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JEO *Consulting
Group, Inc.*
JEO CONSULTING GROUP, INC.
WAHOO, NEBRASKA

INTRODUCTION

LOCATION

Saunders County is located in east central Nebraska. The Platte River forms the county's northern and eastern borders. The county sits north and east of the most populated areas in Nebraska, the Lincoln and Omaha metropolitan areas. Cass and Lancaster Counties are south of Saunders County; while, Butler County is to the west. Saunders County embraces deep, rich, loamy soil, divided into bottom, plain and rolling lands.

CLIMATE

The climate of Saunders County is not unlike most of the climate in Eastern Nebraska. The climate consists of cold winters and hot summers. The average temperature during the winter months is 22 degrees Fahrenheit and the average summer temperature is 73 degrees.

Precipitation for Saunders County is in the form of snowfall in the winter and rains in the spring and summer months. The average seasonal snowfall for the Saunders County area is 29 inches during the winter months. During the rest of the year precipitation in the form of rain falls in the amount of 32 inches.

HISTORY OF SAUNDERS COUNTY

The first human inhabitants came to Saunders County 12,000 years ago. They were prehistoric Indians who followed herds of elephants and buffalo, which provided them with food and materials for all their needs. About 2000 years ago, their descendents began settling in temporary villages. Between 700 to 1400 AD, these Indians began living in permanent villages. Remains of these villages can still be seen today in Saunders County.

At the time Nebraska became a territory in 1854, Saunders County was known as Calhoun County. In 1856, the county was renamed to Saunders County in honor of Alvin Saunders, the last territorial governor of Nebraska. In 1866, Ashland became part of the County and was named the County Seat. In 1873, the county seat was moved to Wahoo, due to its central location in the county.

The Homestead Act of 1862 drew farmers to Nebraska with the offer of free land. The railroads also encouraged settlement. Most early settlers to Saunders County came from the eastern United States. During the 1860s and 1870s, European immigration into Saunders County increased dramatically due to railroad advertising campaigns in Europe. By 1880, almost two-thirds of the population of Saunders County was foreign born. The largest proportion of these settlers came from Germany, Sweden and Czechoslovakia looking for farmland. Agriculture continues to be the primary industry, with crops such as corn, soybeans, milo, sorghum, winter wheat and popcorn.

THE PURPOSE OF THE COMPREHENSIVE PLAN

The Saunders County Comprehensive Plan is intended to balance development with the existing physical and human environment, set forth a long range plan for use of land and encourage the efficient use of public expenditures and services within the rural areas of Saunders County. The Comprehensive Plan will provide policy guidelines to enable citizens and elected officials to make informed decisions about the future of the community.

*The Plan acts as a tool to “Develop
a road map that guides the community
through change”*

The Comprehensive Plan will provide a guideline for the location of future developments within the planning jurisdiction of Saunders County. The Comprehensive Plan is intended to encourage a strong economic base for the county, based upon county goals and the objectives and policies established to achieve those goals.

The Comprehensive Plan will assist Saunders County in evaluating the impacts of development (i.e. economic, social, fiscal, service and amenity provision, health, safety and welfare) and encourage appropriate land uses throughout the jurisdictional area of the County. The objective of planning is to provide a framework for guiding the county toward orderly growth and development. The Plan assists the County in balancing the physical, social, economic, and aesthetic features as it responds to private sector interests.

Planned growth will make Saunders County more effective in serving residents, more efficient in using resources, and able to meet the standard of living and quality of life every individual desires.

THE PLANNING PROCESS

Planning begins with the collection of data in order to provide a snapshot of the past and present county conditions. Analyses of data provide the basis for developing forecasts for future land-use demands in the County.

The second phase of the comprehensive planning process is the development of general goals and policies. These are practical guidelines for improving existing conditions and guiding future growth. The Comprehensive Plan is a vision presented in text, graphics and tables that represent the desires of the community for the future.

The Comprehensive Plan represents a blueprint designed to identify, assess, and develop actions and policies in the areas of population, land use, transportation, housing, economic development, community facilities, and utilities. The Comprehensive Plan contains recommendations that when implemented will be of value to the community and its residents.

Implementation is the final phase of the process. A broad range of development policies and programs are required to implement the Comprehensive Plan. The Comprehensive Plan identifies the tools, programs, and methods necessary to carry out the recommendations. Nevertheless, the implementation of the development policies contained within the Comprehensive Plan is dependent upon the adoption of the Plan by the governing body, and the leadership exercised by the present and future elected and appointed officials of the County.

The Comprehensive Plan was prepared under the direction of the Saunders County Planning Commission with the assistance and participation of the Saunders County Board of Supervisors and the Plan Review Committee and citizens of Saunders County. The planning time period for achieving goals, programs, and developments identified in the Saunders County Comprehensive Plan is twenty (20) years. However, the county should review the Comprehensive Plan annually and update the document in ten to fifteen years, or when a pressing need is identified. Updating the Comprehensive Plan will allow the county and community to incorporate ideas and developments that were not known at the time of the present comprehensive planning process.

COMPREHENSIVE PLAN COMPONENTS

Nebraska State Statutes require the inclusion of certain elements in a Comprehensive Plan. State Statutes prescribe a “Comprehensive Development Plan” consists of both graphic and textual material, and is designed to accommodate anticipated long-range future growth. The Comprehensive Plan is comprised of the following components:

- County Profile
- Community Facilities,
- Community Goals and Policies,
- Land Use Analysis,
- Transportation, and
- Plan Implementation.

Analyzing past and existing demographic, housing, economic and social trends permit the projection of likely conditions in the future. Projections and forecasts are useful tools in planning for the future; however, these tools are not always accurate and may change due to unforeseen factors. Also, past trends may be skewed or the data may be inaccurate; creating a distorted picture of past conditions. Therefore, it is important for Saunders County to closely monitor population, housing and economic conditions that may impact the community. Through periodic monitoring, the community can adapt- and adjust-to changes at the local level. Adaptability to socio-economic change allows the community to maintain an effective Comprehensive Plan for the future; to enhance the quality of life and standard of living for all residents.

The Comprehensive Plan documents where Saunders County has come from, where it is now, and the likely direction it may head in the future. The Comprehensive Plan is not a static document, but should evolve as changes in the land-use, population or local economy occur during the planning period. The Comprehensive

Plan is a management tool for county leaders to base their decision-making process upon when considering future developments. These decisions will assist Saunders County in achieving their physical, social, and economic goals.

GOVERNMENTAL AND JURISDICTIONAL ORGANIZATION

The governmental functions of Saunders County, Nebraska are provided and coordinated by the County Board of Supervisors, comprised of seven (7) elected officials. Each incorporated community in Saunders County has elected officials and officers that oversee the governing of their community.

PLANNING JURISDICTION

The planning and zoning jurisdiction for the incorporated communities in Saunders County that have adopted Comprehensive Planning and Zoning Ordinances includes the area within one mile of their corporate limits, as written under the authority of Section 17-1002, Nebraska Revised Statutes, 1943 (as amended). As these communities grow and annex land into their corporate limits, their extraterritorial jurisdictions will extend further into the County.

The planning and zoning jurisdiction of Saunders County includes the unincorporated portions of the County, excluding the established extraterritorial jurisdiction of each community and their corporate limits, as written under the authority of Section 23-114, Nebraska Revised Statutes, 1943 (as amended).

**COUNTY PROFILE:
CONDITIONS AND TREND ANALYSIS**

COUNTY PROFILE: CONDITIONS AND TREND ANALYSIS

POPULATION AND HOUSING

Population statistics aid in developing a picture of a county. It is important for a County to understand where it has been and where it appears to be going. Population is the major force behind housing, the economy, employment and fiscal stability of communities and counties. Historic population levels assist in projecting future levels, which in turn assist in determining the future need for housing, retail, medical, employment and educational within the county. Projections do provide a logical, practical estimate for the county to base development decisions. However, population projections are only estimates and a number of unforeseen factors can effect these projections significantly.

POPULATION TRENDS AND ANALYSIS

Table 1 shows the population level for Saunders County, the incorporated communities and the unincorporated area of the county. Table 1 has population data from 1970, 1980, 1990 and 2000. In addition, the Table contains the percent change from each Census to the next. This will give residents of Saunders a better understanding of recent trends within the County and each of its municipalities.

TABLE 1: POPULATION TRENDS OF SAUNDERS COUNTY COMMUNITIES 1970 TO 2000

Community	1970	1980	% Chg 1970 1980	1990	% Chg 1980 1990	2000	% Chg 1990 - 2000	% Chg 1970 - 2000
Ashland	2,176	2,274	4.5%	2,136	-6.1%	2,262	5.9%	4.0%
Cedar Bluffs	616	632	2.6%	591	-6.5%	615	4.1%	-0.2%
Ceresco	474	836	76.4%	825	-1.3%	920	11.5%	94.1%
Colon	109	148	35.8%	128	-13.5%	138	7.8%	26.6%
Ithaca	121	153	26.4%	133	-13.1%	168	26.3%	38.8%
Leshara	102	133	30.4%	118	-11.3%	111	-5.9%	8.8%
Malmo	131	100	-23.7%	114	14.0%	109	-4.4%	-16.8%
Mead	488	506	3.7%	513	1.4%	564	9.9%	15.6%
Memphis	71	89	25.4%	117	31.5%	126	7.7%	77.5%
Morse Bluff	162	132	-18.5%	128	-3.0%	134	4.7%	-17.3%
Prague	291	285	-2.1%	282	-1.1%	346	22.7%	18.9%
Valparaiso	415	484	16.6%	481	-0.6%	563	17.0%	35.7%
Wahoo	3,835	3,555	-7.3%	3,681	3.5%	3,942	7.1%	2.8%
Weston	285	286	0.4%	299	4.5%	310	3.7%	8.8%
Yutan	507	631	24.5%	626	-0.8%	1,216	94.2%	139.8%
Incorporated Areas	9,783	10,244	4.7%	10,172	-0.7%	11,524	13.3%	17.8%
Unincorporated Areas	7,235	8,472	17.1%	8,113	-4.2%	7,721	-4.8%	6.7%
Saunders County	17,018	18,716	10.0%	18,285	-2.3%	19,245	5.3%	13.1%

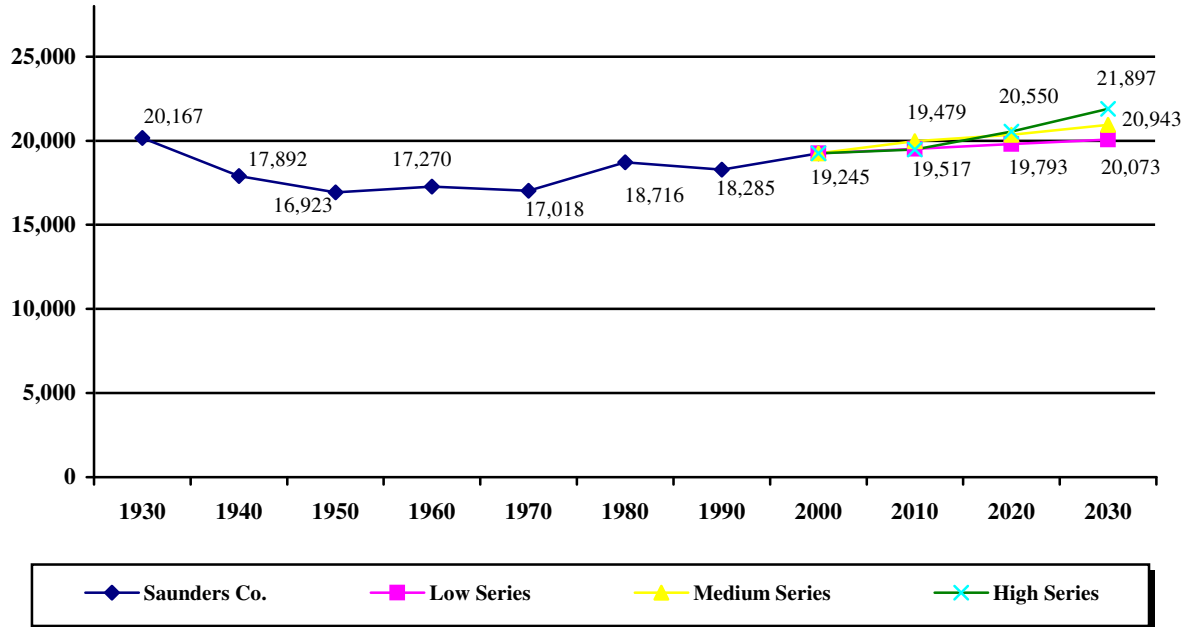
Source: US Census Bureau, Census of Population and Housing, 1970-2000

Table 1 indicates an increase of 13.1% from 1970 to 2000. The increase has been driven by population growth in a number of municipalities within Saunders County during the period. Additionally, the unincorporated areas accounted for an increase of 6.7% during the same period.

Within Saunders County there are 15 municipalities, which from 1970 to 2000 accounted for a 17.8% increase, with 12 of the 15 municipalities experiencing population growth.

Saunders County saw the greatest increases in population from 1970 to 1980 and during the 1990's, with the 1980's seeing many communities lose population. In addition, the county lost population in rural areas as a whole.

FIGURE 1: POPULATION TRENDS AND PROJECTIONS 1930 TO 2030



Source: US Census Bureau, Census of Population and Housing, 1930-1990; JEO Consulting Group, Inc.

Figure 1 indicates the historic population of Saunders County from 1930 to 2000. Based upon the data, 1930 was the peak population. However it is anticipated that future populations will exceed this value. Furthermore, the low point in population was in 1950 with a population of 16,923 people.

In addition to the actual population, Figure 1 also indicates a series of population projections. These projections will be discussed in more detail later in this plan, but indicate that Saunders County could experience slight to moderate growth by 2030.

MIGRATION ANALYSIS

Migration Analysis allows a county to understand how a specific dynamic is influencing the overall population. Migration indicates the portions of the population that have either moved into or out of the county. Migration is the remaining portion of the population after the natural change has been subtracted from its total change in population. Table 2 shows the total change in population for Saunders County from 1960-1970, 1970-1980, 1980-1990, and 1990-2000. The Table also indicates the natural change (total births minus deaths) and the total migration. A negative number in the total Migration column indicates population moving away and a positive indicates population moving into the County.

TABLE 2: MIGRATION ANALYSIS 1960 TO 2000

Census period	Total Chg (persons)	Natural Chg (persons)	Total Migration (persons)
1960-1970	-252	775	-1,027
1970-1980	1,698	511	1,187
1980-1990	-431	671	-1,102
1990-2000	960	586	374
Total	1,975	2,543	-568

Source(s): U.S. Census Bureau, Census of Population and Housing, 1960-1990, 2000; Nebraska Department of Health and Human Services System, Vital Statistics Report(s), 1960-2000

Table 2 indicates that the overall population has declined and increased every other decade between 1960 and 2000. From 1960 to 2000 one of the factors behind the increase in Saunders County's population has been the fact that births have exceeded deaths in every decade. However, out-migration has drastically impacted the population during the period. Therefore, the primary force affecting the population in Saunders County has been the out migration experienced during the 40-year period.

AGE STRUCTURE

Age structure is an important component of population analysis. By analyzing age structure, Saunders County can see if the population has been increasing in specific age cohorts that aid in sustaining future growth. The age cohorts tending to promote future growth are infants to teenage children and adults of childbearing age. A strong presence and growth in these age groups will provide a base for the County to grow and prosper into the future.

Table 3A shows the structure of the age cohorts in Saunders County in 1980 and 1990. Changes between 1980 and 1990 occurred within all age groups. An example of analyzing cohort movement in a population would involve counting the number of persons aged between 0 and 4 years in 1980 with the existence of persons in the same age cohort ten years later, or aged between 10 and 14 years in 1990. A review of population by this method permits one to undertake a detailed analysis of which cohorts are moving in and out of the County.

Saunders County had some key age cohorts' increase in population from 1980 to 1990. However, there were some cohorts that declined which were key to future growth within Saunders County. The impact of this loss can be observed by analyzing the 2000 census data that is provided in Table 3.

TABLE 3: AGE-SEX COMPOSITION OF THE POPULATION 1990 AND 2000

Age	1990		2000		1990-2000		1990-2000		
	Male and Female	% of Total	Male and Female	% of Total	Net Change	% Change	Cohort Change	% Change	
0-4	1,365	7.5%	1,260	6.4%	-105	-7.7%	1,260	-	
5-9	1,510	8.3%	1,556	7.8%	46	3.0%	1,556	-	
10-14	1,528	8.4%	1,696	8.6%	168	11.0%	331	24.2%	
15-19	1,188	6.5%	1,478	7.5%	290	24.4%	-32	-2.1%	
20-24	811	4.4%	786	4.0%	-25	-3.1%	-742	-48.6%	
25-29	1,329	7.3%	929	4.7%	-400	-30.1%	-259	-21.8%	
30-34	1,376	7.5%	1,212	6.1%	-164	-11.9%	401	49.4%	
35-44	2,575	14.1%	3,327	16.8%	752	29.2%	622	23.0%	
45-54	1,836	10.0%	2,719	13.7%	883	48.1%	144	5.6%	
55-64	1,848	10.1%	1,824	9.2%	-24	-1.3%	-12	-0.7%	
65-74	1,451	7.9%	1,591	8.0%	140	9.6%	-257	-13.9%	
75-84	1,064	5.8%	991	5.0%	-73	-6.9%	-1,524	-60.6%	
85+	404	2.2%	461	2.3%	57	14.1%	-1,007	-68.6%	
Total	18,285	100.0%	19,830	100.0%	1545	8.4%	1,488	8.1%	
Selected Characteristics	1990		2000						
	Total 19 yrs and Under		5,591	Total 19 yrs and Under		5,990			
	% of total population		30.6%	% of total population		30.2%			
	Total 65 yrs and older		2,919	Total 65 yrs and older		3,043			
	% of total population		16.0%	% of total population		15.3%			
	Median Age		35.1	Median Age		38.0			
	Total Females		9,130	Total Females		9,961			
	Total Males		9,155	Total Males		9,869			
	Total Population		18,285	Total Population		19,830			

Source: US Census Bureau, Census of Population and Housing, STF-1A, 1990, 2000

1990 Age Cohort	Number	2000 Age Cohort	Number	Change
		0-4 years	1,260 persons	+1,260 persons
		5-9 years	1,556 persons	+1,556 persons
20-24 years	811 persons	30-34 years	1,212 persons	+401 persons
25-29 years	1,329 persons	35-44 years	3,327 persons	+622 persons
35-44 years	2,575 persons	45-54 years	2,719 persons	+144 persons

Decreases in the cohorts occurred in a number of age groups between 1990 and 2000, these cohort shifts were:

1990 Age Cohort	Number	2000 Age Cohort	Number	Change
10-14 years	1,528 persons	20-24 years	786 persons	-742 persons
15-19 years	1,118 persons	25-29 years	929 persons	-259 persons
45-54 years	1,836 persons	55-64 years	1,824 persons	-12 persons
55-64 years	1,848 persons	65-74 years	1,591 persons	-257 persons
65-74 years	1,451 persons	75-84 years	991 persons	-1,524 persons
75-84 years	1,064 persons	85 + years	461 persons	-1,007 persons

TABLE 3A: AGE-SEX COMPOSITION OF THE POPULATION 1980 AND 1990

Age	1980		1990		1980 to 1990 Change	
	Male and Female	% of Total	Male and Female	% of Total	Male and Female	% Change
0 – 4	1,449	7.7%	1,365	7.5%	+1,365	--
5 – 9	557	3.0%	1,510	8.3%	+1,510	--
10 – 14	2,423	13.0%	1,528	8.4%	+79	5.50%
15 – 19	1,749	9.3%	1,188	6.5%	+631	113.3%
20 – 24	1,200	6.4%	811	4.4%	-1,612	-66.5%
25 – 29	1,347	7.2%	1,329	7.3%	-420	24.0%
30 – 34	1,242	6.6%	1,376	7.5%	+176	14.7%
35 – 44	2,021	10.8%	2,575	14.2%	-14	-5.4%
45 – 54	1,933	10.3%	1,836	10.0%	-185	-9.2%
55 – 64	1,846	9.9%	1,848	10.1%	-85	-4.4%
65 – 74	1,611	8.6%	1,451	7.8%	-395	-21.4%
75 – 84	991	5.3%	1,064	5.8%	-547	-34.0
85 +	347	1.9%	404	2.2%	-587	-59.2%
Total	18,716	100.00%	18,285	100.0%	-431	
1980	Total 18 years and Under - 5,912 % of total population – 31.6%		1990		Total 18 years and Under – 5,219 % of total population – 28.5%	
	Total 65 years and over – 2,949 % of total population – 15.8%				Total 65 years and over – 2,919 % of total population - 16.0%	
	Median Age – 32.5 years				Median Age – 35.1 years	
	Total Females – 9330				Total Females – 9,130	
	Total Males – 9386				Total Males – 9,155	
	Total Population – 18,716				Total Population – 18,285	

Source: US Census Bureau, Census of Population and Housing, STF-1A, 1980, 1990

The cohort change in Table 3A indicates the population declined from 1980 to 1990 and was spread amongst several of the age cohorts. Increases in the cohorts occurred in a certain age groups between 1980 and 1990, these cohort shifts were:

1980 Age Cohort	Number	1990 Age Cohort	Number	Change
		0-4 years	1,365 persons	+1,365 persons
		5-9 years	1,510 persons	+1,510 persons
20-24 years	1,200 persons	30-34 years	1,376 persons	+176 persons

Decreases in the cohorts occurred in a number of age groups between 1980 and 1990, these cohort shifts were:

1980 Age Cohort	Number	1990 Age Cohort	Number	Change
10-14 years	2,423 persons	20-24 years	811 persons	-1,612 persons
15-19 years	1,749 persons	25-29 years	1,329 persons	-420 persons
25-34 years	2,589 persons	35-44 years	2,575 persons	-14 persons
35-44 years	2,021 persons	45-54 years	1,836 persons	-185 persons
45-54 years	1,933 persons	55-64 years	1,848 persons	-85 persons
55-64 years	1,846 persons	65-74 years	1,451 persons	-395 persons
65-74 years	1,611 persons	75-84 years	1,064 persons	-547 persons
75-84 years	991 persons	85 + years	404 persons	-587 persons

POPULATION PROJECTIONS

Population projections allow Saunders County, if all things stay equal, to estimate what the population will be in specific future years. Projections are only estimates based upon present day and past circumstances. A number of factors (economic, social, etc.) can affect projections positively or negatively. At the present time, these projections are the best crystal ball Saunders County has for predicting future population changes.

Trend Line Analysis

Trend line analysis is a process of projecting future populations based upon specific changes during a specified period of time. In this analysis of Saunders County, three different trend lines were reviewed; 1960 to 2000; 1970 to 2000 and 1980 to 2000.

Review of these three trend lines indicates Saunders County will continue to increase in population through 2030. The following are the results of the trend line projections for Saunders County:

Year	1960 to 2000	1970 to 2000	1980 to 2000
2010	19,795	20,084	19,517
2020	20,361	20,961	19,793
2030	20,943	21,875	20,073

The 1970 to 2000 trend line indicates the strongest growth through 2030. The 1980 to 2000 trend line shows continued growth but the growth is minimal and barely reaches 20,000 people by the year 2030. Finally, the 1960 to 2000 trend line also produces continued population growth, but at a slower rate than presented in the 1970 to 2000 trend line.

Cohort Survival Analysis

Cohort survival analysis reviews a population by different age groups and sex. The population age groups are then projected forward decade by decade using survival rates for the different age groups. This projection model also accounts for average birth rates by sex and adds the new births into the future population. However, this model does not account for any sort of in or out migration, which has historically been a major factor of population changes.

The Cohort Survival Model indicates an eventual increase in the population for Saunders County. The following projections are based purely on survival rates and do not consider any type of migration:

Year	Population
2010	19,479 persons
2020	20,550 persons
2030	21,897 persons

The projections indicate the trend for Saunders County is to decrease in 2010 and begin an increase through 2030.

