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The Role of Higher Education in Rural Economic Development: A Program Evaluation of the Colorado Rural Jump-Start Program

Abstract

Since the financial crisis of 2008 and the subsequent recession, some urban and metro areas have experienced economic recovery, but not all geographic areas are recovering at the same pace. Federal, state, and local programs developed to help rural communities with their economic development efforts have failed to make much of a difference. In 2015, as a potential solution, Colorado spearheaded an initiative to incentivize economic development in rural communities. The Rural Jump-Start (RJS) Zone Act provides tax relief to new businesses and employees of those businesses, with the idea that because of these benefits, more businesses would retain, start, locate, or relocate to the rural economically distressed areas of Colorado.

This program evaluation delved into the complexities of the RJS program. It used the theory-driven program evaluation model (Chen & Rossi, 1983), with the community capitals framework (Emery & Flora, 2006) as the theoretical framework and the entrepreneurship ecosystem (Isenberg, 2014) as the conceptual framework. Data were gathered through interviews of 19 stakeholders—four considered program visionaries/creators, five from government entities, four program participants/recipients, three from institutions of higher education, and three representing other stakeholders—as well as document review. The qualitative data were coded and analyzed using Dedoose.

Four general findings emerged: (1) the community capitals framework model of a healthy community ecosystem must be in place for an entrepreneurship ecosystem to be built, and the entrepreneurship ecosystem needs to be in place for the RJS to be successful; (2) the perception of success varies with the differing perceptions of the stakeholders; (3) geographic location matters; and (4) the level of success of the RJS correlates to the level of involvement of the institution of higher education. The implications of these findings are discussed and recommendations offered for improving the program so that it will have the best effect on the most communities.

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First Advisor

Ryan Evely Gildersleeve, Ph.D.

Second Advisor

Michelle Tyson, Ed.D.

Third Advisor

Cynthia Bell, Ed.D.

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The Role of Higher Education

in Rural Economic Development:

A Program Evaluation of the Colorado Rural Jump-Start Program

A Doctoral Research Project

Presented to

The Faculty of the Morgridge College of Education

University of Denver

In Partial Fulfillment
of the Requirements for the Degree

Doctor of Education

by

Maureen T. Stepp

August 2019

Advisor: Dr. Ryan Gildersleeve

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Author: Maureen T. Stepp

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Chapter One:

Introduction

Problem Statement/Background

Since the financial crisis of 2008 and the subsequent recession in the years following, most urban and metro areas have experienced economic recovery and are witnessing flourishing economies. Yet, not all geographic areas are recovering at the same pace. The economic growth in rural Colorado lags significantly behind that of the booming urban areas (University of Colorado Boulder, 2015). The disparity of growth produces a phenomenon called the 'urban-rural divide' and is discussed regularly at the state capital (Sen. Roberts, personal communication, February 6, 2019).

According to the U.S. Census Bureau (2018), the term *rural* encompasses all population, housing, and territory not included within an urban area. Urbanized areas are regions with 50,000 or more people. Urban clusters are defined as regions with at least 2,500 but fewer than 50,000 people. In Colorado, the Front Range consists of the areas east of the Rocky Mountains, where all of the metropolitan cities lie along the I-25 corridor, including Fort Collins, Boulder, Denver, and Colorado Springs. According to the Census Bureau definition, the remainder of the state is considered rural (Figure 1).

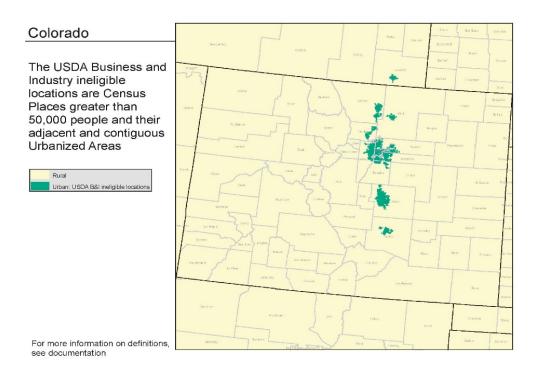


Figure 1. Rural vs. Urban Colorado.

Federal, state, and local programs have been developed to help Colorado's rural communities with their economic development efforts, yet many of these initiatives have failed to make much of a difference. Economic development in rural areas can be difficult, as these areas do not have access to the same quantity or quality of resources or capital found in metro areas. These challenges uncover certain questions: Who is responsible for economic and community development and for job growth? Is it the government (federal, state, or local)? Is it the local business community? Is it the institution of higher education (IHE)?

In 2015, as a potential solution to this phenomenon, the State of Colorado, under then Governor John Hickenlooper, spearheaded an initiative to incentivize economic development in rural communities. Senate Bill 15-282 (State of Colorado Legislature, 2015) created the Rural Jump-Start (RJS) Zone Act, which provides specific tax relief to new businesses and employees of those businesses. The theory behind this bill was that, because of these tax relief benefits, more businesses would locate to the rural, economically distressed areas, providing jobs and capital investments that would spur additional economic growth. Governor Hickenlooper identified this bill as one of the highlights of his administration, which was included in his final Jobs and Economy Report (Hickenlooper, 2018).

Purpose and Research Questions

The purpose of this research study was to conduct a program evaluation of the Colorado RJS. I conducted my analysis using both a theoretical framework (community capitals framework) as well as a conceptual framework (entrepreneurship ecosystem). In addition, Rossi's theory-driven program evaluation model was used as the research methodology.

This study was guided by two research questions and one subquestion:

- 1) In what ways does the involvement of an IHE in the RJS provide an increased value to the entrepreneurship ecosystem and its stakeholders?
 - a. In what ways does the RJS contribute to increased economic development and how do we know?
- 2) What roles/responsibilities should the IHE perform in supporting the success of the RJS?

Project Description

Through interviews with the stakeholders of the RJS program, I provided answers to these questions. The interviewees fell into one of five categories: (1) the visionaries and creators of the program, (2) the government proponents and administrators, (3) the businesses and recipients of the benefits of the program, (4) the IHE partners, and (5) other interested stakeholders. I interviewed 19 different individuals/entities over a course of 6 months (November 2018–April 2019). In addition, I collected secondary data in the form of reports from local and state organizations.

Theoretical Framework: Community Capitals Framework

This evaluation utilized the community capitals framework. According to Emery and Flora (2006), the community capitals framework provides a systems perspective for analyzing community and economic development programs. The capitals include (1) natural, (2) cultural, (3) human, (4) social, (5) political, (6) financial, and (7) built (Appendix A). A solid combination of these elements exemplifies a healthy community. This framework identifies the assets in each community capital category, where investments are made, the interaction among the different capitals, and the impact across capitals. This is an asset-based framework, rather than a needs or deficit approach. It provides a way to analyze programs for their success. The framework can also demonstrate how a program can affect change in a collaborative community change project. By using the community capitals framework as a theoretical framework, a project can be systematically evaluated beyond its specific goals to look at the broader community as a whole (Flora & Flora, 2005). This theoretical framework and systems

approach to program evaluation, discussed in detail in Chapter 3, helps to identify the strengths and improvement strategies for the Colorado RJS program.

Conceptual Framework: Entrepreneurship Ecosystem

An ecosystem is defined as "the complex of a community of organisms and its environment functioning as an ecological unit"; additionally, it is "something (such as a network of businesses) considered to resemble an ecological ecosystem especially because of its complex interdependent parts" ("Ecosystem," n.d.). Building on this concept by applying the ecosystem model to the business environment, an entrepreneurship ecosystem describes a collaborative effort of different stakeholders working together to support local economic development strategies. According to Isenberg (2014), an entrepreneurship ecosystem is a dynamic, self-regulating network of various stakeholders, and part of an economic development strategy used in a number of areas around the country (see Appendix B). A key partner in this ecosystem is the IHE, and especially the community college. Through its design, the RJS program intentionally brings diverse stakeholders together to help revitalize rural communities. This is a prime example of an entrepreneurship ecosystem.

Extensive research has been conducted on the important role IHEs play in local and regional economic development strategies (Bers, 2013; Burke & Phelan, 2016; Flannery, 2012). Evaluating the RJS as an example of an entrepreneurship ecosystem allows for in-depth examination of the role of the IHE. Its role is vital for the long-term economic vitality of the region in which it is located. Recently, community colleges have

begun to play an increasingly more involved, complex, and essential role in the economic development strategies of the communities they serve (Bers, 2013).

Given the economic struggles facing Colorado's rural communities, community colleges are especially poised to contribute to local and regional economic and community development activities (Bers, 2013; Nickoli, 2013; Swanger, 2106). According to Nickoli (2013), community colleges are well positioned to help companies interested in relocating, growing their workforce, or training their existing workforce so they can rely on a steady stream of skilled workers. Since community colleges are more agile than their well-established university counterparts, they can respond more quickly to the needs of the workforce by providing training across a wide range of disciplines. The participation of the college in community economic development strategies can aid in the forecasting of the new certificates or degrees that might be needed by local businesses. Presently, community colleges are playing a significant role in the development and support of entrepreneurship ecosystems. This role includes sponsoring business incubators, assisting students and community members with business education, and providing vital resources such as connections to loan funds and to business mentors. The role can also include the training of entrepreneurs who, in turn, can potentially expand their businesses and hire graduating students (Isenberg, 2014).

Exploring the role of the IHE in the development of entrepreneurship ecosystems sheds light on the importance of the IHE in the design of the RJS program. Researching this role aids in the comprehension of how the IHE, as part of the RJS program, contributes to the community and to local and regional economic growth. This research study examined these relationships, the interconnectedness, and the importance of local

and regional institutions working together to create an innovative entrepreneurship ecosystem.

Methodology: Theory-Driven Program Evaluation Model

Rossi's theory-driven program evaluation model aided in examining the viability of this program. This model of program evaluation concentrates on what a program can do, as well as what it cannot do. It looks at the concept of program inception and the goals the program hopes to accomplish. It provides evaluators the option to not only look at inputs and outputs, but examine whether or not the program recipients, design, operation, and intended outcomes are consistent with the original theory (Stufflebeam, 2001). It then evaluates if the theory was sound by examining the actual outcomes.

The RJS program was based on the proposition that by providing specific state and local tax relief, more businesses would start or relocate to specific tax-free zones, thereby jump-starting the local economy. A key tenet of the program is a partnership with an IHE. This evaluation focused on the importance of this role and examined how leveraging this relationship creates a comprehensive collaboration between the IHE, the state, and regional and local organizations. The IHE is included in the RJS program as a partner to provide a skilled workforce and direction on education and training needs. This approach provides essential information for program administrators and policymakers to look at the viability of the program and possible areas of improvement.

After interviewing program stakeholders, I share the stories of those involved in stimulating economic growth in rural Colorado. The themes emerging from these stories

are useful for understanding the role of the IHE and the effects of the RJS in increasing rural economic growth.

Positionality

Rural entrepreneurship and specifically the development of entrepreneurship ecosystems intrigues me for a number of reasons. As an assistant dean of instruction for the business programs at a rural community college, I engage with the local business community on several different levels. I serve on boards, develop internship sites, rely on their business expertise to guide our offerings, and help students and local residents find resources for new business start-ups or existing business expansion. I continually receive calls from local businesses looking for additional help and guidance with their business strategies.

One of the pillars of my institution's strategic plan is "community and economic development: serve the local community to help local businesses thrive" (Colorado Mountain College, 2019). However, without a precise definition of community and economic development, this pillar can be interpreted in different ways. This program evaluation examined one particular partnership of an IHE in a collaborative, regional entrepreneurship ecosystem, the Colorado RJS program. With this program evaluation, I hope to help my institution develop a solid and realistic definition of community and economic development.

Limitations

The limitations of this study included the small sample size and the newness of the program. RJS has been implemented for only 3 years; therefore, little data were available to be examined. Some of the key stakeholders involved at the beginning of the planning and implementation stages were no longer in the same roles and were not available for interviews. In November 2018, a new governor of Colorado was elected, which resulted in changes to some stakeholders at the state level. A few of the new businesses have already closed; consequently, finding those stakeholders proved to be difficult.

Statement of Significance

This program evaluation is relevant to demonstrate how, by working together, various stakeholders can make a difference in their own communities, without relying on federal or state support. The results of this analysis demonstrate how and why the role of the IHE is critical in the ecosystem and why it was included as a requirement in the RJS. Conducting a study of the first community in Colorado to implement the program, which includes the local IHE Colorado Mesa University, as well as Mesa County, the City of Grand Junction, the Grand Junction Chamber of Commerce, and other economic development entities in the business community, I offer insights into the overall effectiveness of the program. Since the study demonstrates that the program is not equally successful in all rural areas of the state, the recommendations that are made could be used by the legislature to improve the next version of the bill, which will come out in 2020.

Chapter Two:

Literature Review

In this literature review, I focus on the core components of the project: the theory-driven evaluation (TDE) model for program evaluation, the theoretical community capitals framework (CCF), the conceptual framework of the entrepreneurship ecosystem (EE), and the role of the institution of higher education (IHE) in rural economic development. I additionally reference economic development programs at the federal, state, regional, and local levels geared toward spurring increased economic activity. Furthermore, my literature review focuses specifically on the role that community colleges are increasingly playing in this space.

Theory-Driven Model for Program Evaluation

Rossi's TDE aided in examining the viability of this program. This social science research model of program evaluation concentrates on what a program can do, as well as what it cannot do. It looks at the concept of program inception and the goals the program hopes to accomplish. It provides evaluators the option to not only look at inputs and outputs, but to examine whether or not the program recipients, design, operation, and intended outcomes are consistent with the original theory (Stufflebeam, 2001). It then evaluates if the theory is sound by examining the actual outcomes.

Another definition states that TDE is the "process through which program components are presumed to affect outcomes and the conditions under which these processes are believed to operate" (Donaldson, 2001, p. 471). According to a study conducted by Renger (2010), when using TDE, it is important to make the program theory explicit. Once this theory is established, the program logic is established so that essential correlations between the program theory, activities, and outcomes can be made. Rogers (2009) described TDE as the "process by which change comes about for an individual, organization, or community" (p. 3). Baldwin, Hutchinson, and Magnuson (2004) discussed how programs are being asked more frequently to prove empirically that they are working. This empirical evidence is usually shown through impact evaluation studies, which demonstrate if the desired outcomes have occurred.

In her evaluation of an associate program of nursing, Peer (2017) discussed why she used the TDE model of program evaluation. She posited that TDE is a conceptual framework developed to review program creation that determines what should be and what actually is, in order to prove program effectiveness. The approach evaluates why a program is supposed to work based on an assessment of how it was implemented (Chen, 2006). This evaluation model combines both the applied and scientific facets of research to formulate questions that examine the efficacy of inputs to produce expected outcomes. It is valuable in helping stakeholders identify program weaknesses or identify program improvements (Chen, 2006; Donaldson, 2007).

