

ENTREPRENEURIAL COMMUNITIES IN RURAL  
OKLAHOMA

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ENTREPRENEURIAL COMMUNITIES IN RURAL  
OKLAHOMA

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## **CHAPTER I**

### **INTRODUCTION**

#### **Problem Statement**

Rural areas throughout the United States have faced many obstacles over the past decades such as a declining population, the loss of local business, and simply the challenge of existence in some cases. A growing number of communities are struggling to achieve sustainability and economic vitality (Innovation & Information Consultants, 2006). Rural Oklahoma also faces these same obstacles. According to the Bureau of Economic Analysis, 36.8 percent of Oklahoma's total population resides in nonmetropolitan areas in 2004. This number has decreased since 1990 when 39 percent of Oklahoma's total population resided outside of the metropolitan areas.

Communities cope with these number of business and number of community losses by making strategic efforts to increase local businesses. Some communities attract businesses to locate in their communities by offering incentives such as tax breaks. Communities also focus on their current local businesses in hopes of retaining and expanding those that are present. Finally, communities look to create new businesses. This particular action looks toward the entrepreneurs or potential entrepreneurs within the community. Ultimately, communities choose to create, attract,

retain, or expand current businesses to fulfill their economic development goals (Woods, Frye, and Ralstin 2004).

The creation of small businesses locally can be favored over recruiting outside firms. The recruitment of large firms tends to be highly unsuccessful, and when successful, it tends to be very costly for the community (Edmiston 2007). Therefore, communities turn towards entrepreneurs for job creation. Chatman (2004) describes entrepreneurs as individuals that envision something that did not exist before, create something new, or provide an existing product or service in a new way. Small businesses are believed the innovators of today's economy (Edmiston 2007). They are also believed to improve the quality of life of a community, increase the income of the family that owns them, and improve the economic base of the community (Muske and Woods 2007).

When communities begin to focus on entrepreneurship activity, many questions arise regarding how to aid these individuals. Communities that provide various types of assistance to their entrepreneurs are thought to be entrepreneurial. "An entrepreneurial community is one where there is significant economic and social entrepreneurial activity and where there is an effective system of entrepreneurship development," (W.K. Kellogg Foundation 2004). Thus, an entrepreneurial community is one that provides a haven to nurture entrepreneurs. However, an entrepreneurial community is also described as one that behaves as an entrepreneur. The community as a whole works together to take risks, adopts new technology, and continues to reinvent themselves in a similar manner as an individual entrepreneur would.

Entrepreneurial communities not only build the spirit of the community, but they also expand the economic base through increased retail sales within the community. Retail sales are very important to communities. Increasing retail sales can provide larger employment opportunities and increase the tax base for the community. Communities then utilize those tax dollars to perform necessary operations and improve the quality of life.

It is useful to understand and identify the characteristics that an entrepreneurial rural community in Oklahoma possesses. This will be accomplished through empirical and qualitative research with data from Oklahoma communities. This research will overall aid in community planning and rural development efforts across the state of Oklahoma. This research will identify policy steps and actions to enhance the local economy in rural Oklahoma. It will provide vital information identifying the strengths, positive characteristics, and best practices of rural entrepreneurial Oklahoma communities.

### **Objectives**

The overall goal of this research is to improve community planning and rural development efforts across the state of Oklahoma. Specific objectives include:

1. Determine if selected services and characteristics affect whether a rural community operates in an entrepreneurial manner.
2. Determine the overall impact of selected services and characteristics on community's development efforts in rural Oklahoma.
3. Determine which characteristic or combination of characteristics is most beneficial in a community's effort to be entrepreneurial.

## **Outline of Thesis**

In chapter two, literature is reviewed including: theory, definitions of entrepreneurs and entrepreneurship, models of entrepreneurship, and services for entrepreneurs. Chapter two also contains the conceptual framework for this research. Chapter three contains the methodology of the research. The methods for the Oklahoma Social Indicator Survey of 2006, the econometric models of the research, and the case studies completed are all included. Chapter four presents the quantitative results from both the Oklahoma Social Indicator Survey of 2006 and the econometric models to be estimated with a comparison of the econometric results. Chapter five includes the qualitative results and case study results. Chapter six includes the summary, conclusions, and recommendations for further research.

## **CHAPTER II**

### **REVIEW OF LITERATURE**

Local small businesses are very important to rural communities. They make up around two-thirds of rural, non-farm jobs (McDaniel 2001). Many rural communities rely solely on sales tax collections to provide quality streets, emergency services, and many other amenities for residents and business owners. These collections are obtained from retail sales. Communities have started to look toward their business owners and entrepreneurs (Chatman, Johnson, and Rightmyre 2004). Acs and Malecki express the differences in firm creation, growth, and existence in rural and urban areas. “Rural areas lack the intense communication, the clusters and large numbers of potential customers, and capital needed for the creation of these firms” (Acs and Malecki 2003).

These communities have had to transform from their traditional farming, agricultural dependent past to find new sources of income. “Over the past few years, it has been noted more often that small businesses are the majority of businesses in the country; however, especially in rural America even smaller businesses (less than 20 employees) seem to be a major source of income” (McDaniel 2001). It is important to identify what services or features are offered in the communities where these businesses are located to aid start-up, existing, and expanding businesses.

## **Theory**

Rural development utilizes a variety of theories to explain growth and development. Three important theories to understand rural development include the growth of a community by export base, central place, and location theories.

Entrepreneurial communities are excellent examples of these three economic theories in process. For example, export base theory stresses the effects exports have on a given region. Central place theory describes interdependence within a hierarchy of cities.

This particular theory helps explain why markets locate where they do (Shaffer, Deller, and Marcouiller 2004). This theory is very beneficial when looking at rural Oklahoma.

This also aids in understanding retail sales analysis. Another theory that can also help explain trends in rural Oklahoma would be location theory. This theory rests on the notion that production will locate where investment is the greatest (Shaffer, Deller, and Marcouiller 2004). All these factors are important when looking at rural Oklahoma.

### **Export Base Theory**

Export base theory is a model of growth for a community. The economy is divided into two sectors: the export sector, also known as the basic sector, and the nonexport or the nonbasic sector (Shaffer, Deller, and Marcouiller 2004). The export sector produces goods and services that are exported outside of the community. This theory stresses the development and vitality of a community depends largely on the exports of the community, the outside dollars (Shaffer, Deller, and Marcouiller 2004). The export sector actually brings revenue into the community from someone outside the community purchasing items produced within the community (Shaffer, Deller, and

Marcouiller 2004). This is important to a community because the outside shopping brings in outside dollars into the community to increase revenue (Shaffer, Deller, and Marcouiller 2004). The nonexport sector represents the goods and services that are consumed within the community. The nonexport sector and the export sector work together within the community. Therefore, if there is a change in the export sector, there will be a multiplier impact on the nonexport sector (Shaffer, Deller, and Marcouiller 2004). There are limitations to the export base theory. For example, it is not a general theory of community development; it doesn't address a large variety of communities in the short run (Shaffer, Deller, and Marcouiller 2004).

### **Central Place Theory**

Central place theory explains why certain goods and services are not produced in every community; therefore, this particular theory also does not isolate one community (Shaffer, Deller, and Marcouiller 2004). Central place theory is built on the idea of a hierarchy of communities based on the goods and services that are available in the community (Shaffer, Deller, and Marcouiller 2004). Central place theory utilized two major assumptions. Businesses will strive to maximize the area they serve, and consumers will minimize their travel distance to obtain these goods (Shaffer, Deller, and Marcouiller 2004). Central place theory has limitations. Central place theory does not take in account the qualitative aspects such as a store's hours, parking, and other amenities (Shaffer, Deller, and Marcouiller 2004). Central place theory does not take in account people shopping where they "feel good." Central place theory also does not take in account tourists shopping in a region, and individuals shopping for multiple purposes (Shaffer, Deller, and Marcouiller 2004).



## **Location Theory**

Location theory aids in explaining how location decisions are made and why firms and economic activity occur in the areas they do (Shaffer, Deller, and Marcouiller 2004). The firm's goal is to make a profit. Further, firms are more likely to locate where they can maximize their profits by locating where the demand is the highest and costs are the lowest (Shaffer, Deller, and Marcouiller 2004). Communities that expand their economy by attracting firms oftentimes provide incentives through tax breaks or other benefits that will lower the firm's overall costs. The least cost approach of location theory supports firms locating where their total cost of production and transportation costs are the lowest (Shaffer, Deller, and Marcouiller 2004). Moreover, when these costs are significantly lower or there is a large increase in demand for a good or service, one would notice an uneven growth of regions (North 1955).

Location theory provides much insight on the activities of firms; however, there are also limitations to location theory. There is little attention paid to housing, the labor force, and the overall quality of life of the area (Shaffer, Deller, and Marcouiller 2004). Location theory also does not take in account that firms are not exactly mobile; moreover, new start-up businesses are often not explained by location theory (Shaffer, Deller, and Marcouiller 2004).

### **Definitions of Entrepreneurs and Entrepreneurial Communities**

Entrepreneurs are not new to society; however, today, they are becoming more and more noticed in development circles. Several different authors have defined entrepreneurs. For example, Minnesota Rural Partners Inc.(2005) describes

entrepreneurs as individuals that come in every shape, size, age, income, ability, and color. Chatman, Johnson, and Rightmyre (2004) also goes on to describe the act of being entrepreneurial as approach to business that relies on innovation, ambition and growth. The W.K. Kellogg Foundation (2004) defines entrepreneurs as people who create and grow enterprises.

Entrepreneurial community is a rather recent term. There are definitions of entrepreneurial communities that include the previous definitions of entrepreneurship. The Edward Lowe Foundation (2002) defines an entrepreneurial community as, “One that has numerous threads woven together, including public policy that supports entrepreneurship, people, money, technology, customers, transportation, a supportive environment and services. As more threads are woven together, the community’s strength and resource base grows.”

### **Factors Affecting Entrepreneurial Communities**

There are several qualities that an entrepreneurial community should possess. The Small Business Administration and Innovation & Information Consultants (2006) developed a basic model defining the attributes of rural small business growth and profitability. The independent variables include: Population, education, wealth, employment, wages, technology, access to business capital, quality of life, and macroeconomic variables. Two different time periods were analyzed to capture differences in the overall economy. The first time period covered 1997-1999 when the economy was positive and 2000-2002 when the economy was slower. The Rocky Mountain Region had a positive coefficient of rural establishments during the 2000-2002 time period while the Southeast Region had a negative coefficient of rural

establishments (Innovation & Information Consultants 2006). Other variables such as population and quality of life or natural amenities available had a positive effect on the number of rural establishments and even the number of rural small business births during the 1997-1999 time periods (Innovation & Information Consultants 2006). Also, when rural businesses were compared to urban in terms of businesses, there was a noticeable lag on the part of the rural businesses (Innovation & Information Consultants 2006).

### *High-Speed Internet*

Accessing technology is an important obstacle rural America faces (Henderson 2002). It is believed that a lag in communication technology actually costs rural businesses in earnings (Gale and McGranahan 2001). The communities that have high speed internet and other technology amenities help their business owners stay ahead. It can even help their local businesses compete with urban counterparts. This is now becoming possible due to E-commerce. Yet, Whitacre and Mills (2007) found that individuals in rural areas regardless of education and income have a lower probability of having high speed internet.

### *Wages*

Another issue that continues to arise in rural Oklahoma is the ability of the small businesses to pay competitive wages. There has been a great difference in average hourly wages between urban and rural America. Moreover, the gap continues to grow larger (Innovation & Information Consultants 2006). There is also a difference in wages among sizes of firms. Firms that are larger in size tend to pay higher wages

(Edmiston 2007). Thus, competitive wages are important for the workforce in rural Oklahoma.

### *Business Incubators*

Small business incubators offer space and support services at a lower rate to help small businesses in the start-up and expansion stages (Woods and Rushing 1995). Business incubators provide many services for small businesses such as financial assistance, managerial support, and access to office equipment (Woods and Rushing 1995). Since business incubators offer one building for several start-up businesses, the business incubators also offer an “entrepreneurial climate” for those who participate (Henderson 2002). Henderson (2002) also states that almost 90 percent of businesses incubator graduates from business incubators affiliated with National Business Incubator Association were still in business, and 84 percent of this total remained in their local community. Therefore, the help of business incubators aids small businesses make a positive start. Thus, with a positive start, the longevity of the firm increases.

The Oklahoma Legislature passed the Oklahoma Small Business Incubators Act in 1988 (Oklahoma Department of Commerce, 1998). In 1998, there were only 18 business incubators operating in Oklahoma (Oklahoma Department of Commerce, 1998). In 2006, this number had increased to 45 business incubators in operation (Oklahoma Department of Commerce, 2006). There are 131 small businesses that have 629 full time jobs housed in the 45 business incubators (Oklahoma Department of Commerce, 2006).

### *Mentors*

The Center for Rural Entrepreneurship (2003) takes note that entrepreneurs need and value the opportunity to network with other entrepreneurs and have access to mentors. Henderson (2002) finds that networks for entrepreneurs, both formal and informal, that help pair entrepreneurs with necessary resources can provide aid. These networks can help entrepreneurs find financing sources, potential employees, and other services needed to start and operate a small business; overall, these networks can provide an entrepreneurial environment for entrepreneurs (Henderson 2002). Recently, entrepreneurial coaches have been utilized to facilitate entrepreneurial growth. These are individuals that work with entrepreneurs to help locate the services needed for their businesses (Powers and Scorsone 2005). These coaches can and oftentimes do play a mentoring role for entrepreneurs.

### *Courses on Owning and/or Operating a Small Business*

There are many thoughts of why some people are entrepreneurs and others are not. Some are thought to have an extraordinary genetic background in entrepreneurship; however, there are also many entrepreneurs who have not had the benefit of such a genetic make up (Garavan and O’Cinneide 1994). Therefore, many conclude that, “Entrepreneurs are often made, not born” (Garavan and O’Cinneide 1994).

Education or knowledge about owning a small business can prove to be beneficial for entrepreneurs. Oftentimes, however, individuals who desire to start and operate a new business lack the knowledge that is needed for this endeavor (Korsching

and Allen 2004). Headd (2000) found that small businesses had higher percentages of employees who did not receive high school diplomas and employees whose highest amount of education is a high school diploma. Moreover, larger firms had higher percentages of employees who had higher formal education, some college, a bachelor's degree, or even a master's degree (Headd 2000). Therefore, courses pertaining to owning, managing, and operating a small business could aid in the success and longevity of rural entrepreneurs.

### *Local Financing*

Financing is a major component to success of all businesses especially for those regions who are transforming their economic base (Henderson, Moore, and Weiler 2005). However, sometimes in rural Oklahoma it can be difficult to find a financing source. McDaniel (2002) notes the importance of financing and the difficulties that rural America experiences. It is stated that investors oftentimes pay little attention to the states that are not on a coastline. The overlooked states account for the vast majority of rural America. Thus, the investors do not see the need to travel to the heartland to even look at potential firms that have been viewed to be profitable (McDaniel 2002).

Research conducted by Henderson, Moore, and Weiler (2005) of the Kansas City Federal Reserve Bank have found many benefits for local communities to finance and support their local businesses especially those in the smaller communities. This might sound odd since sometimes small community banks do not have the diversified portfolios like those of the larger urban banks. However, there are many benefits to the lending of small, rural banks. There is much benefit to the community as a whole. Henderson, Moore, and Weiler (2005) describe in great detail of how a community as a

whole, the financial institution, and the business owner all benefit from local financing of success for businesses. For example, when a local bank provides lending, the returned principal and interest in turn can create more jobs and more spending. Plus, the successful business may return for added funding for more expansion. In turn, the community bank has the opportunity to diversify their portfolio and keep their funds local. Small community banks know their community and overall have a better knowledge of the markets for their region. They have a better opportunity to determine the potential results of their investment. They also have a better understanding of the firm in which they invest. Small community banks actually know their small business owners as a person (Henderson, Moore, and Weiler 2005).

#### *State and/or Federal Programs*

Building rural communities through entrepreneurship is a fairly modern concept. Moreover, the positive results are just now beginning show. Entrepreneurship is now a strong element of economic development; therefore, rural policymakers are taking different directions in policy (Henderson 2002). With new policies being both proposed and passed on both state and federal levels, new programs are being developed to help entrepreneurs. However, there is not a substantial amount of previous literature and studies to quantify the positive impacts.

There are also state and federal loan and financing programs available. For example, the Small Business Administration guarantees loans made by banks and other financial institutions (Holcomb, Muske, Urbach, Woods 2007). Therefore, the risk is moved from the financial institution making the loan and absorbed by the Small Business Administration (Holcomb, Muske, Urbach, Woods 2007).

### *Infrastructure*

The Center for Rural Entrepreneurship (2003) is one source that identifies community infrastructure to be very important. For economic development purposes, infrastructure includes water, sewer, and streets. While important for community residents infrastructure is a definite need for business owners. The Center for Rural Entrepreneurship (2003) compares infrastructure to the framework of a structure. However, in many places through out rural America, infrastructure is lacking or deteriorating. Thus, competitive businesses need quality infrastructure (McDaniel 2001). The preparation of infrastructure and the presence of quality infrastructure is key in attracting firms (Minnesota Rural Partners 2005).

### *Community Involvement*

Previous research by Blanchard et al. (2001) have found that being actively involved in the community can overall be the best method of advertising for one's small business available. Today there are various community development organizations available for small towns. One's involvement in civic organizations can provide many opportunities (Blanchard et al. 2001). Levitte (2004) found that social networks aimed towards business development are very helpful in supplying knowledge and assistance. These social networks also provide norms and values to build business (Levitte 2004). Moreover, it is also important to educate one's community on the businesses available and the benefits of shopping locally. The Center for Rural Entrepreneurship (2003) advises educating the youth in the community about the businesses available. They



found this could help with the success of present small businesses, but it could also help fuel the next generation to start businesses and shop locally.

### *Qualified Workforce*

The small business owner faces several issues when looking for good workers. Over the past few years, many rural communities have lost employment. With the loss of jobs, the workforce tends to leave the community as well (Goetz 2005). Also, qualified workers may be educated and/or have training in different fields. It has been found that educated workers have better odds in finding opportunities (Innovation and Information Consultants 2006).

An educated workforce has a greater understanding of technology, previously stated as another important variable to rural America (Innovation & Information Consultants 2006.) Many communities have strived to build their labor force skills and improve the technological desires of current local businesses (Henderson 2003). Therefore, these small communities are developing their workforce and striving to create their high-skill service jobs that will use their own labor force (Henderson 2003). However, the education and qualification of workers continues to be an issue for small business owners.

### *Wal-Mart*

Many Americans have mixed emotions or rather a love-hate relationship with Wal-Mart (Clark and Irwin 2006). The presence of a Wal-Mart can have a diverse and varied effect on a community. Many community members and regional residents see large benefits of having a Wal-Mart (Clark and Irwin 2006). One of these benefits is

overall lower prices of goods to consumers (Clark and Irwin 2006). Stone (1997) found that sales of eating and drinking establishments increased 3 percent after one year and 5 percent after ten years after having a Wal-Mart locate in Iowa towns with a population of 5,000 to 40,000. However, communities that did not have a Wal-Mart present consistently reported a decrease in sales of eating and drinking establishments for the 10 years of the study (Stone 1997).

