investors. Some of its members, who are senior students at the Media School and Kelley School of Business, are currently working on *Frankenship*, a capstone project game which students build from ground up during the last three semesters of their major. The project will culminate in having the game officially published in May 2016. People whom we interviewed, both faculty and students, were very enthusiastic at the idea of starting a video game studio in Bloomington. While they have ideas, knowledge and relevant skills, they lack resources that would help them to start a business. We suggest that the BEDC considers whether, and how it can support by connecting them with existing resources available for entrepreneurs, as well as helping to meet needs specific to starting a video game business. Inviting members of Hoosier Games to participate in the next B-Start could be a good first step.

Recommendations

Recommendation 1: Continue the development and focus on Bloomington's quality of life for employees and small businesses. The Bloomington Certified Technology Park is a step in the right direction for work-life balance, while amenities such as co-working spaces and high-speed internet, such as Google Fiber, make a city a better place to work and live.

Recommendation 2: Consider using economic impact analysis as a tool to challenge the county's conservative approach to economic development. The analysis will provide the BEDC with hard data to back up its arguments in favor of new business attraction.

Recommendation 3 (video game industry):

- Work with the local and state authorities to adopt a tax incentive program for video game and digital media companies. While currently not permissible under state law, tax incentives have proven to be a driving factor in the relocation of video game businesses.
- Take advantage of a growing pool of talent at IUB. We recommend to look into forming a partnership between IUB, the BEDC, and a video game company that may provide the company with high quality talent in exchange for jobs, internships, and mentoring opportunities for students.
- Consider supporting local talent that is eager to start a video game studio in Bloomington. This should include connecting students with resources available to individuals seeking to start a business, and forming a partnership between a new studio and the Kelley School of Business that could provide training in business management skills

Chapter 3: Education

The Problem

Bloomington has a wealth of education related resources. These range from highly ranked high schools and skill based programs to the presence of well-respected higher educated institutions. In many cases these resources align to provide skilled labor to local employers, but there are some resources falling short of their potential. Specifically, the flow of students from Hoosier Hills Career Center to local employers and the perception of Ivy Tech are areas which are not meeting their potential. It is in these areas of under-utilization that there is opportunity for actions to realize a large return on investment.

Background

To establish the context in which the education environment exists, this subsection will provide a brief overview of the education related entities considered, the relationships between these entities, and the impact of higher education institutions in Bloomington.

The graphic on the next page summarizes the identified relationships relevant to the education environment in Bloomington. As illustrated, students attending the local high schools have some opportunity to interact with Hoosier Hills Career Center (HHCC), Ivy Tech, and Indiana University. These interactions provide students the opportunity to supplement their education with a wide variety of technical skills and research experience. For example, a student could attend dual credit courses at Ivy Tech and receive college credits or the same student might work in a research lab under a professor at IUB. Hoosier Hills Career Center provides an experienced-based education for students interested in any of its nine pathways, including introduction to advanced manufacturing and logistics or computer integrated manufacturing.

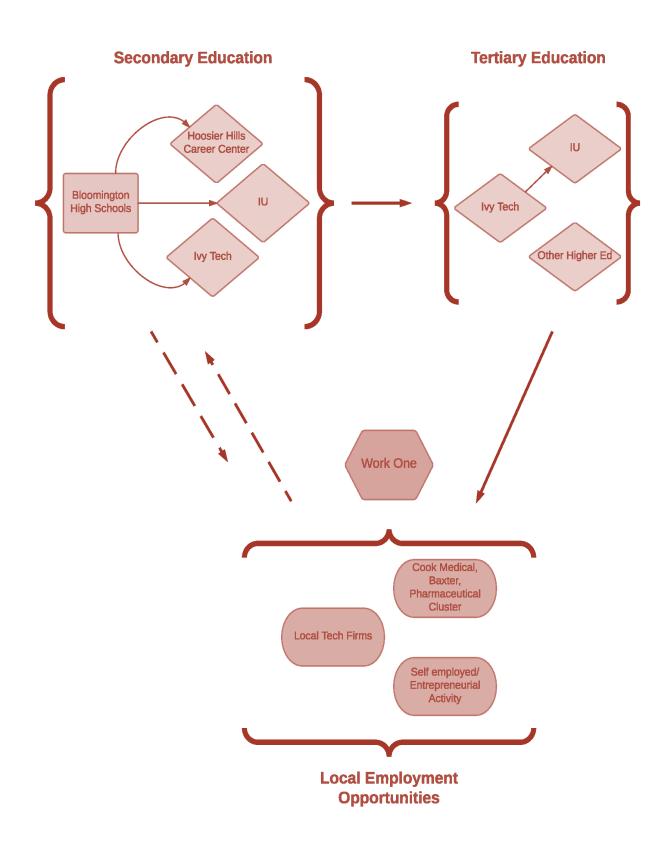
Moving forward from secondary education, there is a clearly established pipeline to send students on to higher education. For students who stay in Bloomington, the options include Ivy Tech and IUB. A student may choose to attend Ivy Tech for two years before transferring to IUB for a bachelor's degree, rather than beginning and completing their education at a four year institution. Following the completion of their education, students may choose to pursue careers in Bloomington. Among the employment options available are the local life sciences firms, technology firms, and the option of starting a new business.

It is worth noting that these firms provide some degree of feedback to the secondary educations in the community. To some extent, the employment opportunities available help shape the education pathways offered at the local high schools. This is seen specifically at HHCC and The Academy. Students at The Academy work on projects affiliated with local employers and students may choose classes at HHCC that specifically prepare them for jobs in the community. Through these tangential relationships, local employers can use the local education system to fit their hiring needs, however, existing relationships among stakeholders must be strengthened for this to work.

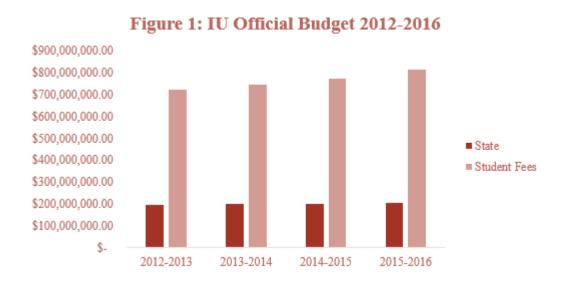
Current Status of Ivy Tech

One of the most underutilized resources in Bloomington is the educational opportunities offered at Ivy Tech. As a result, most of the recommendations provided by this chapter are either directly or indirectly targeted to increasing the exposure of Ivy Tech to both Bloomington's residents and employers. For residents, Ivy Tech is a more affordable path

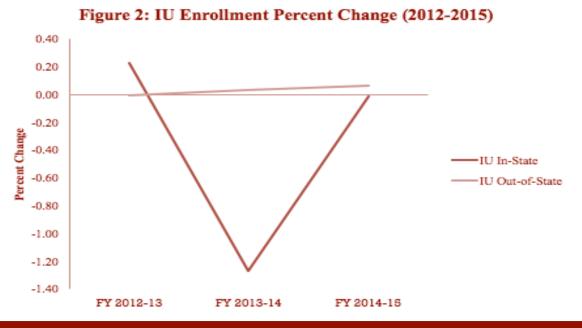
Education—Current Relationships



to higher education, and even though it does not offer 4 year programs, the opportunities to transfer to IUB after two years are quite extensive. More importantly, studying for two years at Ivy Tech is a much cheaper alternative to attending IUB for the full four years. In terms of the impact for employers, Ivy Tech provides several programs that allow students to master technical skills that are currently in high demand, such as cyber security, biotechnology or software development, to name a few. Some of these programs are not currently offered at IUB.



Conversations with local high school administrators suggest that many prospective local college students do not even consider attending Ivy Tech, and instead focus on Indiana University or other four year institutions. Budgetary stress at IUB (See figure 1) is causing a smaller percentage of in-state (refer to IU enrollment table) students being accepted each year. This is an issue for local high school students who may not have good enough grades to get into IUB. On the other hand, this issue presents an enormous opportunity for Ivy Tech in terms of reaching potential students and increasing enrollment (See Figure 2). Attending Ivy Tech for two years and then transferring to IUB is the best opportunity for



those who originally desired to attend Indiana University but were not accepted and, as such, Ivy Tech needs to capitalize on those students.