Bureau of Business Research (BBR)

These sets of population projections are based upon the analysis of the Bureau of Business Research at the University of Nebraska-Lincoln. These numbers are generated solely by the BBR, and may or may not follow the Census population directly. This organization has projected populations of the counties in Nebraska through the year 2020. These projections are BBR's projections for Saunders County:

Year	Population
2010	20,372 persons
2020	21,731 persons

The projection from BBR closely reflects the 1970 to 2000 trend as well as the Cohort projection.

Population Projections

Using the modeling techniques discussed in the previous paragraphs, the following is a summary of the population projections for Saunders County through the year 2020. There has been a Low Series, Medium Series and a High Series projection established in order to indicate different growth patterns which may be encountered in the next 21 years. The following are the populations for each Census year:

Year	Low Series (1980 to 1998)	Medium Series (1960 to 2000)	High Series (Cohort)
2010	19,517 persons	19,975 persons	19,479 persons
2020	19,793 persons	20,361 persons	20,550 persons
2030	20,073 persons	20,943 persons	21,897 persons

As stated previously, these are only educated estimates based upon data from the past. There are a number of external and internal economic and social issues, which could affect these projections in either a positive or negative fashion. Saunders County residents must monitor the future population estimates and US Census releases carefully in order to be educated on the growth of their community.

HOUSING

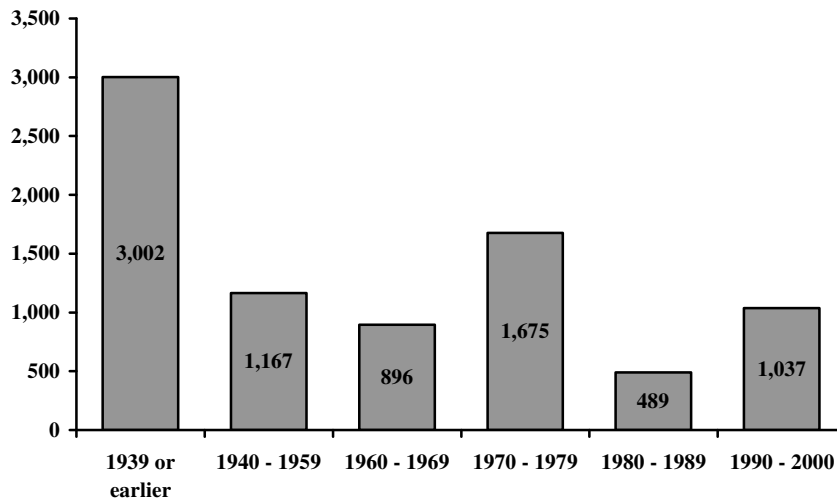
The Housing element of the Comprehensive Development Plan identifies existing housing characteristics and projected housing needs in Saunders County. A primary goal of the County should be to provide safe, decent, and sanitary housing for every family and individual residing within Saunders County.

Projecting future housing needs requires that several factors must be considered. These factors include Population changes, family income, employment, land use, and residents' attitudes. In determining the future housing needs in Saunders County different housing types need to be evaluated which include owner-occupied and renter-occupied. The following Tables and Figures provide the needed information to base future projections for Saunders County.

AGE OF EXISTING HOUSING STOCK

The age of a county's housing stock can indicate a great deal about population and economic conditions of the past. The age of the housing stock may also indicate needed repairs or needed replacements within the county. The category is important in understanding the overall quality of housing and the quality of life in the county.

FIGURE 2: AGE OF EXISTING HOUSING STOCK



Source: US Census Bureau, Census of Population and Housing, STF-3A, 2000

According to the information in Figure 2, approximately 36% or 3,002 housing units were built before 1940, with an additional 3,738 units or 45% constructed between 1940 and 1980. Overall, 61.2% of the housing units in Saunders County are more than 30 years old.

As the existing housing stock begins to age (especially those units built prior to 1940) the Saunders County housing stock will need to be renovated, maintained, and/or replaced with newer units. Additionally, the county may need to take measures to identify those units which are deteriorated and dilapidated. Once these

units are identified, steps should be taken to demolish the units so the County is able to meet future needs and to sustain growth through the provision of quality housing.

HOUSING STOCK

The housing stock of the County is analyzed as to the make up of owner-occupied, renter-occupied, and vacant units. These data provide a picture of the housing composition and can be broken down in many additional ways. Besides these data units, it is important to compare data regarding median value of owner-occupied and median contract rent for housing units.

TABLE 4: COMMUNITY HOUSING TRENDS 1980 TO 2000

Selected Characteristics	1980	1990	% Change 1980-1990	2000	% Change 1990-2000	% Change 1980-2000
Population	18,716	18,285	-2.3%	19,830	8.4%	0.06
Persons in Household	18,475	18,045	-2.3%	19,575	8.5%	0.06
Persons in Group Quarters	241	240	-0.4%	255	6.3%	0.06
Persons per Household	2.80	2.65	-5.4%	2.61	-1.5%	-0.07
Total Housing Units	7,484	7,185	-4.0%	8,266	15.0%	0.10
Occupied Housing Units	6,603	6,809	3.1%	7,498	10.1%	0.14
Owner-occupied units	5,269	5,424	2.9%	5,974	10.1%	0.13
Renter-occupied units	1,334	1,385	3.8%	1,524	10.0%	0.14
Vacant Housing Units	881	785	-10.9%	768	-2.2%	-0.13
Owner-occupied vacancy rate	1.7%	1.9%	N/A	1.4	N/A	N/A
Renter-occupied vacancy rate	1.5%	5.1%	N/A	5.8	N/A	N/A
Single-family Units	6,684	6,580	-1.6%	7,293	10.8%	0.09
Duplex/Multiple-family units	487	598	22.8%	601	0.5%	0.23
Mobile Homes, trailer, other	313	518	65.5%	372	-28.2%	0.19
Median Contract Rent						
Saunders County	\$129	\$217	68.2%	\$474	118.4%	2.67
Nebraska	\$170	\$348	104.7%	\$491	41.1%	1.89
Median Value of Owner-Occupied Units						
Saunders County	\$36,100	\$43,600	20.8%	\$87,800	101.4%	1.43
Nebraska	\$38,000	\$50,000	31.6%	\$88,000	76.0%	1.32

Source: US Census Bureau, Census of Population and Housing, STF-1A, 1980, 1990, 2000

Table 4 reviews housing statistics regarding household population, persons per household, types of housing units, and housing make-up. Also included are vacancy rates and the median value of owner-occupied and median contract rent for housing units. These data are compared for 1980, 1990, and 2000.

The 1980 Census reported there was 7,484 year round housing units, of these 6,603 or 88.2% were occupied and the other 881 units or 11.8% were vacant. In the 1990 Census, there were 7,185 total year round housing units with 6,809 housing units or 95.0% occupied, leaving 376 units or 5.0% vacant. Overall, the decrease the total number of housing units caused the number of owner occupied units to decrease as well. This could have resulted from the transference of owner occupied to renter occupied of the same housing units or the demolition of some older single family units across the county.

Owner-occupied Housing Units

As stated in Table 4, Saunders County had a total of 6,603 housing units, in 1980, of which 5,269 or 79.8% were owner occupied. In 1990, the total number of housing units increased to 6,809, of which 5,424 units or 79.7% were owner-occupied. Between the 1980 and 1990 US Censuses, the portion of owner-occupied housing units remained relatively stable.

In 1980 the median value of owner-occupied housing units were \$36,100 compared to \$38,000 overall in the State of Nebraska. In 1990, the median value of owner occupied units increased to \$43,600, a total change of 21.0%. The median value of owner-occupied units for the state of Nebraska increased to \$50,000 or a total change of 31.6%. Saunders County saw less of an increase in the median value of owner-occupied units than the state of Nebraska. In 1980, the median value accounted for 95% of the state average by 1990 this decreased to 87.2% of the state average. The reason for the increased separation is not immediately apparent.

Comparing this change in value of owner occupied housing in Saunders County to the CPI (Consumer Price Index) for the same time period can reveal certain aspects of the housing market. As stated before the median value for owner occupied housing increased at a rate of 21.0% where the CPI increased at a rate of 60.7% for the same period. This indicates that housing units increased in value between 1980 and 1990 but still fell short of inflation, which simply means that housing units gained in value but still were worth less in real dollars in 1990.

An increase of approximately 101% in the median value occurred during the 1990's, which raised the median value to \$87,800 in 2000. This was just below the median value for the State of Nebraska (\$88,000) in 2000, although the rate of increase was higher than experienced statewide (76%). Between 1990 and 2000, the CPI increased 31.7 percent, which means that housing values increased at a higher rate than inflation. In addition, the number of owner occupied units increased by 10.1% for a total of 5,974 units in 2000. With regard to housing type, the only category to decline between 1990 and 2000 was manufactured housing.

Renter-occupied Units

The number of rental units in Saunders County increased from 1,334 to 1,385 between the 1980 and 1990 census. Rental units in Saunders County made up 20.2% of the total occupied housing units in 1980. By 1990 rentals increased to 20.3% of the total occupied housing units. This may be explained, in part, by the increase of duplexes, multi-family, dwellings, and mobile homes.

Between 1980 and 1990, Saunders County's Median Cash Rent increased from \$129 to \$217, a 68.2 % increase or 6.8% per year. This compares to a Consumer Price Index (CPI) increase of 60.7% for the same time period. The Median Cash Rent increased at a faster rate than the CPI. Thus, renters were actually paying more in real dollars in rent in 1990 than they were in 1980.

From 1990 to 2000 the median rent increased approximately 118% to \$474, which was slightly lower than the median rent for the state. During the same period, Nebraska's median contract rent increased by almost 57% to \$491.

Between 1990 and 2000, there was a 15% increase in the total number of housing units, with most of them noted as being occupied. While the number of occupied units increased by 10.1%, the number of vacant units decreased by 2.2 percent. In addition, the majority of dwelling units in Saunders County are noted as single family, which increased 10.8% during the period, while manufactured housing declined 28.2% between 1990 and 2000.

Table 5 exhibits tenure of households by number and age of persons in each housing unit in Saunders County. Saunders County was comprised mainly of 1 and 2 person(s) households for both owner-occupied (57.6%) and renter-occupied (67.2%) units. These smaller household sizes are also represented by the decrease in the average household size.

Tenure by age indicates 43.1% of owner-occupied housing units were comprised of persons aged 55 years and older, while 45.1% of these units were comprised of individuals between the ages of 35 and 54. Characteristics for renter-occupied units were different, with the 25 to 44 years age cohorts representing 47.5% of rented dwellings. Furthermore, 27.6% of all renter-occupied units were made up those who were 55 or older.

TABLE 5: TENURE OF HOUSEHOLD BY SELECTED HOUSING CHARACTERISTICS, SAUNDERS COUNTY, 2000

Householder Characteristic	Owner-Occupied	% O.O	Renter-Occupied	% R.O
Tenure by Number of Persons in Housing Unit (Occupied Housing Units)				
Household Characteristic	Owner-occupied	% O.O	Renter Occupied	% R.O
1 person	1,164	19.5%	609	40.0%
2 persons	2,278	38.1%	414	27.2%
3 persons	876	14.7%	222	14.6%
4 persons	892	14.9%	149	9.8%
5 persons	487	8.2%	78	5.1%
6 persons	185	3.1%	36	2.4%
7 persons or more	92	1.5%	16	1.0%
TOTAL	5,974	100.0%	1,524	100.0%
Tenure by Age of Householder (Occupied Housing Units)				
15 to 24 years	56	0.9%	164	10.8%
25 to 34 years	637	10.7%	371	24.3%
35 to 44 years	1,412	23.6%	354	23.2%
45 to 54 years	1,287	21.5%	214	14.0%
55 to 64 years	905	15.1%	110	7.2%
65 to 74 years	869	14.5%	114	7.5%
75 years and over	808	13.5%	197	12.9%
TOTAL	5,974	100.0%	1,524	100.0%

Source: US Census Bureau, Census of Population and Housing STF-1A, 2000

Table 6 indicates the changes in housing conditions and inventory of substandard housing for Saunders County between 1990 and 2000. From 1990 to 2000, Saunders County gained 1,081 housing units or an increase of 108.1 units every year. In 2000, there were 8,266 occupied housing units; the U.S. Department of Housing and Urban Development considered 167 of those units substandard. Those units considered substandard either 1) lacked complete plumbing, or 2) had more than 1.01 persons per room.

These figures do not represent the total number of dwelling units containing major defects requiring rehabilitation or upgrading to meet building, electrical or plumbing codes. A comprehensive survey of the entire housing stock should be completed every five years to determine and identify housing needs. This process would ensure that Saunders County protects the quality and quantity of their housing stock so they may continue to develop.

TABLE 6: SELECTED HOUSING CONDITIONS, SAUNDERS COUNTY, 1990-2000

Housing Characteristic	Saunders County
1990 Total Housing Units	7,185
2000 Total Housing Units	8,266
Change in Number of Housing Units between 1990 and 2000	
Total Units	1,081
Annual Units	108.1
2000 Total Housing Units – Plumbing Facilities & Overcrowded Units	
Occupied Housing Units	7,498
Lacking Complete Plumbing Facilities	33
Units with 1.01 persons or more per room	134
Substandard Housing Units*	167

*Substandard housing is defined by the U.S. Department of Housing and Urban Development as (1) lacking complete plumbing facilities, and/or (2) with more than 1.01 person or more per room
Source: U.S. Census Bureau, Census of Population and Housing, STF-3A, 1980, 1990

ECONOMICS AND EMPLOYMENT PROFILE

Economic data are collected in order to understand area markets, changes in economic activity and employment needs and opportunities. In this section, household income statistics are reviewed for Saunders County and Nebraska. Employment by Industry, Location Quotients, Transfer Payments, Agricultural Statistics, and Basic/Non-Basic Analysis are performed in order to better understand the economic forces at work in Saunders County.

INCOME STATISTICS

Income Statistics for households are important in telling the earning power of the households in a community. These data indicate at what level households are earning, compared to the State. In addition, these data are reviewed for purposes of determining if the households are seeing income increases at a rate at least comparable to the Consumer Price Index (CPI).

In 1990, the median income for Saunders County's households was \$26,058, and increased to \$42,173 in 2000. Nebraska households saw an increase to \$26,016 to \$39,250, which was less than that of the Saunders County.

Saunders County households also increased at a greater rate than the 31.6% growth of the CPI for the same period. This states that families in Saunders County were making more money in real dollars in 2000 than in 1990. In comparison to the State, Saunders County had greater gains overall for this time period.

TABLE 7: HOUSEHOLD INCOME STATISTICS 1990-2000

Household Income Ranges	1990				2000			
	Saunders County	% of Total	State of Nebraska	% of Total	Saunders County	% of Total	State of Nebraska	% of Total
Less than \$10,000	1,028	15.1%	95,602	15.9%	503	6.7%	55,340	8.3%
\$10,000 to \$14,999	611	9.0%	64,661	10.7%	402	5.4%	43,915	6.6%
\$15,000 to \$24,999	1,562	23.0%	128,454	21.3%	1,057	14.1%	98,663	14.8%
\$25,000 to \$34,999	1,477	21.7%	108,560	18.0%	1,039	13.9%	97,932	14.7%
\$35,000 to \$49,999	1,288	18.9%	107,111	17.8%	1,551	20.7%	122,654	18.4%
\$50,000 and over	833	12.3%	98,470	16.3%	2,925	39.1%	248,491	37.3%
Total	6,799	100.0%	602,858	100.0%	7,477	100.0%	666,995	100.0%
Median Household Income	\$26,058		\$26,016		\$42,173		\$39,250	
Number of Households	6,799		602,858		7,477		666,995	

Source: US Census Bureau, Census of Population and Housing, STF-3A, 1990, 2000

Table 8 indicates household incomes for Saunders County householders aged 55 years and over in 2000. The table indicates 1,163 senior households or 39.3% of the total senior population had incomes of less than \$25,000 per year. Furthermore, another 453 senior households, or 15.3% of the total senior population had incomes between \$15,000 and \$34,999 per year.

This information indicates many senior households could be eligible for housing assistance. The number of senior households should continue to grow; and fixed income households may be required to provide their entire housing needs for a longer period of time. However, fixed incomes for seniors tend to decline in real dollars at a faster rate than any other segment of the population, when compared to the rate of inflation.

The last two columns of Table 8 indicate the total number of households in each income level and the proportion of households aged 55 years and older having said income level. Note that the income levels of less than \$10,000, 57.7% of total households in this range were over the age of 55.

TABLE 8: HOUSEHOLD INCOME BY AGE (55 YEARS & OLDER), SAUNDERS COUNTY, 2000

Income Categories	55 to 64 years	65 to 74 years	75 years & older	All Households 55 years & older	% of Households	Total Households	Proportion of Households by age 55 & older
Less than \$10,000	44	66	180	290	9.8%	503	57.7%
\$10,000 to \$14,999	37	89	147	273	9.2%	402	67.9%
\$15,000 to \$24,999	124	209	267	600	20.3%	1,057	56.8%
\$25,000 to \$34,999	158	148	147	453	15.3%	1,039	43.6%
\$35,000 to \$49,999	236	217	104	557	18.9%	1,551	35.9%
\$50,000 or more	425	225	130	780	26.4%	2,925	26.7%
Total	1,024	954	975	2,953	100.0%	7,477	39.5%

Source: US Census Bureau, Census of Population and Housing, STF-3A, 2000

Table 9 shows owner-occupied and renter-occupied housing costs as a percentage of householder income in 1990. In addition, the table estimates the number of households experiencing a housing cost burden. A housing cost burden is defined by the U.S. Department of Housing and Urban Development (HUD) as the extent to which gross housing costs, including utility costs, exceed 30% of gross household income, based on data published by the U.S. Census. The information shows households earning near or below median income levels experienced higher housing costs compared to those earning more than \$35,000 per year. Renter-occupied households for this age group had 26% of all renter units experiencing a housing cost burden in Saunders County. Owner-occupied households had 17.2% of the total owner units experiencing a housing cost burden. Most of the households within this classification made less than \$35,000 annually. Overall, in 2000 there were 1,073 households or 19.1% in Saunders County experiencing a housing cost burden.

TABLE 9: HOUSING COSTS AS A PERCENTAGE OF HOUSEHOLD INCOME, SAUNDERS COUNTY, 2000

Income Categories	Owner-Occupied Households	% O.O. Households	Renter-Occupied Households	% R.O. Households	Total Households	% of Total Households
Less than \$10,000						
Less than 30% of income	45	1.0%	51	4.1%	96	1.7%
More than 30% of income	132	3.0%	106	8.6%	238	4.2%
\$10,000 to \$19,000						
Less than 30% of income	271	6.2%	135	11.0%	406	7.2%
More than 30% of income	146	3.3%	147	12.0%	293	5.2%
\$20,000 to \$34,000						
Less than 30% of income	594	13.6%	289	23.5%	883	15.8%
More than 30% of income	218	5.0%	55	4.5%	273	4.9%
\$35,000 to \$49,999						
Less than 30% of income	755	17.2%	244	19.8%	999	17.8%
More than 30% of income	191	4.4%	6	0.5%	197	3.5%
\$50,000 or more						
Less than 30% of income	1,960	44.8%	191	15.5%	2,152	38.4%
More than 30% of income	66	1.5%	6	0.5%	72	1.3%
TOTAL	4,378	100.0%	1,230	100.0%	5,608	100.0%
Housing Cost Analysis						
Less than 30% of income	3,625	82.8%	910	74.0%	4,535	80.9%
More than 30% of income	753	17.2%	320	26.0%	1,073	19.1%
TOTAL	4,378	100.0%	1,230	100.0%	5,608	100.0%

Source: US Census Bureau, Census of Population and Housing, STF-3A, 2000

Table 10 indicates owner and renter costs for persons in households aged 65 years and over. Again similar trends are exhibited in Table 9 are exhibited. In 2000, 421 elderly households or 26.8% experienced housing

costs exceeding 30% of their income. This finding is of particular importance, as many elderly households will continue to face increasing household costs while depending upon decreasing and/or fixed incomes. Over 66% of elderly renter households experienced a housing cost burden, while only 203 or 16.4% of elderly owner occupied household were reported to be experiencing a cost burden.

**TABLE 10: OWNER AND RENTER COSTS BY AGE OF HOUSEHOLDER (65 YEARS & OLDER)
AS A PERCENTAGE OF HOUSEHOLD INCOME, SAUNDERS COUNTY, 2000**

Income Categories	Owner-Occupied Households	% O.O. Households	Renter-Occupied Households	% R.O. Households	Total Households	% of Total Households
Housing Cost Analysis						
Less than 30% of income	1,037	83.6%	110	33.5%	1,147	73.2%
More than 30% of income	203	16.4%	218	66.5%	421	26.8%
TOTAL	1,240	100.0%	328	100.0%	1,568	100.0%

Source: U.S. Census Bureau, Census of Population and Housing, STF-3A, 2000

The relationship between income and housing is the most crucial factor in the provision of safe, decent, sanitary and affordable housing for all households and individuals. Saunders County should look at developing and implementing a set of housing goals when making decisions regarding future developments.

INCOME SOURCE AND PUBLIC ASSISTANCE

Personal income by source, for Saunders County residents, is shown in Table 11. Between 1970 and 2000 total income and per capita income exhibited continued growth, especially non-farm income. Non-farm income increased from \$48,480,000 in 1970 to \$401,757,000 in 2000 or 728.7%. Income levels for Saunders County, as a whole, grew at a moderate rate during the 30-year period. Saunders County residents went from a total of \$56,391,000 earned in 1970, to \$436,861,000 earned in 2000, which accounts for a 674.7% increase. During the same period, the CPI increased by 343.8%. The increase within Saunders County was nearly twice as much as the cost of living nationally, which means total personal income in Saunders County was growing almost two times faster than inflation during this time period.

In 1970, non-farm income accounted for \$48,480,000 or 86.0% of the total personal income for Saunders County. By 2000, non-farm income had increased by 728.7% to \$401,757,000. The 2000 non-farm income accounted for 91.9% of Saunders County's total personal income. In 1970, the farm income in Saunders County was \$7,911,000 or 14.0% of the total. By 2000, the farm income increased to \$35,104,000 or 9.1% of the total. The change from 1970 to 2000 was an increase of 9.3%, although farm income decreased between 1990 and 2000. Overall, this indicates that farm income was increasing at a smaller rate than non-farm income. Both areas increased at a rate greater than the CPI nationally. However, non-farm income decreased in its overall share of the total personal income.

Table 11 also shows the Per Capita Income (PCI) for Saunders County for 1970, 1980, 1990, and 2000. In 1970, Saunders County had a PCI of \$3,303, and in 2000 the PCI was \$21,999; an increase of 566%. Once

again, the change from 1970 to 2000 exceeded the increase in the CPI. This further indicates residents of Saunders County had increases in their income that was greater, on average, than the nation as a whole.

TABLE 11: INCOME BY SOURCE, SAUNDERS COUNTY, 1970 TO 2000

Income Characteristics	1970	1980	1990	2000	% Change 1970-2000	% Annual Change
Total Personal Income	\$56,391,000	\$138,639,000	\$275,686,000	\$436,861,000	674.7%	18.2%
Non-farm Income	\$48,480,000	\$148,404,000	\$238,968,000	\$401,757,000	728.7%	19.7%
Farm Income	\$7,911,000	-\$9,765,000	\$36,718,000	\$35,104,000	343.7%	9.3%
Per Capita Income	\$3,303	\$7,408	\$15,034	\$21,999	566.0%	15.3%

Source: Bureau of Economic Analysis, Regional Economic Information System, 2000

Table 12 contains information regarding Transfer Payments. Transfer payments are monies sent to individuals by the federal government meeting certain criteria. These payments include food stamps, medical payments, veteran's benefits, aid to families with dependent children, and more.