Wal-Mart and mass retailers have also been found to have a negative impact on rural communities especially communities with a population of less than 5,000 (Stone 1997). Studies conducted in Iowa have indicated that the smaller communities, population 5,000 or less, have experienced a decrease in their retail sales equaling close to a 50 percent decline (Stone 1997).

### **Models of Entrepreneurship Development**

Over the past few years, several different ideas, models, and guides have been developed to help community leaders and aspiring entrepreneurs work together to be successful. These models depend greatly on funding, time available, and overall motivation. These models are not a “quick fix” for economic development issues. Rather, they provide a framework and a starting point to help community leaders and entrepreneurs come together.

All of the models presented are to aid with the support and development of local entrepreneurs. These models focus more on the sense of providing what entrepreneurs need to start-up and grow in the sense of an entrepreneurial community. However, the community must work together, diligently plan, and execute their plans and goals to

make the models work. Therefore, the entire community needs to work together as an entrepreneur would to achieve success through the following models.

### *Sirolli Approach*

On its website, the Sirolli Institute was founded in 1996 pioneering the concept of Enterprise Facilitation. The Sirolli Institute website also states that they help establish a community-based organization that works with the local community to assist entrepreneurs. The Sirolli approach is responsible for placing facilitators inside of the community (Sirolli 1999). The purpose of the facilitator is to become available to community members who have a dream of owning their own business (Sirolli 1999). The facilitator helps community members move from a dream to the start up of their business (Sirolli 1999). The Sirolli approach builds a board of community members that are interviewed and trained by the Sirolli Institute on how to implement the program (Powers and Scorsone 2005). Each board member commits to introducing the facilitator to about 10 community members to help build rapport and credibility within the community (Powers and Scorsone 2005).

There are some drawbacks to the Sirolli approach. The upfront cost is a fairly large amount; it is an estimated several hundred thousand dollars over a period of three years (Powers and Scorsone 2005). This can be quite challenging for a small community to obtain such a large amount of funding. However, if all the communities within a county or group of counties chose the Sirolli method, the costs could be shared.

### *Entrepreneurial Coaching*

Entrepreneurial coaches are community members who volunteer or work part time to help local aspiring entrepreneurs (Powers and Scorsone 2005). Powers and Scorsone (2005) states that entrepreneurial coaches not only help entrepreneurs, but they also help the community to embrace the entrepreneurial spirit. Since the entrepreneurial coach is heavily involved within the community, they are often the medium between entrepreneurs and services needed (Powers and Scorsone 2005). According to Powers and Scorsone (2005) this method is the less expensive since the coach is a volunteer and works only part time; however, it is also the least structured.

### *Community Environment for Entrepreneurship*

The Center for Rural Entrepreneurship (2003) is just one source that offers a model of the elements of a successful community. For example, the climate, culture of the community is defined, and the model describes the infrastructure that is needed within the community (Center for Rural Entrepreneurship 2003). The model also offers methods and different levels of support for the local entrepreneurs (Center for Rural Entrepreneurship 2003).

### *Minnesota Rural Partners*

The Minnesota Rural Partners' (2005) model lays out a basketball or football framework where the steps are laid out in four different quarters. The model also identifies what a community needs to have in place to begin building their stock of entrepreneurs. The first quarter is to set the tone and set goals for the community (Minnesota Rural Partners 2005). The second quarter is to connect and identify key

individuals in the community (Minnesota Rural Partners 2005). The third quarter is designed to assess one's position and evaluate one's culture and place (Minnesota Rural Partners 2005). The fourth quarter is titled score where the community to plan for the future and make improvements to original goals (Minnesota Rural Partners 2005).

#### *Community Based Approach-USDA*

USDA has also developed a guide book for community leaders to embrace. Chatman (2004) developed a six-step guide that begins with the community getting organized and building a group that works together to help the community grasp the entrepreneurial spirit. The next steps include an assessment of the community, the development and implementation of a plan; the final steps measure the results and advertise the work and success that has been accomplished (Chatman, Johnson, and Rightmyre 2004).

There are limitations to these models. They do provide steps towards promoting an entrepreneurial community; however, community leaders will need to be dedicated and very inspired to take what is written in these guides and put the ideas and plans in motion.

Table II-1 compares the sample models in terms of cost, regional scope, and the type of facilitator needed based on the comparison table by Powers and Scorsone (2005). The cost varies due to the need of a full time facilitator. There are many advantages to having a full time facilitator. The facilitator completes a large portion of the responsibility. Therefore, the community members do not have to donate as much of their time. The Sirolli method does require a full time facilitator to be hired. This can be quite costly. The regional scope of this method is larger than the USDA model

or entrepreneurial coaching model. Therefore, several communities in one area can pull their assets together to cover the costs of the facilitator. The models that require a volunteer have many advantages. They are an excellent starting point for communities to identify goals and get organized.

**Table II-1. Comparison of Sample Models**

	Minnesota Partners Model	Enterprise Facilitation (Sirolli Approach)	Entrepreneurial Coaching	Community Based Approach-USDA	Community Environment for Entrepreneurship
Facilitator	Part-time (volunteer)	Full-time	Part-time (volunteer)	Part-time (volunteer)	Part-time (volunteer)
Upfront Cost	Moderate-Low	High	Moderate-Low	Moderate-Low	Moderate-Low
Operating Cost	Low	Moderate-High	Low	Low	Low
Training Curriculum	Public Domain	Proprietary	Public Domain	Public Domain	Public Domain
Entrepreneur Relationship	Active	Passive	Active	Active	Active
Regional Scope	County or Smaller Division	County or Multi-County	County or Smaller Division	County or Smaller Division	County or Smaller Division

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\*The models that indicate a part-time (volunteer) facilitator utilize a group effort from within the community. It is possible for the community to hire a person full-time on salary to help make certain everything is running smoothly. That is up to the community, and depends greatly on community funds available.

\*The upfront and operating costs can also vary from community to community. It depends heavily on funds available within the community.

\*This table is based on the “Differences between Enterprise Facilitation© (Sirolli Approach), Modified-Sirolli Approach, Entrepreneurial Coaching” table by Powers and Scorsone 2005.

## Conceptual Framework

The reviewed literature identifies many components of an entrepreneurial community. The variables that were selected were significant in previous studies. Also, the availability of data was a large factor in determining variables. This particular model displays the variables described in the literature review. This model is the base of the four econometric models to be estimated. The dependent variable in each of the models is an entrepreneurial community. For the two ordinary least squares models, entrepreneurial community is captured by the pull factor of the community. Percentage of non-farm proprietors per county, the breadth of an entrepreneurial community, is the dependent variable for one logistic model. For the second logistic model capturing depth of entrepreneurship, average income received by non-farm proprietors is used as the dependent variable.

Entrepreneurial Community = f(NE NW SE WM HSI W BI M COUR LF STP IN CH QF PRS BUS)

Where an entrepreneurial community is a function of:

**Northeast Oklahoma (NE)**- Northeast Oklahoma is comprised of twenty-one counties.

Eighteen of those counties are included in the survey sample.

**Northwest Oklahoma (NW)**- Northwest Oklahoma is comprised of seventeen counties. Fourteen are included in the survey sample.

**Southeast Oklahoma (SE)**- Southeast Oklahoma is comprised of nineteen counties. Twelve counties are included in the survey sample.



**Wal-Mart (WM)-** Wal-Mart has previously been viewed as a popular place of retail trade. Therefore, the presence of Wal-Mart could be thought of as a factor attracting shoppers to a given area.

**High-Speed Internet (HSI)-** Communication technology is very important. The assumption of most businesses having a telephone, either a land line or a cellular telephone, was placed on this variable. Thus, the main issue of communication technology is the availability of high speed internet.

**Wages (W)-** This is important for attracting a qualified workforce. However, in the past it has been noted that rural Oklahoma does not offer the competitive wages that its urban counterparts do. However, communities that offer higher wages are more likely to attract the more qualified, dependable workforce to benefit their businesses.

**Business Incubator (BI)-** Business incubators help business owners start their business. They provide a facility and many helpful tools to help start-up businesses. They also provide an “entrepreneurial environment” for business owners.

**Mentors (M)-** Mentors or an entrepreneurial network can provide assistance to not only start-up businesses, but for all stages of businesses. Mentors and entrepreneurial networks also help pair business owners with their needed services.

**Courses (COUR)-** Small businesses trail larger firms in terms of overall formal education. Thus, courses on funding sources, business planning, and other business activities can aid small business owners in their endeavors.

**Local Financing (LF)-** All businesses need some type of financing; however, local financing has proved in the past to be very beneficial. Therefore, we will expect that financing will represent a positive force in our model.

**State and/or Federal Programs (STP)**- Many policy efforts have been made in recent years to aid entrepreneurs. There are numerous state and federal programs designed to aid business owners. There are programs to help with starting up a business to helping a business expand.

**Infrastructure (IN)**- Infrastructure is not only a requirement for business owners, but it is a need of community residents. This is very important since a lot of the infrastructure in rural communities was put in place many decades ago, and they have yet to be updated and renovated.

**Chamber of Commerce (CH)**- One's involvement within the community is very important. It is also important for those communities to have organizations available for business owners to be involved. Involvement within the community gives business owners the opportunity to network and market their business to their neighbors. This particular variable is labeled Chamber of Commerce; however, it will account for any economic development organization present in a community.

**Qualified Workforce (QF)**- A qualified workforce is desired by all business owners. Sometimes, in rural Oklahoma this can be more difficult to find due to the lower population. A qualified workforce is an educated workforce

**Personal Shopping (PRS)**- Personal shopping within the community is a way to support other business owners and advertise for one's own business. Personal shopping is used to measure one's involvement within the community.

**Business Shopping (BUS)**- Business shopping within the community is another way to show support for one's community. It also helps keep expenditures locally. Business shopping is also used as another measure for community involvement.

Based on the literature, it is anticipated that these variables should have a positive impact on the community. Thus, the hypothesis of the model would be the successful communities have a positive combination of all traits and variables listed. Therefore, the variables of successful communities would all have positive coefficients.

## **CHAPTER III**

### **METHODS AND PROCEDURES**

For this research, both quantitative and qualitative methods were utilized to better understand entrepreneurial communities. First, the Oklahoma Social Indicator Survey of 2006 was conducted. Next, the results of the survey were analyzed and also used in an econometric model. Finally, case studies were conducted on selected communities that displayed attributes of entrepreneurial communities.

#### **Oklahoma Social Indicator Survey of 2006**

This survey was selected since it captured the opinions of business owners across the state. This is important for community leaders because it can help them understand how business owners view the services available in the community.

The survey was conducted by the Bureau for Social Research at Oklahoma State University. The survey was completed during the months of October 2006 through mid December 2006. A total of 1,210 telephone interviews were completed with an additional 23 partial interviews completed. Therefore, there were a total of 1,233 surveys completed for this research. The sample consisted of individuals who were 18 years of age and older and reside within the state of Oklahoma. Respondents were asked a screening question that determined if they or someone in the household was an owner or part-owner of a business. A business included farms, ranches, home-based businesses, and other small

businesses. Of the 1,233 total respondents, 196 indicated they were business owners. Therefore, 15.9 percent of total respondents indicated they or someone in their household owns a business.

The respondents were then asked if their employment level has grown, declined or stayed the same. They were also asked how many jobs they have added or lost over the past five years. The survey respondents were also asked if start-up services such as a business incubator, mentors or entrepreneurship network, courses on starting a small business, local financing, and state and federal loan programs were available in their community. Next, the respondents were asked if they used each of these services in their community.

The survey respondents were asked if they have had difficulty finding workers for their business over the past five years. They were also asked if majority of their business financing came from their community or outside the community. Respondents were asked if a local development organization such as a Chamber of Commerce was located in their community and if he or she was an active member of that organization. Also, respondents were asked how satisfied they are with their local development organization in terms of helping their business succeed. Respondents were then asked questions about availability of internet and had high speed internet; there was also a question in the survey that questioned if their community provides adequate overall infrastructure. Survey respondents were asked if they do at least fifty percent of their personal and/or business shopping within the community where their business is located. Finally, the survey included two open-ended questions that ask the respondents what one thing their

community does to help and what one thing their community lacks in helping with the success of their business.

The survey responses will be reported in tables. They will be utilized to determine what services are being used by small business owners, what services are available, and what services individuals are aware of in their local communities. The open-ended questions will also be gathered in table form to display what communities lack and what communities possess in helping entrepreneurs.

### **Econometric Models**

Both ordinary least squares and logistic models will be utilized to determine the marginal effects the independent variables have on the pull factors of the communities included. The ordinary least squares model will be used to determine the marginal effects of the independent variables. The logistic model will be used to determine the probability of the variables while using binary values for the dependent variable. The models will be tested to determine if the model specification is the best fit.

### **Data**

Retail sales analysis is widely used by local leadership and businesses. It helps give communities an idea of the impacts of their local retail sales. There are multiple ways to evaluate a community's retail sales. For this particular model, trade area capture and the pull factor will be utilized. The trade area capture divides the community's retail sales by the state retail sales. It is also adjusted for income differences between state and communities. The pull factor divides the trade area

capture by the local population. This allows one to determine what percentage of the local population shops in the given community.

Trade area capture identifies an estimate of how many shoppers shop in a given area (Hustedde 1984). This is calculated by:

$$\text{Calculated TAC} = \frac{\text{RS}}{\frac{\text{RS}_{\text{state}}}{\text{P}_{\text{state}}} \frac{\text{PCI}}{\text{PCI}_{\text{state}}}}$$

TAC=Trade Area Capture for region

RS=Retail Sales for region

RS<sub>state</sub>=Retail Sales for state

P<sub>state</sub>=Population for state

PCI=Per capita income for region

PCI<sub>state</sub>=Per capita income for state

The number found is very beneficial, but it can be difficult to interpret and compare. For example, Stillwater will have a much larger TAC than Perkins. However, it is difficult to notice the actual effects of the two different retail trade areas. It makes it difficult to compare the two areas since their populations are quite different.

The pull factor takes in account the population of the community being evaluated (Hustedde, 1984).

$$\text{Calculated PF} = \frac{\text{TAC}}{\text{P}}$$

P= Local Population

Once the pull factor is calculated, one can use it to compare other cities. One can now compare Stillwater to Perkins even though they have different populations. The pull

factor can also be thought of as a percentage. For example, if a community has a pull factor of greater than one, they are attracting a number of shoppers that equals at least 100% of their population. If the community has a pull factor of less than one, then one can conclude that residents are shopping outside of the community.

Pull factors will be calculated from communities across the state of Oklahoma. The selected communities are the ones specified through the Oklahoma Social Indicator Survey. To account for macroeconomic and other effects, the actual pull factor used will be an average over the years 2001-2006 to even out large fluctuations in pull factors over time.

The data for calculating the trade area captures and pull factors were all publicly available. Per capita income per county and per capita income for the state of Oklahoma were obtained from Bureau of Economic Analysis. United States Bureau of the Census data was used for population information for the state and selected communities. Oklahoma Tax Commission provided the sales tax revenue for the state of Oklahoma and the selected cities

The Oklahoma Social Indicator Survey responses were then used for the remainder variables in the econometric model. The respondents remained anonymous; however, their zip codes were provided. Therefore, the zip codes were linked to the pull factors for that community. Their zip codes were also used to locate additional information provided by the United States Bureau of the Census, Bureau of Economic Analysis, and the Oklahoma Tax Commission.

Since the focus of this research is towards rural communities in Oklahoma, cities with a population of over 100,000 have been taken out of the data set. Oklahoma City,



Tulsa, and Norman have all been removed, and their responses are not reflected in the model. After this modification, there are now 160 observations included in both the ordinary least squares and logistic models.

For the purpose of this research, a community is referred to as a town on the local level. However, due to the availability of data, partial data will be derived from the county level as well.

Variables to capture the effects of education are included in two econometric models. Preliminary research was conducted to determine which models and variables offered the most significant contribution to the research. This data for education was derived from the United States Bureau of the Census.

The equation used to determine the effects of the selected variables for an ordinary least squares model is as follows:

$$y = \alpha_1 NE + \alpha_2 NW + \alpha_3 SE + \alpha_4 WM + \alpha_5 HSI + \alpha_6 CS + \alpha_7 W + \alpha_8 BI + \alpha_9 M + \alpha_{10} COUR + \alpha_{11} LF + \alpha_{12} STP + \alpha_{13} IN + \alpha_{14} CH + \alpha_{15} QF + \alpha_{16} PRS + \alpha_{17} BUS + e$$

Where:

Y is the dependent variable. In this model, Y is the calculated pull factor. This is a five year average of the pull factors for the cities included in this research.

NE, NW, and SE are dummy variables that help explain the effect of location within the state. The southwest district has been removed to prevent multicollinearity.

WM is a dummy variable to represent if a Wal-Mart is present in the town where the survey respondent operates his or her business.

HSI is a dummy variable to represent if the business owner has high-speed internet at his or her place of business.

CS is a dummy variable for if the town the business owner operates his or her business is a county seat.

W represents wages. BEA was utilized for wage information for the county the business is located. For this particular variable a county will be utilized as a community. The actual data set was taken from BEA's Average Wage per Job set.

BI is a dummy variable that represents if the business owner surveyed used a business incubator.

M is a dummy variable that represents if the business owner utilized the assistance of a mentor or any type of entrepreneurial network.

COUR is a dummy variable that identifies if the business owner has taken courses on owning and/or operating a business.

LF is a dummy variable for if local financing is available in the community. Business owners who participated in the survey were asked if local financing was available for their business.

STP is a dummy variable that represents if a business owner utilized any state and/or federal programs.

IN is a dummy variable for quality infrastructure in the community. Survey respondents were asked if they believe there is quality infrastructure in the community where they operate their business.

CH is a dummy variable to represent if the survey respondent is a member of a local chamber of commerce or a local economic development organization.

QF is qualified workforce. There were questions in the survey that asked if the business owner has experienced difficulty in finding qualified workers. If the respondents indicated that they did not have problems finding qualified workers, the observation is assumed to have a qualified workforce available.

PRS is a dummy variable for if the survey respondent does at least 50 percent of his or her personal shopping within the same community where his or her business is located.

BUS is a dummy variable to represent if the survey respondent does at least 50 percent of his or her shopping for their business in the same community.

These variables are expected to have a positive impact on the pull factors.

Therefore, it is believed that these variables aid in the success of the communities included in the model.

Another ordinary least squares model was estimated to determine the effects of a combination of services a community can offer, state and federal programs, and the overall purchases made within the community. The combination of services a community can offer combines the previous variables of local financing, business incubator, mentors or an entrepreneurial network, quality infrastructure, Chamber of Commerce, high speed internet, and qualified workforce. These responses have all been grouped together to represent the community services variable. State and federal programs and courses on owning a small business were combined to represent services available on the state and federal level. The community purchases variable was created by combining the personal purchases and business input purchases variables.