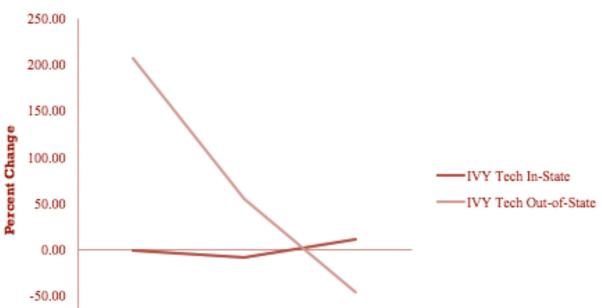
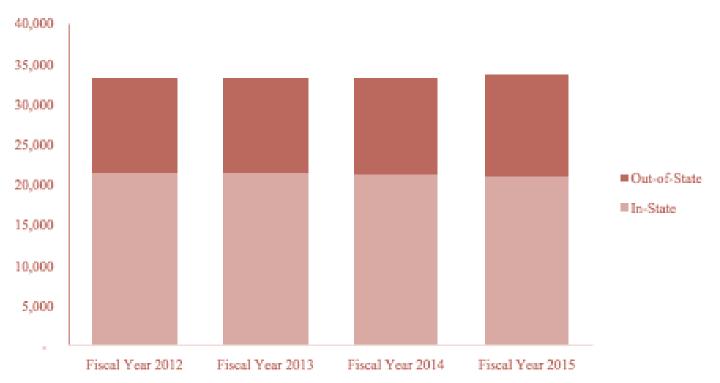


Figure 3: Ivy Tech Enrollment Percent Change (2012-2015)

Figure 4: IUB 2012-2015 Full-time Enrollment

FY 2014-15

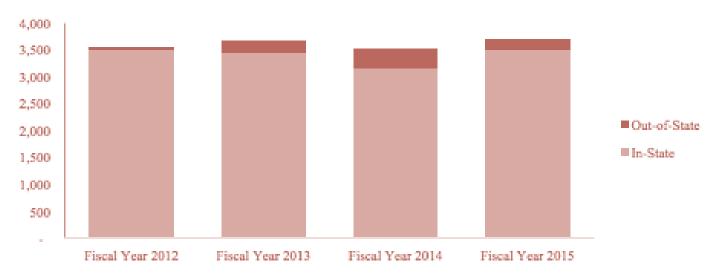
FY 2013-14



-100.00

FY 2012-13

Figure 5: IVY Tech Bloomington 2012-2015 Full-time Enrollment



Based on enrollment statistics between the fiscal years of 2012-2015, IUB has experienced a decrease in the amount of in-state students, while out-of-state enrollment has steadily increased. However, the opposite can be said for Ivy Tech, which has experienced a rise in in-state enrollment during the same period. As mentioned before, budgetary stress at IUB may be a contributing factor, which has led the university to admit more out-of-state students to compensate for a minimal increase in state funding. State funding for IUB has remained fairly steady, but student fees provide the bulk of the university's funding and continue to increase.

Strategies

This chapter has identified two main areas for improvement in Bloomington's education environment. Associated with these improvement areas this section identifies both general strategies and specific instruments to bring about change. The first strategy focuses on improving perception, awareness, and access to Ivy Tech by detailing a different recruiting strategy, a brand new marketing campaign targeted to the different groups of students, and a plan to increase collaboration between Ivy Tech and IUB.

Regarding Ivy Tech's recruiting strategy, the school should invite current students and recent graduates of Ivy Tech to talk with high school juniors and seniors about their experiences at Ivy Tech. In general, teenagers are more receptive to new ideas when they are told by people to whom they can relate to, either by age group or other personal interest. Creating a program in which recent Ivy Tech graduates share their experiences and explain how the community college has prepared them for the workforce would be highly beneficial. By inviting graduates rather than admissions personnel from Ivy Tech, potential candidates will receive objective information, which will lead to a more effective presentation.

In addition to a new recruiting strategy, Ivy Tech needs to launch a marketing campaign that differentiates between traditional and non-traditional students. As previously identified, there are two main groups that might attend Ivy

Tech with different priorities and interests. Therefore, two separate paths that fit each student's needs should be created. The first group, consisting of traditional students, includes those who attend Ivy Tech as a stepping stone towards earning a bachelor's degree at IUB or other university. These students are interested in earning transferable credits at a lower cost. Based on information from local high school administrators, a decreasing percentage of local students are being accepted into IUB. Consequently, this group presents a larger market of potential Ivy Tech students. As a result, Ivy Tech should consider creating and marketing "CollegeBound", a program specifically tailored for students who want to transfer to a four year university after doing their first two years at Ivy Tech. Given its location, the Waldron Arts Center would be the ideal center/headquarters for this program. In addition to the logistical advantage of placing the program down, this location would also promote the students' feeling of involvement and belonging within the IUB community.

Second, these non-traditional students value schedule flexibility and career advancement opportunities. Many of these students are also generally older and, therefore, are more likely to have access to private transportation which would allow them to commute to the Ivy Tech campus. As a result, their courses should be taught at the Ivy Tech campus on the west side of Bloomington as part of a "CareerBound" initiative.

Ivy Tech's final strategic concern is its location. The main campus is located on the west side of Bloomington, which has limited public transit access. In order to promote student access, the current Bloomington transit lines should be updated. The only line that comes close to Ivy Tech is the 3: Highland Village/Curry Park, which has a stop about 10 minutes away from Ivy Tech. Taking this into consideration, the addition of a new line or shuttle service that would have stops both at the IUB campus and Ivy Tech is necessary. As mentioned before, bringing students closer to the IUB community would promote their sense of belonging. Finally, increasing Ivy Tech's presence downtown would act as a marketing tool of its own, as it would tackle the geographic isolation of Ivy Tech.

The second main strategy proposed by this chapter is to facilitate further relationships between HHCC and local employers. In order to do so, it is important to showcase the work done by HHCC students, who are graduating with specialty skills and the matching certifications. These students, given the opportunity, could provide highly skilled labor for businesses in the Bloomington area, a resource that local business owners have stated as lacking in Chapter 1. At the moment, there is limited exposure of students to employers, which results in a lack of knowledge regarding the degree of skill obtained by some students and limits the employment opportunities students may consider.

This chapter proposes that programs targeting collaboration between HHCC students and local employers will address this concern. Programs could include a 'HHCC Pitch Series', which would invite students in to provide a brief presentation (~10 minutes) of a current project during the BEDC's quarterly member meetings. An additional program to consider is facilitating a project competition for high school students, sponsored by local employers. The competition would feature focus areas of employers (e.g. technology or bio-medical based challenge) and encourage inter-disciplinary collaboration.

Recommendations

Make Ivy Tech More Relevant

- · Using Ivy Tech graduates as recruiting tools
- · Offer specific programs differentiated by traditional and non-traditional student groups
- · Starting a bus line that connects Ivy Tech and IU's campuses

Building Relationships with HHCC

- Implementing the HHCC Pitch Series
- · Creating a project competition for local high school students

Chapter 4: The Entrepreneurial Ecosystem

Over the last 10 to 15 years, the term entrepreneurial ecosystem has become a way to describe the network of public and private stakeholders in a specific region that support individuals creating and developing local businesses.^{1,2,3,4} This term relates to economic development, as it is thought policymakers and other community leaders may be able to positively affect the growth of an entrepreneurial ecosystem, and the local economy of a region more broadly.

At first glance, Monroe County's entrepreneurial ecosystem, like its economy, is anchored by entities related to and supported by Indiana University. However, there are also a number of other resources that support the small businesses and start-ups in the county. While the organizations providing these resources may not yet be coordinated into a thriving entrepreneurial ecosystem, efforts by BEDC and others are improving cooperation across various groups.

This chapter examines the entrepreneurial ecosystem in Monroe County, including its key players and resources. It is also highlights work being done across a set of peer communities, similar in nature to Monroe County. The goal is to lend insight into what opportunities exist to strengthen the local ecosystem in Monroe County and Bloomington. This review is supported with a case study of Cardinal Spirits, a local small business and concludes with recommendations to foster entrepreneurship in the region.

Small Business and Start-up Community in Monroe County

Bloomington, and surrounding parts of Monroe County, seem to be developing more start-ups, yet still seem to be far from becoming a thriving entrepreneurial ecosystem. According to analysis of ReferenceUSA data, it is estimated there are 74 start-ups in Monroe County.⁵

It is difficult to measure exactly the number of *potential* entrepreneurs, that is, individuals considering or attempting to start their own business. The South Central branch of the Indiana Small Business Development Corporation (ISBDC) had 83 clients in calendar year 2014 in Monroe County (66 in Bloomington). Of those 83 clients, just 12 went on to start businesses that year (four in Bloomington). ISBDC asserts it doubled its Monroe County client total from 2014 to 2015, and the organization expects to triple its client total in 2016.⁶ The Bloomington branch of SCORE met with 41 new clients and 23 follow-on clients in fiscal year 2015.⁷ Of all these clients, 27 are now in business.⁸

Community Challenges

Service Provision Overlap – SCORE, the ISBDC, BEDC, and Ivy Tech's Cook Center for Entrepreneurship have increasingly referred clients to each other to better meet individualized needs. However, potential entrepreneurs do not always know where to begin looking for a specific service, due to overlap of service provision across organizations.

⁸ Due to confidentiality concerns, we may not receive specific names or information of clients to compare them across databases and organizations.



¹ Isenberg, D. (2014). What an entrepreneurship ecosystem actually is. Harvard Business Review, mai.

² Motoyama, Y., Konczal, J., Bell-Masterson, J., & Morelix, A. (2014). Think locally, act locally: Building a robust entrepreneurial ecosystem. Act Locally: Building a Robust Entrepreneurial Ecosystem (April 2014).

³ Dunn, K. (2005). The entrepreneurship ecosystem. Technology Review, 9.

⁴ Feld, B. (2012). Start-up communities: Building an entrepreneurial ecosystem in your city. John Wiley & Sons.

⁵ Startups are classified as having less than ten employees, less than \$2.5 million in sales, and being in the database for one year or less. (Reference USA the U.S. Database, 2016)

⁶ Historical data for 2015 and 2016 are not yet available, but ISBDC had 39 clients and 6 business starts from January 1, 2015 to April 30, 2015, in Monroe County (31 clients and 4 starts in Bloomington).

A follow-on client is a client continuing to work with SCORE having started work with the organization in a previous year.