After examining the varied uses of the TDE model, which explores the original program theory and then evaluates the outcomes, I determined it was a suitable model for the program evaluation of the Colorado Rural Jump-Start (RJS) program.

Community Capitals Framework

The CCF provides a theoretical framework to assess community or economic development projects. The CCF posits that healthy sustainable communities have seven types of capital: (1) built, (2) cultural, (3) financial, (4) human, (5) political, (6) social, and (7) natural (Flora, Flora, & Fey, 2004). This framework offers a systematic way to examine how multiple community resources can be leveraged to influence any of the other forms of capital, which in turn can affect the entire community system. The term 'spiraling up' has been used to explain a phenomenon whereby success builds on success (Duffy, Kline, Swanson, Best, & Mckinnon, 2017). The CCF model helps explain this reinforcing notion in which assets gained in one capital domain increase the likelihood that other assets will also be gained in other capital domains (Emery & Flora, 2006). Emery and Flora (2006) also explained how this framework can describe the opposite of 'spiraling up.' Because of the interconnectedness of the community assets, if a community does not invest in one capital, the likelihood of other capitals diminishing greatly increases. For example, if investments are not made in built infrastructure (roads, bridges, airports, broadband), the likelihood of new businesses moving into the community is greatly reduced.

The CCF model focuses on the interactions between and among the seven capitals. A brief summary of each of the capitals is provided below (Colpaart, 2017):

• **Built capital:** Any human-made environment, i.e., housing, transportation infrastructure, telecommunications infrastructure and hardware, utilities, buildings, equipment, and infrastructure (Colpaart, 2017).

- Cultural capital: How people understand the world and how they interact within it, including traditions, values, and languages. Cultural capital influences how creativity, innovation, and influence emerge and are nurtured, i.e., religion, education, knowledge, intellect, style of speech, and dress. "Cultural capital has been used to evaluate employment, education, achievement, families, gender issues, multiculturalism, and racism" (Colpaart, 2017, p. 39).
- Financial capital: The financial resources available to invest in community capacity building, to support civic and social entrepreneurship, and to accumulate wealth for future community development, i.e., physical goods that assist in the production of other goods and services, financial wealth, investment, credit, loans, and cash money. This can be used, for example, to evaluate social relations and networks, female entrepreneurship, new venture performance, poverty reduction, and social enterprise (Colpaart, 2017).
- **Human capital:** The skills and abilities of people to develop and enhance their resources, as well as to access outside resources and knowledge to increase understanding for community building, i.e., knowledge, habits, social and personality attributes, creativity, risk-taking, talent, experience, training, judgment, and wisdom. Human capital has been used to evaluate leadership, management, high school dropout rates, earnings, skill formation, and inequality (Colpaart, 2017).
- Political capital: Access to power, organizations, resources, and power brokers.
 Political capital also refers to the ability of people to find their own voice and to engage in actions that contribute to the well-being of their community, i.e.,

credibility, relationships, endorsements, campaign contributions, lobbying, access, connectivity, and standards enforced by rules and regulations. This capital can evaluate immigration, civil society, democracy, social networks, attitudes, and moral hazard (Colpaart, 2017).

- Social capital: The connections among people and organizations. Bonding social capital refers to those close, redundant ties that build community cohesion.
 Examples of bridging social capital include neighborhood or community groups, friendship networks, schools, and civic associations, and more recently, crowd funding or sourcing. Social capital has been used to evaluate a wide variety of topics like civic engagement, community health, trust, social networks, cheating, and terrorism (Colpaart, 2017).
- Natural capital: Assets that are located in a specific area, encompassing any
 natural resources, amenities, and natural attractions. Natural capital has been used
 to evaluate outdoor industry attractions, tourism, and the effect of increased usage
 of natural scenic areas (Colpaart, 2017).

By examining how each of these capitals separately manifests in the RJS program and how they interact, I completed a comprehensive evaluation of the interconnectedness and importance of balance between them. Through this framework, the outcomes of the RJS program and the influence on the community can be acknowledged, the advantage points can be identified, and the areas needing increased investment can be explored.

This framework has been used to examine community resilience and long-term sustainability. Indeed, several scholars have used CCF as a framework for their research (Anderson, 2014; Duffy et al., 2017; Pigg, Gasteyer, Martin, Keating, & Apaliyah, 2013).

Duffy et al. (2017) used the CCF model to explore how one community in Cuba is capitalizing on an agro-ecotourism industry. They researched how as tourism around an urban, organic cooperative farm increased, community capitals also improved. The increased international interest in the farm had a 'spiraling-up' effect on tourism, which in turn had a 'spiraling-up' effect on the overall economy of the community.

In their study of community development activities, Pigg et al. (2013) examined the interrelationships between the seven community capitals. They found that "mostly all community development activities investigated exhibited the deployment of multiple capitals that appear to interact with each other in mutually beneficial ways" (p. 500). Instead of using the term 'spiraling-up,' these authors used the term 'leveraging' to describe how improvement of one capital appears to influence the utilization of another capital.

Another example of a research project that utilized the community capitals framework is Anderson (2014), where she explained how the CCF was created to aid researchers and community development champions in understanding how communities behave in order to help craft better communities. Anderson stated how she looked at the capitals and the interaction between them to create a 'spiraling-up effect,' in which greater benefits are realized from investment in existing capitals (Anderson, 2014; Emery & Flora, 2006). She used this framework as a tool to explain what happens in a boomtown economy. Communities exposed to rapid economic growth must take intentional action to preserve and nurture the unique assets of the community, so that if the phenomenon that created the rapid growth changes, the community is prepared for continued growth and survival. According to Anderson (2014),

There have been several examples of rural communities across the country that have suffered a post-boom downturn and required decades to recover, if they even recovered at all. On the other hand, there have been examples of rural communities who have banded together using the resources they had to rebuild their communities into a place they were proud to call home. (p. 311)

After investigating projects that have used the CCF model, which explored the resiliency and health of communities, I determined it was a representative theoretical model to use for this research project and the Colorado RJS program.

Entrepreneurship Ecosystems

Similar to the CCF model, EE is a conceptual model for analyzing a community's vibrancy for supporting new business start-ups. An EE describes a collaborative effort of different stakeholders working together to support local economic development strategies. According to Isenberg (2014), an EE is a dynamic, self-regulating network of various stakeholders and part of an economic development strategy used in a number of areas around the country (see Appendix B).

The CCF model and EE model have several common capitals or domains (Figure 2). Each model studies the financial health of a community and the financial resources available for investment, such as micro loans, angel investors, venture capital, private equity, public capital markets, and accumulated wealth, which would be available for future community development. Additionally, each model surveys the political climate that describes access to power, decision makers, lobbyists, government institutions, existing regulatory framework, and venture-friendly legislation (Isenberg, 2014). Human capital is also a shared domain of the two models. Human capital refers to the skilled and unskilled labor market; the existence of an educational institution that can provide

general degrees, skilled training, and specific entrepreneurship training; and the ability to access outside resources. Cultural capital is another shared component. Cultural capital describes how success stories can be used to spur additional successes, how connections between people and organizations contribute to societal norms, and how the social status of the entrepreneur and wealth creation contribute to the ecosystem.

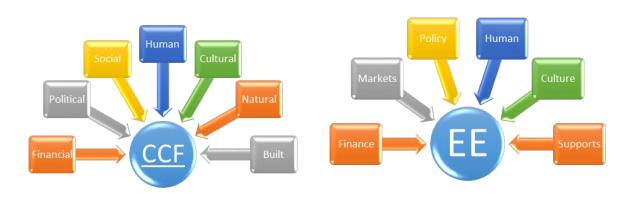


Figure 2. Comparison of community capitals framework and entrepreneurship ecosystems.

Various scholars (Isenberg, 2014; Malecki, 2018; Mason & Brown, 2014; Stam & Spigel, 2016) have defined EE in diverse ways. Isenberg's (2014) definition includes the six domains of an EE: (1) financial, (2) policy, (3) markets, (4) human capital, (5) culture, and (6) supports (see Appendix B). Fernandez, Blanco Jiménez, and Cuadrado Roura (2015), in their research around business incubation, posited that business incubators are entrepreneurial organizations that operate within the EE. They defined 13 elements of the EE: (1) leadership, (2) government, (3) culture, (4) successful stories, (5) human capital, (6) financial capital, (7) entrepreneurial organizations, (8) education institutions,

(9) infrastructure, (10) economic clusters, (11) networks, (12) support services, and (13) early customers. Stam and Spigel (2016) defined EEs as "a set of interdependent actors and factors coordinated in such a way that they enable productive entrepreneurship with a particular territory" (p. 4).

In another definition, Mason and Brown (2014) defined EE as follows:

a set of interconnected entrepreneurial actors (both potential and existing), entrepreneurial organizations (e.g. firms, venture capitalists, business angels, banks), institutions (universities, public sector agencies, financial bodies) and entrepreneurial processes (e.g. the business birth rate, numbers of high growth firms, levels of 'blockbuster entrepreneurship,' number of serial entrepreneurs, degree of sellout mentality within firms, and levels of entrepreneurial ambition), which formally and informally coalesce to connect, mediate and govern the performance within the local entrepreneurial environment. (p. 5)

Malecki (2018) studied the phenomenon of the ever-evolving EE. He described an EE as "dynamic, local, social, institutional, and cultural processes and actors that encourage and enhance new firm formation and growth" (p. 1). He also indicated how the role of the university as a hub or node of the ecosystem is an important aspect that has been the focus of much research. Providing highly skilled talent is one of the main functions of the IHE. Additionally, the IHE can also act as a network nucleus, influencing regional strategies and national policies.

These definitions discuss a collaboration of multiple stakeholders. For this ecosystem to work, as in the case of the RJS, the entrepreneur community, the local and state economic development entities, and the IHEs all need to work together to support the development of new and existing businesses, which in turn benefits the overall economic growth of the community. Without all of these stakeholders joining forces,

creating a positive economic impact in rural communities is difficult at best, or at worst nearly impossible.

There are varying theories about who should sponsor, fund, support, and create EEs. The remainder of this chapter explores federal and state support, regional and local support, university and college support, and the support of smaller community colleges.

Federal and State Support

At the federal level, the U.S. Small Business Administration is the key federal organization that supports economic development, business development, and business growth for the country's small businesses. A few well-established programs include the state-run Small Business Development Centers, the nonprofit partner Service Corps of Retired Executives, and the Guaranteed Loan Program. More recently, the Small Business Administration has implemented the Boots2Business program, which supports veterans in starting new businesses after military service (Heriot, Dickes, & Jauregui, 2017).

Additionally, the U.S. Department of Agriculture (USDA) has a long history of supporting rural economic development. Since 2009, the USDA Rural Development has invested \$11 billion to start or expand 103,000 rural businesses. In 2016, the USDA invested \$39.3 million in loans and grants for 68 projects that will support small rural businesses and communities in 26 states (USDA, 2016).

Another federal program that helps rural economic development is the USDA Business and Industry Guaranteed Loan Program. In 2009, Johnson conducted a program evaluation of this loan program where the USDA subsidizes loans made by rural banks to

rural businesses. Using basic ordinary least squares and propensity score matching models, she found a positive correlation between loan reception and increased employment growth.

Beyond federal programs and support, quite a few states have also created small business support programs. A recent study indicated that there are approximately 2,000 economic development incentive programs within the 50 states plus Washington, D.C. (LeRoy et al., 2015). For example, Minnesota's Job Opportunity Building Zones offers new businesses certain exemptions from sales, income, and property taxes.

The Colorado Office of Economic Development and International Trade is the department responsible for these economic development programs throughout the state. Colorado has a program similar to Minnesota's Job Opportunity Building Zones called the Job Growth Incentive Tax Credit. The office also manages programs like the advanced industry tax credit, the enterprise zone tax credits, and a strategic fund initiative, which are among 35 business incentives financing programs at the state level. Colorado's RJS program, focusing on rural economic development, which passed in 2015 and was signed and implemented in 2016 (Choose Colorado, 2019), is the focus of this research study.

Regional and Local Support

In addition to federal and state programs, many regional and local municipalities promote economic development activities and programs. Rather than rely on external funding that is out of their control, these small towns have taken their fate into their own hands. According to Morgan and Lambe (2009), these small town economic development

approaches cannot be quantified or placed into a traditional model. Creative approaches to leadership, culture, an existing entrepreneurial spirit, and investment in social capital are required to aid in community revitalization. A collection of 45 case studies of small town development efforts led Morgan and Lambe (2009) to develop a list of best practices of community development. One such best practice, called economic gardening, started in Littleton, Colorado, in 1989. This innovative approach to economic development focuses on "growing your own" by cultivating local entrepreneurs and developing a supportive environment (Morgan & Lambe, 2009). According to Morgan and Lambe (2009), small town economic development has to utilize multiple approaches or use various tools to find one that works for its community. The most successful communities utilize innovation and new ways of thinking and doing community development. After the 2008 economic meltdown and subsequent recession, Morgan and Lambe (2009) described a community's collective sense of hitting bottom and how this economic crisis provided opportunities for community leaders to rise to the challenge and initiate new ways of planning and implementing development efforts.

Another regional and local economic development strategy, started in the 1980s, is business incubation. According to the National Business Incubation Association (NBIA, 2007), business incubations offer business support services that help accelerate the successful development of new start-ups and early stage businesses by providing entrepreneurs with various targeted resources and services (Bruneel, Ratinho, Clarysse, & Groen, 2012). Although the value proposition of business incubations has evolved over the last few decades, providing this type of support is important for small businesses wanting to emerge in small rural communities.

States and local municipalities struggle for a solution to create economic development and revitalization, as many federal and state programs are not sufficient for the needs of rural communities. According to Ring, Peredo, and Chrisman (2010), creating extensive business networks provides numerous opportunities for dealing with scale and capability limits in rural communities. Rural communities provide unique social capital that can lead to effective change, resource exchange, and collaborative entrepreneurial activities.

College and University Support

Having reviewed a number of federal, state, regional, and local programs designed to support rural economic development, the focus now turns to the role of the IHEs. This role has been defined and executed in very different approaches. This section explores the research on how IHEs aid in the formation and support of EEs and rural economic development.

Universities have historically played a large role in entrepreneurship training and support services. In addition, according to a study done by Shaffer (2015), IHEs are progressively becoming a crucial partner in designing economic development strategies. Research universities, in particular, are working to support the creation of innovative ideas that will strengthen the country's competitive advantage. Subsequently, they are now aiding entrepreneurs with positioning these ideas for commercial use, as well as providing other support services such as management and technical assistance. This new focus of economic development activities places the IHE at the core of the new strategies.