This model also captured the effects of education for students who received a high school diploma and those who received a bachelor's degree or higher. This data was

derived from the United States Bureau of the Census. This model utilized all 160 observations from the Oklahoma Social Indicator Survey of 2006.

The equation used to determine the effects of the selected variables for this ordinary least squares model is as follows:

$$y = \alpha_1 NE + \alpha_2 NW + \alpha_3 SE + \alpha_4 WM + \alpha_5 CS + \alpha_6 W + \alpha_7 HSE + \alpha_8 BD + \alpha_9 COMC + \alpha_{10} COMP + \alpha_{11} CSTP + e$$

Where:

Y is the dependent variable. In this model, Y is the calculated pull factor. This is a five year average of the pull factors for the cities included in this research.

NE, NW, and SE are dummy variables that help explain the effect of location within the state. The southwest district has been removed to prevent multicollinearity.

WM is a dummy variable to represent if a Wal-Mart is present in the town where the survey respondent operates his or her business.

CS is a dummy variable for if the town the business owner operates his or her business is a county seat.

W represents wages. BEA was utilized for wage information for the county the business is located. For this particular variable a county will be utilized as a community. The actual data set was taken from BEA's Average Wage per Job set.

BD represents the percentage of individuals who have a bachelor's degree or higher. The percentage is based on the county where the business is located. To prevent multicollinearity the percentage of individuals who did not receive a high school diploma

were removed from the model. The US Bureau of the Census was utilized for this education data.

COMC represents the combination of services available in the community where the business is located. This combination is comprised of local financing, business incubator, mentors, infrastructure, Chamber of Commerce, high speed internet, and a qualified workforce. This data was all derived from the Oklahoma Social Indicator Survey of 2006.

COMP represents the combination of purchases made within the community. This variable combines the majority of personal shopping and majority of business input expenditures made within the community.

CSTP is a dummy variable to represent the combination of state and federal programs and courses available to business owners. This data was also taken from the Oklahoma Social Indicator of 2006.

These variables are expected to have a positive impact on the pull factor. Therefore, it is anticipated that the variables will better explain an entrepreneurial community.

Two logistic models were also estimated. Logistic models were included in the research to help explain the variables selected. Logistic regressions deal with binomial dependent variables. That is those that show whether an event happened (=1) or did not happen (=0). The results then capture the impact of the independent variable on the probability of the event happening. Ordinary least squares models are not appropriate for this type of dependent variable because they can result in probabilities less than 0 or larger than 1. The logistic models use many of the same variables as the ordinary least squares model. However, the pull factor will not be used as a dependent variable. The dependent

variables in our analysis represent several different ways to measure entrepreneurial activity. The dependent variables of interest include a dummy variable for whether or not household non-farm proprietor income was above the state average non-farm proprietor income (a “depth” measure of how well entrepreneurs are doing), and a dummy variable for whether or not the percentage of non-farm proprietors per county was above or below the state average (a “breadth” measure of how many entrepreneurs there are) (Low, 2004). The state average was found for both non-farm proprietors and non-farm proprietor income. The observations were assigned a one if they were equal or greater than the state average and a zero if they were less than the state average. The percent of non-farm proprietors was derived from the Bureau of Economic Analysis’s (BEA) website. The number for the total non-farm proprietors was divided by the total number of employed for the county to find the percent of non-farm proprietorship. The average non-farm proprietor income was found in the same manner. Thus, the total non-farm proprietor income was found from BEA and then divided by the number of non-farm proprietors for the county.

The first logistic model uses the average non-farm proprietor income as the dependent variable. The equation used to determine the effects of the selected variables for this logistic model are as follows:

$$y = \alpha_1 NE + \alpha_2 NW + \alpha_3 SE + \alpha_4 WM + \alpha_5 CS + \alpha_6 HSI + \alpha_7 BI + \alpha_8 M + \alpha_9 LF + \alpha_{10} IN + \alpha_{11} CH + \alpha_{12} QF + \alpha_{13} PRS + \alpha_{14} BUS + \alpha_{15} COUR + \alpha_{16} STP + e$$

Where:

Y is the dependent variable. In this model, Y is a dummy variable indicating that a household has a non-farm proprietor income that is higher than the state average (=1), or lower than the state average (=0). The right-hand side variables will help explain why some entrepreneurs may have higher income than the state average.

NE, NW, and SE are dummy variables that help explain the effect of location within the state. The southwest district has been removed to prevent multicollinearity.

WM is a dummy variable to represent if a Wal-Mart is present in the town where the survey respondent operates his or her business.

CS is a dummy variable for if the town the business owner operates his or her business is a county seat.

HSI is a dummy variable to represent if the business owner has high-speed internet at his or her place of business.

BI is a dummy variable that represents if the business owner surveyed used a business incubator.

M is a dummy variable that represents if the business owner utilized the assistance of a mentor or any type of entrepreneurial network.

LF is a dummy variable for if local financing is available in the community. Business owners who participated in the survey were asked if local financing was available for their business.

IN is a dummy variable for quality infrastructure in the community. Survey respondents were asked if they believe there is quality infrastructure in the community where they operate their business.

CH is a dummy variable to represent if the survey respondent is a member of a local chamber of commerce or a local economic development organization.

QF is qualified workforce. There were questions in the survey that asked if the business owner has experienced difficulty in finding qualified workers. If the respondents indicated that they did not have problems finding qualified workers, the observation is assumed to have a qualified workforce available.

PRS is a dummy variable for if the survey respondent does at least 50 percent of his or her personal shopping within the same community where his or her business is located.

BUS is a dummy variable to represent if the survey respondent does at least 50 percent of his or her shopping for their business in the same community.

COUR is a dummy variable that identifies if the business owner has taken courses on owning and/or operating a business.

STP is a dummy variable that represents if a business owner utilized any state and/or federal programs.

The listed variables are expected to have a positive effect on the average income of non-farm proprietors. Therefore, the coefficients of the variables are expected to be positive.

The second logistic model uses the dependent variable of the percentage of non-farm proprietors per county. This model also includes two variables to capture the effects of education. The equation used to determine the effects of the selected variables for this logistic model are as follows:



$$y = \alpha_1 NE + \alpha_2 NW + \alpha_3 SE + \alpha_4 PF + \alpha_5 W + \alpha_6 WM + \alpha_7 CS + \alpha_8 HSE + \alpha_9 BD + \alpha_{10} HSI + \alpha_{11} BI + \alpha_{12} M + \alpha_{13} LF + \alpha_{14} IN + \alpha_{15} CH + \alpha_{16} QF + \alpha_{17} PRS + \alpha_{18} BUS + \alpha_{19} COUR + \alpha_{20} STP + e$$

Where:

Y is the dependent variable. In this model, Y indicates whether or not the number of proprietors in a county is above or below the state average.

NE, NW, and SE are dummy variables that help explain the effect of location within the state. The southwest district has been removed to prevent multicollinearity.

PF represents the pull factor computed for the community where the business is located.

W represents wages. BEA was utilized for wage information for the county the business is located. For this particular variable a county will be utilized as a community. The actual data set was taken from BEA's Average Wage per Job set.

WM is a dummy variable to represent if a Wal-Mart is present in the town where the survey respondent operates his or her business.

CS is a dummy variable for if the town the business owner operates his or her business is a county seat.

HSE represents the percentage of high school degree recipients for the county the business is located. This data set was taken using US Bureau of the Census' education data.

BD represents the percentage of individuals who have a bachelor's degree or higher. The percentage is based on the county where the business is located. To prevent multicollinearity the percentage of individuals who did not receive a high school diploma were removed from the model. The US Bureau of the Census was utilized for this education data.

HSI is a dummy variable to represent if the business owner has high-speed internet at his or her place of business.

BI is a dummy variable that represents if the business owner surveyed used a business incubator.

M is a dummy variable that represents if the business owner utilized the assistance of a mentor or any type of entrepreneurial network.

LF is a dummy variable for if local financing is available in the community. Business owners who participated in the survey were asked if local financing was available for their business.

IN is a dummy variable for quality infrastructure in the community. Survey respondents were asked if they believe there is quality infrastructure in the community where they operate their business.

CH is a dummy variable to represent if the survey respondent is a member of a local chamber of commerce or a local economic development organization.

QF is qualified workforce. There were questions in the survey that asked if the business owner has experienced difficulty in finding qualified workers. If the respondents indicated that they did not have problems finding qualified workers, the observation is assumed to have a qualified workforce available.

PRS is a dummy variable for if the survey respondent does at least 50 percent of his or her personal shopping within the same community where his or her business is located.

BUS is a dummy variable to represent if the survey respondent does at least 50 percent of his or her shopping for their business in the same community.

COUR is a dummy variable that identifies if the business owner has taken courses on owning and/or operating a business.

STP is a dummy variable that represents if a business owner utilized any state and/or federal programs.

The variables included in this model are expected to positively impact the percentage of non-farm proprietors per county. The coefficients of the variables listed are anticipated to be positive.

### **Case Studies**

Case studies will be included in this research. They offer insight into specific aspects of the variables in addition to providing other rich data that cannot be captured in an econometric model. They also offer more information and history than the survey can provide.

The communities selected were chosen for several reasons. First, they represent different geographical regions of the state. They also offer different views and different methods of becoming an entrepreneurial community. In addition, these communities were identified through other means. First, in 2005, the Southern Rural Development Center sponsored and hosted along with the help of the Oklahoma Cooperative Extension Service a round table listening session (Southern Rural Development Center 2005). At this listening session, the participants discussed resources and activities for entrepreneurial communities; the participants also identified 22 entrepreneurial communities in Oklahoma (Southern Rural Development Center 2005). Second, the communities were selected based on their five year average pull factor and the percent change in population over the years 2001 to 2005 was also examined. Population is

represented in the denominator of the pull factor. Therefore, if the population of the community increases, the pull factor, with all other factors remaining constant, will decrease. The selected communities have a positive percent change in population, and they have a pull factor of at least one. Finally, an expert panel then reviewed the final list of communities derived from the Southern Rural Development Listening Conference with a pull factor of at least one and a positive percent change in population. As noted, four communities were selected each from four geographically different regions of the state of Oklahoma. It was also important for the selected communities to behave in an entrepreneurial manner and to be entrepreneur friendly.

Once the four communities were finalized, communication began between the researchers and Oklahoma Cooperative Extension Service Area Community Specialists. The community specialists were very helpful in referring and contacting county extension educators for all four of the communities. The researchers then contacted by telephone the county extension educators for Cordell in Washita County, Woodward in Woodward County, Sulphur and Davis in Murray County, and Pryor in Mayes County. The county extension educators from all four counties were asked to provide contact information for key community members who play a key role in economic and entrepreneurial development. This list included mayors, chamber of commerce directors and members, various business owners, and even concerned community members. The key individuals from all four communities were then contacted by telephone to discuss their role in this research. A date and time was set to meet with all key individuals on a one on one basis. The meetings lasted about one hour on average. The researchers followed up by sending a reminder, a list of questions to be covered,

and the overall objectives of the research. After all of the meetings, thank you notes and a draft of the case study was sent to all community members who participated. Case study participants then had the opportunity to provide feedback, corrections, and overall more insight into the case study of their local community.

One issue faced in qualitative research is validity and trustworthiness of the person who collects the research since the researcher is the sole collector of the data. The researcher for the case studies grew up in a rural community and has an agricultural economics background. The researcher has worked for three years in the Agricultural Economics Department focusing on rural development. Along with this experience, the researcher has seen rural communities both prosper and decline. One perception the researcher holds is leadership is important to the development of communities. Preliminary research was conducted prior to meeting with community members from the four case study communities. Population trends and pull factor data was analyzed to draw a general impression of the community. The researcher also held the impression of the communities as healthy, vibrant communities since they were selected by the expert panel.





to be taken from communities with populations of less than 100,000. The current sample has a total of 160 observations.

Survey respondents were asked a variety of questions directly relating to their business. Table IV-1 displays the employment level of firms. At least 87 percent of the respondents replied that their business has either stayed the same or grown over the past five years.

**Table IV-1. Employment Level of Firms**

	Percent	Frequency
Grown	24.4	39
Declined	11.9	19
Stayed the same	63.1	101
No Response	0.6	1
Total	100.0	160

Table IV-2 displays if a business incubator is located in the community where the survey respondent's business is located. Almost 9 percent of the respondents replied there is a business incubator in their community. Nearly 43 percent of the respondents were not aware if a business incubator is present in their community.

**Table IV-2. Business Incubator Located in Community**

	Percent	Frequency
Yes	8.8	14
No	47.5	76
Do Not Know	43.1	69
No Response	0.6	1
Total	100.0	160

Fourteen individuals responded that there is a business incubator located in their community. Only 2 of those respondents replied that they used a local business



incubator while starting their business or expanding their business. Table IV-3 displays these results.

**Table IV-3. Business Owners Who Used a Business Incubator**

	Percent	Frequency
Yes	14.3	2
No	85.7	12
Total	100.0	14

Survey respondents were also asked if a mentor, local expert, or an entrepreneurial network is located within the community where their business is located. Table IV-4 displays 24.4 percent or 39 of the surveyed individuals do have some type of mentorship available in their community. At least 33 percent are not aware if any type of mentorship is available in their community.

**Table IV-4. Mentors, Local Expertise, or Entrepreneurial Network in Community**

	Percent	Frequency
Yes	24.4	39
No	42.5	68
Do Not Know	33.1	53
Total	100.0	160

Table IV-5 displays that just over 28 percent or 11 individuals surveyed utilize mentors, local expertise or an entrepreneurial network within the community. Nearly 72 percent of the respondents that indicated such service was available have not utilized mentors or another for of local expertise.

**Table IV-5. Business Owners Who Used Mentors, Local Expertise, or Entrepreneurial Network in Community**

	Percent	Frequency
Yes	28.2	11
No	71.8	28
Total	100.0	39

Survey respondents were also asked if courses on funding sources or starting a small business were available in their community. About 51 percent indicated that courses were available. There were also almost 32 percent or 51 individuals that indicated that courses were not available in their community. Nearly 17 percent or 27 individuals surveyed did not know if courses were available. Table IV-6 displays these results.

**Table IV-6. Courses on Funding Sources or Starting a Small Business Available in Community**

	Percent	Frequency
Yes	51.2	82
No	31.9	51
Do Not Know	16.9	27
Total	100.0	160

Table IV-7 further describes the respondents who indicated that courses on funding sources or starting a small business are available in their community. There were 9 respondents or 11 percent who utilized this service.

**Table IV-7. Business Owners Who Took Courses on Funding Sources or Starting a Small Business**

	Percent	Frequency
Yes	11.0	9
No	89.0	73
Total	100.0	82

Survey respondents were asked if local financing including loan and investor services were available in their community. About 66 percent indicated that local financing was available. Nineteen percent or 31 individuals responded that this particular service was not available in their community. About 14 percent of the surveyed sample was not aware if there is local financing available in their community. These results are presented in Table IV-8.

**Table IV-8. Local Loan or Investor Services in Community**

	Percent	Frequency
Yes	66.2	106
No	19.4	31
Do Not Know	14.4	23
Total	100.0	160

Table IV-9 reports on survey respondents who utilized local loan or investor services. There were 46 individuals (43 percent) who stated this service was available in their community utilized this particular service while 60 respondents did not.

**Table IV-9. Business Owners Who Used Local Loan or Investor Services**

	Percent	Frequency
Yes	43.4	46
No	56.6	60
Total	100.0	106

Survey respondents were asked if state or federal loan programs were available in their community. Approximately 59 percent indicated state or federal loan programs were available. Twenty percent were not aware of state or federal loan programs in their community, and 20 percent replied there were none available in their community. These results are presented in Table IV-10.

**Table IV-10. State or Federal Loan Programs in Community**

	Percent	Frequency
Yes	59.4	95
No	20.6	33
Do Not Know	20.0	32
Total	100.0	160

Nearly 17 percent or 16 business owners indicated that they used state or federal loan programs. Approximately 83 percent or 79 individuals that indicated state and/or federal loan programs were available in their community did not utilize them. Table IV-11 displays these results.

**Table IV-11. Business Owners Who Used State or Federal Loan Programs**

	Percent	Frequency
Yes	16.8	16
No	83.2	79
Total	100.0	95

Survey respondents were asked if they had difficulty finding qualified workers. Twenty-three percent or 37 of the surveyed individuals indicated they did have difficulty finding qualified workers. Nearly 58 percent or 92 respondents indicated they had no difficulty finding qualified workers. Nineteen percent of the surveyed respondent revealed they have not needed to find qualified workers. These results are displayed in Table IV-12.

**Table IV-12. Difficulty Finding Qualified Workers**

	Percent	Frequency
Yes	23.1	37
No	57.5	92
Have not needed to find workers	19.4	31
Total	100.0	160

Table IV-13 displays the results of where business owners' found their business financing. Nearly 46 percent of business owners utilized financing options within the same city or town where their business is located. Thirty-seven percent of individuals surveyed indicated that no financing was needed for their business. Sixteen percent of respondents utilized financing outside of the community where their business is located.

**Table IV-13. Majority of Business Financing**

	Percent	Frequency
Within the same town or city where business is located	45.6	73
Outside the same town or city where business is located	16.3	26
No financing is needed	37.5	60
Do Not Know	0.6	1
Total	100.0	160

Table IV-14 displays the number of individuals indicating that a Chamber of Commerce or local economic development organization is active and located in their community where their business is located. Eighty-nine percent of the respondents indicated there is a Chamber of Commerce or local economic development organization in their community. Three percent or 5 individuals were not aware if there is such an organization in their local community.

**Table IV-14. Chamber of Commerce or Local Economic Development Organization in Community**

	Percent	Frequency
Yes	89.4	143
No	7.5	12
Do Not Know	3.1	5
Total	100.0	160

Survey respondents were asked a follow up question if they were active members in their local economic development organization. Eighty percent of individuals that indicated they did have a local economic development organization also responded that they were not active members of that organization. Nearly 20 percent or 28 respondents are active member of their local economic development organization. These results are displayed in Table IV-15.

**Table IV-15. Business Owners who are Active Members of Their Local Economic Development Organization**

	Percent	Frequency
Yes	19.6	28
No	80.4	115
Total	100.0	143

The respondents that indicated they were active members of their local economic development organization were asked to determine how satisfied they were of the local economic development organization in terms of helping their business succeed. Only 7.1 percent or 2 individuals indicated they were dissatisfied with their local economic development organization. Respondents that indicated they were satisfied and very satisfied equaled 50 percent. These results are displayed in Table IV-16.

**Table IV-16. Satisfaction of the local development organization in terms of helping businesses succeed**

	Percent	Frequency
Very Dissatisfied	0.0	0
Dissatisfied	7.1	2
Neutral	35.7	10
Satisfied	28.6	8
Very Satisfied	21.4	6
No Response	7.1	2
Total	100.0	28

Table IV-17 displays the results for business owners who have some type of internet service at their place of business. Nearly 74 percent or 118 of the surveyed individuals responded they do have internet at their business. Approximately 26 percent indicated they do not have internet at their business.

**Table IV-17. Business Owners Who Have Internet at Their Place of Business**

	Percent	Frequency
Yes	73.8	118
No	26.2	42
Total	100.0	160

Survey respondents that indicated they do have internet at their place of business were then asked what type of internet access they have. Nearly 74 percent indicated they have high speed internet. These results are displayed in Table IV-18.