TABLE 12: TRANSFER PAYMENTS 1970 TO 2000

Payment Type	1970	1980	1990	2000	% Chg	% Chg/yr
Government Payments to individuals	\$5,819,000	\$20,206,000	\$38,449,000	\$61,683,000	960.03%	32.00%
Retirement and Disability Insurance Benefits	\$3,939,000	\$13,683,000	\$25,672,000	\$31,779,000	706.78%	23.56%
Medical Payments	\$780,000	\$3,829,000	\$9,669,000	\$24,234,000	3006.92%	100.23%
Income Maintenance Benefits (SSI, AFDC, Food Stamps, etc)	\$175,000	\$729,000	\$1,255,000	\$2,870,000	1540.00%	51.33%
Unemployment Insurance Benefits	\$127,000	\$742,000	\$367,000	\$649,000	411.02%	13.70%
Veteran's Benefits	\$600,000	\$1,089,000	\$1,229,000	\$1,875,000	212.50%	7.08%
Federal Education and Training Assistance	(L)	\$132,000	\$251,000	\$252,000	-----	-----
Payment to Non Profit Institutions	\$305,000	\$819,000	\$1,147,000	\$2,236,000	633.11%	21.10%
Business Payments	\$130,000	\$486,000	\$989,000	\$1,538,000	1083.08%	36.10%
Total	\$6,266,000	\$21,511,000	\$40,585,000	\$127,116,000	1928.66%	64.29%
Transfer Payments Per Capita	\$367	\$1,149	\$2,213	\$6,410	1646.67%	54.89%
Total Per Capita Income	\$3,303	\$7,408	\$15,034	\$21,999	566.03%	18.87%
Per Capita Transfer Payments to Total Per Capita Income	11.1%	15.5%	14.7%	29.1%		

Source: Bureau of Economic Analysis – Regional Economic Information System Report, 2000

(L) – Less than \$50,000, estimates are included in totals.

Between 1970 and 2000, the total dollars sent to Saunders County residents increased from \$6,266,000 to \$127,116,000, an increase of 1,928%, or an average of 64.3% per year. Even though many of the categories have not disclosed certain values it can be seen by the total value per year. These increases have had an impact on Saunders County's economy.

The payment type with the largest overall increase from 1970 to 2000 was medical payments at 3,006% or 100.2% per year. The second largest was income maintenance benefits at 1,540% or 51.3% per year. Each of these payment types has a drastic impact on local incomes and spending capacity. If Federal programs begin to downsize these areas there could be a significant impact on the local economy.

Table 12 also analyzes Transfer Payments on a Per Capita basis and the percent of total Per Capita Income. From 1970 to 2000, Transfer Payments Per Capita increased from \$367 to \$6,410, an increase of 1646.7%, or

an average of 54.9% per year. The portion of the total Per Capita Income that is Transfer Payment Per Capita increased from 11.1% in 1970, to 21.9% in 2000. Over the past 24 years, the amount of Per Capita that is Transfer Payments vs. income has increased significantly. At this rate, residents of Saunders County, on average, have become more dependent on Transfer Payments. The impact of these increases will be negative if the United States Government is forced to cut spending to some or all of these programs.

INDUSTRY EMPLOYMENT

Employment by Industry assists in painting a picture of Saunders County's labor force. This topic will begin to indicate what type of jobs the local residents have, and will assist in identifying those jobs, which may be attracting residents of Saunders County to leave the community during work hours.

Table 13 contains data on Employment by Industry for residents of Saunders County. These are not solely the jobs within Saunders County, but the number of residents 16 and over employed within and outside the County. From 1980 to 1990, the total number of persons employed increased from 7,837 to 8,723 or 11.3%. Of the 15 industries listed, 12 industries had increases in employment. These industries were:

- Business & Repair Services 37.1%
- Communications & Other Public Utilities 36.1%
- Manufacturing, nondurable 34.0%
- Public Administration 32.0%
- Educational Services 32.0%
- Retail Trade 31.1%
- Wholesale Trade 30.0%
- Health Services 18.3%
- Other Professional and Related Services 17.2%
- Finance, Insurance, & Real Estate 16.0%
- Personal Services, Entertainment, & Recreational Services 16.0%
- Construction 11.0%

TABLE 13: EMPLOYMENT BY INDUSTRY – 1980 TO 2000

Industry	Saunders County						State of Nebraska					
	1980		1990		2000		1980		1990		2000	
Ag., Forestry, Fisheries, & Mining	1,471	18.8%	1,163	13.3%	734	7.1%	78,840	11.0%	66,476	8.6%	48,942	5.6%
Construction	602	7.7%	667	7.6%	846	8.2%	43,296	6.0%	40,821	5.3%	56,794	6.5%
Manufacturing	1316	16.8%	1360	15.5%	1,768	17.2%	99,046	13.9%	98,344	12.8%	107,439	12.2%
Transp. Comm. & Public Utilities	591	7.5%	618	6.9%	831	8.1%	66,834	9.3%	62,510	8.1%	75,654	8.6%
Wholesale Trade	287	3.6%	372	4.3%	376	3.7%	33,961	4.7%	35,726	4.6%	31,265	3.6%
Retail Trade	1,162	15.0%	1,523	17.5%	1,261	12.3%	120,958	16.9%	138,179	17.9%	106,303	12.1%
Finance, Insurance, & Real Estate	353	4.5%	408	4.7%	600	5.8%	44,014	6.1%	52,137	6.7%	67,370	7.7%
Business & Repair Services	251	3.2%	344	3.9%	530	5.2%	24,929	3.6%	35,089	4.5%	63,663	7.3%
Personal, Ent. & Rec. Services	231	2.90%	267	3.1%	716	7.0%	27,836	3.9%	30,928	4.0%	63,635	7.3%
Health & Educational Services	1096	14.0%	1290	14.8%	1,761	17.1%	90,412	16.9%	134,440	17.4%	181,833	20.7%
Other Professional & Related Services	231	2.9%	387	4.4%	436	4.2%	27,084	3.8%	48,754	6.2%	40,406	4.6%
Public Administration	246	3.1%	324	3.7%	417	4.1%	28,144	3.9%	30,009	3.9%	33,933	3.9%
Total Employed persons 16 yrs & over	7,837	100.0%	8,723	100.0%	10,276	100.0%	716,633	100.0%	772,813	100.0%	877,237	100.0%

Source: US Census Bureau 1980, 1990, 2000

The decreasing percentage in agriculture, forestry, fisheries, and mining can be explained by the downsizing in the farming industry in recent history as well as the increasing amount of urbanized population within the county. The decrease in manufacturing of durable of goods could be due to a single plant closing or relocation of that plant from this county to another.

Another important issue from Table 13 is the number of people employed increased while the overall population decreased for the same period. This comparison would tend to support the decline in the age groups not generally employed.

Furthermore, the overall number of employed persons increased between 1990 and 2000 by approximately 1,500 people or 17.8 percent. The largest changes occurred in Agriculture, Forestry, Fisheries, and Mining, Retail Trade, Health and Educational Services, and Manufacturing; with Manufacturing and Health and Education services increasing jobs during the period. Overall, Saunders County lost jobs in the following industries:

- Agriculture, Fisheries, Forestry, and Mining - 429 jobs
- Retail Trade - 262 jobs

However, employment increased in the following industries during the period:

- Business & Repair Services + 186 jobs
- Transportation, Communications, & Public Utilities + 213 jobs
- Manufacturing + 408 jobs
- Public Administration + 93 jobs
- Wholesale Trade + 4 jobs
- Health & Educational Services + 471 jobs
- Other Professional and Related Services + 49 jobs
- Finance, Insurance, & Real Estate + 192 jobs
- Personal Services, Entertainment, & Recreational Services + 449 jobs
- Construction + 179 jobs

COMMUTER POPULATION

Data regarding commuter population allows a county to identify several issues. These data assist in painting a more accurate picture for the economic forces at work on Saunders County. Most importantly these data help to explain where the population is going within the county and outside the county.

Table 14 indicates the commuter population for 1960, 1970, 1980, and 1990, for residents of Saunders County; plus, shows which county the commuters were employed. Additional items indicated are:

- Total employed,
- Percent change decade to decade,
- Number of residents commuting out of the county,
- Percentage of residents commuting, and
- The ratio of Saunders County residents employed in Saunders County compared to number commuting out of the County.

These data sets show what most people probably suspect, a large amount of Saunders County residents working in the Douglas, Dodge, and Lancaster counties, by 1990 3,666 of the total 4,168 commuters (88.0%) traveled to one of these three counties.

The total employed changed by 3,177 employees or a 58.0% increase. Table 14 shows the number of Saunders County residents employed within Saunders County increased between 1960 and 1980. However, the percent of Saunders County residents working within the County decreased from 80.1% in 1960, to 51.2% in 1990.

The counties and other areas employing a large portion of Saunders County residents were:

- Douglas County 6.1% in 1960 15.0% in 1990
- Dodge County 4.5% in 1960 8.7% in 1990
- Lancaster County 4.4% in 1960 12.0% in 1990

TABLE 14: COMMUTER POPULATION 1960 TO 1990

Resident County	Work County	1960	1970	1980	1990	# Change	% of 1960 Total	% of 1990 Total
Saunders	Saunders	4,394	4,273	4,672	4,493	99	80.1%	51.2%
	Butler	4	6	37	39	35	.06%	.45%
	Cass	24	54	44	68	44	.44%	.5%
	Colfax	0	0	31	16	16	0%	.18%
	Cuming	0	13	0	0	0	0%	0%
	Dodge	245	408	620	755	510	4.5%	8.7%
	Douglas	335	653	1,072	1,647	1,312	6.1%	15%
	Lancaster	242	492	991	1,264	1,022	4.4%	12%
	Platte	0	13	10	29	29	0%	.33%
	Saline	0	0	16	21	21	0%	.24%
	Sarpy	20	42	71	206	196	.36%	2.4%
	Seward	3	16	22	13	10	.05%	.15%
	Washington	4	24	10	27	13	.07%	.31%
	Elsewhere	34	45	108	83	49	.62%	1.0%
	Not Responding	179	219	0	0	0	3.3%	0%
Total		5,484	6,258	7,704	8,661	3,177		
% Change			14.1%	23.1%	12.4%	58%		
# Commuting		1,090	1,985	2,220	4,168			
% Commuting		20%	31.7%	28.8%	48.1%			
% Change			82.1%	11.8%	12.4%	282.2%		

Source: Bureau of Economic Analysis – REIS 1998

Between 1960 and 1990, the total number of commuters increased from 1,090 to 4,168, an increase of 282.3%. These figures translate into the percent of Saunders County residents. This percentage went from 6.3%, in 1960, to 23.0%, in 1990. The largest increase occurred between 1980 and 1990; the change accounted for an increase of 89.4%.

The data in Table 14 are further supported by data in Table 15: Travel Time to Work. Table 15 indicates strong increases in those individuals traveling between 10 to 19, 20 to 29, and 30 to 44 minutes to work. Those traveling 10 to 19 minutes increased by 99.1% from 1980 to 1990, while those traveling 20 to 29 minutes increased by 57.2%, and for those traveling 30 to 44 minutes increased by 110.4% for the same period. Finally, the mean (average) travel time decreased from 16.0 minutes in 1980, to 14.2 minutes in 1990.

TABLE 15: TRAVEL TIME TO WORK 1980-2000

Travel Time Categories	1980	1990	% Change 1980-1990	2000	% Change 1990-2000
Less than 5 minutes	860	776	-9.8%	828	6.7%
5 to 9 minutes	1,420	1,370	-3.5%	1,489	8.7%
10 to 19 minutes	816	1,626	99.3%	1,907	17.3%
20 to 29 minutes	781	1,228	57.2%	1,550	26.2%
30 to 44 minutes	824	1,734	110.4%	2,444	40.9%
45 to 59 minutes	1,262	724	-42.6%	958	32.3%
60 minutes or more	509	370	-27.3%	410	10.8%
Worked at home	308	833	170.5%	597	-28.3%
Total	6,780	8,661	27.7%	10,183	17.6%
Mean Travel Time (minutes)	16.0	14.2	-11.3%	22.7	59.9%

Source: US Census Bureau, Census of Population and Housing, STF-3A, 1980, 1990, 2000

In 2000, the largest increases were recorded amongst those individuals driving between 30 and 59 minutes. Other categories that registered an increase between 1990 and 2000 were those commuting from 10 to 29 minutes to work, although these categories had a smaller rate of increase. Additionally, while the mean travel time increased the number of individuals working at home declined during the period.

AGRICULTURAL PROFILE

The agricultural profile enables a county to understand the influences of agriculture on the area economy. Since most Nebraska counties were formed around agriculture, the agricultural economy, historically, has been the center of the County. However, the U.S. Census Bureau has tracked agricultural statistics on different years than the decennial census, thus making it difficult to compare between census data.

TABLE 16: AGRICULTURAL PROFILE, SAUNDERS COUNTY, 1982-1997

Agricultural Characteristics	1982	1987	1992	1997	% Change 1982-1997
Number of Farms	1,444	1,417	1,235	1,176	-18.6%
Land in Farms (acres)	447,901	445,387	437,274	435,865	-2.7%
Average size of farms (acres)	310	314	354	371	19.7%
Total land area for Saunders County	481,792	481,792	481,792	481,792	0.0%
Percentage of land in farm production	93.0%	92.4%	90.8%	90.5%	-2.7%
Total cropland (acres)	382,939	394,209	383,206	382,176	-0.2%
Harvested cropland (acres)	338,298	307,451	339,952	350,166	3.5%
Estimated Market Value of Land & Bldg (avg./farm)	\$396,114	\$281,774	\$425,107	\$581,020	46.7%
Estimated Market Value of Land & Bldg (avg./acre)	\$1,258	\$905	\$1,199	\$1,556	23.7%

Source: U.S. Census of Agriculture, 1992, 1997

Table 16 examines agricultural indicators including:

- number of farms,
- land in farms (acres),
- average size of farms (acres),
- percent of county land in farm production,
- total crop area vs. harvested crop land (acres), and
- estimated market value of land and buildings.

Each data category is examined for the Agricultural Census years of 1982, 1987, 1992, and 1997.

From 1982 to 1997, the number of farms in Saunders had an overall decrease of 268 farms or -18.6%. The total amount of land in farms saw a decrease of 12,036 acres or -2.7% from 1982 to 1997. During the same time period, the total number of average acres grew by 19.7 %.

When comparing farming acres to the County's total land area it is evident that the considerable amount of land is specifically agriculture and will remain that way in the future. From Table 11 it can be concluded that the trend of the number of farms is decreasing but sizes of these farms are growing larger. This change in farm number and size in Saunders County can be seen throughout the rest of the State as well.

From 1982 to 1997, the total crop land in Saunders County decreased from 382,939 acres to 382,176 acres, a change of -.20%. While total crop land was decreasing, the amount of harvested crop land increased from 338,298 in 1982 to 350,166 acres in 1997, a change of 3.5%. This indicates the cropland in Saunders County may have decreased, however the amount left after the decrease was being harvested in greater amounts.

The estimated market value of land and buildings indicates how well the land values and building values are performing compared to the CPI. From 1982 to 1997, the estimated market value grew from \$396,114 to \$581,020, a change of 46.7%. However, the same time period saw the CPI increase a total 285.9%. Therefore, the estimated market value of land and buildings did not grow as rapidly as the national economy.

TABLE 17: NUMBER OF FARMS BY SIZE

Farm Size (acres)	1982	1987	1992	1997	% Change
1 to 9	115	123	78	59	-48.7%
10 to 49	137	167	150	162	18.2%
50 to 179	372	366	318	315	15.3%
180 to 499	563	485	383	335	-40.5%
500 to 999	218	214	233	211	-3.2%
1,000 or more	39	62	73	94	141.0%
Totals	1,444	1,417	1,235	1,176	-18.6%

Source: US Census of Agriculture 1992 and 1997

When looking at Table 17, it is well noted that the size in farms is growing thus decreasing the overall number of farms in Saunders County. Again, this follows the overall trend in the state. While there were overall losses and some gains in farms less than 499 acres, there were substantial gains in farms with greater than 1,000 acres.

Table 18 displays the number of livestock by type in Saunders County. This information is useful since livestock is one of the main facets of farming. This information is studied on the basis of finding future trends in the livestock industry in the county.

**TABLE 18: NUMBER OF FARMS & LIVESTOCK BY TYPE,
SAUNDERS COUNTY, 1982-1997**

Type of Livestock	1982	1987	1992	1997	% Change to 1997
Cattle and Calves					
farms	751	627	505	507	-32.5%
number	87,898	74,945	58,192	66,276	-24.6%
average	117	120	115	131	11.7%
Beef Cows					
farms	570	478	395	433	-24.0%
number	15,035	11,940	12,320	11,956	-20.5%
average	26	25	31	28	4.7%
Milk cows					
farms	82	61	44	31	-62.2%
number	1,492	1,643	1,378	922	-38.2%
average	18	27	31	30	63.5%
Hogs and Pigs					
farms	358	305	236	146	-59.2%
number	59,187	55,780	52,879	43,820	-26.0%
average	165	183	224	300	81.5%
Sheep and lambs					
farms	81	79	64	47	-42.0%
number	4,153	2,648	4,669	2,543	-38.8%
average	51	34	73	54	5.5%
Chickens <= 3 months					
farms	17	21	13	15	-11.8%
number*	7,261	2,394	4,145	1,640	-42.9%
average*	427	114	319	109	-25.3%

Source: US Census of Agriculture, 1992, 1997

All sections saw decreases in the number of livestock in Saunders County. There were three sections in particular that saw substantial decreases, which include chickens, sheep and lambs. The percent change for chickens was -94.6% for 3-month chickens and -77.4% for broiler chickens, following that was sheep and lambs with a loss of -39.2%.

The growing trend of the small producer moving to other types of farming and new farms setting up in order to specialize in one type of livestock is becoming more common. The change in the numbers in the Table are economy driven not solely by farmer preference. These numbers should be followed in the future to see established patterns in farming so that farmers may become accustomed to changing times.

SAUNDERS COUNTY: REGIONAL BASIC/NON-BASIC ANALYSIS

The following data look at six occupational areas that were established by the US Bureau of the Census. Edward J. Blakely in a “Planning Local Economic Development: Theory and Practice” defines basic employment and non-basic employment as follows:

- Basic employment is associated with business activities that provide services primarily outside the area via sales of goods and services, but whose revenues are directed to the local area in the form of wages and payments to local suppliers¹
- Non-Basic employment is primarily the sale of goods and services within the local area with the revenues recirculating in the form of wages and payments.

This analysis is used to further understand which occupational areas may be supplying goods and services outside the study area, thus importing dollars into the local economy. This analysis is performed for Saunders County with a comparison to the surrounding entities. The six occupational areas are listed below:

- Occupation 1 = Managerial and Professional specialty occupations
- Occupation 2 = Technical, sales and administrative support occupations
- Occupation 3 = Service occupations
- Occupation 4 = Farming, forestry, and fishing occupations
- Occupation 5 = Precision production, craft and repair occupations
- Occupation 6 = Operators, fabricators, and laborers

Table 19 contains the work sector, the percentage of basic employment, the percentage of non-basic employment, and the percent of the State workforce in each occupational area. Basic employment percentages are the remaining points left after subtracting the non-basic from the percent of State workforce. If the study area is less than the State percentage, then the entire percentage for the study area is non-basic. The bolded occupations in Table 19 indicate areas that appear to be basic as opposed to non-basic. The economic base multiplier designates the number of non-basic jobs supported by every basic job in the area.

TABLE 19: BASIC / NON-BASIC EMPLOYMENT 2000

Work Sector	Basic	Non-Basic	% of Workforce	% of State Workforce
Managerial & Professional Services	0.0%	28.5%	28.5%	33.0%
Technical, sales, and administrative	0.0%	14.6%	14.6%	14.6%
Service	0.0%	24.9%	24.9%	26.4%
Farming, Forestry, & Fishing	0.0%	1.0%	1.0%	1.6%
Precision Production, Craft & Repair	3.2%	9.3%	12.5%	9.3%
Operators, Fabricators, & Laborers	3.5%	15.1%	18.6%	15.1%
Totals	6.7%	93.3%		

Economic Base Multiplier for Saunders County is 14.98
 Source: US Census Bureau – 2000

Table 19 indicates Saunders County has basic employment in two categories:

- Precision production, craft, and repair occupations
- Operators, fabricators, and laborers

These occupations relate back to the data found in Table 14. Most of the basic employment figures are related to jobs found in Douglas, Dodge, and Lancaster Counties.

¹ Blakley, p. 297, Sage Publications, Newbury Park, 1989

A key issue to pay special attention to is basic employment, this portion of the labor force is tied to the exportation of either goods, services, or labor. After analysis of the basic/non-basic employment, Saunders County's basic employment was at 6.7%. This indicates that basic employment in Saunders County was spread out among a small number of occupations contained within particular economic sectors. If a trend moves away from its present state and towards an overabundance upon on one occupation group, concerns should arise and changes must be made. If changes are not made at the time a drop in the economy in the future, in this one sector, could have a major ripple effect on the rest of the employment throughout the county. In the future, Saunders County should take measures to even out its labor force to a greater degree and also maintain its current state of employment.

The Economic Base Multiplier is an indication of the balance between basic employment and non-basic employment. Saunders County has an Economic Base Multiplier of 14.98. This can be interpreted two ways:

- Every job on the basic side supports 14.98 jobs, meeting the needs locally; or
- Every dollar generated from exports generates 14.98 dollars locally.

Due to the two reasons stated above, it is critical for the Economic Base Multiplier to be based upon a stable and diverse level of basic employment as too much dependence on one sector can cause major economic problems in the county.

Table 20 contains a comparison of the State of Nebraska, Saunders County, and surrounding counties. The **bolded** numbers indicate 1) The figures for the State of Nebraska; and 2) Those sectors by county which have basic employment. This is provided to demonstrate how well Saunders County compares to surrounding counties.

There is some concern regarding Occupations 1 and 3 since they are below the statewide average, although the differences are not likely to make a large impact upon the county during slow times in the economy. All other occupation groups within the county follow the state's percentages closely. Even though Saunders County is well balanced at present, the County needs to discover new ways of creating a more balanced marketplace. By developing even more balanced employment sectors, the county will have a greater chance of surviving a major economic downturn in any of the sectors with basic employment.

TABLE 20: REGIONAL AND STATE LABOR FORCE COMPARISONS, 2000

Study Area	Occup 1	Occup 2	Occup 3	Occup 4	Occup 5	Occup 6	Base Multiplier
Nebraska	33.0%	14.6%	26.4%	1.6%	9.3%	15.1%	NA
Saunders Co	28.5%	14.6%	24.9%	1.0%	12.5%	18.7%	14.98
Wahoo	27.8%	18.4%	23.5%	0.4%	11.4%	18.5%	10.76
Douglas Co	36.5%	13.5%	30.1%	0.2%	7.8%	11.9%	13.89
Dodge Co.	23.9%	15.9%	27.8%	1.1%	9.7%	21.7%	10.41
Lancaster Co.	36.0%	15.0%	26.8%	0.3%	8.4%	13.4%	25.78
Cass Co.	30.5%	15.2%	28.3%	0.4%	9.8%	15.8%	27.44

Occup 1 = Managerial and Professional Specialty occupations Occup 2 = Technical, sales, and administrative, support occupations
 Occup 3 = Service Occupations Occup 4 = Farming, forestry, and fishing occupations
 Occup 5 = Precision production, craft, and repair occupations Occup 6 = Operators, fabricators, and laborers
 Source: US Census Bureau. Census of Population and Housing, STF-3A, 2000

SUMMARY AND PLANNING IMPLICATIONS

Saunders County has seen a decreasing population in previous decades. This can be explained by many factors but most specifically out-migration. This out-migration was most likely to the more populated neighboring counties in the state. Even though the county has lost population in recent history it has not been so substantial to have a great impact upon the county. Of late the population in the county has seen a leveling off of the population and even an increase from 1990 to 2000. Due to Saunders County's location in the state, directly outside the two highest population centers, the population will likely continue to increase in future decades. Even being in this location within the state, Saunders County needs to produce more growth through economic development and provide for its aging population in order to sustain the remaining population in the county.

Housing in the County must further meet the needs of its residents. The growing trend of the aging population and the baby boomers must be the highest priority at this time. The county must provide such facilities as assisted living, care centers, and nursing homes for that part of the population of the county that is growing older so that not to lose these residents to other communities. The other part of the housing market that should be discussed are the housing units that are becoming out dated, which have out lived their life span. These homes were typically built prior to 1940. An active stance should be taken to replace these units with new units to replenish the housing market with affordable, safe homes.

