

Introduction

The study of the economic characteristics of Dickinson County provides a historical understanding of the business climate in the region and a look toward the future. This may assist County leadership with funding and policy decisions based on the needs of residents. A typical economic analysis utilizes statistics and measurements to describe the economic vitality of a county or community. The methods used for this economic study of Dickinson County include:

- changes in county residents' income level
- measurements of employment by industrial classification
- economic base analysis techniques
- retail trade analysis, and
- economic comparison to neighboring and similar counties

Each technique allows the Planning Team to make economic projections into the future and to make suggestions and comments on how Dickinson County can best utilize its economic resources. It is important to note that no one economic analysis technique or its results is absolute. It is essential to view all of the analysis techniques over time to determine trends and project the future for economic objectives and strategies.

Socioeconomic Characteristics

A good indicator of the overall economic health of a community is the socioeconomic characteristics of the study area. Among these characteristics are:

- median income
- per capita income
- poverty levels, and
- education levels.

The amount of family or household income greatly affects the local economy and determines a standard of living. Thus, the higher the median income is in a community, so to is the standard of living. Income levels also directly influence the volume of local retail sales, house rentals, home prices, and many other items directly tied to the local economy.

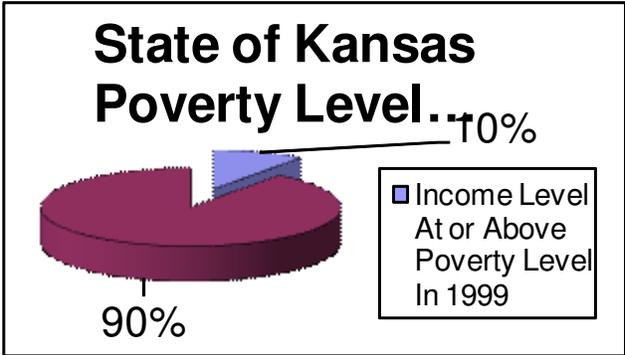
Dickinson County's median family and household incomes (when adjusted for inflation to the 1999 dollar) rose by 16 percent between 1989 and 1999. This rate of change is slightly higher than that of the State of Kansas which was 10.7 percent. The per capita income grew at a comparable rate to the State of Kansas with an adjusted rate of change at 16.2 percent (**Table 4.1**). This increase in median income levels is an indicator that the economy is healthy and growing. One can also speculate that the standard of living is increasing along with the increase in income.

	Median Household Income		Median Family Income		Per Capita Income	
	1990	2000	1990	2000	1990	2000
Dickinson County	\$22,953	\$35,975	\$28,019	\$43,952	\$11,407	\$17,780
State of Kansas	\$27,291	\$40,624	\$32,966	\$49,624	\$13,300	\$20,506

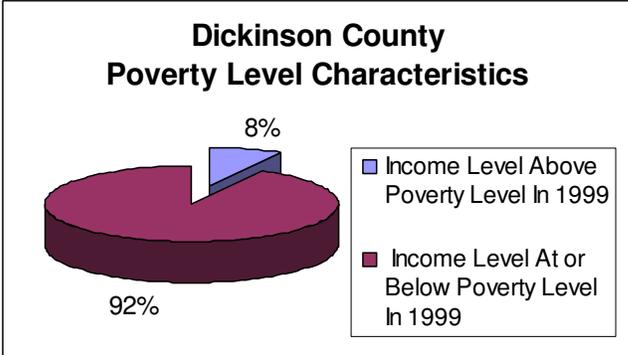
Source: U.S. Census, 1990 & 2000.

While the median income is a strong economic indicator, it does not convey the entire economic picture. Another indicator is poverty status. By calculating the poverty status for the county, the planning team is able to further uncover the economic framework. The following two pie graphs (**Graphs 4.1 & 4.2**) summarize the percentages of people living below the poverty line in the State of Kansas and Dickinson County. In 1999, the percent of the population living below the poverty line in Dickinson County was two percent lower than the State of Kansas.

Graph 4.1



Graph 4.2



Source: U.S. Census, 2000

Educational Attainment

The level of education attainment in a community is another excellent indicator of socio-economic status and wealth. In 2000, Dickinson County had a greater percent of population that attained a high school degree than did the state. The two areas are similar in percent of population without a high school degree and only differed slightly in the percent of population with a college degree and/or a graduate or professional degree. **Table 4.2** compares both areas.