Funding for Entrepreneurs – Another concern facing individuals developing businesses in Monroe County and Bloomington is funding. Troy Phelps of the ISBDC states funds are typically readily available for start-up loans of \$100,000 to \$200,000, but both he and Dr. Donald Kuratko of the Johnson Center for Entrepreneurship and Innovation agree there is limited access to large venture capital funds (multi-million dollar investments). Even when receiving start-up funds entrepreneurs may be unable to find large amounts for expansion.

Despite these struggles, Phelps maintains capital is not a large problem like it was just a few years ago. ISBDC clients were bolstered by capital infusion of \$3.85 million (\$2.615 million in Bloomington) in 2014. Kuratko, on the other hand, asserts the region lacks an adequate amount of venture capital, which may drive successful start-ups out of the region. This disagreement could be due to the use of different definitions of "entrepreneurship". Some define it as self-employment of any sort, while others define it as the individual act of taking risks with innovative ideas to generate new products or services. In the case of Monroe County, funding appears to be more readily available for small business development than for innovation-driven, high-growth entrepreneurs. For more information on finance, see Appendix C.

Community-University Divide – Indiana University is a major asset for Monroe County, especially in terms of economic development in Bloomington and other communities. Some local experts, however, note a divide between university centers focused on economic development and the efforts of community-based entities. Kuratko specifically states his center is focused on "in-reach" to university students and staff, not community engagement or local economic growth. Another IU official was unaware of the existence of Bloomington's Certified Technology Park, while some community organization representatives expressed confusion as to who at IU they should be talking to. These issues illustrate a potential lack of coordination between IU and the city in regards to local economic development. Increasing engagement between community-based and university-based stakeholders is an important step in the journey of enhancing the entrepreneurial ecosystem in the region.

Commercialization of IU Research – In addition to the opportunity to better engage with local stakeholders, IU could likely strengthen its support of individuals interested in product-based research focused on commercialization opportunities. The university is a highly-respected research institution at the national level, but there has not been a significant amount of commercialization that stems from its research. Considering the research and innovation efforts at IU, there has been significant progress in R&D and commercialization in recent years, particularly as a result of vigorous initiatives taken by Indiana University Research & Technology Corporation (IURTC) since 2007. IURTC has been within the top 100 Worldwide Universities Granted U.S. Utility Patents in 2014. During the 2015FY, IU had a record 183 U.S. and global patents issued with a remarkable 254 percent increase over the previous year.¹¹

Nevertheless, when compared with other top-ranking universities it seems there is still significant room for improvement when it comes to the number of start-up companies and commercialization stemming from IU's research activities. IU research has led to the launch of around 75 start-up companies since 1997. And these companies based on IU-licensed

¹¹ Source: IU Innovate Indiana. (n.d.). Research & Innovations. Retrieved March 25, 2016, from http://innovateindiana.iu.edu/initiatives/research-innovations.shtml



⁹ Historical data for 2015 and 2016 are not yet available; Monroe County ISBDC clients raised capital infusion of \$2.69 million dollars from January 1 to April 30, 2015 (\$2.12 million in Bloomington).

¹⁰ Bassanini, A., & Scarpetta, S. (2002). The driving forces of economic growth. OECD Economic studies, 2001(2), 9-56.

technologies have seen revenues of over \$100 million. This is despite spending more than \$2.5 billion on research in the last five years. ¹² By comparison, 25 start-up companies were created based on Purdue University innovations in FY2015 alone. In 2014, Purdue University generated nearly four times as many patents as IU. 13 University of California (UC) researchers and the 86 companies created to commercialize UC technologies generated \$14 billion in revenue in 2014 and employed approximately 19,000 people. 4 Massachusetts Institute of Technology (MIT) launches around 700 inventions, and assists in forming around 20 start-up companies each year. 15 Stanford University Office of Technology Licensing has generated over \$1.5 billion return to the University and Stanford inventors since 1970. Most of the commercialization activity from IU has been realized within the IU Medical School at IUPUI in Indianapolis, which does not contribute to Bloomington's economy directly.

Restrictive Local Policies – Another concern for the region, in terms of entrepreneurial ecosystem development, is consistent reports of restrictive policies in place, which stem from local government. Various stakeholders noted regulations, such as strict zoning rules, that negatively affect local entrepreneurs by costing them time and money.¹⁷ Some also described an attitude where the city and county governments appeared to not desire the opening of certain types of businesses. 18 While there may be valid reasons for certain policies, a new administration could make some key changes that streamline the small business development process.

In coming years, along with the increasing product-based commercialization efforts in Bloomington, Monroe County could be a hub with emerging life science and high tech companies, if government and other organizations take necessary steps to foster networks and lessen obstacles toward entrepreneurial development.

Interviews were conducted with recent Bloomington start-ups in hospitality, retail, and commercial sectors, to understand what challenges they face when opening their businesses; what resources they utilized; what resources they currently utilize; and what challenges they foresee in the coming months or years. Seven interviews were conducted with recently opened small businesses operating in the fitness, restaurant/café, retail, and insurance industries.

Typically, businesses in these industries do not have a lot of access to start-up capital in the form of grants or awards. No ED corporations in similar cities appear to provide grants to small businesses operating outside highly technical or innovative fields. 19, 20 However, the backbone of great communities like Bloomington is in locally owned businesses providing retail and restaurant services. As one business owner interviewed said, almost all the spaces in the square downtown are locally owned businesses, and Bloomington's reputation is one of uniqueness and creativity.

One vital aspect of local ED to the growth and health of communities is social capital. Bridging social capital refers to

²⁰ The Columbus Region. (n.d.). Start and Grow a Business in the Columbus Region. Retrieved from http://columbusregion.com/Start-Locate-Expand/Entrepreneur-Resources.aspx



¹¹ Source: IU Innovate Indiana. (n.d.). Research & Innovations. Retrieved March 25, 2016, from http://innovateindiana.iu.edu/initiatives/research-innovations.shtml

¹³ Purdue Research Foundation's Office of Technology Commercialization (OTC). 2015 Annual Report.

¹⁴ The Daily Californian. (August 5, 2015). UC research in 2014 leads to 1,796 inventions, 86 startups. Retrieved March 25, 2016, from http:// www.dailycal.org/2015/08/05/uc-research-2014-leads-1796-inventions-86-startups/

MIT Technology Licensing Office. (n.d.). Commercializing an Invention. Retrieved March 25, 2016, from http://tlo.mit.edu/community/transfer/commercializing for Stanford's Office of Technology Licensing. (n.d.). OTL and the Inventor: Roles in Technology Transfer. Retrieved March 25, 2016, from http://otl.stanford.edu/ inventors/resources/inventors otlandinvent.html

Wuslich, Jeff (2016, March) Cardinal Spirits. Greg Shirbroun, Interviewer

¹⁸ E.g. a veteran-owned tactical shooting training center that caters to law enforcement ended up opening in a nearby county; food trucks were initially difficult to open and operate in Bloomington.

19 Wisconsin Economic Development Corporation. (n.d.). S³: A Statewide Solution Securing Resources for Wisconsin Entrepreneurs. Retrieved from http://

inwisconsin.com/entrepreneurs/s3-funding-initiative/

deep ties between people that improve quality of life and access to ideas.²¹ All local business owners interviewed said they relied on personal, informal networks to build clientele, navigate bureaucratic institutions and processes like acquiring permits and appropriate legal status, and find support with renovating and preparing business infrastructure. Many stated they would not have started a business in Bloomington without a strong personal network and tie to the region. To start their businesses, the owners interviewed used mentors, support groups and relationships with BNI, Bloomington Entertainment and Arts District (BEAD), the Cook Center for Entrepreneurship at Ivy Tech, Local First Bloomington, Bloomington SCORE, Downtown Bloomington INC, and the Indiana Small Business Development Center (ISBDC).

One business owner started a business with a loan in the form of a Kickstarter that she and her husband will pay back 175% of. One owner took a loan from her landlord (because of their strong relationship) and another took a small business loan. The other four owners relied entirely on savings and fundraisers to start their businesses, and while they have no debt, they all named capital and finances as the biggest challenges going forward as they expand, continue to motivate employees, and market their businesses.

Business owners have successfully found support from organizations like Local First, BEAD, DBI and SCORE, but appreciation of these organizations is not absolute—especially if membership dues are required. Even though three business owners contacted the ISBDC, none were particularly impressed with the help they received from the organization, and all cited other resources that were more useful for them. In particular, mentors who currently are or have been small business owners are the best resources for new business owners, and they continue to rely on support groups comprised of local business owners founded entirely on their own to answer questions they can't answer via the Internet or government agencies. Almost all of the business owners had previous experience owning a business or running "pop-up" versions of their current business, so they brought in their own knowledge, as well. Business owners typically found out about permit processes, health code requirements and legal norms by talking with electricians, City Hall officials, health department workers, and landlords. Almost all business owners expressed frustration at the lack of a face-to-face mentor to explain the entire process, offer practical advice, identify possible funding sources, and provide helpful resources.

The BEDC and its partner organizations do not currently offer any grants to local business owners in these industries, which leaves them at a disadvantage. One business owner said if it were not for her landlord offering a loan because she knew them personally (and knew they would pay it back), she would not have started this business. However, just because agencies like the BEDC do not fund start-ups in these fields does not mean money is not available. One owner was able to open her business because she held a fundraiser in town. Small business owners would benefit from information about funding strategies and access to local venues for holding fundraisers.