Rafn (2012) explored the formation and implementation of regional educational and economic development endeavors. A clear leader in the concept of rural, regional partnerships, the Northeast Wisconsin Educational Resource Alliance (NEWERA) proved how different stakeholders in a regional educational ecosystem could collaborate to "serve the region with quality, seamless education, provide essential resources for communities, businesses, and government, and drive regional and state economic vitality" (p. 4). Building on this success, NEWERA was a key player in helping to develop the 'New North.' This initiative combined some of the area economic development entities and created regional goals to help stimulate the economy. With NEWERA as a partner, the demonstrated collaboration and leadership is ensuring the region has a strong future (Rafn, 2012).

Another example is the University of Michigan-Flint's Innovation Incubator.

Custer (2016) stated that this incubator supports new and emerging businesses with services like programming, business plan creation, and ongoing mentorship. The program is designed to address important social issues in the community. It is named "innovation" to emphasize the focus on social entrepreneurship, innovation, and creativity. This program provides access to crucial entrepreneurial resources for both students and community members. It is also helping a depressed, postindustrial city to reinvent itself.

Burke and Phelan (2016) highlighted a new, rural entrepreneurship program at the State University of New York (SUNY)-Cortland, where a community partnership exists to capitalize on the expertise of the business community to mentor and foster new start-up businesses of SUNY-Cortland students. In return, the businesses receive other services, such as help with research, technology, marketing, and other business services. This

aligns with one of the strategic goals of the SUNY system to increase the role of colleges and universities in New York's economy through innovation, knowledge transfer, and community engagement.

As Swanger (2016) explained, for communities to prosper, they need a skilled labor force that is educated in conjunction with an IHE. In today's shifting economy, in tandem with the dynamic needs of employers, there is a growing need for IHEs to participate as a critical partner in the economic development of the regions they serve. Moreover, in some instances, community leaders are looking to the IHE to spearhead the innovation and revitalization of their region.

Community College Support

As these examples suggest, large research universities are considered a crucial partner in the economic fabric of their communities. Nonetheless, community colleges are increasingly becoming the partner of choice for business and economic development entities (Swanger, 2016). Beyond their mission of education and training, "community colleges can, and should, play a larger role in community and economic development" (Swanger, 2016, p. 17). This is true especially in rural communities where the local college is usually the only IHE. Community colleges could easily convene business, government, and community organizations, act as a facilitator around current issues, and help create a vision for the future. Furthermore, the American Association for Community Colleges (2011) is helping to create national partnerships to support local community colleges in providing increased business services to support start-ups and grow small businesses.

According to Nickoli (2013), community colleges are in the best position to aid companies that want to grow their workforce or train their existing workforce. Most community colleges are more agile and able to respond more quickly to workforce needs, so they are able to provide training across a wide range of disciplines. The participation of the college in the community can assist in forecasting what new certificates or degrees might be needed by local businesses. More recently, community colleges have been progressively playing a significant role in building EEs.

Community colleges are strategic partners in establishing thriving local and regional economies. Bers (2013) stated that community colleges not only contribute an educated workforce for the economic vitality of their region, but they also sponsor small business assistance centers, which can provide programs and services to aspiring entrepreneurs who need mentorship and guidance for start-up or expansion of their small business. In addition to accredited degree and certificate programs, community colleges offer seminars, workshops, consultations, technology resources, and networking opportunities. Furthermore, community colleges collaborate with local and regional economic development entities and governmental agencies in developing regional strategies to attract new and retain existing businesses (Bers, 2013).

In 2011, Goldman Sachs, in association with the American Association for Community Colleges, instigated the "10,000 Small Businesses Initiative" with a \$500 million investment in small businesses. This was created to help small businesses create jobs and economic opportunities by opening access to education, financial capital, and other support services (American Association of Community Colleges, 2011). Eligible business owners receive 100 hours of free business education, 6 to 8 weeks of business

support, technical assistance, one-on-one business advising, business clinics, and expert advice on business growth. By collaborating with a community college, the program offers innovative models that should benefit the local communities and, as a result, the entire nation.

In an *NEAToday* interview conducted by Mary Ellen Flannery (2012), Dr. Jill Biden discussed the crucial role of community colleges:

Community colleges play an absolutely critical role to America's future because they are working directly to meet the needs of employers in their regions. They can meet evolving workforce needs by being flexible and adaptable. They can train the next generation of our workforce as well as train existing workers in new technologies. (p. 1)

In this interview, Dr. Biden reinforced the fact that the community college is an ideal partner in the creation and support of local EEs. Because community colleges are nimble, flexible, and adaptable to the ever-changing requirements of the local business community, they play a key role in identifying what workforce skills are needed and then training the current and future workforce to meet these needs. This provides an additional example of why the IHE is a key partner in the RJS program.

Currently, community colleges are playing an increasingly more involved, complex, and essential role in the economic development strategies of their communities. A missing piece in this research is how that role has evolved and why it is so critical to have the IHE as part of a regional EE. This program evaluation studied this relationship in one particular case of a comprehensive collaboration of state, regional, local, and IHE partnerships: the Colorado RJS program. The next chapter details the study's methodology.

Chapter Three:

Methodology

Introduction to the Program

This program evaluation studied the role that institutions of higher education (IHEs) play in collaborating with community stakeholders in the development of entrepreneurship ecosystems (EEs). In addition, the evaluation determined to what extent the Colorado Rural Jump-Start (RJS) Program is driving economic growth in rural Colorado and contributing to the development of a rural EE. Since economic growth in rural Colorado lags behind that of its prosperous urban areas (University of Colorado Boulder, 2015), the State of Colorado, under Governor John Hickenlooper, supported a plan to ignite economic development in rural communities. Senate Bill 15-282 passed the Rural Jump-Start Zone Act (State of Colorado Legislature, 2015). Codified under Colorado Revised Statutes 39-30.5-101, the program is jointly administered at the state level by the Colorado Office of Economic Development and International Trade (OEDIT), the Colorado Economic Development Commission, and the Colorado Department of Revenue.

This program was modeled after a similar program addressing rural economic development in New York State called Start-up New York:

START-UP NY helps new and expanding businesses through tax-based incentives and innovative academic partnerships. START-UP NY offers new and expanding businesses the opportunity to operate tax-free for 10 years on or near eligible university or college campuses in New York State. Partnering with these schools gives businesses direct access to advanced research laboratories, development resources, and experts in key industries. (Start-Up NY, n.d., para. 1)

Similar to the Colorado RJS, the Start-Up NY program was designed to help create jobs in economically distressed areas of the state. It was common for graduates from the State University of New York to move to the big city because they could not find a decent-paying job in their local community. The lack of well-paying jobs in rural areas leads to the continuation of struggling rural communities. Rural Colorado is experiencing this same phenomenon where there are not enough local jobs in rural areas to sustain a living wage for recent college graduates. As such, they are moving to the Front Range metro area where good-paying jobs are plentiful. The exodus of human capital from rural communities results in their continued economic struggles.

Program Description

The RJS program entices new businesses to start or relocate in rural, economically distressed areas of Colorado. It does this by offering certain tax relief benefits to the business and the new employees of that business (Choose Colorado, 2019).

An RJS zone, as defined by Senate Bill 15-282, is created in a county with a population of less than 250,000 people that has been designated as economically distressed by the Economic Development Council. According to Senate Bill 15-282, economically distressed entails the following: (1) per capital income that is substantially below the statewide average, (2) local gross domestic product or similar performance

measures that are substantially below the statewide average, (3) unemployment levels that are substantially above the statewide average, (4) a net loss of people of workforce age, and (5) a countywide concentration of pupils eligible for free lunch (State of Colorado Legislature, 2015).

Another prerequisite of the RJS program is a collaboration between IHEs, counties, municipalities, local economic development entities, and local businesses and their employees. The county must meet the definition of economically distressed described above and then pass a resolution to participate in the program. The participating municipality must be located within one of these eligible counties and must also pass a resolution to participate. In fact, a municipality is not required to participate simply because the county is participating.

The IHE is a 2- or 4-year public college or university in Colorado. These institutions are crucial partners in the process. Businesses interested in receiving the tax credits must work closely with the local IHE to ensure that their product or service does not directly compete with that of another Colorado business. This is known as the competition clause. The IHE, with local knowledge and expertise, is considered the local administrator of the program; therefore, it is in the best position to guide the new business through the application process. The business also communicates its hiring needs to the IHE. If it needs employees with specific skills, the IHE connects it with the appropriate academic department to facilitate filling those needs. Together they develop a partnership that ensures graduates have the needed skills. Not only does the partnership benefit the IHE with increased connections in the community, but it also benefits the company by filling internship positions with students, as well as providing students with mentorships

and, eventually, jobs. The IHE administers the program and attests that the new business could result in positive benefits to the community and the local economy. In addition, the IHE ensures that the mission and activities of the business align with or further the academic mission of the IHE.

There are several eligibility requirements for businesses interested in participating in the program. The organization must be a new type of business in Colorado and must be locating in the RJS zone. The business must apply to the IHE and be endorsed by that institution. Senate Bill 15-282 offers tax relief from state income taxes for the new business, relief from state sales and use tax for the new business, relief from county and municipal business personal property tax for the new business, and relief from state income taxes for the employee. This relief is effective for 4 years, and the company has the option to apply for an extension for another 4 years, for a total of 8 years. To participate and receive the benefits, an employee must work for a business that is approved by the Economic Development Commission, be making the county median wage, and work for the new business for at least 6 months.

Mesa County, in conjunction with Colorado Mesa University, was the first county in the state to sign up for the RJS program; therefore, I concentrated my evaluation in this area. By comparing the economic development activity before and after the implementation of this program, this evaluation helps determine the impact of the RJS program. It also highlights the role of the IHE and its contribution to the economic growth of the communities it serves.

Specifically, this program evaluation addressed two research questions:

- 1) In what ways does the involvement of an IHE in the RJS provide an increased value to the EE and its stakeholders?
 - a. In what ways does the RJS contribute to increased economic development and how do we know?
- 2) What roles/responsibilities can the IHE perform in supporting the success of the RJS?

Conceptual Framework and Research Paradigm

The study utilized the theoretical community capitals framework (CCF), exploring each of the seven community capitals—(1) natural, (2) cultural, (3) human, (4) social, (5) political, (6) financial, and (7) built—and their relation to one another and to the goals of the RJS. According to Emery and Flora (2006), the CCF provides a systems perspective for analyzing community and economic development programs. CCF offers a systematic way to examine how multiple community resources can be leveraged to influence any of the other forms of capital, which in turn can affect the entire community system. Keeping these as the central components of my inquiry provided a clear framework for analysis.

Applying a pragmatic research paradigm allows for focus on the research problem and utilizes all approaches to understanding the problem (Creswell, 2003, p. 11). As the research questions are fundamental to the process, data collection and data analysis methods are selected based on providing insights into the questions and not to any loyalty to alternative paradigms. Pragmatic researchers have the freedom to choose the methods, techniques, and processes of research that best meet their needs (Creswell, 2007, p. 23).

The pragmatic paradigm focuses on the consequences of actions, is problem centered, and is oriented to real-world practice. This paradigm aligned with this particular program evaluation because it aimed to incorporate all stakeholder viewpoints. All voices are critical to completely understand the program and its successes and challenges, areas of opportunity, and strategies for improvement.

Evaluation Methodology

By interviewing program stakeholders—the visionaries and creators, the government proponents and administrators, the business participants and recipients of the benefits, the IHE partners, and other interested stakeholders—I was able to tell the stories of those involved in stimulating economic growth in rural Colorado. Additionally, I used previously collected data at the local and state levels to determine if economic growth was occurring and if it could be correlated to the RJS program. In addition, I evaluated in what ways the IHE was aiding in the success of the program.

Program Evaluation Model

Rossi's theory-driven evaluation (TDE) model was the model used to produce answers to my research questions. This evaluation allowed me to examine the role of the IHE and the participating businesses. My qualitative data collection methods included one-on-one interviews, secondary data collection, and review of artifacts and news reports. Through my interview questions, I determined how each community capital was improved or expanded, as well as diminished or negated.

Rossi's TDE model (Chen & Rossi, 1983) was the ideal model for this particular program evaluation, as it provides a clear framework for analyzing inputs, activities, and

short-, medium-, and long-term outcomes. When Chen and Rossi (1983) developed their TDE model, they urged evaluators to look at not only inputs and outputs, but also context, process, and implementation. Utilizing this qualitative approach allows for a rich description of complex relationships. This TDE model involves systematic review of the initial theories behind program development, subsequent program implementation, and resulting program outcomes. I evaluated how well the program was working compared to the intended outcomes. These insights can assist stakeholders in understanding the components of the program that are working well and identify those that are not, as well as make recommendations for improvement.

Interview Participants

The purpose of interviewing the program stakeholders was to capture and tell the stories of the businesses that have been successful in Mesa County, the economic impact of those businesses in the region, the impact and importance of the role of the IHE, and the effect it was having on their students. By using the TDE methodology, the evaluation can adapt to different perspectives, based on the feedback and data gathered. As such, I was able to tell the stories of success or failure for these new businesses and the RJS program as a whole.

My goal was to include as many stakeholders as possible, including those who were involved in the visioning, implementation, and administration of this program. All stakeholders were allowed to provide a voice, and no voices were excluded. To my knowledge, no vulnerable populations were included in this study.

I conducted interviews in the locations of the participants, i.e., the program administrator of Colorado Mesa University was interviewed at the university and the business owners at their places of business. I interviewed 19 individuals: four considered program visionaries/creators, five from government entities, four program participants/recipients, three from IHEs, and three representing other interested parties.

The program visionaries and creators. The group of program visionaries and creators included those who proposed the legislation, i.e., administrators at Colorado Mesa University, the business people in Grand Junction, and local state legislators. It also included those who endorsed the program, i.e., the Grand Junction mayor and city council, Mesa County commissioners, the local IHE (Colorado Mesa University), the local economic development partners (the Grand Junction Economic Partnership), and local business people who supported this effort. These included Derek Wagner, Colorado Mesa University Vice President for Intergovernmental and Community Affairs, Jay Seaton, Publisher of the Grand Junction Daily Sentinel, Kristi Pollard, Former Director of the Grand Junction Economic Partnership, and Steve Jozefczyk, the Deputy Director of the Grand Junction Economic Partnership.