Table 4.2 Educational Attainment - 2000

	No High School Diploma	High School Diploma	Associate or College Degree	Graduate or Professional Degree
Dickinson County	13.6%	39.3%	16.1%	4.4%
State of Kansas	14.0%	29.8%	22.9%	8.7%

Source: U.S. Census - 2000

Due to the high levels of educational attainment in Dickinson County, the county should see continued growth in jobs with higher earning potentials. This is demonstrated by the increasing income levels in Dickinson County over the past decade.

Labor Characteristics

The civilian labor force is comprised of the non-institutional population that is 16 years and over. The size of the civilian labor force reflects the availability of “human

resources” in the community. The availability of trained workers is a key attribute to a county or community’s efforts to recruit new or expanding businesses.

As **Table 4.3** conveys, Dickinson County’s civilian labor force has rebounded from a downturn in 1990. The unemployment rate has been relatively steady since the 1980 census count. The average unemployment rate for 2005 was 4.5%, which is lower than unemployment for Kansas at 5.0% and the United States at 5.1% for the same time.

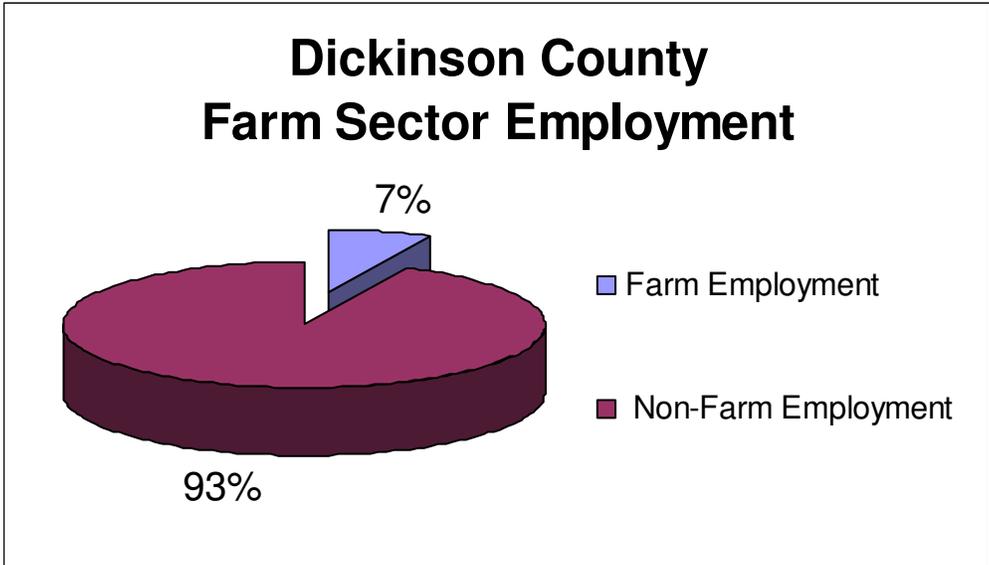
	1980	1990	2000	2005
Total Population	20,175	18,958	19,344	19,209 *
Civilian Labor Force	9,087	8,859	9,944	10,595 **
Employed	8,626	8,579	9,626	10,119 **
Unemployed	461	280	318	476 **
Unemployed Rate	5.1%	3.2%	3.2%	4.5% **
Labor Force as Percent of Total Population	45.0%	46.7%	51.4%	52.7% **

* Estimates
 ** Annual Average

Source: U.S. Census 1980, 1990, 2000 and 2005. *Kansas Labor Force Estimates January - December, 2005*, Kansas Department of Human Resources, Labor Market Information Services

Dickinson County is considered a rural county, with 7.1 percent of the workforce being employed in agricultural sectors in 2000 (**Graph 4.3**). Since 1970, which had 16.8 percent of the work force in agricultural related jobs, the county has experienced a 57.7 percent drop. This drastic change is in line with the state and national trend of family farms disappearing throughout the countryside as families move to more urban settings for employment. To compare, Kansas has 3.3 percent of the workforce employed in the agricultural sector, and the nation, only 1.5 percent.

