

# LYON COUNTY, IOWA



# COMPREHENSIVE LAND USE PLAN

2012



*Prepared with Planning Assistance from  
Northwest Iowa Planning &  
Development Commission  
Spencer, Iowa*

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# LYON COUNTY

# COMPREHENSIVE

# LAND USE DEVELOPMENT

# PLAN

*Prepared with Planning & Technical Assistance By:*

**Northwest Iowa Planning & Development Commission**  
217 West 5<sup>th</sup> Street, Box 1493, Rock Rapids, Iowa 51301  
(712) 262-7225 1-800-798-7224

*In Cooperation with and Support from:*

**Lyon County**  
**Fred Christians, Zoning Administrator**  
**Pam Tille, Zoning Secretary**  
**Lyon County Courthouse**  
**206 S. 2<sup>nd</sup> Avenue**  
**Rock Rapids, Iowa 51246**  
**Office Hours: Monday – Friday 8:00 A.M- 4:30 P.M.**  
**Ph: (712) 472-8550 Fax: (712) 472-8551**

Lyon County Board of Supervisors

Steve Michael – District 1  
Merle Koedam – District 2  
Mike Modder – District 3  
Randy Bosch – District 4  
Kirk J. Peters – District 5

Lyon County Planning Commission

John Madden, Chair (Rock Rapids)  
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LeRoy Hassebroek (Little Rock)  
John Schulte (Rock Rapids)  
Jeff Williams (Rock Rapids)

## 2012 LYON COUNTY COMPREHENSIVE PLAN EXECUTIVE SUMMARY

The comprehensive land use plan is an essential planning document for those counties in Iowa intending to enforce zoning regulations, annexations, urban renewal tax benefits and other land use controls. This document is created to be Lyon County's primary guide for future land use policy decision making. The comprehensive plan is general in nature and broad in scope, assessing past and current conditions and making projections for population, housing, economic conditions, and land use issues. The core of the plan is comprised of two primary sections to be supported by the remainder of the data and statistical analysis in this plan.



Photo courtesy of [www.lyoncountyiowa.com](http://www.lyoncountyiowa.com)

- 1) **Goals, Objectives & Policy Recommendations** for the next 10 to 20 years in Lyon County
- 2) **Land Use Map** creating a visual depiction of proposed future land use development.

Included within this executive summary are the general comprehensive plan goals, plan implementation strategies, and the future land use map. Supporting data is available within the main body of the plan, as well as specific policy recommendations addressing each land use classification in Lyon County.

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### SUMMARY OF OVERALL COMPREHENSIVE PLAN GOALS

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The comprehensive planning process was completed by the county's Planning and Zoning Commission, and provides the tools necessary for effectively directing change. The Planning Commission must commit to working with the Board of Supervisors and other county departments to properly guide the successful implementation of this plan in addition to other development issues. The amount of growth, change or shifting of land use trends in Lyon County will determine the type and frequency that the Planning Commission will need to utilize and perhaps even amend this document. The Planning and Zoning Commission developed a framework of goals and objectives to serve as a basis for future land use decisions. These goals are designed to provide a guide for the implementation of the plan despite changes in membership of the governing body over the lifetime of the plan. A comprehensive land use plan needs to be modified and updated over time in order to maintain current plan and control ordinances.

1. Lyon County should strive to preserve and protect prime agricultural lands while continuing to separate the distinct urban and rural characteristics of the county.
2. Lyon County should consider and finds ways to mitigate or lessen the impact of development on neighboring properties when making future land use decisions.
3. Lyon County should take measures to preserve, protect and enhance the irreplaceable natural resources of the county, both recreational and pristine.

4. Lyon County should achieve a progressive balance between promoting development to facilitate the economic development potential of the county, and respecting the rights and responsibilities to preserve prime agricultural lands and natural resources.
5. Lyon County should facilitate the provision of necessary and required county services to its residents, businesses and industries in a reasonable, efficient and fiscally responsible manner.
6. Lyon County must recognize the importance of securing new and expanding businesses, including but not limited to those businesses promoting good paying jobs for the county's residents.
7. Lyon County should welcome new residents to locate within the county through encouraging or facilitating new and expanding residential development, in addition to those economic or financial assistance programs which may entice new developments.
8. Lyon County has already established an environment and economy which promotes agricultural and animal husbandry. The county should continue to promote these key economic interests, but also expand its economic development efforts to include new, innovative, renewable resource, and green industries.
9. Lyon County should continue to maintain a transportation and infrastructure system that provides for the safe, convenient and economical movement of people and goods in and out of the county.

The above listed term goals are the most significant element underlying the comprehensive development plan. The land use objectives and the policy recommendations formulated in this plan are intended to achieve these overall goals.

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### **IMPLEMENTATION OF THIS PLAN**

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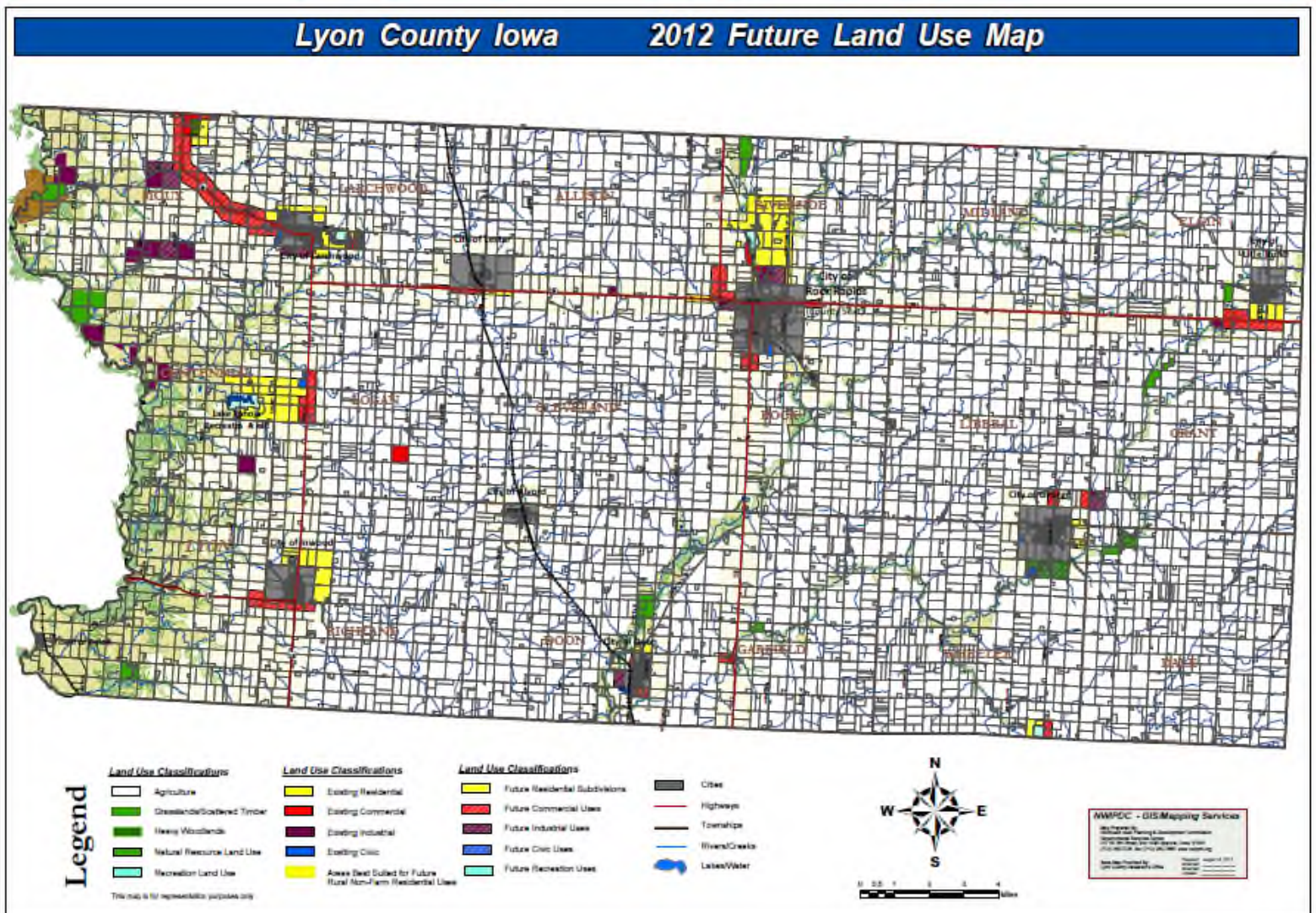
With anticipated land use changes and the potential for future growth and development in Lyon County, these expected changes will bring about an opportunity to establish a benchmark from which new trends in land use and development will be measured. Lyon County's leaders of today and tomorrow are granted the responsibility of identifying, leading, and being the first to accept and embrace a bright future for the county. Listed below are suggested attainable implementation strategies in which the county's planning officials and government leaders may explore to fully realize the maximum benefit from this comprehensive planning document. Lyon County may wish to accept and utilize some or all of these identified implementation measures or create additional measures to identify and measure the county's future land use and development recommendations.

1. Establish a benchmark for Lyon County from which future growth and development patterns and changes will be measured against. Create an action plan addressing county growth, city growth and annexation policies.
2. Allow county leaders, staff and government officials to attend training in an effort to gain new perspective on current or innovative trends in land use policy and regulatory controls.
3. Establish an annual comprehensive plan review workshop in which members of the public are invited to share with county planning officials and the Board of Supervisors their thoughts, concerns, and visions for Lyon County's future.



4. Regularly update an inventory of the county conservation’s parks, recreation areas, and natural resources; identifying completed and proposed short term and long term park, trail or other natural habitat development. Support and sustain the projects identified in the conservation board’s five-year strategic plan.
5. Lyon County, with an aging population base, must address future needs and services targeted to the senior demographic.
6. In establishing new county policies, government leaders must remember the property rights and interests of land owners in Lyon County. Consistency and fairness is a must.
7. Once the county completes a comprehensive review and update of its enforcement ordinances, such as zoning and subdivision regulations, it would be beneficial to Lyon County to have the services of zoning administration and enforcement consistent with the new or proposed rules adopted by the county.

### LYON COUNTY FUTURE LAND USE PLAN



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## Chapter 1. INTRODUCTION & PLANNING ELEMENTS

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A comprehensive plan is a collection of material and information designed to guide the future growth and development of the community. The comprehensive plan is general in nature and provides a framework and policy context within which to make land use decisions relating to future development. The comprehensive plan must be long range, looking forward 15 to 20 years, and does not plan a highly specific course. Rather, the plan points toward land use goals and general policies that the city should consider when making development decisions. While short term planning is important, such as a capital improvement planning, strategic action plans, economic development strategies, or municipal budgeting, it is not within the scope of the comprehensive plan, although these short term plans may be incorporated into the comprehensive plan by reference.

The comprehensive planning process consists of utilizing past and present efforts and information provided by predecessors and integrating this information into a vision for the future. What exactly is a “vision?” A vision is an image or foresight into where representatives of Lyon County wish to see county growth and development directed in the future. A common vision is critical for the development of a comprehensive plan, because once a vision statement has been established; it serves as a focal point for all other long range plan goals and specific policy statements to aim for.

### **DEFINITION OF A COMPREHENSIVE PLAN:**

“Comprehensive planning is a transparent, public process in which communities establish a future vision and locally designated standards in order to promote public health, safety and prosperity. Successful planning attracts economic development, protects and preserves the community’s resources, and encourages a strong community identity”

Defined by the Rebuild Iowa Office “Iowa Smart Planning” 2010

The Lyon County comprehensive plan is an analysis into specific components that make the county work. Another aspect explored in the comprehensive plan is the physical growth and development of the county itself. Information on changes in land uses, infrastructure, transportation, county facilities and services, population, housing, and other features are very important in determining the current condition of the county. This information is useful in determining objectives and policies relating to agricultural lands, the natural environment, the built environment, varying land uses, and other such activities that directly affect the physical aspects of Lyon County.

The plan’s overall goals and policies and future land use designations are intended to be updated and amended as needed. As the county grows or changes from year to year, so will its needs. Therefore, the comprehensive plan should reflect new changes and possibly new objectives or policies toward specific actions. Ideally, the comprehensive plan would be updated on an annual basis. Actions recommended by the planning and zoning commission and approved by the Board of Supervisors can amend this plan to reflect current trends or simply a change in philosophy regarding one or more of the policy statements.

The Iowa Code makes it clear that zoning regulations must be made in accordance with a local comprehensive plan. According to Chapter 335.5, Iowa Code, if a county is to zone then “*The regulations shall be made in accordance with a comprehensive plan and designed to preserve the availability of agricultural land;*” All counties that are involved in zoning and land use regulations need to have an updated plan to guide development activities. In general this comprehensive plan should and will contain sections regarding population and housing trends, socio-economic data, transportation & infrastructure, hazard mitigation actions, parks & recreation, city services & community facilities, economic development, smart growth and low impact development, and future land uses. Once the working definition of planning has been internalized by those involved, the steps of the actual process should commence.

- 1) The primary stage of a planning program is **research and data collection**. It is from this supply of data that all decisions will be based, indicating that the more extensive and specific the data is the more accurate and functional the decisions. The first step is to identify all sources of existing data, and establish what data needs exploration and research.
- 2) **Analysis of the data collected** is an ongoing activity conducted simultaneously as research and data collection is being pursued. Analysis involves the collection and presentation of data in written and/or graphic form to establish a complete base of existing conditions. Once this base has been established, the analysis proceeds into projection of future trends and growth.
- 3) All of this **input will facilitate the evolvement** of certain broad and general goals for the planning area. A goal is that aim or end toward which effort is to be directed. Objectives involve bringing the goals closer to reality and specifically establishing those accomplishments that are desirable and closer to realizing established goals.
- 4) The **goals and objectives** constitute the framework for plan preparation. Before submission of the plan to the legal bodies concerned, it should have been studied and commented upon by all involved sectors and altered accordingly.
- 5) **Legalization of the plan** involves the plan adoption by the Board of Supervisors. Public hearings and wide distribution of the plan should take place before formal adoption proceedings. The plan must meet with the approval of those in the planning area to function properly.
- 6) **Actual implementation of the plan** is not carried out by any one department or agency, but is out of necessity a combined effort of all government, private and related entities. The plan will list and define various tools of implementation (zoning and subdivision regulations, capital improvements programs, etc.).

This comprehensive plan is to be used by both public and private sectors in land use decision-making processes. The private sector, including developers, investors, industry, and businesses will use this document to become informed of the official positions of the county regarding land use and policy issues. The public or government sector shall use the plan as a guide in land use decision making processes. While this working document is the result of the efforts of the county, it has been prepared representing the interests of all Lyon County residents. Decisions affecting land uses within Lyon County should follow the spirit and intent set forth in this plan.

### Lyon County Location Map

Figure - 1

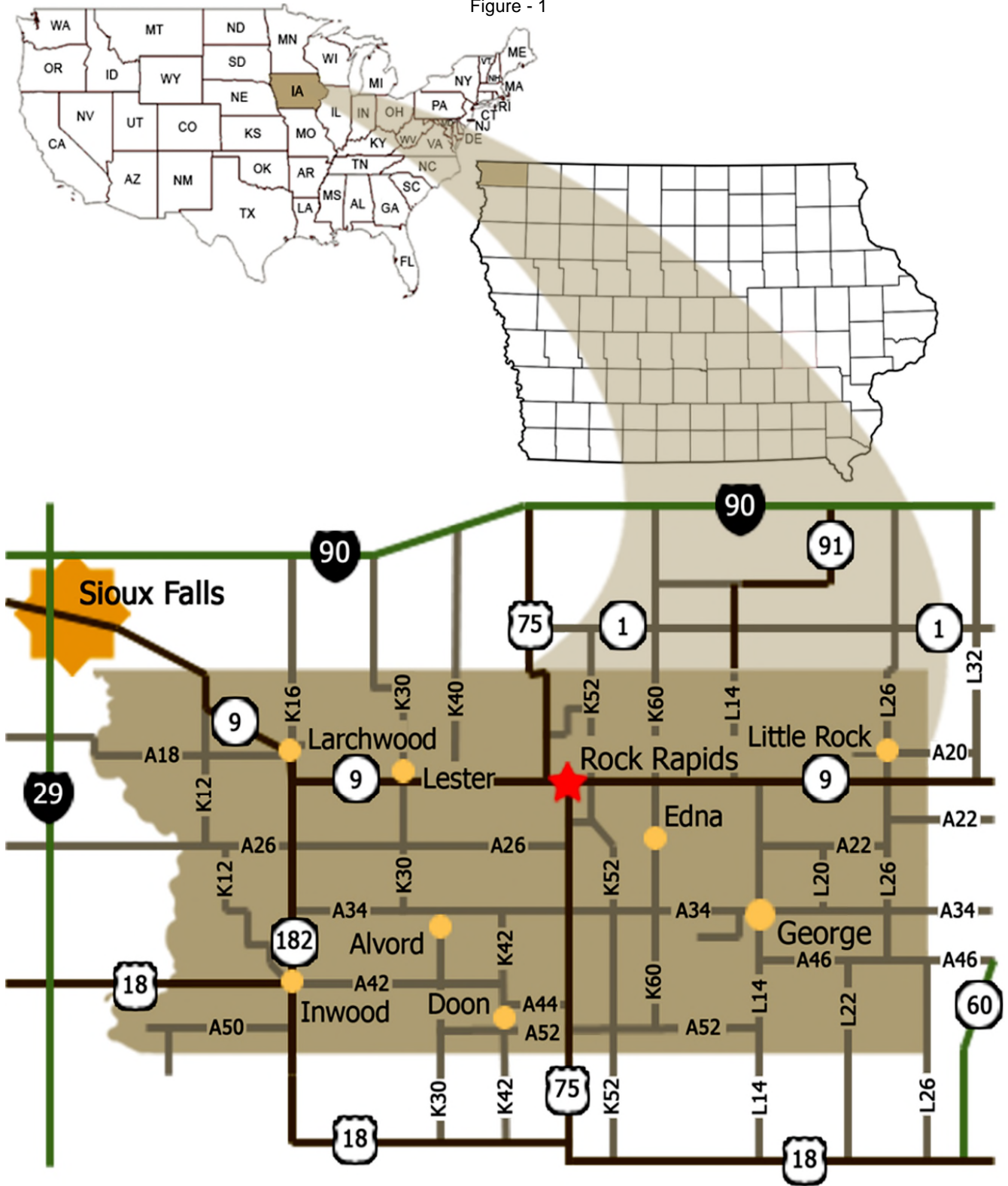


Image courtesy of Lyon County Economic Development at: <http://www.lyonedia.com/>



## Chapter 2. LYON COUNTY HISTORY

Lyon County, located in the northwest corner of Iowa, was named in honor of General Nathaniel Lyon, brigadier general in the Mexican and Seminole Wars. Lyon was killed while leading the First Iowa Infantry at the Battle of Wilson's Creek in Missouri. This was the first battle in which Iowa troops took part. General Nathaniel Lyon, an Iowan soldier, was the first United States General killed in the Civil War.

The county was originally called Buncombe County, in honor of Edward Buncombe of North Carolina. On September 11, 1862 it was officially changed to Lyon County. Under the statutes of 1870, the organization of Lyon County took effect on January 1, 1872. The first county business was held in the homes of the various county officials. Some offices were held in the village of Beloit. In 1873 the county offices were all located in the town of Rock Rapids, named for the rapids found in the Rock River.



Lower Dam at Rock Rapids - Photo Source: US GenWeb Iowa Archives



Early photos of Lyon County Courthouses  
Photo Source: [www.iowacourts.gov/](http://www.iowacourts.gov/)



Bids for the first courthouse were opened on May 5, 1873 but it was not until June 24, 1874 that the cornerstone was laid into place. The \$14,000 courthouse was dedicated in 1875. This building was later moved. In recent years, the building was demolished and no longer exists. The present Lyon County courthouse was started in 1916 and completed one year later at a cost of \$135,053. The three-story structure is constructed of Indiana limestone, and the main entrance is appropriately decorated with a carved stone lion. Many of the original pieces of oak furniture are still used in the building. In the summer of 1991, an inventory was taken of all unused furniture, equipment and miscellaneous items throughout the building. Many of these pieces were donated to the Lyon County Historical Society. A public auction was held to dispose of the rest of the items.

Sources: Buncombe to Twenty Two, Paul C. Smith & Lucy Colby; Anniversary Booklet and Lyon County Minute Books; Kenneth Mellema, Lyon County Auditor

Wikipedia, an online resource, indicates the first white man to live in Lyon County was Daniel McLaren, known as “Uncle Dan”. He lived near the Sioux River for a short time, spending his time hunting and trapping. He moved out of the county very early in its settlement to stake a claim further west. The second settler in the area was known as "Old Tom", a hunter and trapper who lived briefly near present-day Rock Rapids. While setting his traps, Old Tom was killed by Sioux Indians. The first permanent settlement in Lyon County was built by Lewis P. Hyde in July 1866. The county's population reached 100 persons in 1869, entirely through migration and settlement. The first white child born in the county was Odena Lee, born on May 28, 1871. The first election in the county was held on October 10, 1871, and recorded 97 votes.

### **BLOOD RUN NATIONAL HISTORICAL LANDMARK**

The following historical account of Blood Run is provided by information obtained from the Lyon County Historical Society’s website: <http://lyoncountyhistoricalsociety.com/bloodrun.htm>. This important historical site in Iowa was given its name, not because of all the bloody battles making the stream run red with blood, the story most of us have heard; rather because of its red color caused by the concentration of iron in the water.

There are few Oneota Indian sites in the United States that compare in size, scope and importance as compared to Blood Run. Other sites range in size from 2 to 25 acres; however Blood Run, at over 600 acres, is vastly unique. According to experts, from about 1300 to 1700 A.D. there was a permanent community of Oneotas living in lodges at the site, the largest known permanent community on the North American Continent. Blood Run was an important cultural, religious, and trading center, occupied at times by more than



*Photo of Blood Run area*

6,000 people. Multitudes of Indians would arrive by boat and on foot from the western plains and from the east to trade and socialize. The village was a bustling place, filled with people coming and going, trading with those from other villages. Tools were made from what was available, such as hoes from bison bone, fish hooks from bone, knives and mauls from stone. The Oneota hunted bison, elk and other wildlife, fished and gathered clams from the Big Sioux River, ate berries and wild nuts and grew corn, beans and squash. These native people dug large storage pits for their meat, corn, tools and other items of value. After a few seasons, when the pits were no longer used for storage, they were filled with food refuse, broken tools, and other household debris, including pottery. These refuse pits are valuable to archeologists because they can uncover a wealth of information about the daily life of the Oneota and reconstruct aspects of Oneota life.

The Oneota built many of Blood Run’s features, including stone circles, earthen enclosures and mounds. They used the stone circles to hold down the roofs of their lodges, which were covered in elm bark. These stones are all that remain of the lodges. Mounds were either round or took the

shapes of various animals. To build their mounds, the Oneota began by clearing away the sod in the shape they wanted the mound, usually a circle. On this they would place the bodies of their dead. On top of the bodies they heaped baskets full of dirt from around the village, creating a mound up to eight feet high. Some of the interesting features included circular mounds ranging from 8 to 60 feet in diameter and up to 12 feet high. One mound mapped in the late 1800s was described as a serpent-shaped mound about 1/4 mile long. There are traces of a 5-acre earthen enclosure made of heaped-up earth. One of the mysteries of Blood Run is the pitted boulders. These are large Sioux Quartzite boulders with small depressions pecked and ground into the surfaces. By the time the first French trappers and fur traders came to the area only a few members of the tribes still lived there. It isn't known what happened to the Oneota Indians.

In 1970, the federal government designated 844 acres on both sides of the Big Sioux River a national historic landmark. It was named the Blood Run/Rock Island Railroad National Historic Landmark. Blood Run is the portion on the Iowa side of the river. The smaller area on the South Dakota side is designated "Rock Island Railroad". This designation makes it recognized as an important piece of history, but fails to protect the area in any way. The landmark size was determined by archeological studies up to that time. Later studies have found evidence of Oneota occupation spread over an even larger area of several thousand acres. At present, it is the largest Oneota site ever found. An 1883 survey documented 276 mounds. Decades of farming and railroad construction have destroyed many of the mounds. The railroad right-of way cut through the area where an enclosure or possibly an animal-shaped mound was located. By clearing the fields for farming, early farmers dismantled the stone circles, building a wall from the stones.

In past years, there have been several attempts to protect Blood Run and to have it a part of the National Park system. In 2010, the Lyon County Historical Society formed a National Park Committee concerned with the preservation and protection of the Blood Run area. In a special report about Blood Run, the National Park Department stated the area was currently endangered and that the best means of protection and preservation was as a part of the National Park system. The purpose of the Historical Society's National Park committee is to seek that goal for the acres in Iowa designated as the Blood Run National Historic Landmark, adjacent properties of equal cultural significance and Gitchie Manitou which abuts the landmark on the north.

### **HISTORICAL MELAN ARCH BRIDGE**

Another interesting and equally important historical contribution in Lyon County pertains to the historical significance of the first reinforced bridge constructed in the United States utilizing the combination of steel and concrete. Constructed in 1894, the Melan Arch Bridge marks the first experiment using the innovative concrete-steel system invented by Austrian Josef Melan. It was a Midwestern contractor, Frederick Von Emperger, who designed the 30 feet concrete arch reinforced with structural steel to span Dry Run Creek outside of Rock Rapids. The bridge was built by John Olsen and W.S.



*Photo source: American Memory from the U.S. Library of Congress website at <http://www.linkpendium.com/genealogy/USA/IA/Lyon/>*

Hewett. According to historical specifications, Von Emperger’s design called for 4" I-beams, bent to the elliptical shape of the arch and spaced at 3 feet intervals. However, local legend tells the story that the contractor reinforced the structure with railroad rails to spare expense. The Melan system Von Emperger introduced was adopted widely during the first part of the 20<sup>th</sup> century for the highway bridges and pedestrian spans. Today, the Melan Arch Bridge sits in Emma Slater Park where it was moved in 1964. It is only used for pedestrian traffic today, but remains a visual sense of historical engineering concepts first utilized in Lyon County, Iowa.

### GHOST TOWNS OF LYON COUNTY

According to data provided from the website <http://www.iowaghosttowns.com>, there were many towns and villages that once occupied Lyon County of which have long disappeared. Listed below are the names and descriptions of the towns and villages that once were a part of Lyon County. Some of these towns or villages became a part of or absorbed into other cities that are still in existence today. The list below was taken from the Iowa Ghost Towns website and used with permission from the State Historical Society of Iowa.

- ERNEST. A post office in 1872 to 1874 in the southern part of section 6, Wheeler Township.
- GIBRALTAR. A post office from 1869 to 1871 in the northwest corner of Sioux Township.
- IUKA. The former name of the present village and railroad station of Granite.
- KROGNESS. A hamlet and post office in section 9, Richland Township, as shown on maps of 1887.
- PARK. Former name of the present village of Alvard.
- PENNINGTON. A post office (1883-86) in the northern part of Richland Township.
- RIVER VIEW. A post office from 1872 to 1886 in the northwestern part of section 2, Grant Township, about two miles southwest of the present village of Little Rock.
- SMEAD. A post office in 1871 a short distance south of the present town of Rock Rapids.
- UPLAND. A post office in section 16, Centennial Township, from 1877 to 1890.
- WARREN. Former name of the present town of Inwood.
- WILLDA. A post office from 1873 to 1875 in the eastern part of section 22, Grant Township

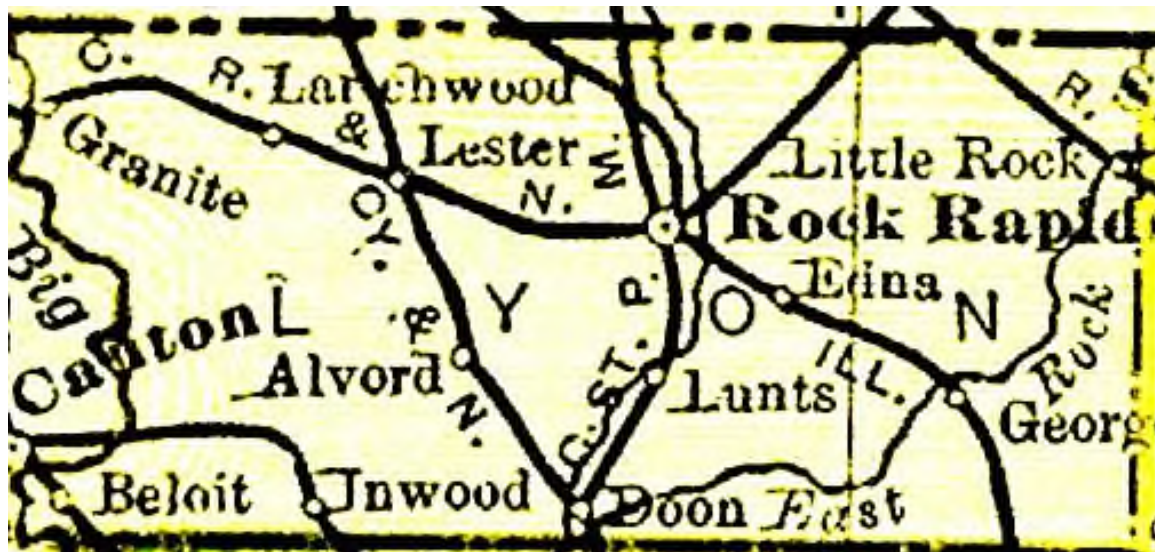


Figure 2 – Historic 1895 map of Lyon County, Iowa

## PLACES OF HISTORICAL SIGNIFICANCE - NATIONAL REGISTER OF HISTORIC PLACES

There are ten (10) structures or sites in Lyon County carrying the distinction of being placed on the national register. These sites are important to the knowledge of the county's founding forefathers and provide a glimpse into what life was like more than one hundred years ago. Below is a listing of the nationally registered historic places with a brief background.

*Big Sioux Prehistoric Prairie Procurement System Archeological District (Big Sioux River)* – Placed on the National Register by the National Park Service, this archeological district was established in January 1989 and is related to historical documentation of prehistoric hunters and gatherers across the northwest Iowa Plains from 10,000 BC-1900 AD.

*Blood Run Site (near Larchwood)* – the Blood Run site located near the unincorporated town of Granite was added to the National Register in 1970 and contains a historic collection of Native American cultural artifacts. The period of historical significance is 1000-1749 AD.

*Broad View Ranch Historic District* – This privately owned farmstead was added to the national register in 1994. The historic property shows insight into early agricultural subsistence.

*Burlington, Cedar Rapids, & Northern Railroad-Rock Rapids Station, Railroad Track & Bridge (Rock Rapids)* – This collection of early railroad infrastructure, also known as the Rock Rapids Depot, Bridge No. 2834. The period of transportation significance to this site is 1850-1874.

*Duncan-Duitsman Farm Historic District (rural George)* – This farmstead identifies early architecture, agriculture and exploration settlement of early settlers in Lyon County. The site was added to the National Register in 1994.

*First Methodist Church (Rock Rapids)* – Known as the United Methodist Church, this building was added to the National Register in 1978 for its Romanesque architectural style.

*Klondike Bridge (southwest of Larchwood)* – This historic bridge over the Big Sioux River at 180<sup>th</sup> Street was added to the National Register in 1998. The bridge is historically significant for its transportation engineering and the engineer/builder of the structure.

*Kruger Mill (southwest of Larchwood)* – Located near the unincorporated town of Klondike is the Kruger Mill, also referred to as the Klondike Mill. This historic structure was added in 2003.

*Lakewood Farm Historic District (rural Rock Rapids)* – This historic farmstead near Rock Rapids, added to the National Register in 1994, is historically significant because it shows early agricultural life in Lyon County, including agricultural subsistence, outbuildings and dwelling.

*Lyon County Courthouse (Rock Rapids)* – This historic center of government in Lyon County was added to the National Register in 1979. The Courthouse is historically significant for its Beaux Arts style of architecture and for the architect, Joseph Schwartz.

*Melan Bridge (Rock Rapids)* – Currently situated in Emma Sater Park, this historic bridge is significant based upon its early use of reinforced concrete in bridge construction.

*Reynolds, Charles B., Round Barn (rural Doon)* – This historic barn, also known as the Tunis Jansma Round Barn, was added to the National Register in 1999. Local officials are not certain if this structure still exists today.

## **Chapter 3. PLANNING BACKGROUND & PUBLIC INPUT**

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### **BACKGROUND OF COMPREHENSIVE PLANNING**

The Northwest Iowa Planning and Development Commission, formed in 1973, is responsible for coordinating activities in the region and assisting member governments with technical assistance and planning projects. The formation of the Northwest Iowa Regional Planning Commission marked the first real effort of a genuine “regional” planning commission in northwest Iowa. The principal purpose of the regional planning commission was to undertake planning studies on a regional basis and facilitate cooperation among the various governmental bodies within the region. Lyon County initiated its first planning efforts in 1972 by participating in a 701 Housing and Urban Development (HUD) Urban Planning Assistance Program. The original planning effort in Lyon County resulted in the county adopting its first zoning ordinance followed by the adoption of a land use plan. This process continues still today and will be reflected by the adoption of this current plan.

Over the course of the next three decades, the Lyon County Planning Commission, Board of Adjustment and Board of Supervisors actively utilized the comprehensive plan in making land use decisions to guide zoning issues and control growth within Lyon County. By the late 1990s, conditions of the county had changed and land use patterns changed from what was planned in the 1972 document. Local officials believed that a major update to the county’s existing ordinances was overdue. In 1999 Lyon County officials once again initiated working with the staff at Northwest Iowa Planning and Development Commission in completing an update of the county’s comprehensive plan, zoning ordinance and subdivision regulations. Over the course of the next several years, the county completed a major undertaking and adopted the new zoning and subdivision ordinances in 2003, followed by adopting the county’s updated comprehensive plan in 2004.

During the fall of 2010, the Board of Supervisors and county Planning Commission indicated the need to update the comprehensive plan and amend portions of the zoning ordinance and subdivision regulations to reflect inconsistencies and conflicts within the current ordinances and changing land use philosophies reflective of current growth trends. The Board of Supervisors with guidance from the county zoning administrator sought the assistance of the regional Council of Governments (COG), of which Lyon County is participating member. The Northwest Iowa Planning and Development Commission staff planners initiated the third revision and update to the county’s zoning and subdivision regulations in spring 2011 with the county adopting such new ordinances in early 2012. Once the ordinances were updated, the county Planning Commission and staff moved on with updating the comprehensive plan update for Lyon County. This process was initiated in February 2012.

### **PUBLIC INPUT & DATA GATHERING**

Lyon County officials, staff and the Planning & Zoning Commission initiated several actions to ensure public input is an integral part of the comprehensive planning process. First, in an effort to better understand the current state of planning services within Lyon County, the staff at Northwest Iowa Planning & Development Commission provided the Lyon County Zoning Administrator an informational questionnaire intended to develop an overview of current planning activities in Lyon



planning activities in Lyon County and planning services offered by the county. This survey was completed by the Zoning Administrator in February/March 2012 and provided valuable input and data to initiate and begin the comprehensive planning process.

The Lyon County Planning & Zoning Commission met seven times beginning in February 2012 through August 2012. Each of these meetings was open to the public and a public notice was posted for the meeting. The general public had an opportunity to attend and offer comment at any one of the Planning Commission meetings in which the comprehensive plan was discussed. Specifically in June 2012, the Planning Commission spent the entire meeting reviewing the 2004 land use goals and objectives and prepared new land use goals and policies for the updated comprehensive plan. Additionally, the July and August 2012 meetings was spent reviewing, in detail, the proposed revised Lyon County future land use map by the Planning Commission. In July 2012, a completed draft of the comprehensive plan document, goals and policies and the revised land use map were presented to the Planning Commission for review and consideration. In August 2012, the Lyon County Planning and Zoning Commission held a public meeting in which the general public was offered a final opportunity to provide any public comment on the comprehensive plan prior to the Planning and Zoning Commission making its recommendation to submit the comprehensive plan to the Board of Supervisors for approval.

In April 2012, the residents of Lyon County were given the opportunity to submit their thoughts, concerns, and suggestions for the future of Lyon County through the 2012 Lyon County Visioning Survey. The survey was published in the county's three (3) newspapers; the Lyon County Reporter in Rock Rapids, the Lyon County News in George and the Doon Press. County residents were encouraged to complete the printed survey and return it to the Lyon County Zoning Administrator. Below is a sample survey that was published in the newspapers for the general public to complete as part of the Lyon County comprehensive planning public participation process.

**2012 LYON COUNTY VISIONING SURVEY**  
**comprehensive land use planning & visioning process**

Please take a moment to complete the following community visioning survey that will provide Lyon County's Planning Commission valuable input to assist them in creating future land use policies. Please consider the following questions and think about how county leaders and government officials can strive to make Lyon County a greater place than it already is. Please use the backside of this survey if you need additional space for responses.

Are you a resident of the county \_\_\_ or a city \_\_\_? If a city, which one? \_\_\_\_\_  
*(please check one)*

**1. STRENGTHS: WHAT ARE THE CURRENT SUCCESSES OR STRENGTHS THAT MAKE LYON COUNTY A GREAT PLACE TO LIVE?**

- 1) \_\_\_\_\_
- 2) \_\_\_\_\_
- 3) \_\_\_\_\_

**2. CHALLENGES: WHAT CHALLENGES WILL LYON COUNTY FACE OVER THE NEXT 20 YEARS? WHAT CAN BE IMPROVED IN LYON COUNTY?**

- 1) \_\_\_\_\_
- 2) \_\_\_\_\_
- 3) \_\_\_\_\_

**3. FUTURE VISION: WHAT SUGGESTIONS OR ACTIVITIES CAN LYON COUNTY ADDRESS OVER THE NEXT 20 YEARS TO MAKE THE COUNTY BETTER FOR ITS RESIDENTS?**

- 1) \_\_\_\_\_
- 2) \_\_\_\_\_
- 3) \_\_\_\_\_

PLEASE LIST ANY ADDITIONAL COMMENTS/SUGGESTIONS YOU HAVE FOR LYON COUNTY:

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Thank you and please return completed surveys no later than April 6, 2012 to Fred Christians, Zoning Administrator, Lyon County Assessor’s Office, Courthouse, 206 S. 2<sup>nd</sup> Avenue, Rock Rapids, Iowa 51246. For additional questions, please call 472-8550.

**ISSUES AND OPPORTUNITIES FOR COUNTY GROWTH**

Of those Lyon County residents that received or have access to any one of the three newspapers, there were ten completed surveys returned from the solicited efforts. With that stated, the received surveys were from a good cross representation of Lyon County residents. Surveys were submitted by residents of Rock Rapids, Larchwood, George and rural portions of the county. A compilation of the results from the completed visioning surveys is as follows.

**STRENGTHS**

**What are the current successes or strengths that make Lyon County a great place to live?**

- 
- Casino
  - Casino
  - The Casino
  - Morals and character of residents
  - Clean air
  - Opportunity to grow
  - Willingness to improve
  - Opportunities within the county
  - I choose to live in Lyon County because it is a small county with rural communities and great schools
  - Quality high school education systems
  - Proximity to Sioux Falls (metropolitan area) and eastern South Dakota
  - Small community quality of life and values
  - Strong economic base – agriculture, manufacturing, service, education, technology
  - Vibrant agricultural economy
  - Work ethic of mixed European ancestral population
  - Strong educational system
  - Conservative philosophy of elected officials (financial conservative)
  - Agriculture – including livestock and rich farmland and livestock know how
  - Good work ethic and morals
  - Pride in our local communities
  - Good private and public schools

## CHALLENGES

### What challenges will Lyon County face in 20 years? What can be improved in Lyon County?

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- Schools – improve on education
- Churches – true Christianity
- Employment for young people
- New stores so we can shop at home
- Need people in management positions in the courthouse
- North ½ of Beech Street between 220<sup>th</sup> and 230<sup>th</sup> needs re-grading
- Road repairs so there's ditches for the water to run down instead of the middle of the road
- White bridge needs to be repaired – should be for small vehicle traffic only
- Small bridges need repairs
- Cut down cedar trees in ditches for better visibility
- Roads in the rural areas need to be better maintained
- Over the last 10 years the roads and bridges have been neglected
- Many bridges need repair or replacement
- Jobs for Lyon County residents
- Continued growth
- Bring taxes down for homeowner's and businesses
- Population is decreasing, residents & workforce growing older
- Drawing younger workers to the county for quality careers, not low-paying jobs
- Retaining businesses as owners retire
- Sustaining communities that make Lyon County a great place to live – retire
- Growth of urban residential population in agricultural areas
- High cost of land resources and economic inputs
- Shortage of skilled trade labor
- Limited local access to medical services
- Lack of understanding of agriculture
- Less tolerance among neighbors
- Different visions of the future (no consistency)
- Lack of a right to farm law in Iowa

## FUTURE VISION

### What suggestions or activities can Lyon County address to make the county better for its residents?

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- Better maintain roads and bridges
- Repair White Bridge in the west end of Lyon County
- Making easier transportation and access for residents
- It's a beautiful area for the county to utilize
- No more confinements
- Let Minnesota, Canada and Sioux County have them (confinements) because they own them
- We don't need any more hog confinements
- Fix the White Bridge
- Better church attendance on Sundays
- More business opportunities
- Law enforcement
- Clean up surroundings
- Zoning is necessary for both residential & business development
- Help fund school construction so it does not fall so heavily on the taxpayers
- Bring down taxes!
- Stronger support by county and communities of economic development – pro growth

- Be proactive on tourism issues like Blood Run, recreation facilities
- Coordinate with schools to provide skilled workforce for future
- Be open to change – new things, progress, while maintaining quality of life
- Joint city-county-township for professional administrative staff
- Small business incubator facilities
- Affiliation with expanding industries in Sioux Falls (metropolitan area)
- Lyon County business and industry web site (publicly financed)
- One of the surest ways to avoid conflict is less rural residences
- I think the State of Iowa will put more restrictions on large ag uses without help from the county

#### **Residents were asked to list any additional comments**

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- All towns should receive equal shares of casino money. Not have Larchwood take a lion's share.
- I know White Bridge is an issue and nobody wants to fix it, but for those of us in this end of the county, it is important and I think it could be fixed for cars and pickups and made accessible for them only. Thanks.
- Observe what neighboring communities are doing and how.
- Why are the land taxes so low compared to value of farmland?
- Lyon County residents can not like modern agriculture to what ever degree they desire, or the rest of the world will move on and leave us behind.

#### **ANALYSIS OF COUNTY SURVEY RESULTS**

The Lyon County Visioning Survey resulted in twenty one responses pertaining to the question inquiring about the strengths of the county. There were two areas that identified with the most popular responses pertaining to the strengths of Lyon County. One was the new casino that opened northwest of Larchwood. The newness and grandness of Grand Falls Casino near Larchwood likely resulted in the number of positive comments. The other area of comment that tied for the most popular response pertained to the “opportunities” presented to Lyon County residents; whether it is the opportunity to grow, opportunity to improve or employment opportunities. Other positive aspects of Lyon County include the small town charm, rural characteristics, and quality of life while at the same time being in close proximity to the nearby metropolitan area of Sioux Falls, South Dakota.

Another aspect of the community survey inquired as to what residents felt were current challenges facing the community today. This section identifies those issues important to Lyon County that need to be addressed in the future. Survey respondents offered a total of a twenty eight (28) responses generalized into the most popular themes. Regarding the challenges facing Lyon County today, the greatest challenge appears to be related to the county's infrastructure, especially road and bridge repairs. Other areas of interest deemed as challenges for the county include job growth, new businesses, employment opportunities and taxes.

Upon identifying the strengths and weaknesses of Lyon County, the last component of the county's Visioning Survey was to create a future vision for the county. This category summarizes what residents of Lyon County believe are future ideas, projects, or visions they have to make the county a better place to live in the next 15-20 years. There are twenty five (25) responses from the surveys grouped together according to the most popular responses. The number one response regarding a future vision for Lyon County was focused on making needed infrastructure

improvements to the roads and bridges across the county. Other topics that generated multiple responses for the same future vision include the limiting or restriction of additional animal confinement facilities in the county, and the promotion of new jobs/economic development and business opportunities. Additional future vision statements for Lyon County include promoting tourism, effectively utilize zoning for residential and business development, reducing taxes and embracing the quality of life in Lyon County.

Lastly, residents were given the opportunity to share any additional or final comments for the county. The five comments listed were random and included topics such as the distribution of gaming revenues, taxation of land in Lyon County, infrastructure/bridge improvements, observant of what other communities are doing to improve, and an appreciation for modern agriculture in Lyon County. Overall, with the limited number of surveys returned, there was a good amount of valuable information provided by the residents of Lyon County. The survey tabulation and analysis of comments regarding the county's future provides county leaders an overview of the philosophies, beliefs and thoughts of the county's constituents.

### **LYON COUNTY ECONOMIC DEVELOPMENT STRATEGIC PLAN**

In November 2011, the Lyon County Economic Development Advisory Board and staff were assisted by the Smart Solutions Group in preparing an economic development strategic plan. A portion of this planning process was also devoted to soliciting and gathering public input and input from those with a vested interest in economic development, a focus group. Since this information is fresh and the public input process will also help the county and the planning commission in developing future land use policies, the information gathered will be listed below and utilized for the purposes of this planning document also. Below is simply an overview of the key issues and emerging strategic issues for Lyon County, relative to economic development efforts. A complete copy of the strategic plan can be found in Attachment C at the conclusion of this document.

### **Lyon County Growth and Development**

#### **- Community Leader Focus Group Interviews and the Emerging Key Issues**

Thirty four (34) individuals from all Lyon County communities participated in focus group interviews that were intended to lay the groundwork for the development of the Lyon County plan. The following summarizes the input gathered from the participants.

#### *Describe Current Status of Economic Development in Lyon County*

- Lack teamwork....need the attitude that “we’re all in this together”
- Need continued focus on growing our existing business
- Need to work jointly to leverage common opportunities....e.g. casino-related development

#### *Identify the Most Important Issue facing Lyon County*

- Need to focus on mutual success—LCED structure should encourage collaboration
- Take full advantage of casino-related development....infrastructure development and land use policy
- Businesses need skilled workers
- Community-specific issues need to be addressed...e.g. utility issue in Lester and industrial park in Doon
- Need to identify ways to keep more young people in the work force

*What are the Strengths and Weaknesses in Lyon County?*

- Strengths.....Proximity to Sioux Falls....Community College Training....Highway Infrastructure....Productive, Stable Workforce....Community Quality of Life....Great Schools
- Weaknesses....Lack investment capital for new ventures....Lack consensus vision for growth....Lack unity among communities....Lack Skilled workers....Competitive disadvantage with Sioux Falls/South Dakota....Lack housing to meet demand....Employers need to interact more with schools

*What are Key Opportunities for Growth in Lyon County?*

- Housing
- Spin-Off/Complementary Opportunities from Growth in Sioux Falls Area
- Casino-Related Development
- Local Investments with Casino-Related Funds
- Recreation Development around the River/Further Development around Lake Pahoja
- Tourism
- Assistance to Entrepreneurs—Developing an Investment Network
- Local Issues and Priorities—Lester ( Electricity/Gas) and Doon (Industrial Park)

*Ways to Improve the Organizational Approach to Economic Development in Lyon County*

- Establish an active Economic Development Board Focused on a Long Term Vision
- Board and Staff Need to be “Apolitical” ....Independent yet Accountable
- Communities Need More Frequent Communication on What LCED is Doing
- Need More Focus on Ongoing Marketing and Promotion of Lyon County...”Our Opportunity is Now “
- Need to Help Each local Community Get Organized and Provide Guidance
- Remain Active in Northwest Iowa Development –Regional Marketing

The focus group interviews were discussed with the Steering Committee and a set of Emerging Issues began to evolve. As the Steering Committee reached consensus on the key issues facing growth and development in Lyon County, these issues formed the foundation for the goals and objectives proposed in the Lyon County Strategic Plan.