**Table IV-18. Types of Internet Access of Business Owners**

	Percent	Frequency
High Speed	73.7	87
Dial-up	26.3	31
Total	100.0	118

Table IV-19 displays the survey respondents' opinion of local infrastructure. Infrastructure, for the purpose of this research, refers to water, sewer, and electricity. Almost 81 percent of the survey respondents indicated that quality infrastructure exists in their community. Nearly 17 percent or 27 individuals surveyed responded that their community does not provide adequate infrastructure.

**Table IV-19. Adequate Overall Infrastructure (water, sewer, and electricity) for Your Business is Provided by the Community**

	Percent	Frequency
Yes	80.6	129
No	16.8	27
Do Not Know	1.3	2
No Response	1.3	2
Total	100.0	160

Table IV-20 displays the survey respondents' view of they support the local community provides for their business. Approximately 61 percent indicated they were either satisfied or very satisfied. A total of 16 individuals or 10 percent responded they were either unsatisfied or very unsatisfied. Twenty percent gave a response that indicated they have a mixed opinion of the local support.

**Table IV-20. Satisfaction of Business Support from the Local Community**

	Percent	Frequency
Very Unsatisfied	3.8	6
Unsatisfied	6.2	10
Mixed	20.0	32
Satisfied	41.3	66
Very Satisfied	20.0	32
Do Not Know	6.2	10
No Response	2.5	4
Total	100.0	160



Survey respondents were asked if they do at least 50 percent of their personal shopping in the same community where their business is located. Almost 74 percent indicated they do most of their personal shopping locally. Twenty-six percent or 42 individuals indicated they do not do most of their personal shopping in the same community where their business is located. These results are displayed in Table IV-21.

**Table IV-21. At Least 50 Percent of Personal Shopping is in the Community Where Business is Located**

	Percent	Frequency
Yes	73.7	118
No	26.3	42
Total	100.0	160

Survey respondents were also asked if they do at least 50 percent of their business shopping locally. Nearly 66 percent or 105 individuals indicated they do most of their business purchasing locally. More than thirty-two percent replied they do not do most of their business shopping within the same community. These results are displayed in Table IV-22.

**Table IV-22. At least 50 Percent of Business Input Expenditures Come from Within the Community Where Business is Located**

	Percent	Frequency
Yes	65.6	105
No	32.5	52
Do Not Know	1.9	3
Total	100.0	160

## Econometric Results

The previous survey results were utilized for econometric models. Four models are presented. Two ordinary least squares models and two logistic models. The ordinary least squares models have been tested for goodness of fit by using Ramsey's RESET test. The RESET test was used to determine if the linear model used was the best model specification for the data. The ordinary least square models were also tested for heteroscedasticity by using the Breusch-Pagan Test. Both tests for the ordinary least squares models determined that heteroscedasticity was not present in the models.

Table IV-23 displays the econometric results for the first ordinary least squares model. The location variables were all significant at the 90 percent level. The Southeast variable gives a positive parameter estimate of 0.2841. The southwestern region of the state was removed to prevent multicollinearity. Therefore, the southwestern region is captured by the intercept and reflected through the other three location variables and their relation to the intercept. Wal-Mart, county seat, wages, infrastructure, and Chamber of Commerce are all positive at the 95 percent confidence level. They all have a positive impact on the pull factor of a community except for the wages variable. This was unexpected for the wage variable to be negative since Innovation and Information Consultants, Inc. (2006) found wages to positively effect the number of rural establishments. Courses utilized by small business owners and qualified workforce were both significant at the 90 percent confidence level. A qualified workforce appears to have a positive impact on the pull factor of a community. The utilization of courses on owning a small business had a negative impact on the pull factor of the community. The negative coefficient could be due to

the low number of survey respondents who utilized this service. The survey indicated that only 9 respondents utilized courses on owning a small business. The adjusted R-Square value for the model is 0.7254.

**Table IV-23. Parameter Estimates, Standard Errors, P-Values, and R-Square Value for Pull Factor**

Variable	Parameter Estimate	Standard Error	P-Value
Intercept	5.0304	1.757	0.0048**
Northeast	-0.1087	0.0614	0.0789*
Northwest	-0.188	0.0834	0.0256**
Southeast	0.2841	0.0816	0.0007**
Wal-Mart	0.5977	0.0668	<.0001**
County Seat	0.1819	0.0631	0.0046**
Wages	-0.449	0.1729	0.0104**
High Speed Internet	0.0562	0.0508	0.2709
Business Incubator	-0.2293	0.2209	0.301
Mentors	-0.1279	0.0988	0.1976
Local Financing	-0.0484	0.0556	0.3854
Infrastructure	0.1349	0.0645	0.0384**
Chamber of Commerce	0.1782	0.0677	0.00095**
Qualified Workforce	0.1172	0.0599	0.0523*
Personal Shopping	0.0503	0.0606	0.4076
Business Shopping	-0.0166	0.0543	0.7597
Courses	-0.1862	0.1088	0.0892*
State/Federal Programs	-0.1243	0.0842	0.1421
Adjusted R-Square	0.7254		

\*Significant at the ninety percent level

\*\*Significant at the ninety-five percent level

Table IV-24 displays the econometric results for the second ordinary least squares model. This model observed the effects of having a healthy, well represented, combination of services. All three of the location variables are significant at the 95 percent confidence level. The northeast and northwest location variables both had coefficients. The Southeast variable is the only one that has a positive coefficient of

0.25732. The southwest variable is reflected through the intercept which was not significant in this model. The combination of State and Federal Programs and courses was significant at the 95 percent confidence level. The use of State/Federal Programs also appears to have a negative impact on the pull factor of a community. In the previous model, IV-23, the variable for courses had a negative coefficient. The variable for State/Federal loan programs was not significant in the previous model. The combination of services a community can offer which includes local financing, business incubator, mentors, infrastructure, Chamber of Commerce, high speed internet, and a qualified workforce is significant at the 90 percent level. This particular combination also appears to have a positive impact on the pull factor of a community. Wal-Mart and the county seat variable are both significant at the 95 percent confidence level and have a positive impact on the pull factor of a community. The adjusted R-Square value for this model is 0.6874.

**Table IV-24. Parameter Estimates, Standard Errors, P-Values, and R-Square Value for Pull Factor Using Combined Resources**

Variable	Parameter Estimate	Standard Error	P-Value
Intercept	2.37424	2.25096	0.2932
Northeast	-0.13608	0.06058	0.0262**
Northwest	-0.19999	0.08133	0.0151**
Southeast	0.25732	0.08336	0.0024**
Wal-Mart	0.68173	0.06423	<.0001**
County Seat	0.15087	0.06519	0.022**
Wages	-0.12934	0.23181	0.5777
Community Combination	0.04502	0.02426	0.0655*
Community Purchases	0.1809	0.03534	0.6096
Combined State/Fed Programs	-0.17362	0.06115	0.0052**
High School Education	-0.00355	0.00791	0.654
Bachelor's Degree	-0.01312	0.00799	0.1026
Adjusted R-Square	0.6874		

\*Significant at the ninety percent level

\*\*Significant at the ninety-five percent level

Table IV-25 displays the results of the first logistic model. This model was developed to determine the effects the independent variables have on the probability of non-farm proprietor income being higher than the state average (or, the depth of entrepreneurship). The Northeast location variable is significant at the 95 percent confidence level. It also has a positive coefficient of 1.09. The Northwest variable is significant at the 95 percent confidence level with a negative coefficient. The Southwest region is represented through the intercept which is significant at the 95 percent level with a negative coefficient of -3.0342. Mentors and county seat were both significant at the 95 percent confidence level. County seat appears to have a negative impact on the income of non-farm proprietors. The parameter estimate for this variable is -2.8826. This result is rather unexpected since both OLS models found that the

county seat variable had a positive effect on the pull factor of the community. This could possibly be due to the larger number of government jobs available in a community that is a county seat. However, Wal-Mart had a positive effect on the income received by non-farm proprietors, depth of entrepreneurship. The correlation coefficients were analyzed to conclude that Wal-Mart and county seat were not highly correlated. Mentors seem to have a positive impact with a parameter estimate of 2.4245. The location variable for northwest is significant at the 90 percent level. It does appear that being located in the northwest region has a negative effect on non-farm proprietor income. Wal-Mart was also significant at the 90 percent level. The parameter estimate for Wal-Mart is 1.0235.

**Table IV-25. Parameter Estimates, Standard Error, P-Values, and R-Squared Value for Logistic Proprietor Income (1=Higher Than State Average, 0=Lower)**

Variable	Parameter Estimate	Standard Error	P-Value
Intercept	-3.0342	1.1313	0.0073**
Northeast	1.09	0.5403	0.0437**
Northwest	-2.846	1.4858	0.0554*
Southeast	-12.8841	231.00	0.9555
Wal-Mart	1.0235	0.561	0.0681*
County Seat	-2.8826	0.7809	0.0002**
High Speed Internet	0.1943	0.5132	0.7049
Business Incubator	2.792	1.8472	0.1307
Mentors	2.4245	1.2137	0.0458**
Local Financing	0.0763	0.5804	0.8954
Infrastructure	1.0222	0.6958	0.1418
Chamber of Commerce	-0.667	0.8629	0.4395
Qualified Workforce	-0.0664	0.6124	0.9137
Personal Shopping	0.4157	0.6192	0.502
Business Shopping	0.7793	0.5148	0.1301
Courses	-0.3685	1.6038	0.8183
State/Federal Programs	0.3277	0.8453	0.6982
Max-rescaled R-Square	0.5188		

\*Significant at the ninety percent level

\*\*Significant at the ninety-five percent level

Table IV-26 displays the results of the second logistic econometric model. This model determines the effects the independent variables have on the probability of a county having more non-farm proprietors than the state average (breadth of entrepreneurship). Pull factor and wages are both significant at the 95 percent level. Pull factor appears to have a positive impact on the percentage of non farm proprietors. The parameter estimate for pull factor is 2.2512. Wages has a negative coefficient of -18.2923. This result was expected since the variable for wages was consistently negative in both OLS models. The data used for wages was an average wage per job on the county level. Therefore, many metropolitan, manufacturing, and higher wage

earning based counties can affect the average wage per job. High school education and bachelor's degree were both significant at the 95 percent confidence level. The results indicate that a high school education positively impacts the percentage of non-farm proprietors. The variable for bachelor's degree has a negative coefficient of -0.6454. This could be due to the information for education used is based on a county level. Therefore, a large percentage of non-farm proprietors could have a bachelor's degree, but the county has a lower percentage of college degree recipients. However, previous research by Headd (2000) displayed a high number of high school graduates with a low number of college degree earners.

High speed internet is also significant at the 95 percent confidence level. The results display the parameter estimate for high speed internet to be -2.84. This result was unexpected since 118 business owners responded that they do have internet services at their place of business. Of the 118 individuals, 87 indicated they have high-speed internet. Mentor was significant at the 90 percent level. The results infer that the use of mentors positively impacts the percentage of non-farm proprietors.



**Table IV-26. Parameter Estimates, Standard Error, P-Values, and R-Squared Value for Logistic Percentage of Non-Farm Proprietors (1=More Proprietors than Average, 0=Less)**

Variable	Parameter Estimate	Standard Error	P-Value
Intercept	149.900	37.356	<.0001**
Northeast	-1.3316	0.8486	0.1166
Northwest	-1.1787	0.9739	0.2262
Southeast	-0.9044	1.0294	0.3796
Wal-Mart	-0.5098	1.1703	0.6631
County Seat	-1.6867	0.8653	0.0513*
Wages	-18.2923	4.1524	<.0001**
High Speed Internet	-2.84	0.823	0.0006**
Business Incubator	-9.4528	768.3	0.9902
Mentors	3.5017	2.0512	0.0878*
Local Financing	-0.2635	0.7189	0.714
Infrastructure	0.5063	0.8475	0.5503
Chamber of Commerce	-0.6257	0.8248	0.4481
Qualified Workforce	-0.4284	0.8365	0.6085
Personal Shopping	-0.929	0.8068	0.2495
Business Shopping	0.407	0.66	0.5375
Courses	-1.8082	1.2924	0.1618
State/Federal Programs	1.0439	1.2323	0.3969
High School Education	0.6208	0.1335	<.0001**
Bachelor's Degree	-0.6454	0.1406	<.0001**
Pull Factor	2.2512	1.0436	0.0157**
Max-rescaled R-Square	0.7812		

\*Significant at the ninety percent level

\*\*Significant at the ninety-five percent level

The R-square values for the four models all prove the models to have a good fit. The southeast location variable appears to have a positive impact on the pull factor in both Ordinary Least Squares models. The northeast location variable indicates that the average income of non-farm proprietors is higher in the northeastern part of Oklahoma. Wal-Mart is significant in 3 models. Wal-Mart also appears to have a positive impact on the pull factor in the ordinary least squares models. There also appears to be a positive impact on the income of non-farm proprietors with a Wal-Mart present in the

community. The county seat variable appears to be a positive impact on the pull factor in both ordinary least squares models. When looking at the logistic models, the county seat variable appears to negatively affect the percent of non-farm proprietors and the income of non-farm proprietors. This is rather unexpected since the county seat variable was consistently positive in both of the OLS models.

Table IV-23 displays the results of the first ordinary least squares model. Infrastructure, Chamber of Commerce, and a qualified workforce all positively impacted the pull factor of communities. Table IV-24 displays the results of the combinations of resources and services. The combination of community services, including infrastructure, Chamber of Commerce, and qualified workforce, did have a positive impact on the pull factor. The group of purchases for both personal and business uses made within the community was not significant at the ninety percent level. In Table IV-23, courses on starting a small business or funding sources had a negative impact on the pull factor. The group of combined state and federal programs that also included courses had a negative impact on the pull factor as well.

Tables IV-25 and IV-26 were the two logistic models. The use of mentors within the community had a positive impact on both the percent of non-farm proprietors, breadth of entrepreneurship, and the average income of non-farm proprietors, depth of entrepreneurship. The county seat variable had a negative effect on both the income received by non-farm proprietors and the percentage of non-farm proprietors.

Table IV-27 summarizes all of the significant variables from the four econometric models from Tables IV-23, IV-24, IV-25, and IV-26.. The variables that were not found to be significant were not included in the summary table.

**Table IV-27. Comparison of Significant Values from Econometric Models**

Variable	OLS Pull Factor	OLS Pull Factor	Logistic Proprietor Income	Logistic Proprietor
	Parameter Estimate	Parameter Estimate	Parameter Estimate	Parameter Estimate
Intercept	5.0304**		-3.0342**	149.900**
Northeast	-0.1087*	-0.13608**	1.09**	
Northwest	-0.188**	-0.19999**	-2.846*	
Southeast	0.2841**	0.25732**		
Wal-Mart	0.5977**	0.68173**	1.0235*	
County Seat	0.1819**		-2.8826**	-1.6867*
Wages	-0.449**			-18.2923**
High Speed Internet				-2.84**
Mentors			2.4245**	3.5017*
Local Financing				
Infrastructure	0.1349**			
Chamber of Commerce	0.1782**			
Qualified Workforce				
Courses	0.1172*			
High School Education				0.6208**
Bachelor's Degree				-0.6454**
Community Combination		0.04502*		
Combined State/Fed Programs		-0.17362**		
Pull Factor				2.2512**
R-Square	0.7254	0.6874	0.5188	0.7812

\*Significant at the ninety percent level

\*\*Significant at the ninety-five percent level

Overall, it is important for the community to have quality infrastructure, a qualified workforce, mentors, and an active Chamber of Commerce. It is even more important to have a combination, provide more than one, of these services and resources for entrepreneurs.

## **CHAPTER V**

### **QUALITITATIVE RESULTS**

#### **Case Studies**

Four communities were selected for case studies. These communities were selected because they are entrepreneurial in either or both senses of the term, entrepreneurial community. They have all had to reinvent their economy, trust their leadership, and overall work together to make their community what it is today.

The four communities are located in four very different locations in Oklahoma. Cordell is located in southwest Oklahoma. There is not a Wal-Mart or a McDonald's in Washita County where Cordell is located. Cordell has been able to maintain a positive increase in their population over the past few years while the trend for the region has been decreasing. Pryor is located in the northeastern region of Oklahoma. Pryor has an immense amount of natural resources with water being one the most abundant. Pryor is also home to MidAmerica Industrial Park, the largest industrial park in Oklahoma and the largest rural industrial park in the United States. Sulphur and Davis are located in the southern region of Oklahoma. They also are known for their natural resources and National Park. Sulphur and Davis are also well recognized for their ability to put aside their differences and work together as Murray County. Woodward is located in northwest Oklahoma. Woodward is well recognized as the trade center for the

northwestern region of Oklahoma, southeast region of Kansas, and the northeast panhandle of Texas.

## **Community: Cordell**

**County:** Washita

**Population (2006):** Cordell: 2,908  
Washita County: 11,583  
Oklahoma: 3,617,316

**Employment (2005):**  
**Total:** Washita County: 5,271  
Oklahoma: 2,071,838  
**Non-Farm Proprietor:** Washita County: 1,071  
Oklahoma: 395,367

**Income (2005):**  
**Per Capita:** Washita County: \$21,606  
Oklahoma: \$29,948  
**Average Non-Farm Proprietor:** Washita County: \$19,292  
Oklahoma: \$38,501

## **Community History**

Washita County was settled during the land run, April 19, 1892. Cloud Chief was designated as the county seat for County "H" by the United States Congress. The Old Cordell Post Office was established on October 12, 1892. In 1893, New Cordell was settled near one mile west. In the fall of 1897, H.D. Young moved his store and post office to the site of New Cordell. The move took place due to the water in Old Cordell. The water in Old Cordell contained large amounts of gypsum. Livestock would not even drink the water.

The citizens of Washita County voted in 1900 to move the county seat from Cloud Chief to New Cordell. This vote passed with nearly 83 percent of the citizens in favor of moving the county seat to New Cordell. New Cordell is located in the exact



center of Washita County. The move was denied since Congress had to approve the designation of the county seat. The citizens of Cordell were determined to make Cordell the county seat of Washita County. In August 1900, the records in the court house in Cloud Chief were moved during the night. The movers did not go unnoticed. There was a gun fight, but the records did make it to Cordell.

In 1902, the first courthouse in Cordell was built. In 1905, President Roosevelt signed a bill that officially recognized Cordell as the county seat of Washita County. In 1909, the courthouse in Cordell was destroyed by a fire. This fire has long been a mystery. Many believe it was the act of arson. In 1911, the present Washita County Courthouse was built. The architect was Salomon Andrew Layton who later designed the state capital.

Cordell remains the county seat of Washita County. The courthouse built in 1911 still stands in the center of the town square. It is noted by residents of Cordell that the courthouse is photographed almost on a daily basis.