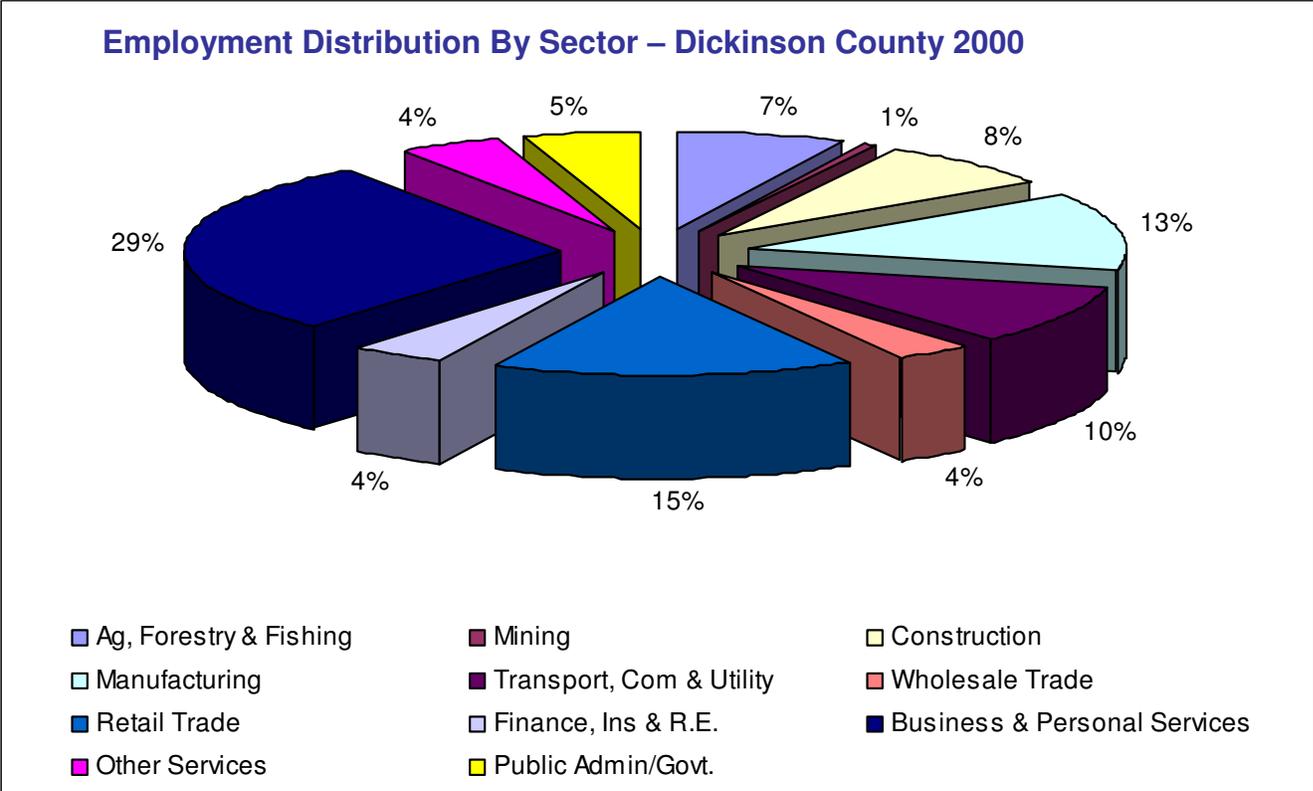
Graph 4.3



Source: U.S. Census, 2000.

According to the 1975 Dickinson County Comprehensive Plan, there were 1,388 farms located in the county. In 2002, 976 farms were being used to raise crops (USDA Census of Agriculture). The average farm size has also changed drastically since the 1975 Comprehensive Plan. The average size of a farm in Dickinson County in 2002 was 564 acres (USDA Census of Agriculture,) compared to 409 acres in 1969 (1975 Dickinson County Comprehensive Plan), a 37.9% increase in size. One of the most alarming trends in the agricultural economy is the cost of an acre of farm land. In 1969, the value of a farm per acre was \$176, in 2002, that same acre of farm land is estimated to cost \$666, a 278% increase. Although these have been significant changes in Dickinson County’s agricultural economy, it is obvious to the Planning Team that this economic sector is healthy when compared to state and national figures.