**Emerging Strategic Issues for Lyon County**

- Teamwork and Communication between LCED and Communities
- Assisting Existing Businesses to Grow in Lyon County
- Fully Leveraging all Aspects of the Grand Falls Resort development
- Increasing the Access to More Skilled Workers for Lyon County Businesses
- A Comprehensive Housing Strategy for Lyon County
- Maximizing the use of casino funds (Riverboat Foundation Grant funds) in each community with Strong Local Plans
- Assisting Small Businesses and Entrepreneurs to Grow



## Chapter 4. PHYSICAL FEATURES & THE ENVIRONMENT

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Physical features, an important element in land use planning, has been largely ignored in the past in determining future land uses. An emphasis on environmentally sensitive areas and the availability of advanced information on geological structure and soils have made it possible to place more importance on physical features analysis in land use planning. Climate, location, topography, drainage, surface waters, and soils each uniquely affect the types of land use that are best suited for a particular tract or parcel of land. Some of these factors, such as topography, drainage or soils should be considered more intently when determining acceptable land uses for an area. The purpose of this section is to determine natural conditions, as they relate to Lyon County, so adequate consideration may be given when determining future land uses.

### GEOGRAPHIC LOCATION

Lyon County, located in northwest Iowa, is in the top tier of counties in Iowa, adjacent to the Minnesota state border and in the first column of counties east of the South Dakota border. The county is 37 miles in length and about 17 miles north to south, consisting of approximately 376,083 acres or 587.63 square miles. There is an estimated 83 total acres of water or .13 square miles of lakes, marshes, wetlands, ponds, and pits. The average elevation of Lyon County is 1,580 feet above sea level. The nationwide average elevation is 1,062 feet above sea level. In comparison, the highest elevation in the State of Iowa is at Hawkeye Point in Osceola County (east of Lyon County in northwest Iowa) at 1,670 feet above sea level and the lowest elevation in the State is at 475 feet above sea level along the Mississippi River in southeast Iowa. Lyon County is bordered by Rock County, MN to the north, Nobles County, MN to the northeast, Osceola County to the east, O'Brien County to the southeast, Sioux County to the south, Lincoln County, SD to the west and Minnehaha County, SD, to the northwest. The largest city within Lyon County is the City of Rock Rapids at 2,432, which is also the county seat of Lyon County.

The nearest city of 10,000 + population is Worthington, MN (pop. 12,764) – 40 miles northeast

The nearest city of 50,000 + population is Sioux Falls, SD (pop. 153,888) – 20 miles northwest

The nearest city of 200,000 + population is Omaha, NE (427,872) – 165 miles south

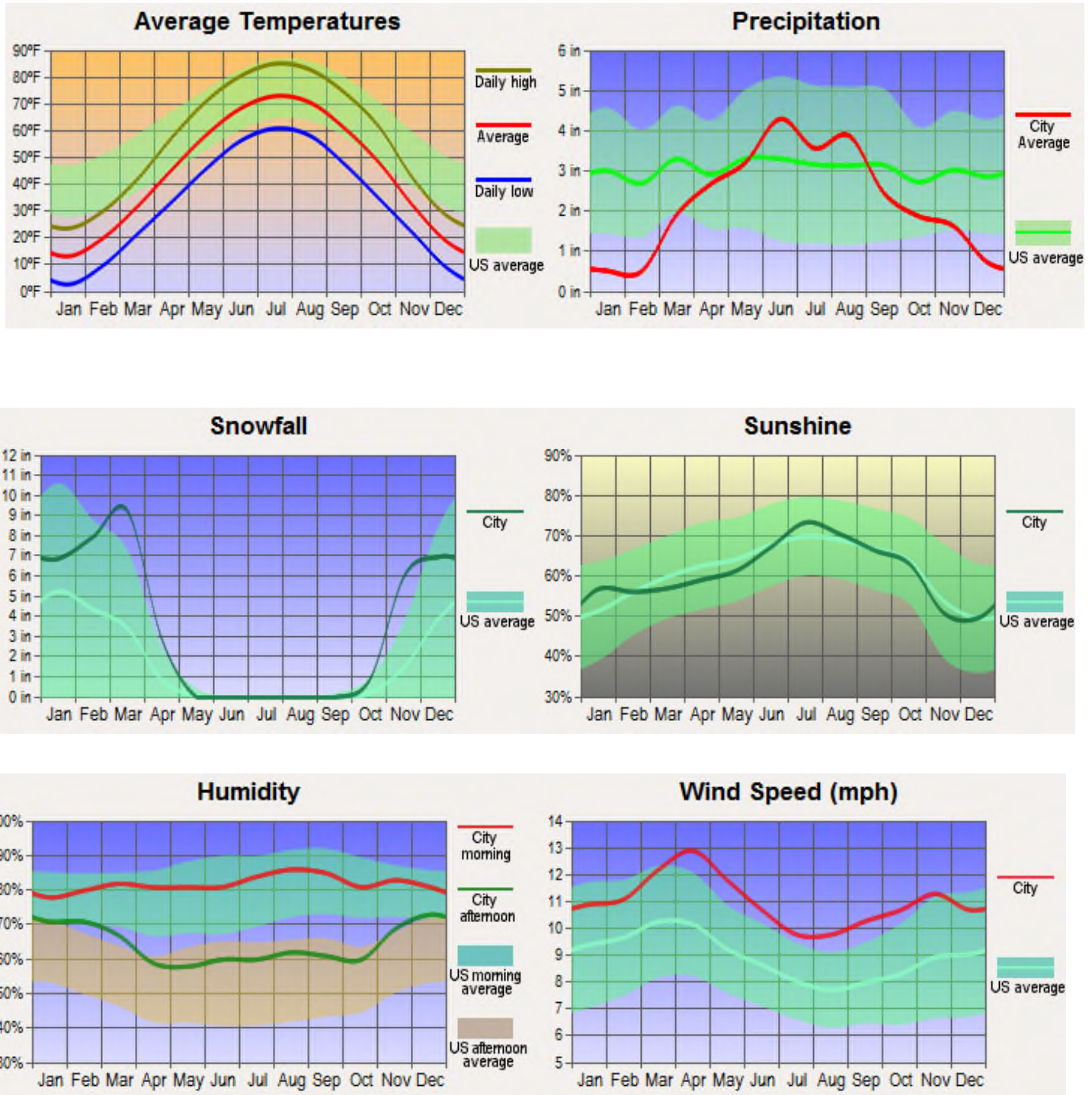
The nearest city of 1,000,000 + population is Chicago, IL (2,896,016) – 550 miles southeast

### CLIMATE

Climate becomes a major factor in land use planning when it relates to agricultural production and construction seasons for roads and buildings. Climate limits agricultural, construction and tourism related activities to certain times of the year. Most development, along with cultivation, planting and harvest will occur from April through October. According to climate data obtained from Sperling's Best Places at <http://www.bestplaces.net>, the total annual rainfall precipitation is 26.3 inches, as compared to 36.5 inches for the national average. The total annual rainfall is usually adequate to produce a healthy agricultural crop. The annual average snowfall in Lyon County is 34.6 inches which is higher than the national average of 25 inches. The total number of precipitation days in a calendar year is 75. In the winter, the average January low is 4.5° F. On the contrary in July the average highs are 86.0° F. This temperature range allows for a frost-free growing season of approximately 150 days. The prevailing winter winds are from the northwest with southerly winds prevailing during the summer. The overall climate comfort index ranks Lyon County at 43, which compares to the national climate index of 44.

The following climate charts represent the averages in Lyon County based on data reported by more than 4,000 weather stations across the nation. The data seen below, as presented by “City-Data.com” is representative of the climate in Lyon County, Iowa.

Figure 3 - Average Climate Trends in Lyon County

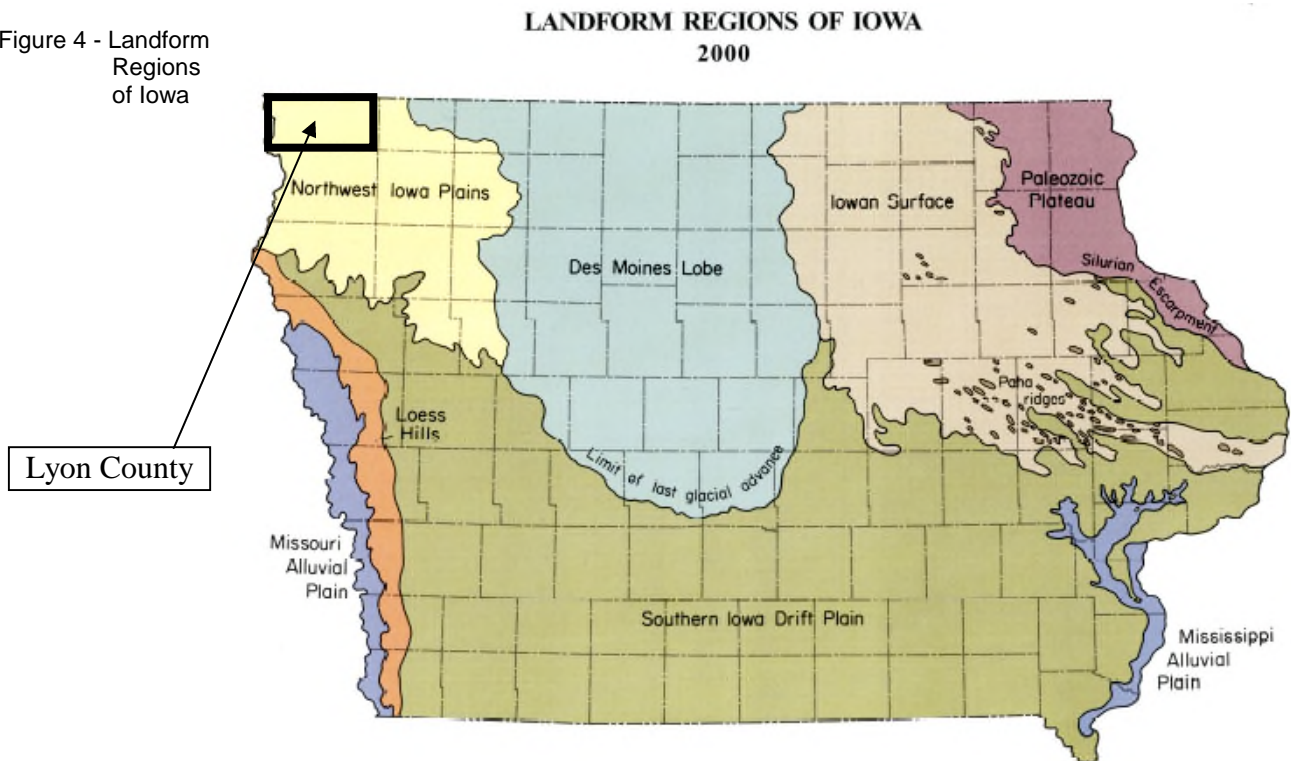


**LANDFORMS & LANDCOVER**

As defined by the Iowa Department of Natural Resources, a “Landscape” is a collection of shapes or landforms. Individual landform shapes reflect the diverse effects of deposits left by glaciers, wind, rivers, and seas in the geologic past. Examples include the loess hills, moraines, kettles, kames, sinkholes, springs, algific slopes, and entrenched valleys. Lyon County has very few lakes or sloughs yet has a well defined drainage system consisting of streams and minor feeders that are not large enough to be placed on a typical map. These streams and minor feeder creeks drain to the Little Rock River and Rock River, which eventually drain into the Big Sioux River along the western border of Lyon County. The county is mostly flat by appearance but does have steep slopes adjacent to the Big Sioux River corridor that separates the county from South Dakota. Generally, the topography of Lyon County is not an extremely important factor to consider when planning for future land use, with the exception of the steep sloped areas adjacent to the Big Sioux River in western portion of the county.

Lyon County lies entirely within the “Northwest Iowa Plains” landform region in the State of Iowa. As summarized by the Iowa Department of Natural Resources from information obtained from Landforms of Iowa by Jean C. Prior, the Northwest Iowa Plains landform is characterized by vigorous erosion that accompanied the glacial movements, which also produced open rolling hills across this region. Loess type soils area abundant, a reflection of its nearness to the Missouri and Big Sioux River valley sources. Land elevation is uniformly higher and precipitation lower than elsewhere in Iowa.

Figure 4 - Landform Regions of Iowa



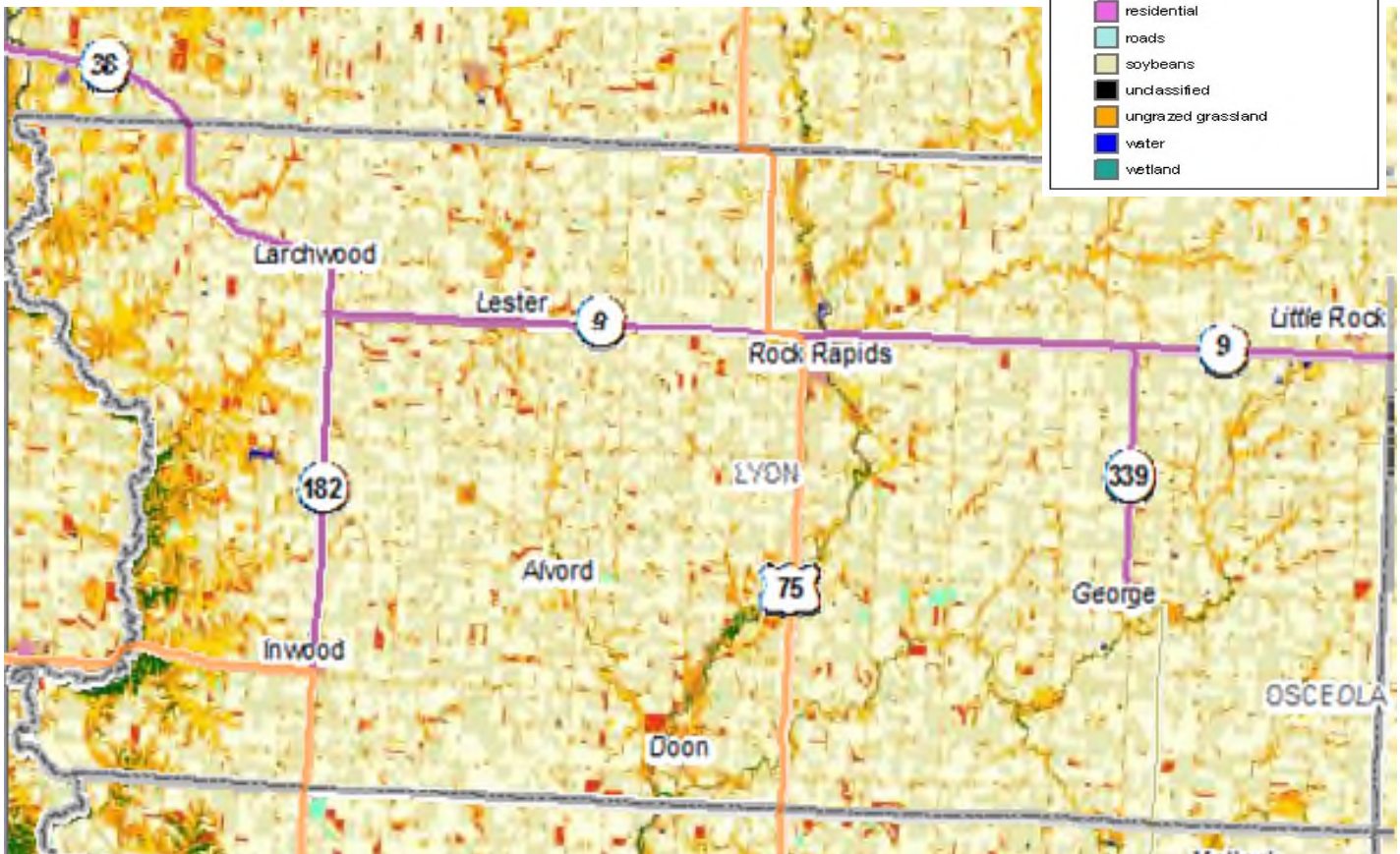
On the following page is the 2002 Landcover Map from the Iowa Geological Survey Bureau, depicting the landcover and land uses for Lyon County. The image data depicting the landcover is derived from satellite imagery. The map was prepared by the Iowa Department of Natural



Resources Geological Survey. The completed data is available on the Iowa Geographic Survey Bureau's website at <http://www.igsb.uiowa.edu/nrgislibx/>. According to the Iowa DNR, the purpose of the landcover research and mapping was created to carry out the agency's responsibilities related to management, protection and development of Iowa's natural resources. The estimated accuracy of the data presented on the following map is +/- 30 meters.



Figure 5 - 2002 Landcover/Land Use Map of Lyon County



**SOILS**

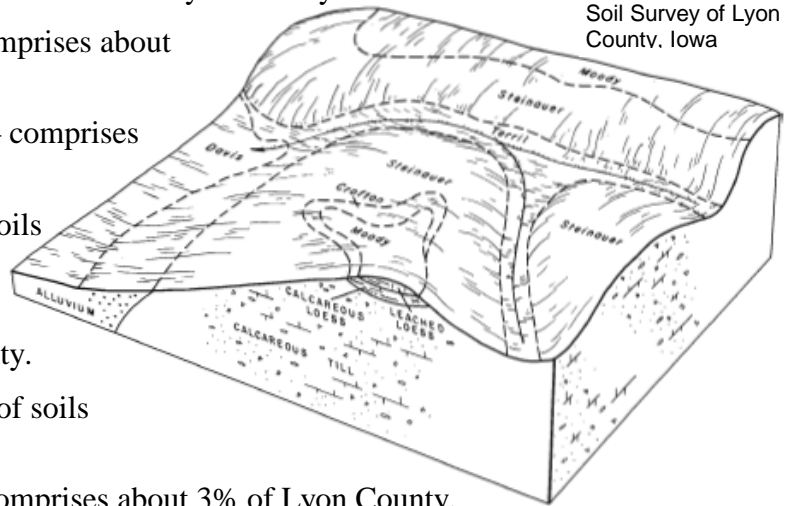
Soil conditions can affect important land use decisions when planning for future growth and development. Where suburban growth occurs on a fragile or balanced ecosystem, the types of soils and their suitability or lack thereof to development becomes of great importance. The lands structure suitability, percolation rate, water holding capacity, productivity, slope, and nutrient composition are all important factors to consider. These factors all have various effects on placement of public utilities, residential and commercial development, construction or placement of recreational areas, as well as local agricultural usage. The material in this section is taken primarily from the Soil Survey of Lyon County, Iowa. This survey was made cooperatively by the Soil Conservation Service; the Iowa Agriculture and Home Economics Experiment Station; the

the Cooperative Extensive Service, Iowa State University; and the Department of Soil Conservation, State of Iowa. Although the document is several years old, the soils information will remain accurate because the soil types will not change drastically over the course of several years. Lyon County is characterized by eight major soil classifications. As with topography, the county's soil associations are a product of the intrusion of glacial ice. Identified in the soil legend on the following page is a brief description of each of the soil associations.

A listing of specific soil types with detailed information may be obtained in the Soil Survey of Lyon County, Iowa through the USDA Natural Resource Conservation Service.

1. Calco-Spilco-Dempster Association of soils - comprises about 11% of Lyon County.
2. Moody Association of soils - comprises about 41% of Lyon County.
3. Galva-Primghar Association of soils - comprises about 23% of Lyon County.
4. Egan-Trent-Moody Association of soils – comprises about 7% of Lyon County.
5. Primghar-Marcus-Galva Association of soils - comprises about 6% of Lyon County.
6. Sac-Galva-Primghar Association of soils - comprises about 5% of Lyon County.
7. Ocheyedan-Bolon-Dickman Association of soils - comprises about 4% of Lyon County.
8. Steinauer-Moody Association of soils - comprises about 3% of Lyon County.

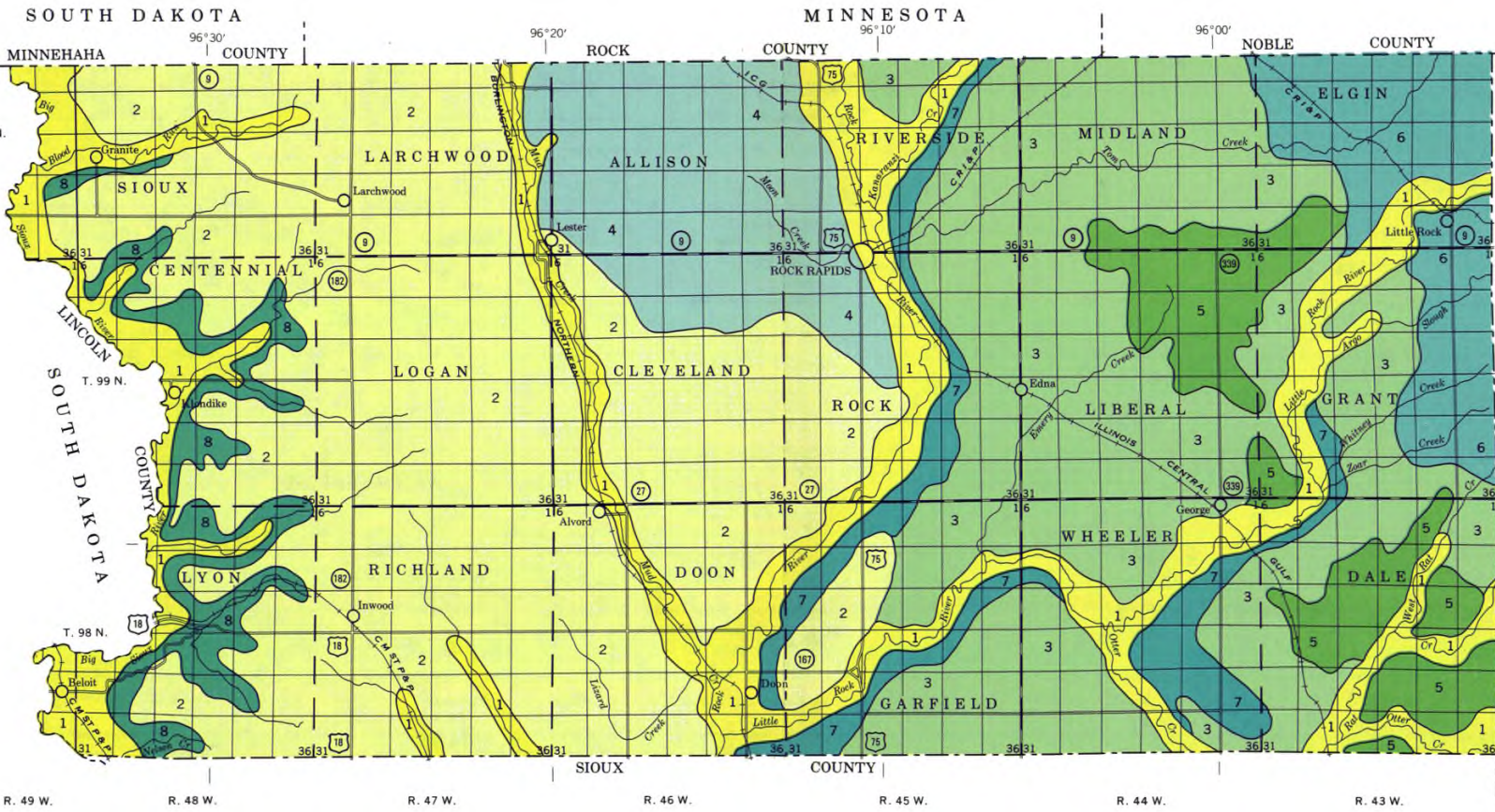
Figure 6 - Provided by USDA NRCS Soil Survey of Lyon County, Iowa



The western half of Lyon County is characterized mainly by the Moody association. This soil type is described as having gently sloping convex ridge tops and gently sloping to moderately sloping hillsides. This soil type makes up about 41 percent of the county. This association is used mainly for row crops. The Steinauer-Moody soil association is also found in the western half of the county on the upland adjacent to the Big Sioux River. It has gently sloping or moderately sloping ridge tops and strongly sloping to very steep hillsides. This association is used mainly for pasture, but the wider ridge tops and drainage ways are used for row crops. The general soil map, shown on the following page, as published by USDA NRCS, shows large areas with distinctive soils. These large areas or tracts of common soil types are called associations. Each soil association is its own unique landscape with typically one or more major soil types and several minor or miscellaneous soil types scattered throughout the area. The general soil map can be used to compare the suitability of large tracts of land suitable for varying types of development as well for general land use discussions. When parcels of land are being reviewed for zoning compliance or building permits, the proposed use should be cross referenced in the soil survey with respects to the particular soil type being reviewed. If the Lyon County Zoning Administrator or Planning and Zoning Commission are unsure of how to interpret the soil survey on a particular issue, the Lyon County Soil Conservation Service office should be consulted.



Figure 7 - General Soil Map of Lyon County, Iowa



**SOIL ASSOCIATIONS \***

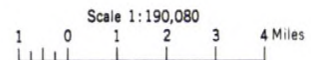
- 1** Calco-Spillco-Dempster association: Nearly level to moderately sloping, moderately fine textured and medium textured, poorly drained to well drained soils
- 2** Moody association: Nearly level to strongly sloping, moderately fine textured, well drained soils
- 3** Galva-Primghar association: Nearly level to moderately sloping, moderately fine textured, well drained and somewhat poorly drained soils
- 4** Egan-Trent-Moody association: Nearly level to strongly sloping, moderately fine textured, well drained and moderately well drained soils
- 5** Primghar-Marcus-Galva association: Nearly level to moderately sloping, moderately fine textured, poorly drained to well drained soils
- 6** Sac-Galva-Primghar association: Nearly level to strongly sloping, moderately fine textured, well drained and somewhat poorly drained soils
- 7** Ocheyedan-Bolan-Dickman association: Nearly level to strongly sloping, medium textured and moderately coarse textured, well drained and somewhat excessively drained soils
- 8** Steinauer-Moody association: Gently sloping to very steep, moderately fine textured, well drained soils

\*Texture terms apply to the surface layer of the major soils.

U. S. DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE

IOWA AGRICULTURE AND HOME ECONOMICS EXPERIMENT STATION  
COOPERATIVE EXTENSION SERVICE, IOWA STATE UNIVERSITY  
DEPARTMENT OF SOIL CONSERVATION, STATE OF IOWA

**GENERAL SOIL MAP**  
**LYON COUNTY, IOWA**



The following information summarizes why soil types and soil conditions may prove beneficial to both daily and long term planning efforts in Lyon County.

### ***How Soil Surveys Can Help Farmers***

To stay in business, farmers have to evaluate important developments in agricultural management. Farm production depends largely on fitting soil management practices to the soil properties as accurately as possible. It is the right combination of a number of practices that gets optimum results. Researchers try various combinations of fertilizers, tillage methods, water management, and conservation measures. Combinations that produce the greatest yields at the least cost on soils at experiment stations can be expected to give equally good results on similar soils elsewhere. Soil descriptions outlined in the Lyon County Soil Survey can aid in evaluating prospective changes in management of soils.

Crop yields: Estimated yields can help calculate approximate returns expected on soils and determine whether a high level of management may increase yields enough to pay the extra cost.

Conservation plan: A soil survey can help determine how to use soils without damage. It helps determine conservation measures needed to control erosion and increase productivity.

Reclaiming land: Some eroded soils respond readily to soil treatments, such as fertilizer, lime, and manure. A soil survey can help decide whether treatment to reclaim soils is likely to succeed.

Waste disposal: Feedlots, poultry plants, and dairy farms dispose of manure and other wastes into soils. A soil survey helps determine how much waste the soils can absorb and in what form.

### ***Land Use Planners (County Planning Commission and/or Zoning Administrator)***

Soil surveys assist planners to make and substantiate decisions that local government officials translate into zoning ordinances, building permits, sewer projects, and other regulations. Information about soil limitations for given uses helps prevent major mistakes in land use and unnecessary costs to individuals and the county. Soil surveys help in determining flood prone areas, and identify hazards that affect such areas. In many states soil surveys are used to guide decision-makers in restricting the use of flood plains for housing, septic tank fields, and other intensive development. Zoning areas for housing, recreation, commercial, and other kinds of development should take account of the suitability and limitations of soils for such uses. Soil surveys describe soil properties in detail and can help planners establish general patterns of soil suitability and limitations for various land uses.

Septic tank absorption fields do not work in wet or impermeable soils. Soil surveys provide detailed descriptions of soil properties that can be used to determine the suitability of areas for absorption fields. Such surveys may indicate soil hazards that affect absorption fields such as slow permeability caused by high clay content, the presence of a high water table, or excessive permeability that may allow effluent to pollute ground water. Prime farmland can be identified through use of soil surveys. Other areas suited to development and not so well suited to farming may be selected for development instead. In planning uses for specific areas, an onsite investigation by a trained professional can determine if there are any soil hazards or limitations, and whether these can be overcome by corrective measures.

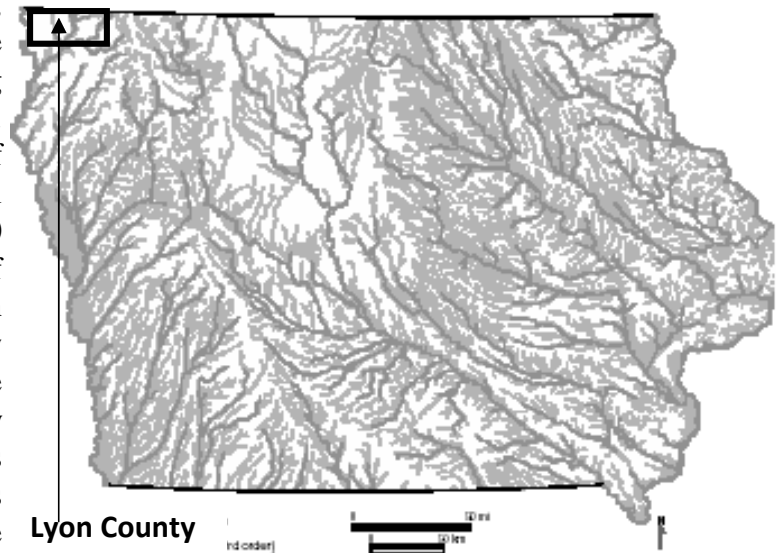
**ACQUIFERS AND GROUND WATER**

In the Iowa Department of Natural Resources’ book Iowa’s Groundwater Basics - A Geological Guide to the occurrence, use & vulnerability of Iowa’s aquifers, Lyon County is located within the Northwest Iowa Groundwater Province. Groundwater sources in northwest Iowa can generally be characterized as “fair” in terms of availability and quality. However, there are fewer options presented in northwest Iowa in comparison to those located in central or northeast Iowa. Ground water resources in Lyon County are typically sought through two major sources; surficial aquifers (shallow aquifers) including alluvial aquifers and the Dakota Aquifer (deep aquifer).

**Surficial Aquifers:**

Located beneath primarily the Rock River, Little Rock River, and their tributaries are shallow sand and gravel deposits containing alluvial aquifers or shallow well aquifers. These aquifers are an important source of water supply to many agricultural and rural uses. The wells in the region are an average 40 feet in depth and have the highest level of nitrates of any other hydrogeologic regions in the state. The region is dominated by shallow wells because regional aquifers are often quite deep; thus, drilling may be prohibitively expensive. On the other hand, shallow aquifers are more vulnerable to seasonal conditions such as drought or flooding, and much more susceptible to contamination issues.

Figure 8 - Alluvial Aquifers in Iowa

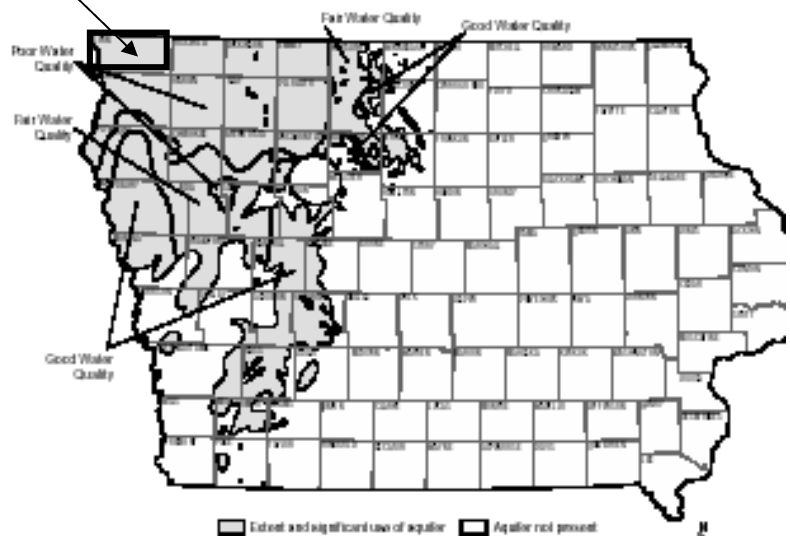


**Dakota Aquifer:**

The Dakota aquifer is comprised of sandstone deposits 200 to 300 feet thick, providing a quality water supply to many rural and community water supplies across northwest Iowa. The water source from this aquifer is often times 100 feet to 600 feet deep and typically produces 100 to 500 gallons per minute. With that stated, the northwestern hydrogeologic region contains a higher percentage of nitrates found in water than other regions in the state. This indicates a degree of pollution related to agricultural practices, fertilizer use, manure, septic tank wastes, sewage sludge, or other sources. Raw water can sometimes display a rust color as a result of iron-bearing minerals.

Lyon County

Figure 9 - Dakota Aquifer of Iowa



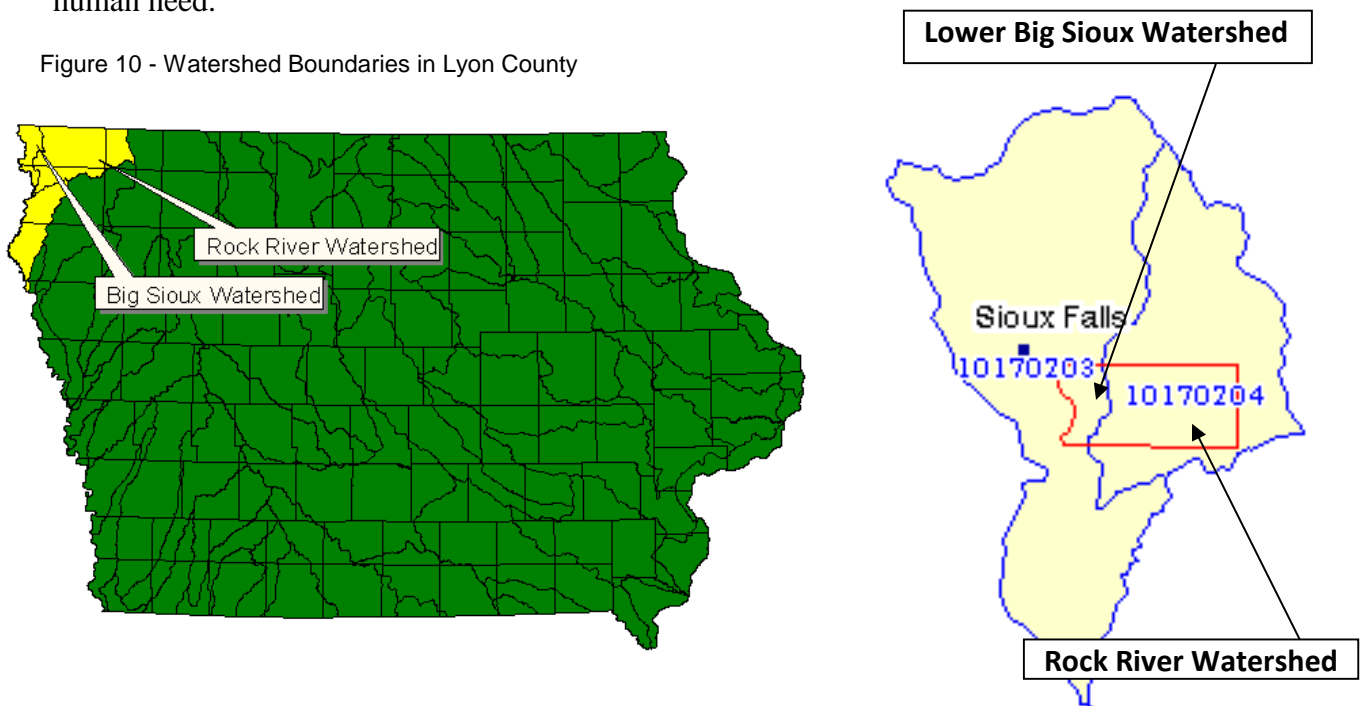


**DRAINAGE/WATERSHED**

Surface waters in Lyon County consist of tributaries, rivers, and streams. The Little Rock River and its main tributary, Otter Creek, drain the western part of county, mainly to the south and to the west. The Little Rock River drains into the Rock River in the extreme south central part of the county. The Rock River drains the central part of the county and eventually drains into the Big Sioux River south of the county. The western part of the county is drained by a series of small streams that drain to the Big Sioux River. The entire county is part of the Missouri River drainage area.

Lyon County is located in portions of two (2) watersheds dissecting the county. The Rock River watershed covers approximately 75% of the county’s land acres. The second watershed, the Lower Big Sioux River watershed, covers approximately 25% of the county’s land area mostly within the eastern three townships along the Big Sioux River. All waterways and rivers in both the Rock and Lower Big Sioux watersheds flow to the southwest towards the Missouri River. Watersheds affect every part of life as we know it today. Watersheds are one of nature’s primary sources of recharging groundwater sources and aquifers referred to in the previous section. This action is necessary for people to continue to extract water from the ground to provide this basic essential human need.

Figure 10 - Watershed Boundaries in Lyon County



**LAND CONSERVATION PRACTICES**

Information obtained from the Natural Resource Conservation Service (NRCS) brochure titled Conservation Strategies for Growing Communities suggests there are several conservation practices that could be simply accommodated during pre-construction, construction, and post construction to make a remarkable difference in the amount of erosion and runoff allowed to infiltrate and pollute local waterways and natural resources. Following is a listing of suggested management practices to support conservation practices.

- **Erosion Control Practices** – after construction, the planting of fast growing vegetation such as grasses and wild flowers can prevent the runoff and erosion of construction sites.

1. Compost Blankets
  2. Rolled Erosion Control Products
  3. Grading Strategies
  4. Vegetative Establishment
  5. Mulching
- **Sediment Control Practices** – is often confused with erosion control, but is actually the trapping of detached soil particles that are already moving in the erosion process.
    1. Compost Filter Berms
    2. Compost Socks
    3. Filter Strips
    4. GeoRidge
    5. Inlet Protection Devices
    6. Rock Check Dams
    7. Sediment Control Basins
    8. Silt Fences
  - **Low Impact Development (LID)** – is an alternative approach to traditional storm water management that retains and infiltrates rainfall on-site.
    1. Bioretention Cells
    2. Bioswales
    3. Infiltration Trenches
    4. Native Landscaping
    5. Permeable Paving Alternatives
    6. Rain Gardens
    7. Soil Quality Restoration

In the State of Iowa, the Department of Natural Resources (IDNR) has measures in place to monitor and regulate water discharges through its use of storm water discharge public notices on projects. Furthermore, in accordance with the federal Clean Water Act, all construction projects larger than one acre must file a National Pollutant Discharge Elimination System (NPDES) permit prior to construction of storm water drainage systems.

## Chapter 5. NATURAL HAZARDS & MITIGATION ACTIONS

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This section addresses the identification of hazards affecting Lyon County along with the goals, policies and mitigation actions to address the future risk of natural hazards in Lyon County. Hazards can have a devastating impact on a community, county or region and Lyon County is not immune to the power of mother nature and the devastating affects that natural disasters can have upon the local economy, agricultural sector, housing and many other development/land use related issues. The purpose of a mitigation plan is to:

- Mitigate against injuries, the loss of life and property
- Reduce disaster losses, break the cycle of disaster damage, reconstruction and repeat damage
- Allow the community to be eligible for non-emergency disaster assistance

Hazard mitigation is any sustained action taken to reduce or eliminate the long-term risk to human life and property from hazards. Mitigation activities may be implemented prior to, during, or after an incident. However, it has been demonstrated that hazard mitigation is most effective when based on an inclusive, comprehensive, long-term plan that is developed before a disaster. (FEMA Local Multi-Hazard Mitigation Planning Guidance, July 1, 2008)

### HAZARD MITIGATION ENABLING LAWS AND REGULATIONS

States, Indian tribes, and local governments are required to develop a hazard mitigation plan as a condition for receiving certain types of non-emergency disaster assistance, including funding for mitigation projects. The Robert T. Stafford Disaster Relief and Emergency Assistance Act (Public Law 93-288), as amended by the Disaster Mitigation Act of 2000, provides the legal basis for State, local, and Indian Tribal governments to undertake a risk-based approach to reducing risks from natural hazards through mitigation planning. The requirements and procedures for State, Tribal and Local Mitigation Plans are found in the Code of Federal Regulations (CFR) at Title 44, Chapter 1, Part 201.

### IDENTIFICATION OF NATURAL HAZARDS

This section is intended to provide a brief identification of those hazards that the Lyon County Hazard Mitigation Planning Committee believes either already exist or could potentially affect the county in the future. The descriptions of hazards presented on the following pages are derived and referenced from the 2010 Statewide Hazard Mitigation Plan for Iowa. Of the 16 identified natural hazards occurring in the State of Iowa, the local planning committee has concluded that 14 of these hazards have either already affected to could affect Lyon County.

- **Severe Winter Storm** - Severe winter weather conditions affecting day-to-day activities can include blizzards, heavy snow, blowing snow, freezing rain, sleet, and extreme cold.
- **Flash Flood** – A flash flood is an event that occurs with little or no warning where water levels rise at an extremely fast rate. Flash flooding results from intense rainfall, frozen ground, saturated soil, or impermeable surfaces.
- **Wind Storm** - Wind storms are created when extreme winds, typically associated with thunderstorms or downbursts, generate excessive and damaging wind speeds and can be responsible for structural and property damage.

- **River Flood** - River flooding is a rising or overflowing or a tributary or body of water that covers adjacent land, not usually covered by water, when the volume of water in a stream exceeds the channel's capacity. Floods are the most common and widespread of all natural disasters, except fire.
- **Tornado** - Tornadoes result from powerful thunderstorms created by the contrast of warm, moist air, to the south, and cool, dry air, to the north. Iowa is located in "Tornado Alley".
- **Hail Storm** - Hail storms are created from an outgrowth of a severe thunderstorm in which balls or irregularly shaped lumps of ice, greater than 0.75 inches in diameter, fall with rain.
- **Thunderstorms and Lightning** - Thunderstorms are common in Iowa and can occur singly, in clusters, or in lines. Lightning is an electrical discharge that results from the buildup of positive and negative charges within a thunderstorm.
- **Grass and Wild Fires** - A grass or wildland fire is an uncontrolled fire that threatens life and property in either a rural or wooded area.
- **Extreme Heat** - Extreme heat is classified by temperatures (including heat index) in excess of 100° F or 3 successive days of higher than 90° F.
- **Landslide** - Landslides occur when susceptible rock, earth, or debris moves down a slope under the force of gravity and water.
- **Levee Failure** - The failure of a levee can be attributed to the loss of structural integrity of a wall, dike, berms, or elevated soil by erosion, piping, saturation, or under seepage causing water to inundate normally dry areas.
- **Drought** - Droughts are described as a period of prolonged lack of precipitation for weeks at a time producing severe dry conditions.
- **Dam Failure** - Dam failure is the uncontrolled release of impounded water resulting in downstream flooding, which can affect life and property.

#### **HAZARD MITIGATION GOALS AND ACTIONS**

The participating jurisdiction planning committees identified the mitigation plan goals. The committee developed broad-based goals that would address a large number of hazards and cover a variety of mitigation activities. The hazard mitigation plan goals identified are as follows:

1. Injuries, sickness, deaths, property loss, utility services disruption and economic loss due to natural hazards will be reduced and mitigated against.
2. Protect against critical infrastructure and city/county assets from natural hazards.
3. Educating the public on the hazards that are associated and are most prone to cause a disturbance or result in damage in Lyon County.

The purpose of establishing goals is to set a general guideline for eliminating or reducing the long-term effects to property and life, reducing costs of response and recovery and minimizing disruption to all of Lyon County following a natural hazard event. Goal statements do not spell out specific strategies that can be measured but are written in general terms. Mitigation actions or measures are designed to be measured. The subsections of the hazards worksheets sections (e.g. historical occurrence, probability, vulnerability, maximum extent, severity, and speed of onset) were consulted as necessary.

To be able to complete or help meet the goals of the Lyon County Multi-Hazard Mitigation Plan, different mitigation measures were developed. The following table shows those mitigation actions and what actions are to be followed by what entity.