The government proponents and program administrators. The group of government proponents and administrators included the governor, the department heads and program administrator of the Colorado Office of Economic Development and International Trade (OEDIT), the Colorado Department of Revenue, the Colorado Economic Development Commission, and the local state legislators. These included Jeff Kraft, OEDIT Director of Business Funding and Incentives, Ken Jensen, OEDIT Deputy

Director of EDC Operations, Senator Ray Scott, Senator Dylan Roberts, and Brenden Reese, Director of the Division of Taxation.

The Colorado OEDIT manages numerous programs to aid economic development throughout the state, such as the Rural Technical Assistance Program, the Advanced Industry Tax Credit Program, the Colorado Creative Districts Program, and the Enterprise Zone Tax Credit Program, to name just a few. Along with the RJS program, the OEDIT manages these programs at the state level to help local communities grow and diversify their economies.

By interviewing the stakeholders involved in the vision, planning, and implementation of this tax relief program, I was able to evaluate the theory behind the program and the expected results from its implementation. Unfortunately, with a change of administration in November 2018, some of these stakeholders were no longer in office and were not available for interviews. The new state department heads were not familiar with the program yet and therefore were not able to answer my questions. For this section of data collection, I had to rely on a few stakeholders who were still in a position related to the RJS.

The program participants and benefit recipients. The program participants included those businesses created in Mesa County because of the RJS program. Six new businesses were created in Grand Junction in 2016, two in 2017, and four in 2018. By interviewing the owners of these businesses, their employees, the local economic development partners, and other local businesses, I was able to determine if the outcomes proposed at the origination of the program matched the actual outcomes. These included Steve Cullen and Curtis Flores from Dude Solutions, Mark

Lewis, Owner and President of Rocky Mountain Manufacturing, Mike Blakeman, Founder of Visual Globe, and Page Tucker, CEO and President of Prostar Geocorp.

The IHE partners. The IHEs involved in the program included Colorado Mesa University in Grand Junction and Colorado Mountain College in Glenwood Springs.

Other regional and community colleges in other parts of the state were designated as the IHE partner in the program, but none had taken an active role or recommended a new business; therefore, these were beyond the scope of this project. These included Matt Gianneschi, COO and Chief of Staff of Colorado Mountain College, Randy Rudasics, Manager of the Yampa Valley Small Business Development Enterprise Center, and Derek Wagner, Colorado Mesa University Vice President for Intergovernmental and Community Affairs.

Other stakeholders. I interviewed a few other economic development entities in other rural areas of the state who were aware of the program, but who had not yet been directly involved with a new business that could take advantage of the program. These interviews were significant because they were able to illuminate why the program was not successful in particular areas. I also interviewed a selection of others who were involved in economic development and the development of EEs, but were not directly involved in the RJS. By interviewing these other interested stakeholders, I was able to clarify the level of awareness of the program throughout the state. These included Laura Lewis Marchino, Executive Director of the Economic Development District for Southwest Colorado, Kevin Batchelder, Garfield County Manager, and Makala Barton, Rio Blanco County Economic Development Specialist.

I invited more than a few participants from each category to interview. I did not exclude any stakeholder who had relevant feedback to provide. As my research mainly focused on the Western Slope of Colorado, I was not able to interview anyone from the Eastern Plains, the southeast, or the northeast regions of the state.

Data Collection

My data collection methods were twofold. Principally, I interviewed the stakeholders in the program (see Appendix C for interview protocols). Additionally, I gathered secondary data, including documents and data that had already been collected by the organizations/participants in the program. The types of data gathered consisted of reports from the newly formed business, annual reports of the OEDIT program manager, and economic impact studies conducted by the cities, counties, and state departments. All of these economic impact reports are public knowledge and were available on each organization's website.

Data Analysis

I recorded the interviews, with the participants' consent, and kept a copy on my password-protected laptop to provide integrity and confidentiality. In the analysis of the interview data, I transcribed the interviews and coded the responses for recurring themes. Coding is an exploratory, problem-solving technique with no specific formulas to follow (Saldana, 2009, p. 8). Saldana indicated that codes are essential elements of the story and enable the development of categories and analysis of their connections. Creswell (2007, p. 153) noted that the codes that emerge from the data may not only be those that were expected, but also those that are surprising or unusual.

To analyze the collected data, I looked at trends and economic impact studies to determine if the program was having an influence on the regional economy. By reviewing the coding and resulting categories, as well as the impact studies, I concluded which parts of the program were working and which areas needed improvement. I used this analysis to answer my research questions and make recommendations for improvement.

Criteria for Quality

According to Creswell (2011), methods used to validate the integrity and quality of a qualitative research study include triangulation, member checking, detailed descriptions, research bias clarification, and peer debriefing. I used these protocols throughout the program evaluation and analysis to ensure that the data and themes being captured truly reflected the intentions of the participants. I checked in with the program administrator and various stakeholders throughout the process, asking for clarifications and making adjustments as needed.

The evaluation findings, corresponding implications, and recommendations will be successful if the OEDIT RJS program administrator utilizes the stakeholder input and insights to make the necessary improvements. If it is successful, the OEDIT and legislative representatives could also use these recommendations to propose a renewal of the bill, which would allow the continuation of the program for another 5 years. The bill is scheduled for a sunset review in the 2020 legislative session.

Chapter Four:

Findings

Context

To answer my research questions, I interviewed 19 different individuals/entities: four program visionaries and creators, five government program proponents and administrators, four program participants/recipients, three representatives of institutions of higher education (IHE), and three other interested parties. The interview protocols can be found in Appendix C. These interviews helped me to investigate these research questions:

- 1) In what ways does the involvement of an IHE in the Rural Jump-Start (RJS) program provide an increased value to the entrepreneurship ecosystem (EE) and its stakeholders?
 - a. In what ways does the RJS contribute to increased economic development and how do we know?
- 2) What roles/responsibilities should the IHE perform in supporting the success of the RJS?

Once the interviews were completed and transcribed, I analyzed the data using first-cycle and second-cycle coding (Miles et al., 2014). I used the qualitative coding software Dedoose to help organize the codes, excerpts, and emerging themes. Four

general findings emerged: (1) the community capitals framework (CCF) model of a healthy community ecosystem must be in place for an EE to be built, and the EE needs to be in place for the RJS to be successful; (2) the perception of success varies with the differing perceptions of the stakeholders; (3) geographic location matters; and (4) the level of success of the RJS correlates to the level of involvement of the IHE. I have organized my results based on these four broad categories of findings, combined with the CCF theoretical framework and the general groupings of stakeholders, in order to highlight the successes and areas of improvement that emerged from the data. Table 1 shows the various capitals represented in each of the four findings.

Table 1
Community Capitals Addressed in Each Finding

	Community capitals						
Finding	Financial	Political	Social	Human	Cultural	Natural	Built
 CCF + EE = RJS success For the RJS to succeed, a vibrant and supportive EE needs to be in place. For a vibrant and supportive EE to be successful, it helps if a healthy community already exists, as defined by the CCF. 	X	X	X	X			X
 2) Perspective matters Depending on the perspective of the stakeholder, the RJS is thought to be successful or not successful. 	X	X	X	X	X		X
3) Geographic location mattersWhere the RJS is implemented plays a role in whether it is successful or not.	X	X	X			X	X
 4) Involvement of IHE matters The level of success of the RJS correlates with the level of involvement of the IHE. 	X	X	X	X	X		X

Note. CCF indicates community capitals framework; EE, entrepreneurship ecosystem; RJS, Rural Jump-Start program.

Finding 1: Importance of Community Capitals and an Entrepreneurship Ecosystem

Through my discussions with the 19 different stakeholders, one key finding that emerged was that the RJS thrives when a rural community is already considered healthy based on a strong combination of the community capitals described in the CCF model. In these healthy communities that also have a flourishing EE, the RJS has been successful. With these two existing key structures, the RJS is a valuable, additional tool that assists with community development. Conversely, where a community does not have a solid combination of capitals or where there is no existing EE, the RJS has yet to produce any measurable results.

Although the Colorado Office of Economic Development and International Trade (OEDIT) acknowledged the RJS's limited successes, some members were enthusiastic about its possibilities. Jeff Kraft, director of business funding and incentives for the OEDIT, appreciated that the RJS program allows individuals at local levels to collaborate before they meet at the state level, so that it is "not an imposed 'top-down' thing." His department was excited that the visionaries approached them to ask for technical assistance in drafting the legislation.

It was really helpful that they partnered with us proactively to get our input on the process. Otherwise, our team usually would hear about a bill after it was fully designed and conceptualized, which they would then tend to be less effective or harder to administer. (J. Kraft, personal communication, 2018)

According to Kraft, it helped to have a local economic developer lead the initiative, one who did not have a formal role in the program—as he stated, one who could "herd all the cats and make it happen." These developers are the ones who will

drive the program and recruit the companies. He described this process as organically creating "that entrepreneurship ecosystem that might need a little bit of help or a boost."

One of the biggest successes of the RJS program came from the fact that it required all program stakeholders to work together. The cities and counties both had to pass an ordinance to waive the sales tax revenue. They had options to waive other taxes, but each city could decide which exact taxes they wanted to include in the waiver.

Another program design decision, which most stakeholders were in favor of, was not to waive the special district taxes, i.e., the fire districts, the water districts, and regional transportation. If all of these taxes were also included, the bill would have become too complicated and probably would not have passed.

Once a rural Colorado city and county had made a commitment to participate in the program and passed their ordinances, additional steps were required to get a business approved for the program. First, the business had to contract with the local IHE by signing a memorandum of understanding. The IHE helped the business fill out the application to submit to the state. Afterwards, a conversation was held with Ken Jensen, the RJS program director at the OEDIT. The OEDIT completed a competitive analysis to ensure that no other company in Colorado was doing the same thing or producing the same product. He ensured the application was sound and that the company could meet the other requirements. These requirements included hiring at least five new employees who were making the county average annual wage. Subsequently, the OEDIT made its recommendation to the Economic Development Commission (EDC), and finally the EDC approved or disapproved the company from participation in the RJS program.

Due to the varied quality and quantity of existing community capitals, it was difficult to write legislation that would be equally successful in all 64 counties in Colorado. This bill had a very narrow scope, with specific requirements for business eligibility. For example, it required that the business locate or relocate in an economically distressed area of the state, be a new type of business in the entire state of Colorado, work with the local IHE, hire five new employees, and pay the county median salary. As a consequence of these narrow stipulations, to date the program had been successful in only one county, Mesa County, which was the first county to adopt the program. This particular county boasted that its community capitals were strong, the community was relatively healthy, and the ecosystem for new business start-ups was thriving. On the other hand, if communities were not as healthy and did not have an EE in place, the RJS had not been successful.

The relationship that emerged creates a model where a healthy community, with all of the community capitals in place, needs to be the foundation of the structure. Additionally, the EE can be built on that foundation and work to build another layer of interconnected domains that support and foster new business activity. Finally, with what I am calling the nexus of success, the interconnectedness of these two structures creates an environment where the RJS has the best chance of succeeding (see Figure 3).



Figure 3. A visual representation of the relationship between CCF, EE, and RJS.

The most notable example of the CCF + EE = RJS nexus of success was in Mesa County, the first county to adopt the program. Grand Junction is the regional capital of Mesa County. Business, community, and political leaders came together to find a solution to their lagging economy. Interestingly, this story did not start in 2015 when conversations surrounding RJS were taking place. It started back in 1982.

In the early 1980s, the Western Slope of the Rocky Mountains in Colorado was experiencing a booming economy due to Exxon/Mobil Corporation's expansion into the area to develop the emerging oil shale extraction industry. Exxon/Mobil was investing nearly a million dollars per day. Thousands of people were employed not only from this industry, but also through ancillary jobs (i.e., painters, carpenters, welders, etc.). The local municipalities rushed to build additional housing, new schools, and new churches, pave streets, and hire police. It was a 20th century gold rush. Then, on May 2, 1982, Exxon/Mobil pulled the plug, shut down operations, and moved out of town (Gulliford, 2012). Overnight, 2,300 people were out of work. People were losing not only their jobs, but their cars and homes too. Over the next few years, close to 15,000 people would leave

the area, resulting in a bust economy. This economic downturn created close to two decades of recession in western Colorado, including hundreds of bankruptcies and foreclosures. The region was just beginning to experience a slight recovery when the recession of 2008 occurred. In an interview, Jay Seaton, publisher of the Grand Junction *Daily Sentinel*, explained that a lack of jobs created related social problems like drug use, addiction, homelessness, and lack of quality and affordable childcare, among others.

After "Black Sunday" in 1982 (Gulliford, 2012) and then during the recession in 2008, area politicians, business leaders, educators, and concerned citizens came together to investigate other avenues to achieve economic vitality. According to Seaton,

We convened a group of business guys here in the community to see what we could do to try to move the needle on economic development, because we were watching the rest of the state really recover, and this area was continuing to languish. Every economic measure was going down and we felt we needed to do something. We had lost close to 11,000 people out of our workforce. We had to do something. (J. Seaton, personal communication, 2018)

Seaton spoke about an economic model called the "Dutch disease." The Dutch disease, he explained, occurs when there are two similarly situated communities, in terms of population and community capitals, except one of them is sitting on enormous natural resource wealth. The resulting outcomes turn out very differently. In the Dutch example, the natural resource was timber, and in the Grand River Valley of Colorado, it was oil, gas, and uranium. This model posits that over time, the community without the natural resource wealth will outperform the one that has the wealth. Seaton explained:

One of the reasons for this phenomenon is that the child living in the natural resource community, who should have gone off to college, got a fancy degree, and came back and started a company that employed a bunch of people, instead decides to stay in the community to work for the natural resource company for a manual, decent-paying job. However, as a result, this person's kids have no

appreciation for higher education and feeding the brain. As a result, over the course of time, as in Grand Junction and the Western Slope of Colorado, they have a 20% below the national average college-going rate. This in turn leads to all sorts of economic problems and poverty-related issues. (J. Seaton, personal communication, 2018)

He argued that if the community can increase the college-going rate, some of the problems and issues start to resolve themselves. His hope was that the RJS program would be so successful that it would no longer be needed and the Colorado Grand River Valley would no longer be considered an economically distressed area. In times of economic downturn, when an economic bust occurs, different organizations attempt to provide social services like homeless shelters, food banks, detox centers, childcare centers, etc. These organizations require money to support those services. When a community pulls together to address these social issues, like Mesa County did after 2008, and with additional helpful programs like RJS, a community can increase relative wealth upstream and can then address all of the poverty-driven issues downstream. "Investing in economic development activities can save a lot of money down the road" (J. Seaton, personal communication, 2018).