Household income in Saunders County saw increases throughout all income brackets. Most importantly, the number of households that moved from below the poverty level to upper income brackets was quite substantial and created a positive impact upon the county as a whole. Income levels in the county did see a growth overall but still could improve to greater levels. Again the key to this is the retention of the existing population base and growth in economic development overall. Saunders County must monitor every bit of information, household income levels within the county and what direction they are moving.

Growth in Saunders County is going to happen, it is the question of how fast or slow will the policies allow? The other question is, how growth in the county should occur? The residents of Saunders County can only answer these two questions. The stress of making these decisions should be put on all sides not just a few individuals. Finally, all sides must learn the art of give and take in order for the County's plan to work. The Comprehensive Planning process has identified one major thing for Saunders County and that is:

The future for Saunders County is now
and
everyone must make quality decisions for tomorrow.

COUNTY FACILITIES

COUNTY FACILITIES

State and local governments provide many goods and services for their citizens. The people, buildings, equipment and land used in the process of providing these goods and services are referred to as public facilities.

Public facilities represent a wide range of buildings, utilities and services that are built and maintained by many government agencies. Such facilities are provided to insure the safety, well being and enjoyment of the residents of a jurisdiction and in this case Saunders County. These facilities and services provide the county residents with social, cultural, educational, law enforcement, fire protection and recreational opportunities designed to meet area needs. It is important for all levels of government to anticipate the future demand for their goods and services if they are to remain strong and vital. The sequential step is to evaluate the ability of the county to meet that future demand and determine at what level services will be provided. The analysis of existing facilities and of future goods and services is known as the Facilities Plan.

The Facilities section of the Saunders County Comprehensive Plan reviews present capacities of all public facilities and services. The section then evaluates these capacities with current demands and accepted standards to determine whether the capacity is adequate, determine future adequacy of these facilities and services to meet future demands within the planning period. Finally, recommended improvements where public facilities are not considered adequate for present or future needs are made.

The Facilities Plan for Saunders County is divided into the following categories:

- Recreational Facilities
- Educational Facilities
- Fire and Police Protection
- County/Community Buildings
- Transportation Facilities
- Communication Facilities
- Public Utilities
- Health Facilities

RECREATIONAL FACILITIES

Czechland Lake Recreation Area is located one mile north of Prague, on State Highway 79, this area is conveniently located to Omaha, Lincoln, Fremont, and Wahoo. The 85 surface acre area lake is situated on 192 acres of public access land, operated and maintained by the Lower Platte North Natural Resources District (LPNNRD). Completed in 1988, Czechland Lake is the final structure of 12 in the Cottonwood Creek Watershed Flood Control Project. This recreation area offers camping, fishing, hiking, picnicking, wildlife watching, and no wake boating.

Red Cedar Recreation Area is located six miles north and two miles west of Valparaiso. This 175-acre recreation area includes a 51-acre surface lake formed through dam construction of a county road. The Red Cedar Recreation Area includes a boat ramp, parking facilities, primitive camping areas, and seasonal restrooms. The main use of this recreation area comes from fishing a variety of fish which include small mouth bass, channel fish, large mouth bass, channel fish, flathead catfish, saugeye, and bluegill.

Memphis State Recreation Area is a multi-use park including a lake for the use of swimming and fishing. Other facilities include campsites both primitive and modern, a playground, concessions, and shelters.

Pioneer State Recreation Area located south of Swedeberg on the east side of U.S. Highway 77. This 8.1-acre recreation area is a day use park with facilities that include picnic shelters, grills, and restroom facilities.

Jack Shin Memorial Wildlife Management Area is located 3 miles southwest of Ceresco. That encompasses approximately 420 acres: 100 in crop, 272 in pasture, 42 in marsh, and 6 in water. The area is used primarily for hunting which include deer, pheasant, quail, rabbit, and waterfowl.

Bramble Wildlife Management Area can be found 4 miles northwest of Cedar Bluffs. The total area includes approximately 93 acres of which 56 is cropland, 6 is left in timber, 8 in marsh, and 23 acres in water. Hunting is allowed and in this area that includes deer, pheasant, quail, rabbit, and squirrel.

Larkspur Wildlife Management Area is 3 miles west of Valpraiso. This management area includes approximately a total of 160 acres, 128 acres in pasture, 25 acres in timber, and 7 acres in water. Hunting is allowed and in this area that includes deer, pheasant, quail, rabbit, and squirrel.

Catfish Run Wildlife Management Area is located 1 mile east of Ashland. This management area is completely comprised off timber, which is approximately an acre in size. There is no hunting allowed in this area.

Lake Wanahoo Recreation area is currently in the research and development stage. The lake is planned to be constructed north of Wahoo in the Duck Creek and Sand Creek watersheds. At the time of this plan, the

scheduled completion of the dam was to take place in 2003. When developing the initial aspects of Lake Wanahoo the contributors felt that a more primitive lake with a thriving fish and wildlife habitat would best suit the site rather than a pure recreational lake.

Activities around the lake will occur in different zones, basically falling into two areas, wildlife management area and a day use area. The day use area will include playgrounds, sand volleyball, horseshoe pits, swimming beach, picnic shelters, hiker/ biker trails, restroom facilities, and shelters. Other areas around the lake will include campsites, RV pads, boats launch, and boat docks. All these plans are still in the development phase so any or all of this information could change.

Hilltop County Club located in Wahoo, is a private country club but allows the public to play during the week with scheduled tee time. Built in 1949 the course consists of a 9-hole par 36, which has a total distance of 3,014 yards. The clubhouse contains a private dining room used by the members.

Whitetail Run Golf Course is a nine-hole public daily fee course. The course is located 3 miles southwest of Fremont.

Valley View Golf Course is located 3 miles south of Fremont. The course is a 5,285 yard 18 hole public golf club with an access to a driving range for golfers. Facilities include a clubhouse with a full line pro-shop and snack bar.

CAMPS IN SAUNDERS COUNTY:

Camp Calvin Crest is located approximately 8 miles southwest of Fremont on the south side of the Platte River. This facility is a year round camp-conference-retreat center, which includes 250 acres. The camp is utilized by a diverse group of people from churches to communities for retreats and other events. The center can handle 200 people during the winter months and 300 people in the summer months. Recreational activities at the camp include hiking, softball, basketball, volleyball, tennis, disc golf, swimming, picnicking, and indoor games as well.

Camp Cedars & Camp Eagle is both Boy Scouts of America camps part of the Mid-America Council. These camps are located in the same area of Saunders County, 3 miles north of State Highway 109, east of Cedar Bluffs, on the south bank of the Platte River. Both Camps are utilized most during the summer months. The schedule of events for various ages changes throughout the summer. The facilities at both provide vast options for campers of all skills.

Camp Moses Merrill located approximately two miles east of Linwood. Camp Mosses Merrill is owned and operated by the Ministries and Organizations of American Baptist Churches of Nebraska. The camp encompasses 568 acres of rolling hills and wooded ravines overlooking the Platte River. The facility is family oriented camp and retreat center that is open year round. The camp includes a lodge, ten cabins, seventy RV

sites (including electrical hookups), and 15 tent sites. During the summer months activities include hiking and mountain biking trails, baseball, tennis and volleyball courts, archery and BB gun range, horseback riding, and a swimming pool.

In addition to recreational facilities in the Saunders County, the plan reviews data on recreational facilities in nearby counties, which may serve the residents of Saunders County. The following is a breakdown of those facilities.

Eugene T. Mahoney State Park located just southwest of Saunders County, south of Ashland. This park offers many different types of recreation which include: Recreational Vehicle Camping, tent camping, picnic shelters, horseback riding, a swimming pool, dining and lodging. Various other amenities include an observation tower, theater, toboggan run, ice rink, golf driving range, and playground. The park encompasses 675.65 total acres, of which 15.80 acres are water and the remaining 659.85 are in land.

Fremont State Lake Recreational area located 3 miles west of Fremont along the Platte River is a park consisting of 670 acres; 269 of that are water acres separated into 20 sandpit lakes. Facilities around the lakes include picnic tables, fire places, playground equipment, water, lights, electrical hookups, modern restrooms, a shelter house, and a boat launch. The lakes are open to swimming, fishing, and boating (both power and non-power boats). These types of recreation are restricted to certain lakes in the park.

Two Rivers State Park is located in western Douglas County one mile south of State Highway 92, along the Platte River. The park's total area includes 644 acres including 320 water acres. The main attraction at Two Rivers is the Caboose Park, which includes 10 cabooses donated by Union Pacific Railroad, which are used for park lodging. Besides the Caboose Park other attractions remain at the park, which include, camping, fishing, swimming, bicycle rentals, and hunting.

EDUCATIONAL FACILITIES

PUBLIC SCHOOLS

There are 17 county-based public school districts and 11 public school districts based outside the county serving the residents of Saunders County. Table 21 and 22 indicate the student population of each school district. The school districts based within the county are:

- Ashland-Greenwood, District 1
- Clear Creek, District 3
- District 5
- Yutan, District 9
- Platte Ville, District 11
- District 23
- Malmo, District 36
- Wahoo, District 39
- District 44
- Ithaca, District 50
- South Center, District 70
- Mead, District 72
- Weston, District 103
- Prague, District 104
- Cedar Bluffs, District 107
- Touhy, District 111
- North Star, District 115

TABLE 21: PUBLIC SCHOOL ENROLLMENTS (TOWNS) SAUNDERS COUNTY, 2001-2002

<u>School District</u>	<u>Pre-K</u>	<u>K-6</u>	<u>7-12</u>	<u>Total</u>
39-Wahoo	50	393	421	864
9-Yutan	---	242	217	459
107-Cedar Bluffs	---	129	172	301
104-Prague	---	68	83	151
72-Mead	---	135	141	276
1-Ashland Greenwood	---	375	382	757

Source: 2001/2002 Nebraska Education Directory

Those school districts based outside but serve a part of Saunders County include:

- Fremont, District 1
- Standard, District 23
- Abie, District 25
- Sand Creek, District 34
- Dodge, District 46
- Scribner-Synder, District 62
- Bruno, District 86
- Waverly, District 145
- Raymond Central, District 161
- East Butler, District 502
- North Bend Central, District 59

TABLE 22: PUBLIC SCHOOL ENROLLMENTS (RURAL) SAUNDERS COUNTY, 2001-2002

<u>School District</u>	<u>K-6</u>	<u>7-8</u>	<u>Total</u>
3-Clear Creek	17	---	17
11-Platteville	68	---	68
23-Standard	3	3	6
36-Malmo	14	---	14
44	5	2	7
50-Ithaca	14	---	14
70-South Center	13	---	13
103-Weston	3	---	3
111-Touhy	4	1	5
115-North Star	3	1	4

Source: 2001/2002 Nebraska Education Directory

FIGURE 3
SCHOOL DISTRICT MAP

TABLE 23: SCHOOL DISTRICT VALUATIONS & COST PER PUPIL (ADA), SAUNDERS COUNTY, 2001

<u>School District</u>	<u>District Valuation</u>	<u>Cost per Student</u>
39-Wahoo	\$239,496,608	\$6,442.31
9-Yutan	\$116,877,823	\$6,882.68
107-Cedar Bluffs	\$97,494,920	\$7,273.76
104-Prague	\$62,354,948	\$7,405.61
72-Mead	\$134,120,565	\$7,311.79
1-Ashland Greenwood	\$242,388,514	\$6,502.93
3-Clear Creek	\$11,194,921	\$5,303.87
11-Platteville	\$95,688,317	\$6,370.47
23-Standard	\$22,868,155	\$9,543.55
36-Malmo	\$15,093,661	\$7,923.20
44	\$27,985,386	\$7,942.26
50-Ithaca	\$18,170,446	\$6,718.91
70-South Center	\$14,300,208	\$5,247.37
103-Weston	\$20,573,644	\$11,002.30
111-Touhy	\$4,244,116	\$7,316.63
115-North Star	\$9,525,366	\$6,812.21

Source: 2001/2002 Nebraska Education Directory; Nebraska Department of Education, 2002

PAROCHIAL SCHOOLS

Saunders County currently has two Catholic Elementary Schools and one Catholic Junior/Senior High School located in the county. These schools are:

- St. John Nepomucene Elementary School located in Weston. The school as of 1999-2000 had a total of 108 students in K through 6th grade.
- St. Wenceslaus Elementary School in Wahoo. The school as of 1999-2000 had a total of 339 students in Pre-Kindergarten through 6th grade.
- Bishop Neumann Central High School in Wahoo. The school as of 1999-2000 had a total of 382 students in 7th through 12th grade.

Other parochial schools outside Saunders County that may serve the educational needs of the residents are:

- Trinity Lutheran Elementary School in Fremont,
- Heartland Christian School in Fremont,
- Archbishop Bergen Junior/Senior High School in Fremont, and
- Aquinas / St. Mary’s Catholic Schools in David City.

POST SECONDARY SCHOOLS

In close proximity to Saunders County are various higher level educational opportunities, which include:

- University of Nebraska-Lincoln
- University of Nebraska-Omaha
- Bellevue University
- Southeast Community College (Lincoln)
- College of St. Mary’s (Omaha)
- Nebraska Wesleyan (Lincoln)
- Union College (Lincoln)
- Peru State College (Peru)
- Creighton University (Omaha)
- Metropolitan Community College (Omaha)

This is just a short list of post-secondary institutions that are available to residents of Saunders County. There are various other schools that offer higher level educational classes, such as vocational and business

schools. Most of these types of schools are located either in Omaha or Lincoln. Saunders County's location in the state provides great access to education experience that other counties in the state can not offer.

FIRE AND POLICE PROTECTION

FIRE DEPARTMENTS

Fire Protection in Saunders County is the responsibility of 13 fire districts located throughout the County. The major concerns of the fire departments are the many acres of open range and farmland, rural residential fires, and hazardous materials. The fire protection is provided by the volunteer firefighters, and historically they have fulfilled that capacity exceptionally well. Each of the districts provides regular training for firefighters and is continuing to add certified Emergency Medical Technician personnel as needed. Fire District locations include: Morse Bluff, Cedar Bluffs, Prague, Malmo, Colon, Mead, Yutan, Weston, Wahoo, Ithaca, University of Nebraska, Valpraiso, Ceresco, and Ashland. There is one area to note that can be seen on the Fire District Map, Figure 4, which is the University and army land south of Mead. This area is under contract with the Mead fire district, but other districts assist when needed.

Morse Bluff

The Morse Bluff Fire District consists of 23 volunteer firefighters of which four are first response certified. The district serves Morse Bluff and the surrounding rural areas. The service area covers approximately 62 square miles. The fire station is located directly within the village of Morse Bluff, and was constructed in 1974 and has room for expansion on site if needed. The space at the time of the plan was considered adequate.

<u>Year, Make and Type</u>	<u>Pump Size</u>	<u>Tank Size</u>
1984 Ford 4x4 Grass Truck	150 GPM	200 Gallon
1967 Ford Pumper	750 GPM	750 Gallon
1964 Ford Tanker	300 GPM	1500 Gallon
1981 Ford Utility		

Cedar Bluffs

The Cedar Bluffs Fire District consists of 33 volunteer firefighters (20 members are EMT certified) and serves Cedar Bluffs and the surrounding rural areas. The service area covers approximately 67 square miles in Saunders County. The department recently completed a new fire station across from the old facility.

<u>Year, Make and Type</u>	<u>Pump Size</u>	<u>Tank Size</u>
1978 GMC Attack Truck	100 GPM	300 Gallon
1969 Jeep 4x4	90 GPM	250 Gallon
1977 Pumper	750GPM	1000 Gallon
1976 Tanker	250 GPM	1500 Gallon
1994 GMC Tanker/Pumper	1000 GPM	1000 Gallon
1998 Ford Rescue Unit	2 Patient Capacity	
1990 Ford Rescue Unit	2 Patient Capacity	

Prague

Fire and emergency services in Prague are provided by the Prague Volunteer Fire Department. The Department's 40 fire fighters and 15 EMT's serve the Village and the surrounding Rural Fire Protection District, which generally covers the area within a 73 square mile radius surrounding the Village. The EMT's are defibrillation and incubation certified, and is trained every six months. The fire station, constructed in the mid 1970s, is located south of City Hall, on West Center Avenue, and is considered adequate at this time. The Department participates in mutual aid agreements with surrounding fire districts.

<u>Year, Make and Type</u>	<u>Pump Size</u>	<u>Tank Size</u>
1982 Ford 4x4 Grass Truck	100 GPM	150 Gallon
1988 Ford Pumper	750 GPM	750 Gallon
1989 Ford Tanker	250 GPM	1,500 Gallon
1955 IHC Tanker	500 GPM	1,000 Gallon
1964 Utility Bus		
1992 Ford Rescue Unit	3 patient capacity	

Malmo

The Malmo Fire District consists of 29 volunteer firefighters (3 members are EMT certified) and serves Malmo and the surrounding rural areas. The service area covers approximately 62 square miles. The fire station is located on center Ave in Malmo. The station was constructed in 1954 with an addition in 1971, and is the process, during the time of this plan, of adding a 32' x 60' addition.

<u>Year, Make and Type</u>	<u>Pump Size</u>	<u>Tank Size</u>
1978 International Pumper	750 GPM	750 Gallon
1953 FWD Pumper	500 GPM	500 Gallon
1972 AMG 6x6 Tanker	250 GPM	1500 Gallon
1979 Ford Utility		
1954 GMC 6x6 Tanker	100 GPM	1000 Gallon

Colon

The Colon Fire District consists of 15 volunteer firefighters and serves Colon and the surrounding rural areas. The service area covers approximately 43 square miles. The fire station is located on 124 spruce street in Colon, and was constructed in 1963. The Facility is slowly becoming inadequate for the districts needs. The site provides no room for expansion if that was ever an option.

<u>Year, Make and Type</u>	<u>Pump Size</u>	<u>Tank Size</u>
1983 International Pumper	750 GPM	1000 Gallon
1976 Chevy Tanker	250 GPM	1000 Gallon
1978 International Tanker	250 GPM	1000 Gallon
1998 GMC Tanker	350 GPM	2000 Gallon
1980 Dodge 1 Ton Dully	250 GPM	250 Gallon

Mead

The Mead Fire District consists of 34 volunteer firefighters (14 members are EMT certified) and serves Mead and the surrounding rural areas. The service area covers approximately 60 square miles. The fire station is located in the center of the community, and was constructed in 1975 and has room for expansion on site if needed.

<u>Year, Make and Type</u>	<u>Pump Size</u>	<u>Tank Size</u>
1988 Pumper	750 GPM	750 Gallon
1978 Tanker	500 GPM	1,000 Gallons
1981 Tanker	500 GPM	1,000 Gallons
1976 4x4 Brush Truck	750 GPM	750 Gallons
1993 4x4 Light Vehicle	250 GPM	500 Gallons
1994 Rescue Squad		
1983 Rescue Squad		

Weston

The Weston Fire District consists of 40 volunteer firefighters (4 members are EMT certified and 10 are first response certified) and serves Weston and the surrounding rural areas. The service area covers approximately 57 square miles in Saunders County. The fire station is located on in 241 Main Street in Weston, and was constructed in 1998 with a approximate size of 80'x 50' with four bays and room for a one bay add on.

<u>Year, Make and Type</u>	<u>Pump Size</u>	<u>Tank Size</u>
1953 GMC 6x6 Grass Truck	250 GPM	1000 Gallon
1988 GMC Pumper	750 GPM	1000 Gallon
1965 Ford Tanker	200 GPM	1000 Gallon
1964 Chevy Tanker	350 GPM	1000 Gallon
1985 Chevy 4x4 QRT Van Rescue Unit	No Patient Capacity	
1978 Army Truck	400 GPM	2500 gallon

Wahoo

The Wahoo Fire District consists of 34 volunteer firefighters (10 members are EMT certified) and serves Wahoo and the surrounding rural areas. The service area covers approximately 57 square miles. The current fire station is located at 158 West 6th Street in Wahoo, and was completed in 1999. The overall space includes 14,000 square feet and has a meeting room, office space, communication room, restrooms, kitchen facilities. The garage includes six bays for storage that are approximately three vehicles deep.

<u>Year, Make and Type</u>	<u>Pump Size</u>	<u>Tank Size</u>
1974 Ford 4x4 Grass Truck	100 GPM	200 Gallon
1989 Ford 4x4 Grass Truck	250 GPM	250 Gallon
1974 Chevy Pumper	750 GPM	500 Gallon
1983 Ford Pumper	750 GPM	1000 Gallon
1985 Chevy Tanker	150 GPM	1200 Gallon
1992 Chevy Cube Van		
1987 Ford Rescue Unit	2 Patient Capacity	
1974 Chevy Rescue Unit	4 Patient Capacity	

Ithaca

The Ithaca Fire District consists of 28 volunteer firefighters and serves Ithaca and the surrounding rural areas. The service area covers approximately 40 square miles. The fire department was established in the 1940's.

<u>Year, Make and Type</u>	<u>Pump Size</u>	<u>Tank Size</u>
1978 Ford 4x4 Grass Truck	60 GPM	300 Gallon
1955 International Pumper	500 GPM	300 Gallon
1963 Ford Tanker	160 GPM	1000 Gallon
1975 Chevy Tanker	240 GPM	1200 Gallon

Valparaiso

The Valparaiso Fire District consists of 20 volunteer firefighters (11 members are EMT certified) and serves Valparaiso and the surrounding rural areas. The service area covers approximately 66 square miles within Saunders County. The fire station is located on 3rd and pine in Valparaiso. The facility is adequate for the department needs at the present time and there is room for expansion on the site if needed.

<u>Year, Make and Type</u>	<u>Pump Size</u>	<u>Tank Size</u>
1952 Jeep 4x4 Grass Truck	250 GPM	150 Gallon
1985 Chevy 4x4 Grass Truck	250 GPM	150 Gallon
1970 IHC Pumper	500 GPM	750 Gallon
1969 GMC Tanker	250 GPM	1200 Gallon
1963 Chevy Tanker	250 GPM	1000 Gallon
1976 Ford Van		
1991 Ford Rescue Unit	3 Patient Capacity	
1999 Pumper		

Yutan

No information was supplied by the City of Yutan

Ashland

The Ashland Fire District consists of 25 volunteer firefighters (15 members are EMT certified) and serves Ashland and the surrounding rural areas. The service area covers approximately 85 square miles in Saunders County. The fire station is located at 24th and Silver, and was constructed in 1975 with continual updates every year. There is room for expansion on the site if needed in the future.

<u>Year, Make and Type</u>	<u>Pump Size</u>	<u>Tank Size</u>
1976 Dodge 4x4 Grass Truck	70 GPM	150 Gallon
1990 Central Pumper	1000 GPM	750 Gallon
1996 Central Pumper	1250 GPM	500 Gallon
1996 Ford Tanker	300 GPM	2000 Gallon
1975 Chevy Utility		
1989 Ford Rescue Unit	3 Patient Capacity	
1992 Ford Rescue Unit	3 Patient Capacity	

LAW ENFORCEMENT

Wahoo is the location of the only jail in Saunders County. The jail has a capacity of 20 adults, in three cells, with one cell dedicated to a female or a juvenile. The jail is located at 354 W. 4th Street in Wahoo. The building was built in 1929, and is structurally sound. However, the capacity is limited and cannot provide for a female and a juvenile at the same time. Also, the jail does not meet standards for the Americans with Disabilities Act (ADA).

Based upon data in the “*Crime in Nebraska – 1998*” published by the Nebraska Crime Commission the following data for Saunders County and the surrounding counties, regarding officers is as follows:

<u>County</u>	<u>Sworn Officers</u>	<u>Sworn Officers per 1,000 persons</u>
Saunders County	22	0.8
Douglas County	159	1.8
Lancaster County	81	2.9
Dodge County	23	1.4
Cass County	35	1.2

COUNTY BUILDINGS

This section is considered to be a summary of the facilities offered by the County. These facilities will most likely be located in the City of Wahoo.