Table 1 – Lyon County Hazard Mitigation Actions per city, hazard addressed and mitigation category

Jurisdiction Abbreviation In This Plan	
Lyon County = LC	Larchwood = LA
Alvord = AL	Lester = LE
Doon = DO	Little Rock = LR
George = GE	Rock Rapids = RR
Inwood = IN	

Weather Events by Number	
1 = Drought	8 = Sinkhole
2 = Extreme Heat	9 = Thunderstorm and Lightning
3 = Flash Flood	10 = Tornado
4 = Hailstorm	11 = Windstorm
5 = Landslide	12 = Dam Failure
6 = River Flood	13 = Levee Failure
7 = Severe Winter Storm	14 = Grass of Wildland Fire

Mitigation Action	Community Choosing this	Hazard Addressed	Mitigation Category
Enforce Tree Trimming	LC, AL, GE, IN, LA, LE,	7, 10, 11	Nat. Resource Protection
Purchase Back Up Generators	LC, IN, LA, LE, LR, RR	2, 3, 4, 6, 7, 9, 10, 11	Property Protection
Bury Utility Lines	GE, LA, LE,	2, 4, 7, 9, 10, 11	Structural Projects
Distribute NOAA Weather Radios	LC, GE, LA, LE,	2, 3, 4, 6, 7, 9, 10, 11	Public Awareness
Designate Local Shelters	GE, IN, LA, LE, LR, RR	1, 2, 3, 6, 9, 10, 11	Public Awareness
Purchase Snow/Plowing Equipment	LC, AL, GE, IN, LA, LE,	7	Prevention
Establish Good Neighbor Program	LA, LE, LR, RR	2, 7, 9, 10, 11	Public Awareness
Build a Safe Room	LC, GE, IN, LA, LE, RR	7, 9, 10, 11	Structural Projects
Build or Update Warning Sirens	LC, AL, GE, IN, LA, LR, RR	4, 9, 10, 11	Prevention
Watershed Study/Implement findings	LC, IN	3, 6	Prevention
Enforce Building and Zoning Codes	LC, GE, IN, LA, LR,	3, 5, 6	Prevention
Continue HAZMAT Training	LC, AL, IN, LA, LE, LR, RR	9, 10, 11, 14	Emergency Services
Continue Fire Dept Training	LC, AL, GE, IN, LA, LE, LR,	9, 10, 11, 14	Emergency Services
Enforce the Snow Removal Policy	LC, AL, GE, IN, LA, LR, RR	7	Prevention
Develop list of Storm Shelters	LA, RR	2, 3, 4, 7, 9, 10, 11	Public Awareness
Develop Public Education/Awareness	LC, LA,	All	Public Awareness
Maintain Outdoor Warning Sirens	AL, GE, IN, LA,	4, 9, 10, 11	Prevention
Update/Create Local Emergency Plans	LC, AL, GE, IN, LA, LE, LR,	All	Prevention
Clean or Enlarge Sewage Lagoons	IN, LA, RR	3, 9	Structural Projects
Construct Sewer Lift Station	AL, GE, IN, LE, RR	3, 9	Structural Projects
Replace and Rehab Sewer Lines	GE, IN, LA, LE,	3, 6, 13	Structural Projects
Monitor Storm Sewer	RR	3, 6	Prevention
Maintain Dams & Record of Maint.	LC, RR	12	Prevention
Install Riprap	LC, GE, IN,	3, 5, 6	Nat. Resource Protection
Continue with NFIP Participation	LC, GE, LA, LE, RR	3, 6	Property Protection
Develop Alt. Fire Suppression	LA,	10, 11, 14	Emergency Services
Purchase Portable Pumps	GE, IN, LA, LR,	3, 6, 9, 10, 11	Emergency Services

Purchase Fire Gear (PPE)	LC, AL, GE, IN, LA, LR,	14	Emergency Services
Develop a list of Elderly, Disabled. Distressed for Law Enforcement	AL, LA,	2, 7, 9, 10	Public Awareness
Purchase Shelter Rations	LA,	7, 9, 10, 11	Emergency Services
Backup City Records	GE, LA,	2, 3, 4, 7, 9, 10, 11	Prevention
Establish a Technical Weather Warning System	LA,	4, 9, 10, 11	Public Awareness
Create Dry Hydrants		1, 14	Emergency Services
Enforce Burn Bans	LC, GE, LA, LR,	1, 14	Prevention
Reaffirm Rural Water Connections	LC, AL, IN, LA,	1, 14	Emergency Services
Purchase Sandbags	LC, GE,	3, 6	Property Protection
Determine Flood Prone Areas	GE,	3, 6	Nat. Resource Protection
Sinkhole Prone Area Soils Testing	LC	8	Prevention
Develop a Res. Weather Survey		1, 2, 3, 4, 6, 9, 10, 11	Public Awareness
Develop Connection with IDNR	LA, LR,	3, 6, 12, 13, 14	Nat. Resource Protection
Reaffirm Mutual AID	AL, GE, IN, LA, LE,	14	Emergency Services
Purchase Paramedic Equipment	GE, LA, LR,	2, 9, 10, 11, 14	Emergency Services
Trans. for Critical Employees	GE, LA, RR	7, 9, 10	Emergency Services
EMT Snowmobile	GE, LA, RR	7	Emergency Services
Test Warning Sirens Monthly	AL, GE, IN, LA, LR, RR	4, 9, 10, 11	Prevention
Maintain/Expand Debris Removal	AL, GE, IN, LA, RR	3, 4, 7, 9, 10, 11	Emergency Services
Monitor Levees Closely	RR	13	Prevention
Funding for Strengthening Levees	RR	13	Structural Projects
Joining NFIP and Getting Mapped	AL, DO, IN, LR	3, 6	Property Protection
Enforce Floodplain Ordinance	GE	3, 6	Prevention
Build Temporary Earth Dykes	LC, RR	3, 6	Property Protections
Review/Update Operations Plan	LC, GE, LA,	All	Prevention
Build Safe Rooms for Critical Fac.	LC, AL, DO, GE, IN, LA, LE, LR, RR	4, 9, 10, 11	Structural Projects

## Chapter 6. AGRICULTURE

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### AGRICULTURAL ECONOMY

Agriculture is historically the economic foundation of Lyon County and remains today as one of the primary economic sectors. Why is farming and agriculture so important to those in Lyon County and all of us? Every day, farmers in Lyon County continue to meet the growing demand of feeding the world. Satisfying not only local, state or national demand; but the crops and commodities raised in Lyon County provide grain, meat and other agricultural products to those in a global economic market. As stated on a web page sponsored by Monsanto, “To these men and women, the land is more than a livelihood-it’s a legacy. It’s a resource to be cared for, preserved, improved and passed to the next generation. They’re the caretakers of our land.” In an online web page titled “America’s Farmers”, the statement was made that in some way all persons are connected to agriculture. Below is a sample of what U.S. and Lyon County, Iowa farmers provide to us all.

### FARM FACTS

- *To keep up with population growth more food will have to be produced in the next 50 years as the past 10,000 years combined.*
- *Today, the average U.S. farmer feeds 155 people. In 1960, a farmer fed just 26 people.*
- *Today’s farmer grows twice as much food as his parents did – using less land, energy, water and fewer emissions.*
- *American farmers ship more than \$100 billion of their crops and products to many nations.*

### U.S. CORN FACTS

- *One bushel of corn is 56 pounds. That means U.S. farmers produce an average of more than 9,000 pounds of corn per acre.*
- *If U.S. farmers used crop production practices from 1931 to produce an amount of corn equivalent to the 2008 crop, it would require 490 million acres—an area more than 120 million acres larger than the state of Alaska.*
- *The U.S. produces about 40 percent of the world’s corn – using only 20 percent of the total area harvested in the world.*
- *Families own 82 percent of corn farms. Another 6 percent are family-held corporations.*
- *Less than 15 percent of U.S. corn acres are irrigated.*
- *Farmers today produce 70 percent more corn per pound of fertilizer than as recently as the 1970s.*
- *Corn farmers have reduced total fertilizer use by 10 percent since 1980.*
- *One acre of corn removes about 8 tons of carbon dioxide from the air in a growing season... 180 bushels per acre produces enough oxygen to supply a year’s needs for 131 people.*
- *Corn production has marched steadily upward for decades while using fewer acres.*
- *American farmers produced the five largest corn crops in history during the past five years. Even after supplying food-makers, ranchers, ethanol producers and grain exporters, America will again be able to save 10 percent of this year’s harvest for the future.*
- *Farmers today grow five times as much corn as they did in the 1930s — on 20 percent less land. That is still 13 million acres, or 20,000 square miles, twice the size of Massachusetts.*
- *The yield per acre has skyrocketed from 24 bushels in 1931 to 154 now, or a six-fold increase.*

**U.S. SOYBEAN FACTS**

- Farmers in more than 30 U.S. states grow soybeans, making soybeans the country’s second-largest crop in cash sales and the number one value crop export.
- Soy ink is used to print textbooks and newspapers.
- The soybean is the highest natural source of dietary fiber.
- The livestock industry is the largest consumer of soy meal.
- In 2008, soybeans represented 56 percent of world oilseed production, and 33 percent of those soybeans were produced by the American farmer.
- The U.S. exported 1.16 billion bushels (31.6 million metric tons) of soybeans in 2008, which accounted for 40 percent of the world’s soybean trade.
- A 60-pound bushel of soybeans yields about 48 lbs of protein-rich meal and 11 lbs of oil.
- 1½ gallons of biodiesel and 48 lbs of soybean meal are produced from 1 bushel of soybeans.

Sources of Information: USDA ERS, FAO, EPA, USDA Census of Agriculture, USDA FAS and NCGA

Although 323,000 acres or 504.7 square miles of land in Lyon County are utilized for agricultural purposes, the number of farms continues to decline. One would assume that as economies of scale continue to dictate fewer farms in operation the remaining operations continuing to grow larger. On the contrary, in Lyon County the size of farm operations has declined in size along with the number of farms. In 1987 there were 1,234 farms in Lyon County. By 1997 this number dwindled to 1,149. In more recent time, the Agricultural Census shows that in 2007 the number of farms in Lyon County declined to 1,087 with an average size of 297 acres. In comparison to the State of Iowa, in 1997, the average farm size was 343 acres. Ten year later in 2007, the average farm size decreased to 331 acres per farm. The average over the last 10 years for Lyon County has remained at a lower average than the state. Lyon County’s median size acreage overall is 10.3% smaller than that of the state’s median size.



Photo Source: www.e-referencedesk.com

Table 2 - Farm Acres in Lyon County and Iowa, 1997 and 2007

	Lyon County			State of Iowa (ooo's)		
	1997	2007	%change	1997	2007	%change
Total Farm Acres	348,492	323,054	-7.30%	31,166	30,747	-3.82%
Average Farm Size (in acres)	303 ac.	297 ac.	-2.0%	343 ac.	331 ac.	-3.5%
Cropland Acres	315,326	290,911	-7.74%	26,821	26,316	-1.88%
Harvested Cropland Acres	293,762	278,919	-5.05%	23,323	23,799	2.04%
Pasture/Non-Cropland Acres	33,166	32,143	-3.08%	4,345	4,158	-4.300%
Irrigated Land Acres	515	1,005	95.15%	125	189	51.2%

Source: 1997 & 2007 Census of Agriculture, USDA, National Agricultural Statistics Service



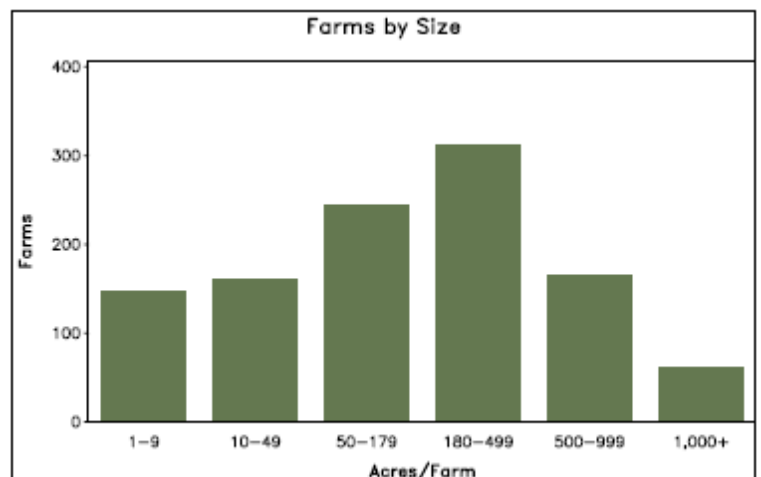
Both Lyon County and Iowa are following similar trends in the decline of overall number of farm acres and total cropland acres. This trend may point towards urban sprawl issues accounting for a portion of agricultural lands losses. With that stated Lyon County remains predominately agricultural in nature. The numbers above clearly show the rural agrarian nature of Lyon County. While the number of acres devoted to harvested crops in Lyon County is down slightly more than 5 percent, the State of Iowa experienced a growth of roughly 2 percent in the number of harvested crops. One interesting trend shown in the table above is that irrigated land acres in Lyon County have increased by more than 95% from 1997 to 2007; the State of Iowa increased its number of irrigated land acres by more than 51% during this same time frame. The data presented below comes from the 1997 and 2007 U.S. Census of Agriculture as summarized by the USDA National Agricultural Statistics Service. This data provides information on the distribution of farms by farm size (in acres). In 2007, the smallest farms (1-9 acres in size) accounted for 10.8 percent of Lyon County farms, compared to 9.4 percent statewide. In contrast, 28.6 percent of farms in Lyon County had more than 500 acres. Statewide, the percentage of farms in this category was 20.8 percent.

Table 3 - Number of Farms in Lyon County and Iowa, 1997 and 2007

Farms	Lyon County				Iowa			
	1997		2007		1997		2007	
Size in acres	N	%	N	%	N	%	N	%
<b>1 to 9</b>	<b>116</b>	10.10%	<b>146</b>	13.43%	<b>5,049</b>	5.56%	<b>8,709</b>	9.38%
<b>10 to 49</b>	<b>119</b>	10.36%	<b>160</b>	14.72%	<b>11,580</b>	12.75%	<b>17,824</b>	19.20%
<b>50 to 179</b>	<b>273</b>	23.76%	<b>244</b>	22.45%	<b>24,525</b>	27.01%	<b>24,692</b>	26.59%
<b>180 to 499</b>	<b>424</b>	36.90%	<b>311</b>	28.61%	<b>28,918</b>	31.85%	<b>22,354</b>	24.07%
<b>500 to 999</b>	<b>181</b>	15.75%	<b>165</b>	15.18%	<b>14,833</b>	16.34%	<b>11,826</b>	12.74%
<b>1,000 or more</b>	<b>36</b>	3.13%	<b>61</b>	5.61%	<b>5,887</b>	6.48%	<b>7,451</b>	8.02%
<b>Total Farms</b>	<b>1,149</b>	100.0%	<b>1,087</b>	100.0%	<b>90,792</b>	100.0%	<b>92,856</b>	100.0%

The chart to the right presents data from the 2007 Census of Agriculture on the number and size of farms for Lyon County. Farmland comprises 90.05% of the land area in Lyon County, relative to 85.59% in Iowa. Recent data shows a reported 1,087 farms in Lyon County, with an average of 297 acres per farm. This average farm size is 11.5% smaller than the statewide average of 331 acres per farm. While the average farm size across the entire state decreased by 5.4 percent from 2002 to 2007, Lyon County also decreased from an average of 327 acres per farm in 2002 to 297 acres per farm in 2007, a decrease of 9.2 percent.

Figure 11 - Farm Size in Lyon County by # of Acres, 2007



Source: 2007 Census of Agriculture, USDA, [www.agcensus.usda.gov](http://www.agcensus.usda.gov)

Table 4 - Livestock Inventories for Lyon County, 1997-2007

<b>Livestock Inventories</b>	<b>1997</b>	<b>2002</b>	<b>2007</b>
Farms with Hog/Pig Inventories	371	290	241
Number of Hogs/Pigs	325,619	428,010	561,045
Farms with Cattle/Calf Inventories	522	480	514
Number of Cattle/Calves	75,088	88,926	143,014
Farms with Dairy Cattle Inventories	59	44	51
Number of Dairy Cattle	4,315	5,384	10,941
Farms with Chicken (meat type, not layer)	13	9	6
Number of Chickens	404,682	-	-

Source: 1997, 2002 & 2007 Census of Agriculture, USDA, National Agricultural Statistics Service

Table 5 - Harvested Crops in Lyon County, 2002-2007

<b>Harvested Crops</b>		<b>2002</b>	<b>2007</b>
Corn	# Farms	766	739
	# Acres	137,862	151,303
	# Bushels	20,460,665	24,490,445
Soybeans	# Farms	754	667
	# Acres	134,125	110,754
	# Bushels	6,420,553	5,876,581
Oats	# Farms	100	35
	# Acres	1,710	543
	# Bushels	148,658	45,722

Source: 2002 & 2007 Census of Agriculture, USDA, National Agricultural Statistics Service

As indicated in the livestock inventories and harvested crops tables above, there are very distinct trends that appear relative to agricultural livestock commodities and harvested crops in Lyon County. First, the number of farms with inventory for each of the four major livestock categories (hogs, cattle, dairy cattle and chickens) was dramatically different in each of these five year spans. Overall, it appears the number of farms with hogs and chickens decreased significantly in Lyon County from 1997 to 2007. Whereas the number of farms with beef cattle and dairy cattle both decreased from 1997 to 2002, but then increased from 2002 to 2007, nearly to the point of inventories ten years earlier. Regarding the number of livestock maintained in Lyon County farms, although the number of hog farms decreased by 130 or 35%, the number of hogs raised on fewer farms nearly doubled in ten years to 561,045 head, an increase of 72.3 percent. Similarly, the number of beef cattle farms in Lyon County decreased slightly to 514 farms (-1.5%), but the number of beef cattle being raised increased by 90.5% to more than 143,000 head. The dairy cattle industry in Lyon County shows the same trends as beef cattle, whereas the number of farms decreased slightly, but the number of dairy cattle head more than doubled in Lyon County over this ten year period.

Table 5 on the previous page shows the growth or decline in harvested crops from Lyon County farms from 2002 to 2007. Over this five year span, the number of farms harvesting corn in 2007 decreased by nearly 3.5 percent, while at the same time increasing its productivity to harvested an additional 4.05 million bushels for an increase of almost 20% from 2002. Similarly, the amount of land acres being put into corn production continues to rise when 13,441 additional acres were put into corn production, an increase of almost 10% from 2002 to 2007. Conversely, the number of farms harvesting soybeans decreased by 87 farms or 11.5 percent, with the number of soybean acres decreasing by 24,000 acres. The number of bushels of soybeans harvested decreased by nearly 544,000. Oat production showed similar trends to the soybean crop.

**FARM INCOME**

In addition to the number of farms, size of farms and types of crops or livestock produced, one of the major components of the farm economy of Lyon County is the farm income. Farm income figures, presented in the following charts and tables reflects the market value of agricultural products sold in Lyon County, total farm production expenses and net farm incomes in Lyon County. For purposes of the report and for this comprehensive plan, the term “farm”

includes farming and ranching, but not agricultural services such as soil preparation or veterinary services. Farm income of businesses differs from personal farm income because it also includes government payments, rent, and the value of inventory and production expenses.

Figure 12 - Farm Income in Lyon County, 1987-2007

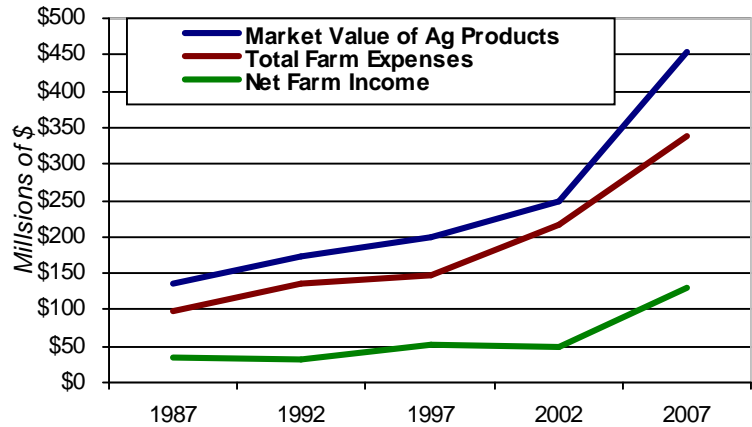


Table 6 – Gross Income, Expenses and Net Income from Farming, 1987-2007

Gross Income, Expenses and Net Income from Farming					
	1987	1992	1997	2002	2007
Market Value of Ag Products Sold (\$000s)	\$135,613	\$173,419	\$198,795	\$247,896	\$453,112
Crops (\$000s)	\$38,781	\$48,293	\$70,645	\$67,239	\$115,737
Livestock (\$000s)	\$96,832	\$125,126	\$128,151	\$180,657	\$337,375
Total Farm Production Expenses (\$000s)	\$99,059	\$137,665	\$145,807	\$216,155	\$339,125
Average per Farm	\$80,275	\$115,297	\$126,899	\$206,846	\$311,983
Net Farm Income of Operation (\$000s)	\$34,861	\$31,434	\$50,676	\$47,605	\$129,574
Average per Farm	\$28,250	\$26,326	\$44,104	\$45,555	\$119,203

Source: 1992, 1997, 2002 & 2007 Census of Agriculture, USDA, National Agricultural Statistics Service

According to information obtained from the USDA Economic Research Service website: [www.ers.usda.gov/StateFacts/IA.htm](http://www.ers.usda.gov/StateFacts/IA.htm), in 2007 Lyon County had the fourth highest agricultural sales in the state in excess of \$453,000,000 or 2.2 percent of the state’s total agricultural receipts.

### AGRICULTURAL LAND VALUES

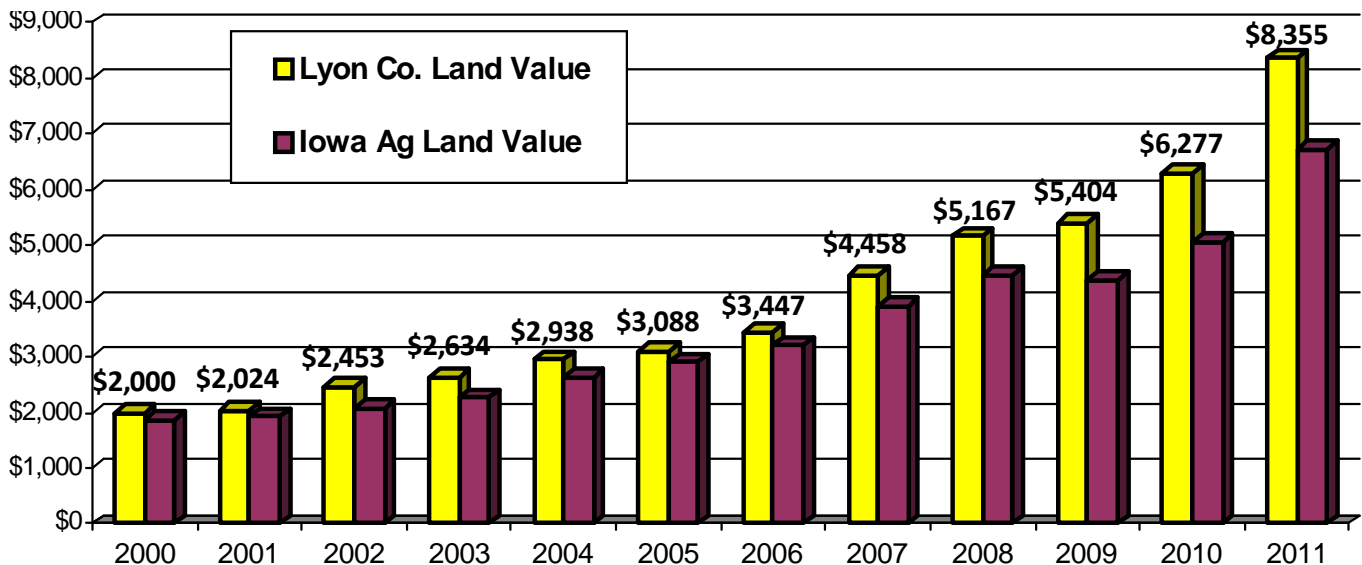
Changing trends and continuing shifts in farming in Lyon County, northwest Iowa, and the state can be expected in the future. One factor that will continue to have a significant impact on future trends in the agricultural economy is the value of land. The measure of land value dictates to farm borrowers and lenders how much equity one has in their land based against their debt. Often times, land value is the factor allowing agricultural operations to borrow funds for new equipment and land. Lyon County is fortunate to have some of the most nutrient rich black topsoil in the state and nation. Henceforth, the county has consistently higher land values higher than statewide averages. The following data shows the differences in land values between Lyon County, northwest Iowa, and the entire state. Lyon County maintains a high level of agricultural land value due primarily to the natural presence of good nutrient rich topsoil.

Table 7 - Lyon County and Iowa Agricultural Land Values, 2000-2011

Year	Lyon County (avg. land value)	NW Iowa District (avg. land value)	Iowa (avg. land value)
2011	\$8,355	\$8,338	\$6,708
2010	\$6,277	\$6,356	\$5,064
2009	\$5,404	\$5,364	\$4,371
2008	\$5,167	\$5,395	\$4,468
2007	\$4,458	\$4,699	\$3,908
2006	\$3,447	\$3,783	\$3,204
2005	\$3,088	\$3,393	\$2,914
2004	\$2,938	\$3,118	\$2,629
2003	\$2,634	\$2,683	\$2,275
2002	\$2,453	\$2,434	\$2,083
2001	\$2,024	\$2,240	\$1,926
2000	\$2,000	\$2,198	\$1,857

Source: <http://www.extension.iastate.edu/landvalue/> - Iowa State University Extension, 2012

Figure 13 – Lyon County and Iowa Land Values, 2000-2011



The data in the maps presented below originates from the Iowa State University Extension’s Iowa Land Value Surveys, compiled by Michael Duffy, ISU Extension Farm Management Specialist and professor of economics. ISU Extension is the only statewide survey that collects information on land values in each of Iowa’s 99 counties. The following figure shows a 33.1% increase in agricultural land value in Lyon County over just one year (2010-2011). The following graphs depict average land values across the State of Iowa during 1999-2000 as compared to 2010-2011. It is clear to see that Lyon County is situated amidst some of the richest, prime agricultural soils found in the nation. Northwest Iowa, on average, offers the highest land values across the entire state.

Figure 14 - 2000 and 1999 Land Values (Northwest Iowa)

2011 and 2010 Land Values (Northwest Iowa)

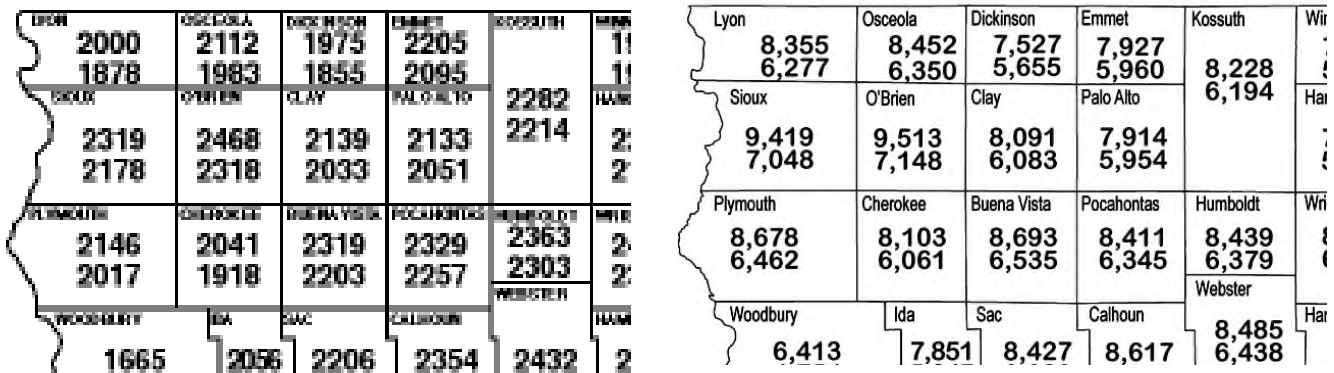


Figure 15 - 2011 Iowa Land Values for all 99 counties in Iowa

## 2011 Iowa Land Values

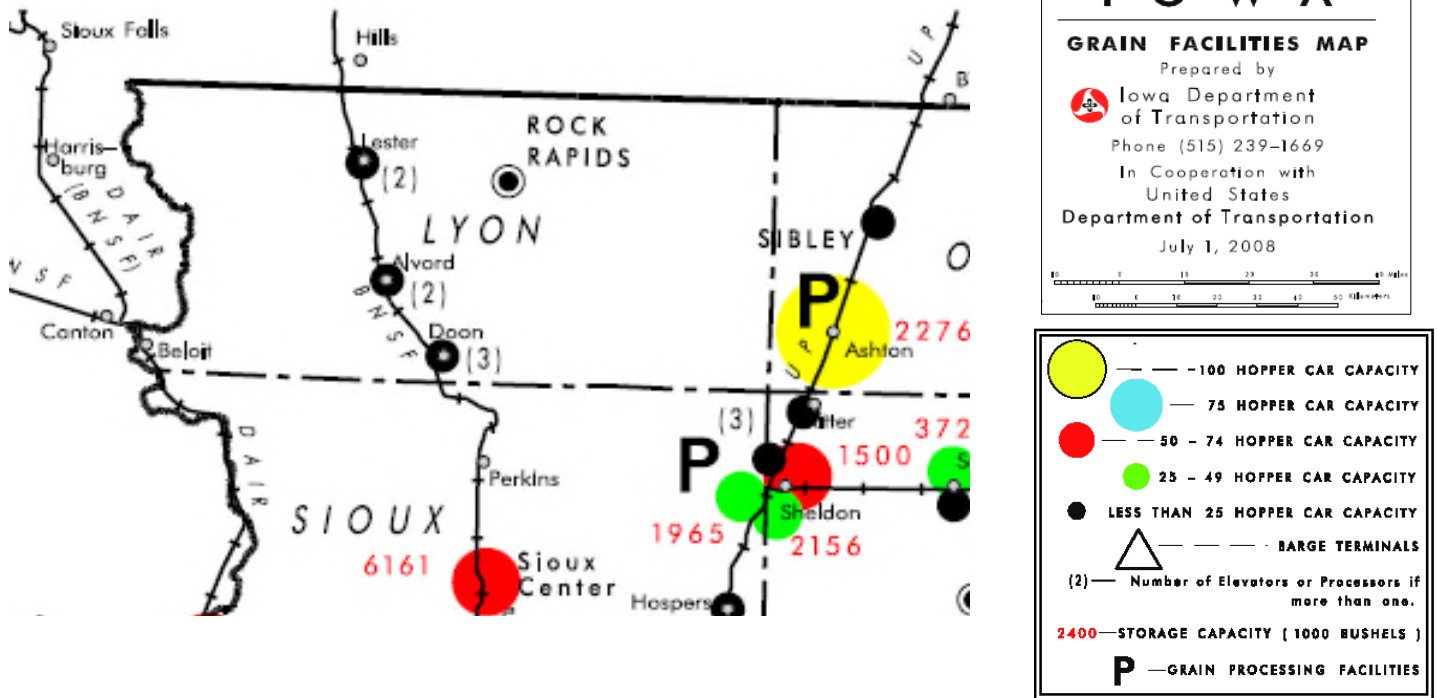




### GRAIN PROCESSING FACILITIES

The Iowa Department of Transportation created a map identifying grain facilities and shipment capacities within Lyon County. This data shows the agricultural infrastructure and rail transportation network in Lyon County. There are three (3) smaller gain loading facilities located in Doon, Alvard and Lester. Each of these facilities is equipped to handle less than 25 hopper cars. Most of Lyon County’s grain is stored and shipped from outside of the county. The map below shows larger grain facilities in Sioux Center and Sheldon with more than 6 million and 2 million bushel storage capacities respectively. By far, the largest grain processing facility in the region is the facility located in Ashton. This plant, which is also a grain processing facility, has a storage capacity of nearly 23 million bushels and can handle trains with more than 100 hopper cars. Grain processing and storage facilities are also located in Minnesota and South Dakota; however, these facilities do not appear on the Iowa map.

Figure 16 - Lyon County Grain Storage and Transportation Map



### VALUE-ADDED AGRICULTURE

One group that is focused on helping farmers in Iowa to continue gaining more value and better returns on their agricultural commodities is the Iowa State University Extension and Outreach. Specifically, ISU Extension has created a program called VAAP or Value Added Agriculture Program. This program is designed to assist farmers in gaining the greatest value for their product, specifically in the value-added market. Value added agriculture is a means for farmers to capture a larger share of the consumer food dollar. Examples of adding value to traditional agricultural products includes: direct marketing; farmer ownership of processing facilities; and producing farm products with a higher intrinsic value (such as identity-preserved grains, organic produce, hormone-free beef, free-range chickens; etc.) for which buyers are willing to pay a higher price than for more traditional bulk commodities. Small-scale organic food processing, non-traditional crop production, agri-tourism, and bio-fuels development are examples of value added agricultural projects that have created new jobs in rural Iowa.

According to the Iowa Farm Bureau website, Iowa farmers are becoming more adept to creating additional value out of Iowa's natural agricultural products. From textiles to tires, more and more products used in everyday life are impacted directly and indirectly from agricultural products. Below is a list assembled by the Iowa Farm Bureau to show examples of products made from and adding value to Iowa's agricultural crops.

**Value-added Agriculture** refers most generally to manufacturing processes that increase the value of primary agricultural commodities. Value-added agriculture may also refer to increasing the economic value of a commodity through particular production processes, e.g., organic produce, or through regionally-branded products that increase consumer appeal and willingness to pay a premium over similar but undifferentiated products.

- Soybeans – toilet seats, adhesives, cleaners, candles, inks, flooring, furniture and pet shampoo.
- Corn – cosmetics, antibiotics and vitamins, batteries, plastics, paints, aspirin, beer and wine.
- Cattle – Buttons, luggage, shampoo, shoes, pencils, film, vitamins, bandages, and the collagen for lip augmentation is prepared from the collagen in cow skin.
- Hogs – Antibiotics, insulin and other pharmaceuticals, car wax, chalk, glass, porcelain china and crayons.

In a 2004 report issued from the Iowa Agricultural and Home Economics Experiment Station, value added agriculture in Iowa has focused on working with producer groups and individual entrepreneurs to build long term economic, environmental and socially sustainable capacities. Emphasis has been on working with existing value-added groups, development of value chains, and working to develop quality systems to ensure food safety and accountability. Future value added programs are being explored in Iowa, specifically in partnership with the cooperation of Iowa State University Extension. Other efforts taking place include developing niche value markets for specialized products to assist producers in determining the highest market for their products.

## **RENEWABLE ENERGY**

Renewable energy (also referred to as alternative energy) is energy that comes from natural resources such as sunlight, wind, rain, tides, and geothermal heat, which are replenished naturally. In 2008, about 19% of global energy consumption came from renewable sources.

### ***Wind Generation***

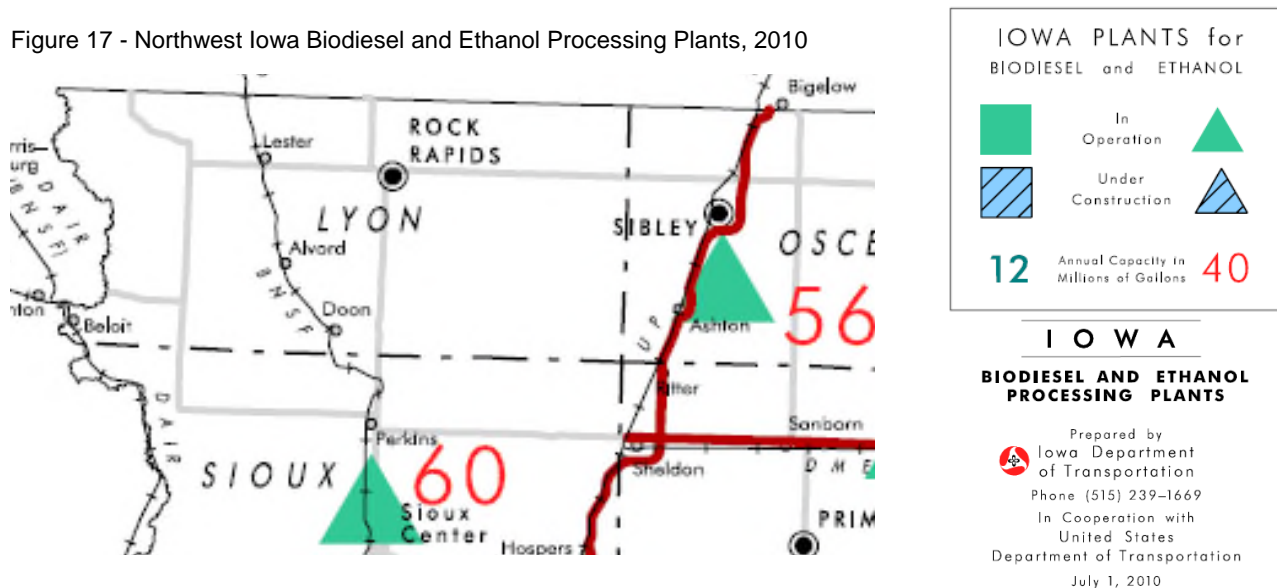
Wind energy is clean, renewable, pollution free and produced locally with no imports. Consistent, strong winds are located in the interior of the continent in places like north central Iowa, west Texas, South Dakota, etc. In the U.S., today, only 1% of the nation's energy is produced by the wind, compared to Denmark which produces 20%. Across northwest Iowa, wind generation farms are increasingly becoming the norm with several hundred wind generators located near Lyon County. To date, there are no commercial wind generators or wind farms located within Lyon County. Local leaders and government officials both desire to explore this renewable energy source and encourage the recruitment and development of wind generation companies, if prevailing conditions exist.

Wind generation on a smaller scale, often times referred to as small wind energy, is becoming more prevalent in rural areas. Lyon County has experienced several requests and has had a couple of small wind energy devices erected in the county. Mostly, these small wind energy devices are utilized for the production of energy for the immediate farmstead and associated agricultural operations such as hog or cattle buildings or other livestock confinements.

**Ethanol**

According to the Iowa Corn Growers Association website, there are thirty-five (35) dry mill ethanol plants and six (6) wet mill plants located in the state of Iowa. The dry mill plants produced nearly 3.2 billion gallons of ethanol in Iowa in 2011. The six wet mill plants produced another 915 million gallons of ethanol for a combined 4.04 billion gallons of ethanol produced in Iowa. In excess of 1.1 billion bushels of Iowa corn was used to produce ethanol at the 35 wet mill plants. Another 327 million bushels of corn was used by the wet mill plants for a combined total of 1.43 billion bushels of Iowa corn being utilized for ethanol in Iowa. There are many Lyon County farmers that raise and sell corn to ethanol plants for production of alternative fuels. With that stated, there is not an ethanol plant within Lyon County at this time. Farmers are likely selling their commodities to ethanol plants in Ashton (Osceola County) and Sioux Center (Sioux County). There are also corn ethanol plants located across portions of southern Minnesota and southeast South Dakota. The map below shows the locations of Iowa’s ethanol plants in proximity to Lyon County.

Figure 17 - Northwest Iowa Biodiesel and Ethanol Processing Plants, 2010



**Soy Biodiesel**

According to www.itsgood4.us.com, biodiesel is a fuel suitable to run in diesel engines that is derived from contemporary sources of oil like soybean oil, canola oil (from rape seed) or even modern algae. Since biodiesel has not collected impurities over millions of years, it is a very clean and pure fuel source to burn. Biodiesel is so similar to petroleum diesel fuel that no modification to the diesel engine is required. Several locations in Lyon County will deliver soy biodiesel to the farm. However, to purchase soy biodiesel at the pump for a car, truck, or other equipment will be a difficult endeavor. As seen on the map above, there currently are no biodiesel plants located within Lyon County or in adjacent counties.



## Chapter 7. PARKS, RECREATION & NATURAL RESOURCES

Lyon County offers a variety of county parks and recreational areas. The county's most notable natural resources are the wooded river corridors along the Big Sioux River, the Lake Pahoja Recreation Area, and the historical natural resource areas of Blood Run and Gitchie Manitou in northwest Lyon County. Lake Pahoja, one of Lyon County's most utilized park and recreation uses, is a multi-use park with campground, lake and recreational cabins. There are numerous public wildlife management areas and other county parks which cater to the desires of sportsmen, hikers, bird-bird-watchers and nature enthusiasts alike. With leisure time becoming more of a treasured aspect to all segments of our society, the result has been a growing demand for public outdoor recreational opportunities. In coming years, the Lyon County Conservation Board seeks to insure ample opportunity to enjoy the scenic beauty and recreational potential within the county.



The Lyon County Conservation Board was formed in 1963 for the purpose of acquiring, conserving, and developing natural resource projects of the county. The Conservation Board is supported by a property tax levy, user fees, and grants. The five person board is appointed by the Board of Supervisors for a period of five years in staggered terms. Meetings are held on the second Monday of each month and are open to the public. The Conservation Board may accept a transfer of land from the Iowa Department of Natural Resources, Lyon County Board of Supervisors, or city government as long as due consideration is given to its scenic, historic, archaeological, recreational, or other special features. Recreational and natural resources provide many benefits and amenities to the individual, family, and the county's overall quality of life.

### COUNTY PARKS, RECREATION & WILDLIFE AREAS

An overview of Lyon County's parks and recreation facilities will reveal the true natural beauty and amenities that few in Lyon County truly know exist. For example, Lyon County residents have access to 15 county parks and recreation areas, 5 state preserves and 3 public golf courses; in addition to numerous outdoor shelters, natural areas, native prairie remnants, woodland areas, and river bottoms. Following is a listing of each of the 12 county parks and recreation areas.

#### *Blankespoor Wildlife Area (near Inwood)*

Located two miles south and five miles west of Inwood, this 160 acre area is an outdoor lover's dream. It offers an abundance of timber, prairie, fish ponds and a relaxing atmosphere. Many people visit this area for bird watching, fishing, hiking and enjoying the outdoors.

#### *Blood Run/Rock Island National Landmark (west of Larchwood)*

Located eight miles west of Larchwood, this 178 acre historical area is a beautiful place to visit. Owned by the State Historical Society of Iowa and managed by the Lyon County Conservation Board (LCCB), this area has significant historical value for the Oneota Native American Tribe. At the site are several burial mounds, a pitted boulder, and an original homestead. The scenery is amazing and includes many prairie grasses and flowers. This area can be viewed only by calling the LCCB to set up a guided tour.

*Boersma Wildlife Area (south of Rock Rapids)*

This 62 acre wildlife area is located 8 miles south and one half (½) mile east of Rock Rapids. Included is a food plot, restored prairie acres, shelter belts and a mile of Little Rock River for fishing access.

*Boon Ranch Wildlife Area (near Rock Rapids)*

This 215 acres area is located 4.5 miles north of Rock Rapids. You could spend days discovering the many habitats and different ecosystems and still discover something new next time. The Rock River flows through this area and provides for fishing and wildlife.

*Doon Wildlife Area*

This 197 acre wildlife area is located two miles north of Doon on K42. The area provides outdoor enthusiasts a nice fishing stream and good hunting.

*Hidden Bridge Wildlife Area (southwest of Larchwood)*

Located 6 miles west and 2 miles south of Larchwood on the Big Sioux River, this 154 acre area offers a scenic view of natural prairie grasses and flowers along with many birds and wildlife. After enjoying the panoramic view, you can fish along the river or stroll through the timber.

*Klondike Area – River Access (southwest of Larchwood)*

Located four miles south and five miles west of Larchwood, this 6.5 acre tract is on the Big Sioux River. The area is great for fishing, wildlife, hiking, and picnicking. The area also includes a canoe access for the Big Sioux River.

*Lakewood Corner Wildlife Area (south of Rock Rapids)*

This area is located six miles south of Rock Rapids along Hwy 75. This 4.05 acre area includes areas good for bird watching, fishing and enjoying nature, along with access to the Rock River.

*Little Rock River Wildlife Area: Central (near George)*

This 232 acre area is located two miles east of George. The area offers fishing, picnicking, and a boat landing for access to the Little Rock River.

*Little Rock River Wildlife Area: North (southwest of Little Rock)*

This wildlife area is located three miles west and two miles south of Little Rock. Included in this 155 acre area is a food plot, hillside, prairie and a new shelter belt. The Little Rock River borders the western boundary of this area.

*Peterson Prairie Wildlife Area*

This wildlife area is located 7 miles west and 2 miles south of Larchwood. Peterson Prairie is located adjacent to the Hidden Bridge Wildlife Area along the Big Sioux River corridor. This 320 acre prairie area consists of amenities designed for picnicking, equestrian riding, and hiking.

*Roemen-Stettrichs Nature Area (near Larchwood)*

Located two miles west of Larchwood, this 5.09 acre area is managed as a wildlife habitat and provides limited hunting opportunities.

Figure 18 - *Lyon County - Parks and Recreation Map*



***Lyon County Conservation Areas***

- |                                   |  |
|-----------------------------------|--|
| 1. Blood Run                      | 9. Doon Wildlife Area                    |
| 2. Hidden Bridge Wildlife Area    | 10. Boersma Wildlife Area                |
| 3. Peterson Prairie Wildlife Area | 11. Little Rock River Wildlife - Central |
| 4. Klondike River Access Area     | 12. Little Rock River Wildlife Area      |
| 5. Blankespoor Wildlife Area      | 13. Little Rock River Wildlife -North    |
| 6. Roeman-Stettnichs Nature Area  | 14. Venenga Wildlife Area                |
| 7. Boon Ranch Wildlife Area       | 15. Lake Pahoja Recreation Area          |
| 8. Lakewood Corners Wildlife Area |  |

***Iowa DNR State Preserves & Wildlife Management Areas***

- |                                   |                             |
|-----------------------------------|-----------------------------|
| A. Gitchie Manitou State Preserve | D. Kroger Wildlife Area     |
| B. Egebo Wildlife Area            | E. Highway 18 Wildlife Area |
| C. Lee Wildlife Area              |                             |

***Public Golf Courses in Lyon County***

- G-1. Meadow Acres Golf Club
- G-2. Rock River Golf & Country Club
- G-3. Otter Valley Golf Course





## STATE PARKS

Lyon County is not home to an Iowa State Park. The nearest Iowa State Parks to Lyon County are two state parks that are managed under local county conservation boards. These state parks are the Oak Grove State Park (along the Big Sioux near Hawarden) managed by Sioux County Conservation and Mill Creek State Park (near the City of Paullina) managed by O'Brien County Conservation.

## PUBLIC GOLF COURSES

There are three public golf courses located in the rural portion of Lyon County. Meadow Acres Golf Club is located approximately 1 mile east of the Larchwood, Iowa along 135<sup>th</sup> Street in the northwest corner of Lyon County. Meadow Acres is a public 9 hole golf course with a par 36 at more than 2,959 yards. Meadow Acres has a sizeable residential neighborhood located along the western and southern edges of the course. Immediately east of Meadow Acres Golf Club is the Zanger private airport. Rock Rapids Golf & Country Club is situated between Harding Avenue and the Rock River approximately one mile north of the city of Rock Rapids. This course is also a 9 hole public golf course with a par 36 and more than 2,737 yards. Finally, the Otter Valley Golf Course is located along the southern border of Lyon County south of the City of George along Kennedy Avenue. Otter Valley is a 9 hole par 36 public golf course in Lyon County. Otter Valley's course is currently the largest in Lyon County at more than 3,186 yards.

3,186 yards.



Photos of Otter Valley Golf Course (above) and Rock River Golf & Country Club (below).  
Photo Source: Lyon County Economic Development



Lyon County will soon be home to a new golf course. The Grand Falls Casino and Resort situated along the Iowa-South Dakota border northwest of Larchwood is in the development stages of constructing a new championship 18 hole golf course. The new Grand Falls Golf Course is a Rees Jones, Inc. designed golf course located immediately east of the casino and hotel. According to the course designers, the Grand Falls course will be 155 acres of rolling terrain. Each hole will be designed to be integrated into the natural landscape and feature panoramic views of the adjoining countryside. The course is expected to open in 2014.