Though interviewees have been able to start their businesses by utilizing previous experience, asking community members for advice, creating informal networks, reaching out to local business support organizations, and searching the internet, they all identified some aspects of the process for which they would appreciate more mentoring:

• Outlining the process start-to-finish of starting a small business, including how to secure permits and how to budget time and money realistically;

²¹ Aubuchon, C., Engbers, T., Rubin, B. (2015). The Currency of Connections: An Analysis of the Urban Economic Impact of Social Capital. EDQ forthcoming.



- Identifying funding and grant opportunities outside of crowd funding;
- Finding good, responsible landlords who want to support local businesses;
- Negotiating leases and understanding the rules/requirements of commercial real estate;
- Knowing what a good operating agreement looks like, how to locate a lawyer, and what one should prepare
 and expect when meeting with a lawyer;
- Attending courses on HR, management, and professionalism;
- Locating new clientele; and
- Knowing where to go to for help

Some of these tools are currently provided by the SBDC, but even the interviewees who met with the SBDC are not comfortable articulating the intricacies of areas with which they have the most trouble. Providing new business owners with a packet of information regarding legal and financial resources is helpful, but it is not enough. Business owners want practical information about lawyers, landlords, funding, management, and new customers—information they can currently only get in informal networks through the experiences of others. This chapter recommends the BEDC attempt to help business owners so it can make it easier to open a business in these sectors in Bloomington.

The Ecosystem

Switchboard

The Switchboard is a website designed to serve "as the central dispatch for the Bloomington start-up community." A cooperative effort between BEDC and the Cook Center for Entrepreneurship, the Switchboard seeks to foster and expand Bloomington's entrepreneurial ecosystem.

The Switchboard has already been a positive development, and its second iteration is expected to make an even greater difference to the entrepreneurship community in the region. To aid the stage two development process recommended to the BEDC, and others working on the project, review San Diego's CONNECT as a potential program model.

The CONNECT site is dynamic and provides many opportunities for interaction between users. One downside to Switchboard is a lack of information flow regarding new resources, programs, events, etc. For example, when one looks for the "events" or "trainings" in the community, it directs one to the profiles of some community organization at which there might be an event or a training program. Users need to go through websites of all these organizations and find suitable programs for themselves. Instead of this static and time-consuming approach, Switchboard should provide easily digestible information packages that include all the ongoing entrepreneurial activities for its users, which no doubt require day-to-day updates. As for passivity, there is no prior checking mechanism to sign up for membership. Because of this, it appears that some members have more than one entry or have incomplete information, photos, and non-working links for their websites. To overcome this problem, existing entries should be reviewed, repetitive entries should be eliminated and profiles that have incomplete information should be fixed. For the new members, the request for the membership could be finalized after a prior-check by a website administrator. Finally, there is a need for a vocational classification both for individuals and firms, which would be beneficial for users to find resources specific to their needs.

An Alternative Model: CONNECT

CONNECT is a site designed to help San Diego entrepreneurs find the "people, capital, and technology" needed to grow. Originally a creation of the University of California-San Diego, it has morphed into a joint project between the university and city. The site has four main modules designed for different potential users: 1) entrepreneur experience, 2) executive experience, 3) connect-match, and 4) public policy. CONNECT has two boards of directors (one for its association and one for its foundation). These boards are made up of venture capitalists, scientists, research institutions, entrepreneurs, CEOs, and strategic advisors. Through the development of these boards CONNECT has become a project through which various players in the entrepreneurial ecosystem of San Diego come together to build relationships and enhance their efforts to support start-ups in the region. The CONNECT team consists of 15 professionals who are experts in various fields related to entrepreneurship (See Appendix D for more information on CONNECT).

Efforts by Other Communities

In 2013, SPEA prepared a report for the Central Indiana Corporate Partnership that highlighted three peer regions, each with anchor cities similar to Bloomington, IN.²² These three cities were Huntsville, AL; Knoxville, TN; and Kennewick, WA (Tri-Cities). The Indiana Business Research Center (IBRC) played a key role in city selection, and searched for regions with three elements: (1) a major federal research laboratory; (2) a large research university; and, (3) a rural setting. The cities selected also stood out based on the strength of regionally-focused economic development entities and strategies.²³ When considering how to enhance Monroe County's entrepreneurial ecosystem, it makes sense to revisit these peer places and review actions they are taking to stimulate small business growth.

As a quantitative means of comparison the Innovation Index, developed in part by IBRC, and funded by the U.S. Commerce Department's Economic Development Administration, shows how the peer places stack up in terms of various inputs (human capital and economic dynamics) and outputs (productivity/employment and economic well-being).²⁴

Anchor City	Index	Human	Economic	Productivity &	Economic
(County, State)	Total	Capital	Dynamics	Employment	Well-Being
Kennewick	100 1	126.6	90.0	108.7	102.4
(Benton County, WA)	108.1	126.6	89.9	108.7	103.4
Huntsville	107.0	126	0.1	07.0	102.0
(Madison County, AL)	107.8	136	91	97.8	103.8
Bloomington	96.8	3 111.2	83.6	96.9	92.9
(Monroe County, IN)					
Knoxville	02.5	0.7.6	05.4	00.1	102.6
(Knox County, TN)	92.5	95.6	85.4	93.1	102.6

²² Davee, Kim, et al., 2013 SPEA Capstone: Economic Development Strategy for Southwest Central Indiana. School of Public & Environmental Affairs.

²⁴ USCD-EDA. (n.d.). Innovation Index: Select Regions. U.S. Commerce Department, Economic Development Administration. Retrieved March 27, 2016, from http://www.statsamerica.org/innovation/innovation index/region-select.html



²³ Ibid

Bloomington's (Monroe County) Innovation Index score of 96.8 places it ahead of Knoxville, TN (92.5), but behind Kennewick, WA (108.1) and Huntsville, AL (107.8). Thus, while Bloomington compares favorably in some ways, there are certain steps it could take to enhance its environment in regards to innovation and entrepreneurship.

Looking at specific index components reveals a human capital issue for Bloomington. Its component score was 111.2, higher than Knoxville, but much lower than Huntsville and Washington's Tri-Cities. A region's human capital score is determined by educational attainment, population growth, occupational mix, and high-tech employment.²⁵

The Innovation Index is a good start for economic comparison, but it does not reveal much about the specific actions economic development leaders in each of Bloomington's peer regions are taking to enhance the entrepreneurial ecosystem for small businesses and start-ups. Thus, below is a more in-depth review of each of the selected peer regions and more information about certain initiatives economic development leaders are investing in to stimulate entrepreneurship.

Huntsville, AL

Home to the University of Alabama in Huntsville, A leading economic development institution in the region is the North Alabama Industrial Development Association (NAIDA).²⁶

There is a history of partnership between the Marshall Center and commercial, academic, and non-profit partners. These partnerships are strengthened by Space Act Agreements, which encourage and allow Marshall to make facilities, laboratories, knowledge, and skills available to third parties.²⁷ Like Crane in Bloomington, Marshall also has a Technology Transfer Office. Its purpose is to ensure new technology and other innovations are made available to the public. The hope is this will benefit the U.S. economy and increase return on taxpayer investment in the lab. In practice, this means third parties, including small businesses and individuals, can capitalize on patents, software, and other innovations stemming from the Marshall Center.²⁸

Figure 1

Lowe Mill (Arts and Entertainment Center) – Not directly focused on entrepreneurship, but noted for its effect on the Hunstville ecosystem, Lowe Mill is, "the largest privately owned arts facility in the US," A converted cotton mill, it provides studios, performance space and galleries for 200 artists. A marketing blogger notes, "Lowe Mill is an important part of the puzzle for Huntsville's start-up community. Most people, when talking about a start-up community think tech, but whenever something great is going to be achieved, artists are always involved,"

Sources:

Lowe Mill. (n.d.) About Lowe Mill. Lowe Mill Arts & Entertainment. Retrieved March 27, 2016 from http://www.lowemill.net/about/
Blue Fish. (February 4, 2015) Huntsville Alabama's Startup Scene. Marcus Neto. Retrieved March 27, 2016 from http://bluefishds.com/blog/article/huntsville-alabamas-startup-scene.

²⁷ NASA (2014) Authority to Enter into Space Act Agreements. NASA Policy Directive. NPD 1050.1I. Office of the General Counsel. Retrieved March 28, 2016 from http://nodis3.gsfc.nasa.gov/displayDir.cfm?t=NPD&c=1050&s=1I

²⁸Ibid.



²⁴ USCD-EDA. (n.d.). Innovation Index: Select Regions. U.S. Commerce Department, Economic Development Administration. Retrieved March 27, 2016, from http://www.statsamerica.org/innovation/innovation_index/region-select.html

²⁶ Davee, Kim, et al., 2013

Knoxville, TN

Home to the University of Tennessee, Knoxville is also home to the Oak Ridge National Laboratory (ORNL). One of the leading economic development institutions in the region is Knoxville-Oak Ridge Innovation Valley (KORIV). ORNL is managed by UT-Battelle, a limited liability partnership between the University of Tennessee (UT) and Battelle Memorial Institute. ORNL's Science and Technology Partnerships Directorate aims to, "identify and leverage new economic opportunities and move them to the private sector," Specific activities include opening labs for university research, technology development challenges, and the creation of entrepreneurial development programs. UT is ORNL's largest research partner, and together the two parties operate five joint institutes. UT also plays a vital role in supporting regional companies and industries. In particular, the University of Tennessee of Center for Industrial Services (UTCIS) was established to assist the state's manufacturers and businesses in efforts to become more productive, profitable, and competitive. To fulfill this mission, UTCIS provides research and consulting services for companies, identifies their technology needs, and helps them find grants to support growth. In addition to the efforts of ORNL and UT, KORIV is focused on establishing a collaborative system to help create new businesses and expand existing ones.