County Court House

Built in 1904, the Saunders County courthouse still in use today was listed on the National Register in 1989 for its historical significance and prominence in local government.

County Road Department/Maintenance Shop(s)

The County Road Department is located in Wahoo at 426 North Broadway. The Maintenance facility is located at 216 north Orange Street in Wahoo. There are various other shops located throughout the county within or around the communities of Cedar Bluffs, Morse Bluffs, Prague, Valparaiso Ceresco, Weston, Yutan, and Ashland.

COUNTY HISTORICAL SITES

The Saunders County Historical Society Museum located in Wahoo contains various historical markers from the county. Originally built in 1977, an addition was latter added in 1994. In addition to the many exhibits within the museum, outside on site includes an historic log house, the original district 42 school house, the old Memphis post office (smallest in Nebraska until 1988), Burlington Northern Depot (Built in 1886), and a Burlington Northern caboose.

Beetison House is located in Ashland and was built in 1874-76. This home has been occupied continuously by the Beetison family. The house was listed on the National Register in 1976 for its architectural significance.

St. Stephen's Episcopal Church is located in Ashland and was built in 1872. This is a fine example of Gothic Revival church architecture. The church was listed on the National Register for its architectural significance in 1979.

Saline Ford is a rocky ford along Salt (Saline) Creek, which served as an important crossing on the Ox-Bow Trail, linking Plattsmouth and Nebraska City with Ft. Kearney and the west. This site is located in Ashland.

National Bank of Ashland was built in 1889 in Ashland. This building served as a bank until 1948, when it was converted to law offices, which it still houses to the present. It was listed on the National Register in 1983 for its economic and architectural significance.

Ashland Public Library was built in 1911 with a grant from Andrew Carnegie. The library was listed on the National Register in 1983 for its architectural and educational significance. This site is located in Ashland.

Stambaugh House: Remains of a handsome brick residence built in 1874 for Joseph Stambaugh, the first white settler in Saunders County. Remains have been incorporated into a dwelling. This site is located in Rural Ashland.

Site 25SD19 (NSHS Survey Number): Archaic Workshop area in Rural Ashland.

Round Barn: Circular barn, a rare architectural form, built in 1921 of ceramic tile bricks, located in Rural Ashland/Ceresco.

Pioneer Sandstone Quarry: Red (Dakota) sandstone quarry, which furnished foundation stone for much of the construction in Swedeburg. This site is located in Rural Ceresco.

Wahoo/Ceresco Trail Ruts: Four sets of ruts for trail between Wahoo and Ceresco when Ceresco was in the southwest corner of the section. This site is located in Rural Ceresco.

Saunders County Courthouse was built in 1904 in Wahoo. This building continues to serve as the County Courthouse. The Courthouse was listed on the National Register in 1989 for its architectural significance and prominence in local government.

Hanson House is the childhood home of Pulitzer Prize-winning composer and internationally recognized musician Howard Hanson from Wahoo. The house is owned by the Saunders County Historical Society and is operated as a museum by the Wahoo Woman's Club. This house was listed on the National Register of Historic Places in 1983.

Wahoo Burlington Depot was a depot in operation from 1886-1972. This was one of three depots in Wahoo, which ensured the economic survival of this community. This depot is owned by the Saunders County Historical Society and is operated as an exhibit building at the Historical Society Complex. This depot was listed on the National Register of Historic Places in 1985.

OK Meat Market: Constructed in 1907 as a harness shop and located in Wahoo, this building has housed a butcher shop continuously since 1919 and still has many original interior features. The market was listed on the National Register in 1991 for its significance in commerce and as a well-preserved example of a rare property type.

Site 25SD4: Small village site located in Rural Wahoo.

Site 25SD5: Small village site yielding Nebraska Culture and Early Woodland materials, located in Rural Weston.

Site 25SD22: Archaic camp in Rural Weston.

Burlington Railroad Cut: Deepest cut between Prague and Rescue, a made using a team and one man “slip” before fresnoes were built. This is located in Rural Prague.

Masek House: “Pre-fab” house purchased from Sears, Roebuck and Company for \$2,443 by George Masek and one of the few known Nebraska “pre-fab” houses from the early 20th century. This site is located in Rural Valparaiso.

Ox-Bow Trail Ruts: Ruts from the Ox-Bow Trail which thousands followed across Saunders County on the way west during the early 19th century. This site is located in Rural Weston and routes near Touhy.

Dunlap Site: Village site located in Rural Weston.

Ithaca Site (Indian Mound): Hill top burial and village site identified with both Oto and Pawnee. This site is located in Rural Ithaca.

Yutan Site: Oto Indian Village and burial site, occupied from ca. 1775-1835, and was the site of the Treaty of 1833, marking the beginning of the reservation period for the Oto. Listed on the national Register in 1971. This site is located in Rural Yutan and portions of the site are occupied by a RV Park.

Leshara Site is a Pawnee earthlodge village occupied during the 1850’s. This was listed on the National Register in 1971. This site, located in Rural Leshara, has been plowed, which destroyed the surface evidence, but the habitation zone remains in relatively good condition.

Pitzel Site: Archaic campsite located in Rural Leshara.

McClellan or McClaine: Site of a large Skidi Pawnee earthlodge village (the only skidi village along the Platte River) and was occupied from the late 1840’s to 1859. Listed on the National Register in 1971. This site is located in Rural Ashland/Leshara.

Woodcliff Burials is a cemetery for McClellan Site and is one of the last cemeteries, which can be attributed to a specific band of the Pawnee. This site was listed on the National Register in 1971. (Site has been under cultivation for years, and relic collectors have opened some graves, but damage has been negligible. Humans Remains legislation protects this site, but care should be taken that the landowner is aware of this site.)

Christensen Site: Large village of the Nebraska Culture period. This site is located in Rural Cedar Bluffs. (Harmon Site identified as a possible extension of this site.)

Indian Peak was one of the lookouts or signal hills used by the Pawnee and is located in Rural Morse Bluff.

Z.C.B.J. Lodge Plzen was built in 1911 to house Lodge Plzen, an important organization among Czech immigrants. This lodge was listed on the National Register in 1986 for its cultural and architectural significance. This site is located in Morse Bluff.

Pahuk Monument is one of the most sacred of the five sacred sites of the Pawnee Indians. This site is the only one of the five that has not been destroyed by cultivation or development. Also the site of Neapolis, a proposed site for the Nebraska State capitol. This monument was listed on the National Register and is located North of Cedar Bluffs.

SAUNDERS COUNTY FAIRGROUNDS

Located in Wahoo at 1st and Pine Street. The Saunders County Fairgrounds house the Gene Hattan Pavilion, which is used for various activities. In addition to the Pavilion the fairgrounds include display buildings, livestock buildings, and an outdoor arena.

TRANSPORTATION FACILITIES

Truck Line Service

There are various truck lines that run through Saunders County. The primary two routes used by truck line include Highways 92, which travels east west, and Highway 77 that runs north/south through the county.

Railroad Service

The nearest passenger services are located in Omaha and Lincoln with AMTRAK.

Bus Service

There is presently no bus service to Saunders County. The nearest terminal is located in Omaha, through Greyhound Bus Lines at 1601 Jackson Street.

Airports

Wahoo Municipal Airport is owned and operated by the city of Wahoo and the Wahoo Airport Authority. The airport is located 2 miles Northeast of the City (west ½ section 26-15-7W) and is comprised of 153.50 acres.

Approximately 50 aircraft are based at the airport and it is one the top five General Aviation Airports in the State of Nebraska. Many business's and other related service's utilize the Airport such as medical services, UPS, Charter Service, aerial application, Military, Flight Instruction, and aircraft Maintenance.

The Airport experiences high numbers of single engine, light twin engine, and twin turbo-prop operations. Small business jet activity is also on the increase. Runway expansion and other improvements are recommended within the 20-year planning period. Airport zoning is in place for Wahoo Municipal under Nebraska Revised Statute sections 3-301 to 333 which, allows zoning to restrict height of structures within three miles of the Airport. The nearest passenger and freight services are located in Omaha at Eppley Air Field and at Lincoln municipal airport. All major airlines fly out of Eppley Air Field in Omaha and limited flights fly out of the Lincoln municipal airport.

COMMUNICATION FACILITIES

Telephone Services

All local telecommunications services in Saunders County are provided by Alltel Communications of Lincoln. This service is adequate for present and future needs. Long distance carriers in the area include Sprint, MCI, AT&T, and various others.

Radio and Television

There are currently no local television or radio stations located within Saunders County. However there are various radio stations and television stations located in neighboring counties that provide local as well as regional programming for the area.

Newspapers

Saunders County has two weekly papers the Wahoo Newspaper and the Ashland Gazette. In addition to these papers there are others that serve the county as well which include the Fremont Tribune, the Lincoln Journal-Star, and the Omaha World Herald. (All Daily)

PUBLIC UTILITIES

Three main suppliers who include Musiel Propane Company, Nelson Gas & Oil & Propane Service Co Inc., and Otte's Propane Inc provide propane gas in Saunders County.

Refuse collection for the county is provided by Wahoo Sanitation, which is owned by Waste Connections out of California.

Electrical power for Saunders County is distributed both by Nebraska Public Power Department and Omaha Public Power Department.

HEALTH FACILITIES

The following are a listing of those health services that are available to the residents of Saunders County.

MEDICAL CLINICS

Coleman Clinic is located at 735 West 10th Street in Wahoo and was built in 1992. The staff includes 2 physicians, 1 physician's assistant, and 3 registered nurses. The facility is meeting the present needs of the doctors and patients. There are no future plans in writing for expansion at this time.

Family Planning Clinic is located at 1410 N. Bell Street in Fremont. The building was constructed in 1998 and is in excellent condition. At this point of the plan, there are no plans to expand the building, but there is room to, if necessary. This facility is primarily for women's health. There is one doctor, two physician assistants, seven LPNs and RNs to serve the facility. There are no specialists working at this facility and no special equipment.

Prague Clinic

The Prague Clinic is located on the East Side of Railroad Street, directly across from City Hall. The clinic is open every day, taking appointments on Monday, Wednesday, and Friday mornings. The Prague Clinic is part of Butler County Health Care Facilities and provides services including physicals, x-rays, and minor surgery. The building was constructed in 1990 and has two (2) exam rooms and one (1) x-ray room. Staff

at the Prague Clinic includes a PA, Director (MD), Alternating (MD), Office Manager and a CMA. The Clinic is presently adequate to serve residents of the Prague area and does have room for expansion, if needed.

Wahoo Medical Clinic located at 964 North Laurel Street in Wahoo has been located at this site since the mid-1960s. The Clinic is primarily a general family practice that offers a wide range of medical services including office calls and minor surgery. The staff includes two physicians, one registered nurse, two licensed practical nurses, one radiology technician, and office staff. The facility includes nine exam rooms, two surgical rooms, a x-ray room, lab, and an on-site pharmacy that is separate from the clinic but on the same property.

Ashland Clinic

Ashland has one clinic located at 705 N. 17th Avenue. The Ashland Family Medical Clinic, operated by the Lincoln Family Medical Group, has five physicians, two dentists, two physician assistants, one optometrist, and two nurses. The clinic is open from 9:00 a.m. - 4:30 p.m., Monday through Friday. This clinic serves the basic medical and dental needs of Ashland residents and the surrounding area.

HOSPITALS

Saunders County Hospital is located in Wahoo. The facility is located at 805 West 10th Street. The facility was built in 1950 and has become inadequate for the present needs. The facility is licensed for 15 acute care beds and 25 skilled care beds. The hospital contains an emergency room, a laboratory, and an inactive operating room. Various services are cardiology, urology, ortho, podiatry, and vascular oncology. It was commented that equipment throughout the hospital is in serious need of updating. There are no future plans for the hospital at this time.

Bryan LGH Medical Center is located in Lincoln and has two locations. Bryan LGH Health Services and Medical Center are non-profit corporations and is locally owned. **Bryan LGH Medical Center West**, located at 2300 South 16th Street, is a 302-bed health care facility with 1,100 employees and more than 300 physicians on staff. Bryan LGH West provides a full range of inpatient and outpatient services including advanced surgical techniques, cardiopulmonary services and cardiac catheterization lab capabilities. Their specialties include cancer treatment, mental health, orthopedics, and emergency trauma services. **Bryan LGH Medical Center East**, located at 1600 South 48th Street, is a 208 bed health care facility with 1,900 employees and 375 physicians. Their services include comprehensive cardiology services and have specializations in neurology, neurosurgery, orthopedics, rheumatology, oncology, and ophthalmology. There are future plans for the two hospitals to expand or offer more services to their patients.

Saint Elizabeth Regional Medical Center is located at 555 South 70th Street in Lincoln. This facility has 208 beds, which provides a wide variety of patient care services and programs, including inpatient and outpatient, mobile and educational. Saint Elizabeth's provides extensive care for high-risk pregnancy,

pediatric cardiology, minimally invasive surgery, burn care, cardiac catheterization, services for business and industry, and mobile diagnostics. There are future plans to expand services at this hospital.

CARE CENTERS

Haven House is located at 1145 N. Laurel Street in Wahoo. The building was built in 1965 and is in good condition. There is no room to expand this facility, but there are no plans for future expansion or remodeling at the time of the plan. Therapy and nursing services for elderly is the primary function of this facility. There are 75 staff members; of those, 11 are licensed nurses and 35 are nurses' aides. Programs offered are occupational, physical and speech therapy, long-term care, and assisted living care. There are 3 specialists working at the facility; a podiatrist, psychiatrist and a general practitioner.

Saunders County Senior Center is located at 844 West 9th Street in Wahoo. The building was built in 1960 and is in good condition. There has been minor remodeling to the facility over the years since the initial construction. There are 62 Medicaid beds available for residents. The overall state of the facility is average and there are no future plans for the center.

The Ambassador is a Subacute and Rehabilitation Center located at 4405 Normal Boulevard in Lincoln. The facility has three different types of special care units; pulmonary special care, subacute special care and long term care. This center offers 24-hour nursing and respiratory therapy. They offer physical, occupational, speech, recreational and restorative therapies to their clients seven days a week. Subacute care is used for the recovery of strokes, cardiac conditions, following various surgeries, cancer diagnosis, pulmonary complications, orthopedic fractures, complex medical conditions, and ventilator assisted patients. Outpatient therapy is available for pulmonary rehabilitation, physical therapy, occupational therapy and nursing care.

Madonna Rehabilitation Hospital is located on 5401 South Street in Lincoln. This facility is the only freestanding, hospital-licensed, rehabilitation facility in Nebraska. The 252-bed hospital provides many different services and programs for children and adults with physical disabilities, including rehabilitation for traumatic brain injury, spinal cord injury, neuromuscular disorders, strokes, orthopedic surgery and pediatric injury and illness. The facility also offers comprehensive inpatient and outpatient rehabilitation, adult day services, work injury rehabilitation and prevention programs, specialized ventilator assisted Alzheimer's, complex medical and rehabilitation, and extended care units.

Tabitha Health Care Services is located at 4720 Randolph Street in Lincoln. Tabitha provides services for home health care (Medicare certified and private duty), hospice (Medicare certified), rehabilitation, Alzheimer's care, case management, housing, and nursing and subacute rehabilitation.

GOALS AND OBJECTIVES

GOALS AND OBJECTIVES

Planning for the future of counties is an ongoing process of goal setting and problem-solving that aims to bring about livable places. Planning focuses on ways of solving existing problems facing the county, as well as providing a powerful tool people can use to achieve their vision for the future.

Visioning is a process of evaluating present conditions, identifying problem areas, and bringing about a county-wide consensus on how to overcome existing problems and manage change. By learning about its strengths and weaknesses, a county can decide what it wants to be, and then develop a plan that will guide decisions toward that vision.

Because change is continuous, a county must decide the specific criteria they will use to judge and manage change. Instead of reacting after the fact to forces altering the county, residents armed with a strategic vision can better reinforce the changes they desire, and discourage changes detracting from the vision. Having a shared vision allows a county to focus its diverse energies and avoid conflicts in the present as well as the future.

The foundation of a comprehensive development plan is the section on goals and objectives. This is where citizen concerns and vision are translated into action statements that can be used to direct future growth and change within Saunders County. This is where a consensus on "what is good development?" and "how to manage change in order to provide the greatest benefit to the county at-large?" is formed. The Saunders County goals and objectives attempt to address various issues affecting the county and the questions of "what" and "how" we plan in the county.

Issues are items either positive or negative from the past, present and/or the future. Issues may represent present concerns needing to be continued or discontinued in the future. In all cases, issues are items affecting the quality of life within Saunders County.

Goals are desires, necessities and issues to be attained in the future. A goal should be established in a manner that allows it to be accomplished. Goals are the end-state of a desired outcome. Goals also play a factor in the establishment of policies within a county. In order to attain certain goals, objectives and/or policies within the county government may need to be modified or changed from time to time.

Objectives are the steps or actions performed in order to attain specific goals. Objectives should be measurable through both specific levels of achievement and in terms of time. Objectives can be established in a way that assigns specific activities to specific individuals and/or governing body. Policies can also be a derivative of objectives where regulations are implemented.

Goals and objectives are “measuring” tools for guiding growth and development issues. The goals and objectives of this Plan are sufficiently detailed to be referred to when considering individual zoning, subdivision or public improvement matters. They provide specific direction to assist in making the daily, incremental decisions that ultimately lead to the full implementation of the Comprehensive Plan.

The goals and objectives assure the Comprehensive Plan accomplishes the desires of the residents in Saunders County. For this reason, this section of the Plan is a compilation of local attitudes generated through public meetings and workshops. If followed, development or improvements in the county will have a direct link to residents’ stated interests. Therefore, these goals and objectives should be referred to as diligently as the Future Land Use Map or any other part of the Comprehensive Plan. Likewise, they should be kept up to date to truly reflect the current attitudes of the county and its residents.

Town Hall Meeting

On three different occasions, citizens of Saunders County had the opportunity to tell the consultants their opinions, wishes and complaints about the County. These meetings reflected the desires of the citizens. The meetings were held in different locations in the County and the three distinct regions of Saunders County were identified. On January 17, 2000, the first meeting was held in Cedar Bluffs. This region was identified as the Todd Valley region. The second meeting was held in Valparaiso on January 20, 2000 and the region identified was the Western Uplands region. The last meeting was held on February 2, 2000 in Yutan and the region identified in that meeting was the Platte River Corridor region. Each region has specific goals designed by the input from that particular meeting. Goals and objectives for the County as a whole are stated as well. For Saunders County, goals and objectives were formulated under generalized categories or issues. These issues include:

- Conservation and Environment
- Economy and Economic Development
- Education
- Health and Safety
- Housing
- Land Use
- Transportation and Energy

GOALS AND OBJECTIVES

POPULATION

Goal

Saunders County must address the primary factors impacting their increasing population.

Objectives

1. Maintain the number of existing residents through developing and marketing programs or policies that encourage persons to remain, relocate and establish in Saunders County.
2. Develop and partner with area businesses and educational providers to identify and provide greater employment opportunities to retain the young persons of Saunders County.
3. Expand sheriff's office and patrol capabilities to supplement law enforcement assistance to villages.

LAND USE

Goal

Saunders County is to develop a new set of land use and zoning regulations, which is sensitive to their agricultural heritage, while protecting the natural resources of the county. The land use goals of Saunders County are to utilize a combination of development policies and regulations to manage future development in the most efficient and cost effective manner.

Objectives

1. Consult specialized agencies in designation and approval of land use issues.
2. Establish land use development districts that will identify areas of the county best suited for specific uses.
3. Develop a set of regulations sensitive to the environmental conditions of Saunders County. These include soil types and suitability, groundwater, surface water, watershed areas, and air pollution.
4. Develop a policy requiring the coordination and review of all planning and zoning activities as they relate to extraterritorial jurisdictions and the unincorporated portions of the County. This policy would require a joint review and comment on the proposed activity by the adjacent communities and/or county before the activity proceeds to the next step in the process.
5. Protect historic/cultural architectural and archaeological resources.

Agriculture

1. Protect prime agricultural land and maintain the quality of groundwater.
2. Support livestock production and related agricultural businesses designed, operated and located consistent with maintaining the health, safety and welfare of all county residents.
3. Provide separation between livestock and urban/community development. Avoid locating new livestock operations next to incorporated or unincorporated settlements within the County.
4. Work with Livestock Producers on a continual basis in evaluating and following regulations.
5. Locate most intensive uses accessible to, but not immediately next to, major paved roads and where the soil is compatible.

-
6. Continue to review and adjust implementation techniques to reflect the changes in agricultural land in order to preserve and protect this major land use.
 7. Establish regulations that require or encourage open space subdivisions, which maintain a common agricultural space.

Residential

1. Encourage residential development in and around the established communities of Saunders County.
2. Promote low to zero non-farm densities in agricultural districts by providing proper distances between residential and agricultural uses.
3. Consider soils, floodplain, road and bridge development or maintenance when identifying areas for development.
4. Examine the suitability for septic systems, basements and wells for any rural residential dwelling.

ENVIRONMENT

Goal

The natural resources (soil, groundwater, surface water and air) and environment of Saunders County shall be protected and managed to insure long term quality, availability and sustainability for the current and future residents and industries of Saunders County. The goal of Saunders County is to guide development in a manner that conserves and protects the natural resources; minimizes potential conflicts between rural/urban residents; promotes compatible land uses; encourages compact development and an efficient provision of services.

Objectives

1. Establish zoning standards that support conservation and protection of Saunders County's natural resources.
2. Protect all water supplies and aquifers. This can be achieved by forcing development to demonstrate a positive or, at least, a neutral impact on ground water supplies. Discourage development over or adjacent to water generating aquifers that could have a negative impact on water quality and/or quantity.
3. Identify with all appropriate agencies, possible sediment control regulations to minimize potential soil loss and/or contamination problems due to over irrigation in specific areas of Saunders County.
4. Regulate development in floodplains.
5. Protect natural stream corridors and enhance man-made open channels for the purpose of improving water quality and reducing flood damage and erosion while retaining open space.
6. Maintain, preserve and enhance existing wetlands and restore degraded wetlands. This should be balanced with the property rights of landowners.
7. Develop methods for maintenance and enforcement of environmentally valuable resources.
8. Inform and educate the public on the value of environmentally valuable resources including the zones of influence around these resources.

EDUCATION

Goal

Encourage and maintain a viable school and distance learning system, excellence in the public school curriculum and quality of school facilities to further the educational opportunities for all residents of Saunders County.

Objectives

1. Cooperate with the school systems in expanding public uses of educational facilities.
2. Establish entrepreneurship training and mentoring program in Saunders County Schools to encourage and promote business development opportunities for area students and residents, specifically targeting youth.
3. Utilize schools in Saunders County as community learning centers for all age groups.
4. Set development standards that coordinate reservation of land for future educational needs.

PARKS AND RECREATION

Goal

Provide for a wide variety of recreational opportunities for all age groups for residents of Saunders County.

Objectives

1. Promote recreation as an economic development tool for Saunders County.
2. Develop standards that require dedication of parks and open space in new residential developments.
3. Encourage recreational amenities offering year round enjoyment.

HOUSING

Goal

Provide for orderly and compatible growth throughout the county by encouraging contiguous and infill development of existing towns and discourage leapfrog development.

Objectives

1. Encourage the establishment of a rehabilitation program to maintain and improve existing housing stock.
2. Establish zoning standards that support housing options for all incomes and physical capabilities of Saunders County's residents.
3. Enforce regulations protecting the rights of Saunders County's residents.

ECONOMIC DEVELOPMENT

Goal

Strive to promote and balance the needs of the retail, wholesale, agricultural, commercial and manufacturing industries necessary to support County residents now and in the future, thereby promoting sustainable economic suitability throughout Saunders County.