## LYON COUNTY CONSERVATION BOARD (LCCB)

The Lyon County Conservation Board is headquartered in the Conservation Administration Center at 311 1<sup>st</sup> Avenue East in Rock Rapids. The Lyon County Conservation Board and its officers are granted the responsibility to implement the natural resource and recreation policies of Lyon County through enhancing and protecting the county's natural resources, providing outdoor recreation and environmental education. Located at the Lyon County Conservation Administration Center is an outdoor campus available for general public's enjoyment. The outdoor campus

outdoor campus includes a guided path, benches, picnic table, and a butterfly garden.

### **LYON COUNTY CONSERVATION – FIVE YEAR PLAN**

The Lyon County Conservation Board has achieved today's success by sticking to a plan. Every so often it is necessary to analyze and evaluate where Lyon County Conservation wants to be in five years, ten years, and so on. Listed below are ideas and development plans for the future of recreation and conservation in Lyon County. The LCCB Board members have looked at the list of plan objectives and future development visions and prioritized the following five year plan goals accordingly. It is important to remember that these goals and plan developments for Lyon County Conservation are simply a plan for the future and can be amended at any time. These goals are not "etched in stone" at any time.

1. New Maintenance Shop (*completed fall 2012*)
2. Permanent sites on some of the tent sites (*completed*)
3. Development at Klondike
4. Two modern cabins to sleep up to twelve
5. Renovate old office. Be able to display artifacts.
  - Move old office and make it into cabin with bathroom
  - Construct new 40 x 60 building for office and education center at Lake Pahoja
6. Update Electrical to 50+ amp hookups
7. Park main roads and parking lots chip sealed (funding source – LCCB budget)
8. Renovate the Pahoja beach restroom to include a larger lodge or gathering place to accommodate up to 300 people. Beach parking lot used for parking and the restrooms existing septic and drainage field. (funding source - infrastructure grant and LCCB budget)
9. Update playground (funding source - foundation project)
10. Farm Pond development at Blankespoor (funding source - fish habitat funds & farm rent)
11. Additions of land on to our existing wildlife areas located throughout the county. (funding sources - habitat stamp, Pheasants Forever, NWTF and local REAP funds)
12. Additional land purchased for the Lake Pahoja Recreation Area.

### **STATE OF IOWA DNR SCORP PLAN - PROJECTED RECREATION TRENDS**

In 2006, the most recent statewide comprehensive outdoor recreation plan or SCORP was developed and resulted in the "Outdoor Recreation in Iowa" plan. When planning for future outdoor recreation it becomes necessary to identify issues and priorities facing recreation activities. The Department of Natural Resources was granted the task of bringing together many diverse persons with a strong interest in outdoor recreation, representing varying interests. One of the primary components to the outdoor recreation plan is to explore and examine recreation trends across the state and comparisons to national trends. In order to accomplish this examination of current trends in recreational usage and desires, the Iowa Department of Natural Resources distributed 1,000 surveys to residents of Iowa. Based on the recreation survey, the top four recreational activities of Iowans are 1) family-oriented activities (picnicking, outdoor family gatherings), 2) driving for pleasure, 3) observing, feeding or photographing wildlife, and 4) using trails for physical fitness

Survey results from Iowa Statewide Comprehensive Outdoor Recreation Plan

#### ***Most Popular Wildlife Related Activities in Iowa***

- Observing, Feeding, Photographing wildlife near home (44%)

- Hiking (32%)
- Fishing from the Shore (27%)
- Lake Fishing (26%)
- Observing, Feeding, Photographing wildlife on a trip (24%)

***Most Popular Motorized Activities in Iowa***

- Driving for Pleasure (55%)
- Motorboating (14%)
- ATVing (13%)

***Most Popular Water Related Activities in Iowa***

- Fishing from Shore (27%)
- Lake Fishing (26%)
- Swimming in Public Outdoor Pools (26%)

Iowans hold many opinions regarding attitudes toward the environment, natural resources and green space in Iowa. Regarding the amount and types of land in Iowa, just more than 51% indicated there are too few forests in Iowa, followed by 36% of Iowans that believe there are too few open natural areas in suburban/urban environments. Finally, 35% of Iowans believe there are too few wetlands in the state. Iowans overwhelmingly disagree that Iowa's natural resource areas, open spaces and agricultural lands should be developed, especially if such development results in an adverse impact on natural areas.

**State Recreation Goals and Performance Measures**

Another major component to the Iowa State Outdoor Recreation Plan is the consideration of plan goals, performance goals and performance measures. This is different from previous planning efforts and is intended to measure success through identifying tangible and intangible outcomes. Identified below is a listing of the four goal and related performance goals.

1. *Meet local recreation needs by providing close-to home opportunities*
  - Develop e-SCORP, an on-line statewide recreational database.
  - Using a marketing approach, promote local available recreational opportunities.
  - Encourage Iowans to improve physical and mental health through outdoor recreation
  - Provide for local outdoor skills workshops and programs (families, couples, men, women, teens, and children) to help get people outdoors and active.
2. *Increase availability of outdoor recreation resources*
  - Increase outdoor associated recreation, focusing on additions to existing public lands and public lands near population centers.
  - Create conservation corridors (greenbelts) to improve water quality, recreation opportunities, and wildlife habitat.
3. *Enhance the quality of outdoor recreation resources*
  - Provide assistance to local communities and governments to improve the quality and revitalize the recreational use of priority water bodies.

- Plan, develop, and maintain natural resources through an ecosystem based approach to protect the endemic flora and fauna and provide a quality recreational experience.
  - Enhance public health and safety and protect environments through upgrading or developing new horizontal infrastructure facilities to meet current environmental standards as well as today's recreational demand.
  - Enhance recreational opportunities through upgrading or constructing new vertical infrastructure facilities to respond to current recreational demands.
4. *Encourage state, county, city, and private sector planning for recreation to meet the needs of Iowans*
- Develop toolboxes for state, city, and county leaders for plan development.



## Chapter 8. POPULATION TRENDS

Lyon County population trends are typical with trends experienced by other northwest Iowa counties and most other rural counties in Iowa. Having similar population trends to many other counties brings with it many shared experiences with other local governments, but also new and challenging issues such as an aging population, migration, income or successes that affect the entire population of an area as explored in this chapter. Shifts in population play a critical role in the planning process. Analysis of past trends and current population structure is important in making future population projections. Those projections, in addition to population characteristics such as age and household size, are fundamental in considering the need for future infrastructure improvements and the development of residential, commercial and industrial areas.

### PAST POPULATION TRENDS

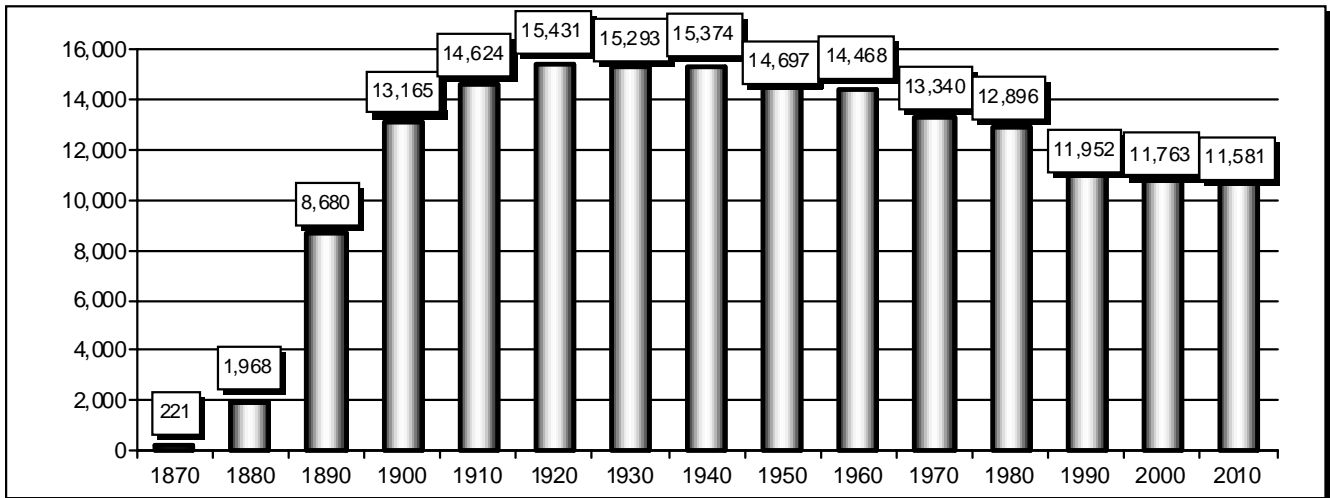
Lyon County today is rural and agrarian in nature, and has been for decades. This fact begins to shape the character, composition and population of those that call Lyon County home. According to U.S. Census Bureau statistics, Lyon County had more residents in 1900 than it does today. Lyon County, first recorded an official federal census in 1870 with a county population of 221 residents. However, it did not take long for early settlers to find Lyon County. By 1880 the county's population grew to 1,968 residents. Ten years later, in 1890, Lyon County's population exploded to 8,700 residents. By 1900 the population nearly doubled to more than 13,000 residents. Over the past 100 years, Lyon County experienced population growth until 1920 when the county reached its peak population of 15,431 residents. Since 1940 the population of Lyon County has continued to gradually decline. The largest period of decline in Lyon County happened between 1960 and 1970 in which the counties population decreased by 1,128 residents or 7.8% of the population. Similar to other rural counties in Iowa, Lyon County's population also felt the repercussions from the 1980s state and national farm crisis. During the 1980s decade, 944 residents left Lyon County resulting in a 7.3% loss in population. The population trends in Lyon County are very indicative of larger regional trends occurring throughout much of rural Iowa.

Table 8 - Historic Population Trends, Lyon County

YEAR	1900	1910	1920	1930	1940	1950
POPULATION	13,165	14,624	15,431	15,293	15,374	14,697
YEAR	1960	1970	1980	1990	2000	2010
POPULATION	14,468	13,340	12,896	11,952	11,763	11,581

Lyon County's greatest period of growth was experienced between 1880 and 1890 when the county grew by 6,712 residents or 341% over 10 years. The greatest period of population decline for Lyon County was between 1960 and 1970 when the population slipped by 1,128 residents or 7.8 percent. According to 2010 Census records, recently population trends have continued to decline slightly but has remained stable for the most part. The next official census will be taken in 2020 and published in 2021.

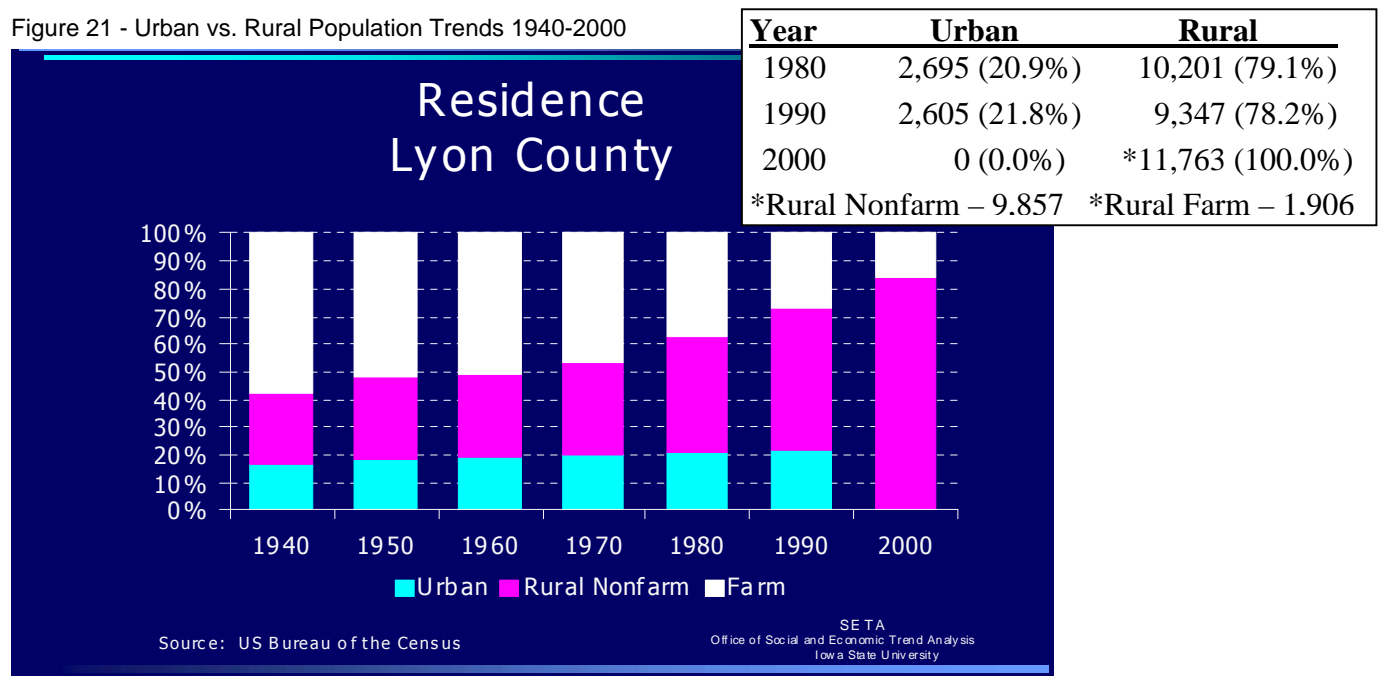
Figure 20 - Historic Population Trends 1870-2010



**RURAL VERSUS URBAN**

According to 2000 and 2010 census records, 100 percent of the residents of Lyon County, Iowa are classified as living in a “rural” residence. Through definition changes in the amount of population that classifies an “urban” versus “rural” population center, Lyon County Iowa is now classified entirely as rural. With that stated, Lyon County’s population is defined as those that live in “rural nonfarm” and “rural farm” areas. As of 2000, roughly 84 percent of Lyon County’s current population resides in rural nonfarm communities, subdivisions or acreages. The remaining 16 percent of Lyon County’s population resides in rural farms.

Figure 21 - Urban vs. Rural Population Trends 1940-2000



Individually, population trends among Lyon County’s cities have varied widely over the past 20 years. Of the eight (8) cities in Lyon County, there is one community with a population of greater than 2,000 residents.

Table 9 - Percentage of Population Change of Cities in Lyon County

	2010	2000	1990	1980	2000-2010	1980-2010
<b>Lyon</b>	<b>11,581</b>	<b>11,763</b>	<b>11,952</b>	<b>12,896</b>	<b>-1.5%</b>	<b>-10.2%</b>
Alvord	196	187	204	246	+4.8%	-20.3%
Doon	577	533	476	537	+8.3%	7.4%
George	1,080	1,051	1,066	1,241	+2.8%	-13.0%
Inwood	814	875	824	755	-7.0%	7.8%
Larchwood	866	788	739	701	+9.9%	23.5%
Lester	294	251	257	274	+17.1%	-7.3%
Little Rock	459	489	493	490	-6.1%	-6.3%
Rock Rapids	2,549	2,573	2,601	2,693	-0.9%	-5.3%
<b>Rural</b>	<b>4,746</b>	<b>5,016</b>	<b>5,392</b>	<b>5,959</b>	<b>-5.4%</b>	<b>-20.4%</b>

### TOWNSHIPS

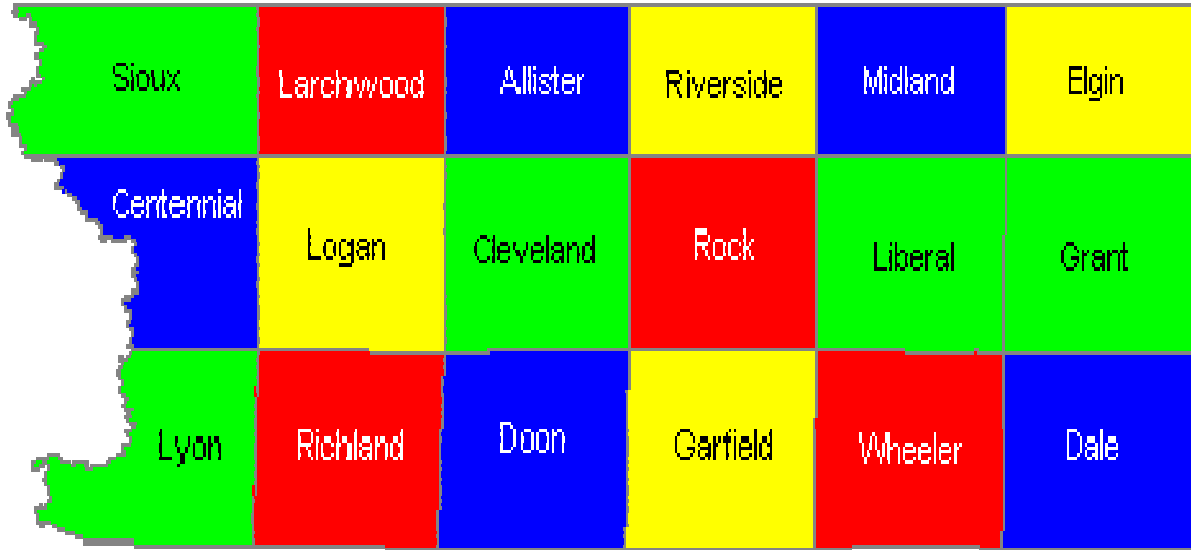
The following table includes a sample of demographic statistics relative to the rural townships in Lyon County. Most data sources do not report demographic data for townships, rather just county or larger city statistics. Population statistics and other data are often times difficult to gather at the township level. The source used to document this information is the city-data.com web site. It is expressed that this website is intended for informational use only and does not rely upon the accuracy or timeliness of the data presented on the website. The data has been presented from multiple governmental and commercial sources.

Table 10 - Rural Population and Housing Units of Lyon County Townships, 2010

Township Name	Rural Population	Housing Units	Cities in Township
Allison Township -	246	98	East ½ of Lester
Centennial Township -	232	92	Town of Klondike
Cleveland Township -	392	110	none
Dale Township -	223	94	none
Doon Township -	1,094	420	Doon & Alvord
Elgin Township -	634	291	Little Rock
Garfield Township -	309	100	none
Grant Township -	262	113	none
Larchwood Township -	1,400	569	Larchwood & west ½ of Lester
Liberal Township -	385	167	Town of Edna & part of George
Logan Township -	338	109	none
Lyon Township -	275	106	Town of Beloit
Midland Township -	136	59	none
Richland Township -	1,136	482	Inwood
Riverside Township -	412	161	North part of Rock Rapids
Rock Township -	2,639	1,223	Rock Rapids
Sioux Township -	311	117	Town of Granite
Wheeler Township -	1,157	537	George

*Note: The term “rural population” includes rural residents and residents of small cities located within each township, based upon the definition of rural population by the data source. The term “rural population” does not include cities over 2,500 in population.*

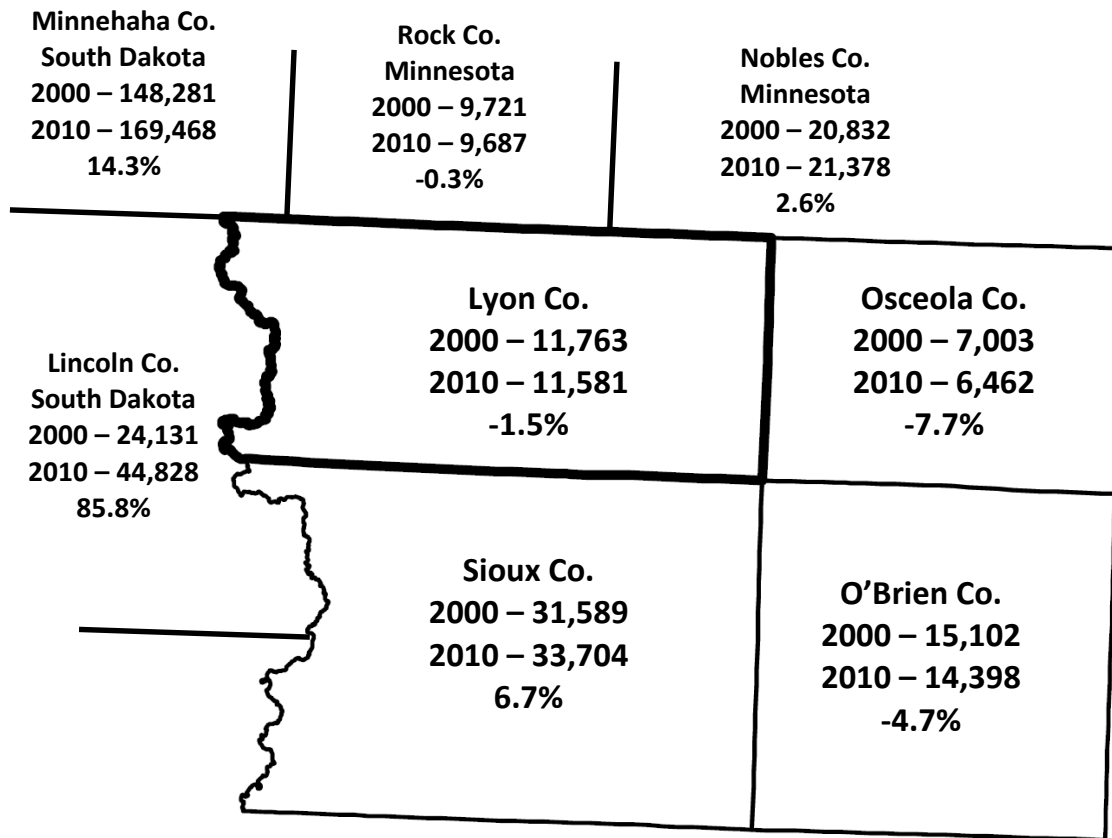
Figure 22 - Township map of Lyon County



**CURRENT POPULATION STRUCTURE**

As of the 2010 Census, Lyon County has a total population of 11,581 persons, of which 4,746 are rural residents. From 2000 to 2010, the rural population of Lyon County decreased from 5,016 to 4,746, a loss of 270 residents or a 5.4 percent decline. This trend alone is not unique since only a few counties in the entire state experienced an increase in rural population. Every county across northwest Iowa experienced a loss in the rural population. The continued decline or shift in Lyon County’s rural population will become a key factor for future community and economic development efforts. Although the rural population of Lyon County may be declining or “shifting” to smaller communities, the overall population of Lyon County is also continuing to shrink, but not as quickly as the rural population. As seen on the following map, of the 8 counties represented in this northwest Iowa, southwest Minnesota and southeast South Dakota region, half of the counties in this region experience growth. With that being stated, all of the counties experiencing growth either contained metropolitan or other urban population centers. Lyon County is considered, by definition, a rural county and its population trends are reflective of that classification. In fact, all of the counties that lost population in the region shown below are defined as rural counties. This trend goes to support the overall continuing “rural to urban” shift occurring within the states of Iowa, Minnesota and South Dakota. The large population shown in Minnehaha County, South Dakota is attributed to the City of Sioux Falls, a city of 155,000 residents with a metropolitan area population of 225,000 residents. In fact, over the past decade, the sprawling growth of the Sioux Falls metropolitan area has continued south into Lincoln County, South Dakota. This is evident from the 85% growth in the county’s population over the past 10 years. Furthermore, Rock County, Minnesota is considered a rural county, but Nobles County, Minnesota is the location of Worthington, MN, a micropolitan “urban” community of approximately 12,000 residents.

Figure 23 - 2000-2010 comparison population of neighboring counties



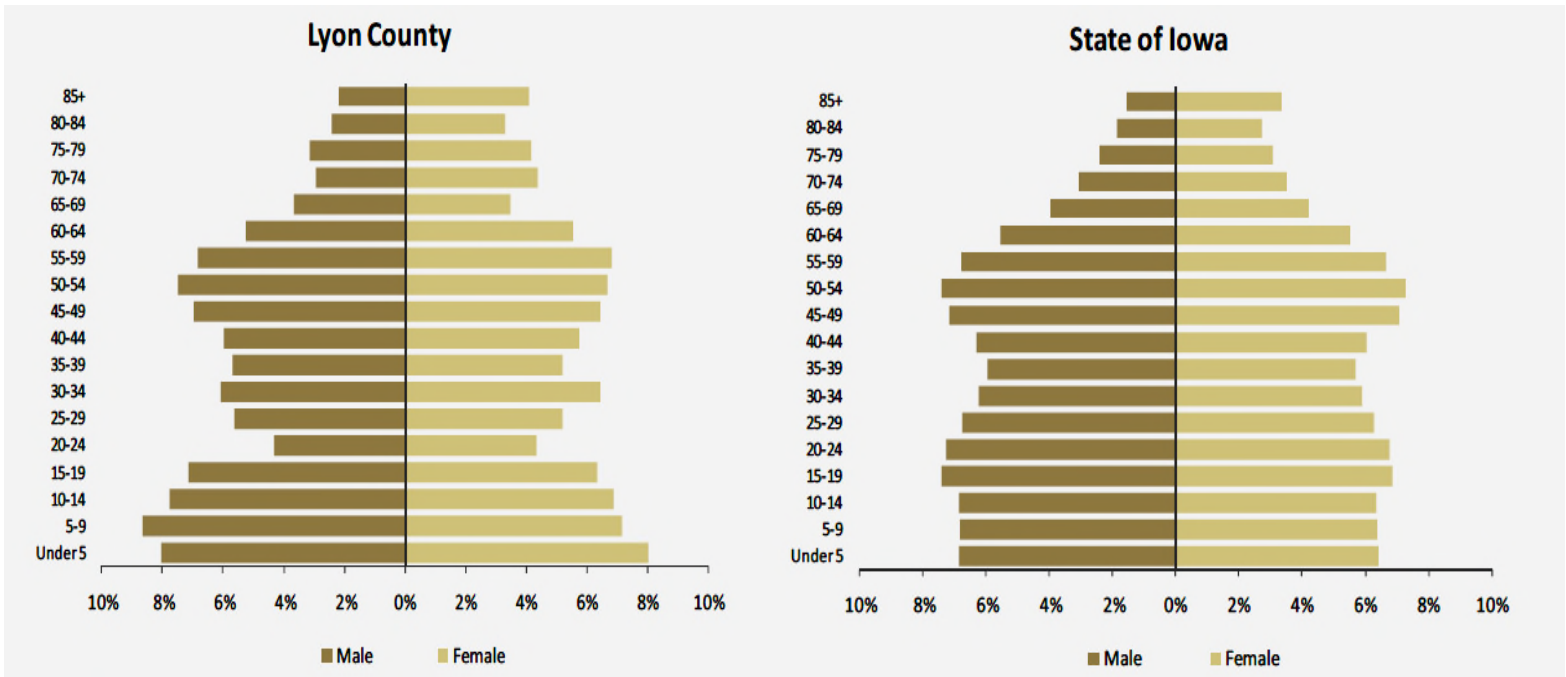
The 2010 median age in Lyon County is 38.7 years in comparison to 38.1 years for the State of Iowa. Median age in Lyon County has been consistent, on average, with that of other counties in northwest Iowa. This statistic indicates Lyon County does have an aging population base and special considerations may need to be taken regarding the services and provisions for county services relative to a senior population. Nearly seventeen percent (16.8%) of the county's 2010 population or 1,948 residents meet the U.S. Census' definition of senior or elderly population, which includes persons aged 65 and older. On the contrary, the 2010 census also reports a larger than average 29.9 percent of the county's population is under the age of 20. As of 2010, there were 3,470 youth living in Lyon County. Both of these age demographic groups show clear but distinctly different needs for special consideration when providing future county services and planning future land use growth decisions.

Of the total Lyon County population, 49.9 percent, or 5,783 are male, while 50.1 percent or the remaining 5,798 residents are female. This proportion of males to females is nearly even in Lyon County, which is not typical of northwest Iowa trends, mostly due to the longer life expectancy of females. As seen in the following chart, the balance between males and females within Lyon County appears to be mostly even, except for over the age of 70 when the presence of females appears to be slightly larger in percentage than males. This trend is also repeated in the statewide population distribution which would go to support the statistics of women having a longer life expectancy. The following charts were provided by the Census 2010 Demographic Profile, a part of the Regional Economics & Community Analysis (RECAP) Program through Iowa State

University. The RECAP Program provides several areas of socio-economic statistical data for the cities and counties in Iowa, including population trends, housing profiles, retail sales and analysis reports, take charge reports, school district profiles and a multitude of other useful demographic and economic data.

Figure 24 - 2010 Lyon County Population Distribution

2010 Iowa Population Distribution

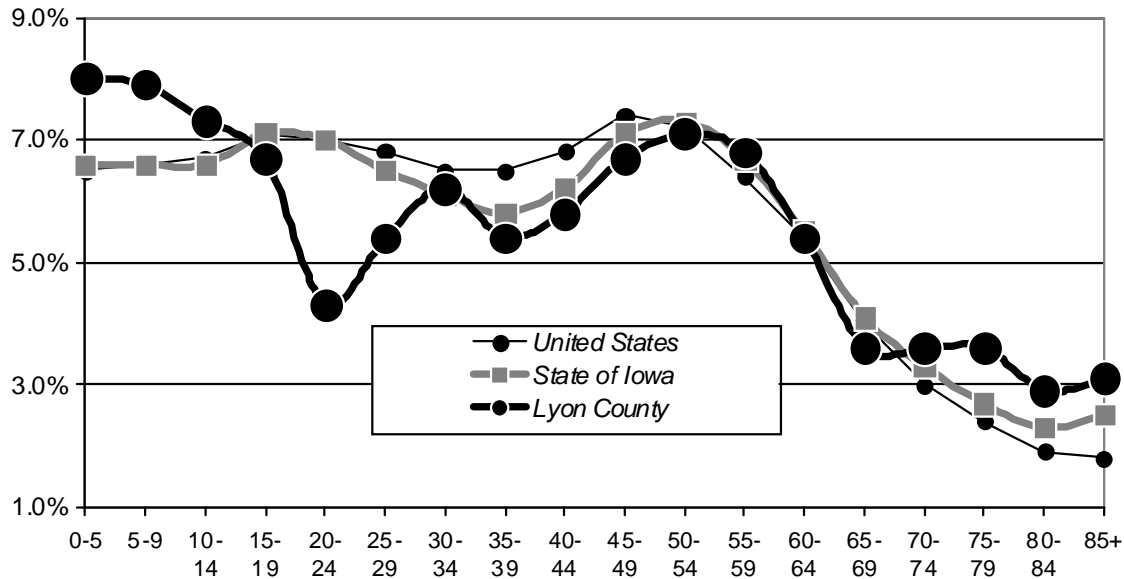


Source: Census 2010 Demographic Profile, Regional Economics & Community Analysis Program (RECAP) [www.recap.iastate.edu](http://www.recap.iastate.edu), Iowa State University, University Extension

Table 11 - Age Distribution of Population, 2000 (Lyon County and Iowa)

Age	Lyon County	Percent	State of Iowa	Percent
0-5	929	8.0	202,123	6.6
5-9	916	7.9	200,646	6.6
10-14	846	7.3	200,904	6.6
15-19	779	6.7	216,837	7.1
20-24	500	4.3	213,350	7.0
25-29	625	5.4	197,843	6.5
30-34	723	6.2	184,740	6.1
35-39	629	5.4	177,148	5.8
40-44	677	5.8	187,400	6.2
45-49	776	6.7	216,482	7.1
50-54	819	7.1	223,244	7.3
55-59	790	6.8	204,393	6.7
60-64	624	5.4	168,357	5.5
65-69	412	3.6	124,365	4.1
70-74	421	3.6	100,291	3.3
75-79	422	3.6	83,387	2.7
80-84	331	2.9	70,187	2.3
85+	362	3.1	74,658	2.5
Total	11,581	100.0%	3,046,355	100.0%

Figure 25 - Age Distribution comparison, Lyon County, Iowa, United States, 2000

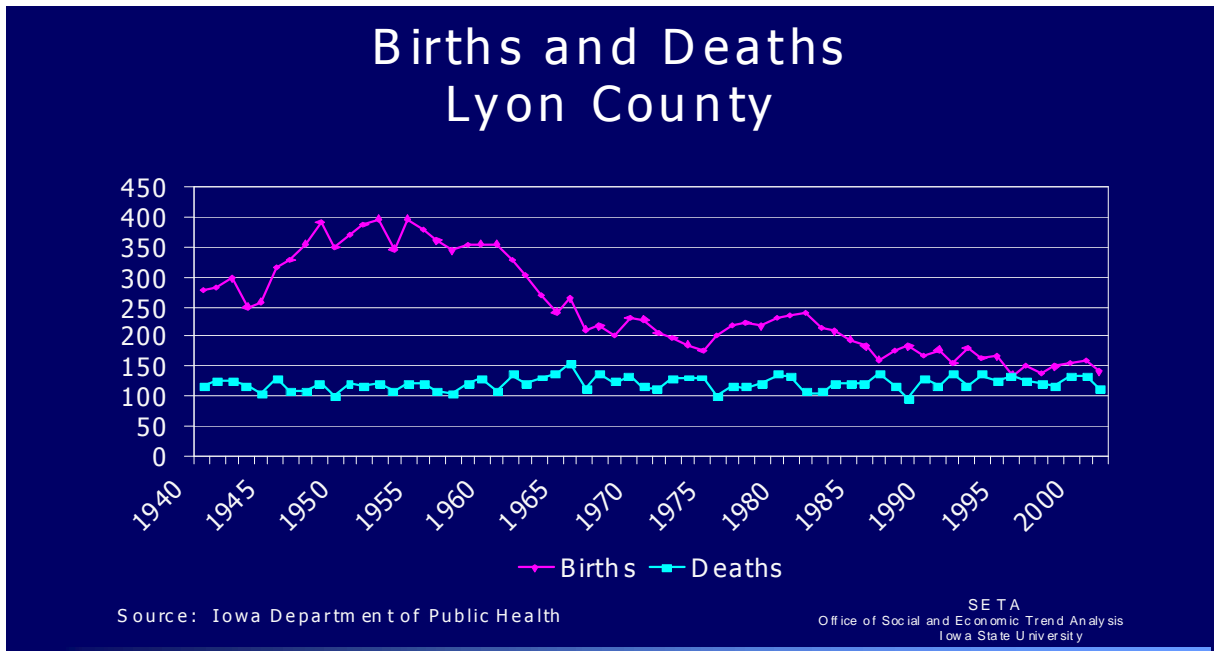


The 2010 census indicated 2.1% of the county's residents were members of a minority race. Nearly 98 percent of the county's population is identified as Caucasian or White, while 9 residents were American Indian, 10 individuals are Black or African American and 25 additional residents are identified as Asian. According to statistics, there are 127 residents that declared they were “some other race” and 70 persons declared “two or more races”. Of all races, 212 persons in Lyon County declared they were of Hispanic or Latino decent constituting 1.8% of the total population. These numbers of minorities are important when determining the services that are to be provided. As these segments of the population continue to grow, the county's policies and goals with respect to personnel and service provisions may need to be evaluated and adjusted.

**POPULATION CHANGE – NATURAL CHANGE AND MIGRATION**

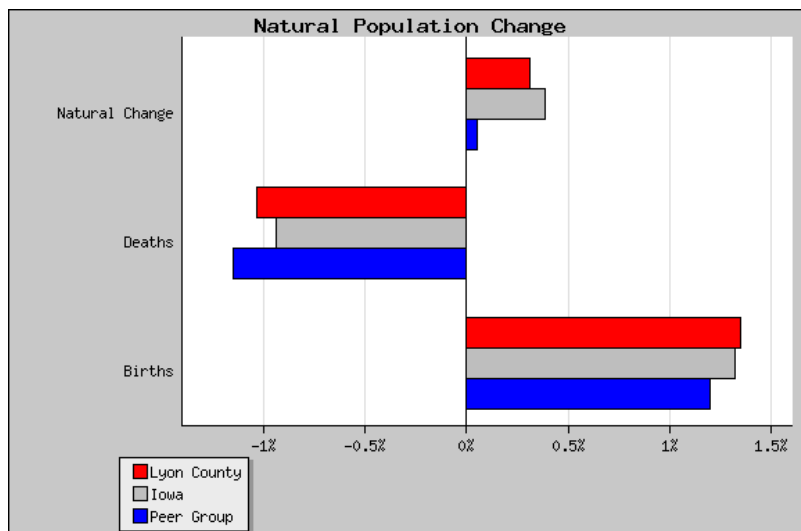
Analyzing individual components of population change identifies the internal and external forces affecting local population changes occurring in Lyon County. Since the statistics show Lyon County’s population has declined over the past 30 years, it may be wise to determine what impacts are causing this population change in Lyon County. Population change results from two occurrences; natural change and migration. Natural population change describes the effects from births and deaths occurring within the county, whereas net migration describes the effects of people moving into and out of the county. Total population change occurs from the results of both natural change and net migration. The following graphs were obtained from the RECAP Take Charge report prepared for Lyon County prepared by Iowa State University. Within this report, the components of population change are addressed which compare annualized rates of population change by component for the county, state, and peer group. The peer group used in the following tables includes the combined averages of 45 other counties in Iowa of similar rural and agricultural composition. The first graphic illustrates natural change (births and deaths). The second graphic illustrates net migration (both domestic and international migration).

Figure 26 - Historic trends of Births and Deaths in Lyon County, Iowa 1940-2000



The chart above shows the historic trends of births and deaths in Lyon County. This information may shed some light on the continuing declining population of Lyon County. Fifty years ago, there were several more hundred births in Lyon County versus the number of deaths. This added to the county’s population growth. In recent decades, the gap between births and deaths has narrowed significantly. With that stated, Lyon County still maintains more births than deaths, even if it is a small percentage. This fact alone should not be a large contributing factor to the population decline of Lyon County. Upon seeing the data for natural change in Lyon County, it makes one assume the leading factor in the decline of the county’s population must be migration, since it is now shown to be natural change.

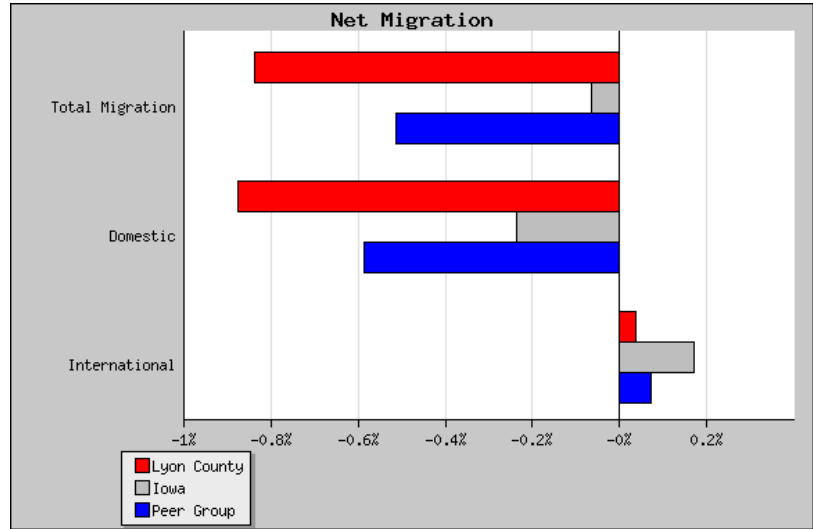
Figure 27 - Natural Change and Migration Patterns of Lyon County, Peer Group and Iowa, 2000-2007



Source: *Take Charge Report  
Regional Economics  
& Community Analysis  
Program (RECAP)*  
[www.recap.iastate.edu](http://www.recap.iastate.edu)  
Iowa State University,  
University Extension



As seen on the adjoining figures and the table on the following page, Lyon County has experienced a positive natural change of nearly 0.3% from 2000-2007. Although, this percentage increase is very small, it means that Lyon County is not losing population from natural change. Conversely, the figures on the following page and the table below shows Lyon County lost a significant amount of its total population to domestic out-migration. This means people living within Lyon County moved out of the county. Actually, the numbers show that international in-migration accounted for positive growth in Lyon County, but the overall net migration was significantly lower based on the large percentage of domestic out-migration. Since statistics show Lyon County’s population loss is not attributed to natural change, but rather an out-migration of current residents, the issue now shifts to how can Lyon County’s leaders and government officials stop the outflow of current residents and stop the loss of domestic migration severely impacting Lyon County’s ability to grow.



The “Peer Group” shown in the above charts is data assembled from 46 rural counties in Iowa in which the RECAP program at Iowa State University call the Plains Low Urban Influence Peer Group. This group is intended to provide a view of how Lyon County compares to other similar rural counties in Iowa.

Table 12 - Natural Change and Migration Patterns of Lyon County, Peer Group and Iowa, 2000-2007

	Lyon County	Annualized County Rate	Annualized State Rate	Annualized Peer Group Rate
<b>2000 Population</b>	11,763	0.0%	0.0%	0.0%
Births	1,143	1.3%	1.3%	1.2%
Deaths	878	-1.0%	-0.9%	-1.1%
<b>Natural Change</b>	<b>+ 265</b>	<b>0.3%</b>	<b>0.4%</b>	<b>0.1%</b>
International	32	0.0%	0.2%	0.1%
Domestic	-743	-0.9%	-0.2%	-0.6%
<b>Total Migration</b>	<b>-711</b>	<b>-0.8%</b>	<b>-0.1%</b>	<b>-0.5%</b>
Residual	-51	-0.1%	-0.0%	-0.1%
<b>Total Change</b>	<b>-497</b>	<b>-0.6%</b>	<b>0.3%</b>	<b>-0.5%</b>

Source: Take Charge Report; Regional Economics & Community Analysis Program (RECAP) [www.recap.iastate.edu](http://www.recap.iastate.edu)  
Iowa State University, University Extension

**FUTURE POPULATION PROJECTIONS**

Accurate estimates of population for a county are important factors in determining future needs for services, housing, and infrastructure. Analysis of population projections can provide some insight into the type and quantity of future development and allows local officials to set land use policies to guide expected development. Only a few reputable agencies, including government agencies and private consulting firms have developed reasonably acceptable population and demographic projections at the county level. For purposes of identifying future population projections for Lyon County, the data presented by Woods & Poole Economics, Inc. will be used. Woods & Poole Economics, Inc. is an independent corporation located in Washington D.C. that specializes in long term county economic and demographic populations. Whereas other projection models, such as the cohort-survival method is based strictly on the natural change, including births and deaths, of a given population the Woods & Poole data accounts for in-migration and out-migration as well as other economic factors. Projections are made for the county level; therefore no manipulation of the data has been made. The numbers are raw data presented by Woods & Poole, in conjunction with the present and historical population statistics provided by the U.S. Census Bureau. The Woods & Poole population projections coincide with projected U.S. Census Bureau population estimates, which depict a continuing trend of a declining population base in Lyon County. The current population trends in Lyon County are expected to continue through 2040. If Lyon County officials can find a way to minimize the out-migration of domestic or current residents, Lyon County’s population will likely grow in the future, but Lyon County has to stop exporting its greatest resource; its residents.

Table 13 - Projected Population Trends, 2015-2040

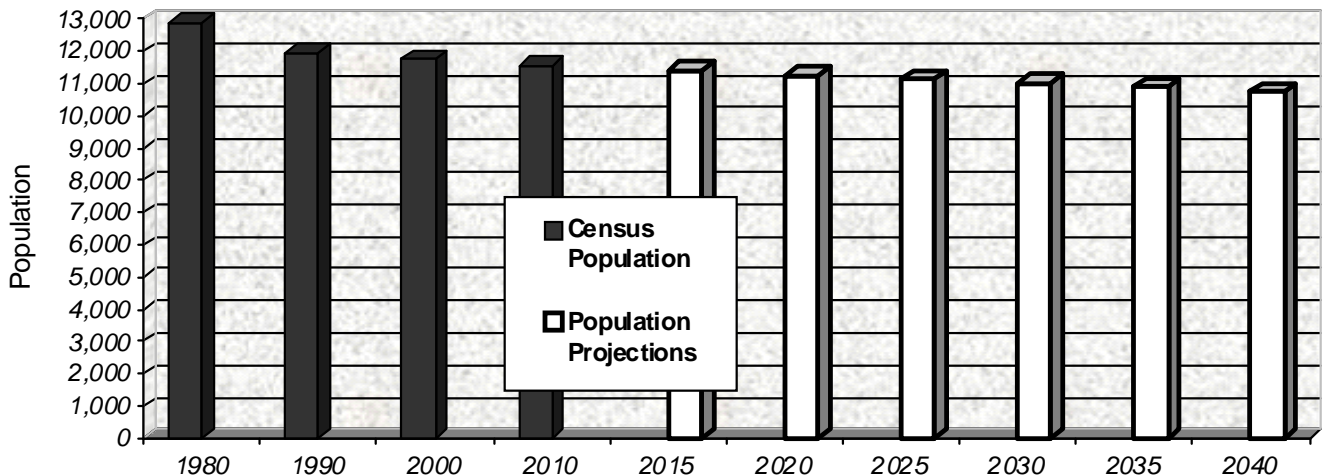
Year	Lyon County Population	Year	Lyon County Population
1980	12,896	<b>2020</b>	<b>11,263</b>
1990	11,952	<b>2025</b>	<b>11,137</b>
2000	11,763	<b>2030</b>	<b>11,013</b>
2010	11,581	<b>2035</b>	<b>10,887</b>
<b>2015</b>	<b>11,403</b>	<b>2040</b>	<b>10,769</b>

Source: U.S. Census Bureau, 1980-2010;

\*2015-2040 are projections by Woods & Poole, Inc. 2012

Figure 28 -

Projected Poluation Growth 2015-2040



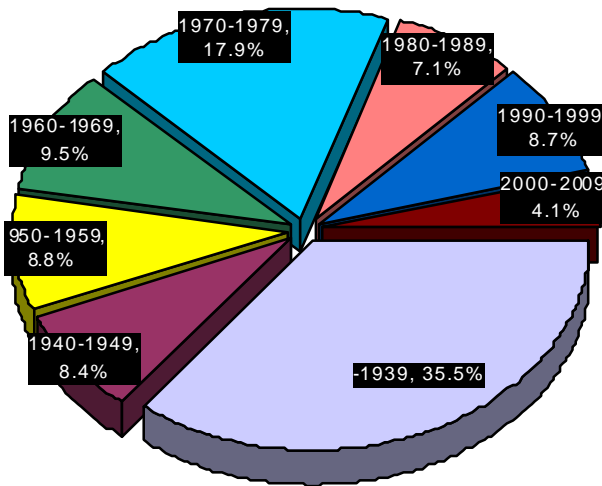
It should be noted that projected populations are based upon the historic and current population trends of the county. When analyzing population projections, potential socioeconomic variables are not considered. The projections are based strictly on statistics such as past population trends, migration patterns and current tax data. The above listed population projections do not consider all of the economic and sociological forces effecting a county's growth. These variables alone are quite difficult to project or forecast and then to apply them to population projections is even more difficult. A number of assumptions have to be made and the margin of error at each level of application increases. Factors that may affect population estimates include business expansions or closures, new housing developments, or a rise or decrease in the cost of living. Factors that should be monitored in future years that may have an impact upon the county's population include the potential for additional commercial growth near the casino which may lead to additional job and housing growth. Additionally, as the Sioux Falls metropolitan area continues to grow and expand portions of western Lyon County should consider the potential for additional rural residential growth as a residual affect from the overall metropolitan area growth. There are many reasons why someone working in Sioux Fall would want to live in western Lyon County, including property tax structure, land value, property sales pricing, and simply the fact that some people want to live close to a metropolitan area, but yet have the atmosphere of the country.