### **Economic History**

Cordell has historically been an agricultural community producing wheat and cattle. Cordell also depends heavily on the oil and gas industry. The air base in Burns Flat provided employment for many Cordell residents until it closed in the late 1960's. In the early 1970's, Robertson's Factory was located in Cordell. Robertson's manufactures curtains. They employed many throughout the 1970's and 1980's. Today, Robertson's is no longer in business in Cordell. The economy in Cordell prospered until the decline in the oil industry in the 1980's. Cordell, like other oil-

dependent towns, was hit especially hard. The decline caused many businesses to vacate the town square, and many residents to find work elsewhere. The downtown area suffered until individuals in the town began to search for ways to revitalize and encourage economic growth in Cordell. The Main Street Program was identified as an opportunity for the town.

This program was selected due to its reputation of promoting life and aesthetic qualities back to downtown areas across Oklahoma and the United States. The Main Street Program utilizes an approach that focuses on design all the way to the promotion of the overall downtown area. The communities that are active Main Street communities complete training and various types of assistance to business owners and Main Street members within the community.

The Main Street Program started in Cordell in 1993 with 24 members. There was much enthusiasm from the residents. The Cordell Main Street Program was the first nationally awarded community in the state of Oklahoma in 1999. Cordell received the first National Trust for historical preservation and recognition as “The Great American Main Street Award.” The Main Street Program led to renovation of the downtown square, revitalization of the sidewalks, restoration of many building fronts, and a regained optimism of the community for the future. In 1995, the 1945 theater also began restoration.

Today, the restoration of the downtown buildings is complete, and the 1945 theater has been completely restored with THX sound. There are even renovated lofts that look out over the square in the downtown area. The lofts remain rented for most of the year. The sidewalks are complete included with fiber optics ready for high speed

wireless internet to enhance the infrastructure and telecommunication technology of Cordell. There are currently 2 stoplights in Washita County. There is not a Wal-Mart nor a McDonald's located in the entire county where Cordell is located. The entire area is a rural area. The Main Street Program is currently inactive with only 4 members. There are hopes of regaining an active Main Street membership in the near future. There have not been significant movements made to accomplish this. The downtown square has evolved from the past retail dominant area to a more service industry. Price Prints is a screen printing business located in Cordell. It is housed right next door to the former location of Roberson's. They currently employ twelve and are currently contracted through the Department of Defense. Agriculture and the oil and gas industry remain important components to the economy of Cordell.

### **Entrepreneurial Opportunities**

Through the previous efforts of the Main Street Program many amenities have been developed for current and future entrepreneurs. The downtown sidewalks have been restored with fiber optics embedded, there are quality streets, quality water supply, and there is high speed internet available. The Oklahoma Department of Transportation has a current project of construction on Highway 183 to expand it a four-lane highway running through Cordell to eventually connect Texas to Kansas by 4-lane highway. It is known as the I-35 of western Oklahoma.

Local financing is present in Cordell. Before the decline in the oil industry in the 1980's, Cordell had 3 family owned banks. During the decline, all 3 of the banks

left. Today, Cordell is home to 7 banks. The banks in Cordell work hard to offer business owners and potential owners the best and lowest financing available.

There is not a current mentorship network or entrepreneurial network in place. However, informal mentoring occurs on a regular basis. In the past, there were also programs that work with the schools in Cordell to teach the students about entrepreneurship. This was done to encourage the next generation to take advantage of the opportunities available in one's town.

State and federal loan programs are oftentimes difficult to locate. The OSU Cooperative Extension Service in Washita County makes newsletters with the latest information about different state and federal programs available. Also, Oklahoma Cooperative Extension Service helps business owners identify courses that are available to best suit their needs. Southwestern Oklahoma State University's main campus is located at Weatherford which is just minutes from Cordell. There is also a Small Business Development Center located on the Southwestern campus.

There is a local chamber of commerce located in Cordell. It has at least 150 members. The chamber aids business owners through various means especially with networking with other business owners.

Cordell also offers many quality of life amenities. The City of Cordell is currently working to put in a walking trail. There is a pool, bowling alley, and a movie theater located within the city limits. There is also a 9-hole golf course open to the public. There is a quality public school system that the town highly supports. Overall, Cordell is seen as a good place to raise a family.

## **Cordell as an Entrepreneurial Community**

Entrepreneurial communities are defined in more than one way. Cordell was selected as an entrepreneurial community because they represent both definitions of the term entrepreneurial community. Cordell is located in southwestern Oklahoma. The community of Cordell builds on attractive amenities. There is much history in the revitalized downtown square. The Washita County Courthouse is a unique and a beautiful land mark. The community of Cordell displays many aesthetic amenities. The aesthetic qualities of the community, for the most part, are manmade attractions. These were all made possible through present and past community members.

Cordell does provide many services for start up and existing small businesses to utilize. There are a variety of options available for competitive local financing. There are mentors who volunteer to assist start up and existing business owners through an informal manner. The OSU Extension Service provides insight on state and federal programs available to small business owners in Washita County. There are courses available on funding sources or starting a small business in the region. There is also an active Chamber of Commerce in the community of Cordell that provides many incentives for business owners. There is not an actual operating business incubator in Cordell. There are many services available that have proved in previous research to help aid communities in providing a haven for entrepreneurs to start, grow, and prosper.

The community also seems to behave as an entrepreneur. Cordell has had to continue to reinvent themselves in economic terms. The leadership in Cordell has the ability to gain the support of the community members. This was evident when the Main Street Organization was introduced. Some of the leaders describe it as, “everyone

seemed to be moving in the same direction at the same time and at the same pace.”

This happened due to strong leadership. Entrepreneurial communities are communities that grab the attention and support of the community members. Cordell is currently in the process of reinventing themselves again. The leadership of the mayor and other key individuals in the community are working together to identify a common vision for the future of Cordell.

There are many things to learn from the community of Cordell. The leadership of the community actively plans and identifies goals for the future. They also share these goals with the community members. This gains the support and enthusiasm of community members. The community works as a single entity to accomplish the common goal. The results are then shared and evident for everyone to take pride in the accomplishment.

### **Pride in Cordell**

There is a strong sense of pride in Cordell. Many in Cordell are life long residents. The people of Cordell have always had a strong work ethic, and that is evident today. There is the small town feel and the tight knit community feeling. The community suffered from the tornado on October 9, 2001. Many lost their homes. This tragedy brought the community together yet again. Businesses closed for the day to go help community members. Shortly after the tornado, an ice storm went through western Oklahoma, and many residents in Cordell were without power. Neighbors helped one another get through the trying times.

There is also a strong sense of pride for the downtown square. The renovation took a lot of time and commitment from the residents, and it is displayed in the square. The theater is also a popular mark in Cordell. It attracts movie goers from various communities in the region.

The courthouse in Cordell is most likely the landmark that holds the most pride in Cordell. The community members in Cordell are well aware of the history of their courthouse. The architect, Salomon Andrew Layton, who designed the courthouse, also designed the state capital. The courthouse in Cordell also had its dome long before the state capital as noted by Cordell residents. Today, the clock still chimes on the hour. Community members notice tourists photographing the courthouse daily.

### **The Future of Cordell**

The residents and leadership in Cordell are currently in a stage of planning for the future. While agriculture and the oil and gas industry account for a large portion of the economy, it has been recognized that there needs to be diversity for the future. Many want to see more retail ventures take hold in Cordell. Currently, the city operations are funded by the income generated from the utilities in Cordell. With a larger retail base, an increase in sales tax collections will allow more opportunities for the City of Cordell to reinvest in projects for residents and business owners.

The Main Street Organization allowed residents to come together and revitalize the downtown square. This caused much excitement and enthusiasm throughout Cordell. This also allowed the community members to regain hope for the future. Many in Cordell are looking into resurrecting the Main Street organization, or they are

looking for a similar avenue to regain the enthusiasm and excitement of the community members.

There have also been efforts put in place for Cordell to move towards an arts based community. Currently, there is a 6,000 square foot art gallery in town where local and regional community members can showcase their talent. This is definitely a new avenue for Cordell. However, this has created new opportunities for the community of Cordell. There are hopes that similar places to showcase arts, culture, and overall talent locate in Cordell. Along with the increase in arts and culture, an increase in tourism is anticipated for the future.

Cordell has many goals for the future. It is important that everyone understands and works together for the future of Cordell. While the exact plan for Cordell is still being worked out, it is unanimous that the community members of Cordell do not want their town to disappear. They are very proud of their town, and they share a rich history. They are determined to keep Cordell not only on the map, but to lead Cordell to continue to be a prosperous community.



## **Community: Pryor**

**County:** Mayes

**Population (2006):** Pryor: 9,294  
Mayes County: 39,774  
Oklahoma: 3,617,316

### **Employment (2005):**

**Total:** Mayes County: 16,264  
Oklahoma: 2,071,838  
**Non-Farm Proprietor:** Mayes County: 3,106  
Oklahoma: 395,367

### **Income (2005):**

**Per Capita:** Mayes County: \$22,942  
Oklahoma: \$29,948  
**Average Non-Farm Proprietor:** Mayes County: \$50,485  
Oklahoma: \$38,501

## **Community History**

Pryor was founded in 1887. The community was named after Captain Nathaniel Pryor. He was most famous for his participation during the Lewis and Clark Expedition. As a First Sergeant, he also fought in the war of 1812. He traveled up the Mississippi and eventually to present day Pryor. He set up a trading post in 1817 on Pryor Creek. He married one of the daughters of Chief Claremore, chief of the Osages. He was a subagent to the Osages. He was also responsible for bringing Union Mission to Mayes County near Pryor. Union Mission arrived to Mayes County in 1821. Nathaniel Pryor passed away in 1831 near Pryor, Oklahoma.

## **Economic History**

Pryor has been a prosperous community long before it was even recognized as a town. The first industry in Mayes County near Pryor was salt production in the early

1815. Captain Nathaniel Pryor was the first recorded entrepreneur to the area. He set up his trading post at what is today, Pryor Creek, Oklahoma.

Pryor is in the heart of the Cherokee Nation. The Cherokees were the first to establish businesses in the downtown area of Pryor around 1880. During the early 1900's, the Whitaker Home was the largest employer in Pryor. Before 1900, the Whitaker Home was built in Pryor, Oklahoma. It was built on the W.T. Whitaker Cherokee allotment. There were 40 acres designated for the Whitaker Home. W.T. Whitaker and his wife had 11 children of their own. They also took in 30 Cherokee orphans around 1903. Until 1907 or the time Oklahoma entered statehood, Mr. Whitaker paid for everything out of his pocket. After statehood, the state took over the home and hired more employees to help. The Whitaker Home had a farm where the boys learned agriculture. They entered many fairs and won many awards. The girls were taught cooking, sewing, and cosmetology. They even made their own clothes at the home. There was a small hospital located at the home as well. The Whitaker Home remained the number one employer through the 1920's and 1930's. Today it is operated by the Oklahoma National Guard. It continues to serve as the Thunderbird Youth Academy helping teenagers from all over the state.

In 1940, the federal government obtained land south of Pryor. DuPont managed the facility to produce black powder for explosives for the use during World War II. This quickly became the number one industry in Pryor until the war ended. The workforce was found throughout Mayes County and the surrounding area. Housing was a problem for all of the workers. DuPont eventually built dorms next to the powder plant. Several housing units, known as the bricks and Choteau Courts, appeared in

Pryor. Before black powder production ended, the dorms became home to German officer prisoners from World War II for a short period.

After the plant closed and the prisoners were moved to Texas, the area became an industrial park. In the late 1960's, President Johnson dedicated the Mid America Industrial Park. Since the dedication of the park, many renovations, reinvestments, and improvements have been made. There is an ongoing focus on improving infrastructure. Today, the industrial park employs at least 4,800 people within 78 industries. The park covers a over a total of 9,000 acres. MidAmerica Industrial Park is Oklahoma's largest industrial park. It is also the largest rural industrial park in the United States. The park continues to grow and make news. The two latest additions to MidAmerica are Gatorade and Google.

Pryor is also tapping in to their tourism opportunities. Hudson Lake is located in the Pryor area. Pryor is also just minutes from Grand Lake. Pryor Creek borders the west edge of the Grand River. Dam Jam gives cyclists an opportunity to bike through northeastern Oklahoma and Pryor. Pryor is also nationally recognized for the Pryor Creek Music Festivals. This year marked the 6<sup>th</sup> year of Country Fever. This is where several country bands perform over a four day period in Pryor. This past year was the first year for Rocklahoma, an 80's rock concert. This concert attracted attention nationally and internationally.

### **Entrepreneurial Opportunities**

Pryor offers many opportunities for entrepreneurs. Pryor is located in one of the more aesthetically appealing areas of Oklahoma. The natural amenities are varied. There is an abundance of lakes, rivers, hills, and trees in northeastern Oklahoma.

Northeastern Oklahoma attracts many tourists throughout the year because of the natural amenities.

There are local banks that are capable of providing financing for an entrepreneur who wants to either start up or expand a business. There is a business incubator available through OSU-Okmulgee's branch location located within the MidAmerica Industrial Park. There is currently one business utilizing this opportunity. There are also courses for small business owners through OSU-Okmulgee's branch location.

The leadership in Pryor and the surrounding areas has realized the need to improve the workforce. They are currently utilizing the Work Keys Program through ACT. ACT is an organization that is well known for the assessments of high school students. They also provide much assistance in workforce development. This program provides training, testing, and different levels of certification. Pryor is one of the first locations in Oklahoma to develop and utilize this program.

Infrastructure has the possibility of being one of Pryor's strongest assets. There is an abundance of water and electricity in the Pryor region. Grand River Dam Authority provides the electricity to Pryor, the surrounding area, and other cities in Oklahoma such as Stillwater. The city purchases electricity from GRDA and then sells it to the residents and business owners. With this control, there are possibilities of providing incentives for start up businesses. The leadership in Pryor is currently discussing improvements to be made on the sewer lines. This infrastructure is very important to the success of Pryor. One possible step for the future would be to expand city limits and provide infrastructure to businesses desiring to locate south of town.

Mid America Industrial Park utilizes the abundance and low cost energy found in Pryor. The high quality infrastructure and low energy cost is a major recruiting advantage.

Mid America has been very successful in helping companies relocate to Pryor. Over 4,800 people are employed by industries at Mid America Industrial Park. With the employment level increasing, there should be no lack of traffic, shoppers, and even tourists in Pryor due to the immense amount of natural resources available. This is a positive attribute for entrepreneurs in Pryor.

### **Pryor as an Entrepreneurial Community**

MidAmerica Industrial Park is outside of the city limits of Pryor. It is considered a separate entity. The City of Pryor and Mid America are both aware of this separation. They both choose to work together. They have a close relationship and understanding of each other's role. Even though they are separate entities, both work together as one. They both share goals, information, and plans together. There is a strong understanding that MidAmerica handles the industrial recruiting and decision making. There is also an understanding of the roles the city play. The City of Pryor and the Chamber of Commerce strive to increase the tourism, encourage local small business success, and maintain a positive economic development atmosphere. In the end, both entities support one another.

The City of Pryor has recently been very active in promoting tourism attractions. There is constant work being done to attract people to northeastern Oklahoma. The leadership of the city and Chamber of Commerce has been very successful in motivating the community members to volunteer and help with the vast number of events being held. The number of volunteers that help with Country Fever increases

each year. There is a new sense of excitement in Pryor that the leaders have placed in the community members.

Leaders in Pryor also understand the need to be active not just in Pryor or Mayes County but active on the state level. Leaders in Pryor understand the need to advertise their tourist attractions to the state of Oklahoma. They also understand the importance of being part of legislation to improve the opportunities for residents and business owners alike in rural Oklahoma. Pryor is part of decision made effecting rural Oklahoma.

There is also much support for entrepreneurs and potential entrepreneurs in Pryor. There are local banks to finance business ventures. There is not a formal mentoring network, but informal mentoring and directing takes place on a regular basis. Oftentimes, business owners who have been in business for quite some time offer referrals or advice to individuals starting a business. There is much work being done to help educate and train the workforce.

The Chamber of Commerce is very active in providing support and networking opportunities for business owners. The Chamber of Commerce also sponsors Leadership Pryor. The course is composed of a class that meets once a month for 9 months. The leadership class teaches individuals of what Pryor has to offer and what is available in the community. An entire day is spent at MidAmerica Industrial Park. The class also spends an entire day looking at the different educational opportunities available in Pryor. Leadership Pryor is in its eighth year of class. It appears that Leadership Pryor will continue long into the future.

Pryor demonstrates many characteristics of an entrepreneurial community. The city works closely with MidAmerica Industrial Park and has a strong, positive relationship with them. The leadership in Pryor has successfully gained the support and created enthusiasm from the community members. There is currently much excitement of what is going to happen next. Leaders in Pryor understand the importance of being active involved on the state level. Pryor has also taken numerous steps to improve services, the workforce, and infrastructure for entrepreneurs to prosper.

### **Pride in Pryor**

The community members of Pryor are extremely proud of the amenities their community has to offer. They are proud of the tourism potential at Hudson Lake. Pryor is located within minutes of Grand Lake. Water is a prominent natural resource available in Mayes County.

There is much pride of the history that Mayes County and Pryor has. The community is proud of its heritage and the ability of the community to continue to prosper after hardships. In April of 1942, a tornado formed over Claremore, moved to Pryor, and destroyed many of the downtown buildings in Pryor. Many people were injured and 51 people lost their lives. The community worked diligently together to rebuild and help one another. That same sense of service is alive in Pryor today.

The community members of Pryor are extremely proud of MidAmerica Industrial Park. They are very proud of the successes the park has seen and will see in the future. There is much pride when companies like Gatorade and Google choose MidAmerica for a location. The community is proud of the high standards kept at MidAmerica.

The community of Pryor is also proud of its innovative ability. For example, they utilize the resources available to them. They have an abundance of water which they have capitalized on its many uses. They are now striving to attract more tourists using their natural resources. The community members of Pryor understand the need to move forward with goals and plans. The community has had to create an attitude that is innovative and welcoming.

Leadership Pryor has also helped develop pride in the community members. For the past 8 years, community members have had the opportunity to learn about what their community has to offer. They have also learned about the different opportunities of education, volunteerism, and about what happens at Mid America Industrial Park.

### **The Future of Pryor**

Pryor has experienced substantial economic success in the past. This success was accomplished through organization and planning among key leaders in the community. This will remain to be important for future success. This is understood by the leaders in Pryor. There is current planning in progress for improvement of the infrastructure especially the sewer lines.

Pryor is very active in legislation and programs on the state level. This involvement allows the community to be innovative. The community as a whole is well educated and aware of opportunities and potential threats in a similar manner of an entrepreneur due to good communication of key leaders and community members. Leadership Pryor has and will continue to educate community members of Pryor and the opportunities that are available. Pryor is currently getting ready to begin the Work Keys Program to better train and educate the workforce. The Work Keys Program



provides information, assessment and training of personal, professional, and workplace skills. Tourism appears to have a growing impact on the economy of Pryor. This has occurred through an increase of attention drawn to the area as a result of key leaders activity on the state level. There have been many efforts made to increase awareness of all the natural amenities available in the Pryor region.

MidAmerica Industrial Park has recently captured national news from their latest additions. The relocation of Google and Gatorade to MidAmerica has provided the park much attention. MidAmerica will continue to reinvest into the infrastructure. It is not an accident that large names locate there. MidAmerica is prepared.