Objectives

1. Expand and promote agriculture and agricultural employment opportunities in the County. These might include value-added agricultural industries and/or livestock feed operations.
2. Support area historical, cultural and recreational activities to encourage a sense of community through tourism based endeavors.
3. Promote economic development projects that will encourage area youth to remain in the County upon completion of their secondary education.
4. Encourage and promote the development of home-based businesses and telecommuting based upon technology communication infrastructure.
5. Expand tax base with diversified industries.
6. Encourage, promote and develop economic development partnerships between local entities and private companies to assist existing and expanding business enterprises.
7. Develop phasing and implementation strategies to guide commercial growth.
8. Continue to develop commercial areas that connect with the transportation plan.
9. Discourage strip development and spot zoning, while encouraging compact retail and commercial developments.

TRANSPORTATION & PUBLIC INFRASTRUCTURE

Goal

Develop, maintain and upgrade an efficient road system to serve current and future circulation and access needs.

Objectives

1. Continue updating county equipment and road programs as needed.
2. Encourage the formation of a Regional Transportation Planning concept.
3. Improve, develop, and maintain well-traveled roads with hard surfacing as identified in the County's One- and Six- Year Plan.
4. Maintain a phased program of transportation improvement, with priorities based on need, relative to costs and financial constraints.
5. Encourage the on-going replacement of older, dilapidating bridges throughout the County.
6. Support county wide transportation services for the elderly.
7. Require developers of leapfrog development to pay for upgrades on roads to new developments.
8. Evaluate the project priority list on an annual basis as part of the ongoing transportation planning process.

TODD VALLEY GOALS AND OBJECTIVES

Goal

Protect and Preserve Todd Valley Aquifer

Objectives

1. Discourage development, which may pollute or impact the Todd Valley aquifer.
2. Promote policies that actively maintain the quality and quantity of groundwater.

Goal

Create policies geared toward protecting the agricultural land of the Todd Valley as a natural resource.

Objectives

1. Discourage leapfrog development.
2. Encourage residential settlement within the one-mile jurisdictions of the communities in Saunders County, as well as the transitional agricultural sections.
3. Require cooperation between greenbelt laws and transfer of development rights.
1. Minimize the number of homes (non-farm) through disbursement throughout the County, within the extraterritorial jurisdictions of the communities of Saunders County.
2. Accommodate controlled growth.

WESTERN UPLANDS GOALS AND OBJECTIVES

Goal

Create appropriate balance of land uses, services and amenities to promote social and cultural interaction among residents.

Objectives

1. Encourage infrastructure that promotes managed growth.
2. Preserve and enhance the quality of life.

Goal

Create agricultural compounds, where more than one house can be built on the land of one farming operation, for farming purposes only (no non-farm dwellings).

Objectives

1. Develop a one-time split of two acres for a new residence on farmstead.

Goal

Establish Rural Residential Zones in the Western Uplands within close proximity or adjacent to communities of the region.

Objectives

1. Discourage leapfrog development.

-
2. The developer should take on the development of infrastructure costs if creating subdivisions in these areas.
 3. The developer should absorb the development of a minimum maintenance road into a hard surfaced road; maintenance costs will be the responsibility of the neighbors near the road.

Goal

Establish Interlocal Agreements with area schools in the Western Uplands region for recreational and educational uses.

Objectives

1. Create a mentoring program for all age segments of the population.
2. Utilize schools in Western Uplands region as community learning centers for all ages.

PLATTE RIVER CORRIDOR

Goal

Protect eco-sensitive areas of the Platte River Corridor, other watersheds and wetlands.

Objectives

1. Establish zoning regulations that protect the natural environment.
2. Create educational opportunities to view the natural resources of the Platte River Corridor.
3. Promote eco-tourism throughout the region.
4. Manage the area for its renewable resources and economic potential.

Goal

Prohibit waste from other Counties coming into Saunders County.

Objectives

1. Enforce penalties and/or fines against those who do bring in waste from another county.

Goal

Use Transitional Agricultural Land around communities as Rural Residential Zones.

Objectives

1. Decrease the amount of substandard housing units in the transitional zone.
2. Create sustainable growth efforts throughout this zone.
3. Increase density level of zone, while decreasing leapfrog development.
4. Locate rural residential dwelling in areas which are not designated in prime farmland.

ENVIRONMENT, NATURAL, AND MAN-MADE RESOURCES

PHYSICAL & ENVIRONMENTAL CHARACTERISTICS

In order to formulate a truly valid and 'comprehensive' plan for the future development of Saunders County, it is necessary to evaluate the environmental and man-made conditions, which exist in order to determine the impacts that these factors may have on encouraging or limiting future land uses throughout the County.

This component of the Saunders County Comprehensive Development Plan provides a summary of the physical and environmental characteristics, which are present within the County. In addition, this component identifies and qualifies the characteristics of both environmental and man-made conditions and their impact on future land use developments in the County.

For clarity the evaluations are presented in two categories, these include:

Natural Environmental Conditions

- Geology
- Prime Crop Land
- Soil Limitations
- Topography
- Flood Hazards
- Water Supply and Quality
- Air Quality

Man-made Conditions

- Past Land Use Development Trends
- Transportation System Impacts
- Public Facility Locations and Impacts
- Public Water Supply Locations and Impacts

Natural Environmental Conditions

GEOLOGY

Saunders County is located in the east-central portion of the State of Nebraska. Examination of this region of the State, specifically Saunders County, reveals that there are three major geological categories to examine further. These consist of uplands, terraces and bottomlands.

In Saunders County the uplands are a part of an eroded glacial drift plain that has been covered in most places by one or more layers of wind-deposited material called loess¹. The first loess to be deposited over the glacial drift was the Loveland. Locally, it may be seen at or near the surface on upland slopes and rounded ridgetops or in deep road cuts or gullies.

¹ Loess Geological deposits of relatively uniform fine material that is mostly silt* and presumably was transported by wind. Many kinds of soil in the United States have developed from loess blown out of alluvial** valleys and from other deposits during periods of aridity.

* Silt Individual mineral particles in a soil that range in diameter from the upper limit of clay (.002 millimeter) to the lower limit of very fine sand (.05 millimeter). Soils of the silt textural class is 80% or more silt and less than 12% clay.

** Alluvial Sand, mud and other sediments deposited on land by streams.

Loveland loess is reddish-brown and can be easily distinguished both from the brownish Peorian loess above it and from the glacial materials below it. The climate and vegetation at the time favored soil development on the Loveland loess but this changed as the climate later changed.

Peorian loess was then deposited and this buried the Loveland loess and the remnants of the soils that earlier developed. Remnants of the buried dark colored soils can be observed in road cuts and excavations, as well as, in fields where it crops out. The Peorian loess ranges for yellow to yellowish brown to gray. It forms the surface of the present landscape throughout most of the County and is the most extensive parent material of the soils on uplands and high terraces.

Bedrock crops out at only a few places in Saunders County. Near Ashland, Nebraska the bedrock is limestone; in sections 23 and 24, Township 13 North, Range 7 east and near Ceresco, Nebraska the bedrock is Dakota sandstone. Other bedrock forms, including Greenhorn limestone and Graneros shale, are visible in other locations within Saunders County. It is important to note that no mappable areas of soils have developed from bedrock materials meaning that the majority of bedrock on the uplands in Saunders County has been covered with Loveland then Peorian loess.

At one time the terraces within Saunders County were local stream flood plains, but now they are at several levels above the present streams. The highest and oldest terraces are 30 to 90 feet above the bottomlands. These terraces are covered by Peorian loess, the same as the uplands.

The most extensive terrace in Saunders County is the Todd Valley, an old valley that has been abandoned by the Platte River. This terrace is 6 to 8 miles wide and 30 miles long. It extends diagonally across the east-central portion of the County southeastward from the vicinity of Cedar Bluffs, near the northern border, to Ashland, near the southeastern corner of the County. The terrace is underlain by deposits of sand and gravel that are almost identical to those on the bottom of the Platte River.

In the southwestern part of Saunders County there are low terraces or high bottoms that are flooded only when local streams are unusually high. Alluvial parent materials are present at the base of the upland slopes throughout the County [refer to previous footnote for description of alluvial material].

The bottomland along the Platte River varies in width from less than a mile to more than five miles. The underlying materials consist of sand and gravel. The bottomland is nearly level, except where there are low ridges, shallow depressions and old abandoned sloughs or channels. In these areas alluvial materials comprise the majority of underlying geology.

The upland drains consist mostly of silty to clay alluvial sediments that are only a few feet above the present stream level and are subject to occasional flooding. As the streams subside, surplus water drains off readily but local swales and depressions remain flooded until the water enters the soil or evaporates.

A summary of the parent materials of the existing soils in Saunders County indicate that the soils on the uplands developed on Peorian loess, Loveland loess, Kansan drift, and below this are shale, sandstone, and limestone. Soils are also present on terraces and in recent alluvium in the valleys, some of which is so recent that soil development is just beginning.

The implications of the geology of the County with regard to future development of Saunders County are several. First, the adequate supply of groundwater will continue to encourage crop production. Second, erosion has increased and the entire original surface layer has been removed. Proper cultivation techniques have helped minimize such erosion, but additional consideration should be placed on retaining topsoil, specifically those soils conducive to crop production. Thirdly, there are several areas in the County, the Platte River included, where the geology and the characteristics of the overlying soils present considerable potential for groundwater contamination if improper uses are allowed to develop. These limitations are discussed later in this analysis.

Prime Farmland

The preservation of soils, which are the most productive in terms of crop production, is a critical issue in any County planning effort, specifically in the State of Nebraska. In Nebraska and other states where the major component of the economy is agricultural production, this issue of preserving prime cropland for future generations is a key component in planning for the future of any rural area.

Prime farmland soils, as defined by the U.S. Department of Agriculture, are soils that are best suited to producing food, feed, forage, fiber and oilseed crops. Such soils have properties that are favorable for the economic production of sustained high yields of crops. The soils need only to be treated and managed using acceptable farming methods. The moisture supply, of course, must be adequate and the growing season has to be sufficiently long. Prime cropland soils produce the highest yields with minimal inputs of energy and economic resources and farming these soils results in the least damage to the environment.

Approximately 237,826 acres, or nearly 50% of the County, is considered prime farmland. Figure 5 provides a visual representation of where the prime farmland soils are located in the County. A recent trend in land use in some parts of the County has resulted in the loss of some prime farmland to urban and industrial uses. The loss of prime crop land to other uses puts pressure on marginal lands, which generally are wet, more erodible, droughty or difficult to cultivate and less productive than prime crop land. If prime crop land is to be preserved for agricultural production, it would indicate that loss of such land through development of non-agricultural uses including residential, commercial, industrial and other non-agricultural developments must be avoided, or at least minimized, by providing other, more appropriate, locations for such uses.

Development of large scale confined livestock feeding operations in areas where these prime soils occur would also result in the loss of notable quantities of this very productive cropland. Thus should be

permitted to occur only when the long-term economic gain is determined to be greater than the long-term economic loss of the prime croplands. It should also be noted that several soils categorized as prime crop land have other environmental limitations which should prohibit or at least restrict the development of non-agricultural uses, including confined livestock feeding operations. The limitations include the potential for flooding, high water tables and strong erosion potentials.

Table 24: Prime Farmland within Saunders County

- Only the soils considered prime cropland are listed
- Urban or built-up areas of the soils are not considered prime cropland
- If a soil is prime crop land only under certain conditions, the conditions are specified in parenthesis after the soil name

Soil	Area (acres)	% of Saunders County
Aksarben silty clay loam, 0 to 2% slopes	6,742	1.4
Alda fine sandy loam, 0 to 2% slopes - occasionally flooded (prime crop land where properly drained)	3,062	.6
Filbert silt loam 0 to 1% slopes (prime crop land where properly drained)	21,810	4.5
Gibbon silt loam 0 to 2% slopes - occasionally flooded (prime crop land where properly drained)	4,694	1.0
Judson silt loam 0 to 2% slopes	3,507	.7
Kenridge silty clay loam 0 to 2% slopes - occasionally flooded	15,606	3.2
Lamo silty clay loam 0 to 2% slopes - occasionally flooded (prime crop land where properly drained)	3,268	.7
Lex loam 0 to 2% slopes - occasionally flooded (prime crop land where properly drained)	1,529	.3
Muscotah silty clay loam 0 to 2% slopes - occasionally flooded (prime crop land where properly drained)	6,106	1.3
Nodaway silt loam 0 to 2% slopes - occasionally flooded	31,908	6.6
Olmitz loam 2 to 5% slopes	2,784	.6
Tomek silt loam 0 to 2% slopes	33,427	6.9
Wann fine sandy loam 0 to 2% slopes - occasionally flooded (prime crop land where properly drained)	4,598	.9
Yutan silty clay loam terrace 2 to 5% slopes	34,409	7.1
Yutan-Aksarben silty clay loams 2 to 5% slopes	64,376	13.3
Totals	237,826	49.1

Source: United States Department of Agriculture
Natural Resources Conservation Service

FIGURE 5: PRIME FARMLAND SOILS

Table 24 lists the prime cropland soils within the County. As can be seen in the Table, the majority of prime crop land soils within Saunders County are located on level to nearly level slopes, as a result, no prime crop land soils are found on slopes greater than 5% within the County. It should also be noted that several soils categorized as prime crop land have other environmental limitations which should prohibit or at least restrict the development of non-agricultural uses, including confined livestock feeding operations. The limitations are discussed in the following section.

Soil Limitations

As described in Table 25, above, there are a number of soils which occur in the County which should be avoided by non-agricultural developments and confined livestock feeding operations due to the potential for environmental damage. These limitations include such problems as flooding, wind and water erosion and potential pollution of surface or groundwater through seepage into high water tables.

The environmental hazard factors indicated on Table 25 are designed to provide the Planning Commission and County Officials with an indication of potential environmental problems associated with various uses which may be proposed in different areas of the County. It is important to note these limitations so that these factors can be explored in detail prior to a determination of whether a use is appropriate for a given area.

These environmental hazard factors, which are linked to soil types, are mapped on Figures 5 through 10 to provide the Planning Commission and County Officials a source to construct a general evaluation of the appropriateness of any proposed use in any area with environmental limitations. Care should be used in the interpretation of the hazards indicated due to the generalized nature of the map scale. Should any non-agricultural development, including confined livestock feeding operations, be proposed in any of these areas, the soils present on each site proposed for development should be investigated more closely through the use of the Saunders County Soil Survey and on-site investigation.

The soils in the areas of the County where the urban communities are situated present varying levels of limitations for development. There are areas where future development should be monitored and / or restricted. For example near the City of Wahoo surface drainage is slow and streams near the City of Wahoo occasionally overflow. Existing farmsteads around Wahoo are situated on the higher areas due to this hazard and, as a result, set the trend for any future development in close proximity to the City of Wahoo. The Villages of Leshara, Wann, Ashland and Morse Bluff also face limitations regarding future development. This is due to their close location to the Platte River and the varying non-conductive soils and topography of the surrounding area. It is important to monitor development surrounding these Villages to prevent potential hazards to the environment, specifically the Platte River, and to prevent further erosion of the soils in these areas. The remaining Villages are situated on soil types which present only slight to moderate limitations for building development.

TABLE 25: USE LIMITATIONS OF EXISTING SOILS WITHIN SAUNDERS COUNTY, NEBRASKA *

environmental hazard code

- | | |
|---------------------------|---------------------------------------------|
| 1 ----- FLOODING | 2 ----- HIGH WATER TABLE (LESS THAN 6 FEET) |
| 3 ----- DEGREE OF SLOPE | 4 ----- EXCESSIVE SEEPAGE |
| 5 ----- WETNESS / PONDING | 6 ----- SLOW PERCOLATION RATE |
| 7 ----- POOR FILTER | 8 -----DEPTH TO ROCK |

POINT OF REFERENCE

ENV. FACTORS ENVIRONMENTAL FACTORS THAT LIMIT DEVELOPMENT OF VARIOUS LAND USES (INDICATED AS A NUMBER IN ACCORDANCE TO THE ENVIRONMENTAL HAZARD CODE PROVIDED)

LIMIT LEVEL LEVEL OF LIMITATION THAT SUCH ENVIRONMENTAL FACTORS HAVE ON THE VARIOUS LAND USES

ENVIRONMENTAL HAZARDS FOR VARIOUS LAND USES

SOIL TYPE	DWELLING WITHOUT BASEMENT	DWELLING WITH BASEMENT	SEPTIC TANK ABSORPTION FIELD	SEWAGE LAGOON	CONFINED LIVESTOCK FEEDING*	COMMERCIAL / INDUSTRIAL STRUCTURES
Aksarben 0 to 2% slopes ENV. FACTORS LIMIT LEVEL	- SLIGHT	- SLIGHT	6 SEVERE	4 MODERATE	4 MODERATE	- SLIGHT
Alda ENV. FACTORS LIMIT LEVEL	1 SEVERE	1,5 SEVERE	1,5,7 SEVERE	1,4,5 SEVERE	1,4,5,7 SEVERE	1 SEVERE
Barney ENV. FACTORS LIMIT LEVEL	1,5 SEVERE	1,5 SEVERE	1,5,7 SEVERE	1,4,5 SEVERE	1,4,5,7 SEVERE	1,5 SEVERE
Boel ENV. FACTORS LIMIT LEVEL	1 SEVERE	1,5 SEVERE	1,4,5 SEVERE	1,4,5 SEVERE	1,4,5 SEVERE	1 SEVERE
• Burchard 6 to 12% slopes ENV. FACTORS LIMIT LEVEL	3 MODERATE	3 MODERATE	6 SEVERE	3 SEVERE	3 SEVERE	3 SEVERE
• Steinauer 6 to 12% slopes ENV. FACTORS LIMIT LEVEL	3 SEVERE	3 SEVERE	3,6 SEVERE	3 SEVERE	3 SEVERE	3 SEVERE
• Burchard 12 to 18% slopes ENV. FACTORS LIMIT LEVEL	3 MODERATE	3 MODERATE	6 SEVERE	3 SEVERE	3 SEVERE	3 SEVERE
• Steinauer 12 to 18% slopes ENV. FACTORS LIMIT LEVEL	3 SEVERE	3 SEVERE	3,6 SEVERE	3 SEVERE	3 SEVERE	3 SEVERE
Deroin 5 to 11% slopes ENV. FACTORS LIMIT LEVEL	3 MODERATE	3 MODERATE	3,6 MODERATE	3 SEVERE	3 SEVERE	3 SEVERE
Filbert ENV. FACTORS LIMIT LEVEL	5 SEVERE	5 SEVERE	5,6 SEVERE	4 MODERATE	4,5 SEVERE	5 SEVERE
Fillmore ENV. FACTORS LIMIT LEVEL	5 SEVERE	5 SEVERE	5,6 SEVERE	5 SEVERE	5 SEVERE	5 SEVERE
Fluvaquents ENV. FACTORS LIMIT LEVEL	1,5 SEVERE	1,5 SEVERE	1,5,6 SEVERE	1,5 SEVERE	1,5 SEVERE	1,5 SEVERE
Gibbon ENV. FACTORS LIMIT LEVEL	1 SEVERE	1,5 SEVERE	1,5 SEVERE	1,4,5 SEVERE	1,4,5 SEVERE	1 SEVERE
Saltine ENV. FACTORS LIMIT LEVEL	1 SEVERE	1,5 SEVERE	1,5,6 SEVERE	1,5 SEVERE	1,5 SEVERE	1 SEVERE
Hedville ENV. FACTORS LIMIT LEVEL	3,8 SEVERE	3,8 SEVERE	3,4 SEVERE	3,4,8 SEVERE	3,4,8 SEVERE	3,8 SEVERE
• Ida ENV. FACTORS LIMIT LEVEL	3 SEVERE	3 SEVERE	3 SEVERE	3 SEVERE	3 SEVERE	3 SEVERE
• Steinauer ENV. FACTORS LIMIT LEVEL	3 SEVERE	3 SEVERE	3,6 SEVERE	3 SEVERE	3 SEVERE	3 SEVERE
Inglewood ENV. FACTORS LIMIT LEVEL	1 SEVERE	1 SEVERE	5,7 SEVERE	4,5 SEVERE	1,4,5,7 SEVERE	1 SEVERE

TABLE 25 CONT: USE LIMITATIONS OF EXISTING SOILS WITHIN SAUNDERS COUNTY, NEBRASKA *

environmental hazard code

- | | |
|---------------------------|---------------------------------------------|
| 1 ----- FLOODING | 2 ----- HIGH WATER TABLE (LESS THAN 6 FEET) |
| 3 ----- DEGREE OF SLOPE | 4 ----- EXCESSIVE SEEPAGE |
| 5 ----- WETNESS / PONDING | 6 ----- SLOW PERCOLATION RATE |
| 7 ----- POOR FILTER | 8 -----DEPTH TO ROCK |

POINT OF REFERENCE

ENV. FACTORS ENVIRONMENTAL FACTORS THAT LIMIT DEVELOPMENT OF VARIOUS LAND USES
(INDICATED AS A NUMBER IN ACCORDANCE TO THE ENVIRONMENTAL HAZARD CODE PROVIDED)

LIMIT LEVEL LEVEL OF LIMITATION THAT SUCH ENVIRONMENTAL FACTORS HAVE ON THE VARIOUS LAND USES

ENVIRONMENTAL HAZARDS FOR VARIOUS LAND USES

SOIL TYPE	DWELLING WITHOUT BASEMENT	DWELLING WITH BASEMENT	SEPTIC TANK ABSORPTION FIELD	SEWAGE LAGOON	CONFINED LIVESTOCK FEEDING*	COMMERCIAL / INDUSTRIAL STRUCTURES
Judson ENV. FACTORS LIMIT LEVEL	SLIGHT	SLIGHT	6 MODERATE	4 MODERATE	4 MODERATE	SLIGHT
Judson 1 to 5% slopes ENV. FACTORS LIMIT LEVEL	SLIGHT	SLIGHT	6 MODERATE	3,4 MODERATE	3,4 MODERATE	3 MODERATE
Kenridge ENV. FACTORS LIMIT LEVEL	1 SEVERE	1 SEVERE	1,5,6 SEVERE	1,5 SEVERE	1,5 SEVERE	1 SEVERE
Lamo ENV. FACTORS LIMIT LEVEL	1,5 SEVERE	1,5 SEVERE	1,5,6 SEVERE	1,5 SEVERE	1,5 SEVERE	1,5 SEVERE
Lax ENV. FACTORS LIMIT LEVEL	1,5 SEVERE	1,5 SEVERE	1,5,7 SEVERE	1,4,5 SEVERE	1,4,5 SEVERE	1,5 SEVERE
Malcolm ENV. FACTORS LIMIT LEVEL	3 MODERATE	3 MODERATE	3,6 MODERATE	3 SEVERE	3 SEVERE	3 SEVERE
Malmo ENV. FACTORS LIMIT LEVEL	5 SEVERE	5 SEVERE	5,6 SEVERE	3 SEVERE	3,5 SEVERE	3,5 SEVERE
Morrill ENV. FACTORS LIMIT LEVEL	3 MODERATE	3 MODERATE	6 SEVERE	3 SEVERE	3 SEVERE	3 SEVERE
Muscotah ENV. FACTORS LIMIT LEVEL	1 SEVERE	1,5 SEVERE	1,5,6 SEVERE	1 SEVERE	1,5 SEVERE	1 SEVERE
Nodaway 0 to 2% slopes occasionally flooded ENV. FACTORS LIMIT LEVEL	1 SEVERE	1 SEVERE	1,5 SEVERE	1,5 SEVERE	1,5 SEVERE	1 SEVERE
Nodaway ENV. FACTORS LIMIT LEVEL	1 SEVERE	1 SEVERE	1,5 SEVERE	1,5 SEVERE	1,5 SEVERE	1 SEVERE
Obert ENV. FACTORS LIMIT LEVEL	1,5 SEVERE	1,5 SEVERE	1,5,6 SEVERE	1,5 SEVERE	1,5 SEVERE	1,5 SEVERE
Olmitz ENV. FACTORS LIMIT LEVEL	SLIGHT	SLIGHT	6 MODERATE	3,4 MODERATE	3,4 MODERATE	SLIGHT
Pawnee 6 to 12% slopes ENV. FACTORS LIMIT LEVEL	5 SEVERE	5 SEVERE	5,6 SEVERE	3 MODERATE	3,5 MODERATE	5 SEVERE
Pits ENV. FACTORS LIMIT LEVEL	1 SEVERE	1 SEVERE	7 SEVERE	4 SEVERE	1,4 SEVERE	1 SEVERE
Platte ENV. FACTORS LIMIT LEVEL	1,5 SEVERE	1,5 SEVERE	1,5,7 SEVERE	1,4,5 SEVERE	1,4,5,7 SEVERE	1,5 SEVERE
Pohocco ENV. FACTORS LIMIT LEVEL	3 MODERATE	3 MODERATE	3,6 MODERATE	3 SEVERE	3 SEVERE	3 SEVERE
Pahuk ENV. FACTORS LIMIT LEVEL	3 MODERATE	3 MODERATE	7 SEVERE	3,4 SEVERE	3,4,7 SEVERE	3 SEVERE
Saltillo ENV. FACTORS LIMIT LEVEL	1,5 SEVERE	1,5 SEVERE	1,5 SEVERE	1,5 SEVERE	1,5 SEVERE	1,5 SEVERE