## Chapter 9. HOUSING ANALYSIS

Lyon County has experienced varying housing trends over the past decade. By the end of the 1990s decade and the early 2000s, the economy was robust as was the housing market in Lyon County. New acreages were being built, rural housing subdivisions were platted and new housing units constructed. The first half of the 2000 decade showed promising signs for a strong period of housing in Lyon County. However, with the onset of a downturn in the national economy, the local economy (including new housing starts) followed regional and national trends since 2008. When the economic recession grew in 2009 many developers, contractors, builders, homeowners and even farmers experienced the effects from the economic slowdown. This was also reflected in the housing market. Recently, in 2011-2012, the economy and unemployment trends have begun to rebound somewhat. The first signs of improved market conditions, especially regarding the housing market, have been in the agricultural sector. With increasing land values throughout Lyon County, Iowa, and much of the cornbelt region of the Midwest, the strong agricultural economy has helped to keep the housing market in check and continuing strong.

### AGE OF HOUSING

Figure 29 - Age of Housing Units in Lyon County



The graph and associated table below compare data from Lyon County and Iowa regarding the age of housing units. This data was compiled from 2010 census data. According to the information presented, there were 198 new housing units constructed in Lyon County between 2000 and 2009, representing 4.1% of the county’s housing stock. The 2000 decade represents the smallest percentage of new housing units built. Similarly, Iowa statistics show a total of 134,482 new housing starts between 2000 and 2009, representing more than 10% of Iowa’s housing stock. When compared to the State of Iowa, Lyon County has an older housing stock, which is also representative of the surrounding rural northwest Iowa counties. Approximately 46% of Iowa’s housing is more than 50 years old, compared to almost 53% in Lyon County.

Table 14 - Age of Housing Units

Time period	LYON COUNTY		IOWA	
	No. of Units	% of Units	No. of Units	% of Units
2000 to	198	4.1%	134,482	10.1%
1990 to	422	8.7%	144,146	10.9%
1980 to	343	7.1%	99,616	7.5%
1970 to	862	17.9%	202,464	15.2%
1960 to	458	9.5%	140,595	10.6%
1950 to	424	8.8%	148,346	11.2%
1940-1949	407	8.4%	82,686	6.2%
1939 or	1,712	35.5%	374,967	28.3%
Total	4,826	100.0%	1,327,302	100.0

**HOUSING VALUATIONS**

Lyon County's housing stock is comprised of a variety of housing styles and values. 2010 census figures show 3,669 owner-occupied housing units countywide. In order to understand the current housing stock; it is useful to identify changes in the housing market, values and vacancy. According to 2010 census data, the largest category of housing values was in the \$50,000 to \$99,999 range, accounting for more than 36% of the housing stock. Although Lyon County's median housing value lags behind the Iowa median value by approximately 18 percent, it is still promising to see Lyon County's median housing value increase by 53% since 2000.

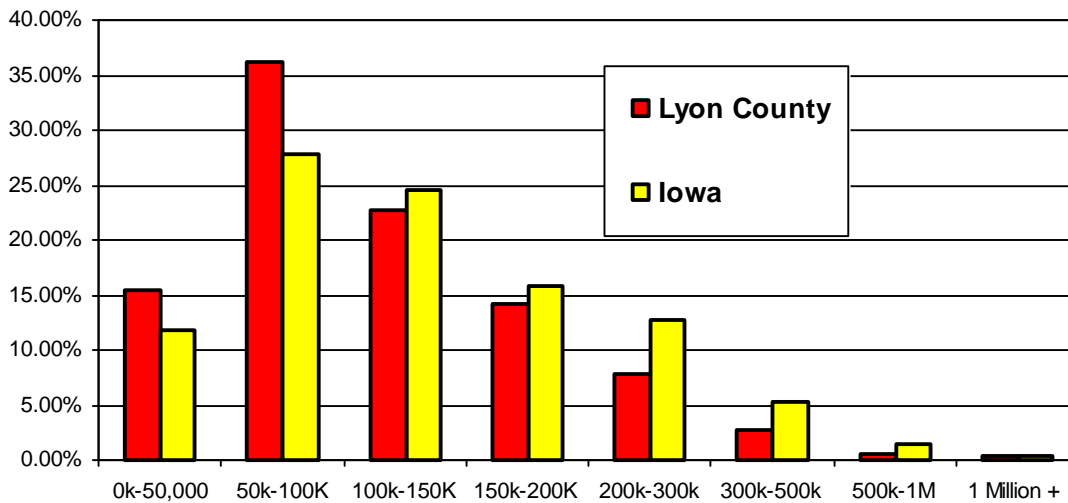
Table - 15

<b>Valuations of 3,576 Owner-Occupied Housing Units – Lyon County, 2010</b>									
Value in 2010	<\$50,000	\$50,000-\$99,999	\$100,000-\$149,999	\$150,000-\$199,999	\$200,000-\$299,999	\$300,000-\$499,999	\$500,000-\$999,999	\$1 million or more	Median value (\$)
# Units	554	1,296	810	508	278	95	20	15	\$97,900
% Units	15.5%	36.2%	22.7%	14.2%	7.8%	2.7%	0.6%	0.4%	

*Source: U.S. Census Bureau, 2006-2010 American Community Survey*

According to the statistics presented in the above table and the figure below, Lyon County appears to have a higher percentage of housing units below \$100,000 in comparison to the state. In addition, Lyon County has a lower percentage of housing units in excess of \$100,000 when compared to Iowa.

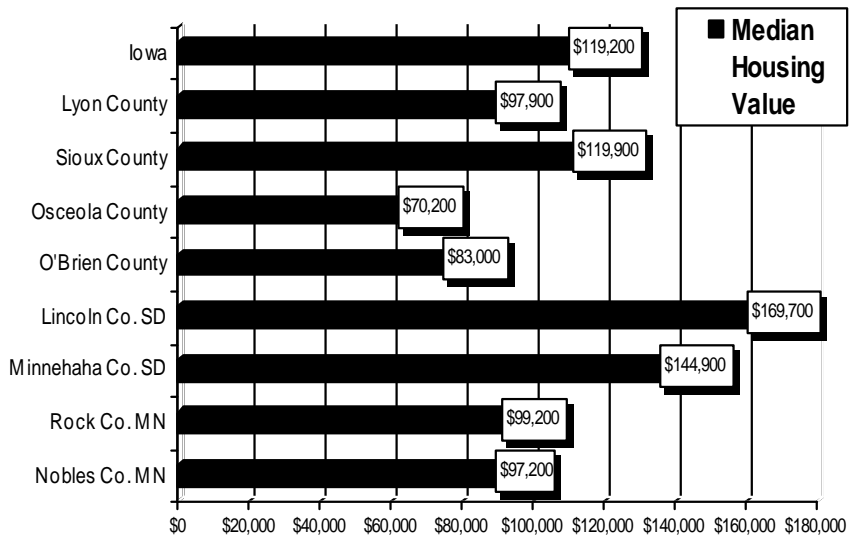
Figure 30 - Housing Valuations of Owner-Occupied Housing Units, 2010



Another method of defining the value of housing is to take a comparative look at the median housing values of other counties in the region. The following chart shows a comparison of median housing values for the State of Iowa and seven (7) counties adjacent to Lyon County's borders, including two counties in Minnesota and two in South Dakota. Lyon County has a median housing value of \$97,900. This figure is 17.8% less than the state's overall median housing value of \$119,200. Although Lyon County's median housing value is less than Iowa's average median

average median housing value, in comparison to the surrounding eight counties, Lyon County ranks only behind Sioux County's housing value. The figures presented in Lincoln and Minnehaha Counties in South Dakota are representative of the newer housing being built within the Sioux Fall metropolitan area. Aside from the high housing values in the two neighboring South Dakota counties, Lyon County's housing value is comparable to the neighboring Minnesota counties to the north counties to the north of Lyon. These statistics just prove that sometimes comparisons with the State of Iowa don't reveal the entire picture, and sometimes you need to take a look at Lyon County's presence within a smaller region of northwest Iowa, which is more similar to Lyon County.

Figure 31 - Comparative Median Housing Values, 2010



**NORTHWEST IOWA REGIONAL HOUSING TRUST FUND**

Lyon County is a participating member of the Northwest Iowa Regional Housing Trust Fund, Inc., a non-profit corporation whose mission is to improve the quality of housing for low and moderate income people in northwest Iowa. The six (6) member counties of the housing trust fund include Buena Vista, Emmet, Lyon, O'Brien, Osceola, and Sioux Counties. The 13 member Board of Directors consists of two representatives from each member county; one from the private sector and one from the public or government sector. The Northwest Iowa Planning & Development Commission is also represented on the board, since NWIPDC is the administrative agency for the trust fund. Housing improvement loans and grants are approved by the board members of the respective counties.



Since 2010, Lyon County participants of the regional housing trust fund have received \$5,050 in grant funds have been spent on households of less than 30% area median income (AMI). An additional, \$27,577 in grant funds were spent to assist households within the 31% to 80% AMI. A total of \$32,627 in grant assistance was made directly to Lyon County homeowners for assistance in making repairs to their homes. Overall, the operation of the Northwest Iowa Regional Housing Trust Fund is only in its second year of funding; and it has been well received by the citizens of Lyon County and Northwest Iowa. During 2011, 46 applications were received for housing assistance. 34 income eligibility determinations were completed and 27 loans were processed within the entire six county region. A total of \$192,991 was loaned across the six participating



participating counties in the trust fund, with \$135,000 being forgivable loans and \$57,991 being repayable over five years. The total project’s cost of improvements was \$208,579. Applications for housing assistance from the regional housing trust fund may be directly downloaded from the NWIPDC website at [www.nwipdc.org](http://www.nwipdc.org) and additional information may be obtained by contacting the NWIRHTF at 217 W. 5<sup>th</sup> Street, P.O. Box 1493, Spencer, Iowa 51301.

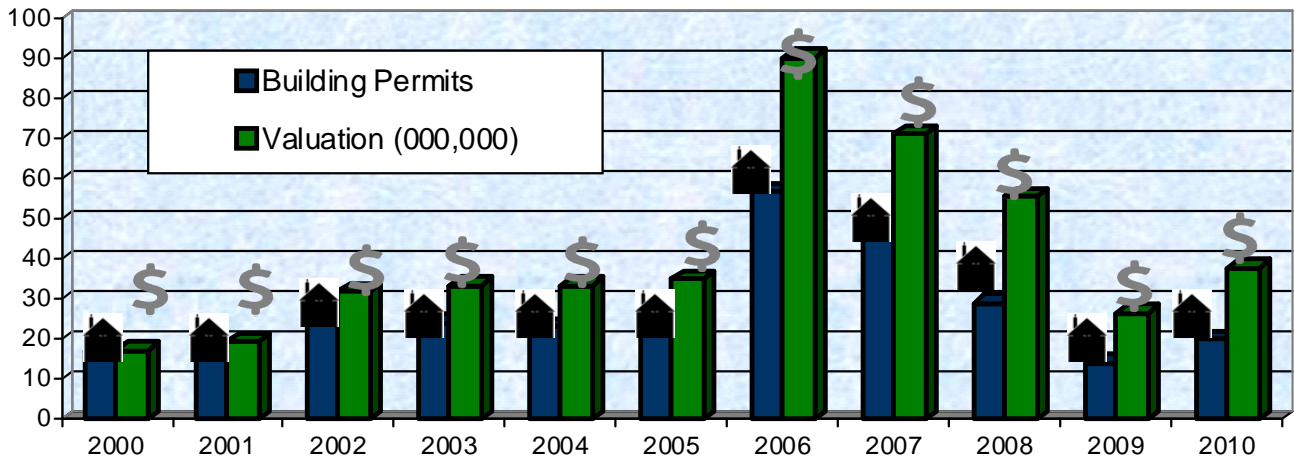
**BUILDING PERMITS**

According to statistics from the U.S. Census Bureau, a combined 296 building permits were issued for the construction of new privately-owned residential housing units over the past decade (2000-2010). During this period, the total estimated valuation of new housing units constructed in Lyon County accounts for more than \$45.1 million. The following statistics are for new construction of residential housing units only and does not include the building permits or valuations for the construction of new commercial/industrial or agricultural related buildings and related structures.

Table 16 - 2000 to 2010 Privately Owned Residential Housing Building Permits, Lyon County, Iowa

Year:	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Permits:	17	17	28	24	23	21	57	46	29	14	20
Value:	\$1.71	\$1.91	\$3.16	\$3.34	\$3.33	\$3.49	\$9.02	\$7.13	\$5.56	\$2.64	\$3.77
(in Millions)											

Figure 32 - Residential Housing Building permits in Lyon County, 2000-2010



Source: U.S. Census Bureau of the Census, Building Permits, 2010

**HOUSING OCCUPANCY**

The two tables on the following page indicate occupancy and vacancy rates according to 2010 census data. Lyon County maintains a lower percentage of total vacant housing units, in addition to a lower owner-occupied vacancy percentage, in comparison to the State of Iowa. Conversely, Lyon County shows a higher renter vacancy rate of 10.7% versus that of the statewide average of 8.5%. The vacancy rate for single family housing in Lyon County is at 8.4% according to 2010 census records. This percentage varies greatly when looking at the difference between the vacancies of owner occupied housing units and rental units. The owner vacancy rate is only 1.7%, which indicates a very tight housing market and shows signs of housing demand within the

county. The rental vacancy rate in Lyon County is 10.7%, which is higher than expected for vacant rental units. However, rental units are typically capable of carrying higher vacancy rates based upon the high rate of turnover in tenants. According to real estate professionals, a vacancy rate of near 5 percent is considered healthy for both buyers and sellers. The number of seasonal or recreational vacant housing units appears to have little effect on the overall housing need in Lyon County.

Table - 17

<b>Lyon County Vacancy Status – 2010</b>											
	TOTAL HOUSING UNITS	OCC. HOUSING UNITS	TOTAL VACANT UNITS	VACANT Units for Rent		VACANT Units for Sale		VACANT Seasonal and Recreation Use		Owner Vacancy Rate	Renter Vacancy Rate
				#	%	#	%	#	%		
Lyon County	4,848 100%	4,442 91.6%	406 8.4%	100	2.0%	82	1.7%	31	0.6%	1.7%	10.7%
<i>Note: All remaining vacant properties are classified as “other vacants” and account for 193 structures or 4.0% of the total housing stock.</i>											

Source: U.S. Census Bureau, 2010 Census

Table - 18

<b>Iowa Vacancy Status – 2010</b>											
	TOTAL HOUSING UNITS	OCC. HOUSING UNITS	TOTAL VACANT UNITS	VACANT Units for Rent		VACANT Units for Sale		VACANT Seasonal and Recreation Use		Owner Vacancy Rate	Renter Vacancy Rate
				#	%	#	%	#	%		
Lyon County	1.336M 100%	1.221M 91.4%	114,841 8.6%	33,615	2.5%	23,960	1.8%	21,020	1.6%	2.0%	8.5%
<i>Note: All remaining vacant properties are classified as “other vacants” and account for 36,246 structures or 2.7% of the total housing stock.</i>											

Source: U.S. Census Bureau, 2010 Census

One interesting trend in Lyon County housing statistics is the higher percentage of unaccounted or “all other vacant” structures in the county. After eliminating the vacant rental units, vacant units for sale and the vacant seasonal or recreation units, Lyon County is still left with nearly 200 housing structures or approximately 4% of its housing stock listed as vacant. This may be indicative of older housing stock or abandoned housing not suitable for occupancy.

**HOUSING UNIT PROJECTIONS**

The average household size in Lyon County in 2010 was 2.57 persons per household. This figure is projected to continue to decline over the next 30 years. The fact that household size is decreasing in Lyon County is a trend taking place throughout the region, state, and nation. Using average household size and population projections one can predict future housing needs for a given area. Between 1990 and 2000, Lyon County's total housing units increased from 7,659 to 7,828 (+2.2%). Since the overall population in Lyon County decreased slightly during this time period, the gains in housing units can most likely be attributed to factors such as higher divorce

rates, the average age of married persons increasing and longer life expectancies. Additionally, the economic boom of the late 1990s decade afforded many people the opportunity to build new houses with declining interest rates and a generous lending market, which may also have contributed to the increase in housing units by 2000.

Table 19 - Projected Housing Units needed in 2020, 2030 and 2040

Year	2020	2030	2040
Projected Population	11,263	11,013	10,769
Projected Household Size	2.37 pph	2.32 pph	2.29 pph
Units Needed For Population Base	4,753	4,747	4,703
Maintain a 5% Vacancy Rate	238	238	236
Average Demolition/Removal of 1 House per year	10	20	30
Total Housing Units Needed	5,001	5,005	4,969
Current Housing units in 2000	4,848	4,848	4,848
<b>Increase From 2010</b>	<b>153</b>	<b>157 (+4)</b>	<b>121 (-36)</b>

Source: U.S. Census Bureau, 2010 Census, 2008 & 2012 Woods & Poole, Inc. - projected population & household size

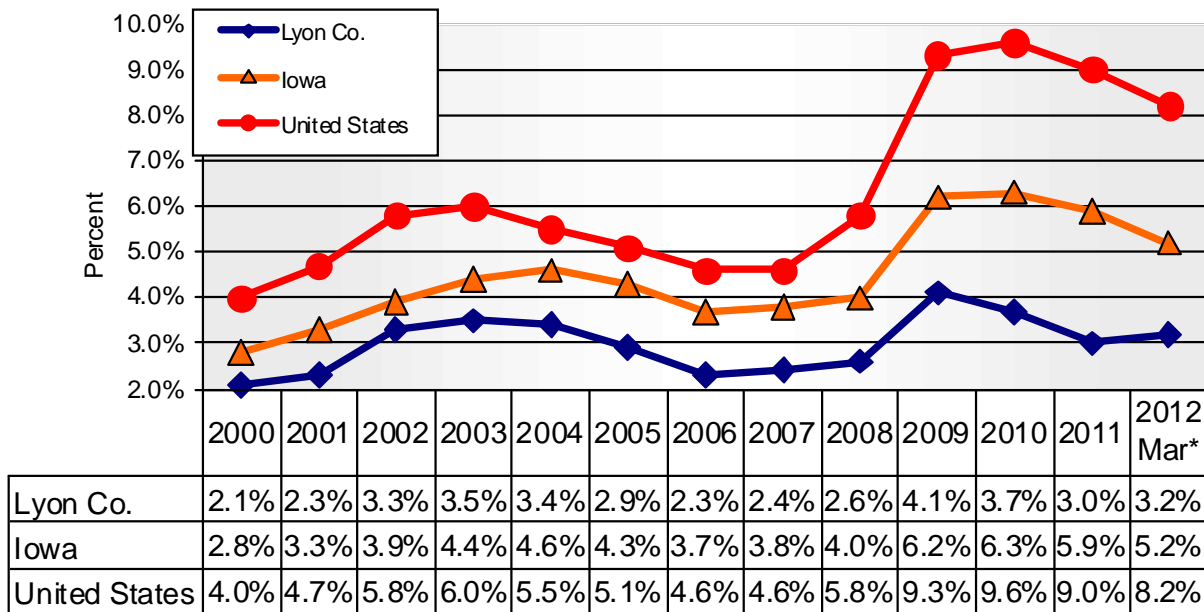
## Chapter 10. OCCUPATIONAL & EMPLOYMENT DIVERSITY

An analysis of past and present employment and occupational trends is necessary to determine patterns, trends, and potential employment and economic growth expected in the future. Employment and job growth or loss has become synonymous with economic development, especially considering the state of the local job market and overall economy since 2008. Employment growth or loss is considered by many as one of the most critical aspects of economic development. The economic base of any county is comprised of two components, employment and income. In this section, Lyon County’s employment and occupations are examined and compared to those of Iowa. Employment analysis provides important indicators as to the relative health of the county and potential growth in each of the land use categories.

### EMPLOYMENT TRENDS

Looking at the overall trends in unemployment for Lyon County, Iowa and the United States since 2000, all three governmental bodies experienced similar peaks and valleys in unemployment over this 10 year trend. However, unemployment within Lyon County remains the overall lowest. The following chart clearly shows the spike in unemployment for all three governmental units in 2009 resulting from the economic recession beginning in the fall of 2008. With all other factors considered, Lyon County has weathered the 2008-2010 economic recession fairly well considering the county’s unemployment jumped 1.5 percentage points from 2.6% to 4.1%. In comparison, the national unemployment trend jumped 3.5 percentage points from 5.8% to 9.3%. The economic impact from the downturn in the economy was especially felt at the local, state and national levels in 2009 and continuing into 2010.

Figure 33 - Unemployment rates for Lyon County, Iowa and United States, 2000-2012.



Source: Iowa Workforce Development, 2012 Labor Market Information; \*March 2012 is most current data

The number of unemployed persons in Lyon County increased steadily between 2000 and 2003, but remained low in consideration of regional and national trends. One can see how labor trends were coming off all-time low unemployment rates of 1.5-2.0% achieved in 1999-2000. However, this trend was short lived and unemployment climbed through 2004. From 2004-2007 all reported unemployment dropped by nearly a full percentage point. This lasted until the national economic recession hit at the end of 2008 and unemployment levels reflect the downturn in the economy during 2008-2010. Recently, unemployment levels have begun to decline again, especially since the latter part of 2010 and into 2011.

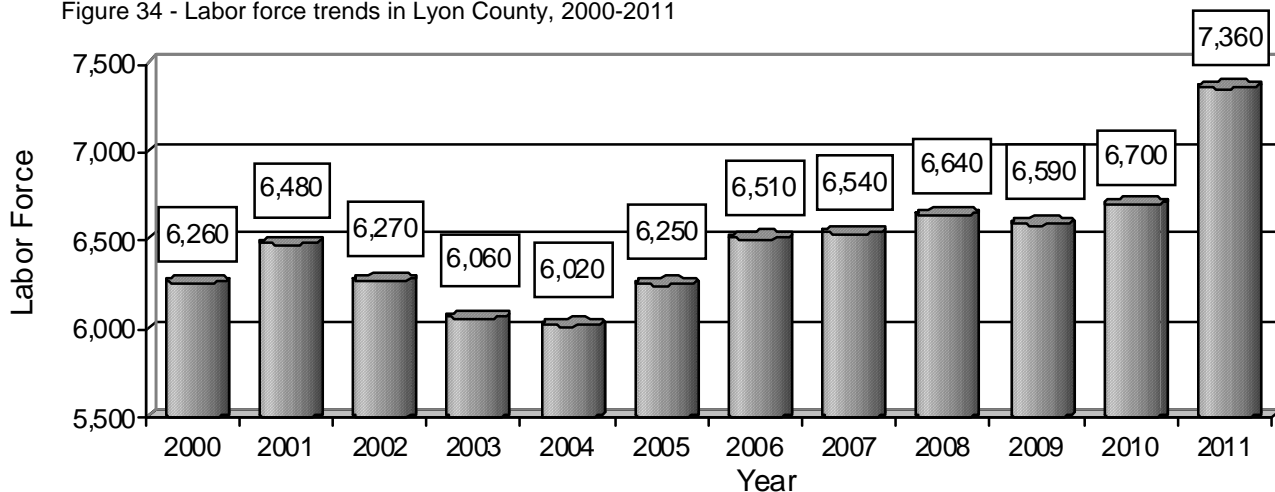
Lyon County, similar to other counties across northwest Iowa, experiences fluctuating and seasonal unemployment highs and lows. The primary factor driving seasonal unemployment in Lyon County is attributed to the agricultural and construction trades. Both of these industries rely upon weather for their ability to complete work. Looking at the monthly unemployment rates for Lyon County in 2011 shows the fluctuations in unemployment. In February, unemployment peaked at 3.9%. Unemployment declined through spring and fall, dropping the most in April and September, indicating the influence the agricultural and construction trades has on the local unemployment rates. Unemployment once again increased in December mostly due to seasonal layoffs due to the weather.

Table 20 - Lyon County 2011 Monthly Unemployment Trends

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
Unemployment	3.8%	3.9%	3.6%	3.1%	2.8%	2.9%	2.8%	2.9%	2.6%	2.4%	2.2%	2.7%
Labor Force	6,780	6,660	6,790	6,900	7,360	7,760	7,660	7,600	7,640	7,720	7,620	7,840

According to Iowa Workforce Development data, Lyon County’s labor force varied from a low of 6,660 workers to a high of 7,840 persons in the workforce during 2011. This increase of 1,180 workers represents a 17.2% gain in the county’s overall labor force. This is compared to 6,260 in 2000 and 6,250 persons in 2005. Between 2004 and 2011, Lyon County increased its overall labor force by 22.3 percent. With an overall growing workforce in Lyon County, this is a good indicator of new and increasing jobs being created and providing opportunities for employment and residency. These labor force figures are based on the yearly average.

Figure 34 - Labor force trends in Lyon County, 2000-2011

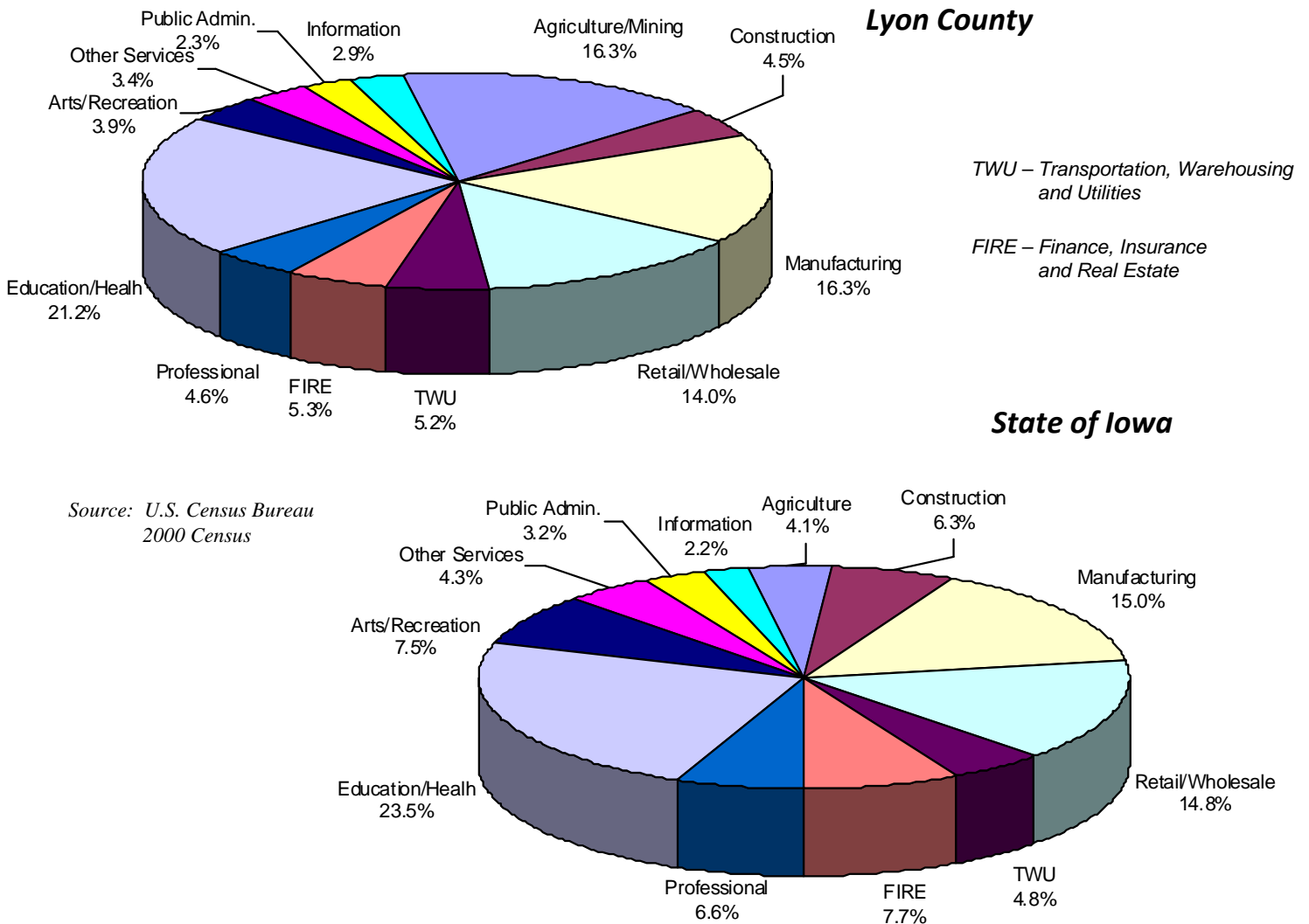


Source: Iowa Workforce Development, Labor Market Information, 2012

**TRENDS IN EMPLOYMENT BY INDUSTRY**

Comparisons of employment and industry sectors between Lyon County and the State of Iowa can provide county leaders with information relative to the economic strengths of Lyon County. Below are two pie charts which represent employment trends by industrial employment sectors for both Lyon County and the State of Iowa.

Figure 35 - Employment by Industrial Sector, Lyon County & Iowa, 2010



The industry employing the most people in Lyon County includes those working in the educational, healthcare and social services fields. This is followed by the agriculture/mining and manufacturing sectors with 16.3% of the workforce each. When compared to the state, the education, healthcare and social services is slightly smaller than the state average. Conversely, Lyon County’s agricultural and mining employment sector is nearly four times larger than the state average. These numbers are indicative of the agricultural employment and economic impact within the county. Lyon County’s workforce in the manufacturing and retail/wholesale trades shows similar trends to statewide averages.



Below is census data comparing employment changes between 1990 and 2010 in Lyon County. This data indicates, to some degree, how industry trends have varied over the past 20 years.

Table 21 - Employment trends by Industrial Sector, Lyon County, 1990, 2000, 2010

	<b>1990</b>	<b>2000</b>	<b>2010</b>
Agriculture and Mining	23.5%	12.8%	16.3%
Construction	4.5%	6.7%	4.5%
Manufacturing	15.7%	18.3%	16.3%
Retail/Wholesale Trade	17.6%	14.0%	14.0%
TWU*	4.7%	5.2%	5.2%
Information	NA	2.3%	2.9%
FIRE**	4.3%	4.8%	5.3%
Professional/Management	6.3%	4.2%	4.6%
Education/Health/Social Services	15.6%	19.5%	21.2%
Arts/Entertainment/Recreation	0.5%	4.1%	3.9%
Other Services	5.2%	5.9%	3.4%
Public Administration	2.0%	2.1%	2.3%
<b>TOTAL</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

\*Transportation, Warehousing, Utilities \*\*Finance, Insurance, and Real Estate

Source: U.S. Census Bureau, 2000 Census and 2006-2010 American Community Survey 5 year Estimates

While the agricultural and mining industry has experienced the largest decline in employment over the past 20 years, this employment sector still remains one of the top three industries in Lyon County. Since 1990, the agricultural industry has shrunk from 23.5% of all persons employed in Lyon County down to 16.3%. Similarly, the retail and wholesale trade sectors also experienced a decline of 3.6% of this employment sector over the past 20 years. Other industrial sectors that continue to experience a declining labor force in Lyon County include those employed in transportation, warehousing or utilities; professional management employees and those classified as “Other Services”. With that said, there are several industrial sectors experiencing increases in growth in the labor force. For instance, the education/health and social services industry increased from 15.6% of the total workforce to 21.2% in 2010. Additionally, those employed in the arts, entertainment and recreation industry experienced an increase from 0.5% to 3.9% by 2010. The manufacturing industry in Lyon County boasted a minor increase in employment from 15.7% in 1990 to 16.3% in 2010. The public administration employment sector along with finance, insurance & real estate also experienced growth in their respective employment sectors over the past 20 years. Overall, these trends indicate an increasing number of employment opportunities exist in Lyon County. The overall labor force is experiencing growth in several industrial sectors.

## LOCATION QUOTIENT

Areas of local industrial specialization within Lyon County may be discovered by comparing the composition of employment in Lyon County to a larger reference region. For purposes of this plan, this will be analyzed utilizing the Location Quotient method. Lyon County’s employment will be

will be compared to the employment composition of Iowa with the national employment composition being the base reference. A relatively high (or low) percentage of employment in a sector compared to the reference region may reflect a competitive advantage (or disadvantage) in that sector. Location quotients can indicate if Lyon County is producing more than needed for its own use and therefore selling excess to other markets. Location Quotients also indicate which employment sectors or types of businesses in Lyon County are not accommodating the local needs and may be considered a potential source of economic “leakage” from the county. A location quotient is simply a ratio comparing the local percentage of employment in a sector to the national average percentage of employment in that sector. A location quotient greater than one (1) suggests a regional concentration of employment in that sector, whereas a location quotient of less than one (1) suggests a regional disadvantage in that sector.

$$\text{Location Quotient} = \frac{\% \text{ of Local Employment in Lyon County}}{\% \text{ of Local Employment in United States}}$$

In the following table, the percentage of employment by sector for Lyon County and Iowa are contained in columns 1 and 2. These values are used to derive county and state location quotients for each sector. The location quotients are displayed in columns 3 and 4. It may be informative to compare the county’s location quotients to statewide values by sector. For example, if the county’s location quotient is greater than one (1) and it exceeds the statewide average, the county may have a regional, as well as a national, competitive advantage in that sector.

Table 22 - Employment by Industry: Percentage Values and Location Quotients, 2012

	Percent of Employment		Location Quotient	
	Lyon County	Iowa	Lyon County	Iowa
Agriculture, forestry, fishing, and hunting	(ND)	1.35%	(ND)	1.25
Mining	(ND)	0.18%	(ND)	0.29
Utilities	(ND)	0.56%	(ND)	1.09
Construction	3.79%	5.13%	0.73	0.99
Manufacturing	18.30%	16.72%	1.69	1.55
Wholesale trade	9.49%	5.50%	1.84	1.07
Retail trade	11.22%	14.41%	0.82	1.06
Professional and technical services	4.35%	3.53%	0.62	0.50
Management of companies and enterprises	(NC)	1.06%	(NC)	0.61
Administrative and waste services	1.25%	5.53%	0.18	0.79
Educational services	0.66%	2.10%	0.28	0.91
Health care and social assistance	15.76%	14.62%	1.03	0.96
Transportation and warehousing	(ND)	4.22%	(ND)	1.14
Information	5.92%	2.39%	2.33	0.94
Finance and insurance	4.61%	7.37%	0.89	1.43
Real estate and rental and leasing	0.28%	1.06%	0.16	0.59
Arts, entertainment, and recreation	0.66%	1.62%	0.37	0.90
Accommodation and food services	5.86%	9.17%	0.56	0.88
Other services, except public administration	3.92%	3.50%	0.96	0.85

(ND) = Not Disclosable (NC) = Not Calculable

Source: U.S. Department of Labor, Bureau of Labor Statistics - <http://data.bls.gov/>

## OCCUPATIONAL EMPLOYMENT PROJECTIONS

Iowa Workforce Development compiles current levels of employment for workforce regions across the state and projects the level of anticipated employment in 10 years for each of the classifications. The employment projection for 2018 is only available on a regional basis. The data for Region 3&4 includes the counties of Lyon, Sioux, Osceola, O'Brien, Dickinson, Clay, Buena Vista, Palo Alto, Emmet and Kossuth. The western portion of this region (Region 4) which is comprised of Lyon, Sioux, Osceola and O'Brien counties constitutes the primary labor shed for Lyon County. Therefore, the employment projections presented below should provide useful data in regards to the employment trends and projected percentages of anticipated growth in Lyon County's labor shed.

Table 23 - Iowa Workforce Development Region 3&4 Employment Projections, 2008-2018

Industry Description	2008 Est. Employment	2018 Projected Employment	Total Growth	Percent Change
Management Occupations	10,945	10,925	-20	0.0%
Business and Financial	1,910	2,225	315	1.6%
Computer/Mathematics	355	370	15	0.4%
Architecture/Engineering	580	635	50	0.9%
Physical/Social Science	630	710	80	1.3%
Community and Social Services	950	1,060	110	1.2%
Education & Library	4,980	5,640	660	1.3%
Arts & Entertainment Sports	1,000	1,105	105	1.1%
Healthcare Practitioners	3,130	3,650	520	1.7%
Healthcare Support	2,670	3,310	635	2.4%
Protective Services	540	570	30	0.6%
Food Preparation/Serving	5,890	6,330	440	0.7%
Building and Grounds	2,660	2,825	165	0.6%
Personal Care and Service	2,210	2,510	300	1.4%
Sales/Related Occupations	7,485	7,830	345	0.5%
Office and Administrative Support	9,600	10,150	550	0.6%
Farm, Fishing & Forestry	2,415	2,395	-20	-0.1%
Construction/Extraction	3,805	4,170	360	0.9%
Installation/Maintenance Repair	3,365	3,640	275	0.8%
Production Occupations	10,785	11,075	285	0.3%
Transportation/Moving	5,410	5,700	290	0.5%

Source: Iowa Workforce Information Network (IWIN), Iowa Workforce Development

## COMMUTING PATTERNS

According to the 2000 census data, the average commute time for Lyon County residents was 18.4 minutes. While 73 percent of county residents drove themselves back and forth to work, nearly 11 percent carpooled, another 4.8 percent walked to work and another 10.4 percent of Lyon County residents work at home. These statistics indicate that although most county residents are still driving to work, the moderate commute time suggests most residents are still working either in Lyon County or surrounding counties.

## Chapter 11. ECONOMIC DEVELOPMENT TRENDS

An analysis of past and present economic trends is necessary to determine patterns, trends, and amount of potential economic growth expected in the future. Economic development has become synonymous with community development in Iowa. Many consider economic development one of the most critical aspects of community development. The economic base of any county is comprised of two components, employment and income. Economic analysis provides important indicators as to the relative health of the county and potential growth in each of the land use categories.

### WAGE & INCOME DISTRIBUTION

As opportunities for employment are presented in Lyon County, the county and the cities within Lyon County will realize benefits including a greater tax base and potential for an increase in population. Studying the income distribution of a county can indicate overall wealth and subsequent purchasing power, providing insight into the relative economic health of Lyon County. One way of analyzing income is to examine the median income level of the county. The 2010 median income in Lyon County is \$49,506 for households and \$57,348 for families. When comparing median income figures to Iowa, Lyon County is slightly higher than the state average of household income but lower than average in terms of median family income. Below is a comparative listing of median household and family incomes for Lyon County and adjacent counties.

Table 24 - Household and Family Income Comparison of Lyon County & Surrounding Counties, 2010

	2010 Median Household Income	2010 Median Family Income	2010 Median Nonfamily Income
<b>State of Iowa</b>	<b>\$48,872</b>	<b>\$61,804</b>	<b>\$27,539</b>
<b>Lyon County</b>	<b>\$49,506</b>	<b>\$57,348</b>	<b>\$25,631</b>
Osceola County	\$43,889	\$58,286	\$22,379
O'Brien County	\$44,018	\$59,391	\$23,677
Sioux County	\$51,557	\$60,043	\$24,661
Rock Co., MN	\$45,411	\$58,147	\$25,143
Nobles Co., MN	\$43,040	\$52,356	\$22,799
Minnehaha Co., SD	\$51,799	\$64,645	\$30,737
Lincoln Co., SD	\$67,365	\$75,231	\$36,893

*Source: U.S. Census Bureau, 2006-2010 American Community Survey*

Along with age and population figures, it is important to look at income distribution to examine what the residents of Lyon County are earning in wages and salaries. This information will help determine the amount that residents can afford for current and future housing and living expenses, along with potential purchasing power. The following table shows household income distribution for Lyon County residents according to 2010 census data.

Table 25 - Lyon County Household and Family Income Distribution

\$ In Income	# Households	% Households	# of Families	% of Families
Less than \$10,000	137	3.1%	8	0.3%
\$10,000-14,999	211	4.8%	64	2.0%
\$15,000-24,999	520	11.9%	250	7.8%
\$25,000-34,999	489	11.2%	262	8.2%
\$35,000-49,999	851	19.5%	648	20.3%
\$50,000-74,999	1,170	26.8%	1,034	32.4%
\$75,000-99,999	619	14.2%	592	18.5%
\$100,000-149,999	258	5.9%	226	7.1%
\$150,000-\$199,999	83	1.9%	81	2.5%
\$200,000 or more	27	0.6%	27	0.8%
<b>Total Households</b>	<b>4,365</b>	<b>100.0%</b>	<b>3,192</b>	<b>100.0%</b>

Source: U.S. Census Bureau, 2006-2010 American Community Survey

Iowa Workforce Development compiles data on current wage levels for several occupations and industries. The wage survey data in the following table is reported for workforce regions in Iowa. This data is representative of a 9 county average across northwest Iowa, of which Lyon County is included within this region. The data should be representative of the trends in wages represented in the following table.

Table 26 - Iowa Workforce Development Wage Survey for Region 3&4 and Iowa, 2011

<b>Occupation Description</b>	<b>2011 Region 3&amp;4 Mean Annual Wage</b>	<b>2011 Iowa Mean Annual Wage</b>
Management Occupations	\$74,446	\$87,093
Business & Financial Operations	\$50,711	\$57,052
Computer & Mathematical	\$54,209	\$64,677
Architecture & Engineering	\$57,349	\$66,015
Life, Physical & Social Science	\$44,576	\$54,578
Community and Social Services	\$30,039	\$37,412
Education, Training & Library	\$35,321	\$43,775
Arts, Design, Entertainment & Sports	\$28,034	\$38,469
Healthcare Practitioners & Technical	\$62,635	\$61,847
Healthcare Support	\$23,864	\$25,981
Protective Service	\$37,480	\$37,760
Food Preparation and Serving	\$19,460	\$19,744
Building & Grounds Maintenance	\$22,747	\$24,140
Sales and Related Occupations	\$30,361	\$32,677
Office and Administrative Support	\$27,497	\$31,269
Construction and Extraction	\$34,619	\$40,057
Installation, Maintenance & Repair	\$39,624	\$40,256
Production Occupations	\$31,391	\$32,531
Transportation & Material Moving	\$30,680	\$31,592

Source: Iowa Workforce Development, Iowa Wage Surveys

**RETAIL TRADE ANALYSIS**

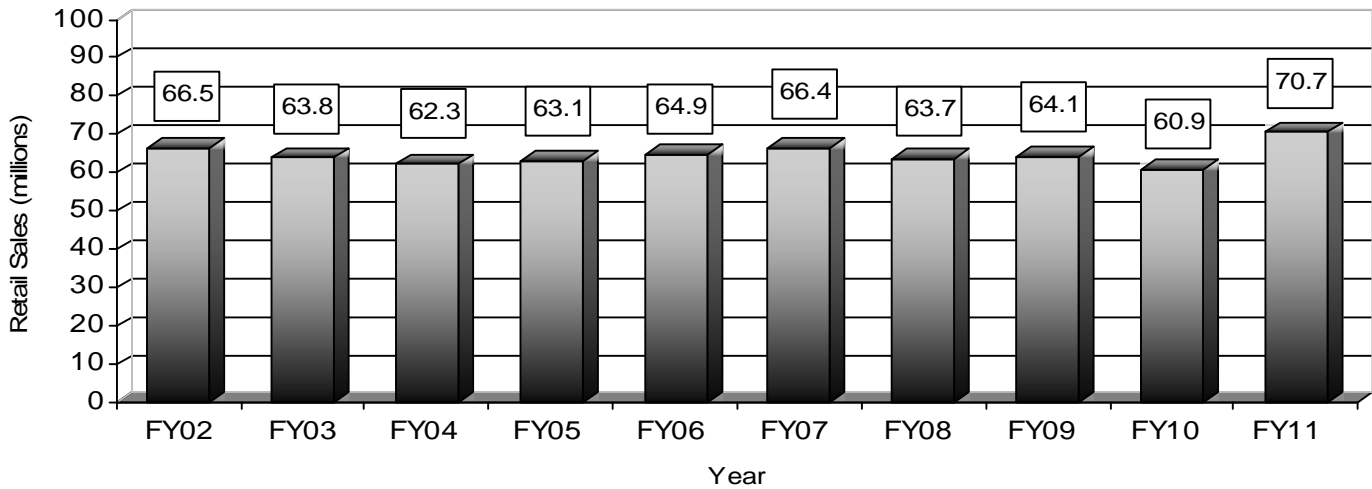
A look into the county’s retail trade statistics translates into how successful the retail and sales industries are to Lyon County. This data also translates into the purchasing power of the county’s residents. The retail trade trends are made available from the Iowa State University Extension, Regional Capacity Analysis Program or RECAP. The data presented in this retail trade analysis looks at comparative 2010 and 2011 data between Lyon County, Iowa and peer counties of Lyon County. The entire FY 2011 Retail Sales Analysis & Report for Lyon County may be seen in an appendix at the conclusion of this plan. Characteristics of retail activity are often indicative of the overall economic vitality of the county.

Table 27 - Retail Trade Overview for Lyon County, 2010-2011

	2010	2011	%Change 2010-2011
<b>Real retail sales (\$ millions)</b>			
Lyon County	60,884,156	70,649,216	16.0%
State of Iowa	-	-	-
<b>Real Per capita retail sales (\$)</b>			
Lyon County	\$5,263	\$6,130	16.5%
State of Iowa	\$10,689	\$10,757	0.6%
<b>Real Retail sales per business</b>			
Lyon County	\$144,704	\$167,019	15.4%
State of Iowa	\$370,602	\$384,414	3.7%

Source: FY 2011 Retail Sales Analysis & Report for Lyon County, Iowa; ISU RECAP, 2012

Figure 36 - Retail Sales and Per Capita Sales for Lyon County, FY02-FY11



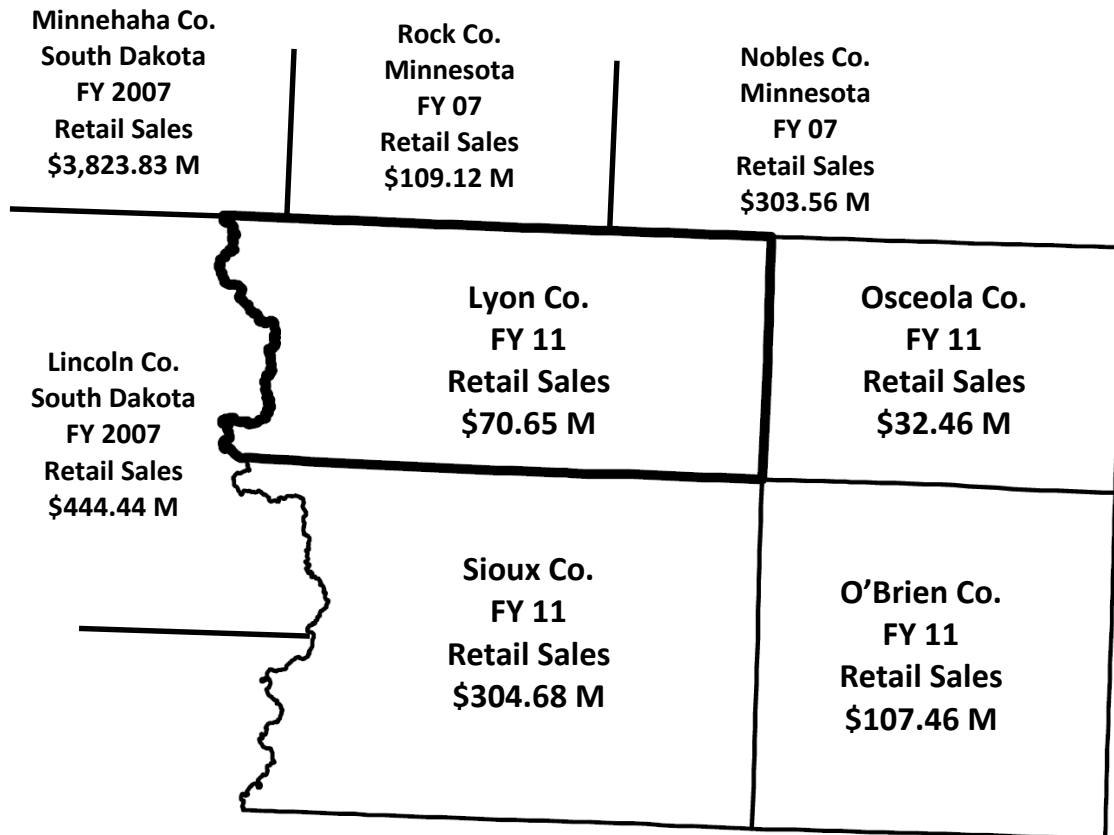
Source: This chart provided courtesy of the FY 2011 Retail Sales Analysis & Report for Lyon County

According to a 2008 retail trade analysis provided by Iowa State University, Regional Capacity Analysis Program, Lyon County experienced retail sales of nearly 71 million during 2011. This figure has increased by roughly 4.2 million or 6.3 percent since FY 2002. Retail sales exceeded \$70 million for the first time in FY 2011, an increase of more than 16 percent from the previous year. This may be directly attributed to the fact that the Grand Fall Casino and Resort opened for



business in May 2011. It will be interesting to see what the five, ten and twenty year retail sales figures are for Lyon County to determine the direct and indirect retail economic impact within the county and region. .