Figure 2

Knoxville Entrepreneur Center – A 501(c)3 organization touted as the first stop for entrepreneurs in the region. KEC is funded through state funds, sponsorships, grants, and membership fees, and offers members and non-members an array of networking opportunities, access to dedicated capital sources, connections with local mentors, and trainings. Currently, KEC is heavily invested in three initiatives – MediaWorks, a digital media start-up incubator; Co.Starters, a nine-week small business development course; and What's the Big Idea?, a 48-hour pitch competition.

Sources

Knoxville Education Center (n.d.) About Us. Retrieved March 28, 2016 from http://knoxec.com/about-us/

Kennewick, WA (Tri-Cities)

Home to an extension of Washington State University the Tri-Cities region is also the location of the DOE's Battelle/Pacific Northwest National Laboratory (PNNL). A leading economic development anchor institution in the region is the Tri-Cities Development Council (TRIDEC). ³⁶

The PNNL, like the ORNL in Knoxville, TN, is also managed by Battelle, through a contract with DOE. PNNL's strong commitment of collaboration with government departments, universities, and businesses is demonstrated by efforts of the Economic Development Office (EDO), which has helped more than 400 companies in the region and 100 others nationwide.³⁷ There is also strong partnership between the PNNL and Washington State University (WSU), an institution with "very high research activity."³⁸ Though Kennewick is only home to a satellite location, Carnegie has applied this rating to the entire WSU system.

³⁸ Carnegie Foundation for the Advancement of Teaching (Carnegie Foundation). (n.d.). Washington State University.



³²UT-Battle, 2013

³³ Slizewski, J. and Wiley, B. (2010). Accessing UT Resources and Technology. University of Tennessee of Center for Industrial Services, Accessed April 1, 2016 from http://www.knoxvilleoakridge.com/advantages-technology/technology/

³⁴ Ibid.

³⁵ KORIV (2013), Blueprint 2.0. Retrieved from http://www.knoxvilleoakridge.com/lib/file/manager/Blueprint_Sheets_for_Web_1.pdf

³⁶ Davee, Kim, et al., 2013

³⁷ Pacific Northwest National Laboratory (PNNL), (n.d.), About PNNL, Retrieved from http://www.pnnl.gov/about/

Opportunities for Bloomington

Bloomington has the opportunity to increase its presence of entrepreneurship. Though they were discussing Indianapolis, much of what indicate about Marion County might also apply to Monroe County and the Bloomington region.³⁹ For example, this quote:

"Some advantages for the region already exist, but could be better harnessed...to maximize their contributions: for example, the presence of leading educational institutions means there is a large potential supply of excellent talent for local companies, but the reports of difficulty recruiting and retaining talent suggest a filter between the universities and the companies. Closing this "gap" could be a worthwhile investment for the region. The region appears to offer some important advantages in terms of market size and location."

Recent investments in transportation infrastructure (e.g. I-69 expansion) help increase the region's advantage related to its geographic location in the heart of the Midwest and provide Bloomington opportunities for reaching broader markets. According to Desai and Motoyama, 80% of the North American population can be reached within eight hours from Indiana by truck, which is a significant logistical advantage for those in the region. This provides new start-ups or incumbent businesses with significant growth potential based on market access. After completion of I-69, the commuting time between Indianapolis and Bloomington will decrease to 40-45 minutes. Armstrong (IURTC) expects this, as well as developments such as the new regional health center will transform Bloomington into a suburb of Indianapolis – like Carmel or Fishers – a transformation which could have a major positive effect on entrepreneurial development.

Bloomington's social capital is fairly robust thanks to its lively downtown, music and art activities, annual festivals, sports organizations, other outdoor activities, and additional social events that bring people together, enable collective actions and give rise to a better economy. Strong social capital is also crucial to keep entrepreneurs in the region by binding and bonding them with the community.

Bloomington's reputation, not only in Indiana, but also some other states, is one that boasts a beautiful campus, that encourages tolerance and diversity. In general, IU graduates love their university. This is not just because of its campus or tolerance, but because of well-functioning institutions, good use of technology, etc. This love seems to go beyond a simple connection between a college student and his or her university. Thus, this could be also another strong point of the city that could attract or retain new talents and entrepreneurs. However, even if Bloomington's atmosphere is quite tolerant, it seems there is lack of diversity in student profiles (e.g. small number of black and Latino students). This could be due to the region where Bloomington is located has still rural characteristics (e.g., Martinsville's bad reputation) which might be a deterring factor.

IU is one of the largest research universities in the U.S. and includes nationally-ranked schools such as the School of Public & Environmental Affairs, the Kelley School of Business, the School of Education, and the Jacobs School of Music. The university is classified as "R1: Doctoral Universities - Highest Research Activity" in the Carnegie Classification of Institutions (2015). The engineering program (scheduled to launch in 2016-17) within the School of

⁴¹ A Short History of Bloomington and Monroe County. (n.d.). Retrieved February 22, 2016 from The City of Bloomington https://bloomington.in.gov/documents/viewDocument.php?document_id=3052



³⁹ Desai, S., & Motoyama, Y. (2015). The Regional Environment: Indianapolis-Insights from High-Growth Companies. *Available at SSRN 2660938*.

Informatics and Computing should considerably enhance the economic development of the region by fostering commercialization.

The new IU Regional Academic Health Center, projected to open in 2019, has potential to influence regional entrepreneurial development. Tony Armstrong (the president and CEO of the IURTC and Joe Carley (Associate Director for Economic Development, Office of the Vice President for Engagement Indiana University) said the new health center will be constructed next to the Indiana University Technology Park, and will be able to both respond quickly to economic opportunities and attract private sector development with cutting-edge informatics infrastructure.

Together, these developments could provide opportunities for the growth of new start-up companies, labs, and significant R&D outcomes are expected to arise from this partnership in the life science industries. It will only do so if designed with considerations for start-ups and tech-transfers in mind. The RAHC is also expected to attract prominent scholars to the region. Facilities along the 10th street from west to east -Tech Park at the down town, School of Informatics, new Health Center, IU's tech park with cyberinfrastructure building, and all other amenities of the downtown- would create "10th Street Corridor" as a hub emergence of a development based on R&D, innovation with new start-ups.

Along with this partnership, West Gate Academy Technology Park also has considerable potential for further knowledge spill-offs and entrepreneurial growth. According to the Strategic Plan for Economic and Community Prosperity in Southwest Central Indiana there is a "lack of sufficient entrepreneurial culture" in the region. A major strategy stemming from this report is to build upon the existing advantages presented by the Technology Parks in Bloomington and West Gate to, "establish entrepreneurial hubs that provide facilities and lab equipment, professional development, coaching and mentorship, and access to risk capital, thereby accelerating the rate of commercialization and the creation of start-up companies." The suggestion is to initially develop two hubs, one in Bloomington and one at the West Gate. The expected cost per hub would be about \$10 million over five years, with an additional \$1.5 to \$2 million each year after that.

Naval Support Activity (NSA) Crane also offers a great asset for the region to pursue entrepreneurial economic development. An Educational Partnership signed recently between NSA Crane and IU could benefit both institutions by bolstering their capacity in cutting-edge naval/military systems and technology. Joe Carley from Office of Engagement states there are a number of IU PhD and Graduate students studying at NSA Crane. Many stakeholders declared that the attitude of Crane's leadership has a great influence on success of this partnership. Even if there is a threat of that the enthusiasm of Crane leadership towards the economic engagement with the community would disappear, the connections established recently will probably improve further in time and not let degrade.

Recommendations

Many resources exist for aspiring entrepreneurs in Bloomington, but they need to be more accessible. Overcoming barriers between organizations and institutions is crucial if Monroe County is to have a consistent and united narrative for entrepreneurial growth along with the underlying policies to make it a reality.

⁴³ Battelle Technology Partnership Practice. (2014). Strategic Plan for Economic and Community Prosperity in Southwest Central Indiana



- Make the Switchboard more interactive.
- The San Diego CONNECT model, particularly its "Entrepreneurial Experience" and "Match" modules, should be carefully studied and considered as ways to revamp the Switchboard.
- Integrate B-Start into Switchboard as an "Entrepreneur Experience" module.
- Create a "Match" module to bring together capital seekers, investors, talent seekers, and talent. This would sync with Bloomington's innovative culture and enable connections among IU researchers, entrepreneurs, and venture capitalists and boost the commercialization of research activities of the university.
- Create a well-coordinated and comprehensive entrepreneurial development platform, Bloomington needs a Switchboard Team which is made up of professionals to execute it effectively.
- Continue to enhance networking events to bring together entrepreneurs, community stakeholders, and economic
 development organizations.
- Address Bloomington's finance problem through carefully crafted policies and programs, perhaps an angel network organization like The Upstate Carolina Angel Network.
- Consider the potential of crowdfunding as an alternative finance tool for the region.
- Create new linkages with larger markets, such as Chicago, to provide seed capital funds for entrepreneurs (similar to Hyde Park Venture, Chicago or Gravity Ventures, Indianapolis).
- Reach out to local businesses to identify and develop programs and resources they want and need.
- Foster relationships with Local First Bloomington, Downtown Bloomington Inc., Bloomington Entertainment and Arts District, and other local nonprofits and initiatives aimed at fostering small business and social capital growth.
- Work in concert with the ISBDC to strengthen its program that provides information to new business owners.
- Provide low- or no-cost courses to business owners regarding HR, management, and professionalism.
- Advocate for business owners so they have legal protection from irresponsible landlords, and encourage landlords to support local businesses.
- Connect business owners with other business owners to form mentorships, support and knowledge sharing.
- Create a microloan fund to provide potential start-up loans of under \$50,000.
- Provide greater investments in Certified Technology Park, ensuring it includes start-up space (e.g. Launch Fishers).
- Streamline local government regulations to boost new business formation and create a more entrepreneurial mindset.