Graph 4.4



Source: U.S. Census 2000

In 2000, the business and personal services sector employed the largest percent (22.5) of Dickinson County's work force. Within the business and personal service sector, the largest employment group was the health services sector with 10.1 percent. This large percentage would be attributed to the County having two community hospitals and healthcare related businesses, such as pharmacies, that support this sector.

The next two industries with the highest percentage of the workforce are retail with 15.5 percent and manufacturing with 12.4 percent, which is credited to the Dickinson County's advantageous location along Interstate 70 and U.S. Highway 77.

Table 4.4. Business & Personal Services Sectors - 2000		
Business Service & Repair	267	2.8%
Personal Service	490	5.1%
Entertain & Recreation	153	1.6%
Health Services	1017	10.6%
Educational Services	870	9.0%

Source: U.S. Census, 2000.

Economic Base Theory

Base theorists divide economic activities into two broad categories: *basic* and *non-basic*. The basic sector is comprised of local businesses dependent on external factors such as raw materials or marketplace. A Dickinson County example would include Solomon Corporation in Solomon and Russell Stovers Candies outside of Abilene. Both of these companies produce products for outside markets rather than try to sell primarily to local businesses or individuals. On the other hand, non-basic businesses provide services or goods for the local community. This would include banks, restaurants, law firms, doctors, dentists, gas stations and retail stores (to name a few). The division between basic and non-basic may get hazy for firms that sell to both local and outside markets. For instance, Russell Stovers may sell product to local businesses and individuals, but it would be considered a basic industry and employer because the majority of its goods are exported to other market areas.

It is important for communities and counties to understand their economic bases as means to strengthen and potentially expand the local economy. Economic Base Theory suggests that it is best to focus on the basic sector which is usually the driving force behind the local economy as a whole. For Dickinson County, this driving force has traditionally been agriculture. It is important to see how this sector can be enhanced for the future but to explore new opportunities in other economic sectors as well.

Location Quotient

Location Quotient (LQ) is a ratio that gauges the level of industrial specialization for an area such as Dickinson County by comparing the same specialization for another area. This method usually involves “the ratio of an industry’s share of the local economy to the industry’s share of the state economy (Klosterman p.129). However, LQ can also be compared to other areas such as the national economy or another county. In addition, Abilene could be compared to the county as a whole. For this study, the planning team has compared Dickinson County to the State of Kansas.

An LQ ratio is based on a value of one. An LQ greater than one means that that a particular industry shares a greater portion of the local employment compared to the state norm. An industry sector with a LQ greater than one assumes to export at least a portion of its products outside of the region. The LQ analysis can also assist in estimating the number of employees that work in exporting industries, or industry sectors with an LQ greater than one.

As shown in **Table 5.5** below, Dickinson County has several industries that exceed the 1.0 LQ and thus exports a portion of its product outside of the county. The largest sector that exports goods is the retail trade, which employed 384 basic workers in 2000. This is due to the county's location along Interstate 70 and the ability of cities within the county to capture tourism dollars from the interstate's travelers. See table 5.4 for industry sector breakdown.

An important aspect of the LQ analysis is defining sectors that are on the brink of reaching the 1.0 benchmark and becoming a countywide exporter. For example, manufacturing has a LQ of .8579, which has been steadily increasing since the 1970's (**See Appendix A**). Following this same trend, the manufacturing sector should begin creating basic jobs throughout the county, which results in "new, clean" dollars entering the local economy.

Table 4.5

BASIC Industries by SIC* 1970 - 2000	Dickinson County			
	Comparison to State BASIC workers in BASIC Industries (LQ>1.00)			
Source: U.S. Census 1970, 1980, 1990 & 2000.				
SIC Industry Classification	1970	1980	1990	2000
Ag, Forestry & Fishing	593	561	549	364
Mining				21
Construction	61	10	68	113
Manufacturing				
Transport, Com & Utility	285	237	156	120
Wholesale Trade				21
Retail Trade		256	249	384
Finance, Ins & R.E.				
Services				
Business Service & Repair				
Personal Service	45	46	33	
Entertain & Recreation	1			29
Health Services				
Educational Service				
Other Services	0	0	0	0
Public Admin/Government	69	85	143	54
Total Basic Workers	1055	1193	1199	1106
Export Base Multiplier	7.02	7.23	7.16	8.71
Population Multiplier	2.70	2.34	2.21	2.01
Coefficient of Specialization	14.25	13.83	13.97	11.49
*SIC or Standard Industrial Code is a series of 4 digit codes created by the U.S. Government to categorize business activities. (www.investopedia.com)				
Note: If a line or space is blank, that category has no basic workers.				