Figure 37 - 2007-2011 Total Retail Sales Comparison of Lyon County and surrounding counties



Lyon County has significantly less in annual retail sales in comparison to its surrounding counties. Only Osceola County, Iowa, which has fewer residents, has a smaller annual retail trade in comparison with Lyon County. It is clear to see the economic impact and retail draw of the metropolitan area of Sioux Falls, SD in Minnehaha and Lincoln counties. The economic draw from the metropolitan area along with the very rural nature of Lyon County are contributing factors to its retail trade numbers. Residents of Lyon County are continually drawn to larger cities and urban center in all directions, including cities in Sioux County, the City of Worthington in Nobles County, MN and the Sioux Falls metropolitan area.

Below is a table showing the cities within Lyon County that reported taxable sales during 2010. The sum of retail sales will vary from the county total in part due to sales data is not reported for cities with 10 or fewer businesses files sales tax returns. These sales are included with the county total, just not listed individually for comparison with other cities in the county.

Table 28 - 2010 Retail Sales of Cities within Lyon County

<i>City</i>	<i>Population</i>	<i>Reporting firms</i>	<i>Total Retail Sales</i>
Alvord	196	17	\$ 700,000
Doon	579	49	\$ 7,100,000
George	1,080	63	\$11,700,000
Inwood	808	55	\$ 7,400,000
Larchwood	869	59	\$13,100,000
Lester	296	23	\$ 2,700,000
Little Rock	456	18	\$ 1,000,000
Rock Rapids	2,540	132	\$26,000,000
Lyon County	11,525	423	\$70,600,000

Relative to retail trade and another good indicator of the strength and vitality of a county’s economy is to look at the “pull factor.” The pull factor is a numerical indicator of the amount of retail activity taking place within or out of a jurisdiction. The number “1” indicates that the appropriate amount of retail sales relative to the population within a given area. Any number below a “1” indicates that fewer people than expected are spending retail dollars in a given jurisdiction, indicating a retail “leakage”. Whereas any number above a “1” indicates more people than expected are spending more retail dollars in a local jurisdiction, indicating retail “surplus”. In 2002, Lyon County’s pull factor was 0.53 indicating that retail sales were nearly 50% lower than expected figures. However, 2011, the pull factor increased to 0.61, indicating an increase of 15.1%. These factors indicate that Lyon County retail businesses are drawing in a larger percentage of retail sales in comparison to ten years ago. However, the numbers also show that Lyon County is bringing in approximately 40% less in retail sales than expected for a jurisdiction with the population base of Lyon County. In looking at the map below, it is easy to see where the retail draw areas are, which correlates to those counties in the previous map that have substantially higher annual retail sales amounts.

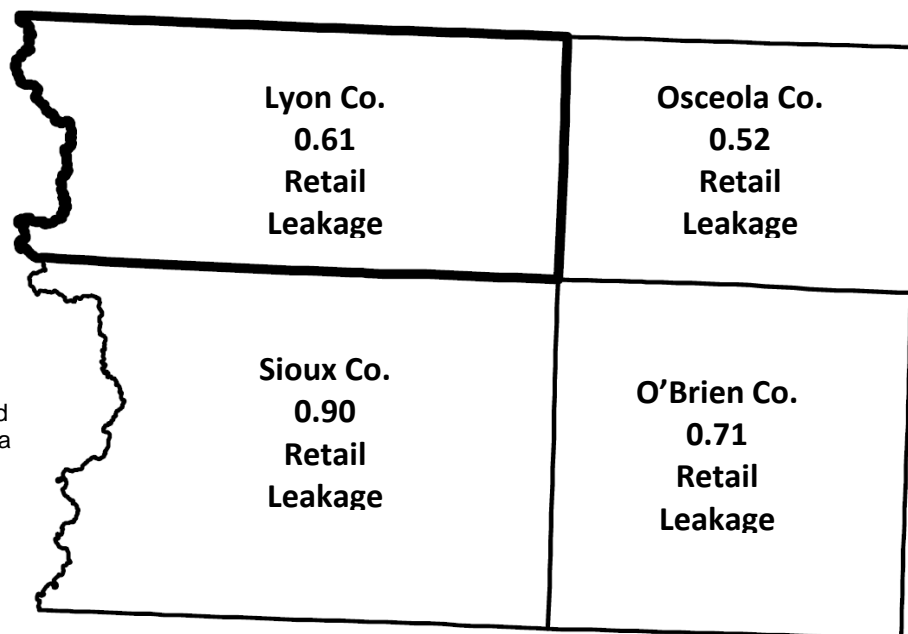


Figure 38 - 2011 Pull Factor Comparison of Lyon County and surrounding Iowa counties

**TRADE AREA CAPTURE**

Another method for determining the amount of retail sales activity occurring within Lyon County is to calculate the county’s trade area capture. The purpose of the "Trade Area Capture" formula is to examine how many customers or potential purchasers are drawn to Lyon County to shop for any type of product at any given time. The trade area capture estimates the portion of customers the county actually draws from within and outside its boundaries. The trade area capture analysis is also be used by retail sectors to understand trade growth or decline.

<p><b>TRADE AREA CAPTURE FORMULA</b></p> $A / [ B x (C / D) ]$ <p>A = Total Retail Sales for Lyon County                  B = Per Capita Sales for the State of Iowa                  C = Lyon County Per Capita Income                  D = State of Iowa Per Capita Income</p>
--

Lyon County's trade area capture for the year 2011 is as follows:

A (Lyon County Total Retail Sales)	= \$70,649,216
B (State Per Capita Sales)	= \$10,757
C (2010 Lyon County per Capita Income)	= \$21,613
D (2010 State per Capita Income)	= \$25,335

***Trade Area Capture for the Lyon County in 2011 =7,699 customers (2010 pop. 11,525)***

This means that businesses in Lyon County captured the sales of 7,699 customers from its population base of 11,525 or 49.7% of its expected customers. This data simply reinforces the previous data and statements regarding Lyon County’s retail leakage, likely to adjoining urban counties and specifically the Sioux Fall, SD metropolitan area.

**LYON COUNTY ECONOMIC DEVELOPMENT (LCED)**

Lyon County Economic Development (LCED) is a branch of the local government devoted to the recruitment, retention and growth of business, industry and the overall economy of Lyon County. LCED promotes Lyon County as a safe, family-oriented lifestyle, with top notch school, a dedicated and skilled workforce, with reasonable

**LCED MISSION STATEMENT:**  
*The mission of Lyon County Economic Development (LCED) is to help Lyon County and its communities obtain and more effectively utilize their resources to promote economic growth and enhance the overall quality of life.*

startup costs, many recreational opportunities and nearby cultural and entertainment activities. LCED is currently headed up by Stephen Simons, Economic Development Director, who has attended the Heartland Economic Development course, is a member of the Professional Developers of Iowa, a member of Western Iowa Tourism, Board member of the Northwest Iowa Planning & Development and current Chairman of the Northwest Iowa Developers group. The LCED provided assistance to seven cities in Lyon County. Among the assistance and services provided are site selection assistance, business plan development, financial planning, expansion planning, and relocation assistance. The county’s economic development office can be found in

the Lyon County Courthouse at 315 1<sup>st</sup> Avenue, Suite 209 in Rock Rapids, Iowa. The LCED is governed by the LCED Advisory Board and ultimately the county Board of Supervisors. The Advisory Board is a 15 member group representing 8 communities and is represented by city, county, education, utility and legal representatives.

In 2011 the Advisory Board of the LCED completed a strategic planning process. This process is intended to outline the goals and objectives for the county economic development group for the next couple of years, beginning January 1, 2012. A brief overview of the counties strategic areas of focus and the four (4) strategic goals are identified below with the entire report found in Attachment C of this plan.

**Strategic Areas of Focus for LCED**

1. Support and facilitate efforts to explore and research ways to develop the area surrounding Grand Falls Casino and assist local areas to maximize the utilization of casino funds.
2. Small business and entrepreneurial development and business start-ups.
3. Retention and expansion of existing businesses.
4. Countywide economic development teamwork, support for local development priorities and developing an organizational structure that stresses transparency and accountability.

**Lyon County Economic Development Strategic Goals**

1. Design an economic development organizational structure and procedures based on teamwork and involvement of all communities in Lyon County . . . resulting in a consensus county-wide development strategy combined with a focus on supporting local and regional development priorities.
2. Maintain and enhance efforts to retain and expand existing businesses in Lyon County . . . resulting in increased employment and household incomes in Lyon County.
3. Fully leverage the economic and promotional benefits and long term potential of the Grand Falls Casino development . . . resulting in an increased tax base and growth initiatives in all Lyon County communities.
4. Focus on small business and entrepreneurial growth and business start-ups in all Lyon County communities. . . . . resulting in new, flexible financing tools, networking amongst entrepreneurs and increased business start-ups.

**NORTHWEST IOWA DEVELOPMENT - A PERSPECTIVE ON REGIONAL ECONOMIC DEVELOPMENT**

The Northwest Iowa Development is a consortium of city, county, educational and utility economic developers from a six



**NORTHWEST IOWA DEVELOPMENT**  
Beyond Expectations.

six county region in northwest Iowa that have come together creating a unified approach to growing, branding and developing the northwest Iowa region. This unified effort creates more opportunities for all participating city, county and non-governmental entities to attract quality new

new corporate businesses, expansions and retentions within the six county region. This effort also strives to attract a skilled workforce to support the growing business sector in this region. Northwest Iowa Development is located on the Northwest Iowa Community College campus in Sheldon, Iowa which is centrally located within the region.

Figure 39 – Map of Northwest Iowa Developers Region



The six counties that comprise Northwest Iowa Development include Lyon, Osceola, Sioux, O'Brien, Plymouth and Cherokee. The region is located with proximity to excellent transportation and shipping routes for new and expanding businesses, as the region is bounded by Interstate 90 to the north, Interstate 29 to the west and Highway 20 to the south. The four lane Iowa Highway 60 from Sioux City to the Minnesota state border transverses the region from the southwest to the northeast, opening up access to many of the region's communities to enhanced transportation routes and ease of shipping goods and services. The collaborative efforts of the region's economic developers can offer business and industry prospects assistance with locating affordable building sites, locating a qualified and dedicated workforce, offer excellent workforce and equipment training opportunities, and a can-do-attitude. According to the NW Iowa Developers website, [www.northwestiowa.com](http://www.northwestiowa.com), ***"Let us show you how we can provide a low cost place to do business..."***

***provide a low cost place to do business...***

***...Beyond Expectations."***

## Chapter 12. TRANSPORTATION DIVERSITY

Lyon County’s surface transportation network includes a comprehensive roadway system including two major federal highway and one state highway, county highways, multiple secondary roads and rural or unimproved roads. As of January 1, 2010, according to the Iowa Department of Transportation, Lyon County’s has 1,073.6 total miles of roads. The county’s secondary roadway network consists of 1,010.7 total miles. Secondary roads are those roads not classified as either a federal or state highway route. Of these road miles, 64.7 miles are considered rural primary miles. There are 3.6 miles of dirt or unpaved secondary roads which accounts for only 0.5% of the secondary roads. Below is a table identifying road miles and surfacing types in Lyon County. Gravel roads account for 74.5% of all secondary roads in the county, while asphalt or PCC account for nearly 24.9% of all secondary roads in Lyon County.

Table 29 - **Secondary Road Miles** and Surface Types in Lyon County, 2010

Surface Type	Earth (dirt)	Gravel	Bituminous	Asphalt	PCC	Combination
Total miles by surface	3.61	753.33	0.00	251.82	0.16	0.00

During the past two decades, the secondary roads in Lyon County have experienced a significant increase in traffic, as both residents and farmers seek alternate routes in order to achieve quicker travel times and less congestion. Additionally, farm-to-market roads also receive a considerable amount of use as axle loads for trucks and trailers continue to increase. Currently in Lyon County, there is a total of 328.6 miles of farm to market roads. Of the farm to market roads none are earth or dirt (not surfaced). Conversely, there is 27.0% of the county’s Farm to Market roads surfaced with gravel and 73.0% surfaced with asphalt or PCC. Below is a table identifying Farm to Market road miles and surfacing in Lyon County.

Table 30 - **Farm to Market Road Miles** and Surface Types in Lyon County, 2010

Surface Type	Earth (dirt)	Gravel	Bituminous	Asphalt	PCC	Combination
Total miles by surface	0.00	88.80	0.00	239.62	0.16	0.00

Lyon County is experiencing a stable to slightly declining population base, while at the same time remaining a very intensely agricultural county in northwest Iowa. Although current and future road and surfacing projects may not be driven by new development or growth, the county is faced with a continually aging and deteriorating network of rural primary and secondary roads that are the responsibility of the county to maintain in a safe and operable condition. The Lyon County engineering department will continue to emphasize a balance between rehabilitation of existing paved roads, replacement of deteriorating or outdated roads and accommodating those areas seeking new development. Gravel roads serving uninhabited areas of the county (level B and C service roads) are left unplowed during the winter.

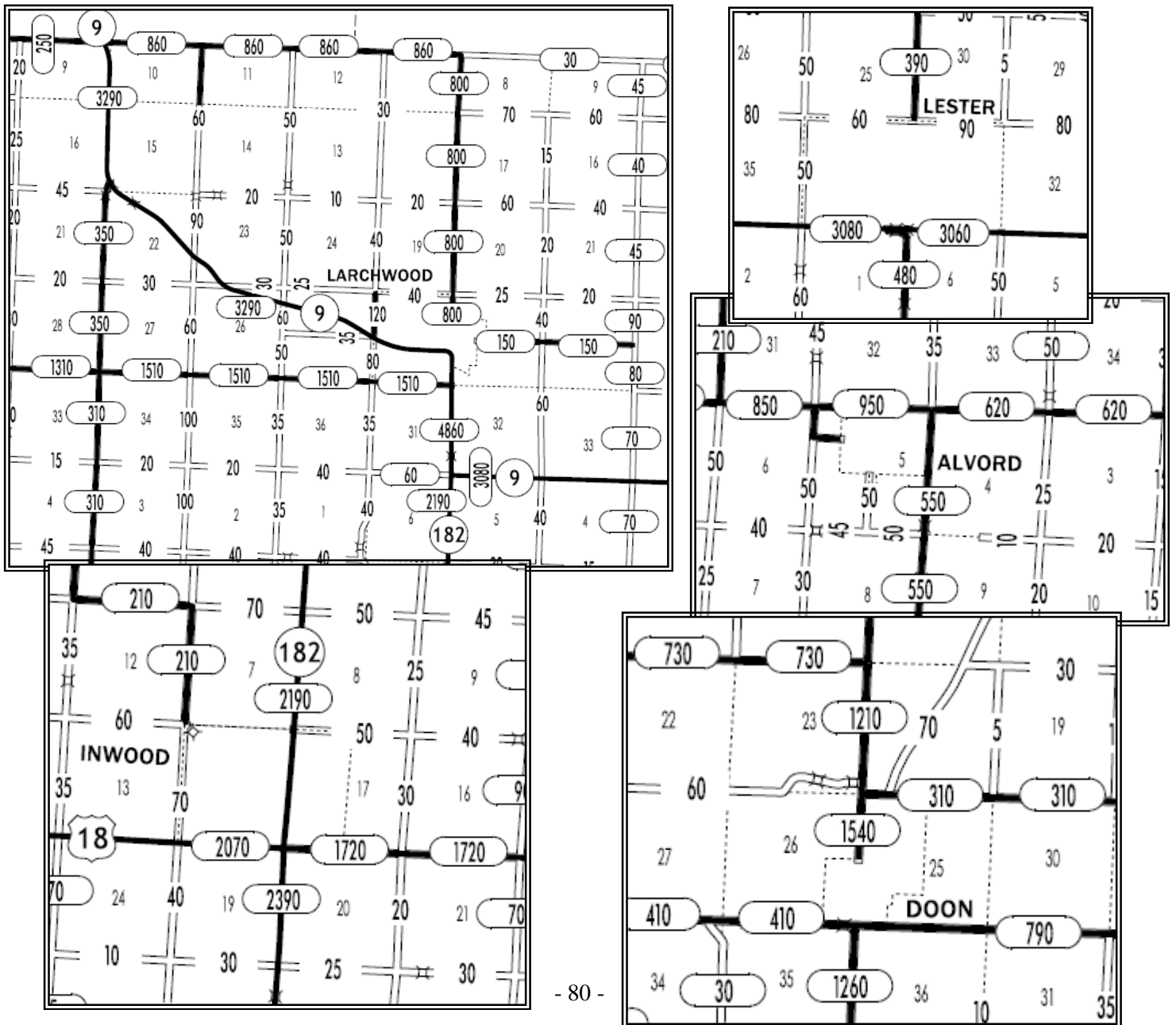


**TRAFFIC FLOW**

Traffic flow surveys are recorded in each county in the state every four (4) years. 2011 is the most recent traffic county survey recorded in Lyon County. Many portions of the highway system in Lyon County have experienced traffic increases over the past four years, whereas other rural areas of the county have seen declines in traffic flow. Since the scale of the Annual Average Daily Traffic map for Lyon County is too small to be legible within this plan, sections of the map surrounding the eight incorporated cities of Lyon County are included to provide an overview of the transportation trends in these parts of the county. The entire ADT maps for Lyon County may be viewed online at the IDOT's website at: <http://www.iowadotmaps.com/>.

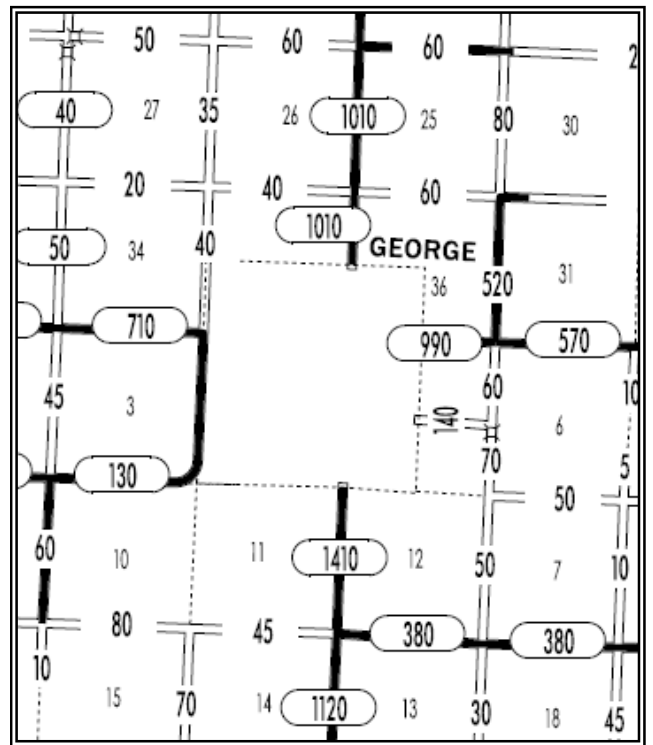
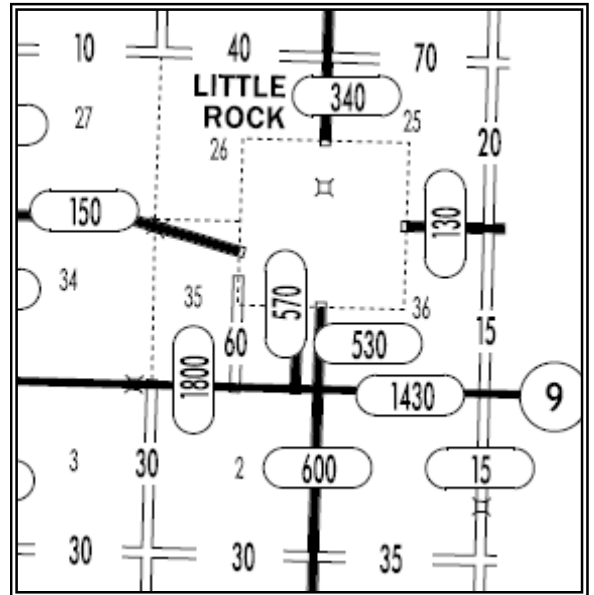
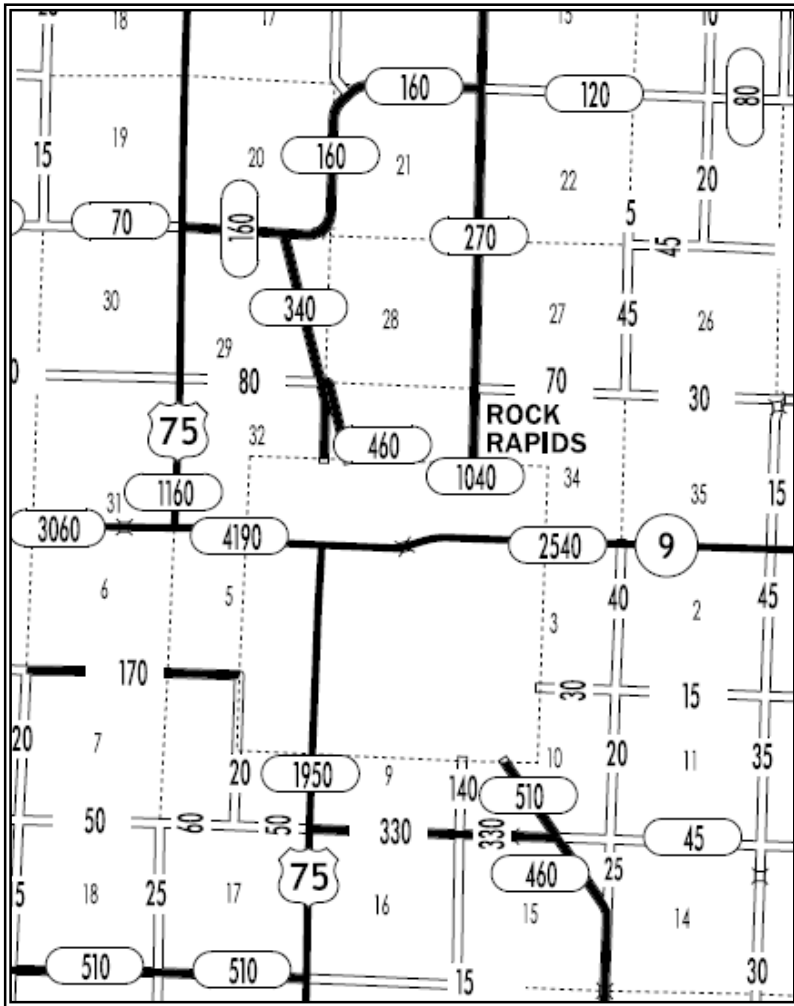
Figure 40 - 2011 IDOT Annual Average Daily Traffic map sections near the incorporated cities of Lyon County

**(2011) ANNUAL AVERAGE DAILY TRAFFIC**  
**2007 ANNUAL AVERAGE DAILY TRAFFIC**



Note: These maps are for reference purposes only. IDOT ADT maps may be seen online at: [www.iowadotmaps.com](http://www.iowadotmaps.com)

2011 ANNUAL AVERAGE DAILY TRAFFIC  
2007 ANNUAL AVERAGE DAILY TRAFFIC



# TRAFFIC FLOW MAP OF LYON COUNTY IOWA



OFFICE OF TRANSPORTATION DATA  
Phone: (515) 239-1289  
[WWW.IOWADOT.GOV/MAPS](http://WWW.IOWADOT.GOV/MAPS)



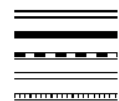
In Cooperation With  
United States Department of Transportation

JANUARY 1, 2011



## LEGEND

DIVIDED HIGHWAY  
PAVED ROAD  
BITUMINOUS ROAD  
GRAVEL ROAD  
EARTHEN ROAD



Following is a listing of traffic counts at some of the most heavily utilized highways, roads and intersections in Lyon County, based upon the 2011 IDOT traffic survey.

Table 31 - IDOT Annual Average Daily Traffic map sections near the incorporated cities of Lyon County

	<b>2011 ADT</b>	<b>2007 ADT</b>	<b>ADT = Average Daily Traffic</b>
<b>Larchwood (Grand Falls Casino Area)</b>			
Hwy. 9 south of Larchwood -	3,080 vehicles	2,520 vehicles	
Hwy. 9 near Grand Falls Casino -	3,290 vehicles	2,520 vehicles	
Hwy. 9 through Larchwood -	4,860 vehicles	3,210 vehicles	
County Rd. A18 west of Larchwood -	1,510 vehicles	1,400 vehicles	
Hwy. 182 south of Larchwood -	2,190 vehicles	1,500 vehicles	
<b>Rock Rapids (Rock River Golf Club Area)</b>	<b>2011 ADT</b>	<b>2007 ADT</b>	
Hwy. 9 east of Rock Rapids -	2,540 vehicles	2,180 vehicles	
Hwy. 9 west of Rock Rapids -	3,060 vehicles	2,630 vehicles	
Hwy. 75 north of Rock Rapids -	1,160 vehicles	1,070 vehicles	
Hwy. 75 south of Rock Rapids -	1,950 vehicles	1,430 vehicles	
County Rd. K52 north of Rock Rapids -	1,040 vehicles	1,040 vehicles	
County Rd. K52 south of Rock Rapids -	510 vehicles	680 vehicles	
<b>Lester Area</b>	<b>2011 ADT</b>	<b>2007 ADT</b>	
Hwy. 9 west of Lester -	3,080 vehicles	2,520 vehicles	
Hwy. 9 east of Lester -	3,060 vehicles	2,630 vehicles	
County Rd. K30 north of Lester -	390 vehicles	310 vehicles	
County Rd. K30 south of Lester -	480 vehicles	490 vehicles	
<b>Alvord Area</b>	<b>2011 ADT</b>	<b>2007 ADT</b>	
County Rd. A34 NW of Alvord -	950 vehicles	950 vehicles	
County Rd. A34 NE of Alvord -	620 vehicles	620 vehicles	
County Rd. K30 south of Alvord -	550 vehicles	580 vehicles	
<b>Inwood Area</b>	<b>2011 ADT</b>	<b>2007 ADT</b>	
Hwy. 182 north of Inwood -	2,190 vehicles	1,500 vehicles	
Hwy. 18 south of Inwood -	2,390 vehicles	1,690 vehicles	
Hwy. 18 west of Inwood -	2,070 vehicles	1,910 vehicles	
County Rd. A42 east of Inwood -	1,720 vehicles	1,720 vehicles	
County Rd. K12 NW of Inwood -	210 vehicles	230 vehicles	
<b>Doon Area</b>	<b>2011 ADT</b>	<b>2007 ADT</b>	
County Rd. A52 west of Doon -	410 vehicles	410 vehicles	
County Rd. A52 east of Doon -	790 vehicles	790 vehicles	
County Rd. K42 north of Doon -	1,540 vehicles	1,540 vehicles	
County Rd. K42 south of Doon -	1,260 vehicles	1,260 vehicles	
County Rd. A44 NE of Doon -	310 vehicles	400 vehicles	
<b>George Area</b>	<b>2011 ADT</b>	<b>2007 ADT</b>	
County Rd. A34 west of George -	710 vehicles	710 vehicles	
County Rd. A34 east of George -	990 vehicles	990 vehicles	
County Rd. L14 north of George -	1,010 vehicles	1,010 vehicles	
County Rd. L14 south of George -	1,410 vehicles	1,400 vehicles	
<b>Little Rock</b>	<b>2011 ADT</b>	<b>2007 ADT</b>	
Hwy. 9 west of Little Rock -	1,800 vehicles	1,420 vehicles	
Hwy. 9 east of Little Rock -	1,430 vehicles	1,230 vehicles	
County Rd. L26 north of Little Rock -	340 vehicles	370 vehicles	
County Rd. L26 south of Little Rock -	600 vehicles	510 vehicles	

Lyon County has experienced areas of significant growth in highway corridor traffic. Similarly, there are also shifts in transportation routes which reduce traffic in certain areas. For example, in 2007 the Grand Falls Casino located approximately 5 miles northwest of Larchwood had not yet been completed. However, by the 2011 traffic county, the casino had just opened for business and experienced significant traffic increases. Traffic near the Grand Falls Casino along Highway 9 experienced an increase of 560 vehicles daily resulting in a net increase of 22.2% in traffic. Similarly, the traffic experience within the City of Larchwood along Highway 9 increased by 1,650 daily vehicles or 51.4%. Traffic along Highway 9 east and west of Rock Rapids experienced an increase of roughly 400 vehicles in each direction. Along Highway 75 north, traffic experienced little growth of roughly 100 vehicles daily, while traffic utilizing Highway 75 south experience a significant gain of more than 500 vehicles daily or an increase of 36.4 percent. There were no significant losses in traffic flow across the county.

### **STREET CLASSIFICATIONS (DEFINITIONS)**

An explanation of the following street definitions is necessary for the proper understanding of the county's street/road plan, as well as reading and comprehending IDOT's System Classification for Planning map. The definitions below are to be considered basic design guidelines that serve as framework for satisfactory design of new street and highways facilities. The following street classification definitions are in accordance with the 2011 Iowa Statewide Urban Design and Specifications (SUDAS). The four major functional classifications for urbanized areas are arterial streets, collector, streets, local streets and private streets. These street classifications are consistent with American Association of State Highway & Transportation Officials (AASHTO).

#### **ARTERIAL STREETS**

1. Major/Principal Arterial - The major/principal arterials serves major centers of activity in urbanized areas and carries a high proportion of total urban travel on a minimum of miles.
2. Minor Arterial - The non-primary arterial connects with and augments the principal arterial system. It accumulates trips of moderate length at somewhat lower level of through movement versus principal arterials.

#### **COLLECTOR STREETS**

1. Major Collector – Provides movement of traffic between arterial routes and minor collectors and, at moderately lower speeds, collects traffic from local streets and residential and commercial areas.
2. Minor Collector - Provides movement of traffic between major collector routes and local streets as well as providing access to abutting property at moderate low speeds. Consideration for through movements and direct land access is normally equal.

#### **LOCAL STREETS**

Local streets provides for the movement of traffic between collectors and residential and commercial areas.

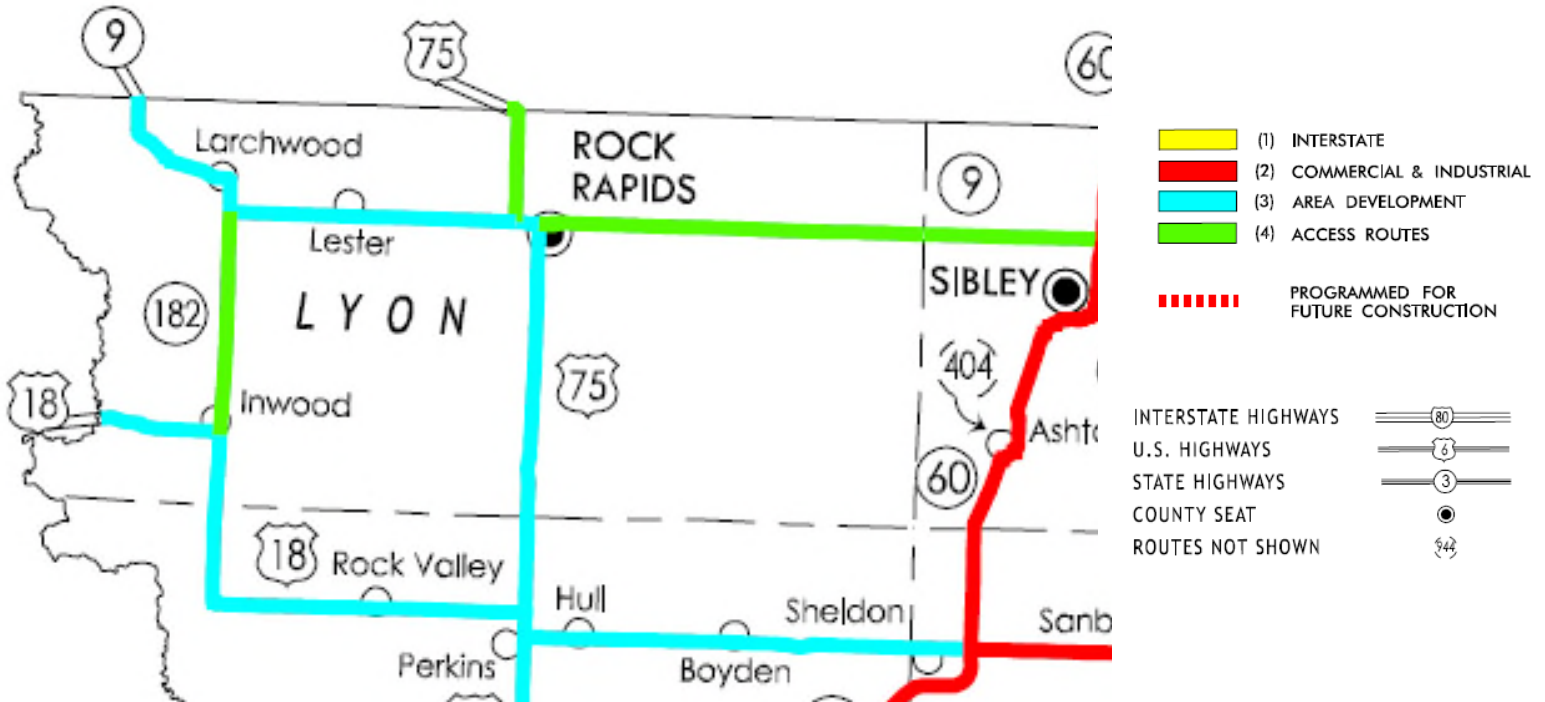
#### **PRIVATE STREETS**

Certain jurisdictions allow private streets in specific situations. Private streets are similar to the local streets but generally are located on dead-end roads, short loop streets, or frontage roads.

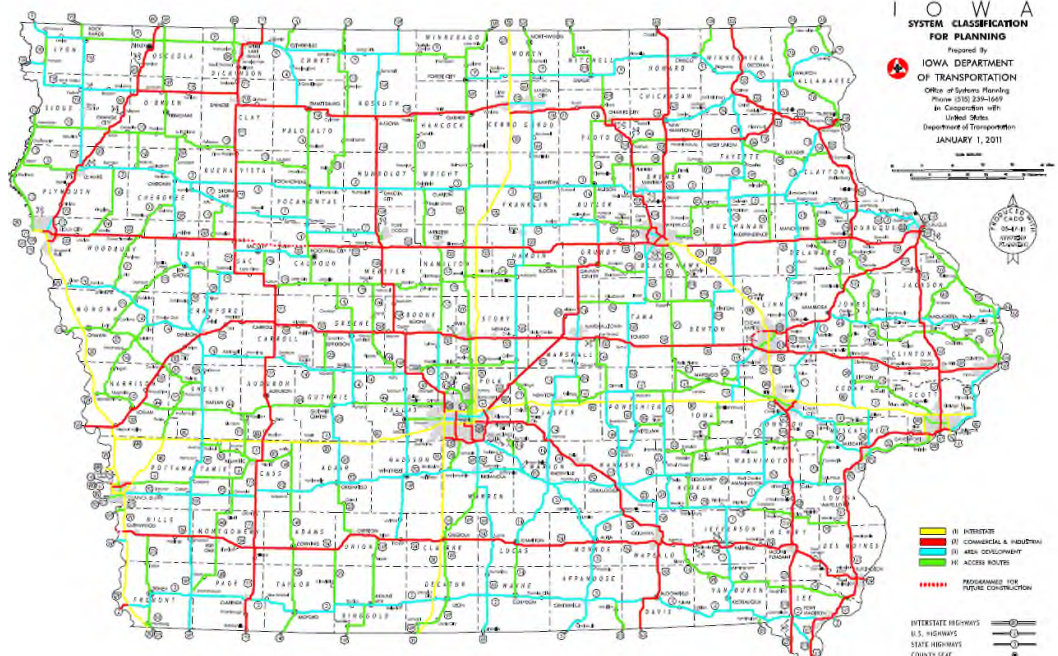
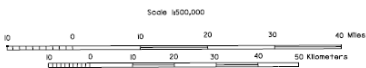
**ROAD SYSTEM CLASSIFICATION FOR PLANNING**

The Iowa DOT Federal Functional Classification map depicts major transportation routes across Lyon County. Classifications of roads found in Lyon County include “Area Development” and “Access Routes”. The nearest commercial and industrial route in proximity to Lyon County is Iowa Highway 60 which transverses portions of Osceola County to the east and Sioux County to the south. The nearest interstate classified route in Iowa is Interstate 29 near Sioux City, approximately 70 miles south of Lyon County.

Figure 41 - Lyon County Federal Functional Classification Map, IDOT



**I O W A**  
**SYSTEM CLASSIFICATION FOR PLANNING**  
 Prepared By  
**IOWA DEPARTMENT OF TRANSPORTATION**  
 Office of Systems Planning  
 Phone (515) 239-1669  
 in Cooperation with  
 United States  
 Department of Transportation  
**JANUARY 1, 2011**

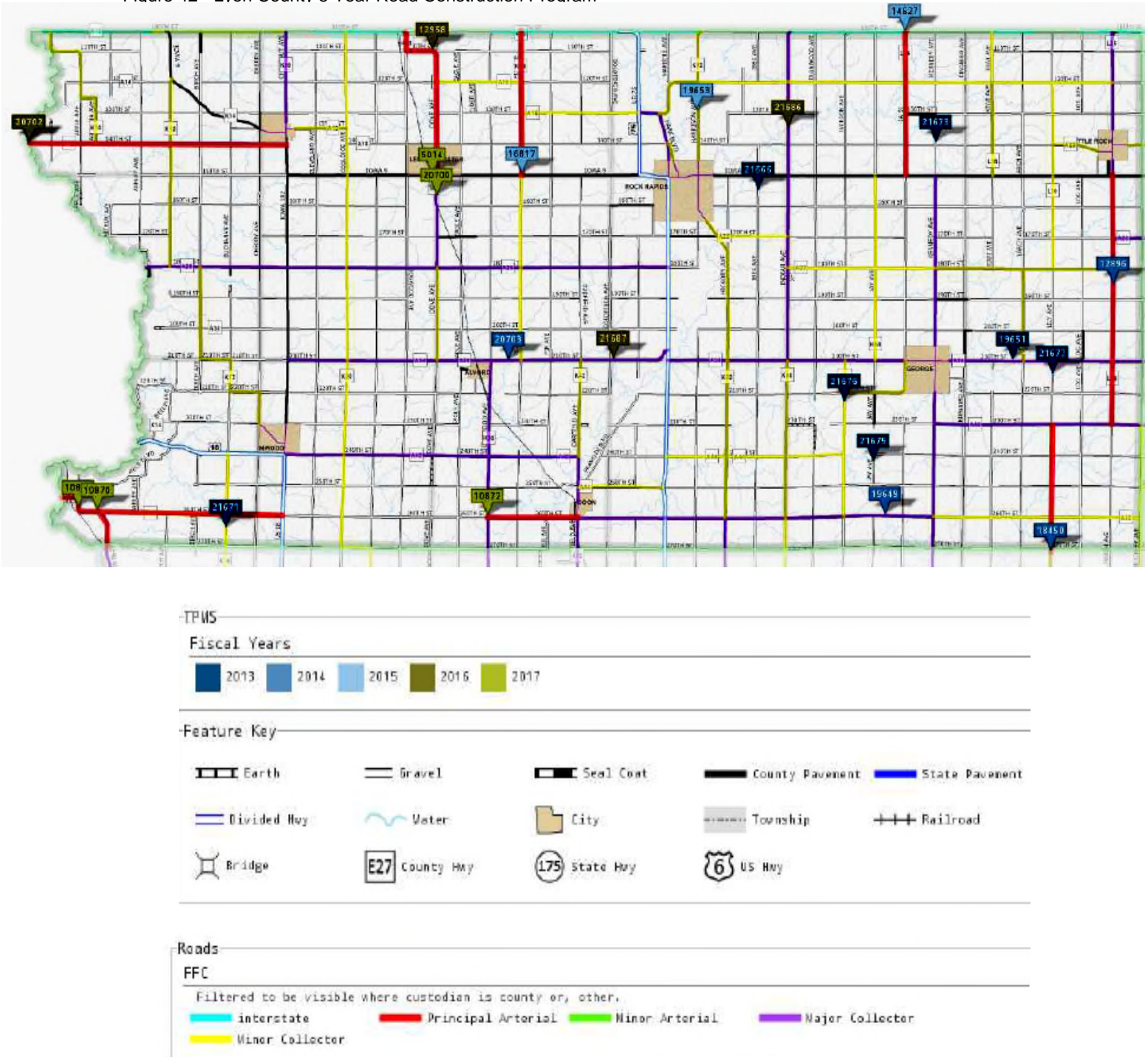




### LYON COUNTY 5-YEAR ROAD CONSTRUCTION PLAN

The Lyon County Engineering Department has prepared and annually updates and prioritizes its long-range road construction program. In May 2012, the Lyon County Engineering Department provided the most recent 5-year road construction program for purposes of including in this comprehensive plan. The following road construction plan begins with FY 2013 and identifies road projects through FY 2017. Below is a map identifying each of the county's proposed road projects.

Figure 42 - Lyon County 5 Year Road Construction Program



**PUBLIC TRANSIT SERVICES**

The Regional Transit Authority (RTA) dba as *RIDES* is the local transit provider for Lyon County. *RIDES* is the regional transit provider for a nine (9) county region in Northwest Iowa. Specifically for Lyon County, *RIDES* provides on demand transit services to the residents of Rock Rapids. Anyone living in Rock Rapids can contact the regional transit provider for on demand taxi service to schedule rides either inter-county or anywhere else within the nine county service area covered by *RIDES*. Although Rock Rapids is the only community being served by public transit at this time the agency is pursuing on-demand service in other Lyon County cities. Other services provided to Lyon County residents include non-emergency medical rides to appointments or hospitals. *RIDES* transit services provide a safe, reliable form of transportation.

**RAILROAD SERVICES**

Lyon County is primarily served by one active rail line transversing the county from south to north. The BNSF Railway Co. (BNSF) line bisects the central portion of the county. This rail line serves the communities of Doon, Alvord and Lester. As expressed in the agricultural section of this plan, the local grain elevators are the primary source utilizing rail service in Lyon County for shipment of agricultural commodities. There is no piggyback ramp available locally. In addition to the BNSF rail line transversing the county, there is a small section in the far southwestern part of Lyon County, where a portion of the D&I Railroad Co. (DAIR) line bisects Lyon County through the town of Beloit. This line travels south from Sioux Falls, SD and follows the Big Sioux River Sioux River south to Sioux City, Iowa.

Figure 43 - 2011 IDOT Railroad Service Map

# IOWA

## STATE RAILROAD MAP

Prepared by

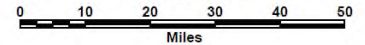


Phone (515) 239 - 1669

In Cooperation with  
United States

Department of Transportation

July 1, 2011



Amtrak	AMTK
Appanoose County Community R.R. Co.	AFCC
Boone Scenic Valley R.R.	BSV
Burlington Junction Ry. Co.	BJRY
BNSF Railway Co.	BNSF
Canadian National Railway Co.	CN
Canadian Pacific Railroad	CP
CBEC Railway Co.	CBRX
Cedar Rapids and Iowa City Ry. Co.	CIC
Cedar River Railroad Co.	CEDR
Chicago, Central & Pacific Railroad	CC
D & I Railroad Co.	DAIR
D & W Railroad Inc.	DWRV
Dakota, Minnesota and Eastern R.R. Co.	DME
Iowa Interstate R.R. Ltd.	IAIS
Iowa Northern Ry. Co.	IANR
Iowa River Railroad Co.	IARR
Iowa Traction R.R. Co.	IATR
Keokuk Junction Ry.	KJRY
Nebraska Northeastern Ry. Co.	NENE
Norfolk and Southern Railway Co.	NS
North Central Iowa Rail Corridor	NCIRC
Omaha Public Power District	OPPD
State of South Dakota	SD
Union Pacific Railroad	UP
Wisconsin and Southern Railroad	WSOR
Private Track - Cargill Alliance	CGAQ
Private Track - Morton Buildings	ZMBU
Private Track - Shine Brothers	SBSX
Trackage Rights Only	( )
Haulage Agreement	( ' )
Primary Operator	( < )



## AIRPORT SERVICES

Of the eight (8) incorporated cities in Lyon County there is one public and one private airport to service the needs of the county residents and businesses. The Rock Rapids Municipal Airport, located approximately 1 mile northwest of Rock Rapids (County Seat), is a publicly owned airport operated by the City of Rock Rapids. This airport serves the corporate, business, private and recreational needs of the Rock Rapids and much of Lyon County. The airport was originally opened to the public in 1961. Runway 16/34 is 3,097 feet in length and 50 feet wide. The runway is asphalt runway is asphalt in fair condition. According to the internet resource [airnav.com](http://airnav.com), there are 16 aircraft based on the airport, with all 16 aircraft being single engine planes. Aircraft operations average 67 per week with 57% of the activity classified as transient general aviation usage and 43% for local general aviation. These figures were calculated from a 12 month usage survey in 2009.