Financial capital. As identified in the CCF model, financial capital identifies the financial resources available to invest in community capacity building, to support civic and social entrepreneurship, and to accumulate wealth for future community development, i.e., physical goods that assist in the production of other goods and services, financial wealth, investment, credit, loans, and cash money (Colpaart, 2017). According to the program visionaries and creators, RJS was not an expensive program to run. Although municipalities, counties, and the state must forego certain future tax revenues, these businesses did not currently exist and therefore this tax revenue was not

currently being collected. As such, the program did not have any impact on current budgets. Furthermore, according to the economic impact report produced by the Grand Junction Economic Partnership, the number of new jobs created and the amount of capital investments made generated a substantial economic dividend for the region. Since the program's inception in 2016, Grand Junction had seen a net increase of 70 new jobs with a total capital investment of \$2,242,105. This was a significant investment for a small rural community (Grand Junction Economic Partnership, 2019). According to Seaton (personal communication, 2018), "The city hasn't seen these types of wins in a generation."

Political capital. The CCF model refers to political capital as access to power, organizations, resources, and power brokers. Political capital also refers to the ability of people to find their own voice and to engage in actions that contribute to the well-being of their community.

The political capital in Mesa County and the City of Grand Junction included two of the program visionaries who were closely associated at the state level. Colorado Mesa University President Tim Foster was a former house majority leader in the Colorado legislature and executive director of the Colorado Commission on Higher Education, a governor-appointed position. As such, he understood how the legislature operates and how to propose bills that have a chance of being passed. The other key visionary was Grand Junction *Daily Sentinel* publisher Jay Seaton, who currently sat on the governor-appointed Colorado EDC. These two visionaries also sat on the board of directors of the Grand Junction Economic Partnership. Foster and Seaton were instrumental in drafting the legislation in the most effective manner to receive bipartisan support. Their vision and

experience helped pave the way for the bill to be passed and for their community, Mesa County, to be the first to be accepted into the program in 2016.

They, along with Kristi Pollard, who was the executive director of the Grand Junction Economic Partnership at that time, brought their proposed bill directly to Governor Hickenlooper. There were ongoing conversations at the state level regarding the urban-rural divide. Most of the state economic development programs seemed to be working only in the metro areas, i.e., the Denver metro area and other communities along the I-25, Front Range corridor. One example was the Job Growth Incentive Tax Credit, which offers businesses a tax credit for the new employees it hires. In 2015, \$870 million in tax credits was delivered to companies located on the Front Range versus about \$100,000 to companies located in other areas of the state. In this scenario, state tax dollars collected from around the state were redistributed through these tax credits to only a very small area of the state along the Front Range. Ironically, the Front Range area of the state had already recovered from the recession and was not in need of these tax incentives. Numerous factors contributed to this imbalance. First, in order to benefit from this tax credit, a company had to be profitable, which put it in a position to hire new employees. This requirement automatically favored established companies, not start-ups and not companies that were financially unstable. Another contributing factor was that eligibility for the tax credit required the creation of 20 new jobs. The composition of jobs created on the Front Range was markedly different from that of rural communities. Twenty jobs created on the Front Range had a much different impact than 20 jobs created in a small rural community, where such jobs could contribute to other economic growth

in that area. The urban/metro areas were thriving and the rural communities were continuing to languish.

In reaction to this phenomenon, Governor Hickenlooper jumped at this opportunity and sponsored the bill from his office as a leadership bill. Pollard explained that because it was late into that legislative session, he knew some political influence would be needed. The governor made it one of his top priorities for the year. He used his power and his name to help secure the needed votes to pass the bill. Throughout his tenure, he continued to highlight this as one of his administration's successes.

OEDIT is charged with administering the RJS program. Although this program was one of many the office managed, staff were excited about RJS because it specifically addressed rural areas of the state that were languishing. According to Ken Jensen, RJS program director at OEDIT, the program had not been as successful as they envisioned. They had planned on the program growing to a point where they would need a full-time administrator. To date, this growth had not come to fruition. In addition, Jensen and Kraft mentioned that RJS was definitely not as successful as some of the other OEDIT programs they managed.

Because of the proactive work completed to bring all of the stakeholders together, the bill received bipartisan support. It was a program that became a valuable tool in any rural economic development strategy. As one senator stated:

Government doesn't create jobs. We can create an atmosphere for businesses to do well by keeping their tax base low, things like that, but as far as government creating a job, we kind of stink at that. If we could put programs out there to assist other people, yeah, I would call that a success. (Sen. Scott, personal communication, 2019)

The businesses accepted into the program did not have much stake in the political process, as they were busy trying to run their businesses. Some of them were not even sure how the process worked and did not have time to figure it out. They relied on receiving information from the state about what they needed to do and what reports they needed to submit. This was not at the forefront of their priorities.

According to one local businessperson, the financial benefit of the RJS program was a slight benefit. Since his business was located in an Enterprise Zone, all of his purchased equipment was already tax free. He did state, however, that his employees would be happy about not having to pay any state income tax. It would be as though they received a 5% raise. He thought there would be a much greater benefit if the county had waived its property tax; Mesa County had elected not to include that as part of its program. That, he said, would have had a much greater impact on his start-up business. He was looking at another location in the state of Washington where he would have received years of property tax breaks. In the end, the RJS did have an influence on the business's decision to locate in Grand Junction.

Social capital. Social capital, according to the CCF model, recognizes the connections among people and organizations. Bonding social capital refers to those close, redundant ties that build community cohesion. Examples of social capital that surfaced in my analysis included the steering committee that came together in Grand Junction to help draft the program. Committee members believed the program received traction there because there were numerous people who understood what the program was intended to do. They had lived through the Black Sunday of the early 1980s and were willing to try any new tool to help avoid another bust economy. The Grand Junction Economic

Partnership and its board of directors worked closely on building this possible new tool. The board of directors comprised an accomplished group of people that included elected officials, the president of Colorado Mesa University, and the publisher of the *Daily Sentinel*. These community leaders met on a regular basis to discuss and strategize about the health and sustainability of their community. As such, it was easier to get everyone together at the same table and committed to a new initiative like RJS.

Another example of how social capital played a role in the expansion of RJS occurred in Routt County. The county seat of Routt County is Steamboat Springs, a world-famous resort destination, which would not normally be considered a "distressed community." Smartwool was one of Steamboat's largest employers, employing approximately 70 people. Its parent company, VF Corporation, made the decision to move its operations to the Denver area to reside closer to its other outdoor brands and operations.

Economist and city council member Scott Ford estimated that Smartwool's approximately 70 employees spend about \$2.8 million locally, which equates to a decrease of less than a half percent in city sales tax revenue. He estimates that the company's employees' spending supports about 10 or 11 full-time equivalent jobs in the community, creating a total loss of 80 to 85 jobs. (Hasenbeck, 2018, para. 20)

These 80 to 85 jobs in this small rural community would be the equivalent of losing thousands of jobs in a metro area. On account of this loss, one of the county commissioners essentially "rallied the troops," including the other municipalities of Oak Creek, Yampa, and Hayden. All three of these municipalities along with the city of Steamboat Springs, as well as Routt County, passed resolutions to join RJS. The EDC, based on a recommendation from OEDIT, made an exception to allow Routt County and

these municipalities to become part of the RJS program. Given that all of the stakeholders recognized what a loss this departure was going to be, they collaborated to find a solution, and RJS was at the forefront of their strategy. As one interviewee quoted Harry Truman, "It's amazing what you can accomplish if you don't care who gets the credit." The collaboration and teamwork that took place proved to be an excellent example of this quote and was essential in accomplishing this achievement.

Human capital. In the CCF model, human capital specifies the skills and abilities of people to develop and enhance their resources, as well as to access outside resources and knowledge to increase understanding for community building (Colpaart, 2017). To further validate the concept of the CCF + EE = RJS success, I examined several instances of how human capital plays an important role in the RJS program.

A partnership with an IHE was a key component in the design of the RJS program. As Pollard from Grand Junction Economic Partnership explained:

One of the things we were seeing in Western Colorado was that we had this great university, Colorado Mesa University. The students were graduating and most of them were leaving shortly after graduation to pursue other jobs. So, the communities had many conversations about how do we keep our young talent here and have them help us become part of the innovation and that thing that is ultimately going to bring us out of this new economic cycle. As such, we incorporated the IHE piece into the RJS program because we wanted to provide these new companies a way in which they would need to engage with students through internships or mentorships. (K. Pollard, personal communication, 2019)

The partnership was an intentional decision made to connect the business community with that pipeline of talent. The hope was that the new businesses would recruit a new workforce year after year, or companies would spring up that were tied to the assets of the university. The university is a natural ecosystem partner; therefore, important long-term relationships can be built between companies and universities. The

new businesses need to have a written memorandum of understanding with the university on the front end before their application can be considered by OEDIT and the EDC. The hope was that these businesses actively engage with the appropriate departments at the university to line up internships, participate in job fairs, or present different applied research projects. According to Derek Wagner of Colorado Mesa University:

It kind of makes sense in terms of a company relocating to a new place, getting up and running, and then at some point in their operation realizing that they have workforce needs. Then they need to figure out a way to develop a relationship with the community college or the university that is closest. (D. Wagner, personal communication, 2018)

By creating this partnership on the front end, these conversations and relationships were proactive and contributed to the success of the students, as well as the new business. The local businesses participated in the program advisory councils to help the college or university understand the latest trends in the industry. In return, the college or university could ensure that the students were being trained with the skill sets and competencies required by the businesses. This type of collaboration could be a win-win-win for the university, the students, and the businesses.

Built capital. As defined in the CCF model, built capital defines any human-made environment, i.e., housing, transportation infrastructure, telecommunications infrastructure and hardware, utilities, buildings, equipment, and infrastructure (Colpaart, 2017). IHEs are considered a valuable, built capital. The communities that have an IHE have "an amazing asset with which to collaborate" (K. Pollard, personal communication, 2019). Colleges and universities are brick-and-mortar entities that tend to be around for a long time. They train the workforce, they bring young people into a community, they can provide technology to license and transfer to start-up companies, and they can provide

labs to test prototypes. They are powerful economic tools (J. Kraft, personal communication, 2018). The RJS is a program that helps optimize the local IHE asset to improve local engagement with the business community and to create a long-term ecosystem partner.

Another reason why the RJS was working so well in Mesa County and specifically Grand Junction is that Grand Junction was in a unique position. As a result of its depopulation over the last several decades, it had underutilized housing stock, or in other words, affordable housing. It had multiple examples of built capital like infrastructure, a transportation system including railroads and access to main highways (I-70 and I-50), a regional airport, a hospital system, and an industrial base including different ancillary support businesses. All of these forms of capital played a large role in helping new businesses decide to relocate to the Grand Junction area. Other rural areas of the state did not have this extent of built capital, which made a relocation decision much more difficult for someone looking to start a new business, with or without the benefits of the RJS program.

Finding 2: Differing Perspective of Stakeholders

As these interviews progressed, it became clear that the differing perspectives regarding the program emerged as another broad category of findings. The viewpoints are organized in this section according to the category of stakeholder: program visionaries and creators, government proponents and administrators, program participants/recipients, IHE representatives/partners, and other interested stakeholders. After data analysis, it was

evident that these different stakeholders had differing views on the benefits and challenges of the program.

Program visionaries and creators. The program visionaries and creators believed the RJS program has been successful. Most of these stakeholders resided in Mesa County and the city of Grand Junction. They were the visionaries who proposed the legislation. They believed it has been by far their most useful tool for recruiting new companies into the area (K. Pollard, personal communication, 2019; J. Seaton, personal communication, 2018). After the recessions of 1982 and 2008, they had not had economic wins in a generation (J. Seaton, personal communication, 2018). Now, they had seven in a year. Those initial jump-start companies created 66 new jobs and made a total capital investment of nearly \$2.2 million. This resulted in a total economic impact in Mesa County, from those jobs and those investments, of about \$13.5 million, which is significant for a relatively small rural community. As mentioned in the previous section, the RJS program worked well in Mesa County because of the other existing capitals that contributed to the overall health of the community and the existence of a thriving EE. These stakeholders were continuing to market the program to attract potential businesses to locate in Grand Junction. They hoped RJS would be renewed in 2020 when it is up for a sunset review.

Government proponents and administrators. The government proponents and administrators had a mixed view of the success of the program. One sponsoring senator believed RJS was a success:

Whenever government can create an atmosphere for businesses to do well by keeping their tax base low, that is a success. If the legislature can put programs out there to assist people, then yeah, it would be considered a success.

Additionally, it is working. There are some really good success stories. (Sen. Scott, personal communication, 2019)

He hoped the RJS bill would be renewed in 2020, but was hesitant to state whether he believed it would be or not. It would depend on the new administration and its policies towards rural economic development as well as the mood of the legislature at that time.

According to the OEDIT staff, the program was not as successful as they had expected and definitely not as high volume compared with some other programs they managed. Kraft believed RJS has had limited success:

It has definitely helped to fuel the fire and support positive growth in Grand Junction. Moreover, that, in and of itself, is a success because from a Colorado perspective, Grand Junction is an important community. (J. Kraft, personal communication, 2018)

As to why other communities had not produced any eligible RJS companies,

OEDIT had some theories. It was awaiting the results of this program evaluation to learn

more and to try to understand the program's obstacles.

Institutions of higher education. The IHE involved in the creation of the program, Colorado Mesa University, considered the program a big success. They believed that having the IHE involved on the front end and as a part of the program was effective and successful. According to Derek Wagner:

I think the most successful start-up businesses are the ones that I've seen embrace the partnership with the IHE. They have to have a written agreement with us on the front end before their application can be considered by the EDC, and those agreements can sit on the shelf and get stale, or they can be something more dynamic where these companies continually come back and say that they want to line up internships. We want to line up opportunities to come to job fairs, or to present different applied research projects that we can work on together with the faculty and the students. (D. Wagner, personal communication, 2018)

The new technology companies were obviously interested in the computer science students, the engineering students, and the data analytic students. Moreover, these businesses had also expressed interest in collaborating with the college to recruit accountants, geographic information system specialists, and students with bilingual skills.

Conversely, not all IHEs were convinced what their role should be and how they could participate in the success of the program. In fact, the only IHE that was currently actively engaged with start-up companies was Colorado Mesa University. According to a local IHE administrator, the visionaries "wrote the legislation in such a way that would ensure that their county would qualify. They did not write it in a way that created any uncertainty about what the outcome would be" (M. Gianneschi, personal communication, 2018).

Other stakeholders. Other stakeholders from around the state agreed that the criteria were designed with too narrow of a focus to be of any assistance for their small rural communities, and therefore they were not actively marketing the program.

Finding 3: Importance of Geographic Location

The third finding that emerged from the interviews is that geographic location matters. The location of the rural community determines the level of engagement in the RJS program. For example, those with strong community capitals, especially transportation infrastructure and human capital, were much more engaged than communities without these assets.