Chapter 5: BEDC Strategic Planning

About Accelerators

Start-up accelerators support early-stage, growth-driven companies through education, mentorship, and financing in a fixed-period, cohort-based setting. Participants go through a period of focused hands-on attention, which provides company founders and entrepreneurial hopefuls an opportunity to learn at a rapid pace. The point of accelerators is to act as a catalyst to the growth of a company or idea—speeding-up the learning cycle in a time-constrained format. Budding entrepreneurs of the program compress years' worth of learning into months.¹

Additionally, accelerator programs can help stave off commonly made mistakes often times are the difference between a successful and a failed company or idea.² These programs and the educators that drive them bring experience and use that experience to steer their students out of the line of fire and place them on the path of least resistance.

Accelerators can have a positive effect on the performance of the start-ups they work with, even compared with other key early-stage investors, such as leading angel investment groups.³ Early evidence from Susan Cohen and Yael V. Hochbert shows that accelerators have a big effect on attracting seed and early-stage financing, as well as additional investors to a community, including outside of the accelerated companies. This brings additional spillover benefits to the wider regional economy.⁴

About B-Start

B-Start is a pre-accelerator program of the BEDC designed for Indiana University and Ivy Tech student technology start-ups. B-Start participants are at the earliest stage of their business development and are coached through a rigorous comprehensive process of cohort activities and individualized mentorship over the course of the program to build a foundation for accelerating the growth of their start-ups. The B-Start program accepts a select number of students to begin in September and complete by December. Students are then paired with a mentor or coach based on best fit and the needs of the student and B-Start arranges for multiple consultations with local experts throughout the deration of the program. Upon completion of the program, students will receive a "graduation stipend" earmarked towards the further development of their business.

Methodology

A literature review was done to research the limited volume of best practices associated with the rather new accelerator entrepreneurial strategy. The qualitative research was performed through interviews with 7 accelerators. All of them were unique in their structure but commonalities exist between most. One example is they all benefit from some form of university collaboration. Potentially the most interesting was 6 of the 7 based their program off of "Techstars", a preaccelerator out of Denver.

⁴Cohen, S., & Hochberg, Y. V. (2014). Accelerating startups: The seed accelerator phenomenon. Available at SSRN 2418000.



¹ Kohler, T. (2016). Corporate accelerators: Building bridges between corporations and startups. *Business Horizons*.

² Ford, C. M. (2015, September). Beyond a Social Capital Agenda: Exploring Metrics and Motives Inside Business Incubators in Arkansas. In 5th International Conference on Engaged Management Scholarship: Baltimore, Maryland.

³ Bhatli, D., Borella, P., & Karimaa, J. (2012, January). Open for Acceleration: The Case of Startup Sauna in Finland. In *International Conference on Innovation and Entrepreneurship (IE). Proceedings* (p. 82). Global Science and Technology Forum.

Outside of private pre-accelerators, the others (nonprofit, consortium and university models) all tend to have funding issues either from the beginning or down the road. This drastically affects the long-term viability of a program. Those entities with a diverse set of funding streams and a larger donor base benefited from less uncertainty. More information on specific programs can be found in Appendix E.

Findings

1. Mentors are the backbone

Successful accelerators must connect students with mentors and foster opportunities for engagement over the course of the program. Essentially, an accelerator program is only as good as its educators and mentors. All of the accelerators interviewed noted this as the key in creating bonds that live past the cohorts start and finish date. In order to keep these mentors as a vital resource it is essential for B-start to frequently engage them in programing, utilize them to expand the network, keep their workload reasonable and always provide public forums for praise. These mentors need to have backgrounds in a wide-variety of business disciplines that include development, legal, marketing, and fundraising. Accelerators have moved away from simply assigning each group a mentor. Instead, they have groups meet with five or more throughout the duration of the program, which enables distinct opportunities for students to learn about alternate strategies. Having formal events that can expose groups to a series of mentors for short durations is key to maximize this

2. Accountability and problem solving

to determine how each person can help them.

Programs should clearly articulate the potential conflicts that can emerge between mentors, company founders, and the companies themselves. Those conflicts should themselves become opportunities to learn and grow. ⁵

process. Through this process groups can take the time to listen and learn, as opposed to always be pitching their ideas,

The accelerators interviewed, stressed the need to hold groups accountable. They emphasized the importance of visualizing goals through white-boards, and provided giant posters that were physical in nature. This makes the accelerator more efficient and allows a series of benchmarks that must be complete in order to make it to Demo Day. Part of the accountability includes building skillsets that require discipline, ability to prioritize and ability to easily track all activities. Spreadsheets, "to do list", and / or a dashboard that tracks all stages and components of the process have been helpful in building skills and keeping students on track.

3. Networking and a Culture of Collaboration

The accelerator, through collaboration, must build a culture and network that will last for the companies' lifetimes. By contrast, less successful accelerators lack a specific vision and fail to set expectations. The opportunity to learn with fellow early stage entrepreneurs can be invaluable for a number of reasons including sharing experiences, sharing ideas, teamwork and developing future partnerships. The experience of starting in the program at the same time is an opportunity to foster strong bonds and communal identity with each cohort. The process itself should value that ideas, capital, talent and a culture of openness and collaboration are all vital to the success of start-ups. Cohorts will be able to analyze their ideas, test analyst, and helping each other.

⁵ Hathaway, I. Accelerating growth: Startup accelerator programs in the United States. Brookings Institute (2016) Advanced Industries Series, Number 81 of 84



In choosing applicants, it is important to look holistically at the entire cohort instead of individual marketable ideas. Cohorts should be chosen in how well they would work together and complement one another. If the future companies are complimentary then they can enhance the entire experience. It can stimulate their perception of fellow entrepreneurs as colleagues providing emotional support and motivate each of them by the perception of competition. The goal is to create a cohort bonding that months, even years, after its completion a network among past students will remain.

B-Start Recommendations

- Challenge the community to galvanize financial support for sustainability
- Build a consortium of shared resources: government and university providing facility/administrative costs while donors funds programmatic expenses
- Add a pre-igniter workshop to enhance applicant pool
- Hire a dedicated staff member to cultivate donors, enhance mentor pool, and improve curriculum
- Keep stringent selection procedures to reassure investors and enhance legitimacy

Poverty in Bloomington

The BEDC does not currently have any initiatives that address poverty in Bloomington, so this is an area of opportunity. Bloomington has one of the highest poverty rates in the country (39% according to the 2010 US Census)⁶, and academics and officials typically attribute the inflated numbers to the large student population.⁷ However, as Indiana Business Review (2012) shows, the median income in Monroe County is lower than the median incomes of Indiana and the United States, and the percentage of families in poverty is higher for Monroe County (14%) than Indiana (10%) or the United States (10%).⁸ Bloomington has a significant number of non-student residents living below the poverty line and/or without a home, according to reports by IU's Criminal Justice Methods Working Group and the Bloomington Food Policy Council and which has been acknowledged by recently elected Mayor John Hamilton.⁹

The Bloomington Food Policy Council (2015) identifies several food deserts, which are categorized as limiting residents' access to healthy foods due to a variety of reasons, including the Crestmont, Reverend Butler, Walnut Woods, Maple Heights, and Broadview neighborhoods. Implications for residents living in food deserts are worsened health, poor economic outlooks later in life, loss of productivity due to illness, irritability and fatigue, and inefficient spending as convenience and fast foods tend to be more expensive than food from major grocery stores. Food deserts typically arise as residents do not have access to a grocery store, which can be caused by the lack of grocery stores and poor access to public transportation. The recommendations proposed by the BFPC include creating mobile farmers' markets for low-income neighborhoods and awareness about available community garden plots. Several neighborhoods in Indianapolis also suffer from food deserts, and efforts to revitalize those communities often involve bringing in grocery stores.

[&]quot;Gunderson, C., Kreider, B., and Pepper, J. (2011). The Economics of Food Insecurity in the United States. Applied Economics Perspectives and Policy. 33, 281-



⁶ US Census Bureau. Quick Facts Bloomington city, Indiana. Census.gov. http://www.census.gov/quickfacts/table/VET605214/1805860w

⁷ Pirog, M. (2015). Poverty and Public Policy lecture. Indiana University.

⁸ Krause, A. and Slaper, T. (2012). Bloomington Forecast 2012. Indiana Business Review. http://www.ibrc.indiana.edu/ibr/2011/outlook/bloomington.html.

⁹ Kane, S., et al. (2009). Homelessness in Bloomington, Indiana: A Preliminary Ethnographic Study of Martha's House. Department of Criminal Justice, Indiana

University. http://www.indiana.edu/~culturex/Homelessness%20Report.pdf.