Photo courtesy of [www.airnav.com](http://www.airnav.com)  
Photo by: Christopher Rust in August 2004

Photo of Zangger Vintage Airpark



Photo courtesy of [www.airnav.com](http://www.airnav.com)  
Photo taken in September 2005

Lyon County is also home to a private airport, the Zangger Vintage Airpark located approximately 2 miles east of Larchwood on County Road A18. The Zangger Airpark is privately owned but is open to the public for use. The airpark meets the local demands of Larchwood and surrounding communities personal, private, recreational and business air travel needs. With that stated, this private airpark is closed from December through February with no snow removal. This airstrip has been in operation since 1953. According to data from the resource [airnav.com](http://airnav.com), runway 12/30 is 3,500 feet in length and 100 feet in width. The airstrip is comprised of turf grass in fair condition. The runway edge markings are marked with yellow cones. There are no published instrument procedures for the Zangger procedures for the Zangger Airpark. With that said, it is reported there are 21 aircraft based on the field with 20

being single engine planes and 1 ultralight. The airpark accounts for 67 aircraft operations per week with 50% being considered transient general aviation and 50% for local general aviation.

Other general aviation airports within close proximity to Lyon County offering instrument procedures include Quentin Aanenson Field Airport (City of LuVerne, MN), Sioux Center Municipal Airport, and the Sibley Municipal Airport. The closest airport offering commercial and international air service would be the Joe Foss Field Airport (Sioux Falls, SD) approximately 15 miles northwest of Lyon County.

## Chapter 13. INFRASTRUCTURE & UTILITIES

### RURAL WATER SYSTEMS

Inadequate water supply, in terms of both quality and quantity, had been a problem for rural residents of Lyon County for many years. Today, there are several organizations devoted to providing the service of delivering a clean, healthy, safe and affordable water supply to the residents and cities of Lyon County. There are three rural water systems primarily serving the present



and proposed future water needs of Lyon County. With the continued growth and expansion of rural water systems, this has opened the door for rural economic development in terms of offering a basic yet essential service for businesses, industries, agricultural operations, and single family residences.

***Lyon & Sioux Rural Water System:*** The Lyon and Sioux Rural Water System is located in Rock Rapids and serves the most Lyon County residents out of all the rural water systems in Lyon County. Lyon Sioux Rural Water was started in 1974 to provide a clean and healthy water supply to the residents, businesses and farmers of Lyon and northern Sioux Counties. The existing infrastructure located in Lyon County is currently satisfactory to meet existing needs of Lyon County residents and businesses.

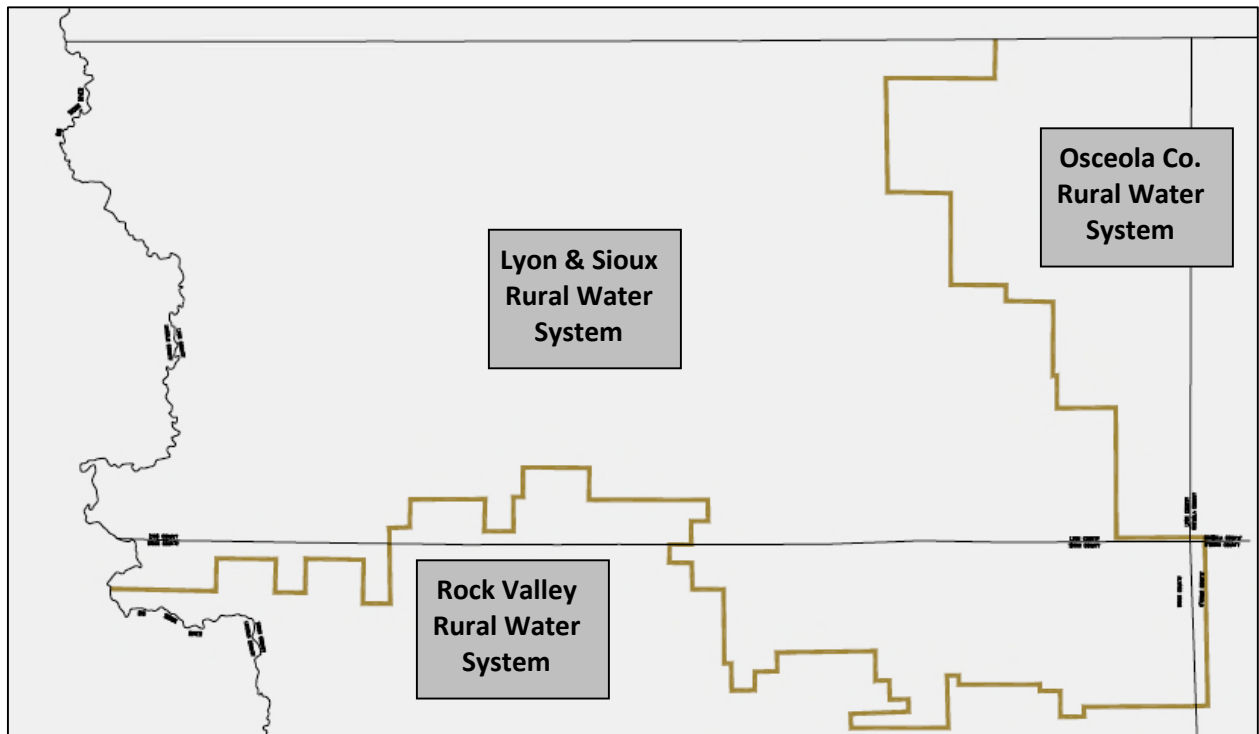
***Osceola County Rural Water System:*** Based out of May City, Iowa, the Osceola County Rural Water system services the rural water needs of residences, farms and businesses in eastern Lyon County. This rural water district stretches the entire width of the county north to south; including the City of Lester and running southward toward the City of George in southeastern Lyon County. Osceola County Rural Water has been in business since 1982 and strives to bring a safe, quality water supply to their customers for family and livestock uses. The existing Osceola County Rural Water infrastructure in Lyon County is satisfactory to meet the current and projected needs of Lyon County.

***Rock Valley Rural Water District:*** Located on Main Street in Rock Valley, the Rock Valley Rural Water District is a private water supply company started in 1983 to help serve the water needs of homeowners, farmsteads and businesses in rural northern Sioux County and a small portion of south central Lyon County. There are no major utility facilities belonging to Rock Valley Rural Water District located in Lyon County. The territory served by RVRWD in Lyon County consists of the southern portions of Richland, Doon and a small portion of southwest Garfield townships, all south of the City of Doon. The existing rural water infrastructure in Lyon County is satisfactory to meet the current and projected needs of the residents and businesses.

***Lewis & Clark Rural Water System:*** The Lewis and Clark Rural Water System was formed in 1990 to provide a clean, safe and plentiful water source to thousands of potential users in southeast South Dakota, southwest Minnesota and northwest Iowa. Originally, this project was intended to service more than 200,000 residents in this Midwest region. Lyon County falls nearly in the center of the LCRWS service area map. The City of Rock Rapids has signed on to become a

a member of Lewis & Clark and is supposed to be connected to the rural water system in 2013. Lyon and Sioux Rural Water System has purchase water from LCRWS in an effort to better serve and supply their customers with the necessary volume of treated water. After initial years in the early 2000s with annual federal appropriations and construction commencing throughout portions of South Dakota, the Lewis & Clark Rural Water System successfully expanded its service area across the tri-state area of southeast South Dakota, southwest Minnesota and portions of northwest Iowa. However, in recent years, federal funding for this massive rural water project has been reduced to the point where it has impacted ongoing construction and expansion projects. In certain instances this is impacting cities in northwest Iowa that need additional treated water volume.

Figure 44 – Rural Water service boundary map for Lyon County



**LYON COUNTY DRAINAGE DISTRICTS**

With advancements in farming practices, it didn't take long to successfully implement the man made manipulation of the land to assist in drainage of naturally low areas and soils conducive to retaining water. In referencing soil types and landforms from Chapter 4 of this document, most of the drainage district manipulation took place in those counties located in the Des Moines Lobe land formation. Lyon County, located in the Northwest Plains land formation has natural soil types and a series of small streams and creeks which provides for greater and more efficient drainage of excess stormwater on agricultural lands. Furthermore, according to a 2006 article from the Iowa Department of Natural Resources, the 1940 U.S. Census Bureau of Agricultural Drainage shows organized drainage areas in Iowa. There are only fourteen (14) of Iowa's 99 counties that have no publicly maintained drainage districts. Lyon County is included in these counties.

## **COUNTY UTILITIES & SERVICES**

There are many public and private companies providing varying utility services to both the cities and rural areas of Lyon County. Below is a general summary listing to provide an overview of those companies that provide Lyon County residents with electricity, natural gas, telecommunications (including telephone, cable and internet providers) and cellular services

### Electrical providers

- Rock Rapids Municipal Utilities (Rock Rapids)
- City of Larchwood Municipal (Larchwood)
- Lyon Rural Electric Cooperative (rural Lyon County)
- MidAmerican Energy (rural Lyon County, Inwood, Doon, Alvord)
- Alliant Energy (George, Lester, Little Rock)

### Natural Gas providers

- MidAmerican Energy (rural Lyon County, Inwood, Doon, Alvord)
- Rock Rapids Municipal Utilities (Rock Rapids)
- Alliant Utilities (George, Little Rock)

### Telecommunications (including telephone, cable and internet providers)

- Premier Communications (Rock Rapids, Doon, George, Little Rock)
- Hickory Tech Telecommunication (Rock Rapids, Doon)
- Alliance Communications (Alvord, Larchwood, Inwood, Lester)
- Frontier Communications (George)

### Cellular Service

Many local, regional and nationwide cellular phone companies offer service within both the cities and rural areas of Lyon County including:

- US Cellular
- Verizon Wireless
- T-Mobile
- Sprint
- AT&T Mobile

## Chapter 14. COUNTY CHARACTER & SERVICES

The Lyon County Courthouse is open Monday through Friday from 8:00 a.m. to 4:30 p.m. There are many county services, departments, and programs operated from within the courthouse. Below is a listing of Lyon County services and 2012 contact information for the current county departments or programs:

- Assessor, Fred Christians, Courthouse, 712/ 472-8550
- Auditor, Wayne Grooters, Courthouse, 712/ 472-8517
- Board of Supervisors, Courthouse, meet each Monday at 9:00 a.m., 712/ 472-8517
- County Conservation, Craig Van Otterloo, 311 1<sup>st</sup> Avenue East, Rock Rapids, 712/ 472-2217
- County Attorney, Carl J. Petersen, Courthouse, 712/ 472-8545
- Economic Development, Steve Simons, Lyon County Annex, 315 1<sup>st</sup> Avenue, 712/ 472-8546
- Emergency Management, Wayne Jepsen, 410 South Boone, Rock Rapids, 712/ 472-8330
- Engineer, Lyon County Annex, 315 1<sup>st</sup> Avenue, Rock Rapids, 712/ 472-8230
- Health Services, Sherri Boeve, Lyon County Annex, 315 1<sup>st</sup> Avenue, 712/ 472-8200
- Law Enforcement, Blythe Bloemendaal, Sheriff, Lyon Co. Law Enforcement Center, 712/ 472-8300
- Mental Health Services, Lyon County Annex, 315 1<sup>st</sup> Avenue, 712/ 472-8240
- Recorder, Eldon Kruse, Courthouse, 712/ 472-8528
- Treasurer, Richard Heifloff, Courthouse, 712/ 472-8500
- Veteran's Affairs, Wilma Miller, Courthouse, 712/ 472-3405
- Zoning Administration, Fred Christians (Assessor), Courthouse, 712/ 472-8550

Photo of Lyon County Courthouse in Rock Rapids



Image Courtesy of: <http://www.co.Lyon.ia.us/index.html>

### ZONING & SUBDIVISION REVIEW

The county has drafted, adopted and enforces zoning regulations for the unincorporated lands of Lyon County. Permits are required for all buildings, structures, decks, fences, accessory buildings, wells, on-site septic systems, variances and special exceptions. The county's zoning department also enforces the subdivision regulations ordinance, which deals with the division of land for purposes of sale or development. The Planning and Zoning Commission participates in review of building permits, zoning changes and subdivision reviews. The county's Zoning Board of Adjustment participates in review of variance and special exception requests.

### FIRE PROTECTION SERVICES

Lyon County cities, townships and rural areas are serviced by several volunteer fire departments. Listed below are fire departments located in Lyon County.

#### Rock Rapids Fire Department

The community has one fire station in operation with 25 volunteer firefighters. All volunteer firefighters are trained at the Firefighter 1 level and 21 volunteers are trained at the Firefighter 2



level. The Rock Rapids volunteer department has 16 of their staff trained as Emergency Rescue Technicians (ERT). The fire department's equipment includes:

- Two pumper trucks
- One equipment rescue truck
- Two tanker trucks
- One grass rig

Hazardous materials response is currently at an operational level. The operational level includes the ability to act defensively to contain the material, and the technical level of service ensures that individuals understand how to act aggressively to stop contamination from continuing.

#### George Volunteer Fire Department

Currently, the George Fire Department includes one (1) station with 20 volunteer fire fighters, of which many are also trained First Responders and work with the George Emergency Medical Services (GEMS). George firefighters do more than just fight fires, they are actively involved with training and responding to hazardous materials spills, storm spotting, confined space rescues and vehicle extractions.

Photo of firefighters in action



#### Larchwood Volunteer Fire Department

Larchwood has 25 active volunteer firefighters, of which they are all trained at the hazardous materials awareness/operations level. All twenty five firefighters are trained at the Firefighter 1 level and two of their staff is trained at the Firefighter 2 level. Eight (8) volunteers are trained as Emergency Rescue Technicians (ERT) and 9 are trained as Emergency Medical Technicians (EMTB). Listed below are the services and equipment provided by the department.

- Two pumper trucks
- Two grass rigs
- One equipment van

#### Inwood Volunteer Fire Department

The City of Inwood is serviced by a fire department consisting of 25 volunteer, all of whom are trained at the Firefighter 1 level and in hazardous materials awareness/operations level. There are 13 Inwood volunteer firefighters trained at the Firefighter 2 level. Thirteen (13) Emergency Medical Technicians (EMTB) and four (4) nurses are also members of the Inwood volunteer fire department team. The city's fire department's services include:

- Two pumper trucks
- Two tanker trucks
- 1 grass rig
- 1 ambulance

#### Doon Volunteer Fire Department

The City of Doon currently has one (1) fire station in operation with 15 volunteer fire fighters, of which they are all trained at the hazardous materials awareness/operations level. There are currently 10 firefighters trained at the Firefighter 1 level and 3 volunteers trained at the Firefighter 2 level. Additionally, in Doon, there are 8 Emergency Rescue Technicians (ERT) and 8 Emergency Medical Technicians (EMTB) on staff. The fire department's equipment includes:

- Three pumper trucks
- Two tanker trucks
- 1 grass rig
- 1 rescue van
- 1 first responder vehicle

Alvord Volunteer Fire Department

Alvord currently has one (1) fire station in operation with 20 volunteer fire fighters. Many of Alvord's volunteer firefighters are trained at the Firefighter 1 level. Currently, there is no Firefighter 2 level trained staff on the Alvord department. With that said, many of the volunteer in Alvord have gone on to become certified at the incident command level or receive their certifications as Emergency Rescue Technicians (EMT) or Emergency Medical Technicians (EMTB).

Lester Volunteer Fire Department

The City of Lester is served by a volunteer fire department consisting of 14 individuals. Of the Lester volunteers, all 14 are trained at the Firefighter 1 level and 1 person trained at the Firefighter 2 level. There are 6 persons trained at the hazardous materials awareness/operations level and 1 trained at the incident command level. Furthermore, volunteers in Lester are also trained emergency medical staff with 7 ERT's and 2 nurses that serves the department.

Little Rock Volunteer Fire Department

The Little Rock volunteer Fire and Rescue Department serves the community with an estimated staff of 22 volunteers. Of the volunteers serving the community and surrounding rural area of Little Rock, many are trained at the Firefighter 1 and Firefighter 2 levels. As part of the fire and rescue department, there is several staff trained in emergency medical response to aid the firefighters in assessing and assisting at the scenes of emergencies. The fire department's equipment includes:

- Two pumper trucks
- One tanker truck
- 1 grass rig
- 1 rescue vehicle

**LAW ENFORCEMENT**

The Lyon County Sheriff's Department is responsible for enforcing the laws of the State of Iowa and the ordinances of Lyon County. The department provides investigation, protection, and prevention of crime through many means including: SWAT Team, Narcotics Investigation, Jail Services, Rescue Officer Program, Canine units, and the 911 Communications Center. The Lyon County Sheriff's Office works cooperatively with several organizations such as the Northwest Iowa Drug Task Force, the Law Enforcement Intelligence Network and the Mid-States Organized Crime Information Center. Aside from the perceived crime prevention and protective services provided by Lyon County law enforcement officials, the Sheriff and Deputies of Lyon County also participate in many community outreach and educational programs.





## EMERGENCY MANAGEMENT



Emergency management is a coordinated effort, involving local, state, and federal government agencies as well as volunteer organizations and businesses. Within an integrated emergency management framework, these entities assist citizens and their communities to prepare for, respond to, recover from, and eliminate or reduce the effects of natural, man-made, civil, and technological emergencies and disasters. As prescribed by Iowa Code, The Lyon County Office of Emergency Management is overseen by a commission comprised of the mayor of each community in the county as well as the Sheriff and a representative of the Board of Supervisors. A coordinator is appointed by the commission to oversee the day-to-day activities of the office.

## HEALTH CARE FACILITIES

Hospitals, healthcare facilities and long term care facilities remain an important aspect of the community facilities offered within the Lyon County communities. Given the statistics presented earlier in this plan regarding the continued aging demographics and continuing out-migration of Lyon County's younger residents, the provisions of healthcare and long term senior care will prove to be a valuable asset to the county's residents. Appropriate considerations should be considered and provided in support of needed healthcare and senior care in the future.

### **Sanford Rock Rapids Medical Center (Rock Rapids Hospital, Rock Rapids Clinic, George Clinic)**

According to the Sanford Health website, the Sanford Rock Rapids Medical Center rests at the center of Lyon County, Iowa. The facility is known for its personal care. A member of the Sanford Health network, Sanford Rock Rapids Medical Center is proud to keep quality healthcare close to home for residents of the Lyon County area. Striving to offer exceptional and quality care, Sanford Rock Rapids Medical Center simply is a place where neighbors care for neighbors. Facilities associated with the Sanford Rock Rapids Medical Center include the Rock Rapids Fitness Center, a health and wellness center dedicated to serve persons of all ages in Rock Rapids and surrounding areas. Additionally, the Sanford network includes the Rock Rapids clinic and hospital. The Sanford Rock Rapids hospital, a 25 bed licensed facility directly connected to the Sanford Medical Center Rock Rapids, and provides medical, surgical and pediatric care. Finally, as part of the Sanford Rock Rapids Medical Center system in Lyon County is the Sanford Clinic George. The George clinic is a part-time local facility serving the residents of George and surrounding areas for limited hours Monday through Friday.

### **Avera Medical Group Larchwood**

The Avera Medical Group from Sioux Falls, SD has a medical clinic located within the City of Larchwood, serving the residents of Larchwood and northwestern Lyon County. This Primary Care Clinic in Larchwood offers basic doctor's office services and treatments, including family medicine. The Avera Health network is a regional partnership of healthcare professionals sharing support services to maintain care at 300 locations in eastern South Dakota and surrounding states.

### **Sanford Health Inwood Clinic**

The Sanford Canton-Inwood Medical Center and the Sanford Health Inwood Clinic are proud members of the Sanford Health network. According to its website at <http://www.sanfordcantoninwood.org/>, Sanford is dedicated to providing the best healthcare services to the people living in Canton, SD and Inwood, IA in Lyon County. Sanford Canton-Inwood began partnering with Sanford Health in 1991 and since then has expanded to offer outreach services, physical therapy, educational resources and comprehensive, high quality, accessible healthcare.

### **EDUCATION**

There are three (3) Iowa public school districts primarily serving residents and children in Lyon County. These school districts include the Central Lyon Community School District in Rock Rapids, the George-Little Rock School District located in George and the West Lyon School District located in rural Lyon County along Highway 182 halfway between Larchwood and Inwood. Additionally, portions of the Rock Valley, Boyden-Hull and Sheldon Community school districts in Sioux and O'Brien Counties each cover small portions in the far southern and southeastern portions of Lyon County.

#### **Central Lyon Community School District (located in Rock Rapids)**

The Central Lyon Community School District consists of three (3) school buildings in Rock Rapids serving a population of 711 students. The student to teacher ratio at Central Lyon is 13.2 compared to a student-teacher ratio of 12.9 for Iowa. Central Lyon Elementary is Pre-Kindergarten through 5<sup>th</sup> grade with 312 students. Central Lyon Middle School consists of 6<sup>th</sup> through 8<sup>th</sup> grade and has 110 students. Central Lyon High School handles 9<sup>th</sup> through 12<sup>th</sup> grades and has 210 students.

#### **George-Little Rock Community School District**

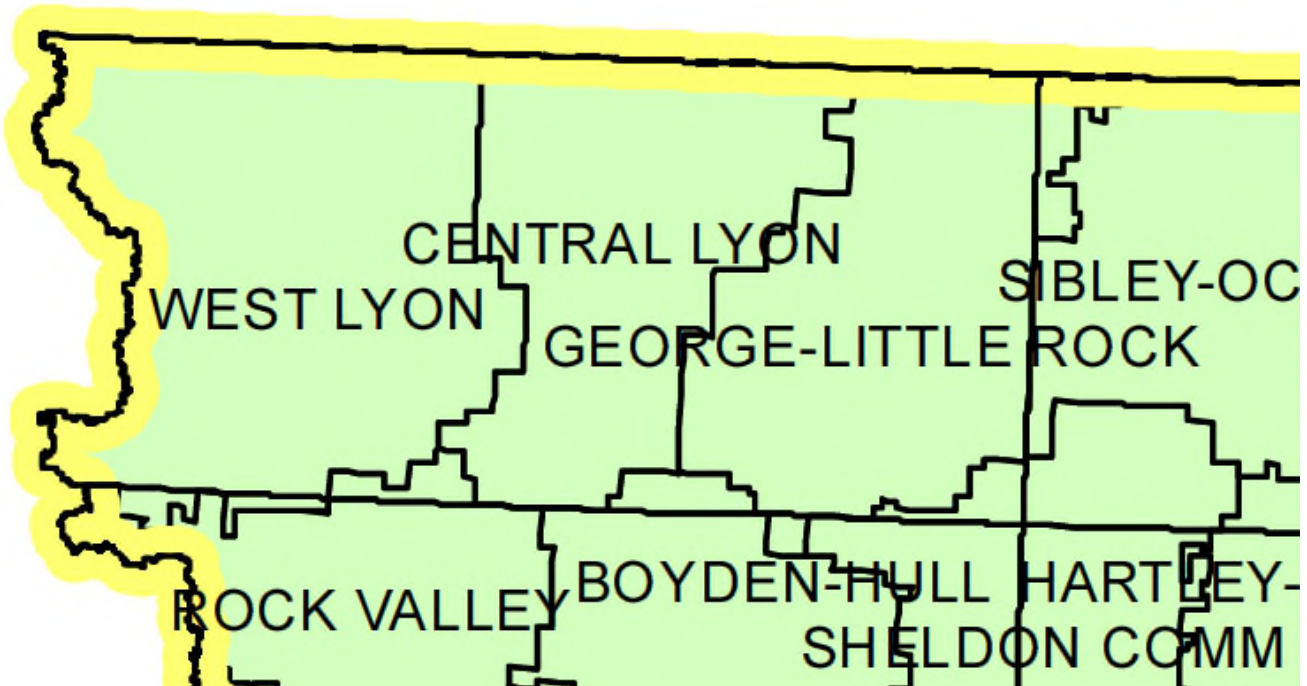
George-Little Rock Community School District is comprised of four (4) educational buildings in two communities. The school district serves a total of 516 students with 39 teachers for a student to teacher ratio of 12.9. This compares to the statewide student-teacher ratio in Iowa of 12.9. George Elementary School is Pre-Kindergarten through 4<sup>th</sup> grade with 130 students. Little Rock Elementary School is Pre-Kindergarten to 5<sup>th</sup> grade with 123 students. The George Little Rock Middle School is comprised of 6<sup>th</sup> through 8<sup>th</sup> grades and has 99 students. The George-Little Rock High School educates 9<sup>th</sup> through 12<sup>th</sup> grades with a combined total of 146 students.

#### **West Lyon Community School District (located between Larchwood & Inwood)**

The West Lyon School District is a Pre-Kindergarten through 12<sup>th</sup> grade facility located along Highway 182 between Larchwood and Inwood. This school is comprised of 759 students with 53 teachers for a student-teacher ratio of 14.1. The West Lyon Elementary School is comprised of grades Pre-Kindergarten through 6<sup>th</sup> grade with 422 students. The West Lyon Junior High consists of 7<sup>th</sup> and 8<sup>th</sup> grades for a total of 104 students. The remaining grades of 9<sup>th</sup> through 12<sup>th</sup> are the West Lyon High School educating a total of 215 students.

In addition to the public school districts in Lyon County, there are other private educational facilities in Lyon County. These include the Doon Christian School, Inwood Christian School, and the Northwest Iowa Protestant Reformed School in Doon.

Figure 45 - Lyon County School Districts Map



Below is a table depicting the certified school enrollment figures for public schools in Lyon County for the 2011-2012 school year. Additionally, the table shows the projected enrollment figures for the next five years for each of the identified school districts.

Table 32 - Lyon County Public School Enrollment for 2012 and Projected Enrollment 2013-2017

School	Year	Certified Enrollment	Year	Projected Enrollment
<b>Central Lyon</b>	2011-12	715	2012-13	715
			2013-14	715
			2014-15	726
			2015-16	734
			2016-17	739
<b>George-Little Rock</b>	2011-12	470	2012-13	468
			2013-14	462
			2014-15	459
			2015-16	457
			2016-17	449
<b>West Lyon</b>	2011-12	816	2012-13	873
			2013-14	897
			2014-15	911
			2015-16	924
			2016-17	935

Source: Iowa Department of Education, 2012

**NORTHWEST IOWA COMMUNITY COLLEGE**

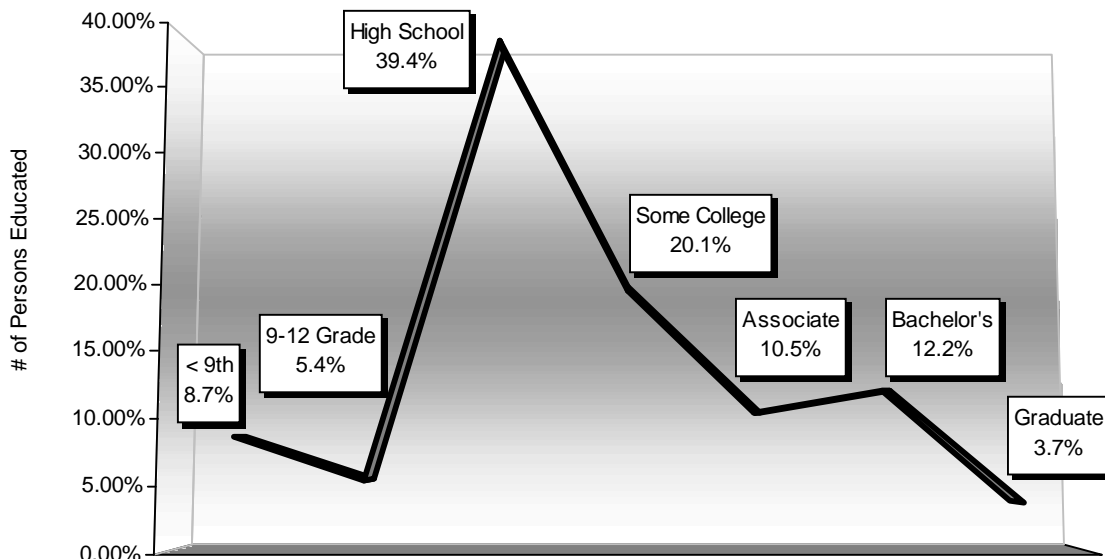


Although located just outside of Lyon County, the Northwest Iowa Community College (NCC) offers Lyon County students and adults alike an opportunity to attend a well recognized community college to either complete a degree in one of many trades programs or to take classes and apply them toward moving onto a four year college or university. NCC is located approximately 5 miles south of the southeastern corner of Lyon County within the City of Sheldon, in Sioux County. According to the NCC website at [www.nwiccc.edu](http://www.nwiccc.edu), the college was first started in 1966 and initially offered three vocational programs. The college moved to its present site in 1966 on the western side of Sheldon and it didn't take long before the school began to expand into new buildings. Today, the college campus consists of primary Buildings A-D, the Library and Learning Center, Building H (home to the college's nursing program), a Radiologic Technology addition completed in 2008 and most recently the completion of the school's new Lifelong Learning and Recreation Center (LLRC). The LLRC was completed in June 2011 and is a 38,000 sq.ft. recreation center that includes multipurpose gymnasium, walking-running track, locker facilities, cyber café, seminar rooms, office space, reception area and convention tradeshow area. The NCC continues to grow each year and has become a consistent and good choice for students in Lyon County and several northwest Iowa counties to either accomplish or begin their college careers.

**EDUCATIONAL ATTAINMENT OF LYON COUNTY RESIDENTS**

According to 2010 U.S. Census Bureau, American Community Survey (ACS) data, of the 11,525 residents in Lyon County, 7,644 are over the age of 25. In identifying the educational attainment level of Lyon County residents, data sources shows 8.7 percent of the county residents have not obtained a high school education. The largest group of educated persons in Lyon County is those who have obtained their high school education or equivalency. Nearly 40 percent of this demographic group or 3,012 Lyon County residents over the age of 25 have obtained only their high school education. Collectively, nearly 86 percent of Lyon County residents over the age of 25 have obtained a high school degree, while 16% have earned a Bachelor's Degree or higher.

Figure 46 - Educational Attainment of Lyon County Residents, 2010



According to 2010 census data, of the 1,347 residents in the 25 to 34 years of age demographic, nearly 95 percent have obtained and high school degree or higher education, while 23.5 percent have obtained a Bachelor’s Degree or higher college education. In comparison, when looking at the 2,004 residents categorized into the 65 years of age and older demographic, only 62.2 percent of these residents have obtained a high school level education or higher. Furthermore, only 8.9 percent of this age demographic has achieved a Bachelor’s Degree or higher education. This information provides the county some insight that when planning for future services, land uses and facilities in Lyon County, a different perspective on the type of planning and needs should be considered based on the educational attainment levels of different age demographics affected by such county decisions.

**CHURCHES & RELIGIOUS ORGANIZATIONS**

The churches and congregations in Lyon County Iowa welcome you and encourage you to attend the church of your choice. Those religious institutions located within and serving the residents of Lyon County, according to the Iowa Genealogy website, <http://genealogytrails.com/iowa/lyon/churches.htm> include:

Table 33 – Lyon County Churches and Religious Institutions, 2012

**Lyon County Churches**

<u>Name</u>	<u>Location</u>	<u>Name</u>	<u>Location</u>
Apostolic Christian Church	Lester	First Reformed Church	Doon
Bethel Church	Little Rock	Grandview Church	Klondike
Bethel Reformed Church	Lester	Holy Name Catholic Church	Rock Rapids
Bethel United Methodist Church	Inwood	Hope Church	George West
Central Baptist Church	George East	Immanuel Lutheran Church	Rock Rapids
Christ Lutheran Church	Alvord	Immanuel Lutheran Church	George East
Christian Church	Rock Rapids	Inwood Christian Reformed Church	Inwood
Christian Reformed Church	Rock Rapids	Lester United Methodist Church	Lester
Congregational United Church	Rock Rapids	New Life Assembly of God Church	Inwood
Doon Protestant Reformed Church	Doon	Our Saviors Church	Inwood
Ebenezer Presbyterian Church	George East	Peace Lutheran Church	Rock Rapids
English Lutheran Church	Larchwood	Sacred Heart Catholic Church	Alvord
Evangelical United Methodist	George West	Saint John Lutheran Church	George West
Faith Baptist Church	Rock Rapids	Salem Reformed Church	Little Rock
First Baptist Church	George	Tabernacle Baptist Church	George East
First Congregational Church	Doon	United Church of Christ	Larchwood
First Presbyterian Church	George East	United Methodist Church	Rock Rapids
First Presbyterian Church	Little Rock	United Reformed Church	Doon
First Reformed Church	Rock Rapids	Zoar Church	George East
First Reformed Church	Inwood		

Source: GNIS Genealogy Trails History Group - <http://genealogytrails.com/iowa/lyon/churches.htm>

**CEMETERIES**

In addition to the many religious institutions listed above, there are several cemeteries within Lyon County. Following is a complete listing of all cemeteries as identified on the Iowa Genealogy website, <http://genealogytrails.com/iowa/lyon/churches.htm>.

Table 34 - Cemeteries in Lyon County and their location

<b>Lyon County Cemeteries</b>			
<b><u>Cemetery Name</u></b>	<b><u>Location</u></b>	<b><u>Cemetery Name</u></b>	<b><u>Location</u></b>
Apostolic Christian Cemetery	Lester	Hope Reformed Cemetery	George West
Beloit Cemetery	Canton	Larchwood Cemetery	Larchwood
Bethel Reformed Cemetery	Midland Twp.	First Presbyterian Cemetery	George East
Bethlehem Cemetery	Inwood	Our Saviors Luth. Cemetery	Inwood
Evergreen Cemetery	George West	Pleasant View Cemetery	Little Rock
First Baptist Church Cemetery	Little Rock	Quaker Cemetery	Ashton
Garfield Township Cemetery	Doon	Richland Cemetery	Inwood
Grandview Cemetery	Klondike	Riverside Cemetery	Rock Rapids
Grant Township Cemetery	Little Rock	Saint Mary's Cemetery	Alvord
Hillside Cemetery	Alvord	Saint Mary's Cemetery	Larchwood
Hillside Cemetery	Lester	Zion Cemetery	George East
Holy Name Cemetery	Rock Rapids	Zion Cemetery	Little Rock
		Zoar Presbyterian Cemetery	George East

Source: GNIS Genealogy Trails History Group-  
<http://genealogytrails.com/iowa/lyon/churches.htm>

### **CULTURAL AMENITIES AND AREA ATTRACTIONS**

Throughout Lyon County, there are numerous examples of civic uses, including cultural attractions, entertainment venues and other businesses in support of the fine arts. Following is a brief overview of the many cultural and entertainment amenities to be enjoyed by residents and tourists alike. This information was obtained from the Lyon County Economic Development website at: <http://www.lyonedia.com/>. Further information about the lifestyle, tourism, activities and fun things to do in Lyon County can be viewed at this site.

### **Lyon County Historical Society Museum Complex**

Located in Rock Rapids, the Lyon County Historical Society's museum complex includes the former renovated Rock Island Depot and a caboose. The historical society has recently constructed an example of an old-fashioned livery stable in the area. Additionally, a Victorian era home has been completely renovated and furnished with artifacts of the period. A period windmill can also be found on the site. Admission is free and the museum complex is open 2:00-5:00 p.m., Sunday and holidays, Memorial Day through Labor Day (or by appointment).

### **Lyon County Cultural Attractions and Sites**

*Gitchie Manitou* is a nature preserve located at the very northwestern most piece of land in Lyon County, approximately 10 miles southeast of Sioux Falls, SD. Gitchie Manitou is culturally significant in Lyon County because it is a place of Native American rituals and habitation. However, this site is more notably a cultural icon for locals due to the infamous Gitchie Manitou murders; one of Iowa's worst massacres in the state's history. There are local claims of a haunting at the site.

*Blood Run* is home to rare Oneota Indian sites ranging in size from 2 to 25 acres. The entire site is more than 600 acres. Blood Run was an important cultural, religious, and trading center, occupied at times by more than 6,000 native people. The Oneota people built many of Blood Run's features, including stone circles, earthen enclosures and mounds. In 1970, the federal government



government designated 844 acres on both sides of the Big Sioux River a national historic landmark. It was named the Blood Run/Rock Island Railroad National Historic Landmark. Blood Run is the portion on the Iowa side of the river.

*Kruger Mill or Klondike Mill* is located near the unincorporated town of Klondike. The Kruger Mill is also referred to as the Klondike Mill. The cultural attraction of this site is that the site is representative of a historical extraction and processing mill located along the Big Sioux River in Lyon County. Today, little remains of the original site except for an old stone wall and a few artifacts from the historical structure.

### **Calico Skies Winery**

One of Lyon County's newest attractions, Calico Skies winery began planting grapes in 2010 and opened for business in 2011. Calico Skies Vineyard and Winery provides an educational, relaxing, and a high quality wine experience that exposes guests to the adventure of exploring Iowa wines. Calico Skies is perched on a plateau overlooking the hills and valleys of pastoral land and wildlife preserve forest near the Big Sioux River. The building includes the tasting room, the production facility, events center, and barrel room. Surrounding the building is a 5 acre vineyard. Enjoy a little slice of California wine country in Lyon County, Iowa.



*Photo courtesy of Lyon Co. Economic Development*

### **Grand Falls Casino and Resort**



*Photo courtesy of Lyon County Economic Development*

Another one of Lyon County's newest attractions, the Grand Falls Casino and Resort opened for business in May 2011. This resort and casino is like no other destination in Lyon County or the tri-state area. Lyon County can now offer big city excitement, with plush amenities and Vegas style gaming. Every aspect of the Grand Falls resort was designed for the enjoyment and entertainment of the guests. The resort is loaded with many styles of gaming, culinary delights in three different restaurants, luxurious hotel rooms and suites, top-notch live entertainment acts, and a relaxing spa.

### **Lake Pajoja Recreation Area**

Lake Pajoja, as described in greater detail in Chapter 7 of this plan, has quickly developed into one of Lyon County's most popular attractions. Not only utilized by local residents, the Lake Pajoja recreation area is enjoyed by residents, guests and visitors from other counties and states. The park, campground, lake and other attractions has numerous activities to keep persons of all



ages entertained. Aside from the excellent fishing opportunities available, there is a four miles paved trail that encompasses the recreation complex, a groomed swimming beach, picnic shelters, a fishing pier, athletic courts and many other activities to keep every member of the family enjoying all aspects of Pahoja.

### **Three (3) Public Golf Courses**

Golf courses remain one of the favorite recreational activities for residents and guests of Lyon County. As described in greater detail in Chapter 7 of this plan, there are three (3) public golf courses located in the rural portion of the county. These three 9 hole golf courses include Meadow Acres Golf Club (east of Larchwood), Rock Rapids Golf & Country Club (north of Rock Rapids), and Otter Valley Golf Course (south of George on the Lyon/Sioux county border. With golfing as popular an activity as it is, Lyon County will soon be home to a new golf course. The Grand Falls Casino and Resort (northwest of Larchwood) plans on developing a championship caliber 18 hole golf course in the near future to add to the amenities of the Grand Falls resort complex.

### **Enjoy Camping in Lyon County**

*Island Park in Rock Rapids* is one of the largest and most scenic city parks in all of northwest Iowa. Island Park offers many shelters for picnicking, areas to fish the Rock River, and of course a large full service campground.

*River of Red Rock Park* is a 9 acre park located on the south side of Little Rock, but within Lyon County. In this park, there is a playground, picnic facilities, athletic fields, and of course a full service campground.

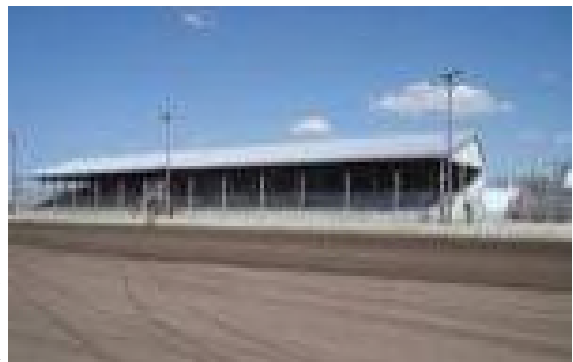
There are many other camping opportunities within the other city parks in Lyon County, along with the unique and enjoyable camping experiences in the cabins at Lake Pahoja.

### **Heritage Days (Rock Rapids)**

This annual citywide celebration began in Rock Rapids in 1981 as a two-day event. Activities in Island Park include horseshoe pitching, canoe races and a flea market. Today, event begins mid-week with a queen contest, family fun night and continues through the weekend with a parade, street dance and activities in Island Park. Events throughout the week include a waffle breakfast, road race, all-school reunion, car show, downtown street sales, etc. The festivities wrap up on Sunday with an outdoor community-wide church service. Heritage Days is always the third week in June.

### **Lyon County Fair and Rapid Speedway**

Touted as the “Best Four Days of Summer”, the Lyon County Fairgrounds are located in Rock Rapids and provide countless hours and days of entertainment, fun and excitement each July. Some of the fair’s amenities include grandstand shows, tractor pulls, entertainment, carnival rides, commercial exhibits, and of course the great fair food. Many youth and adults from across the county come to the fair to show off their talent in the 4-H exhibits and FFA livestock



*Photo courtesy of Lyon Co. Economic Development*

exhibits and FFA livestock shows. Admission is free to the grounds, with free parking and many free entertainment acts. Additionally, one of the highlights during the fair and throughout the summer is racing at the Rapid Speedway. Racing is a tradition in Rock Rapids as evident by the stock, modified and sprint car races that occur every Friday evening of the summer on the 3/8 mile semi-banked oval dirt track.

**Rock Rapids Gun Club**

The Rock Rapids Gun Club has a long and rich history in the community. There are spring and fall trap shooting leagues and special clay events with shooters of all ages. The club has four trap houses and a skeet range. League shooting is held on Wednesday nights. There is open shooting Sunday afternoons from 1-5:00 p.m. for trap and skeet. Members sponsor hunter safety classes and host fund-raising events such as membership and fun nights and wild game feeds to support community activities.

## Chapter 15. OVERALL GOALS AND LAND USE OBJECTIVES

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Those who lead the development of this plan must analyze the background elements of history, physical features, the economic base and population; study land use patterns and trends; and solicit and consider input from county residents regarding future development of the county. The Lyon County Planning and Zoning Commission has developed a framework of goals and objectives to serve as a basis for future land use decisions. These statements are designed to provide a framework for the implementation of this plan despite changes in membership of the administrative body over the lifetime of the plan. These statements will aid in the making of decisions that are not specifically set by final documents.

The goals and objectives for this plan have been developed by the Planning and Zoning Commission and county zoning staff, along with the assistance of the Northwest Iowa Planning & Development Commission. These goals, objectives and land use policies all have been developed to reflect the desires and intent of the county toward future land use development. Additional chapters in this plan will provide an overview of existing conditions in the county that will provide the background and supporting data of the goals and objectives.

There are several items the Board of Supervisors and the Planning and Zoning Commission need to remember in order to make this a successful comprehensive plan. The first and foremost is that all participants must realize there is a large commitment and effort required to make the planning process successful. The commitment of the Planning and Zoning Commission to work with county leaders to guide the implementation of this plan and other development issues is essential. This plan is not a “quick fix” to any agricultural, residential, economic or other development challenges that Lyon County may face; however this plan can serve as a guide to future development opportunities. A comprehensive land use plan needs to be modified and updated over time in order to maintain current plan and control ordinances.

A land use plan needs to be modified and updated over time to reflect current trends and control ordinances. The extent of growth or change experienced by the county will play a major role in determining how often and what types of adjustments will be required. This land use plan must be maintained as the principal guide for future decision making. The following terms should be defined for this plan: **Goals** are broad statements of intent or priority covering a long period of time. **Objectives** are specific land use decisions, are a means by which the goal is reached.

### LYON COUNTY COMPREHENSIVE PLAN GOALS

1. Lyon County should strive to preserve and protect prime agricultural lands while continuing to separate the distinct urban and rural characteristics of the county.
2. Lyon County should consider and finds ways to mitigate or lessen the impact of development on neighboring properties when making future land use decisions.
3. Lyon County should achieve a progressive balance between promoting development to facilitate the economic development potential of the county, and respecting the rights and responsibilities to preserve prime agricultural lands and natural resources.

4. Lyon County should take measures to preserve, protect and enhance the irreplaceable natural resources of the county, both recreational and pristine.
5. Lyon County should facilitate the provision of necessary and required county services to its residents, businesses and industries in a reasonable, efficient and fiscally responsible manner.
6. Lyon County must recognize the importance of securing new and expanding businesses, including but not limited to those businesses promoting good paying jobs for the county's residents.
7. Lyon County should welcome new residents to locate within the county through encouraging or facilitating new and expanding residential development, in addition to those economic or financial assistance programs which may entice new developments.
8. Lyon County has already established an environment and economy which promotes agricultural and animal husbandry. The county should continue to promote these key economic interests, but also expand its economic development efforts to include new, innovative, renewable resource, and green industries.
9. Lyon County should continue to maintain a transportation and infrastructure system that provides for the safe, convenient and economical movement of people and goods in and out of the county.

The above listed term goals are the most significant element underlying the comprehensive development plan. The land use objectives and the policy recommendations formulated in this plan are intended to achieve these overall goals.

## **GENERAL LAND USE OBJECTIVES**

**Physical Setting:** Future development should be scrutinized for potential effects it may have the physical setting and natural resources of the county.

Lyon County is characterized by three (3) distinct and contrasting elements that each deserves individual consideration and attention when planning future land use project. These three primarily land use elements include;

1. Eight (8) incorporated cities and four (4) unincorporated towns
2. Unique natural amenities along the western border in the form of the Big Sioux River corridor and varying topography.
3. Vast areas of prime agricultural lands.

The developed communities have distinctly contrasting needs and impacts upon the land versus the natural resource areas and prime agricultural lands. Thus, land use considerations should be based upon these three separate and distinct environments, when considering future projects.

**Prime Agricultural Lands:** The land in Lyon County is an extremely valuable natural resource and nonrenewable. This natural resource must be protected, especially the control of soil erosion, soil manipulation, and soil contamination which can influence the depletion of this resource and lead to polluting local and regional water resources. However, existing agricultural lands and non-productive lands may be considered for development if they are adjacent to existing communities or built urban areas for the sake of continuity and economic advancement of the county. In most

county. In most instances, non-agricultural development on prime agricultural lands should generally not occur unless mitigating factors add contributing determinants of whether the land is suitable or not suitable for development.

**Natural Resource/Environmental Areas:** Natural resources and environmentally sensitive areas such as watersheds, river flood plains, historic sites, timberlands, and areas of excessive slope require special consideration in order to protect them. Development should be scrutinized prior to being permitted, and any development adjacent to these features must be compatible in nature with such natural resource areas.

**Parks & Recreation:** Recreation and park areas enhance the quality of life for all those who have access to them. The addition of new recreational areas should be closely monitored to determine the affects these areas will have upon the local residents, environment, and social structure of the county. Existing park and recreation areas should be protected from development adjacent to such areas so future growth of the areas can occur without the right of public access being compromised.