Grand Junction is located on the I-70 corridor, has a large regional airport, and has a comprehensive regional university, so it was perfectly positioned for the RJS to be

successful. Other communities in the northwest, southwest, and Eastern Plains that did not have developed community capitals were therefore not as successful in taking advantage of the RJS as an effective tool to attract new business.

Grand Junction, the Colorado Grand River Valley, and the Western Slope of Colorado have historically been very reliant on the energy industry for economic prosperity. After the recession and recovery periods, Mesa County was still considered an economically distressed community and had not recovered as quickly from the last recession. Yet, because of their reliance on such a boom-and-bust industry, communities like Grand Junction were working tirelessly to try to diversify their industry base. There were many reports coming out of the state capital, OEDIT, and the EDC regarding hightech companies and manufacturing companies moving to the Front Range. This was a reflection of the solid community capitals that exist in larger, metropolitan areas, especially human capital and transportation. In fact, more than a few companies stated that they moved to Colorado, and particularly the Denver metro area, because of the excellent millennial workforce. This area has one of the highest percentages of college graduates under age 30 in the country. Even in communities like Grand Junction, which have a comprehensive regional IHE, graduates were continually leaving and moving to the metro areas because of the availability of good-paying jobs.

According to one Colorado state senator,

The rural-urban divide is a common phrase used at the capital, in that Colorado's economy has been expanding and benefitting greatly over the last several years. However, that has often been consolidated to the Front Range in metro areas. The legislators felt that this program was a good way to encourage and incentivize small businesses to look at locating in rural Colorado and thus help the entire area. (Sen. Roberts, personal communication, February 6, 2019)

In other areas, for example, Garfield County and the central mountain communities, the issues surrounding human resource capital revolved not around available jobs, but the lack of affordable housing. One question that arose was how to retain talent in these mountain communities given the extraordinary high costs of living in the region (M. Gianneschi, personal communication, 2018). Another issue related to the success of current efforts to cultivate new businesses, bring new businesses into the area, support existing businesses in the community, and provide guidance and support to existing businesses. In the mountain communities, small businesses were competing for the same limited talent pool, which was a different issue than that faced by Mesa County. There, they were working to get people off public assistance and into employment (M. Gianneschi, personal communication, 2018).

Other more rural areas located further away from the Front Range metro areas faced different challenges. According to one local economic development professional, it was hard to attract companies to a town where there was no easy mode of transportation or access to a regional airport (L. Lewis-Machino, personal communication, 2019).

Smaller communities had only commuter airports, which are more susceptible to adverse weather and scheduling changes—presenting major challenges to any businesses looking at these communities. In addition, most of the local communities were not promoting RJS because they did not have the resources.

A few of the businesses I spoke with confirmed that they had been looking at taking their businesses to other areas within and outside of the state. Most were comparing what tax advantages were available, as well as what infrastructure was in place, how the local IHE could provide a trained workforce, and what other support

businesses already existed. After doing their due diligence and comparing these factors, most said the RJS program and the assets of Grand Junction were deciding factors in locating their business there. Another company indicated that the fact that its employees were exempt from paying state income tax for 4 years, and then for another possible 4 years, has been a big recruiting tool to attract new talent. Another business owner described the "Colorado lifestyle" as a big attractor to the Grand Junction area, stating, "The tax benefit is nice, but to be able to be on a mountain bike trail in 5 minutes, or on the river in 10, is a bigger attraction" (M. Lewis, personal communication, 2019).

One economic development professional stated that a key deciding factor in where to locate a new business was the existence of an IHE. It was important to create a nexus with the college or university. Grand Junction and Colorado Mesa University were the perfect case model because "there is a good, growing university that is graduating students, and those students want to stay in the area" (K. Pollard, personal communication, 2019). Therefore, the RJS program was a great tool to help companies locate to the area, create the partnership with the university, create internship opportunities, and eventually hire the graduates.

An interesting fact arose concerning the types of companies taking advantage of RJS. Because of the noncompetition requirement and because of the requirement to work with an IHE, quite a few of the new businesses were tech start-ups. Many of those companies were very well suited to medium-sized cities like Grand Junction or Montrose. Even so, tech start-ups are probably not appropriate for other Colorado rural communities, for example the far Eastern Plains, where there are no developed cities with the same critical mass that would attract a tech start-up (J. Kraft, personal

communication, 2018). This region is dealing with an aging/retiring population; thus, it does not have a workforce that is being renewed. Three counties in Colorado have less than 1,000 people, and the current RJS program is probably not well suited for them (K. Jensen, personal communication, 2018).

Finding 4: Importance of Involvement of the Institution of Higher Education

The final finding indicated that the level of involvement of the IHE is correlated to the success of the RJS program. According to OEDIT, the IHE did not have to have "a lot of skin in the game." The IHE partner did not have to dedicate any financial resources to the RJS program other than the human resources assigned to manage the program. The IHE acted as the local administrator, helping the new business fill out the application to the state to ensure eligibility. The business and the IHE needed to sign a memorandum of understanding. The IHE could then engage and build relationships with the new businesses. Other than that, there were no additional "formal" obligations; for example, the IHE did not have to get in the business of leasing physical space. If this were an option for the IHE, it could provide a channel to get the IHE more engaged in the program (J. Kraft, personal communication, 2018). Another way to engage with the IHE would be for it to license a new idea, provide equity in the new company, or collect royalties from licensing new technology. Such arrangements would create a win-win for both the IHE and the community, where the IHE would receive additional revenue in some form, and the community would see an increase in jobs and economic growth.

In Grand Junction, Colorado Mesa University was very involved in the vision, creation, and administration of the RJS program. The institution was actively engaged

with the business community and was building strong partnerships with the new businesses. Also in Grand Junction, a very strong economic development group (Grand Junction Economic Partnership) existed that conducted targeted marketing campaigns to attract new businesses. Colorado Mesa University was involved in mentoring the new businesses, inviting them back to campus for lectures and sharing of ideas, setting up internships and career pathways for their students, collaborating on research projects, and helping to drive the economic development strategy of their community.

Other IHEs in Colorado designated as the partner for the RJS program had varying degrees of participation. One local junior college merely acted as the institution of record for completing the necessary paperwork for the application. It was not actively engaged in the program or helping the region implement it. This particular institution was not going to be the one to go out to recruit businesses, as this was not its primary mission (R. Rudasics, personal communication, 2019). IHEs are tax exempt, so no matter what happens with the RJS program, there is no fiscal responsibility on their part. Yet another regional community college was currently in leadership transition, which created confusion with the local economic development personnel who did not know whom to contact concerning the program. This variable role caused misperception for the communities and the businesses.

IHEs' differing views of their roles depended on the mission of the institution.

Colorado Mesa University's primary motivation was to increase its student enrollment full-time equivalent measure, on which the IHE based its budget. Colorado Mountain College, on the other hand, which assisted with filling out the required state application paperwork but did not take a more active role in developing partnerships with the

business community, saw its primary mission as education and developing programs for students that satisfied community workforce needs, i.e., nursing, police, and fire. This fundamental philosophical difference was evident in the differing economic activity of their respective communities and affected how the IHEs interacted with the RJS initiative.

These mission questions arose when talking with the various IHE representatives. What is the institution's mission? Is it to support local industry? Conversely, is it to train the workforce for any industry? There were conflicting viewpoints on the educational mission versus a regional support mission. This led to more questions about program offerings. According to one college administrator,

How much is an institution willing to allow external forces to change or direct internal programming decisions? Additionally, should the institution be using state or public funding for these purposes? Is the institution leading the local economic development efforts or just participating in providing their mission-specific expertise? Are they using existing programs, modifying programs, or creating new arrangements that do not conform to the bylaws or culture of the institution? (M. Gianneschi, personal communication, 2018)

According to M. Gianneschi (personal communication, 2018), partnerships can be defined in a variety of different ways. An institution can help build a workforce for a particular industry, but is that driving decisions made by the college? If an institution begins to be influenced by these external factors, then what other ancillary impacts will that have on the institution concerning faculty and resource allocation? Each institution, along with its board of trustees and executive leadership, must wrestle with how to approach these decisions. If institutions engage in this type of public-private partnership and take advantage of

all stakeholders' core competencies, this leads to the kinds of partnerships that work well and the kinds of relationships IHEs can be excited to have.

Summary

This chapter has presented the main findings of the analysis of the interview data as well as supporting secondary data. Four general findings emerged: (1) the community capitals framework model of a healthy community ecosystem must be in place for an entrepreneurship ecosystem to be built, and the entrepreneurship ecosystem needs to be in place for the RJS to be successful; (2) the perception of success varies with the differing perceptions of the stakeholders; (3) geographic location matters; and (4) the level of success of the RJS correlates to the level of involvement of the IHE.

The 2015 RJS bill was very narrow in scope, incorporating narrow and specific requirements for a business to become eligible to participate in the program. Therefore, at this time, it had only seen success in one county, Mesa County, which was the first county to adopt the program. Mesa County had strong community capitals, a relatively healthy community, and a thriving ecosystem for new business start-ups. On the other hand, in communities that were not as healthy and that did not have an EE, the RJS had not been successful. The relationship that emerged described a model where a healthy community, as defined by a solid combination of all the community capitals, must be the foundation of the program. Once that foundational structure exists, the EE can be built on that foundation and build an additional layer of interconnected capital that supports and fosters new business activity. With these two structures in place, the RJS program has the best chance to be successful.

The second finding described different stakeholders perceived differing levels of success, the RJS program can be thought of as successful or not successful. At the local Mesa County level, the program had been successful for those who envisioned it, implemented it, and dedicated resources to it. On the other hand, according to OEDIT staff, RJS was not as successful as some other programs they managed. Mesa County businesses welcomed the benefits of the RJS program, but other newer companies had yet to see those benefits. More than a few interviewed companies stated that the program was a deciding factor for locating their business in Grand Junction. The IHE engaged in the creation of the program, Colorado Mesa University, considered RJS to be a big success, but not all IHEs were clear about their role and how they could participate in the success of the program. Other stakeholders from around the state agreed that the RJS program criteria were too narrow to help their small rural communities, and so they were not actively marketing the program.

The third finding that emerged is that geographic location matters. Cities like Grand Junction, which has a large regional airport, has a comprehensive regional university, and is located on the I-70 corridor, were perfectly positioned for the RJS to be successful. Other areas in the northwest, southwest, and Eastern Plains did not have these community capitals in place, and therefore the RJS had not been an effective tool to attract new business.

The final finding indicated that the level of involvement of the IHE correlates to the success of the RJS. In Grand Junction, Colorado Mesa University was immeasurably involved in the vision, creation, and administration of the program. Staff engaged actively with the business community and developed strong partnerships with the new

businesses. Other IHEs designated as the partner for the RJS program had varying degrees of participation. One local junior college was merely acting as the institution of record for completing the necessary paperwork. It was not actively engaged or aiding in the implementation or marketing of the program. Another regional community college had experienced a large staff transition. As a result, the individuals tasked with area economic development did not know whom to talk to about the program. This variable role caused confusion for the communities and the businesses. In Chapter 5, I make recommendations for improving these partnerships.

Chapter Five:

Implications and Recommendations

Implications

After conducting interviews with numerous stakeholders, it became clear that not everyone is in agreement regarding the Rural Jump-Start (RJS) program's success or failure. The program appears to be successful in Mesa County, the first county to adopt the program and home to the RJS founders. Other than this limited scope of success, the program has not been successful in other areas of the state. There are varied reasons for this outcome and this program review reinforced the view that this particular program/bill is not working as it was intended.

One of the questions I asked stakeholders was "What improvements would you make to the bill to allow more businesses and counties to take advantage of it?" Most stakeholders had some suggestions for improving the bill; however, some participants, including the program visionaries, hoped it would not be revised. They were afraid that once the bill was open for review and discussion, too many differing voices would have their influence, thus changing the original purpose of the legislation. In both 2015 and 2016, compromises were made to get the bill passed. These program creators did not want to see any more compromises. According to Jay Seaton (personal communication, 2018), the bill was almost hijacked by Boulder County because it wanted to participate in

the RJS as well. Yet, according to the criteria for an economically distressed area,
Boulder County did not qualify. Conversely, more than a few stakeholders felt that the
way the bill is currently written is too restrictive and not responsive to the needs of rural
communities, and it is not aiding them in realizing the economic prosperity that is
occurring in metropolitan areas of the state.

Senate Bill 15-282 is up for a sunset review in 2020. My hope is that some of these recommendations are incorporated into any changes that are introduced.

Recommendations

The RJS program was written in order to help rural, distressed areas of the state with economic recovery by attracting new start-up businesses and capital investments, yet, as indicated in the previous chapter, the findings from the interviews tell a different story. The RJS program has been successful in only one community that was already experiencing moderate economic recovery. My takeaways from these interviews led to the following recommendations.

Time matters. Based on the evidence collected, it usually takes longer than five years for an economic development program to experience any measurable results. The amount of time allotted, initially five years, was a short timeframe because it was a pilot initiative (K. Pollard, personal communication, 2019). This program should be given more time so that other communities can better understand it, as well as learn about and possibly replicate the successes experienced in Mesa County. These other rural communities could try to adopt the same successful strategies that were implemented there. This could take up to ten years. More time would also allow the State of Colorado

to have a larger perspective on the program's benefits. Therefore, in order to determine if the RJS program will be successful in other distressed areas of the state, more time for policy and practice is needed. If the bill is allotted an additional five years after the sunset review in 2020, it should also be granted another five years after the next sunset review in 2025 for a total of ten additional years.

Non-compete clause. The biggest obstacle to success appears to be the competition clause. This requirement states that any new business taking advantage of this tax relief program "cannot be substantially similar in operation to, and does not directly compete with, the core function of a business that is operating in the state at the time the new business submits its application to a state IHE" (Choose Colorado, 2019). When a business submits an application, a thorough competitive analysis is conducted to make sure that no other business in Colorado is operating a similar organization.

According to one viewpoint (S. Jozefczyk, personal communication, 2018), this requirement is very reasonable. The intention of the law was not to disadvantage existing Colorado companies. The intention was to aid rural areas in diversifying their business community and to provide them with a useful tool when talking to potential new companies. It is not fair to provide one company with a tax advantage over another company who is conducting business without any aid from the state. "The legislature does not want to get in to the practice of picking winners and losers (Sen. Scott, personal communication, 2019)". This was one of the main compromises of the bill. Because a new business accepted into the RJS program would not be competing with any existing business, several communication, 2019).