There are three main calculations that the planning team can derive from the LQ analysis. They are the Export Base Multiplier, the Population Multiplier, and the Coefficient of Specialization.

	1970	1980	1990	2000
Total Basic Workers	1055	1193	1199	1106
Export Base Multiplier	7.02	7.23	7.16	8.71
Population Multiplier	2.70	2.34	2.21	2.01
Coefficient of Specialization	14.25	13.83	13.97	11.49

Source: U.S. Census 1970, 1980, 1990, and 2000

- **Export Base Multiplier (EBM)** identifies what happens when one basic worker is added to the community. It explains what multiplier effect this has on the non-basic workers in the community. In 2000, Dickinson County had an EBM of 8.71, which means that for every one basic job added, 8.71 non-basic jobs would be created to support the new basic employee.
- **Population Multiplier (PM)** is understood to mean that for every person employed in the community there will be a greater number of residents in the community. For Dickinson County in 2000, the PM was 2.01 so there would be about two residents added for every basic worker.
- **Coefficient of Specialization (COS)** is the measure of specialization for employment in a community. Dickinson County has experienced a steady improvement in diversification of the county's economy since 1970. In 2000, Dickinson County had a COS of 11.49 which equates to a high level of economic diversification. This gives Dickinson County the ability to absorb an industry sector's decline or a catastrophic event that would affect the state or nation's economy.

Shift Share

The shift share analysis technique measures the movement, or shift, of the local economy into faster or slower growth sectors, as well as the community's larger or smaller portion, or share, of the growth occurring in a given economic sector. There are three components that comprise the Shift-Share Analysis. These are the National Growth Component, the Competitive Share, and the Industrial Mix calculations. The summary of the Shift-Share Analysis calculations can be found in **Appendix B**.

- **National Growth Component (NGC)** measures the potential change in local employment. Results measure how many new jobs were created locally due to national economic trends. From 1990 to 2000, Dickinson County created 1,041 new jobs in response to the nation's average growth rate.

- **Competitive Share (CS)** determines whether local businesses are growing faster or slower than similar businesses nationally. If the CS is a positive figure, then local businesses are capturing more than their share of that particular sector's growth. If it is a negative number, then the community has lost its competitive edge and is not capturing its share of that particular sector's growth. According to the CS measurement, Dickinson County gained 553 jobs in 2000, which represents a job growth rate that is faster than the United States.
- **Industrial Mix (IM)** determines whether the local economy contains industries that are growing slower or faster than the national average. If the IM is negative, the city's economy had this many fewer jobs than if its economic structure were identical to the nation. If a community has a positive IM, its economy has that many more jobs than if its economic structure were identical to the nation. In 2000, Dickinson County's IM was -547, which is slower than nation's economy.

Retail Pull Factor

The final step in evaluating Dickinson County's economy is to calculate the retail trade industry. **Pull Factor (PF)** is a measurement of a community's attraction or leakage of retail dollars for different types of retail businesses. The businesses with the greatest pull are typically "big ticket" items or items where shoppers are willing to travel great distances to compare price, selection and quality. Such items would be furniture sales, automobile sales and consumer electronic sales. A community with a PF less than one is considered to be leaking retail dollars, or sales are being lost to other communities in the region. A community with a PF greater than one is considered to be attracting sales dollars and would be assumed to be a regional retail center.

According to the Kansas Statistical Abstract, Dickinson County had a pull factor of .72 in 2005. This factor means that, as a whole, the county is losing retail dollars to other counties in the region. This is usually because those other counties offer a wider selection of "comparison" items to Dickinson County residents than the local communities. This retail analysis is an important issue to consider, since individuals and families that travel to purchase furniture or consumer electronics in Salina, Manhattan, Kansas City, or Wichita will most likely spend additional dollars at restaurants and on items that could be purchased within the county. The dollars spent on retail items outside of the county results in less sale tax revenue generated within the county, and thus, Dickinson County can provide fewer services to its citizens. However, the Dickinson County pull factor is improving. Since 1999, the county sees an increase of 7.5 percent. The county and its businesses should continue increasing selection and comparison items at competitive prices to move closer to 1.0 and retain more of its retail dollars. The complete Dickinson County pull factor calculations can be found in **Appendix C**.