The future of Pryor will be interesting due to all of the opportunities that have been created by the leaders of Pryor and MidAmerica Industrial Park. Many opportunities for entrepreneurs have been created as well. Regardless of which economic venture is most successful, the future of Pryor will depend on the motivation from the key leaders.

## **Community: Davis and Sulphur**

**County:** Murray

**Population (2006):** Davis: 2,663  
Sulphur: 4,907  
Murray County: 12,945  
Oklahoma: 3,617,316

**Employment (2005):**

**Total:** Murray County: 6,892  
Oklahoma: 2,071,838  
**Non-Farm Proprietor:** Murray County: 1,542  
Oklahoma: 395,367

**Income (2005):**

**Per Capita:** Murray County: \$24,565  
Oklahoma: \$29,948  
**Average Non-Farm Proprietor:** Murray County: \$28,794  
Oklahoma: \$38,501

### **Community History**

In 1887, the railroad was built through southern Oklahoma. The town of Davis was shortly formed around the railroad. S.H. Davis built and owned the first store next to the railroad in 1889. This is the first time that Davis was recognized as a location on a map. In 1890, the first post office was built in Davis. Davis became an actual town in November of 1898. Davis had a professional baseball team in 1921. During this time, Davis began to grow and prosper. Davis received the deed for Turner Falls in 1925. Turner Falls has a natural swimming pool and the largest waterfall in Oklahoma with a fall of 77 feet. Turner Falls remains a prosperous tourist attraction. Thousands of tourists travel through the community every summer.

Sulphur has been attracting tourists for several hundred years. The springs in Sulphur are noted for their healing powers. The first post office in Sulphur was built in

1895. The Chickasaw National Park was the first National Park in Oklahoma and the seventh park in the United States. It was also designated a National Park before Oklahoma entered statehood. The Arbuckle Lake was developed during the 1960's which helped boost tourism to the area even more. Sulphur and Davis are still famous for Arbuckle Mountains, Arbuckle Lake, and the Chickasaw National Recreation Area.

The communities of Sulphur and Davis traditionally were rivals. The rivalry went beyond Friday night football. Key leaders in Murray County understood this rivalry. They also understood the detriment this caused the county. In 2002, key individuals in Murray County decided to develop a plan for the future. They received a three year Initiative for the Future of Rural Oklahoma (IFRO) grant from the Oklahoma Cooperative Extension Service. Only two other communities in Oklahoma received a three year project grant. The purpose of IFRO was to help key leaders in communities identify and develop a plan to address issues facing their communities. The focus was on the issues of leadership and community economic development. The IFRO program also helped communities complete long-term planning for the future.

Murray County developed and listed five major goals to accomplish. Before these goals could even be identified, it was imperative that community members across Murray County come together. One of the identified goals was a retreat that included key community leaders across the county. This was accomplished by having the entire list of selected community leaders traveling to Gainesville, Texas. The participants were not allowed to use cell phones or internet. They were specifically there to develop a plan for their county. This was the first step to developing the bond of Murray County.

There have been numerous positive outcomes resulting from the IFRO program. A tourism office has been developed in Murray County, a long range planning committee has been developed to continue ongoing planning for Murray County, and Leadership Murray County was developed. Leadership Murray County was developed to help educate community members from all areas of Murray County. A beautification committee was developed to help improve the aesthetic appeal of Murray County. The plan for a lodging tax was also identified. In February of 2008, the community members of Murray County will vote again to try to pass this tax.

This action to bring community members together also helped identify work that needs to be done throughout the county. The need for a new hospital building was identified. The ground was broken for this structure in December. The communication between Sulphur and Davis continues today. There is still fierce rivalry during the Sulphur verses Davis football game once a year. The two communities operate as one the rest of the year.

### **Economic History**

Haliburton was previously housed in Davis. Haliburton eventually left their facility in Davis. Davis actively worked to attract another manufacturing company. The community passed a bond issue for the city to purchase the facility with the land. The bond issue was passed. The facility was then leased to Hanover, a compressor company. The City of Davis did keep a portion of the land for the use of the industrial authority. Hanover has since been bought by Exterran who also manufactures compressors.

Murray County offers a vast combination of resources and economic revenue. Community members traditionally relied heavily on agriculture, mainly cattle production. Turner Falls attracts many tourists throughout the year. Sulphur also attracts tourists to the Arbuckle Lake and the Chickasaw National Recreation Area.

Since tourism is recognized as a major industry in Murray County, a lodging tax was proposed to community members in February of 2004. The tax did not pass. The community leaders have strived to educate community members of the importance of the tax and the vast benefits the tax will produce.

### **Entrepreneurial Opportunities**

Sulphur and Davis offer a variety of economic opportunities. Tourism is a large industry in Murray County due to the immense amount of natural amenities available. Turner Falls, the Arbuckle Lake, and the Chickasaw National Recreation Area all attract thousands of tourists each year especially during the summer months. This offers Murray County an excellent advantage for an increase in retail trade.

Local financing is available to both individuals starting up and those who wish to expand their business. There is not a business incubator available. There are many courses offered through the Southern Oklahoma Technology Center in Ardmore. There are even courses for small business offered at the Murray County Expo Center. The Chambers of Commerce in both Sulphur and Davis are very active. They also strive to work together. In 2005, the first joint chamber auction took place. There were many skeptics concerned with the success of the combination. The auction ended up being more successful combined than ever before when held separately.

The combination of the two towns has produced the spirit of Murray County. Several community members stated, “What is good for Sulphur is good for Davis. What is good for Davis is good for Sulphur.” Regionalism is being actively practiced in this particular area. The Initiative for the Future of Rural Oklahoma grant has helped significantly in bringing the two towns together. This causes more than just support from one’s community. The entire county supports the retail industry of Murray County.

### **Murray County as an Entrepreneurial Community**

Sulphur and Davis have transformed their view of success. Prior to 2002, success was performing better than Davis or better than Sulphur. Although competition is healthy, this was not the case between Sulphur and Davis. The Initiative for the Future of Rural Oklahoma grant has completely changed the views of community members from both Sulphur and Davis. An entrepreneurial community is a community that acts the way an entrepreneur would behave. In this case, the entire county acts as an entrepreneur.

There is a certain type of thinking present where, “What is good for Sulphur is good for Davis, and what is good for Davis is good for Sulphur.” This allows the two communities to combine their immense amount of natural resources and greatly increase their tourist attractions.

Murray County offers many benefits for entrepreneurs. First of all, there is a large amount of traffic passing through Murray County due to its tourist attractions. There is an entire county to support an entrepreneur rather than a single town. There is local financing available. There are several banks located in both communities to help both Sulphur and Davis entrepreneurs.

The Murray County Extension Office is centrally located between the two towns. The Murray County Industrial Authority and a branch of Southern Oklahoma Technology Center are both centrally located in the same building. This provides convenience to both community members of Davis and Sulphur. There are courses on owning and managing a small business offered to business owners in this facility.

The Chambers of Commerce in both Sulphur and Davis are extremely active and busy throughout the year. Both Chambers combine their banquets and auctions. This allows for a greater amount of support and a greater opportunity for business owners to network and mentor from both communities.

The teamwork attitude of Murray County allows the entire county to operate as a single entity. It also provides more opportunities and greater services to entrepreneurs. This helps the entire county provide a haven for entrepreneurs to start, grow, and prosper.

### **Pride in Murray County**

Community members of Murray County are proud of a variety of amenities and values. The community members of both Sulphur and Davis are extremely proud of their natural amenities. Davis has Turner Falls which is a very large tourist attraction. Sulphur has the Chickasaw National Recreation Area. Both of these natural amenities draw thousands of tourists each summer and virtually all year. There is also the Arbuckle Lake that is located in Murray County. It provides water to many residents in the area. Many larger cities have tried to purchase their high quality water. The Arbuckle Lake also attracts many tourists and is a great place to experience in the summer months.

Community members of both Sulphur and Davis are proud of their accomplishments as a single entity. The business leaders that worked to develop a strategic planning manual are very proud of their goals being written and in put into action. Today, there is much pride in the joint Chamber of Commerce auctions and banquets. These events draw community members from the entire county. Murray County has undergone a complete change of perception with neighboring towns. This change of perception has in return benefited both communities.

Leadership Murray County helped bring these communities together. The success of Leadership Murray County has largely been from the examples that leadership has played in bringing the communities together. Overall, Leadership Murray County provides an educational and unbiased view of Sulphur, Davis, and Murray County as a whole. This program allows community members from each Sulphur and Davis to spend time together and learn about both communities. The graduating classes also give something back to benefit the county.

Murray County is a very strong tourist region. Even though many tourists pass through Murray County, the feel of a small town is still present. The schools offer a quality education with a rivalry only during the Sulphur and Davis football game every year. The county is proud of the quality of life amenities that are available.

### **The Future of Murray County**

There are many concerned key business leaders involved with planning the future of Murray County. Tourism in Murray County looks to continue and will even grow in the future. There have been numerous revitalization efforts made to improve the attractions. The Chickasaw Nation also has many proposed plans for the future.



There is currently a casino right off of Interstate 35 to attract individuals to exit the interstate. There are also plans to completely rebuild a famous hotel that once stood in Sulphur. The Chickasaw Nation is currently in the process of building a cultural center with an I-Max theater that will open in early 2009.

Uniform city codes help both builders and business owners have a better understanding of what is desired. The ground was broken in December of 2007 to begin the new hospital that will benefit the entire area. There are desires to update the downtown area of Sulphur. This could help promote growth in the retail base of the county.

The Leadership Murray County classes continue to attract more applicants. The advisory board which is made up of previous participants continues to grow. The class still offers participants the option to get involved with the community through various civic organizations. The class will also continue to educate participants about Murray County and the vast amount of opportunities that exist. Leadership Murray County will also continue to give back to the community through the various projects the classes complete each year.

The future of Murray County weighs heavily in building the bonds of the communities of Sulphur and Davis. These two communities appear to continue to strengthen their bonds. With these communities combined, Murray County offers a variety of options in terms of tourism and retail growth.

## **Community: Woodward**

**County:** Woodward

**Population (2006):** Woodward: 12,033  
Woodward County: 19,231  
Oklahoma: 3,617,316

**Employment (2005):**

**Total:** Woodward County: 12,826  
Oklahoma: 2,071,838  
**Non-Farm Proprietor:** Woodward County: 2,512  
Oklahoma: 395,367

**Income (2005):**

**Per Capita:** Woodward County: \$25,798  
Oklahoma: \$29,948  
**Average Non-Farm Proprietor:** Woodward County: \$46,645  
Oklahoma: \$38,501

## **Community History**

Woodward was established in 1887, twenty years before Oklahoma entered statehood. Woodward's location was ideal. The military post Fort Supply was nearby, Fort Reno Military Road and the Southern Kansas Railway crossed in Woodward, and the North Canadian River were all located in Woodward. This provided excellent opportunity for the community to prosper. In 1893, Woodward was already beginning to prosper with about 200 residents who began construction on the town.

Woodward had its share of saloons, brothels, and gambling halls during its early years. This type of business became well recognized establishments by many. There were also many familiar individuals who resided in Woodward. Miss Dollie Kezer, a notorious brothel owner, owned and operated a brothel in Woodward. Temple Lea Houston, son of Sam Houston, also resided in Woodward. He was a notorious trial lawyer who argued with great dramatics. He was also known for a gun fight that took

place in one of the saloons. He ended up shooting the brother of the famous outlaw Al Jennings. He claimed self defense and was later acquitted of the pending charges. Jack E. Love was also part of the famous gun fight. He later became the first chairman of the Oklahoma Corporation Commission.

In November 1907, Theodore Roosevelt signed the proclamation making Oklahoma a state. The quill that President Roosevelt used to sign the proclamation was from an American Golden Eagle. The eagle was capture near Woodward. From the time Woodward was established in 1887 to present, it has been the county seat of Woodward County.

In 1947, a tornado devastated Woodward and northwest Oklahoma. Many people were injured and over 100 were killed. Many homes, businesses, and fixtures were destroyed during this F-5 tornado. The community members did not lose hope. They rebuilt their community stronger than before. Due to the devastation of this tornado, most of the buildings and fixtures, businesses and homes, are less than 60 years of age.

### **Economic History**

Due to Woodward's location near railways, roads, and the Canadian River, many opportunities were available to Woodward. In 1893, construction on buildings and fixtures began. Woodward has historically been the retail trade center for its region. This was evident even before statehood. Woodward housed medical services, necessities such as groceries, clothing stores, banks, and virtually everything one needed to survive.

Woodward does have a strong retail base; however, the community members relied heavily on agriculture and the oil and gas industry. The major decline of the oil and gas industry in the early 1980's had a devastating effect on the Woodward economy. Strong agriculture prices and the regional location for many goods and services kept Woodward as the retail center. "People still had to come to the doctor and go to the bank," explained a key individual in Woodward.

Key individuals in Woodward began to investigate opportunities for Woodward to succeed in the future. Beginning in 1984, concerned bankers, business owners, and leaders in Woodward would meet in the hospital cafeteria every Wednesday evening and Saturday to discuss different diversification opportunities for their community. This was the actual first step towards activating the current Woodward Industrial Foundation. The Woodward Industrial Foundation has been successful in recruiting businesses and industry to Woodward. This, in turn, has created many jobs for the community members of Woodward and the surrounding area.

Today, Woodward is growing and prospering at a rapid rate. Woodward has a diversified economy. The oil and gas industry is now strong as well as the agriculture industry in Woodward. There is a highly respected sale barn in Woodward that attracts buyers and sellers from various locations in Oklahoma, Kansas, and Texas. Wal-Mart has been present in Woodward and is one of the leading stores in the region. Since its arrival, small business owners have found "niche" markets that have been able to prosper. The Woodward community and region have also been actively involved in wind farms. There are various locations around the Woodward area that have active wind farms. There are currently no vacancies in the stores downtown. The Industrial

Foundation continues to recruit businesses to Woodward. The City of Woodward is also very active in recruiting restaurants and hotels. There are plans for construction on two new hotels in Woodward. There are plans to beautify and renovate the downtown area. The City recently passed a \$25 million parks project with 81 percent approval of the Woodward citizens. This project will also not increase the taxes that have remained the same rate for nearly a decade.

The community of Woodward has achieved many goals for economic success. They have continued to increase their population and provide a retail trade area for many in northwestern Oklahoma, panhandle of Texas, and southwest Kansas. The leadership and key leaders in Woodward continue to set higher goals and add more diversification to the economy in Woodward. This is all done to stabilize and create a prospering future for the generations to come.

### **Entrepreneurial Opportunities**

Woodward continues to diversify their economic base. Another venture for diversification is small business development. The community of Woodward has developed and added many services to help current and future entrepreneurs grow and prosper.

There is competitive local financing available. Currently, there are 8 banks operating in Woodward. In the past year, two banks have opened in Woodward. The banks help reflect business success. They help grow second and third generation businesses and start up businesses alike. The banks also provide helpful information about different types of loans and financing for small businesses through various state

and federal sources. These lenders also provide much information about opportunities through the Small Business Administration.

There are courses available for small business owners to utilize. Northwestern Oklahoma State University is located in Alva with a branch also located in Woodward. There are currently a variety of courses offered. There is also construction beginning for a new facility for a variety of curriculum to be offered in the Woodward area. The High Plains Institute of Technology is also located in Woodward. They also provide small business development support. Some of their courses, particularly those related to the oil and gas industry, are currently being taught in Spanish as well as English.

There is currently not an official mentorship network available in Woodward. There are, however, various sources where one can locate assistance. Woodward boasts of being a tight knit, welcoming community where everyone helps everyone. The local banks help with financing and help the potential business owner network and locate additional aid for their business endeavors.

The Chamber of Commerce is very active in Woodward. It is estimated that the monthly meetings average at least 100 chamber members in attendance. The Chamber of Commerce also works very closely with the Woodward Industrial Foundation, the Main Street Organization, and the City of Woodward.

Woodward offers high speed internet to its residents and business owners. The downtown area is expected to begin renovations soon. The renovations include making an aesthetically appealing entry way to the downtown area and renovations of the sidewalks and storefronts. In the mid 1990's, a bond was passed by the city to upgrade the infrastructure in the city. The City of Woodward has continued to reinvest in the

infrastructure with the increased sales tax collections. Woodward does not have a complete 4-lane highway running from it to a larger city. The leadership in Woodward has been the most vocal in the state about improving their highways and infrastructure. Their leadership understands the importance of quality infrastructure and quality highways in and leading to Woodward.

Woodward offers many quality of life amenities. They have recently passed the \$25 million parks project for Crystal Beach Park. This will include improved swimming facilities, improved baseball and softball fields, and state of the art playground equipment. There are also about 7 miles of walking trails that go through Woodward. This is all done to improve the quality of life for the residents in Woodward and to help attract more events in Woodward.

### **Woodward as an Entrepreneurial Community**

Woodward was selected as an excellent example of an entrepreneurial community in both senses of the term. Woodward is located in far northwest Oklahoma where the wind blows year round. There are few natural amenities available in Woodward similar to Cordell. The community members have worked with the leadership in the community to accomplish the high standard of living that exists today.

The community of Woodward does provide many resources and services for entrepreneurs both starting up and those who have been in business for generations. Quality and competitive local financing is plentiful with lenders being highly knowledgeable about various financing opportunities available for business owners. There are a variety of courses available for business owners. They are offered through

Northwestern Oklahoma State University, Woodward Campus or through the High Plains Institute of Technology.

There is neither a formal mentorship network nor a business incubator available in Woodward. There are various sources for informal mentorship available. There are also a variety of organizations that one can utilize to network and find assistance with their business.

The Chamber of Commerce is very active and has a very large membership. The Woodward Chamber of Commerce is an excellent source for business owners to network with other business owners. The chamber is also very supporting of their local businesses. The chamber also holds informative meetings that aid business owners with demographics, economics, and an overall understanding of what is going on in Woodward and the region. Woodward also has an active Main Street Organization that works very hard to aid business owners and provide support for their endeavors. The Woodward Main Street Organization is currently in the process of revamping the downtown area and providing a more aesthetic appeal.

Woodward is a very informed and innovative community. They operate as a single entity. The Main Street Organization, the City of Woodward, the Chamber of Commerce, and the Woodward Industrial Foundation all come together to work together. They have recognized the importance of working together to accomplish their common goal. Many organizations have board members that serve on more than one board or committee. The Woodward Industrial Foundation board is strategically comprised of members that represent various businesses and organizations in the community. By including such a diverse dynamic of key individuals, more issues are



covered, and more community members are involved. This is evident when the community passes a park project with 81 percent approval.

The leadership in Woodward has worked diligently to diversify the economy. The Woodward Industrial Foundation has recruited a variety of industries to Woodward despite many challenges. The Chamber of Commerce and the Main Street Organization aid small businesses, many of which are retail oriented, in making their business successful. The City of Woodward also strives to support their businesses by reinvesting tax collections into the community. There is continual work done to improve the infrastructure for businesses and residents. The city is also active in recruiting and promoting restaurant growth in Woodward.