TABLE 25 CONT: USE LIMITATIONS OF EXISTING SOILS WITHIN SAUNDERS COUNTY, NEBRASKA *

environmental hazard code

1 ----- FLOODING	2 ----- HIGH WATER TABLE (LESS THAN 6 FEET)
3 ----- DEGREE OF SLOPE	4 ----- EXCESSIVE SEEPAGE
5 ----- WETNESS / PONDING	6 ----- SLOW PERCOLATION RATE
7 ----- POOR FILTER	8 ----- DEPTH TO ROCK

POINT OF REFERENCE

ENV. FACTORS ENVIRONMENTAL FACTORS THAT LIMIT DEVELOPMENT OF VARIOUS LAND USES
(INDICATED AS A NUMBER IN ACCORDANCE TO THE ENVIRONMENTAL HAZARD CODE PROVIDED)

LIMIT LEVEL LEVEL OF LIMITATION THAT SUCH ENVIRONMENTAL FACTORS HAVE ON THE VARIOUS LAND USES

ENVIRONMENTAL HAZARDS FOR VARIOUS LAND USES

SOIL TYPE	DWELLING WITHOUT BASEMENT	DWELLING WITH BASEMENT	SEPTIC TANK ABSORPTION FIELD	SEWAGE LAGOON	CONFINED LIVESTOCK FEEDING*	COMMERCIAL / INDUSTRIAL STRUCTURES
Scott ENV. FACTORS LIMIT LEVEL	5 SEVERE	5 SEVERE	5,6 SEVERE	5 SEVERE	5 SEVERE	5 SEVERE
Steinauer 12 to 30% slopes ENV. FACTORS LIMIT LEVEL	3 SEVERE	3 SEVERE	3,6 SEVERE	3 SEVERE	3 SEVERE	3 SEVERE
Tomek ENV. FACTORS LIMIT LEVEL	SLIGHT	SLIGHT	6 MODERATE	4 MODERATE	4 MODERATE	SLIGHT
Wann ENV. FACTORS LIMIT LEVEL	1 SEVERE	1,5 SEVERE	1,5 SEVERE	1,4,5 SEVERE	1,4,5 SEVERE	1 SEVERE
Yutan ENV. FACTORS LIMIT LEVEL	3 MODERATE	3 MODERATE	6 SEVERE	3,4 SEVERE	3,4 SEVERE	3 MODERATE
• Yutan ENV. FACTORS LIMIT LEVEL	3 MODERATE	3 MODERATE	6 SEVERE	3 SEVERE	3 SEVERE	3 SEVERE
• Judson ENV. FACTORS LIMIT LEVEL	3 MODERATE	3 MODERATE	3,6 MODERATE	3 SEVERE	3 SEVERE	3 SEVERE

Source: United States Department of Agriculture
Natural Resources Conservation Service

- * The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation.
- Merged soil types indicate that those soils appear in a complex combination and exhibit slightly different characteristics than when they are the dominant soil

In summary, as one travels Saunders County, he / she can see differences in the shape, steepness and length of slopes, in the width of valleys, in the kinds of wild plants and in the crops grown. With these more obvious differences in the landscape there are less easily noticed differences in the patterns of soils. This analysis identifies the characteristics of these soils within Saunders County. In addition, this analysis further identifies the prime cropland within Saunders County and details the soil limitations with regard to future development. The Planning Commission and County Officials should reference this component of the Comprehensive Development Plan and any other available studies related to the soils of Saunders County when discussing any future development projects.

FIGURE 6 SOIL LIMITATIONS FOR DWELLINGS WITHOUT BASEMENTS

FIGURE 7 SOIL LIMITATIONS FOR DWELLINGS WITH BASEMENTS

FIGURE 8 SOIL LIMITATIONS FOR SEPTIC TANK ABSORPTION FIELDS

FIGURE 9 SOIL LIMITATIONS FOR SEWAGE LAGOONS AND CONFINED
LIVESTOCK FEEDING OPERATIONS

Topography

The topography in Saunders County ranges from nearly level to very steeply sloping and blufflike. Slopes of 3 to 12 percent that are 200 to 800 feet long predominate. The longer, more gradual slopes are farthest from the larger, most deeply entrenched streams or drainageways. The shorter, steeper slopes border these drainageways.

Figure 11 shows an overall view of Saunders County with regard to the slopes that are present. In the uplands that border the Platte River, most slopes exceed 19 percent and some are blufflike. The very steep areas (indicated as red) indicate this near the northern border of the County. In the hilly areas in the southwestern part of the County, slopes range from 3 to 18 percent and are 150 to 400 feet long. These slopes are shorter and steeper than average and these areas are shown on Figure 11 as moderately sloping to steep (the darker shades of orange) to very steep (indicated in red) in the southwestern portion of the County.

The Todd Valley terrace is nearly level to gently undulating. It slopes gradually southeastward, falling approximately 7 feet to the mile. The surface of this terrace is comparatively smooth, but there is a series of shallow depressions and small mounds that formed largely when the wind shifted the surface soil. Todd Valley can be identified on Figure 11. This area contains level to nearly level (green colored) to gently sloping (yellow colored) land and extends diagonally across the east-central portion of the County southeastward from the vicinity of Cedar Bluffs, near the northern border, to Ashland, near the southeastern corner of the County.

In summary, the topography in the County presents a variety of deterrents to agricultural use, as well as, non-agricultural land development. The foremost deterrent with regard to agricultural use is the relatively high percentage of slope that is therefore subject to severe erosion from water. This same slope factor is also a major deterrent to development of non-agricultural uses in some areas of the County. From a topographic standpoint, the relatively flat valleys present few limitations for agricultural use, as well as, non-agricultural uses. The blufflike areas and steep sloped areas (indicated as dark orange to red on Figure 11) present severe limitations for both crop production and non-agricultural uses, but provides adequate rangeland for livestock grazing.

FIGURE 11 TOPOGRAPHY WITHIN SAUNDERS COUNTY

Flood Hazards

There are three primary areas in the County, which are subject to flooding. These include: (1) the areas along the Platte River in the northern and eastern peripheries of the County (2) along the lower elevations in the creeks and local streams which flow from the upland areas and (3) in the small lakes and channels located near the Platte River.

The Platte River has a large and nearly level flood plain that allows for occasional flooding without major damaging potential. However, during longer periods of rain or significantly high rain fall totals, the Platte River can cause significant damage to crops and existing development along its banks. Existing and future development along the Platte River should exercise proper development strategies, such as developing above the 100 year flood plain in accordance with federal law, make sure proper access is developed to such areas in case of emergency and make efforts to minimize, if not eliminate, environmental damage. Specifically, subdivision development along the lakes and channels of the Platte River should pay close attention to waste management as septic tanks can contaminate the water in this area for local residents. In times of high water and flooding it is important that proper access is allowed to these subdivisions. This is necessary in times of emergency such as fire and personal injury.

Drainage for the many creeks and local streams within Saunders County is chiefly southeastward through Wahoo Creek and its principal tributaries: Dunlap, Cottonwood, Duck and Sand Creeks and Miller Branch. Rock and Oak Creek drain the southern and southwestern parts of the County. These creeks flow southward and empty into Salt Creek in Lancaster County. Wahoo Creek flows into Salt Creek just north of Ashland. As in all the Great Plains area, occasionally there are severe storms. Heavy rainfall causes these waterways, including the Platte River, to fill and occasionally overflow. Thus the land adjacent to these waterways can become flooded. Figure 12 details the flood hazard areas within Saunders County.

Due to the flooding hazard in these areas, development of these areas for building or structure development should be avoided unless proper attention is given with regard to waste management, soil preservation and adequate accessibility in times flooded conditions. In addition, development of sewage disposal systems, lagoons or confined livestock feeding operations which would possibly seep or drain into the surface or ground waters in these areas should be stringently monitored if not prohibited.

FIGURE 12 FLOOD HAZARD AREAS WITHIN SAUNDERS COUNTY

In summary, existing and future development along the Platte River or the lakes and channels along the Platte River should be monitored to ensure that proper development strategies have been implemented. This includes the proper and safe placement of septic tanks, the implementation of adequate accessibility to these areas in times of high water or flooding and compliance with federal law that requires development occur above the 100-year flood plain. In addition, flooding along the creeks running near or through the municipalities of Saunders County does occasionally occur, especially during periods of high rainfall in the upland areas which then drains rapidly into the creeks which in turn run through these populated areas. Development along the creeks and local waterways in Saunders County should be avoided due to the high potential of environmental damage. Further, during times of heavy rain these creeks and local waterways have strong and rapid flood waters which could damage any development that is located close proximity of these creeks and local waterways.

Water Supply and Water Quality

Regionally, the State of Nebraska has an abundance of water compared with most of the United States. Though some states may have greater precipitation, more water in lakes and greater stream flow, few can challenge Nebraska with respect to the amount and general availability of water stored and moving underground in porous rocks.

Saunders County is located in Region 11 of the thirteen ground water regions identified within the State of Nebraska. Region 11 is called the Nebraska Glacial Drift. Glacial till of low permeability mantles most of the region. Pleistocene deposits of sand and gravel in buried paleovalleys and along stream valleys are one source of ground water, but they are of limited extent. Sandstones of the Dakota Group are another source of ground water. The shales and sandstones of the Dakota Group underlie much of the region. In some locations, ground water in the Dakota Group is very salty. The Dakota Group is the best ground water reservoir of rocks and sandstones in this group constitute a ground water reservoir in parts of eastern Nebraska, Saunders County included.

Ground water within Saunders County is in storage between 20 to 60 feet below ground level. The level of ground water within Saunders County has not had any significant rises or declines over the past several decades. Declines in the ground water levels would indicate that extensive and overly aggressive irrigation is being practiced. Such is not the case within Saunders County. Thus the supply of water, including river, lake, stream and ground water, within Saunders County will not limit agricultural production or any related commercial / industrial activity that requires an abundance of water.

Air Quality

A key component in any human environment is the quality of air. In Saunders County, there are only a limited number of industries, which generate notable quantities of air pollutants. These industries are limited to grain elevator and storage operations, located in or near the urban communities within the County. These operations emit a limited amount of grain dust, which can at least occasionally affect the air

quality around these elevators. All grain elevators and storage facilities within Saunders County are complying with more stringent dust control regulations and the amount of air contaminants generated at the various elevator sites in the County has declined in the last decade.

Air quality in the rural areas of the County can generally be considered excellent as a significant amount of land still contains its natural cover and the crop land cultivating techniques used continue to provide adequate ground cover to minimize air pollution from wind blown soils. The only notable air contamination issue in the rural areas of the County is that of the odors produced and emitted from a number of the existing confined livestock feeding operations. These uses, although relatively small in size, do emit varying levels of odor depending upon, to a large extent, the size and type of feeding operation and the management of the manure produced. The issue of odors produced by confined livestock feeding operations is a primary reason that Saunders County is constructing this Comprehensive Development Plan and the associated zoning regulations.

Dealing with odor in rural areas an issue which must be effectively addressed in any zoning regulation developed for the County if this conflict between the confined livestock feeding industry and neighboring property owners is to be minimized. It is virtually impossible to eliminate all odor production from the confined livestock feeding operations and thus it is unrealistic to indicate that this issue can be totally resolved. It is, however, possible to minimize this conflict issue through requirement and / or encouragement of manure handling practices which will minimize odor production and through development of minimum spacing or distance standard between any such confined livestock feeding operation and adjoining residential, public or semi-public and / or any non-agricultural use.

MAN-MADE CONDITIONS

Past Development Trends

The presence of man-made features has and will continue to influence development within Saunders County and the urban areas within the County. The location of the Platte River was the primary determining factor in the settlement of the urban areas in the County. The settlement of the urban areas was then further impacted by the development of railroads and finally, by the development of the highways serving the County.

Development of man-made land uses in the rural areas of Saunders County have been limited primarily to agricultural related uses, including rural homes and out-buildings. These agricultural uses include a number of small to medium size confined hog and cattle feeding facilities that are scattered throughout the County. Exceptions to this agricultural development include the development of several recreational camps, rural subdivisions along the Platte River, hunting areas and other public areas along the Platte River.

Development of man-made land uses in the urban areas has followed different patterns depending on the relationship of the urban area to a creek or river. In the cases of Yutan, Leshara and Morse Bluff growth has at least been altered away from the Platte River. In the cases of the City of Wahoo and the remaining villages, where the major rivers are at some distance, the growth has been more concentric because of the lack of flood hazard limitations.

Transportation System Impacts

The major transportation routes in the County consist of 8 major highways that traverse the County and the Union Pacific and Burlington Northern Santa Fe Railroads.

The major highway, U.S. Highway 77, bisects the center of the County from north to south and allows access to the Village of Ceresco and the unincorporated area of Swedeburg. U.S. Highway 77 also provides access to the largest urban center within Saunders County, which is the City of Wahoo. U.S. Highway 77 connects Saunders County residents to the City of Fremont, on the north, and the City of Lincoln on the south.

In addition, State Highway 63 allows access from the City of Wahoo to the City of Ashland, which in turn allows further access to U.S. Highway 6 and Interstate 80. State Highway 66 serves to be an east-west linkage between the Village of Valparaiso and State Highway 15 in Butler County, as well as, a connector highway between U.S. Highways 6 and 75, in Plattsmouth. State Highway 79 allows north-south access throughout Saunders County and provides access to the Villages of Morse Bluff, Prague, and Valparaiso and the unincorporated area of Touhy. State Highway 92 is the major east-west highway within Saunders County and provides access into the City of Wahoo. In addition, State Highway 92 provides access to the Village of Mead and the City of Yutan. State Highway 64, running east-west, runs from U.S. Highway 77 east to U.S. 275 and connects Leshara with the City of Valley, in Douglas County. Finally, State Highway 109 allows access north of the City of Wahoo, as well as, access to the Villages of Colon and Cedar Bluffs.

Combined, this highway network provides excellent access to each of the urban areas of the County, as well as, provides convenient farm to market roadways for all areas of the County. It is important to note that the location of Saunders County in close proximity (regionally) to the Cities of Lincoln and Omaha increases the amount of traffic along these major transportation routes. Although U.S. Highways 77 and 6 are utilized the most and most of the heavier traffic is located on these arterial transportation routes, the remaining State Highways are used significantly more than the average State Highway located in central or western Nebraska.

Virtually all commercial and industrial uses in the County occur near these major roadways, typically in or near the urban areas of the County. The location of the highways has impacted the development of the urban areas in the County by providing the primary determinant regarding the location of commercial uses. Likewise, the railroads have been the primary determinant for the location of industrial uses in these urban

areas. Any additional development of commercial or industrial uses will and should be located near one of these major transportation routes to avoid placing undue loads and wear on the remaining roads in the County.

Public Facility Locations and Impacts

Public facilities located in the rural portions of Saunders County consist of the old Nebraska Ordinance Plant, the Nebraska National Guard Camp and most predominantly, facilities serving the existing development along the Platte River. In addition, there are several other smaller public facilities located within Saunders County; these consist primarily of area cemeteries and substations.

The strongest need for public facility improvements or implementation, in the rural portions of Saunders County, will continue to be along the Platte River. The Platte River's ability to attract people will result in additional demand for non-agricultural residential development, as well as, the potential for limited recreation related commercial uses.

Public Water Supply (Wellhead) Locations and Impacts

An adequate supply of clean, uncontaminated water for domestic use in any urban area is a critical public need. In order to insure that water supplies for the urban areas in Nebraska do not become contaminated federal and state legislation now permits all urban areas in the State to develop and implement wellhead protection regulations. This legislation allows urban communities to prohibit or restrict development of land uses, which have the potential to contaminate ground or surface water, which then may contaminate the source(s) of water for the communities. This regulatory authority for incorporated communities has the potential to directly influence the future land use patterns in the rural portions of the County by prohibiting, restricting or otherwise regulating the development of those uses which may be a source of water contamination within 15 miles of any community.

EXISTING LAND USE

EXISTING LAND USE ANALYSIS

An evaluation of the land uses that presently exist within Saunders County, Nebraska is critical to the formulation of its Comprehensive Development Plan. It is the type and location of the existing land uses which provides the starting point for this 'Plan' and the basis for the formulation of workable zoning regulations to protect such existing uses. In addition, the identification and examination of the existing land uses and corresponding development of zoning regulations also serves to encourage additional economic expansion within the County through development of future land uses which are compatible with such regulations.

PHYSICAL CHARACTER OF SAUNDERS COUNTY, NEBRASKA

Saunders County is located in the eastern portion of the State of Nebraska. The county covers an area of 483,840 acres and the City of Wahoo, which is the largest urban area within the County with a population of 3,681 persons, is the county seat.

Other urban areas of note in the County include the smaller urban communities of Ashland, with a population of 2,136 and located in the southeastern portion of the County. Ceresco has a population of 825 persons and located in the south-central portion of the County. Yutan, with a population of 626 persons is located in the east-central portion of the County. Cedar Bluffs has a population of 591 persons and is located in the northern portion of the County. Mead, with a population of 513 persons is located in the east-central portion of the County. Valparaiso, with a population of 481 persons and is located in the southwestern portion of the County. Weston has a population of 299 persons and is located in the west-central portion of the County. Inglewood (located in both Saunders and Dodge County), has a population of 286 persons in Saunders County and is located in the northeastern portion of the County. Prague, with a population of 282 persons is located in the northwestern portion of the County. Ithaca, with a population of 133 persons is located in the east-central portion of the County. Colon, with a population of 128 persons is located in the north-central portion of the County. Morse Bluff, with a population of 128 persons is located in the northwestern portion of the County. Leshara has a population of 118 persons and is located in the northeastern portion of the County. Memphis, with a population of 117 persons is located in the southeastern portion of the County; and Malmo, with a population of 114 persons is located in the central portion of the County. As is noted above, these urban areas range in population from just over 100 to just under 2,200 persons. The population statistics for these communities were obtained from the 1990 Census.

Saunders County is regionally situated between three major urban areas. The City of Omaha, located directly east of Saunders County, the City of Lincoln, located south of Saunders County and the City of Fremont, located north of Saunders County all have significantly impacted, and will continue to impact, development, specifically non-farm development, within Saunders County. Due to the County's location between these major urban areas, traffic volumes within the County are quite heavy, specifically along U.S. Highway 77 and State Highway 92.

Agriculture is the main economic enterprise within the County and the majority of land within Saunders County is utilized for crop and / or livestock production. The kinds of crops grown and their acreage have been fairly constant through the years. However, the number of farms has declined and the size of each farm has substantially increased over the past several decades.

Approximately 90% of the acreage of the County is in farms. The remaining 10% of land within the County is divided between non-agricultural development areas, recreational areas, highway and railroad rights-of-way and the urban areas within the County. It can be seen, from this breakdown, how significantly important agricultural production is within Saunders County, both to the local economy of the County and in providing jobs for the citizens of the County.

The location of the Platte River and its tributaries was the primary determining factor in the settlement of the urban areas of the County. The settlement of the urban areas was then further impacted by the development of the railroad and finally, by the development of the highways serving the County.

Development in the rural areas of Saunders County has been limited primarily to agricultural related uses, including rural homes and outbuildings. However, due to the County's close location to the cities of Omaha, Fremont and Lincoln and due to the expanding urban areas in the County, especially surrounding Wahoo, development of the rural areas into non-agricultural uses has been increasing. Additional rural non-farm development also has been occurring in areas near the Platte River. These land use trends are ones in which the local governing bodies, particularly County Officials with Saunders County, will need to establish definite policies on so that the issues of potential conflicts with existing agricultural uses and the need for improved public infrastructure and services can be properly addressed.

Industrial development within the rural areas of Saunders County has been minimal. The majority of industrial development has been located near the urban areas of the County, specifically the City of Wahoo, and along the major highways within the County, particularly north of the City of Ashland.

Development of the urban communities within the County has followed different patterns depending on the relationship of the urban area to a creek, river or major transportation route. In the instance of Wahoo, growth has occurred away from the local creeks located near the City to areas along and near U.S. Highway 77. Growth in the Villages located near the Platte River has occurred in a fan shape away from the Platte River to avoid the potential problems associated within occasional flooding. Growth in the remaining urban areas has many been influenced by the availability of land within or surrounding the community, as well as, being located in areas away from the local creeks or channels. In addition, commercial and industrial growth of these areas has been and will continue to be substantially influenced by the location of the main transportation route located within or near the community.

The major transportation components in Saunders County consist of U.S. Highway 77, State Highways 63, 64, 66, 79, 92 and 109 and the major county roads. The major highways within the County are U.S. Highway 77 and State Highway 92. These highways serve to be the main north-south (U.S. Highway 77) and east-west (State Highway 92) thoroughfares within the County. The remaining highways serve to provide access to the urban areas within the County that are not located along or near these two major highways. This highway network, combined with a network of paved county roads, provides excellent access to each of the urban areas in the County, as well as, provides convenient farm to market roadways for all areas of the County.

The railroad systems within Saunders County include the Union Pacific and Burlington Northern rail lines. The Union Pacific railroad line traverses the central portion of the County extending from South of Valparaiso to Wahoo and then eastward across the Platte River. The Burlington Northern Railroad line traverses the eastern side of the County approximately parallel to the Platte River. These rail lines have resulted in only limited amounts of industrial development in the rural portions of the County, but their existence, combined with continued development pressure from the Cities of Omaha, Fremont and Ashland will result in additional industrial uses being located near these lines in the future.

It is important to note the physical characteristics within Saunders County as they exhibit strong influences on the land uses within the County. For example, the location of the Platte River in the eastern periphery of the County has been and will continue to be a strong influence in the development of rural residential and rural recreational land uses in the County. Similar physical characteristics, as well as, many other physical factors will continue to influence future land uses throughout the planning period.

RURAL RESIDENTIAL DEVELOPMENT

Figure 13 details the existing land uses present within Saunders County. From Figure 13 it can be seen that rural residential development is the largest land use within the County. Also it can be seen that rural residential land use has been divided into two categories: (1) farmstead development and (2) rural residential (non-farm) development.

Farmsteads are located throughout the County with higher concentrations of farms being located in the western two-thirds of the County. In most instances the location of farms within the County has occurred on or near to where the soils were the most conducive to crop production. In addition, the existing farms are located away from areas that are prone to flooding and ponding, as well as, away from areas with high degrees of slope.

In 1997 the total number of operational farms within Saunders County was 1,176. This number has significantly decreased over the past decades. From a statewide perspective, Saunders County has approximately 2.29% of all farms located within the State. Of the 93 counties within the State of Nebraska,

Saunders County ranks 4th in total number of farms. Only Custer County, Holt County and Lancaster County have more total farms than Saunders County.

The average size of farms, in terms of acres, within Saunders County totals 371 acres per farm. The average size of farms within the State of Nebraska totals 885 acres per farm, some 500 acres more per farm. This ranks Saunders County 87th in the State in overall farm size. From this it can be stated that farmstead development is quite dense within the County, especially in areas where the soils are the most conducive to agricultural production. In Saunders County farmsteads are developed at an average of 1.56 farmsteads per square mile.