County	2005	2004	2003	2002	2001	2000
Dickinson County	0.72	0.72	0.70	0.68	0.67	0.67
Clay County	0.62	0.67	0.62	0.62	0.61	0.64
Geary County	0.93	0.91	0.81	0.75	0.74	0.73
Morris County	0.57	0.60	0.58	0.58	0.58	0.56
Pottawatomie County	1.44	1.49	1.44	1.44	1.40	1.40
Riley County	0.77	0.76	0.71	0.67	0.64	0.63
Saline County	1.32	1.32	1.35	1.36	1.37	1.36

Source: Kansas Statistical Abstract - 2005, Sept. 2000

Travel to Work

Travel time to work can infer where residents in Dickinson County work. Travel time to work can also infer where family members will shop for convenience items, such as groceries and gas. The 2000 U.S. Census provides estimates of the time that the working population, 16 and older, travel to work. Based on these estimates, it is apparent (**Table 4.8**) that nearly 37.5 percent of Dickinson County's working population travels less than ten minutes from their home to work or work at home. This is followed by 36.4 percent of the working population that travel 10 to 29 minutes to get to their place of employment, which include the cities of Junction City and Manhattan. When Dickinson County residents leave their communities to find suitable employment by choice or by lack of local jobs, they also take with them their retail spending dollars. Family members that travel to Junction City, Salina or Manhattan will presumably do their grocery shopping or buy gasoline in these cities for convenience, wider selection or presumed better prices. These factors create a large hurdle for retail business to overcome for capturing and retaining local dollars.

	Dickinson County	Abilene	Possible Destinations	Chapman	Possible Destinations	Herington	Possible Destinations
Total Population	9,639	3,362		617		1,126	
0 to 9 minutes	32.7%	51.2%	Abilene	28.4%	Chapman/ Junction City	41.4%	Herington
10 to 19 minutes	23.9%	23.1%	Other Cities Within County	24.0%	Other Cities Within County	16.4%	Tri-County Area
20 to 29 minutes	12.5%	4.8%	Junction City	24.6%	Manhattan	5.2%	Junction City
30 to 39 minutes	13.7%	10.0%	Salina	13.8%	Salina	12.8%	Salina
40 to 59 minutes	7.5%	3.8%	Manhattan	5.3%	Concordia	13.7%	Manhattan
60 to 90 minutes	4.9%	5.6%	Wichita	1.9%	Wichita	8.0%	Wichita/Topeka
Work at home	4.8%	1.5%		1.9%		2.5%	

Source: U.S. Census 2000

Insert Travel map

Tourism Industry

Dickinson County's wealth of "Wild West," railroad, and national history, outstanding museums, and its advantageous location along Interstate 70 gives business and community leaders the opportunity to capture the tourist dollar. This form of retail sales is highly sought after because a tourist injects "new" money into the local economy by purchasing museum admission, gift purchases, dining and overnight lodging. It is also a fresh source of local taxes and fees assessed by local government on lodging, food and beverage, and entertainment.

In 2006, the Abilene Convention and Visitors Bureau, partnered with 10 other cities across the state and the Kansas Department of Commerce Travel and Tourism, to conduct a tourism market study. Randall Marketing, Inc. contracted with Department of Commerce to create the market study. This study includes analysis of the tourist attractions, eating establishments, overnight lodging and the estimated tax revenue that the Dickinson County can expect from the tourist industry. The study found that the majority of tourists spending time in Abilene and the surrounding area were day-trippers. These are individuals visiting, but not spending the night in a hotel, motel or RV park. The study also concluded that an estimated \$539,355 was received in city/county tax dollars from the sale of gifts, gas, food and overnight stays. The full market study from Randall Marketing, Inc. is available for review at the Abilene Convention and Visitors Bureau.

Due to the small number of hotels, motels and RV parks in the rest of the county, a similar analysis for Herington, Chapman, Enterprise and Solomon can not be conducted to estimate the potential of tax revenue from tourist. Nevertheless, business and community leaders in individual cities and the county should aggressively market and attract tourists to Dickinson County for added retail sales and tax revenue.