Alternatively, according to the viewpoint of many other stakeholders, this restrictive barrier is hindering any level of possible success. As stated by one business stakeholder, the competition clause is a "silly requirement" (M. Lewis, personal communication, 2018). Mr. Lewis indicated that his previous business, which was also located in Grand Junction, operated in the aerospace industry. This meant he was competing with companies on the Front Range and Boulder areas, where a number of aerospace industries are located. When he sold the business, he had employed over 80 employees and had built a very successful company. He agreed the competition clause is an unnecessary constraint.

Another interested stakeholder and economics professor argued,

It is shortsighted to assume that there is such a small market for any particular industry that it can only survive with a single provider, which somewhat creates a public monopoly. It also assumes that the Colorado market is so small, and even the national marketplace or the international marketplace is so small that it cannot support multiple providers in competition, which just is not the case. There has never been an instance where something that is in high demand did not benefit from competition. Look at the example of Vail Resorts. Just because Vail Resorts exists does not mean that Aspen Ski Company cannot exist, compete, and thrive as well. (M. Gianneschi, personal communication, 2018)

More than a few stakeholders felt that a start-up company in a rural area of the state would not necessarily be competing with a company in the Denver or Boulder areas. They felt that the stipulation could be restricted to certain zones or counties. The Start-Up NY program is restricted to the census tract. The census tract is an area roughly equivalent to a neighborhood established by the Bureau of Census for analyzing populations. A tract generally encompasses a population of 2,500 to 8,000 people. In Colorado, a tract could be defined as a county or other regionally demarcated area. The program could benefit by examining only regional competition. It could follow the same

distinct zones used by the workforce centers. The premise is to determine if there are competing companies within a core place where people work (K. Pollard, personal communication, 2019).

One interested stakeholder explained the competition issue as follows:

Suppose a competing company does not exist in one particular region, but maybe it has been successful in other regions. This could open an opportunity for a new, similar company to locate into a new region. On the other hand, perhaps it has not reached a certain market capitalization in another particular region. This could again open opportunities for additional competition. (M. Gianneschi, personal communication, 2018)

Moreover, competition could be limited only to other economically distressed counties around the state, as defined by the Economic Development Commission and the Office of Economic Development and International Trade (OEDIT). Such restructuring would mean that new businesses would not have to worry about competing with Front Range companies and the wealthier counties. Since this restrictive non-compete requirement has been the major impediment to the program's success, a number of stakeholders felt that it should be revised; otherwise, the program is not helping the rural communities that it is intended to help.

Another perspective clarified that even though stakeholders did not want communities within Colorado competing with each other, the reality was that there was ample business growing along the Front Range, which placed additional burdens on its dated transportation and housing infrastructures. From a policy perspective, it might make sense to incentivize businesses to research other areas of the state that are in desperate need of economic development. At some point, the rapid growth in the metro areas (with the high cost of living and costs of doing business) might drive companies to

search for alternatives outside of the state, which could end up eventually hurting the state's economy as a whole. It could make sense to examine ways to keep businesses in the state by relocating to lower-cost, rural areas, which would then help distribute the wealth and economic prosperity more evenly throughout the state.

Strategic marketing and communications plan. At this time, there does not appear to be a comprehensive, unified marketing and communication strategy for the RJS program. The RJS program is described in a cursory fashion on the OEDIT website. Additionally, former Colorado Governor John Hickenlooper mentioned the program multiple times in his 'state of the state' addresses, which brought some acknowledgment to the program. Furthermore, each community markets the program on its own website. Nevertheless, as per my conversation with the OEDIT program manager, there is no budget at the state level to create a comprehensive marketing and communication strategy. Since this is such a crucial need in the success of any statewide program, my recommendation is to appropriate funds to help market the RJS program and assist these small, rural communities in attracting new businesses.

The Start-Up NY program experienced issues because it spent millions of dollars for marketing campaigns, including expensive Super Bowl ads. This expense was well beyond its marketing budget, and the program did not recoup those costs. The costly marketing campaign in New York created some anxiety with the economic development professionals in Colorado, who did not want to encounter these same issues. In reality however, Colorado did not budget any money for the important component of a marketing and communications campaign. Even a small budget could generate considerable additional interest. This is an essential need and is relatively simple to

implement and measure, therefore, my recommendation is to add this expense to the next version of the bill.

Another example that arose from my research was that participating businesses were not aware of what the other participating businesses were doing or their level of involvement in the program. A monthly newsletter or blog post to keep everyone informed of the status of the program, including which counties, institutions of higher education (IHEs), and companies were participating in the program, and any other pertinent information would be helpful in keeping all stakeholders informed.

Increased state support. One stakeholder believed that having the IHE in front of the process was very unnatural for an IHE with a very specific mission to educate (M. Gianneschi, personal communication, 2018). One suggestion is that OEDIT play a more prominent role in helping communities determine who they are, where they want to go, and what is missing in their community. At that juncture, after these strategies are in place, the role of the IHE can be defined and a strategy of support for their communities can be developed. The goal of the program should be that communities, OEDIT, and the IHEs would all work together to create new initiatives for community development and to enhance new business and economic diversification and growth.

Another stakeholder voiced a frustration with the level of state support for rural areas. OEDIT seemed to be heavily focused on programs that benefit the Denver metro and Front Range communities, and the rural communities sometimes feel left behind.

Some communities are more than seven hours from the capital, which is not an easy drive and may require a plane flight. This distance and complication further exasperates the feeling of isolation. Stakeholders sometimes feel that the state administrators in Denver

OEDIT located throughout the state to help focus attention and program awareness to the areas that need it most. About 10 years ago, there were regional liaisons located outside of Denver who provided more rural-based support and represented the rural communities in the legislative process. With this additional local support, it could be possible to create 15 or 20 jobs in a rural community, which would be the equivalent of creating several hundred jobs in Denver. With an increased, more active role by the state to help build the program in the smaller communities, the overburdened, rural economic development professional would, at a minimum, know how to take advantage of all of the tools that are available.

Furthermore, to strengthen and support this initiative along with other possible future collaborations, a liaison between the Department of Higher Education and OEDIT should be established. In order for IHEs to become more involved in economic development and international trade, both departments need to understand and participate in the discussions and projects in which each department is involved. Having a half-time OEDIT staff and half-time DHE staff would help with this initiative.

Number of net new employees. In the current RJS legislation, the new start-up business must hire five net new employees within the first four years of its operation. To some new businesses, this number seemed like a stretch. One can understand why this stipulation was included. It was meant to deter a scenario where every sole consultant or practitioner working from their house or garage would sign up to receive the tax benefits (K. Pollard, personal communication, 2019). Yet, hiring five new employees could be burdensome for most start-up companies. Based on conversations with various

stakeholders, it is clear this number needs to be lowered to three new employees. For start-up businesses, this threshold could be more achievable. On the other hand, as one participant noted (J. Seaton, personal communication, 2018), if there are home-based businesses that are bringing expertise and capital into a community, why would the same benefits not be extended to them?

County limit of 200 employees. The bill specified that the commission may not issue more than 200 credit certificates in one income tax year for all new hires employed by all new businesses in each RJS zone. My recommendation is that this limit should be increased to 300 employees to allow for acceptance of more businesses into the program. Mesa County, for example, was nearing this threshold since two businesses were growing rapidly. If it hit this threshold, the county would not be able to accept any new start-up businesses into the program, which again defeats the original intent and goal of the program.

Truly tax exempt. The program structure requires businesses to pay all of their taxes and then submit a report at the end of the year to receive a refund. This is not advantageous for small start-up companies. If they were truly tax exempt, they would not have to pay any taxes, which would help their bottom line and cash flow position immensely. The current requirements burden small businesses with a large administrative overhead function, when they may not have the resources to dedicate to this obligation. Most of these new businesses are just trying to keep up with the work and do not have time for all of the administrative requirements of the program.

App for record keeping. Currently, for each business expenditure, a business needs to enter a line item to get its city and county taxes refunded. A number of these

start-up businesses are small and lack the resources for this type of administrative work.

If the State Department of Revenue created an app, which could submit a photograph of the receipt in order to keep track of all expenses and taxes, the overwhelming administrative requirements could be lessened or eliminated.

Expansion of defined districts for IHE partners. When the RJS program was established, IHE districts were created so that counties associated with each of these districts would know their IHE partner. Some stakeholders mentioned that the system was somewhat limiting. For example, if a business in Craig wanted to collaborate with its IHE on an advanced manufacturing project, it would not be able to because Colorado Northwest Community College, the IHE partner in that region, does not offer an advanced manufacturing program. For future iterations of the RJS, a stipulation should be added to allow start-up businesses to collaborate with the most appropriate college/university within the state and with the most suitable program to support their needs. Community colleges and universities in rural Colorado should collaborate more to aid in rural economic development. Not every IHE needs to offer the same programs, nor should they. If students or businesses need help from a particular program, they should be directed to the IHE that would best fulfill those needs.

Additionally, some rural community colleges lack the resources to dedicate to managing this program. Under the current state statute, they do have the right to participate or not, however, if they do not, then a new start-up business could be disadvantaged by not having the support or program management expertise that they might need. As such, a recommendation is to allow other entities to act as the local program manager, such as the Small Business Development Centers (SDBC), the

economic development entities (i.e., GJEP), or the state workforce centers. By opening up the restriction of having to work with only an IHE, more start-up businesses can potentially participate in the program and receive the assistance they need.

Two-tiered program. A recommendation that surfaced from my research is to create a tiered system of what defines a rural, economically distressed community. Other OEDIT programs have this distinction and it is appealing to the smaller rural communities. These communities are further away from the metro areas and have argued that the program is working great for Grand Junction, but to them, Grand Junction feels more like Denver or other large metro areas. These smaller communities do not have all of the same capitals and assets and therefore would like to see a second-tier, more flexible program that might work in their areas.

Community competition. Per one conversation, it was interesting how cities across the United States were recently contending to become an "Amazon City." Amazon set out to select a city that would be home to one of its expansion divisions. As such, the cities had to demonstrate their capacity to accept this new business by highlighting their transportation infrastructure, tax incentives, affordable housing, quality of schools, college graduation output, broadband infrastructure, etc. In other words, they had to promote their best assets. This model created a flurry of activity for cities involved in the competition.

My recommendation would be to adopt this model for future state investments, rather than determining which communities were most severely harmed by the current economy. The state could appropriate certain economic development funds, for example, \$50 million, and counties and communities could compete for 10 grants of \$5 million

each. These grants would help communities focus on their specific strengths and opportunities, as well as to understand the role of state taxes and taxation policy in any particular outcome (M. Gianneschi, personal communication, 2018). The initiative could help the state better understand the role of IHEs and how they can operate differently within their distinct districts. For example, if a community needs engineers or nurses, perhaps those programs could be offered tuition free. This would help increase the number of students enrolling in these programs, especially low socioeconomic students.

Statement of Significance

My research study provided the following professional contributions: (1) adding to the literature regarding the role of Institutions of Higher Education (IHEs) in entrepreneurship ecosystems (EEs); (2) assisting IHEs and higher education scholars to understand and possibly expand their definition of community and economic development; (3) helping the Colorado OEDIT revise the RJS program with recommendations and improvement strategies; and (4) increasing my knowledge and experience as a higher education professional.

Contributions to the literature. The results and recommendations that emerged at the conclusion of this project add to the existing research concerning IHEs' involvement in and support of EEs. The study demonstrated why it is important for IHEs to be engaged with their communities and to be included in local economic development strategies. Significant research has been done surrounding the relationship between universities and entrepreneurship. My research adds to the body of knowledge identifying

the role of community colleges in supporting EEs in economically disadvantaged rural areas.

According to the RJS program manager, no research or program evaluation has been conducted on the Colorado RJS program. This study bridges the knowledge gap that exists in this space. By conducting this specific program evaluation of the RJS, I demonstrated why the inclusion of an IHE in the design of the program was crucial for its inception.

Future research should be conducted on the efficacy of different economic development policies that states implement to address rural-urban divide issues.

Specifically, future research should concentrate on the differing roles of community colleges in rural economic development.

Contribution to higher education. This research and resulting recommendations should be used by IHEs and specifically community colleges to definitively outline what their role should be in local economic development strategies. If there were a more consistent definition of what economic and community development entails, I believe more IHEs and community colleges could contribute significantly to supporting the communities that they serve. With future research looking at these differing roles that community colleges represent, a model of best practices can be developed for other institutions to follow.

In addition, the methods and outcomes used in this evaluation can help other scholars in higher education research endeavors. Those who undertake future research concerning IHEs and rural economic development can benefit from the information shared in this program evaluation. The examination of the roles of IHEs in local

community economic development strategies will also be helpful to higher education practitioners.

Contributions to practice. Utilizing a theory-driven program evaluation model with the community capitals framework offers a robust and recent theory that should be shared with other scholars. This model provides an interdisciplinary approach to program evaluation and could inspire others to continue to examine the concepts evolving in this domain.

Furthermore, the program administrator of the RJS program at the Colorado OEDIT can use the findings and recommendations to request changes and improvements to the program. The administrators at OEDIT could conduct a feasibility study of these recommendations to determine which are practical and which are achievable. These recommendations should be used to support a request to the Colorado State Legislature to extend the program past 2020. The legislative staff should examine these recommendations and build a supporting narrative to engage with other legislators in building a coalition of support to renew the bill. In addition, these recommendations could also help OEDIT determine ways to implement the program in more rural communities throughout the state.

Contributions to my professional development. As a higher education professional, I wanted to conduct this research to engage with the local communities and existing economic development partnerships in the rural mountain and Western Slope regions of Colorado. My aim was to assist regional IHEs in understanding how important their role is in participating in economic development strategies. My research did not

cover every nuance of these strategies, and there are recommendations for future research to help continue the contributions to this conversation.

The role of IHEs in rural economic development strategies, and especially community colleges, is a dynamic one and must continue to evolve and adapt to changing environments. Collaborating and engaging with the local community and workforce will ensure that they are involved in any potential shifts in the economic outlook of their region.

Conclusion

The RJS program, developed by the State of Colorado to ignite economic growth in rural Colorado in partnership with an IHE, is a unique program requiring the engagement of numerous stakeholders. The design of the program is intended to create an entrepreneurship ecosystem, which will in turn spur economic growth in the economically distressed, rural communities of Colorado. With the engagement of multiple stakeholders led by the IHE, this ecosystem provides guidance and support to new local businesses. The RJS program provides tax relief benefits to new start-up businesses, as well as to their employees. The theory behind this program is that by providing certain tax relief benefits, more start-up businesses will locate to rural communities, thus creating a positive economic impact. This program evaluation has determined that if a community is not already a healthy community, as identified by the community capitals of the community capitals framework, EEs are difficult to start. Furthermore, if an EE is not present and thriving, the chances of the RJS program assisting increased economic activity in rural areas is slim. Except in rare cases, the

original theory behind the bill that created the RJS program, which proposed stronger economic growth and diversification of rural communities, was not corroborated by the outcomes.