¹⁰ BFPC Assessment Working Group. (2015). Bloomington City Food System: A First Look. http://bloomingtonfpc.org/sites/default/files/documents/BloomingtonCityFoodSystemAFirstLook.pdf.

Mayor John Hamilton plans to address poverty in Bloomington through multiple means, especially considering housing. His solutions include protecting low-income individuals from being refused a Section 8 home and providing more affordable housing, as the current average rent in Bloomington is higher than the state's average. The BEDC can step in regarding the efforts of various groups—research teams at the University, local agencies like Local First and the Bloomington Food Policy Council, and local homeless shelters and food pantries—and act as a connector of all these efforts, which gives the impression that city agencies and nonprofits care as much about the city's poor and disadvantaged as they do about businesses and talented University students.

Around the country, efforts to revitalize communities involve multiple agencies, nonprofits, government groups, and economic development organizations. A good example is the Avondale Meadows revitalization project in Indianapolis. Several actors work together or separately to address high crime, unemployment, education disparities, and health.¹³ Purpose Built Communities is a nonprofit organization that came into the Meadows to act as a liaison and link the various groups together. While the individual groups carry out research and projects largely on their own, the presence of PBC is helpful to coordinate efforts, secure funding and bring important issues to light so they become priorities. The United Northeast Community Development Corporation (UNEC) assists a number of communities in Indianapolis, developing goals and plans in concert with other agencies, including Avondale Meadows.¹⁴ SPEA students studying the project in 2015 concluded that the involvement of economic development corporations into efforts to address poverty and health in disadvantaged communities is helpful because clear, goals-oriented action plans facilitate coordination between different agencies, nonprofits and government groups and demonstrate to community residents that the city cares and is invested in the long-term health of the neighborhood. The BEDC can act similarly for disadvantaged communities in Bloomington by supporting efforts to better those areas.

Recommendations:

The BEDC should:

- Identify organizations, initiatives and projects by the government, University-affiliated groups and local agencies and nonprofits that are addressing poverty reduction and alleviation in Bloomington.
- Act as a liaison between various efforts to improve the lives of the city's poor by endorsing and drafting action plans to revitalize neighborhoods that are currently slipping under the government's and society's radars.
- Work with groups like the Bloomington Food Policy Council to advocate to bring grocery stores or farmers' markets to bring healthy food to food deserts.
- Make rising incomes of all residents a priority while providing appropriate, well-placed, low-income housing so residents are able to afford Bloomington's cost of living and still participate in the workforce.

¹⁴ UNEC Development Corp. Our Neighborhoods. http://www.unecdc.org/the-community/our-neighborhoods/.



¹² Earley, N. (2015). Hamilton Outlines Poverty Plan. IDSnews.com. http://www.idsnews.com/article/2015/04/hamilton-outlines-poverty-plan.

¹³ Purpose Built Communities. (2015). T.E.A.M. Meadows 2016 Goals and Updates.

- Facilitate evaluative studies of Bloomington's public transit system to make sure every neighborhood can access and use the system.
- Engage with the Office of the Mayor and the Common Council to develop action plans to address poverty in Bloomington that involve as many stakeholders in the BEDC's network as possible.

Metrics and Work Plan

It is difficult to improve programs without first knowing how they are performing in the present. Establishing metrics focused on outcomes of a project instead of the inputs allows the BEDC to track its progress, and make adjustments as necessary.

Current literature on the topic of measuring economic development suggests that metrics should be SMART, or Specific, Measurable, Achievable, Relevant, and Time-based.¹⁵

- Specific: Metrics should not simply restate a program's goals, but should be focused on what should track a program's success. For example, "attracted new businesses" would not be a good measure. Instead, use "Number of businesses brought into Bloomington because of BEDC involvement."
- Measurable: Metrics should be quantifiable. In certain circumstances qualitative data can also be used. Survey data from local businesses who are affected by the particular program.
- Achievable: Setting ambitious goals is important for growth, it is also important for the goals to realistically reached.
- Relevant: Outcomes will measure the success of the project, while inputs simply show resources devoted. Rather than tracking the number of phone calls made to increase membership, the BEDC should track the number of new members added as a result of phone calls should be tracked. If the BEDC deems the return on invested time of phone calls for new members inefficient, it will need to find new ways to accomplish this goal. This can be tracked each month over the course of the year. If a change needs to be made, it can be made in the next work plan, described below.
- Time-based: The appropriate amount of time to collect data will be dependent on the particular activity. For example, tracking self-sustaining B-Start businesses is best done on a quarterly basis, over a several year period. Other activities are better tracked on a monthly or yearly basis.

One useful metric the BEDC can use to measure its B-Start program is counting how many self-sustaining businesses the program creates. It will be important to track businesses for several years after they pass through the program. Since these businesses will be measured over a several year period, there will be some lag time in the final conclusion of the success for each year. While it would be ideal to track immediately, simply tracking the number of students completing the program, or using evaluations after the program will not tell the BEDC how successful the program has been. Creating sustainable businesses is the goal of the program, and this will be the measure of success that the BEDC should follow. Keeping track of the number of students and their satisfaction with the program is also important, but since student satisfaction doesn't measure effectiveness, this measure is less important. In order to get the most out of the metrics the BEDC creates, it should tie them to another tool, the work plan.

¹⁵ Matthew Fischer and Associates, 2011.



Work Plan

A work plan should be inclusive of all of the BEDC's activities, and should align with the mission of the BEDC. The work plan should include all of the major initiatives the BEDC is working on including B-Start, the Bloomington Life Sciences Program, the Regional Academic Health Center. The plan should also include business retention and expansion activities, plans for business attraction, and funding and marketing strategies.

Each of these different categories should be split into a list of tasks that breaks the larger project into workable pieces, which incorporate metrics for each piece. By having valuable data collected its activities, the BEDC will have frequent feedback on its performance.

Work plans should be planned on a yearly basis, starting on the calendar year, or any 12-month period that makes the most sense to the organization. The plan may need to be modified throughout the year as conditions change, but a yearly plan will allow the BEDC to get "out of the weeds" temporarily, and make some longer term plans.

Each task should give some way of measuring its success. There will be many tasks that will be considered ongoing, and will only be measured at certain times, and there are other tasks that occur only at certain points, and have immediate feedback. The metrics will aid the BEDC in altering the next year's work plan to ensure the continued improvement of the BEDC's efforts.

When the goals are reached, the BEDC can decide whether to raise the goals in the next period. If goals are not reached, the BEDC can choose to modify its activities, or if necessary, realign the metrics.

Recommendations

- Establish a work plan to begin at the beginning of each calendar year, laying out the projects the BEDC will undertake, and a breakdown of the projects into several tasks that aid in the project's completion.
- Metrics should be established for each project. These metrics should conform to the principles of SMART, in order
 to assure that the metrics are accurately tracking the outcomes of each project. This will allow the BEDC to discern
 how successful it has been in its activities, and adjust strategies as needed.
- The BEDC should develop a survey to be distributed to local businesses to obtain their input on the activities of the BEDC. The survey should include the knowledge and use of BEDC services, as well as their opinion of the effectiveness of the organization. The survey should be distributed to all businesses in Bloomington, so as not to only get the opinion of those who have already committed resources to the organization. The survey should be administered yearly to provide feedback on the BEDC's improvements. This survey should serve as a baseline for the BEDC. The results should help illustrate where the current gaps are, and possibly provide insights on how to improve them. The insights gained can point out which areas the work plan should focus. Future surveys can be a helpful metric in determining the BEDC's effectiveness.

Conclusion

Monroe County, and specifically Bloomington, currently has a strong economic profile relative to the surrounding region. However, relying on previous success will not enable the community to accomplish its goals of fostering both an entrepreneur-friendly environment and a knowledge based economy. Achieving these goals will require a forward looking economic development strategy that simultaneously capitalizes on existing resources and seeks out new opportunities to pursue. To this end, the previous chapters identified a series of strategies and tactics to guide the BEDC and related stakeholders as they move forward.

Job Creation

- Conduct outreach with stage two companies
- Gauge interest in apprenticeship models with stage two companies
- Strengthen relationship with Indiana University to help foster technology, talent and tolerance

Job Attraction

- Promote information technology sector
- Continue to develop co-working options
- ·Connect businesses with Indiana University

Education

- •Increase exposure and accessibility to Ivy Tech
- Facilitate relationships with Hoosier Hills Career Center

Entrepreneurship

- •Increase visibility, accessibility, and availability of resources for entrepreneurs
- Utilize networking events to bring entrepreneurs, community stakeholders, and economic development professionals together.
- Continue to develop the Certified Technology Park

Strategic Planning

- Continue developing the capacity of B-Start
- •Expand the resources available to current and future business owners to help them naviage the process of starting and maintaining a business

Appendices

Appendix A: Monroe County Competitive Advantage

The competitive advantage of Monroe County's top industries as compared to other counties within Economic Growth Region 8. Within the Monroe County column, the numbers in italics represent the county's most competitive industries. The boxes that are underlined represent the county with the greatest competitive advantage within that industry.