Insert tourism map

Recommendations

Based upon the economic analysis of Dickinson County and views and suggestions expressed at the two focus group meetings, the strategies for economic development are as follows:

1. The County should consider developing a countywide Economic Development Commission which will be directed by a professional Director of Economic Development. By establishing a development commission, the entire County should be served as a whole to assess future economic conditions, recruit new businesses, assist existing businesses and train and develop the work force. This commission should be comprised of business and community leaders throughout the county that are willing to make a difference in the future of the Dickinson County's economy.
 - a. An alternative to this recommendation would be to privately organize an Economic Development Commission through support and contributions of donors, membership and grants. Although this approach would not require an increase in local taxes, this method could produce an imbalance of production in certain locations within the county or within specific industries based on contributions and membership.
2. The 2000 U.S. Census data suggests that parts of Dickinson County serve as a bedroom community to Geary, Riley and Saline Counties. With this in mind, both effort and strategies should be focused on increasing the retail industry sector in an attempt to increase the Retail Pull Factor.
 - a. A "shop at home" campaign should be established to remind Dickinson County residents of the importance to support their local businesses and the impact that local tax dollars earned from sales tax have on the County's quality of life and infrastructure level of service. For instance, keeping sales tax dollars local helps keep property taxes down.
 - b. The County and proposed Economic Development Commission should recruit businesses that meet residents' basic needs, such as a food stores, gas stations and agricultural related stores. Having basic need stores, such as a grocery store, combined with a "shop at home" campaign should increase the County's Pull Factor and thus tax revenues to support roads, public safety and other government services.
 - c. Business owners of Dickinson County with increasing pressures from companies outside of the county, such as big box retail stores, should focus on quality products, customer service and a quaint or unique atmosphere to retain and capture customers. Expanding a custom cut meat counter or offering services, such as house calls for maintenance or repairs, can go a long way to keeping a customer happy and shopping with the local business.

3. The cornerstone to any county's economy is its industry sectors that export a large portion of products or services outside of the County. Dickinson County has a diverse number of industries that produce such products. The County and the proposed Economic Development Commission should focus substantial attention on retaining these businesses and recruiting complimentary businesses to maintain a diverse and vibrant economic mix.
 - a. Many business and community leaders at focus group meetings stated that finding and keeping well trained and motivated workers was a challenge. The County, proposed Economic Development Commission, and area businesses should develop partnerships with area high schools and technical colleges to increase funding and support to the trade and agricultural science programs. Having a strong technical base at the high school level should assist in keeping good help and increase the County's younger population.
 - b. The proposed Economic Development Commission should recruit businesses into Dickinson County that will compliment or support established businesses and industries.
 - c. Dickinson County and the proposed Economic Development Commission should support entrepreneurial endeavors by hosting business start-up training, providing micro-loans and opening a new business incubator to increase the rate of success for new or emerging businesses.
4. The County as a whole should search out ways to support the agricultural sector. Even though the number of farms has shrunk in recent decades, agriculture is still a vital component to Dickinson County's economy. Measures could include:
 - a. Agriculture appreciation events
 - b. Tax incentives for multi-generation family farms
 - c. Training and financial support to create "best practice" operations to increase yields and profitability
 - d. Training and financial support to venture into new grain and stock markets
5. The five major cities in the county and rural tourist attractions should partner to develop a county-wide tourism coalition to strengthen marketing efforts.
 - a. Develop a County-wide tourism brochure to be located at the two official state travel centers and at popular tourist destinations across the state
 - b. Conduct a "fam tour" for local business owners and tourism industry staff to introduce and *familiarize* them with the numerous attractions, shopping, eating establishments, and lodging in all of the Dickinson County cities.
 - c. Conduct specialized training for frontline workers who handle tourist's questions, inquiries and concerns daily.

- d. Improve welcome and directional signage for tourists in the county and cities.
- e. Become active in regional and state-wide tourism programs and alliances to increase marketing exposure and unique partnerships.
- f. Expand upon established tourist destinations, such as the Excursion Train to offer unique, value added experiences
- g. Create new tourist destinations throughout the county, such as agri-tourism and outdoor recreation, to compliment and add to the impressive list of established tourist destinations.

Sources

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