References

- American Association of Community Colleges. (2011). 10,000 Small businesses initiative makes big impact. *Community College Journal*, 82(3), 12.
- Anderson, P. (2014). Preserving place: Williston, ND and the use of the community capitals framework for Boomtown community development. *Housing and Society*, 41(2), 297-314.
- Baldwin, C., Hutchinson, S., & Magnuson, D. (2004). Program theory: A framework for theory-driven programming and evaluation. *Therapeutic Recreation Journal*, 38(1), 16-31.
- Bers, T. (2013). Local and regional economic contributions of community colleges: It will be increasingly important for community colleges to let their constituencies know not only about their contributions to the education of the citizenry, but also about their contributions to the economy. *Planning for Higher Education*, 41(4), 81.
- Bruneel, J., Ratinho, T., Clarysse, B., & Groen, A. (2012). The evolution of business incubators: Comparing demand and supply of business incubation services across different incubator generations. *Technovation*, *32*(2), 110-121. doi:10.1016/j.technovation.2011.11.003

- Burke, K., & Phelan, G., (2016). *College and community partnerships: The development of an entrepreneurial program to support economic development*. Presented at the 7th Annual George Washington University–International Council for Small Business Global Entrepreneurship Research and Policy Conference. doi:10.2139/ssrn.2852004
- Cantu-Ortiz, F. J., Galeano, N., Mora-Castro, P., & Fangmeyer, J., Jr. (2017). Spreading academic entrepreneurship: Made in Mexico. *Business Horizons*, 60(4), 541-550.
- Chen, H. (2006). A theory-driven evaluation perspective on mixed methods research.

 *Research in the Schools, 13(1), 75-83.
- Chen, H.-T., & Rossi, P. H. (1983). Evaluating with sense: The theory-driven approach. *Evaluation Review*, 7(3), 283-302.
- Choose Colorado. (2019). *Rural Jump Start program*. Retrieved from https://choosecolorado.com/doing-business/incentives-financing/rural-jump-start-program/
- Colorado Mountain College. (2019). *CMC vision, mission, values, and guiding*principles. Retrieved from https://coloradomtn.edu/about-us/vision-mission-values-principles/
- Colpaart, A. M. (2017). Exploring personal, business, and community barriers and opportunities for food entrepreneurs. Unpublished doctoral dissertation, Colorado State University, Fort Collins, CO. Retrieved from https://mountainscholar.org/bitstream/handle/10217/184045/Colpaart_colostate_0053A_14422.pdf?sequence=1
- Creswell, J. W. (2003). Research design: Qualitative, quantitative, and mixed methods approaches (2nd ed.). Thousand Oaks, CA: Sage.

- Creswell, J. W. (2007). *Qualitative inquiry & research design: Choosing among five approaches* (2nd ed.). Thousand Oaks, CA: Sage.
- Creswell, J. W., & L.,P. C. (2011). *Designing and conducting mixed methods research*.

 Los Angeles: SAGE Publications.
- Custer, N. (2016). IN like Flint: How the innovation incubator at UM-Flint fosters social entrepreneurship in a city remaking itself. *Journal of Community Engagement & Higher Education*, 8(1), 29-46.
- Department of Sociology. (n.d.). Community capitals. Ames, IA: Iowa State University.

 Retrieved from http://www.soc.iastate.edu/staff/cflora/ncrcrd/capitals.html
- Donaldson, S. I. (2001). Mediator and moderator analysis in program development. In S. Sussman (Ed.), *Handbook of program development for health behavior research* and practice (pp. 470–500). Thousand Oaks, CA: Sage.
- Donaldson, S. (2007). *Program theory-driven evaluation science: Strategies and applications*. New York, NY: Psychology Press.
- Duffy, L., Kline, C., Swanson, J., Best, M., & Mckinnon, H. (2017). Community development through agroecotourism in Cuba: An application of the community capitals framework. *Journal of Ecotourism*, *16*(3), 203-221.
- Ecosystem. (n.d.). In *Merriam-Webster's collegiate dictionary*. Retrieved from http://www.merriam-webster.com/dictionary/ecosystem
- Emery, M., & Flora, C. B. (2006). Spiraling-up: Mapping community transformation with community capitals framework. *Community Development: Journal of the Community Development Society*, *37*, 19-35.

- Fernández, M., Blanco Jiménez, F., & Cuadrado Roura, J. (2015). Business incubation: Innovative services in an entrepreneurship ecosystem. *The Service Industries Journal*, 35(14), 1-18.
- Flannery, M. E. (2012). Interview with Dr. Jill Biden: Community colleges connect the dots. *NEA Today*. Retrieved from http://neatoday.org/2012/03/26/interview -with-jill-biden-community-colleges-connect-the-dots/
- Flora, C. B., & Flora, J. L. (2005). Theory and practice of capitals framework
 [Presentation handout]. Community Capitals Framework: Research, Evaluation;
 Practice Conference, December 12-13, 2005, North Central Regional Center for
 Rural Development, Iowa State University, Ames, IA.
- Flora, C. B., Flora, J. L., & Fey, S. (2004). *Rural communities: Legacy and change* (2nd ed.). Boulder, CO: Westview.
- Grand Junction Economic Partnership. (2019). 2018 Jump Start summary. Grand Junction, CO: Author.
- Gulliford, A. (2012). Black Sunday, 30 years later. *High Country News*. Retrieved from https://www.hcn.org/wotr/black-sunday-30-years-later/print_view
- Hasenbeck, E. (2018). Smartwool announces headquarters will move from Steamboat to Denver. *Summit Daily*. Retrieved from https://www.summitdaily.com/news/smartwool-announces-headquarters-will-move-from-steamboat-to-denver/
- Heriot, K., Dickes, L., & Jauregui, A. (2017). Boots2business: An early view of an SBA entrepreneurship outreach program. *Small Business Institute Journal*, 13(1), 1-15.
- Hickenlooper, J. (2018). *Highlights of jobs and economy report*. Report available at the Governor's farewell luncheon.

- Isenberg, D. (2014). What an entrepreneurship ecosystem actually is. *Harvard Business Review*. Retrieved from https://hbr.org/2014/05/what-an-entrepreneurial-ecosystem-actually-is
- Isenberg, D., Gundlach, G., & Moss, D. (2016). Applying the ecosystem metaphor to entrepreneurship: Uses and abuses. *The Antitrust Bulletin*, 61(4), 564-573.
- Johnson, J. (2009). Rural economic development in the United States. *Economic Development Quarterly*, 23(3), 229-241.
- LeRoy, G., Fryberger, C., Tarczynska, K., Cafcas, T., Bird, E., & Mattera, P. (2015).

 Shortchanging small business: How big businesses dominate state economic development incentives. Washington, DC: Good Jobs First.

 doi:10.2139/ssrn.2771463
- Malecki, E. J. (2018). Entrepreneurship and entrepreneurial ecosystems. *Geography Compass*, 12(3). doi:10.1111/gec3.12359
- Mason, C., & Brown, R. (2013). Entrepreneurial ecosystems and growth oriented entrepreneurship. Paris, France: Organization for Economic Cooperation and Development. Retrieved from https://www.oecd.org/cfe/leed/Entrepreneurial-ecosystems.pdf
- Miles, M. B., Huberman, M. A., & Saldaña, J. (2014). *Qualitative data analysis: A methods sourcebook* (3rd ed.). Thousand Oaks, CA: Sage.
- Morgan, J. Q., & Lambe, W. (2009). Find a way or make one. *Economic Development Journal*, 8(3), 5-13.
- NBIA. (2007). Business incubation FAQ. Retrieved from http://www.nbia.org/resource_center/bus_inc_facts/index.php

- Nickoli, R. A. (2013). Role of the community college in economic development. *New Directions for Adult and Continuing Education*, 140, 69-78. doi:10.1002/ace.20075
- Peer, N. (2017). Evaluating cultural competency concepts using program theory-driven evaluation framework. *Nursing Education Perspectives*, *38*(6), 337-339.
- Pigg, K., Gasteyer, S., Martin, K., Keating, K., & Apaliyah, G. (2013). The community capitals framework: An empirical examination of internal relationships.

 Community Development, 44(4), 492-502.
- Rafn, H. J. (2012). Building regional economic growth and innovation capacity. *New Directions for Community Colleges*, 157, 29-41. doi:10.1002/cc.20004
- Renger, R. (2010). Constructing and verifying program theory using source documentation. *The Canadian Journal of Program Evaluation*, 25(1), 51-67.
- Ring, J., Peredo, A., & Chrisman, J. (2010). Business networks and economic development in rural communities in the United States. *Entrepreneurship Theory and Practice*, 34(1), 171-195.
- Rogers, P. J. (2009, September 1). *Using purposeful program theory and logic models for evidence-based policy and practice*. Presented at the Australian Evaluation Society Pre-Conference Workshop.
- Saldana, J. (2009). *The coding manual for qualitative researchers*. Los Angeles, CA: Sage.
- Shaffer, D. F. (2015). Higher education systems are assuming a larger role in the economic development efforts of their states. *Economics, Management, and*

- Financial Markets, 10(1), 54-79. Retrieved from http://www.ceeol.com/search/article-detail?id=115368
- Stam, E., & Spigel, B. (2017). Entrepreneurial ecosystems. In R. Blackburn, D. De Clercq, J. Heinonen, & Z. Wang (Eds.), Sage handbook for entrepreneurship and small business.
- Start-Up NY. (n.d.). Start-Up NY program. Retrieved July 2, 2019, from https://esd.ny.gov/startup-ny-program
- State of Colorado Legislature. (2015). SB15-282 Colorado Rural Jump Start Act.

 Retrieved from https://leg.colorado.gov/sites/default/files/digest2015.pdf.
- Stufflebeam, D. (2001). Evaluation models. New Directions for Evaluation, 89, 7-98.
- Swanger, D. (2016). Community colleges: Partners in community development. *Planning* for Higher Education, 45(1), 13-49.
- U.S. Census Bureau. (2018, November 26). *Geography program: 2010 Census urban*and rural classification and urban area criteria. Retrieved from

 https://www.census.gov/programs-surveys/geography/guidance/geo-areas/urban-rural/2010-urban-rural.html
- U.S. Department of Agriculture. (2016, May 6). USDA awards \$39.3 million in loans and grants to support economic development in rural areas [Press release]. Retrieved from https://www.usda.gov/media/press-releases/2016/05/06/usda-awards-393-million-loans-and-grants-support-economic
- University of Colorado Boulder. (2015). *Colorado business economic outlook 2015*.

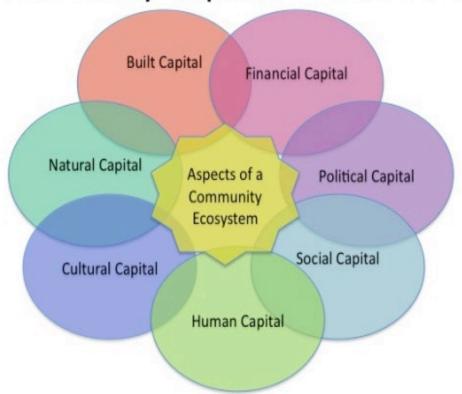
 Retrieved from https://www.colorado.edu/business/sites/default/files/attached-files/2015%20Colorado%20Business%20Economic%20Outlook.pdf

Appendices

Appendix A:

Community Capitals Framework

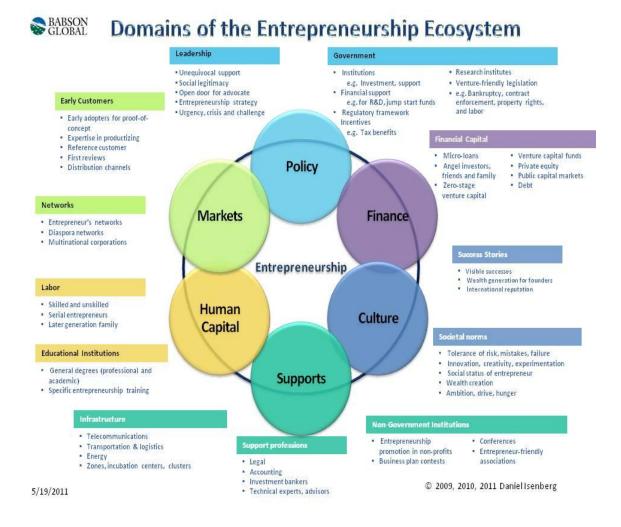
Community Capitals Framework



Source: Community Capitals Framework & Sustainable Communities, Cornelia Butler Flora, Rural Studies Research Seminar, July 4, 2006, University of Guelph

Appendix B:

Domains of the Entrepreneurship Ecosystem



Appendix C:

Interview Questions

I will ask the program visionaries and creators the following questions:

- 1. Why did you think it was important for Colorado to implement this type of tax relief program to new businesses in rural Colorado?
- 2. What was the catalyst that drove you from vision to action?
- 3. What steps did you have to follow to see this vision become a reality?
- 4. What obstacles did you encounter along the way?
- 5. What do you see as the key elements of the program's success?
- 6. Why was it necessary to include the role of the IHE?
- 7. Do you think the program is a success, as you envisioned it?
- 8. What changes would you recommend to improve the program?
- 9. Do you think the program has a chance to renew after the 2020 deadline?
- 10. How would you sell the benefits of the program to other rural areas that are considering adopting the program?

I will ask the government proponents and administrators the following questions:

- 1. Why did this particular program appeal to you?
- 2. Did you believe that all of the stakeholders would actually collaborate to make this a reality?
- 3. Do you think the program has been a success? Why or why not?
- 4. Why do you think more counties have not signed up to participate?
- 5. What changes would you make to the current program to attract more participation?
- 6. Do you think the program has a chance to renew after the 2020 deadline?

- 7. How do you see the role of the IHE as a critical partner in the success of the program?
- 8. Do you think there might be other, similar types of programs that can assist with rural business development?

I will ask the program participants/recipients the following questions:

- 1. Did you locate your business here for the sole reason of participating in the RJS?
- 2. What other locations were you looking at?
- 3. Do you feel the RJS program has contributed to your success? Why or why not?
- 4. What specific ways do you think the RJS has contributed to your success?
- 5. Would you recommend this program to other potential businesses looking to locate in Colorado?
- 6. How has the role of the IHE influenced your business?
- 7. Do you believe that the role of the IHE is critical to the program?
- 8. What barriers have you encountered with the program?
- 9. What changes might you recommend to improve the program?
- 10. Would you have started your business here, with or without the program?
- 11. How would you sell this program to other rural areas that are thinking about implementing the program?