Industry	Brown	Daviess	Greene	Lawrence	Martin	Monroe	Morgan	Orange	Owen
Advanced							Ü	Ü	
Materials	0.15	0.22	0.39	1.22	1.01	1.98	1.23	0.03	3.81
Arts, Enter-									
tainment,									
Recreation									
& Visitor									
Industries	3.47	0.46	0.21	0.4	0.07	0.52	0.35	<u>4.86</u>	1.27
Biomedical/									
Biotechnical									
(Life Sci-	0.22	1.05	1.20	1.10	0.00	1.05	1.00	0.25	1.64
ences)	0.33	1.05	1.38	1.18	0.09	1.25	1.03	0.37	<u>1.64</u>
Business &									
Financial	0.40	0.55	0.02	0.66	2.02	0.52	0.22	0.12	0.20
Services	0.48	0.55	0.82	0.66	<u>2.03</u>	0.53	0.32	0.13	0.38
Chemicals									
& Chemical Based Prod-									
ucts	2.09	0.68	0.51	2.87	2.17	2.8	0.81	0.69	1.12
Education &	2.09	0.08	0.51	<u> 2.67</u>	2.17	2.0	0.61	0.09	1.12
Knowledge									
Creation	0.26	0.2	0.26	1.53	0.11	<u>4.81</u>	0.27	1.29	0.31
Information	0.20	0.2	0.20	1.55	0.11	7.01	0.27	1.27	0.51
Technology									
& Telecom-									
munications	0.55	0.14	0.11	0.1	2.07	0.79	0.59	0.03	0.2
Manufactur-									
ing Super-									
cluster	0.81	0.53	0.47	<u>1.43</u>	0.1	0.83	0.34	0.34	2.44
Electrical									
Equipment,									
Appliance &									
Component									
Mfg						<u>3.41</u>	0.35		
Transportati									
on Equip-									
ment Mfg		0.74	1.11			1.49	<u>1.77</u>		0.43
Mining			2.51	<u>6.79</u>		2	2.87	1.49	

Appendix B: Tax Incentive Programs for Video Game Companies in 21 States

State/ Territory	Program	Incentive	Notes
Alabama	Alabama Film Incentive	Rebates on 35% of Alabama labor, 25% of non-payroll expenditures	Total production cost must fall between \$500,000 and \$20 million
Arkansas	Arkansas Film Commission	Rebates on 20% of qualifying expenditures, plus 10% for Arkansas labor	Companies must spend \$200,000 on the project in a six-month period
Colorado	Colorado Film Incentive	Rebates on 20% of Colorado expenditures	Program has limited funding each fiscal year
Connecticut	Digital Media and Motion Picture Tax Credit	10% to 30% tax credit on Connecticut expenditures	Credits issued on a sliding scale; only >\$1 million productions get full 30% credit
Florida	Entertainment Industry Financial Incentive Program	20% to 30% tax credit on expenditures (including wages)	\$8 million incentive cap per project
Georgia	Entertainment Industry Investment Act	20% to 30% tax credit	Project must spend minimum \$500,000 on qualified Georgia ex- penditures, entire program has a fis- cal year cap of \$25 million
Hawaii	Motion Picture, Digital Media, & Film Production Tax Credit	15% to 20% tax credit on Hawaii expenditures	\$8 million cap per qualified production
Louisiana	Digital Interactive Media and Software Development Incen- tive	35% tax credit on labor, 25% tax credit on expenses	No cap, no minimum requirement, option to take a rebate worth 85% of tax credit

Appendix B: Continued

State/		T	N. A
Territory	Program	Incentive	Notes
Maine	The Maine Attraction Film Incentive	Tax rebate on 12% of Maine resident labor, tax credits on 5% of other production expenses	Minimum qualified expenditure of \$75,000, credit cannot exceed taxes owed
Michigan	2013 Film and Digital Media Incentive	32% of payroll, 27% of production expenditures	Minimum \$100,000 spend required, incentives reduced beginning in 2015
Mississippi	Motion Picture Production Incentive	25% rebate of base investment made in the state, 30% of resident payroll	\$50,000 minimum spend to qualify, \$8 million rebate cap per project
New Jersey	Edison Innovation Digital Media Tax Credit Program	20% tax credit for payroll and production expenses	Minimum \$2 million of qualified expenditures, half of which are NJ resident salaries, must create and maintain 10 new full-time jobs with minimum \$65,000 salary
New Mexico	NM Refundable Film Production Tax Credit	25% tax credit on labor and qualifying expenditures	No minimum spend requirement, claims to be submitted annually
North Caroli- na	Digital Media Credit	15% of wages, 20% on research expenses paid to NC schools	Minimum \$50,000 spend to qualify; \$7.5 million cap on credits received
Ohio	Ohio Motion Picture Tax Credit	35% tax credit for resident wages, 25% for other expenditures	Minimum \$300,000 Ohio spend to qualify
Puerto Rico	Puerto Rico Produc- tion Tax Credit Pro- gram	40% tax credit on wages, production costs	Minimum spend of \$100,000
Rhode Island	Motion Picture Tax Credit	25% tax credit on wages, production costs	Minimum spend of \$100,000, \$5 million cap on credit
Texas	Moving Image Industry Incentive Program	Up to 22.5% of eligible Texas spending	\$100,000 minimum spend required; at least 60% of production must be completed in TX; 70% paid employees and contractors must be TX residents
Utah	Motion Picture Incentive Program	Up to 20% tax credit on payroll and in-state spending	\$6.8 million annual incentive cap for the program
Virginia	Virginia Motion Picture Production Tax Credit	Up to 20% tax credit for wages and expense, plus up to an extra 20% on wages if eligible spending tops \$1 million	Minimum \$250,000 in-state spending to qualify
Wisconsin	Wisconsin Film Tax Credit	25% wages and expenses	Wages for first three years of development must top \$100,000

Appendix C: A New Model for Finance

Greenville, South Carolina is another city with similar characteristics to Bloomington. A small town with a population of about 65,000, Greenville is home to a number of colleges and university satellite sites. Greenville is not as close to a major metropolitan area, like Bloomington with Indianapolis. According to a report from NerdWallet and Entrepreneur Media, Greenville is one of the top-ten small cities for business based on factors including its environment and the average revenue per business.

Greenville has also shown a commitment to providing solutions for the funding problem faced by new start-ups. The best example of this commitment is the Upstate Carolina Angel Network (UCAN), a group of accredited investors located in Greenville who invest in and support start-up and early-stage, high-growth businesses. UCAN is not an investment fund, but rather, a network of investors who make individual investment decisions after working together to evaluate candidate companies. They also serve as a valuable resource for guidance and advice to entrepreneurs and their businesses once an investment is made. According to a 2014 study conducted by CB Insights, UCAN has been one of the top-ten angel groups in the U.S. among premier groups from traditionally strong venture markets like California, Boston and New York.

UCAN was formed in early 2008 through the efforts of co-founder investors, with support from the Greater Green-ville Chamber of Commerce. Regular monthly meetings for investors are held on each month, which typically include presentations from one or two candidate companies and due diligence reports or updates on companies that have previously presented. There are also occasions for member education and networking. Since its inception in 2008, UCAN has invested more than \$11 million in 36 companies.

Sources: Upstate Carolina Angel Network. Top 10 Angels Send Strong Signal for South Carolina. Retrieved on March, 25, 2016 from http://www.upstateangels.com/top-10-angels-send-strong-signal-for-south-carolina/
Entrepreneur. (February 13, 2015). Will These 5 Models of Crowdfunding Replace Angel and VC Investors? Retrieved from https://www.entrepreneur.com/
article/242767

Appendix D: San Diego CONNECT

CONNECT's website could serve as an effective model for Switchboard. Two of its four modules seem especially applicable here in Bloomington and Monroe County.

Entrepreneur Experience – This module connects participants to a start-up accelerator program called Springboard. The program is a free mentoring program for innovators and entrepreneurs within science and technology fields, and can only be applied to via CONNECT. Over 500 mentors make themselves available. Once an entrepreneur applies via the online application, CONNECT's executive team matches the individual with a mentor that can help meet specific needs. In addition to the mentor match program this module provides interested individuals with information about local workshops and other entrepreneurship focused events.

Connect-Match – This module has two matching functions. 1) Capital Match events aim to connect qualified investors with vetted companies seeking financing, 2) Talent Match allows member companies to reach CONNECT's talent pool. One can find current job openings with detailed descriptions and requirements without company names. Job seekers need to apply through CONNECT. Additionally, this module features investors – both venture capitalists and angel investors – as well as researchers from UCSD and the rest of the city. All contacts are made through CONNECT, again with the guidance of the executive leadership team.

Source: San Diego's CONNECT. (n.d.). Retrieved from http://www.connect.org/

Appendix E

Entity	City/State	Status	1st Cohort	Cohorts	Duration	Misc.
Actuate Boise	Boise, ID	Non-Profit, part of Trailhead	2015	1	6-9 months	Started as an informal incubator
Capital Innovators	St. Louis, MO	Private	Early 2011	10	Twice annually, 12 Weeks	Selects 5-6, tech-based
Discovery to Product (D2P)	Madison, WI	University	2014	25 groups	On-going, Fall/Spring semester	Has as pre-igniter workshop
RAIN	Eugene, OR	Consortium	July 2014	3	Twice annually, 12 Weeks	Built on cohort collaboration
StarR	San Diego, CA	Non-Profit housed at UC San Diego	Fall 2013	5	Semester, Spring/Fall	Moved from mentor assignments to
TechArb	Ann Arbor, MI	University	2010	13	Once a year to six months	Two tracks: Idea 2) Venture 15 Teams per semester
The Leatherby – Launch Lab	Orange, CA	University (Chapman)	2014	3	Semester, 3 cohorts per year	Doubles as an incubator Focused on film related produces