**Residential Development:** Adequate space for residential development must be allowed if the county is going to thrive in the future. The county should be careful to consider the needs and services required by future housing developments. Residential expansion must be allowed to occur upon varied locations and situations, but expansion of this land use must be controlled to ensure safe, adequate and affordable housing opportunities for all county residents.

**Commercial Development:** Commercial development should be located adjacent to incorporated areas and arterial streets of the county. Such areas should be near existing commercial sites and in areas established or designated for commercial expansion. This will better utilize existing infrastructure and result in more efficient land uses. Commercial activity of a “home occupation” nature should be allowed in both agriculture and residential areas as long as zoning conditions are met by the occupant. However, certain commercial activities may be better suited in the rural areas, which may be related to agricultural activities or use of natural resources of the county.

**Industrial Development:** The economic base of a county is strengthened and expanded by the variety of industries with which it contains. Expansion of industrial land uses should occur within existing corporate limits or in planned industrial areas where necessary services and utilities can be provided with a minimum of expense and maximum efficiency. Hazardous materials uses (i.e. farm or agricultural chemicals) along with those industries promoting renewable energies or alternative fuels should be considered with careful review and consideration to locate in agricultural areas where zoning protection can be implemented to keep residential uses at a safe distance. All industrial development should be reviewed in regards to its impact upon the surrounding environment.

**Transportation/Infrastructure:** Improvements to the county’s transportation and infrastructure systems is one of the primary components to developing a sound economic base. A good transportation system is a vital link between goods and services and the people who need them. In order to provide transportation at the lowest cost, and integrated system of roadways, railways and airways should be planned for, developed and maintained.

**Utilities:** Necessary services, such as fire protection, water, sewer, electric, streets, natural gas, propane, or petroleum greatly enhance the living environment and economic potential of an area. Because of the cost of providing such services, uses should be encouraged to locate where adequate infrastructure is present. If an existing utility is not available, private systems should be carefully reviewed in regards to their impact upon the environment prior to approval of county officials.

**Economic Development:** Lyon County must encourage, seek and secure new opportunities for economic development. The trending decline in population may directly and indirectly be related to the loss of employment opportunities in Lyon County. Seeking new, innovative and creative solutions to promoting and realizing positive economic development in Lyon County must occur over the next decade.

**County Development:** The overall development of the county must not become stagnant. A pattern of county development that maintains the visual and functional distinction between urban and rural areas should be sought. At a minimum, existing business and housing should be maintained and expanded upon. Increased job opportunities and population growth will be crucial to positive county development. Future urban development should be encouraged in the form of compact, contiguous growth around the existing cities and towns of the county. Additionally, scattered developments of non-farm uses in the agricultural areas of the county should be discouraged.

**City Development:** City growth in Lyon County must be also encouraged in order to strengthen the overall economic vitality of the county. With that said, Lyon County will encourage cities' growth trends toward infill development within existing city limits. The county must carefully review future annexation proposals of unincorporated areas in Lyon County. Growth within the cities makes the most efficient use of available capital resources and community facilities.

**Government Role:** Decisions of government bodies will affect the choices with which property owners consider concerning the use of their property. The role of government in land use issues should be sufficient to protect the rights of both property owners and interested third parties, with considerations for more intergovernmental coordination so consistency of county policies is maintained and duplication of efforts is avoided.

**Land Use Mixing:** Zoning practices should allow for a separation of land use types in order to give all uses protection from incompatible types. Some degree of mixing may be acceptable and even encouraged in instances where multiple land uses are beneficial for the overall development and the properties it affects.

**Planning and Implementation:** Citizen input is vital within the planning process. Local residents can aid local planning boards with policy development and implementation by providing insights into specific areas of their expertise. When a wide range of ideas from residents are included in the plan, implementation of the decisions made should be much easier. Therefore, every effort should be made to implement the ideas contained within this plan, and continued public input and citizen recommendations should be heard and considered by the county.

## Chapter 16. LAND USE TRENDS & POLICY RECOMMENDATIONS

Lyon County continues to be characterized by three distinct land use patterns: (1) the vast prime agricultural areas located primarily in the eastern two thirds of the county, but found in parts of all Lyon County townships; (2) areas of concentrated suburban growth around the fringe of cities and major traffic corridors; and (3) the natural resources near the Big Sioux River and Rock River corridors. From 2000 to 2010, land usage patterns in both rural and urban areas grew more pronounced. Urban development continued to grow slightly around the fringe of the communities and along primary transportation corridors, while agricultural activities seemed to grow as well, in terms of intensity and usage of the land.

There continues to be issues between the amount of agricultural land taken out of production for new residential, commercial and industrial uses. One would think this wouldn't happen when the county's overall population during this same timeframe has decreased slightly. However, the density of housing continues to decrease as people desire to spread out into the county and more people become interested in rural acreages outside of city limits. Developers are simply meeting the demand of rural non-farm acreages and rural non-farm housing subdivisions. Lyon County is also seeing some influx of out-of-state residents that work in a nearby metropolitan city or other communities but prefer to live in rural Lyon County by choice. There are several areas along the western boundary of Lyon County that offer beautiful vistas. These areas are increasingly being sought out by residential developers. The potential for conflict arises in two scenarios. First, the scenario where agricultural residents and ag related businesses are fighting the continued influx of non-farm housing and businesses. The second scenario includes the conflict when those who chose to live in non-farm acreages in rural Lyon County show discouragement toward the proposed expansion or growth in the agricultural sector due to potential or perceived negative affects it may have on quality of life.

Land use policies deal with specific development issues or problem areas and delineate a course of action which can prevent or correct future mistakes. Policies are directly related to the overall goals and objectives, but are specific in that they deal with particular land use types. Policies are meant to be an aid in assisting governing bodies in revising land uses decisions in the form of sound and intelligent decisions. The use of the land is related to factors including past trends, socioeconomic characteristics, soil suitability, topography, utilities, transportation and the nature and beliefs of its residents. Once this information has been gathered, analyzed and quantified, it can be linked with future land use goals and objectives and the suitability of future growth areas to facilitate the evolution of a realistic, attainable and viable land use plan.

### LAND USE DEFINITIONS

According to The New Illustrated Book of Development Definitions, the following land use and planning terms are defined to better provide users of this document an understanding of common planning and land use terms and expressions. Below is a listing of additional land use terms commonly used by planning boards and staff.

#### COMPREHENSIVE PLAN

*“Comprehensive planning is a transparent, public process in which communities establish a future vision and locally designated standards in order to promote public health, safety and prosperity. Successful planning attracts economic development, protects and preserves the community's resources, and encourages a strong community identity”*

Defined by Rebuild Iowa Office “Iowa Smart Planning” 2010



<i>Agricultural Land Use -</i>	Land being utilized for crop production, raising and/or production of livestock or other agricultural-based commodities.
<i>Rural Residential &amp; Unincorporated Towns -</i>	Residential structures, typically single family housing units, located in unincorporated subdivisions, acreages or farmsteads.
<i>Single Family Residential Land Use -</i>	Structures occupied for dwelling purposes by a single-family living in one dwelling unit.
<i>Commercial Land Use -</i>	Structures and/or land used primarily for services, trade, and commerce such as retail, entertainment, food, and other businesses providing the sale of goods, products, and services; excluding wholesale and manufacturing.
<i>Industrial Land Use -</i>	Structures and/or land used primarily for manufacturing, packaging warehousing, or distribution of natural or man-made products.
<i>Public/Civic Land Use -</i>	Structures and/or land available for use by the general public for non-commercial purposes such as schools, churches, cemeteries, fraternal or social clubs, and government buildings.
<i>Parks &amp; Recreation - Land Use</i>	Public and/or private areas devoted to active or passive recreation activities
<i>Natural Resource/ Environmental Land Use -</i>	Those public and/or private areas devoted to the protection, preservation, sustainability of the natural resources and native land uses of the county.
<i>Growth Management -</i>	The pacing of the rate or controlling of the location of development via law enactment to manage growth.
<i>Smart Growth -</i>	An approach to land-use planning and growth management that recognizes connections between development and quality of life. In developing areas the approach is more compact, pedestrian oriented, and has a greater mix of housing, commercial, and retail uses. Smart-growth approaches preserve open space and other environmental amenities.
<i>Conservation Development -</i>	Open space and compact development designed to protect agricultural and/or natural resources while allowing a permitted number of residences under current zoning and subdivision regulations. <i>(Definition courtesy of Urban Land Institute)</i>
<i>Existing Land Use -</i>	The current use of a lot or structure at the time of the comprehensive plan study.
<i>Future Land Use -</i>	The proposed or intended use of properties or areas of land as depicted in the county's comprehensive land use plan and maps

Similar definitions and land classifications are often used within the county's zoning ordinance. Zoning classifications should not be confused with the categories listed herein, as these are more general in nature; and whereas the probable uses of the land are derived only from the appearance of a given land use or property. These categories are meant to aid in studying the composition of the county's current and proposed development patterns.

### **LAND USE CHARACTERISTICS/GROWTH TRENDS**

Historically, growth in Lyon County was concentrated around existing urban developments or transportation corridors. The one exception to this has been the increasing development of non-farm residential dwellings along the Big Sioux River corridor in western Lyon County. There is a rural ag-related industrial development area to the west of Larchwood and north of County Highway A18. Scattered commercial uses appear along portions of Highway 9 throughout the county, including the recently constructed Grand Falls Casino and Resort along Highway 9 adjacent to the South Dakota state line. The other prominent area of rural commercial/industrial uses in Lyon County is north of Rock Rapids along the Rock River corridor which includes the Rock Rapids municipal airport, golf course, rural residential subdivisions, and several storage and excavating/mining related businesses. Rural non-farm residential uses continue to develop throughout the county. Rural non-farm residential uses include both rural subdivisions and rural non-farm residential acreages. Rural residential subdivisions have typically been developed within close proximity to existing cities or previously developed areas. Examples of this trend include the residential subdivision surrounding the Larchwood golf course or the rural subdivisions near Rock Rapids.

The exact amount of land to be planned for each specific land use is not known and cannot be accurately estimated because of unknown variables. Rather, a realistic estimate of land area will be made relative to the following methodology. First, projected changes or shifts in population from 2010 to 2030 will be examined and analyzed to determine the impact on existing and future planned land uses. Secondly, land use areas or districts will be indicated on the future land use map. It must be kept in mind that the future land use plan is a valuable tool in which development decisions and zoning controls can and should be based.

### **AGRICULTURAL LAND USE**

Agricultural uses occur in Lyon County where land is used to produce row crops, grazing, pasture, raising or confine livestock, support orchards or farming, or store grain or agricultural products on a small scale. With the overall number of farmsteads declining, the average size of the farm along with the number of acres farmed in Lyon County is also decreasing; a trend unlike many other rural northwest Iowa counties. Whereas, the trend of surrounding counties appears to be larger farm sizes and more cropland

Photo of a rural farmstead



farmed, Lyon County shows a decline over ten years from an average of 303 acres per farm down to 297 acres per farm. Furthermore, the total number of farm acres in Lyon County has decreased by more than seven percent from nearly 349,000 acres down to just more than 323,000 farm acres. These numbers are reflective of the time frame from 1997 through 2007. With the increase in crop commodities in recent years, it is likely the number of acres of cropland has once again increased. The continual decline of the farm numbers may be attributed to higher production costs and a competitive market created by larger commercial farm operations.

Photo of Lyon County Seal showing agricultural importance to the county



Photo courtesy of <http://www.lyoncountyiowa.com/>

Although the numbers above may show a slightly declining trend in agricultural farms and cropland, the agricultural economy remains the county's strongest economic resource by far. Agricultural lands are the single largest land use in Lyon County, accounting for more than 323,000 acres or approximately 505 square miles. The economic impact derived from agricultural products and farming will continue to evolve, but will also continue to have a strong presence for years to come. Lyon County will need to consider protection measures of prime agricultural land from future development and unnecessary urban sprawl. This is especially true in roughly the eastern two-thirds of the county, where prime agricultural soils dominate the landscape, agriculture is the prime employer and also the greatest economic resource in this portion of Lyon County.

Prime agricultural land is Lyon County's greatest single non-renewable resource. As such, it should receive be preserved for future generations of farming. Protection of agricultural areas can help sustain the primary economic activity in the county. Traditional crop and livestock farming has dominated Lyon County's agricultural economy for decades, but changes in the world market have opened the doors for new and innovative agricultural related industries. Companies that support alternative fuel sources, harnessing natural resources for energy production, and exploring growth in the bio-ag sciences and animal pharmaceutical industries will likely provide many new and exciting economic opportunities.

To further guide considerations of agricultural lands and development related to agricultural uses the following ***agricultural land use policy recommendations*** shall be considered.

- Policy 1. Since prime agricultural soils are a non-renewable resource, encourage all farming and agricultural land uses in Lyon County to become "good stewards" of the land and practice environmentally friendly and conservation practices.*
- Policy 2. Discourage development of new non-agricultural land uses that permanently take prime agricultural lands out of production; especially within the eastern two-thirds of Lyon County. Areas designated for "transitional agriculture" may be better suited for development of non-agricultural uses.*
- Policy 3. Those acres of land removed from agricultural production on a non-permanent basis, such as for natural resource areas, wildlife refuge, wetlands, prairie remnants, etc,*

*shall be encouraged since these natural resource areas are historically accurate of the land use in Lyon County.*

- Policy 4. New non-agricultural development should be encouraged to be built adjacent to or in close proximity of existing developed areas, including cities or existing rural subdivisions, so the negative impact to prime agricultural soils will be lessened.*
- Policy 5. Seek new and innovative agricultural businesses or ag-related industries that compliment the existing land use practices of Lyon County while creating an economic stimulus for the county.*
- Policy 6. Lyon County should encourage the expansion of agricultural based industries such as those related to alternative fuels, animal research or animal pharmaceuticals, with considerations of adjacent environmental resources and prime agricultural lands.*
- Policy 7. Lyon County officials need to balance the agricultural economy and needs of local farmers with the growing business and industrial clientele in Lyon County. Compromise between the agricultural and business communities will provide for a much more diversified and stronger economic climate.*

## **RESIDENTIAL LAND USE**

Residential land uses includes those structures and uses of land primarily intended for human habitation. For purposes of this plan, this will section will include both single family and multiple family residential uses. The broad definition of residential uses can range from small single family lots in subdivisions to large estate lots or rural residential acreages. There is no identified multi-family housing within rural Lyon County. With that stated, there may be future opportunities to develop condominium type multi-family housing surrounding both existing and planned golf course communities. Rural residential growth has steadily developed over the past 10 years with new rural residential subdivisions being platted and developed in Lyon County. Most new rural residential subdivisions and development is occurring within the western townships bordering the Big Sioux River corridor. The land terrain within the western portion of Lyon County begins to change close to the river valley and provides scenic vistas, wooded areas and land not necessarily best suited for agricultural operations. This rural residential style of living offers an enjoyment of residing in a country atmosphere with many of the city amenities people have come to enjoy. Lyon County continues to encourage and promote rural residential development for prospective developers and homeowners; in areas of the county best suited for such developments. Rural residential subdivisions and development will continue to be discouraged in areas of prime agricultural lands.

Photo of a house under construction



With the possibility of farm residences and agricultural housing declining in Lyon County, the trend for non-farm rural residences and rural acreages appears to be increasing. Most rural

residential acreages have become especially evident near incorporated cities where families desire the country lifestyle yet prefer to be close to city amenities. It is expected this practice will continue in the future. Lyon County officials should restrict rural residential non-farm housing in areas of prime agricultural soils. Conversely, rural non-farm housing should be encouraged in areas better suited for that type of development. The expected increase in residential development over the next ten to twenty years in Lyon County should be directed first within the western townships of Lyon County along the Big Sioux River corridor, then toward the fringe of Lyon County's incorporated cities or major transportation routes. Control of residential development can be achieved through the use of regulatory measures such as zoning and subdivision ordinances. Zoning will delineate residential areas by type and density controls, and should reflect the policies of the land use plan to direct development accordingly. A subdivision ordinance regulates the layout of subdivisions, lot sizes, infrastructure, etc., and requires all proposals to conform to the plan.

To further guide development the following *residential land use policy recommendations* shall be considered.

*Policy 8. Encourage non-farm residential development to locate adjacent to existing developed areas first, if possible before locating in prime agricultural areas in the county.*

*Policy 9. Discourage the development of non-farm rural residential acreages on prime agricultural lands that removes land from agricultural production.*

*Policy 10. In rural portions of Lyon County, non-farm residences should be considered and allowed on abandoned or existing farmsteads, in an effort to best utilize existing structures and non-farmed properties.*

*Policy 11. With expanding outlying rural subdivisions intended for commuters, Lyon County needs to be prepared for increased rural residential development in the northwest corner of the county.*

*Policy 12. Identify and support areas within the Transitional Agricultural zoning district that are suitable for rural residential development. These areas should have the potential to be adequately served by utilities and transportation routes.*

*Policy 13. Non-farm residential housing should be encouraged to be located along primary transportation routes, so long as adequate ingress and egress is satisfied and does not result in traffic hazards or congestion.*

*Policy 14. Promote and encourage the growth and utilization of the Northwest Iowa Housing Trust Fund in support of housing rehabilitation and repairs.*

*Policy 15. Encourage Lyon County cities and other non-profit corporations to initiate or continue housing rehabilitation programs and new homeownership programs for low and moderate income persons.*

*Policy 16. Address unsafe or uninhabitable farmsteads and abandoned housing, in support of new housing opportunities.*

*Policy 17. Promote the continued development of vacant lots and the redevelopment or rehabilitation of substandard housing in Lyon County's four unincorporated towns.*



## COMMERCIAL LAND USE

Although commercial uses comprise one of the smallest land use categories in Lyon County, rural businesses remain an important part of the economy, quality of life, and continued success and growth of Lyon County. Most commercial and retail needs of the county's residents are met through businesses located within one of the eight cities. When possible, commercial or retail enterprises should be encouraged to locate within the cities where infrastructure, services, and a customer base are readily available to serve businesses. With that stated, there are instances where specific agricultural related and other rural commercial businesses are better suited in a rural setting. The Highway 9 corridor has become a catalyst to developing several commercial uses. Most commercial uses in Lyon County are situated adjacent to or within a half mile of the Highway 9 corridor or one of the incorporated cities.

Photo of the Grand Falls Casino and Resort in northwest Lyon County



Photo courtesy of: <http://www.grandfallscasinoresort.com/default.aspx>

Although not located adjacent to a community, the Grand Falls Casino and Resort is situated adjacent to the Highway 9 corridor and sits just south of the South Dakota and Minnesota state borders. This strategic location is the closest possible site nearest to the largest population center from which the casino will draw customers. That happens to be the Sioux Falls metropolitan area located only 12 miles to the northwest. Additional rural commercial businesses can also be found within the county's unincorporated towns and within close proximity to the cities of Larchwood, Lester, Rock Rapids, George and Little Rock.

If commercial land use development is to be further supported and developed, the locations of planned commercial properties should be carefully considered as to not infringe upon prime agricultural land. Commercial land uses are better suited on land identified as "transitional

Photo of Calico Skies Winery & Vineyard in southwest Lyon County



Photo courtesy of: <http://www.calicoskieswine.com/>

Only a few scattered commercial uses within Logan, Sioux and Midland Townships are not within immediate proximity to a city. The isolated commercial use in Logan Township is a commercial nursery. The isolated commercial use in Sioux Township is the Grand Falls Casino and Resort. Its location was strategically located due to its proximity to the South Dakota state line. Although not located adjacent

agriculture” areas. According to the future land use map, commercial development is primarily situated adjacent to arterial highways or roadways and also near the fringe of existing cities.

To guide future development, the following *commercial land use policy recommendations* shall be considered.

*Policy 18. Improve commercial trade countywide, including the retention and promotion of agricultural businesses and ag-related support businesses.*

*Policy 19. Commercial development near cities or major transportation routes should be encouraged if appropriate to the area and located in “transitional agriculture” areas.*

*Policy 20. New commercial development should seek properties readily available with adequate services and utilities prior to seeking development on agricultural lands elsewhere in the county.*

*Policy 21. Where commercial uses are adjacent to arterial or major roadways, the use of frontage roads or other adequate ingress and egress should be considered to avoid traffic congestion and dangerous intersections.*

*Policy 22. Prohibit the development of unplanned “spot” commercial uses in areas of prime agricultural lands, in addition to commercial developments that are poorly related to surrounding land use types.*

*Policy 23. An alternative to scattered “spot” commercial developments is the promotion of commercial “clusters”. Clustering of commercial activity within a specific area enhances the economic condition due to the drawing power of existing businesses.*

## **INDUSTRIAL LAND USES**

Most of Lyon County’s manufacturing, industry, warehousing and distribution businesses are located within designated industrial parks in incorporated cities. With that stated, there are several industrial sites located in rural portions of Lyon County. Industries typically locate within cities where adequate utilities and services are readily available to industries. However, due to the type of industry, or limited resources of a city, some industries decide to locate in rural areas better suited to their needs. Several of the rural industries in Lyon County are agricultural in nature for which a rural setting is better suited for their operation. An example of this would be the Novartis Animal

Photo of Sudenga Industries, Inc. of rural George in Lyon Co.



Photo courtesy of <http://www.sudenga.com/>

be the Novartis Animal Health complex west of Larchwood. This animal pharmaceutical company maintains animal barns and pasturage for the horses and other animals that it uses in the daily operations of this pharmaceutical business. Another example of rural industries includes the storage and distribution of bulk fuel or bulk oil products that are generally better suited to be



located in sparsely populated rural areas versus urban centers. Examples of “traditional” manufacturing such as packaging, assembly or production industries are also found in rural Lyon County. One such example is Sudenga Industries, Inc. of rural George. Located approximately 1 east and 1 mile north of George, Sudenga Industries specializes in the manufacturing of grain and feed handling equipment as well as 3 and 4 wheel scooters.

Simply stated, some industries based upon their use, intensity, impact or need for raw products or transportation are better suited to be located within rural settings versus urban. With that understanding, Lyon County needs to be prepared to entice, accommodate and welcome those new industries primarily in the agricultural, mining and alternative energy sectors that are best suited in rural portions of the county. This would include, but not be limited to sand, gravel or rock quarries, grain elevators, agricultural chemical fertilizer manufacturers or storage, feed suppliers and processors, ag-equipment manufacturers, renewable resource or alternative fuel processors, and agricultural animal or commodity processors. Ultimately, due diligence still needs to be met with regards to the impact upon the local environment by any proposed industry. Many of the previously listed industries should be encouraged to locate within the county away from concentrated residential areas where there is easier access to rail, highway, and close to agricultural markets.

An expanding market across much of Iowa, of which Lyon County has yet to tap into, is the alternative fuel, energy and renewable resources industries. Ethanol, soy biodiesel, wind generation, and other bio-engineered or renewable resources industries will become increasingly important to the continued economic growth and success of the county, region and state’s economy. These industries should be highly encouraged to locate within Lyon County. When appropriate, financial incentives and enticing tax benefits should be considered and utilized for the recruitment of highly desirable industrial development considering Lyon County. Future land use designation of industrial uses is a difficult variable to predict for many reasons including the location, available land, transportation access, workforce, availability of utilities, etc.

To support regional economic development, the following ***industrial and economic development policy recommendations*** shall be considered.

- Policy 24. Encourage industries to locate and/or expand in planned industrial parks or areas adjacent to existing industrial developments in an effort to promote the best use of existing utilities and avoid scattering of industrial uses throughout rural areas.*
- Policy 25. Encourage the location of industries with direct access to necessary transportation systems such as highway, rail or air service.*
- Policy 26. Continue to provide industrial uses adequate zoning protection from encroaching non-compatible uses such as residential developments.*
- Policy 27. Continue to provide adequate zoning protection to less intensive and environmentally sensitive areas from encroachment of heavy or more intensive industrial uses.*
- Policy 28. Strengthen Lyon County’s industrial base through support and promotion of economic development organizations, such as Lyon County Economic Development, Northwest Iowa Developers, and Northwest Iowa Planning & Development Commission in their efforts toward business and employment recruitment to the region.*

*Policy 29. Support increased recruitment and development of high tech, biotechnical, research, renewable resource and alternative energy industries in Lyon County through the use of economic development incentives to support those industries with sustainable practices or environmentally friendly practices and products.*

*Policy 30. Encourage the development of industries that utilize locally available materials as a basis for their products, especially those targeting renewable resources, wind generation and alternative energy sources.*

### **CIVIC AND PUBLIC LAND USES**

Civic and public land uses include those properties including public or private utility providers, educational, religious, cultural, medical, protective, governmental and other uses that tend to be strongly vested with public or social importance. These land uses are typically found within the city limits of the eight incorporated cities of Lyon County. Of those civic and public land uses located in rural portions of the county, they are usually compatible with all other land use types and as such their impact upon the county is not as critical to land use planning policies. Civic or public land uses are largely benign in their impact on surrounding properties, thus the common scattered pattern of public uses is appropriate. With that stated, public or private utilities must be careful not to construct water or wastewater facilities, power substations, other utility buildings or structures that are contiguous to residential growth areas. The construction of major utility facilities and buildings must take into account the surrounding environment and conditions. Increases in traffic and congestion are often associated with public uses such as churches, educational or cultural sites. While periodic increases in traffic are often acceptable, congestion and safety issues should be addressed in the development of future public or civic uses.

Photo of West Lyon K-12 School between Larchwood & Inwood



Photo courtesy of: <http://www.west-lyon.k12.ia.us/>

Examples of public and civic uses in Lyon County include rural cemeteries, rural churches, the West Lyon Community School District site and facilities, all other school districts, municipal wastewater treatment lagoons, and rural water treatment plants and wells.

To support cultural, civic, governmental, educational and public land use developments, the following ***civic and public land use policy recommendations*** shall be considered.

*Policy 31. A welcoming and inviting environment in Lyon County should be promoted by all residents, businesses, and county employees.*

*Policy 32. Promote the sharing and cooperative agreements for public services between Lyon County and the cities within the county; especially when sharing services provides better service to the residents and businesses more efficiently or for lower costs.*

*Policy 33. Encourage the cities in Lyon County as well as county officials to meet the arts, educational, and cultural needs of the county.*

*Policy 34. Lyon County should work across state lines to improve the cultural amenities contained within the Blood Run National Historic Landmark as well as the Gitchie Manitou site which are both historically significant with Native American culture.*

*Policy 35. Organizations such as the Lyon County Economic Development, regional economic development and growth organizations and the local city chambers of commerce should work together in promoting the cultural, educational and public amenities of Lyon County.*

*Policy 36. The community school districts in Lyon County should strive to continue offering quality education to all students; and work cooperatively with neighboring school districts and city and county officials to ensure educational standards are achieved.*

### **PARKS, RECREATIONAL & NATURAL RESOURCE LAND USES**

Photo of Blood Run National Historic Landmark along the border of Iowa and South Dakota



Photo courtesy of: South Dakota Parks & Wildlife Foundation  
<http://parkswildlifefoundation.org/projects/BloodRun.aspx>

This land use classification consists of active recreational uses such as county parks, golf courses, and the Lake Pahoja Recreation Area. Additionally, this land use classification also includes the passive recreational and natural resource areas such as county conservation areas, wildlife preserves or reserves, and areas of cultural significance such as the Blood Run National Historic Landmark and Gitchie Manitou area. Both active parks and recreation uses and passive natural resource areas provide many benefits and amenities to enhance quality of life in Lyon County.

In providing an attractive and beautiful setting for residents to live and guests to visit, Lyon County must have a viable parks system and a variety of recreational activities. The appeal of park space and recreational opportunities is often overlooked as an important factor in community and economic development efforts. Lyon County cannot ignore both existing and potential growth in economic benefits it will receive from the thousands of visitors enjoying and participating in Lyon County's parks, recreation areas and other outdoor activities.

Photo of Lake Pahoja Recreation Area



Photo courtesy of  
[http://www.lyoncountyiowa.com/lake\\_pahoja.htm](http://www.lyoncountyiowa.com/lake_pahoja.htm)

Lyon County has an opportunity to capitalize upon the expansion and promotion of one of the most unique areas in the State of Iowa and the Midwest. The Blood Run National Historic Landmark. This site located amongst the native oak forest and prairie remnants of the Big Sioux River Corridor between the rolling hills of western Lyon County and the Sioux Falls metropolitan area lays an area of great cultural Native American significance. Blood Run is identified as one of the oldest sites of long term human habitation in the United States. According to the South Dakota Parks and Wildlife Foundation website, the National Park Service in 2000 identified the Blood Run site as having national importance and worthy of park development. Large portions of the site are identified as communities of ancient Native American civilizations from around 1300-1700 A.D.

Lyon County cannot afford to allow its “green” amenities remain static. Although residents may be satisfied with current park and recreational amenities, the composition of the county will change over time and so must recreation systems change to meet future demands. Furthermore, with the recent addition of new tourism based businesses and amenities such as the Grand Falls Casino, a new winery and enhancements to the cabins and trails around Lake Pahoja, the opportunity for more tourism based guests can be better served through enhanced and new parks and recreation amenities also. Basic park planning standards suggest recreational land uses should comprise 1.5 acres per 100 population. Based on the Lyon County’s 2010 population of 11,581, standards would suggest a recommended total acreage of parks and recreational amenities in Lyon County should equal 174 acres. In reality, there is 475 acres of identified county parks and recreation uses in Lyon County, consisting of the Lake Pahoja Recreation Area, Meadow Acres Golf Course, Rock River Golf & Country Club and Otter Valley Golf Course.

In addition to the 475 acres of active recreation uses, there is another 1,718 acres of passive recreation, wildlife and natural resource areas throughout Lyon County. Although these acres within 14 designated areas of Lyon County are classified as passive recreation, there are plenty of activities to keep one actively involved in nature, recreation and wildlife preservation. These “passive” recreation areas are places for people to engage in bird watching, hiking, canoeing, walking, jogging, hunting, fishing, and general enjoyment of the outdoors. According to the previously identified standard for the number of recreational acres per person, Lyon County should be able to accommodate park, recreational and natural outdoor space needs for a population base of 146,200. Even if you withdraw the public natural resource and open space areas, which tend to be more passive in nature, from the total amount of acreage and just consider the active use county parks and golf courses, these properties account for 475 acres capable of serving a population of 31,600. This number far exceeds the county’s recommended park acres standard for the current population. The largest active recreational park in Lyon County is the Lake Pahoja Recreation Area at 282 acres. The largest passive natural resource area in Lyon County is the Peterson Prairie Wildlife Area consisting of 315 acres of prairie lands, timber and rolling hills.

To guide the use of parks, recreational and natural resource areas in Lyon County, the following ***parks and recreation policy recommendations*** shall be considered.

*Policy 37. Continue presenting and operating a neat and welcoming appearance to the county’s parks, recreation, wildlife areas, and public spaces since first impressions last.*

- Policy 38. Continue to seek funding to the ongoing operation, maintenance, repair and upgrades to the county's existing parks, recreation and public spaces.*
- Policy 39. Support those park and recreation development activities that are comprehensive or regional in nature, but also beneficial to Lyon County's residents, including but not limited to expansion or designation of regional, state or national park status for the Blood Run Historic Landmark.*
- Policy 40. Recognize that best preservation practices for environmentally sensitive areas lie within public ownership, but through restricted zoning districts and regulations, preservation of these lands may also be feasible in private ownership.*
- Policy 41. Protect those natural resource areas in Lyon County that need separation and protection from encroaching or more intensive land uses, both urban and rural, that may have negative influences on natural resource areas.*
- Policy 42. Preserve floodplains and wetlands not normally suited for development.*
- Policy 43. Lyon County will continue to participate in the NFIP and discourage building within designated floodplains. Any development within floodplain boundaries established by FEMA will be built in accordance with recommended NFIP standards.*

#### **TRANSPORTATION, INFRASTRUCTURE & UTILITIES**

An efficiently planned and maintained transportation and infrastructure system is critical to continued development of the county. Lyon County currently has more than 1,073 miles of roads to maintain; ensuring safe route across the county. Of the more than 1,000 miles in Lyon County, 328 are farm to market routes and 65 miles are considered primary routes. Lyon County has more than 750 miles of gravel or secondary roads which can be overwhelming to maintain on a consistent and regular basis. It is not expected that new major transportation routes will be added; rather Lyon County must continually look to improve and update existing modes of transportation and infrastructure. Many of Lyon County's roads are in need of regular repairs and maintenance; but the county's budget simply does not allow for the needed repairs of all the roads in need at this time. The local transportation system and infrastructure network allows for the movement of raw and finished goods as well as provides avenues for personal transportation.

Photo of vehicle traveling along a rural highway



Lyon County has an adequate to good existing transportation system in place with two state highways and rail providing surface transportation. Additionally Lyon County's greatest transportation asset is likely the county's proximity to interstate routes. Although there are no interstate routes directly through the county, Lyon County is situated approximately 15 miles east of Interstate 29 in South Dakota and 15 miles south of Interstate 90 in Minnesota. This close proximity to interstate travel allows businesses and industries an opportunity to locate in the county with lower transportation costs for the shipment of goods and services. For those residents



and businesses utilizing air travel and shipping, Lyon County is also within close proximity to an international airport offering commercial and passenger air service out of Sioux Falls, South Dakota. As identified earlier in this plan, the Lyon County Engineering Department is addressing a proactive road maintenance and infrastructure replacement and maintenance program in order to improve the transportation efficiency and road conditions in Lyon County.

To support transportation, infrastructure and utility land uses, the following ***transportation policy recommendations*** shall be considered.

- Policy 44. The county engineering department should continue to evaluate and maintain the county road system, including hard surfaced roads, farm to market routes and secondary roads, while improving those higher volume routes and those in the most need of improvement.*
- Policy 45. Require frontage roads be used for the access of vehicles to individual lots when subdivisions are platted along major roadways, highways or areas of large traffic volume. Direct vehicular access to highways and heavy volume roadways should be limited for safety concerns.*
- Policy 46. Lyon County officials should cooperate with local, regional, state and federal sources to adequately plan for needed transportation and infrastructure improvements in an effort to promote economic development efforts.*
- Policy 47. Prioritize road and infrastructure projects; and continue to adopt and complete the county's annual 5 year improvement schedule for maintenance and repairs.*
- Policy 48. Continue to support and encourage development and expansion of regional water organizations operating in Lyon County to ensure adequate and cost effective provision of water and sewer services in Lyon County.*
- Policy 49. Continue to support and encourage development and expansion of privately operated local, state or regional utility providers offering efficient and cost effective electric, natural gas, cable, telecommunications and other utility franchises in Lyon County.*
- Policy 50. Promote increased awareness and support ridership of regional transit bus services offered by "RIDES" (Regional Transit Authority) and other public or private transit services in Lyon County.*

## **FUTURE LAND USES**

Lyon County has a solid planning base to monitor its physical growth and future development. This comprehensive plan should be updated on a regular basis. The Lyon County Zoning Administrator and members of the planning and zoning commission and board of adjustment have very important responsibilities. It is vital the volunteers that comprise these boards be conscious of the countywide effect from each decision made, and not tend to be single issue oriented. Determining land uses for a specific area is a product of many variables. Factors affecting land use decisions may include the public's best interest, social values, human behavior, economy, convenience, physical characteristics, and political climate. Identifying the causes of land use patterns becomes even more complex as efforts are made to project and plan future land uses. Essentially, most land use decisions consider the information presented, but are then based upon a

then based upon a combination of objectivity and subjectivity from the local planning commission or board of adjustment. The future land use plan is not a legal document like a zoning ordinance; rather it is a philosophy and statement of land use policies guiding future growth trends within the county. The future land use plan should become a guide for the zoning administrator and the planning and zoning commission to use in determining future zoning changes. Because this is a long range plan based upon projections to the year 2030, changes to this plan over the years may become necessary due to unforeseen variables.

#### **FUTURE LAND USE MAP**

To deal with the future land use planning process effectively, the county has generated a framework of goals, land use objectives and policy recommendations upon which land use decisions are based. Other variables, including planned or possible expansion of services, environmental or natural conditions, or potential economic recruitment also provides insight and can influence future land use patterns. When creating the future land use map, the county has followed existing land use patterns to guide and predict future development. For instance, most planned residential growth is expected to occur adjacent to or near the fringe of existing residential neighborhoods and cities. Similarly, planned commercial corridors, civic/public or recreational land uses are also planned to develop into areas that are either currently known or adjacent to existing or proposed complimentary land uses.

Lyon County's existing land use map, to the best that can be determined, was last created for purposes of the 2004 Comprehensive Plan. The last time the city's future land use map was updated was during the 2004 update. With this plan update, new land use maps have been created with the assistance of the Northwest Iowa Planning and Development Commission staff. The information presented on the land use map has been color coded according to industry standards indicating the following general categories of land uses. For purposes of mapping, the lots were coded with regards to the primary use of the land. For instance, a farmstead with a home occupation or business located on the farm would still be considered an agricultural use since the business or home occupation is secondary in nature and does not directly influence the parcel of land to the extent of the primary agricultural use. The land use map is also mapped according to an area of land or an entire parcel, rather than a specific building footprint. For instance, although a business may only occupy 1 acre of a 20 acre parcel, the entire 20 acres will be classified as a commercial land use since the business is located on one contiguous 20 acre parcel.



## Chapter 17. ADDITIONAL DEVELOPMENT ISSUES

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### ANNEXATION

Future development and growth of Lyon County's cities will occur and county officials should realize this trend will continue. Annexation is the process through which land contiguous to a city is legally added to that municipality; and therefore no longer considered rural unincorporated land. When considering the impact that future annexations may have upon the county at large, it is evident there is a need for county officials to clearly understand and review all proposed future annexations. The county should review, and approve voluntary annexations in most cases. After all, these landowners petitioning for voluntary annexations are not only willing but also wanting to become a part of a city. Regarding attempts from cities to initiate involuntary annexations, Lyon County officials need to offer greater input about the need to control unorganized urban sprawl and protect the development interests of Lyon County. In all cases, a proposed annexation will result in both benefits and disadvantages; thus, the county must look at both sides and make a value judgment. Studies have indicated:

1. Annexations based solely upon speculative growth or anticipated tax generating revenue sources should be discouraged, and likely not approved by the State's City Development Board.
2. Large annexations may spell trouble if a municipality is forced to supply utilities to the furthest point in the annexation.
3. Except in cases where developed areas are annexed, service and utility costs usually occur prior to any benefit from increased tax revenue is available to off-set them.
4. Large annexations should be preceded by a study that will evaluate service requirements and revenue/expenditure relationships likely to result from the annexation.

If cities in Lyon County are to consider undertaking possible involuntary annexations, it should be aware that the burden of proof is upon the annexing body as to the ability to offer the annexed area facilities and municipal services in a better quality and quantity than the area is currently accustomed to. Annexation solely to increase revenue is not justifiable in the eyes of Iowa law.

Laws that regulate annexation vary greatly from state to state, necessitating a brief narrative of the procedures as they relate to Iowa. Annexation usually is not a simple process, but rather one that requires considerable thought and consideration as to benefits and cost requirements prior to an official act. Cities, as well as county governments, must be kept abreast of current legislative proposals as they relate to annexation. Counties often find themselves in situations where large parcels of developing land adjacent to a city's corporate boundaries are constantly under threat of being annexed. In Iowa, a city may annex land by one of five (5) methods:

1. Voluntary annexation not in an Urbanized Area
2. Voluntary annexation in an Urbanized Area
3. "80/20" voluntary annexation not in an Urbanized Area
4. "80/20" voluntary annexation in an Urbanized Area
5. Involuntary annexation.

The City Development Board oversees the annexation process in Iowa. This board is comprised of community officials and representatives from across the state operating under the direction of the Iowa Department of Economic Development and has been granted authority by the State of Iowa to review and make recommendation on annexation proposals.

#### Voluntary Annexations

Voluntary annexation is a relatively simple process that is handled at the local level between the city and property owner(s) requesting annexation. As the name would imply, voluntary annexations have 100% support from the landowners requesting the annexation. Voluntary annexations are typically approved by the city development board without issue.

#### "80/20" Voluntary Annexations

The primary difference between a voluntary annexation and an "80/20" annexation is that a city may include up to 20 percent of the total land area to be annexed containing land owners not wanting to annex into the community, as long as the remaining 80 percent voluntarily agree to the annexation. The City Development Board may request city services be provided to residents in the rural annexed area.

#### Involuntary Annexations

Involuntary Annexations are initiated by the city and are opposed by the majority of landowners in the proposed rural county annexation areas. Before a city attempts such a process, they should review Chapter 368 *Code of Iowa*, as amended and the most recent City Development Board Administrative Rules appearing in the *Iowa Administrative Code*. Involuntary annexations can easily become a complex legal matter; thus, care should be given to assure that all requirements of the City Development Board are met. A city must be prepared to defend its actions by indicating how and when community facilities, services, and utilities can be extended into the proposed annexation. Once approved by the board, involuntary annexations must also be approved by a simple majority of the residents of the proposed annexation area and the residents of the city in a referendum vote. Petitions requesting involuntary annexations must indicate how municipal services will be provided by the city to the county annexed area within three (3) years of July 1 of the fiscal year in which the city taxes are collected against property in the annexed territory.

### **EXTRATERRITORIAL ZONING AND LAND USE**

Cities in Iowa may extend zoning and land use policies to affect the area inside a radius of two miles from the community's existing corporate limits. However, two restrictions apply that limit a city's ability to apply these land use regulations in Lyon County. First, exclusive jurisdiction over non-agricultural land uses in the two-mile buffer is not available to cities within zoned counties. This is the case in Lyon County as the county practices and enforces zoning and subdivision regulations. Secondly, agricultural land uses in the State of Iowa are immune to zoning of any type regardless of proximity to city boundaries.

Nonetheless, cities and counties may establish intergovernmental agreements authorizing a city or county to have specific levels of input into the other entity's land use matters. These agreements may range from granting complete zoning control of the two-mile radius to the city to allowing the county to occupy a non-voting seat on a city's planning and zoning commission (or vice versa).

vice versa). Development issues discussed or addressed within such intergovernmental agreements between a city and county should cover such topics as:

- Primary land use
- Secondary land use
- Utilities – water, sewer, electric
- Infrastructure – roads, storm sewer
- Public roads – concrete/asphalt/unimproved
- Zoning regulations
- Building Codes
- Design Standards
- Subdivision review and standards
- Plat Review

## Chapter 18. PLAN IMPLEMENTATION

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The preceding chapters of this plan establish the framework of the Lyon County Comprehensive Plan with narratives, maps, charts, tables, and statistical information relative to planning desirable future development patterns. This section of the comprehensive plan intends to address those possible means of implementing such objectives and policy recommendations previously outlined in this plan. Because the scope of the Lyon County Comprehensive Plan is long term in nature, its policy recommendations and the idea of implementing such policies may seem daunting. It is for this reason that the Lyon County Board of Supervisors, county employees, and specifically the Lyon County Planning and Zoning Commission should utilize this planning document to assist in developing short term planning programs such as the road improvement plan, capital improvements, financial budgeting, parks and recreation strategic plan or economic development strategic plan, among other examples. Additionally, the planning commission should evaluate the comprehensive plan on an annual basis in consideration of changing development patterns which may occur in any given year.

The private sector, including developers, investors, industries, businesses and homeowners will use this document to become informed of the official policies and positions of Lyon County in regards to land use issues. This comprehensive plan will provide the general public with the framework to potentially assist in making investments, purchases or land development decisions in Lyon County. County residents and potential developers should become informed with regards to those land uses that are permitted, encouraged, prohibited, protected or discouraged in Lyon County. With this information in hand, the public should be able to make informed and knowledgeable decisions regarding developments within the county.

The public of government sector, including but not limited to Lyon County officials, the State of Iowa, and all branches of the federal government will use this document to assist or guide in making future land use decisions in Lyon County. While this evolving document is the result of efforts of the county Planning & Zoning Commission, it was prepared representing the interests of all county residents. Any future land use or development projects proposed by any of the cities, county, state or federal governments should follow the intent and spirit set forth in this document.

The Lyon County Comprehensive Land Use Plan was prepared exclusively for the county by the Lyon County Planning and Zoning Commission with technical assistance provided by the Northwest Iowa Planning & Development Commission. This document will and should be amended from time to time in the future, as deemed necessary by the Lyon County Planning and Zoning Commission. While actual or individual enforcement of the specific policies or recommendations set forth in this plan may be difficult, the comprehensive plan is a policy document intended to serve as a guide for local decision makers in aiding the creation or amendments to the county's regulatory ordinances such as zoning and subdivision regulations. Specific enforcement of land use decisions will be made in conformance with the Lyon County Zoning Ordinance or Subdivision Regulations Ordinance. Changes recommended for enforcement controls should be in compliance with and consistent with the comprehensive plan's future land use map.

## **IMPLEMENTATION STRATEGIES**

With anticipated future land use changes and the potential for growth and development in Lyon County, these expected changes will bring about an opportunity to establish a benchmark from which new trends in land use and development will be measured from. Along with change often means having to give something up or accept new means of looking at the same or new issues. This is why people often try to cling to the past. Most people like things the way they are, even though they know change is inevitable. Some people resist change simply out of fear of the future; they are more comfortable with the past or present. Lyon County's leaders of today and tomorrow are granted the responsibility of identifying, leading, and being the first to accept and embrace a bright future for Lyon County. Listed below are samples of suggested attainable implementation strategies in which the county's planning officials and government leaders may explore to fully realize the maximum benefit from this comprehensive planning document. Lyon County may wish to accept and utilize some or all of these identified implementation measures or create additional measures to identify and measure the county's future land use and development recommendations.

1. Establish a benchmark for Lyon County from which future growth and development patterns and changes will be measured against. Create an action plan addressing county growth, city growth and annexation policies.
2. Allow county leaders, staff and government officials to attend training in an effort to gain new perspective on current or innovative trends in land use policy and regulatory controls.
3. Establish an annual comprehensive plan review workshop in which members of the public are invited to share with county planning officials and the Board of Supervisors their thoughts, concerns, and visions for Lyon County's future.
4. Regularly update an inventory of the county conservation's parks, recreation areas, and natural resources; identifying completed and proposed short term and long term park, trail or other natural habitat development. Support and sustain the projects identified in the conservation board's five-year strategic plan.
5. Lyon County, with an aging population base, must address future needs and services targeted to the senior demographic.
6. In establishing new county policies, government leaders must remember the property rights and interests of land owners in Lyon County. Consistency and fairness is a must.
7. Once the county completes a comprehensive review and update of its enforcement ordinances, such as zoning and subdivision regulations, it would be beneficial to Lyon County to have the services of zoning administration and enforcement consistent with the new or proposed rules adopted by the county.

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## **APPENDIX A**

### **Detailed Schedules of Soil Suitability Based Upon Types of Use**

- ♦ Land Capability
- ♦ Prime and Other Important Farmlands

The following soil suitability schedules were provided from the  
*Soil Survey of Lyon County, Iowa*  
USDA Natural Resource Conservation Service

## **APPENDIX B**

### **Census 2010 Demographic Profile**

Iowa State University  
Department of Economic  
May 2011

## **APPENDIX C**

### **Lyon County Economic Development Strategic Plan**

Roadmap to Success 2011

Prepared by Smart Solutions Group, November 2011