The community of Woodward is also very aware that it captures many shoppers from the surrounding communities. They also strive to help communities in the area. Recently, Woodward donated a fire truck to the City of Gage. The community of Woodward believes in helping others in the area since they do and will continue to shop in Woodward.

The leadership in Woodward has gained the support of the community members over the years through various means. The leadership is informative for the community members. The entire community knows what the goals are and what is going to be done to accomplish various goals. The leaders follow through with the proposals. This creates trust and continued excitement from the community members.

Before these proposals are presented to the community, leaders from various organizations work together to define objective and have a plan of action. The City of Woodward, the Chamber of Commerce, and Woodward Industrial Foundation utilize

tax, population, demographic, and trade area capture information provided by various sources when planning for recruiting new businesses, city projects, and reinvestment for the future.

Woodward is a community that works together as a community to be successful. They have strong, positive leadership that has the support of the community. The community of Woodward enthuses and energizes their community members. This has been accomplished through the success and completion of their projects in the community. The community members have results and understand the standard that has been set in Woodward.

### **Pride in Woodward**

The community members of Woodward are extremely proud of their accomplishments. They have created many quality of life amenities in their community. They have walking trails through town, and they are currently making progress on their parks project. They are also working to beautify their town by working on the downtown area.

Woodward has a vibrant downtown area. There are no vacancies on Main Street. All of the stores are open and operating quite well. This is very important and reflects the vibrancy of the community when the downtown retail is strong. The Woodward community is also very proud of its sale barn that is well known in the states of Oklahoma, Texas, and Kansas. The leaders and community members are also very proud of what is to come.

The community of Woodward is most proud of the people that are there. They have a strong workforce. They also have friendly people who are extremely welcoming

to their visitors. One community member commented, “Woodward is the home to open spaces and friendly faces.” They support their leadership, and they are proud of their accomplishments. With all of the added quality of life amenities available, Woodward is an excellent place to move and raise a family.

### **The Future of Woodward**

Most communities are well aware that the future is oftentimes uncertain. Oklahoma communities understand this very well. There is the understanding that markets change, and economies are not 100 percent stable. Many Oklahoma communities rely heavily on agriculture and the oil and gas industry. Both of these markets have fluctuated over time, and they have both had periods of decline. For the communities that rely solely on these industries, it can be very damaging during a decline.

Woodward is not immune to economic change. Their leadership is well aware of the possibilities of a decline in certain markets. This is why the community of Woodward is striving to diversify their economic base. With a diverse economic base, a decline in one market will not hurt the entire community. There have already been many efforts put in place to diversify the economy in Woodward. For example, the Woodward Industrial Foundation has worked diligently to recruit a menagerie of businesses to Woodward. The Chamber of Commerce and the Main Street Organization have also worked to help small businesses start up and stay in business. The City of Woodward has also strived to continue to improve the infrastructure for community members and business owners. This work will all continue in the future.

Woodward has set many goals in the past. There have been goals focused on increasing tax collections without increasing the tax rate. They have surpassed their previous goals, and they are continuing to set records and break records for themselves. This will continue in the future as well. If Woodward continues to follow through with their plans and proposals, the community will continue to follow and support the leadership in Woodward.

The future of Woodward looks to continue to grow and diversify their economy. There will continue to be obstacles, but the leadership in Woodward is determined to produce a prosperous future for its business owners and community members.

### **Comparison of Case Studies**

The four communities are located in four very different locations in Oklahoma, with equally different defining characteristics. Cordell is located in southwest Oklahoma. There is not a Wal-Mart or a McDonald's in Washita County where Cordell is located. Cordell has been able to maintain a positive increase in their population over the past few years while the trend for the region has been decreasing. Pryor is located in the northeastern region of Oklahoma. Pryor has an immense amount of natural resources with water being one the most abundant. Pryor is also home to MidAmerica Industrial Park, the largest industrial park in Oklahoma and the largest rural industrial park in the United States. Sulphur and Davis are located in the southern region of Oklahoma. They also are known for their natural resources and National Park. Sulphur and Davis are also well recognized for their ability to put aside their differences and work together. Woodward, located in northwest Oklahoma, is well

recognized as the trade center for the northwestern region of Oklahoma, southeast region of Kansas, and the northeast panhandle of Texas.

Cordell has had to continue to reinvent themselves in economic terms. The leadership in Cordell has the ability to gain the support of the community members. This was evident when the Main Street Organization was introduced. Some of the leaders describe it as, “everyone seemed to be moving in the same direction at the same time and at the same pace.” This happened due to strong leadership. Entrepreneurial communities are communities that grab the attention and support of the community members. Cordell is currently in the process of reinventing themselves again. The leadership of the mayor and other key individuals in the community are working together to identify a common vision for the future of Cordell.

There are many things to learn from the community of Cordell. The leadership of the community actively plans and identifies goals for the future. They also share these goals with the community members. This gains the support and enthusiasm of community members. The community works as a single entity to accomplish the common goal. The results are then shared and evident for everyone to take pride in the accomplishment.

Pryor demonstrates many characteristics of an entrepreneurial community. The city works closely with Mid America Industrial Park and has a strong, positive relationship with them. Mid America Industrial Park is outside of the city limits of Pryor. It is actually considered a separate entity. The City of Pryor and Mid America are both aware of this separation. They both choose to work together. They have a close relationship and understanding of each other’s role. Even though they are

separate entities, the both work together as one. They both share goals, information, and plans together. There is a strong understanding that Mid America handles the industrial recruiting and decision making. There is also an understanding of the role the city plays. In the end, both entities support one another.

Leaders in Pryor also understand the need to be active not just in Pryor or Mayes County but active on the state level. Leaders in Pryor understand the need to advertise their tourist attractions to the state of Oklahoma. They also understand the importance of being part of legislation to improve the opportunities for residents and business owners alike in rural Oklahoma. Pryor is part of decision made effecting rural Oklahoma.

Sulphur and Davis have transformed their view of success. Prior to 2002, success was performing better than Davis or better than Sulphur. Although competition is healthy, this was not the case between Sulphur and Davis. The Initiative for the Future of Rural Oklahoma grant has completely changed the views of community members from both Sulphur and Davis. This grant allowed community members to understand the importance of their community, and view the potential benefits from working together. In this case, the entire county acts as an entrepreneur.

There is a certain type of thinking present where, “What is good for Sulphur is good for Davis, and what is good for Davis is good for Sulphur.” This allows the two communities to combine their immense amount of natural resources and greatly increase their tourist attractions.

Woodward is a very informed and innovative community. They operate as a single entity. The Main Street Organization, the City of Woodward, the Chamber of

Commerce, and the Woodward Industrial Foundation all come together to work together. They have recognized the importance of working together to accomplish their common goal. Many organizations have board members that serve on more than one board or committee. The Woodward Industrial Foundation board is strategically comprised of members that represent various businesses and organizations in the community. By including such a diverse dynamic of key individuals, more issues are covered, and more community members are involved. This is evident when the community passes a park project with 81 percent approval. They also strive to help other communities in the area. Recently, Woodward donated a fire truck to the City of Gage. The community of Woodward believes in helping others in the area since they do and will continue to shop in Woodward.

The leadership in Woodward has worked diligently to diversify the economy. The Woodward Industrial Foundation has recruited a variety of industries to Woodward despite many challenges. The Chamber of Commerce and the Main Street Organization aid small businesses, many of which are retail oriented, in making their business successful. The City of Woodward also strives to support their businesses by reinvesting tax collections into the community. There is continual work done to improve the infrastructure for businesses and residents. The city is also active in recruiting and promoting restaurant growth in Woodward.

All four of the communities selected for case studies have had to rely heavily on their local leadership, partnerships among organizations within the community, and strong communication between local leadership and community members in order to grow and prosper. The selected communities have emphasized the importance of

quality infrastructure, local finance, and local economic development organizations. These communities are currently starting or are well on their way to diversifying their economic base in the community. Many communities in Oklahoma rely on agriculture or oil production. These markets have had success and many memorable declines in the past. The selected communities are working diligently to making certain that declines in one industry does not have a negative affect on the entire economy of the community.

These communities have also taken note and capitalized on the natural resources available in their area. Pryor has immense amounts of water that is used in energy production. Sulphur and Davis have a National Recreation Area, a lake, campground, and other amenities that attract tourists throughout the year. Cordell and Woodward both have open spaces, and Woodward has many windmills set up for energy production. Cordell has the space to grow and attract business growth.

The communities selected have all had overcome obstacles. They have all had to reinvent themselves and reinvent their economy over time. Some communities are further in that process than others, but they have all had to complete much strategic planning and decision making. These communities, most of all, have had to work together as one single entity as an entrepreneur.



## **CHAPTER VI**

### **SUMMARY AND CONCLUSIONS**

#### **Summary**

Entrepreneurial communities can provide assistance and assurance for the future to struggling communities in rural Oklahoma. However, movement towards becoming an entrepreneurial community can be quite challenging.

This research has determined that various communities in Oklahoma currently possess characteristics of entrepreneurial communities. The Oklahoma Social Indicator Survey of 2006 was utilized to determine what services and resources were available and being used by entrepreneurs in Oklahoma communities. The survey results displayed that there are small business owners who utilize many of the services and resources available in their communities. The survey also indicated that many small businesses were unaware or did not use the services already provided in their community. For example, more than 43 percent responded that they were not aware if a business incubator was available in their community. More than 33 percent were not aware of mentors or local expertise in their community. Nearly seventeen percent of the individuals surveyed were not aware of courses on funding sources or owning a small business available in the community.

The survey also found that the overall employment level of majority of the firms in the sample is either increasing or staying the same. A majority of the firms that participated in the survey indicated that they were satisfied with the support their business receives from their local community.

The quantitative section of this research identified key services and resources that communities can provide for their entrepreneurs. The first OLS model conducted indicated that infrastructure, a qualified workforce, and a Chamber of Commerce all had a positive impact on a community. This same model also found that wages, courses on owning and managing a small business, and location variables for northeast and northwest Oklahoma had a negative effect on the pull factor of the community.

When the resources were combined into three groups, the group representing resources and services that a community can provide proved to have a positive effect on a community being entrepreneurial. The model that combined State/Federal Programs appeared to have a negative effect on the pull factor of the community. This could be expected due to courses having a negative coefficient, and State/Federal loan programs found not significant in the original OLS model.

The logistic models further explained that mentors are important to both non-farm proprietors' income and percentage of non-farm proprietors. Having a high school education also had a positive impact on the percentage of non-farm proprietors, and Wal-Mart even displayed to have a positive effect on non-farm proprietors' income. The dummy variable for county seat was negative in both logistic models. The location variable for northwest Oklahoma had a negative impact on the income received by non-farm proprietors.

Wages had a negative impact on the percentage of non-farm proprietors, the original OLS model, and the OLS model that captured the impact of combinations of resources. The variable for wages used was the average wage per job. When looking at the state of Oklahoma, there are only seven counties that are above the state average for average wage per job. Four counties were metropolitan counties with Latimer, Noble, and Washington included. Also, when looking at overall retail wages versus manufacturing wages, retail wages were significantly lower. This research does focus more on the retail sector of a community's economy.

The four case studies completed further described the services and resources offered to entrepreneurs in their communities. Many of these services and resources were parallel to those found important in the econometric models. Local financing, an active Chamber of Commerce, mentors, and quality infrastructure were all well represented in all four of the case study communities. Local financing was well represented by having several financial institutions in each community that would compete to offer entrepreneurs quality financing for their small business. Also, the local banks in the community worked together with other banks and organizations within the community. All four of the communities had an active Chamber of Commerce. Sulphur and Davis even had joint chamber auctions and annual banquets. A formal mentoring network was not represented in any of the communities. However, informal networking occurred regularly in all four of the communities.

The case studies also further described the entire community's approach to behaving as an entrepreneur. All four of the communities face different struggles. They all overcome their struggles, set goals, take risks, and reinvent themselves as a

single entity. One community was quoted for saying that, “We were all moving in the same direction, at the same time, at the same pace.” All four of the communities understand the importance of key leaders and organizations working together for the interest of the entire community.

### **Conclusions**

Overall, small business owners do utilize resources available in their community. Entrepreneurial communities do possess the variables found in the econometric models. The econometric results also found that having a combination, more than one, of those variables has a positive effect on the community. The case studies found the following to be important traits of entrepreneurial communities:

- strong leadership
- teamwork
- goal setting
- communication
- long term planning efforts
- local citizens key to community’s success

There are many opportunities for future research in this particular area. The Oklahoma Social Indicator of 2006 displayed results proving that some business owners were not aware of the services available in their community. Therefore, this provides support for efforts to increase information and awareness of services and resources available.

There were negative parameter estimates in the econometric models. The variable for wages was consistently negative in the econometric models. The variable

for wages used was the average wage per job. Possibly future research could use more specific wage variables. Bachelor's Degree also had a negative parameter estimate. However, the data utilized was not specific to business owners. The data used looked at the overall county level of education. There also could be the issue of endogeneity between Wal-Mart and the pull factor. This is where the change occurs within the model. The variable is then rather explained through the model rather than by itself.

Observations that were located in cities with a population of 100,000 or greater were omitted from the sample to keep the focus of the research on smaller communities. Future research could have more ties to rural Oklahoma. Many services such as business incubators, mentors, and state and federal loan programs all had low numbers of small business owners using them. Also, many small business owners indicated they took at least one course on owning a small business. However, these results were not captured in the econometric models. There are several future research opportunities to determine the effects of these services. Oklahoma.

Four case studies were conducted on communities in four very different regions of the state. Future research could include more case studies conducted to get a better idea of exactly what services and resources are available in the communities. Another survey more specific to small business owners could be another opportunity for future research. This could also provide more education and a broadening of information of best practices for Oklahoma rural communities.

There are many opportunities for future research in the area of entrepreneurial communities. There are still many questions of services needed and the quality of services available. There are many opportunities to determine overall effects of factors

not captured in the econometric models such as leadership and involvement of local organizations within the community. There are opportunities in the future to determine the effects of entrepreneurial models in place today.

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**APPENDIX A**

**Oklahoma Social Indicator Survey of 2006**

## Oklahoma State University Institutional Review Board

Date: Monday, October 16, 2006  
IRB Application No. HE06101  
Proposal Title: 2006 Oklahoma Social Indicator Survey

Reviewed and Exempt  
Processed as:

**Status Recommended by Reviewer(s): Approved Protocol Expires: 10/15/2007**

Principal Investigator(s)  
K. Celeste Campbell ✓  
306 HES  
Stillwater, OK 74078

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The IRB application referenced above has been approved. It is the judgment of the reviewers that the rights and welfare of individuals who may be asked to participate in this study will be respected, and that the research will be conducted in a manner consistent with the IRB requirements as outlined in section 45 CFR 46.

The final versions of any printed recruitment, consent and assent documents bearing the IRB approval stamp are attached to this letter. These are the versions that must be used during the study.

As Principal Investigator, it is your responsibility to do the following:

1. Conduct this study exactly as it has been approved. Any modifications to the research protocol must be submitted with the appropriate signatures for IRB approval.
2. Submit a request for continuation if the study extends beyond the approval period of one calendar year. This continuation must receive IRB review and approval before the research can continue.
3. Report any adverse events to the IRB Chair promptly. Adverse events are those which are unanticipated and impact the subjects during the course of this research; and
4. Notify the IRB office in writing when your research project is complete.

Please note that approved protocols are subject to monitoring by the IRB and that the IRB office has the authority to inspect research records associated with this protocol at any time. If you have questions about the IRB procedures or need any assistance from the Board, please contact Beth McTernan in 219 Cordell North (phone: 405-744-5700, [beth.mcternan@okstate.edu](mailto:beth.mcternan@okstate.edu)).

Sincerely,



Sue C. Jacobs, Chair  
Institutional Review Board

Appendix A. Solicitation Script

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INTRODUCTION  
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OKLAHOMA SOCIAL INDICATOR SURVEY 2006

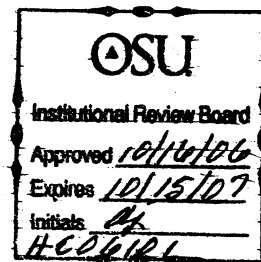
Hello, my name is \_\_\_\_\_. I'm a student calling from Oklahoma State University in Stillwater.

We are doing a study about state issues, such as programs for young children, owning and operating a business, internet service, and mental health and substance abuse services.

I need to talk to the person in your household who is 18 or older and had the most RECENT birthday.

(If respondent ask, say "It's a method of randomly selecting people within the household.")

Your answers will be put with a lot of other people's answers, so you cannot be identified in any way. If there are questions you don't care to answer, we'll skip over them. The interview takes 10-15 minutes. Would this be a good time to do the interview?



Following are some commonly asked questions and the necessary information to provide an answer in your own words.

- *"I've never heard of your organization" or "Where did you say you were from?"*
  - Bureau for Social Research – Oklahoma State University in Stillwater
    - Provides resources and services for assisting social science research
    - Assists in research done by OSU faculty and other public and private organizations

#### Client

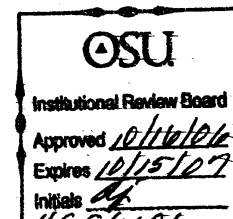
- Several state agencies including: Smart Start Oklahoma; Oklahoma Department of Rehabilitation Services; Oklahoma Department of Mental Health and Substance Abuse Services
- A few OSU faculty members
- *"What is this about?"*
  - Calling adult residents of Oklahoma households
  - To gather information and opinions on various issues that impact the quality of life of persons living in the state of Oklahoma

#### Survey questions regarding

- internet service
- state programs for young children
- owning and operating a business
- awareness of rehabilitation services
- how Oklahomans are paying for mental health and substance abuse services.
- *"Who will see this information?"*
  - Information coded (turned into numbers) and statistically analyzed
  - Survey results given to administrators of the sponsoring agencies
  - Identifying information - such as phone number - kept separate from interview in a confidential file
  - Identifying information destroyed when study is complete
- *"How did you get my telephone number?"*
  - Telephone number was selected from a list of randomly generated telephone numbers based on the telephone prefixes in Oklahoma

#### Contact information:

Dr. Celeste Campbell – Bureau for Social Research at OSU, (405) 744-6701



## Oklahoma State University Institutional Review Board

Date: Friday, January 26, 2007  
IRB Application No AG072  
Proposal Title: Entrepreneurial Communities in Oklahoma: Keys to Success

Reviewed and Processed as: Exempt

Status Recommended by Reviewer(s): Approved Protocol Expires: 1/25/2008

Principal Investigator(s)

Mike Woods ✓  
514 Ag Hall  
Stillwater, OK 74078

Lara B Brooks  
522 Ag Hall  
Stillwater, OK 74078

---

The IRB application referenced above has been approved. It is the judgment of the reviewers that the rights and welfare of individuals who may be asked to participate in this study will be respected, and that the research will be conducted in a manner consistent with the IRB requirements as outlined in section 45 CFR 46.

The final versions of any printed recruitment, consent and assent documents bearing the IRB approval stamp are attached to this letter. These are the versions that must be used during the study.

As Principal Investigator, it is your responsibility to do the following:

1. Conduct this study exactly as it has been approved. Any modifications to the research protocol must be submitted with the appropriate signatures for IRB approval.
2. Submit a request for continuation if the study extends beyond the approval period of one calendar year. This continuation must receive IRB review and approval before the research can continue.
3. Report any adverse events to the IRB Chair promptly. Adverse events are those which are unanticipated and impact the subjects during the course of this research; and
4. Notify the IRB office in writing when your research project is complete.

Please note that approved protocols are subject to monitoring by the IRB and that the IRB office has the authority to inspect research records associated with this protocol at any time. If you have questions about the IRB procedures or need any assistance from the Board, please contact Beth McTernan in 219 Cordell North (phone: 405-744-5700, [beth.mcternan@okstate.edu](mailto:beth.mcternan@okstate.edu)).

Sincerely,



Sue C. Jacobs, Chair  
Institutional Review Board

**Oklahoma State University Institutional Review Board**

Date: Wednesday, January 02, 2008      Protocol Expires: 1/1/2009  
IRB Application No: AG072  
Proposal Title: Entrepreneurial Communities in Oklahoma: Keys to Success

Reviewed and Processed as: Exempt  
**Continuation**

Status Recommended by Reviewer(s)      **Approved**

Principal Investigator(s)

Mike Woods  
514 Ag Hall  
Stillwater, OK 74078

Lara B Brooks  
522 Ag Hall  
Stillwater, OK 74078

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Approvals are valid for one calendar year, after which time a request for continuation must be submitted. Any modifications to the research project approved by the IRB must be submitted for approval with the advisor's signature. The IRB office **MUST** be notified in writing when a project is complete. Approved projects are subject to monitoring by the IRB. Expedited and exempt projects may be reviewed by the full Institutional Review Board.

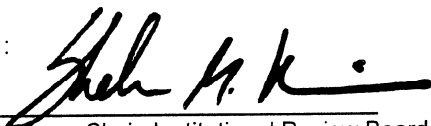
The final versions of any printed recruitment, consent and assent documents bearing the IRB approval stamp are attached to this letter. These are the versions that must be used during the study.

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The reviewer(s) had these comments:

**Approved for continued data analysis only. Should additional data need to be collected, a modification will need to be submitted for review and approval.**

Signature :



Shelia Kennison, Chair, Institutional Review Board

Wednesday, January 02, 2008  
Date



## Oklahoma Social Indicator Survey Questions

1. Is anyone in this household an owner or part-owner of a business? This includes farms, ranches, home-based businesses, and other small businesses.

- A) Yes
- B) No

*If yes, continue with questions 2-14*

*If no, thank you for your time*

2. In regards to the total employment level of your business in the past 5 years, has it:

- A) Grown
- B) Declined
- C) Stayed the same

3. In regards to the total number of jobs in your small business, how many have you added or lost over the past 5 years? \_\_\_\_\_

4. Which of the following “startup” services are available in your community? *Circle all that apply*

- A) Business incubator
- B) Mentors/ Local expertise and/or entrepreneurship network
- C) Courses on funding sources or starting a small business
- D) Local loan and/or investor
- E) State and or federal loan programs

5. Which of the following services have you used in your community?

*Circle all that apply*

- A) Business incubator
- B) Mentors/ Local expertise and/or entrepreneurship network
- C) Courses on funding sources or starting a small business
- D) Local loan and/or investor
- E) State and or federal loan programs

6. At any time over the past 5 years, have you had difficulty finding workers for your business?

- A) Yes
- B) No
- C) Do not need to find workers

7. Where does the majority of your business financing come from?

- A) Within the same town or city where business is located
- B) Outside of town or city where business is located
- C) No financing is needed

8. Is there a Chamber of Commerce or similar local development organization in your community?

- A) Yes
- B) No

9. Are you an active member of that organization?

- A) Yes
- B) No

10. How satisfied are you with the local development organization in terms of helping your business to succeed?

- 1 Very dissatisfied
- 2 Dissatisfied
- 3 Neutral
- 4 Satisfied
- 5 Very satisfied
- 6 Not applicable

11. Do you have internet service at your place of business?

- A) Yes
- B) No

12. What types of internet access do you use at your place of business?

- A) High speed
- B) Dial-up
- C) None
- D) Do not know

13. Does your community provide adequate overall infrastructure (water, sewer, and electricity) for your business?

- A) Yes
- B) No

14. Do you do at least 50 percent of your personal shopping in the community where your business is located?

- A) Yes
- B) No

15. Does at least 50 percent of your business operating expenditures come from within the community where your business is located?

- A) Yes
- B) No

16. What is one thing that your community lacks in helping you be more successful with your business?

17. What has been most helpful within your community to enhance your business success?

## Complete Survey Results

### **Employment Level of Firms**

	(%)	Frequency
Grown	26.0	51
Declined	10.7	21
Stayed the same	61.7	121
Not Applicable	1.5	3
Total	100.0	196

### **Business Incubator Located in Community**

	(%)	Frequency
Yes	9.2	18
No	43.4	85
Do Not Know	46.9	92
Not Applicable	0.5	1
Total	100.0	196

### **Business Owners Who Used a Business Incubator**

	(%)	Frequency
Yes	9.0	2
No	91.0	16
Total	100.0	18

### **Mentors, Local Expertise, or Entrepreneurial Network in Community**

	(%)	Frequency
Yes	25.0	49
No	36.2	71
Do Not Know	38.8	76
Total	100.0	196

### **Business Owners Who Used Mentors, Local Expertise, or Entrepreneurial Network in Community**

	(%)	Frequency
Yes	25.3	12
No	74.7	37
Total	100.0	49

**Courses on Funding Sources or Starting a Small Business Available in Community**

	(%)	Frequency
Yes	53.6	105
No	27.0	53
Do Not Know	18.9	37
Not Applicable	0.5	1
Total	100.0	196

**Business Owners Who Used Courses on Funding Sources or Starting a Small Business**

	(%)	Frequency
Yes	14.0	15
No	86.0	90
Total	100.0	105

**Local Loan or Investor Services in Community**

	(%)	Frequency
Yes	64.3	126
No	15.8	31
Do Not Know	19.9	39
Total	100.0	196

**Business Owners Who Used Local Loan or Investor Services**

	(%)	Frequency
Yes	35.5	45
No	64.5	81
Total	100.0	126

**State or Federal Loan Programs in Community**

	(%)	Frequency
Yes	64.3	126
No	16.3	32
Do Not Know	19.4	38
Total	100.0	196

**Business Owners Who Used State or Federal Loan Programs**

	(%)	Frequency
Yes	14.9	19
No	85.1	107
Total	100.0	126

**Difficulty Finding Qualified Workers**

	(%)	Frequency
Yes	19.3	38
No	60.1	118
Have not needed to find workers	20.6	40
Total	100.0	196

**Majority of One's Business Financing**

	(%)	Frequency
Within the same town or city where business is located	41.8	82
Outside the same town or city where business is located	15.3	30
No financing is needed	40.8	80
Not Applicable	2.1	4
Total	100.0	196

**Chamber of Commerce or Local Economic Development Organization in Community**

	(%)	Frequency
Yes	85.2	167
No	10.7	21
Do Not Know	4.1	8
Total	100.0	196

**Business Owners who are Active Members of Their Local Organization**

	(%)	Frequency
Yes	17.4	29
No	82.6	138
Total	100.0	167

**How satisfied are you with the local development organization in terms of helping your business to succeed?**

	(%)	Frequency
Very Satisfied	17.2	5
Satisfied	41.4	12
Neutral	31.0	9
Dissatisfied	3.5	1
Very Dissatisfied	0.0	0
Not Applicable	6.9	2
Total	100.0	29

**Business Owners Who Have Internet at their Place of Business**

	(%)	Frequency
Yes	69.7	137
No	30.3	59
Total	100.0	196

**Types of Internet Access of Business Owners**

	(%)	Frequency
High Speed	75.2	103
Dial-up	22.6	31
Do Not Know	2.2	3
Total	100.0	137

**Does your community provide adequate overall infrastructure (water, sewer, and electricity) for your business?**

	(%)	Frequency
Yes	81.1	159
No	16.8	33
Not Applicable	2.0	4
Total	100.0	196

**Do you do at least 50 percent of your personal shopping in the community where your business is located?**

	(%)	Frequency
Yes	74.6	146
No	25.4	50
Total	100.0	196

**Does at least 50 percent of your business input expenditures come from within the community where your business is located?**

	(%)	Frequency
Yes	63.8	125
No	33.2	65
Not Applicable	3.0	6



## Open-Ended Survey Responses

### **One Thing the Community Lacks in Helping You be More Successful with Your Business**

	Percent (%)	Frequency
Nothing	42.4	83
More Customers/Higher Population	8.7	17
Community Support in General	8.7	17
Qualified Workforce	6.7	13
Housing/Infrastructure/Telecommunications	6.7	13
More Local Businesses, jobs, and income	6.1	12
More Information/Referrals and Marketing Opportunities	4.6	9
Traffic Control and Parking	3.1	6
More Mentors and Networking	2.0	4
Educated, Qualified Local Leaders	2.0	4
Inputs Closer to Business	2.0	4
Local Financing, Loan Services	2.0	4
More Locations for Businesses	1.5	3
Too Many Large Businesses, Corporations	1.5	3
More State Funding/Tax Breaks	1.0	2
More Educational Opportunities About the Community	0.5	1
More Environmental Restrictions	0.5	1
<b>Total</b>	<b>100.0%</b>	<b>196</b>

**One Thing Most Helpful Within Your Community to Enhance Business Success**

	Percent (%)	Frequency
Nothing/ Do not Know	28.6	56
Networking/ Mentors/ Community Involvement	12.8	25
Reputation/ Word of Mouth	12.2	24
Location of Business	8.7	17
Support of the Community	6.6	13
Advertisement	5.1	10
The Industry/ Economy	5.1	10
Quality Infrastructure, telecommunications, high speed internet	4.6	9
Chamber of Commerce/ Economic Development	3.6	7
Local Finance/ Banks	3.1	6
Qualified Workforce	3.1	6
Growth of community/ Increase in population	2.5	5
Located near inputs	1.5	3
New Businesses	1.0	2
Oklahoma Cooperative Extension Service	1.0	2
Quality Leadership/ Local Government	0.5	1
Total	100.0%	196

## **APPENDIX B**

### **Case Studies**

Oklahoma State University Institutional Review Board  
**Request for Determination of Non-Human Subject or Non-Research**

*Federal regulations and OSU policy require IRB review of all research involving human subjects. Some categories of research are difficult to discern as to whether they qualify as human subject research. Therefore, the IRB has established policies and procedures to assist in this determination.*

**1. Principal Investigator Information**

First Name: Lara	Middle Initial: L.	Last Name: Brooks
Department/Division: Agricultural Economics		College: Graduate
Campus Address: 522 Ag Hall		Zip+4: 74078
Campus Phone: 744-9988	Fax:	Email: <a href="mailto:lara.brooks@okstate.edu">lara.brooks@okstate.edu</a>
<b>Complete if PI does not have campus address:</b>		
Address:		City:
State:	Zip:	Phone:

**2. Faculty Advisor (complete if PI is a student, resident, or fellow)  NA**

Faculty Advisor's name: Dr. Mike Woods	Title: Department Head Professor and Extension Economist	
Department/Division: Agricultural Economics	College: Agricultural Sciences and Natural Resources	
Campus Address: 308 Ag Hall	Zip+4: 74078	
Campus Phone: 744-6161	Fax: 744-8210	Email: <a href="mailto:mike.woods@okstate.edu">mike.woods@okstate.edu</a>

**3. Study Information:**

- A. Title  
 Entrepreneurial Communities in Oklahoma: Keys to Success
- B. Give a brief summary of the project. (See instructions for guidance)  
 Rural communities throughout the state of Oklahoma are facing numerous struggles, growth and even just sustainability. Communities have become creative in terms of keeping their local areas alive. The development of an entrepreneurial community has often been looked at as a positive means of developing and helping a community face the continuous struggles in rural Oklahoma.
- C. Describe the subject population/type of data/specimens to be studied. (See instructions for guidance)  
 The sampling population will be Oklahoma communities that have achieved economic success. Key local leaders will be identified.

Oklahoma State University Institutional Review Board

**Request for Determination of Non-Human Subject or Non-Research**

**4. Determination of "Research".**

**45 CFR 46.102(d):** *Research* means a systematic investigation, including research development, testing and evaluation, designed to develop or contribute to generalizable knowledge. Activities which meet this definition constitute research for purposes of this policy whether or not they are conducted or supported under a program which is considered research for other purposes.

**One of the following must be "no" to qualify as "non-research":**

- A. Will the data/specimen(s) be obtained in a systematic manner?  
 No  Yes
- B. Will the intent of the data/specimen collection be for the purpose of contributing to generalizable knowledge (disseminating the knowledge obtained outside of Oklahoma State University, e.g., presentation or publication)?  
 No  Yes

**5. Determination of "Human Subject".**

**45 CFR 46.102(f):** *Human subject* means a living individual about whom an investigator (whether professional or student) conducting research obtains: (1) data through intervention or interaction with the individual or (2) identifiable private information. Intervention includes both physical procedures by which data are gathered (for example venipuncture) and manipulations of the subject or the subject's environment that are performed for research purposes. Interaction includes communication or interpersonal contact between investigator and subject. Private information includes information about behavior that occurs in a context in which an individual can reasonably expect that no observation or recording is taking place, and information which has been provided for specific purposes by an individual and which the individual can reasonably expect will not be made public (for example, a medical record). Private information must be individually identifiable (i.e., the identity of the subject is or may be ascertained by the investigator or associated with the information) in order for obtaining the information to constitute research involving human subjects.

- A. Does the research involve obtaining information about living individuals?  
 No  Yes  
**If no, then research does not involve human subjects, no other information is required.**  
**If yes, proceed to the following questions.**

**All of the following must be "no" to qualify as "non-human subject":**

- B. Does the study involve intervention or interaction with a "human subject"?  
 No  Yes
- C. Does the study involve access to identifiable private information?  
 No  Yes
- D. Are data/specimens received by the Investigator with identifiable private information?  
 No  Yes
- E. Are the data/specimen(s) coded such that a link exists that could allow the data/specimen(s) to be re-identified?  
 No  Yes  
If "Yes," is there a written agreement that prohibits the PI and his/her staff access to the link?  
 No  Yes

Oklahoma State University Institutional Review Board  
**Request for Determination of Non-Human Subject or Non-Research**

6. Signatures

Signature of PI *Lara Brooks* Date *Aug. 20, 2007*

Signature of Faculty Advisor *[Signature]* Date *8-20-07*  
(If PI is a student)

Based on the information provided, the OSU-Stillwater IRB has determined that this project **does not** qualify as human subject research as defined in 45 CFR 46.102(d) and (f) and **is not subject to oversight by the OSU IRB.**

Based on the information provided, the OSU-Stillwater IRB has determined that this research **does** qualify as human subject research and **submission of an application for review by the IRB is required.**

*Sue C Jacobs*  
Dr. Sue C. Jacobs, IRB Chair

*8/20/07*  
Date

## Case Study Questions

**Introduction:** Hello, I am Lara Brooks from Oklahoma State University. I am a graduate student working on my Master of Science Degree in Agricultural Economics. I am conducting my research on entrepreneurial communities. Your community has been selected because you have excelled in your economic development ventures. I have a few questions concerning your community.

**Question 1)** Does your community offer a business incubator for businesses start-up businesses or expanding businesses?

**Question 2)** Does your community offer mentors, local expertise, or an entrepreneurial network for business owners and community members?

**Question 3)** Does your community offer courses on funding sources or courses on starting a small business?

**Question 4)** Are there local loan or investor services available in your community?

**Question 5)** Do you feel local business owners are aware of state or federal loan programs available for business owners?

**Question 6)** Is there an active Chamber of Commerce or similar local development organization in your community?

**Question 7)** What percentage of business owners do you believe are members of the local development organization?

**Question 8)** Does your community offer high speed internet for residents and business owners?

**Question 9)** Does your community provide adequate overall infrastructure (water, sewer, and electricity) for business owners and residents?

**Question 10)** Do you consider your community to be “entrepreneurial?”  
*Entrepreneurial meaning your community works in an entrepreneurial fashion or your community is a haven for entrepreneurs to prosper.*

**Question 11)** What is one thing your community offers to enhance business success for local business owners?

**Question 12)** What is one thing your community lacks in helping local business owners become more successful with their businesses?

**Question 13)** Can you recall the economic development efforts that were put in place for you community to be what it is today?

**Question 14)** What is the one thing your community as a whole prides itself? (This could be historical facts, natural amenities, etc.)



## Letter to Case Study Participants

December 17, 2007

Dear Case Study Participant,

I would again like to thank you for all of your help. I have attached a copy of the write up from your community. I would greatly appreciate it if you could read over it, determine the revisions needed, and please mail them back to me. After I make all of the revisions that I receive, I will then send you a copy of the final product. Again, thank you for all of your help.

Sincerely,

Lara Brooks  
522 Ag Hall  
Stillwater, OK 74078  
(405)744-9988

## **VITA**

**Lara Lea Bridenstine-Brooks**

**Master of Science**

Thesis: ENTREPRENEURIAL COMMUNITIES IN RURAL OKLAHOMA

Major Field: Agricultural Economics

Biographical:

Personal Data: Born in Stillwater, Oklahoma, on December 9, 1983, the daughter of Leroy and Ruth Gunkel

Education: Graduated from Ripley High School, Ripley, Oklahoma in May 2002; Received a Bachelor of Science degree in Agribusiness from Oklahoma State University, Stillwater, Oklahoma in May 2006. Completed the requirements for the Master of Science degree with a major in Agricultural Economics in May 2008.

Experience: Employed part-time by Oklahoma State University, Department of Agricultural Economics as a student assistant; employed part-time by Oklahoma State University Department of Agricultural Economics as a teaching assistant; employed by Oklahoma State University Department of Agricultural Economics as a graduate research assistant, June 2006 to present.

Professional Memberships: Southern Agricultural Economics Association

**Name: Lara Lea Bridenstine-Brooks**

**Date of Degree: May, 2008**

**Institution: Oklahoma State University**

**Location: Stillwater, Oklahoma**

**Title of Study: ENTREPRENEURIAL COMMUNITIES IN RURAL  
OKLAHOMA**

**Pages in Study: 144**

**Candidate for the Degree of Master of Science**

**Major Field: Agricultural Economics**

**Scope and Method of Study:** The purpose of this study is to identify the characteristics of entrepreneurial communities in rural Oklahoma. Both quantitative and qualitative research will be utilized. The Oklahoma Social Indicator Survey of 2006 and community-specific characteristics will be utilized to determine if the community offers services and resources utilized by entrepreneurs. Case studies from selected successful rural communities will offer insight on how a community as a whole behaves as an entrepreneur and provides resources utilized by entrepreneurs.

**Findings and Conclusions:** This research has indicated that various communities in Oklahoma possess characteristics of entrepreneurial communities. The survey indicated there are small business owners who utilize many of the services and resources available. The survey also indicated that many small businesses were unaware of services already provided. The quantitative portion of this research indicated key services and resources that communities can provide for their entrepreneurs.

Advisor's Approval: \_\_\_\_\_