Non-farm rural residential development, as well as, rural residential subdivision development has also occurred within the County. As can be seen on Figure 13, the majority of this type of development occurs in the eastern two-thirds of the County, with the majority of rural residential subdivisions occurring in the eastern periphery of the County along the Platte River. In addition, rural residential development has occurred in the areas surrounding the urban areas within the County, specifically surrounding the City of Wahoo. This type of development is common across the State of Nebraska, as well as, nationwide due to the overall market trend in which homebuyers are actively searching for larger parcels of land on which to develop larger scale homes. In most instances, larger parcels of land for such development are not located within the urban framework of the urban areas; as a result, the only available land for such development is located in the rural areas.

In Saunders County, this trend can be seen quite extensively as newer non-farm homes have been and are being constructed in the rural areas just outside of Wahoo. Non-farm rural residential development in the eastern and southern portions of the County has also been, and will continue to be, strongly influenced by the continued growth of the Cities of Omaha, Fremont and Lincoln.

In order to determine the number of non-farm rural residential dwellings within the rural portions of the County an overall analysis of the total number of structures within the County was referenced in the 1990 Census. In 1990, there were a total of 7,594 housing units within Saunders County. Of this total, 4,220 housing units were located in the urban areas of the County. This leaves a remainder of 3,374 housing units, which are located in the rural portions of the County. From the information regarding operational farmsteads, detailed above, it is known that there were 1,176 operational farms in 1997. From this information it can be approximated that there were a total of 2,198 rural non-farm housing units within the rural portions of the County in 1997. This total includes existing housing units that used to be farmsteads but have since ceased to operate as a farm and have crossed over into the category of rural non-farm residential housing units.

In 1990, there were 785 vacant housing units within Saunders County and 409 housing units being utilized for seasonal, recreational or otherwise occasional use. Of this total, 233 vacant housing units were located in the urban areas of the County, as well as, 18 housing units located in the urban areas of the County being utilized for seasonal, recreational or otherwise occasional use purposes. This leaves a remainder of 552 vacant housing units in the rural portions of the County and a total of 391 seasonal, recreational or occasional use-housing units within the rural portions of the County. Since it is known that there were 821 operational farms in the County in 1997, the vacant rural housing units are subtracted from the number rural non-farm housing units. This creates a total of approximately 1,646 occupied non-farm rural housing units within Saunders County, Nebraska in 1997, with 391 of such housing units being utilized for seasonal, recreational or occasional use.

Although the number of rural non-farm housing units is an approximated number, it still reflects the overall trend of non-farm development occurring in the rural portions of the County. These numbers are approximated because they do not include any removal or construction of rural housing units since 1990. However, it is known that additional non-farm rural housing units have been constructed in considerable quantities since 1990 and thus hypothetically increasing the overall total of non-farm rural residences in the County.

This level of non-farm housing development in the rural areas of the County has lead to conflicts between agricultural producers and the non-farm dwellers. It is the agricultural – non-agricultural conflict which is the major impetus for updating the existing Comprehensive Development Plan and corresponding zoning regulations, as there is and will continue to be a strong need to minimize these conflicts during the planning period.

It is important to note that the majority of these non-farm rural residences are located in the jurisdictional areas of the urban areas of the County and thus not included as part of the County's jurisdiction. Where municipal zoning is not enforced, the County's jurisdiction extends up to the corporate limits of that municipality. Those non-farm rural residences that are located in other areas of the County are, however, within County jurisdiction and additional development in such jurisdiction should be carefully monitored and regulated by County Officials.

RURAL COMMERCIAL DEVELOPMENT

Rural commercial development within Saunders County is quite minimal. As indicated on Figure 13, commercial development is primarily located surrounding the urban areas of the County and, again, is under the jurisdiction of such urban areas. Only in urban areas that do not enforce zoning or have zoning but fail to utilize their jurisdictional powers does the County have authority over such development. Commercial development within the strongly rural areas of the County is minimal.

This indicates that the majority of commercial business and services are located within the urban areas within the County. This trend is very common throughout Nebraska and primarily occurs in these areas due to the higher volumes of local consumer traffic in the urban areas and due to the close location of additional goods and services offered by other local businesses.

It is important to note that this trend may slightly shift with the completion of the improvements to U.S. Highway 77 and, to a lesser extent, State Highway 92 and the other highways within the County. Commercial development, specifically those businesses oriented towards the highway traveler, may spawn in areas along these major thoroughfares. Acknowledging the impacts and potentials for development along U.S. Highway 77 and other major transportation routes will be covered in the Future Land Use component of this Comprehensive Development Plan.

RURAL INDUSTRIAL DEVELOPMENT INCLUDING COMMERCIAL AGRICULTURAL DEVELOPMENT

Industrial development, aside from that that is agricultural in character, is significantly minimal in the rural portions of Saunders County. Figure 13 indicates that there are few industrial facilities located within the rural portions of the County. One industrial facility is located in the southeastern portion of the County. This industrial facility is located near the Nebraska National Guard Camp located near the Platte River. Another industrial facility is located in the northeastern portion of the County and is located in close proximity to the Platte River. Aside from these facilities there are no other major industrial operations, aside from agricultural operations,

Again, this indicates that non-agricultural industrial development is located in and around the urban areas of the County. The majority of industry in the County is centered in and around Wahoo with other smaller scale industrial operations, including grain storage and related crop production supply uses, being located in the remaining urban areas of the County.

Commercial agricultural facilities are located throughout the County. These operations range from independently owned livestock feedlots to larger scale confined livestock feeding operations. When examining all existing land uses within the County it can be seen that many of these types of uses are located in areas where many rural farmsteads exist. This is unfortunate because these types of uses typically produce odor, dust, flies and potential environmental hazards for adjoining land uses resulting in land use conflicts that are difficult to resolve. However, the development of these uses in areas in and around the many farmsteads in the County has occurred for the same reasons that the original farmsteads were constructed. The reason is the availability of adequate water supplies, higher crop production potentials and the desire on the part of these producers to have their livestock located near their farming or ranching operations.

By acknowledging the location of these facilities in Saunders County, proper planning can occur and valid zoning regulations can be developed to limit the negative effects of such uses, as well as, prevent development near such uses that would potentially be detrimental to the land owner and / or home buyer. It is important to note, however, that the rural development density of the County, as can be seen of Figure 13, significantly diminishes the ability to properly locate any new larger confined livestock uses without substantially impacting existing rural developments.

RURAL PUBLIC & SEMI-PUBLIC DEVELOPMENT

A variety of public and semi-public uses ranging from land owned by the Federal Government and the State of Nebraska to local churches, cemeteries, rural schools and historical markers occur in the rural areas of the County. An examination of the location of these public, semi-public and related uses reveals that, for the most part, these uses are situated near the major highways in the County and in somewhat of a close proximity to an urban area within the County. In many instances throughout the County these uses were

developed during the settlement of the County and have since become significantly aged and, in some cases, obsolete.

One of the largest public use areas located in the County is the land owned by the State of Nebraska that is utilized by the University of Nebraska for field research. This public use area is located in the southeastern portion of the County and is located approximately five miles southeast of the City of Wahoo and two miles east of the Village of Ithaca. This public area comprises approximately seven square miles.

Additional land owned by the State of Nebraska is utilized by the Nebraska National Guard and is located in two separate areas within the County. One such area is located north of the land utilized by the University of Nebraska for field research in the southeastern portion of the County. The other area is located along the Platte River in the southeastern portion of the County and is located in close proximity to the Village of Ashland.

An additional public area, owned by the United States Federal Government, is a United States Military Reservation located directly west of the land utilized by the University of Nebraska for field research.

Recreational facilities in Saunders County are diverse. Aside from the recreational uses located in the urban areas of the County there are many recreational areas in the rural portions of the County. Such recreational areas include the Jack Sinn Memorial State Wildlife Management Area, the Pioneer State Recreation Area and the Memphis State Recreation Area. These uses are located, for the most part, in the southeastern quarter of the County. Additional recreational facilities include hunting and fishing that occurs along the Platte River and its tributaries. Hunting and fishing also occurs in and around the many farm ponds and small lakes located throughout the County.

EXISTING LAND USES WITHIN THE RURAL PORTIONS SAUNDERS COUNTY, NEBRASKA

The existing rural development density pattern within the County is subject to substantial change throughout the planning period, primarily due to continuing pressure for rural non-agricultural development. The objective of this Comprehensive Development Plan and the associated zoning regulations should thus be to prevent land use conflicts and provide liability protection for those uses which now exist by avoiding the placement of new land uses, including larger livestock operations, in areas where land use conflicts would result.

The existing land use pattern in the rural portions of the County will have implications with regard to development of future land use development, including confined livestock feeding operations, as is noted in the Environmental component of this Comprehensive Development Plan. If Saunders County is to encourage development within the rural areas of the County, it will be imperative to formulate a Future Land Use Plan and zoning standards which can overcome or at minimize the land use conflicts which can

result. In addition it should minimize or eliminate the potential of environmental degradation from the construction of new land uses.

The existing land use pattern in the rural portions of the County has and should continue to be influenced by the location of soil types which are the most productive with regard to crop production. The soils that are classified as prime cropland in the County consist of over 237,826 acres, or nearly 50% of the County. These soils are predominantly situated in the areas where existing farmstead development has occurred and in which the majority of land surrounding the farmstead is used for crop production or other related agriculture. If these prime cropland soils are to be preserved, in order to maintain and maximize overall crop production, in the County, a critical component of the local agricultural based economy, the issue of how to avoid the use of the prime cropland soils for other uses, will need to be effectively addressed in the Future Land Use Plan and the corresponding zoning regulations.

The overall existing land use pattern in Saunders County is one of moderate to high density that is, for the most part, consistent with the environmental capacities of the land. A primary objective of the Future Land Use Plan and zoning regulations should be to assure that new land uses, which may be developed, be located and constructed in a manner which is compatible with adjoining land uses and the environmental capacity of the soils and geologic characteristics of the land.

INTRODUCTION

This section and the accompanying Future Land Use Map are the initial steps in Saunders County's goal to establish a growth management plan and policies. Based upon previous reports that have examined population, housing, economy and public services and public facilities, this document attempts to provide recommendations on the type of uses that the County will promote in concert with private property owners and developers. The plan identifies areas for intensive, urban-like development in the County. Conversely, the plan also identifies areas in which agriculture will be considered primary and all other uses must accommodate intensive agricultural activity. To be successful in these objectives, it will be important to follow policies established in this Chapter in order to make sound land use and land use management decisions.

These additional goals and policies support the goals and policies of this Plan and should be considered when making decisions on the future use of land:

1. ***Agricultural Preservation*** - protect one of the county's main industries
2. ***Concentrate New Development*** - encourage new growth inside or adjacent to communities. Consider cost of providing public services in reviewing development requests.
3. ***Use Environmental and Economic Impact Data in Growth Management*** - utilize flood plain, slope data, soil limitations for septic or lagoons, corn suitability, and prime farmland soils in directing development requests.

The generalized land use plan and map identifies fifteen primary land use districts. These districts outline the type of uses and insensitive uses that would be encouraged by the County and eventually regulated through zoning and subdivision regulations. It is expected that the overall framework of the generalized land use plan substantially meets the opportunities and strengths identified in previous plan studies.

FUTURE LAND USE DISTRICTS

General Agriculture (AG)

This land use district provides for all agriculture practices. In this "agriculture first" district, agriculture activities would be given primary consideration where conditions prove favorable. This is the district in Saunders County where crop production as well as livestock production and feeding operations are to be permitted and non-farm residential development is discouraged.

When developing the County's Zoning Regulations, it is recommended that larger Livestock Feeding Operations be regulated with conditional use permits. This would help minimize the affect on the environment, other natural resources, and the health, safety and general welfare of the public. When conditionally permitting such operations, decisions must consider ground water management areas, slope, soils and other natural or cultural resources as required by the County or any other state or federal agency. Furthermore, in discouraging non-farm residential development, minimum lot sizes and/or density in the Agriculture District would be regulated to preserve prime farmland and deter non-farm developments.

Transitional Agriculture (TA)

The Transitional Agricultural District is intended to be a buffer area between intensive agricultural uses and less intensive uses. The TA District is generally located around each community in Saunders County, with some exceptions, and around other uses not conducive to intensive agricultural processes. In addition, the TA District lies along portions of U.S. Highway 77, Nebraska Highway 109 and Nebraska Highway 92, east of Weston, in order to provide a buffer between intensive agricultural uses and the primary transportation corridors of the County.

Within the Transitional Agriculture District, agricultural practices like row crops are highly encouraged. However, this district is not intended for Livestock Feeding Operations. Non-farm residential units, within the Transitional Agriculture District should be at a greater density than in the General Agricultural District. As mentioned previously, the Transitional Agricultural District is intended to be a buffer as well as an area where the communities may eventually grow.

Rural Estates

The Rural Estates District is intended to provide areas in Saunders County where acreages and acreage developments may be desirable in the future. Lot sizes in these areas would be a minimum of three (3) acres with smaller lots allowed in certain circumstances. This district is designed to allow certain livestock on a limited basis for recreational purposes. The required acreage would be regulated based upon the following:

- The soil type,
- The slopes present on the site,
- The ability to cluster acreages within developments,
- The construction of a centralized water and/or sewer system,
- The capacity of the soil to handle sewage, and
- The ability of the site to provide water for the residence.

The acreage requirements typically would be lowered if the developer proposes a multi-lot development with a central water and sewer system.

Lakeside Residential

The Lakeside Residential District is intended to guide development built on or near a sandpit lake or other water amenity. The development in these areas may contain lots as large as three (3) acres or more and as small as a typical urban density. The acreage requirements typically would be lowered if the developer proposes a multi-lot development with a central water and sewer system.

The Lakeside Residential areas are intended to be lots for either full-time residency, part-time residency or a combination of both.

Residential District

Residential developments are intended for single-family residential uses that are incorporated into a subdivision type development. This development can be anywhere from rural type subdivision with gravel local transportation network using separate wells and septic tanks to urban type subdivision with paved local roads and community water and sanitary sewer systems. The use of conservation practices such as clustering and conservation easements is highly encouraged in these areas. Roads within these areas should be built and maintained by the property owners.

Historic Site

These land use district are designated in locations where large scale historic sites exist. The intention is to draw attention to these areas in order to control development so as not to negatively impact these amenities in the county.

Highway Corridor

The Highway Corridor District is intended to enhancing opportunities for commercial developments along the major highway corridors in Saunders County. The district is located along both the new and old alignment of U.S. Highway 77 between Ceresco and Wahoo and extends a ¼ mile on both sides of the highway. In addition, the corridor extends a ¼ mile either side of Nebraska Highway 92 and U.S. Highway east and north of Wahoo between Wahoo, Fremont, and the Saunders/Douglas County line.

Commercial

The Commercial District is intended to cover areas in Saunders County where there are concentrations of commercial uses, other than the communities. These uses need to be located along U.S. Highway 77 and Nebraska 92 east of Wahoo. The types of uses anticipated in this district include all levels of commercial development. In most cases, if the use is along a major highway, the development will be required to gain access along a perpendicular road or the development will need to provide an access road parallel to the highway.

Industrial

Industrial Districts, in Saunders County, should be located in areas already developed as industrial. However, these areas need to provide additional space for future expansion of these uses. The primary locations for these districts are along Nebraska 92 between Wahoo and Mead. Industrial development in Saunders County can and will provide excellent economic development opportunities. However, these developments need to be reviewed and judged based upon the effect they may have on the environment (soil, water and air).

Public Use

The Public Use District in Saunders County is located where current governmental uses are in place. These include Camp Ashland, the UNL Field Laboratory, the National Guard Training Area, and the U.S. Military Reservation.

Lake Wanahoo District

The Lake Wanahoo District is located north of Wahoo along Sand Creek. The district covers an area where the Lower Platte North Natural Resource District and the Corp of Engineers are planning a new flood control structure and recreational lake. The intent of this district is to establish development standards that allow for the continuation of existing uses while protecting the public's interest.

The Lake Wanahoo Conservation District has the following development objectives:

1. Provide flood control and flood hazard mitigation protection along Sand Creek,
2. Provide public outdoor recreation and open space opportunities.

This district does not prohibit existing uses from continuing as they currently exist. However, any new proposed use would have to demonstrate no impact on water, habitat or open space resources. This district should not include commercial, industrial, or intensive agricultural uses such as livestock feeding operations. Also residential development should be located on lots of forty acres or more.

Land Use Summary

Utilization of the Future Land Use Plan as a guide for future land development within Saunders County will result in the protection of the existing land uses throughout the County's jurisdiction, as well as, protection of the citizens residing in or near the communities of the County. Adherence to the land use policies outlined in the Future Land Use Plan will assist the County in avoiding land uses that are incompatible with the environmental conditions. The concept of lessening the future impact upon the public infrastructure (roads) and tax base in the County will assist in preserving vital tax dollars and allowing for fiscally responsible developments in the County for years to come.

The Future Land Use Plan represents a generalized "County-wide" view of where future development should locate. It is important to utilize the graphic data provided in the Environmental Chapter of this Plan (Figure 5 through Figure 12) in conjunction with the Future Land Use Plan Map, in order to properly locate future land uses. Furthermore, the need for on-site investigation will be necessary, especially when larger land use developments are scheduled for the rural areas of the County.

The information provided within this Comprehensive Plan, including this Future Land Use Plan Map, is meant to be a guide for the future development of the County, not a static document that serves to hinder development within the County. It is important; however, that references be made to the information provided within this document prior to making decisions about future land uses in Saunders County, Nebraska.

TRANSPORTATION PLAN

TRANSPORTATION PLAN

The Transportation Plan identifies the future transportation system needs for Saunders County. Primary emphasis is given to the improvement and development of motor vehicular traffic systems in the County. These systems are classified as motor vehicle roads. The implementation of this plan during the planning period will result in the continued safe movement of people and vehicles within Saunders County.

The primary sources of information utilized in the development of the Transportation Plan were (1) Saunders County's "One and Six Year Plan" (2) State "one and Five Year Plan" and county input.

The County "One and Six Year Plans" are reviewed and adopted by the local unit of government to address the issues of proposed road and street system improvements and development. Upon approval of these plans by the Board of Public Road Classifications and Standards, the governmental units are eligible to receive highway-user revenue from the State Highway Department.

The One and Five Year Plan, developed by the Nebraska Department of Roads, establishes present and future programs for development and improvement of state highways. The one-year plan includes highway projects scheduled for immediate implementation, while the five-year plan identifies highway projects to be implemented within five years or possibly sooner if scheduled bids and work for one-year projects cannot be awarded and constructed.

STREET AND ROAD CLASSIFICATION

Nebraska Highway Law (Chapter 39, Article 21, Revised Reissue Statutes of Nebraska 1943) proposes the functional classification of both rural and municipal roads and streets and public highways. Chapter 39, Article 21.03 lists rural highway classifications as:

1. Interstate: federally-designed National System of Interstate and defense highways;
2. Expressway: second in importance to Interstate. Consists of a group of highways following major traffic desires in Nebraska and ultimately should be developed to multiple divided highway standards;
3. Major Arterial: consists of the balance of routes that serve major statewide interests for highway transportation in Nebraska. Characterized by high speed, relatively long distances, travel patterns;
4. Other Arterial: consists of a group of highways of less importance as through-travel routes. Serve places of smaller population and smaller recreation areas not served by the higher systems;

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5. Collector: consists of a group of highways that pick up traffic from the local or land-service roads and transport county centers or to the arterial systems. Main school bus routes, mail routes, and farm-to-market routes;
 6. Local: consists of all remaining rural roads, generally described as land-access roads providing service to adjacent land and dwellings; and
 7. Bridges: structures crossing a stream twenty feet or more in width or channels of such a stream having a combined width of three hundred feet or more.

It is noted in article 39-2103, that the combined rural highways classified under subdivisions (1) and (3) should serve every incorporated municipality having a minimum population of at least one hundred inhabitants or sufficient commerce, a part of that will be served by stubs or spurs, and the major recreational areas of the State.

Figure 15
Transportation Plan Map

PLAN IMPLEMENTATION

PLAN IMPLEMENTATION

ACHIEVING SAUNDERS COUNTY'S FUTURE PLAN

Successful county plans have the same key ingredients: "2% inspiration and 98% perspiration."

This section of the plan contains the inspiration of the many County officials and residents who have participated in the planning process. However, the ultimate success of this plan remains in the dedication offered by each and every resident.

There are numerous goals and objectives in this plan. We recommend reviewing the relevant goals during planning and budget setting sessions. However, we also recommend that the County select three elements of the plan for immediate action; the goals of highest priority. This is the Action Plan.

Action Agenda

The Action Agenda is a combination of the following:

- Goals and Objectives
- Growth Policies
- Land Use Policies
- Support programs for the above items

It will be critical to earmark the specific funds to be used and the individuals primarily responsible for implementing the goals and policies in Saunders County.

Support Programs for the Action Agenda

Four programs will play a vital role in the success of Saunders County's plan. These programs are:

1. Capital Improvements Financing--an annual predictable investment plan that uses a six-year planning horizon to schedule and fund projects integral to the plan's implementation.
2. Zoning Regulations--updated land use districts can allow the county to provide direction for future growth.
3. Subdivision Regulations--establish criteria for dividing land into building areas, utility easements, and streets. Implementing the Transportation Plan is a primary function of subdivision regulations.
4. Plan Maintenance--an annual and five-year review program will allow the county flexibility in responding to growth and a continuous program of maintaining the plan's viability.

Plan Maintenance

Annual Review of the Plan

A relevant, up to date plan is critical to the on-going planning success. To maintain the confidence of both public and private sector; evaluate the effectiveness of planning activities; and, most

importantly, make mid-plan corrections on the use of county resources, the plan must be current. The annual review should occur during the month of January.

After adoption of the comprehensive plan, opportunities should be provided to identify any changes in conditions that would impact elements or policies of the plan. At the beginning of each year a report should be prepared by the Planning Commission that provides information and recommendations on:

- whether the plan is current in respect to population and economic changes; and
- the recommended policies are still valid for the County and its long term growth.

The Planning Commission should hold a public hearing on this report in order to:

1. Provide citizens or developers with an opportunity to present possible changes to the plan;
2. Identify any changes in the status of projects called for in the plan; and
3. Bring forth any issues, or identify any changes in conditions that may impact the validity of the plan.

If the Commission finds major policy issues or major changes in basic assumptions or conditions have arisen which could necessitate revisions to the plan, they should recommend changes or further study of those changes. This process may lead to identification of amendments to the plan that would be processed as per the procedures in the next section.

Plan Amendment Procedures

It is anticipated that each year individuals and groups may come forward with proposals to amend the plan. We would recommend that those proposals be compiled and reviewed once a year at the annual review. By reviewing all proposed amendments at one time, the effects of each proposal can be evaluated for impacts on other proposals and all proposals can be reviewed for their net impact on the comprehensive development plan.

Unanticipated Opportunity

If major new, innovative development opportunities arise which impact several elements of the plan and that are determined to be of importance, a plan amendment may be proposed and considered separate from the annual review and other proposed plan amendments. County Staff shall compile a list of proposed amendments received during a year, prepare a report providing pertinent information on each proposal, and recommend action on the proposed amendments. The comprehensive plan amendment process should adhere to the adoption process specified by Nebraska law and should provide for organized participation and involvement of interested citizens.

Methods for Evaluating Development Proposals

The interpretation of the plan should be composed of a continuous and related series of analyses, with references to the goals and policies, the overall land use plan, and specific land use policies. Moreover, when considering specific proposed developments, interpretation of the plan should include a thorough review of all sections of the plan.

If a development proposal is not consistently supported by the plan, serious consideration should be given to making modifications to the proposal or the following criteria should be used to determine if a comprehensive plan amendment would be justified:

- the character of the adjacent neighborhood
- the zoning and uses on nearby properties
- the suitability of the property for the uses allowed under the current zoning designation
- the type and extent of positive or detrimental impact that may affect adjacent properties, or the county at large, if the request is approved
- the impact of the proposal on public utilities and facilities
- the length of time that the subject and adjacent properties have been utilized for their current uses
- the benefits of the proposal to the public health, safety, and welfare compared to
- the hardship imposed on the applicant if the request is not approved
- comparison between the existing land use plan and the proposed change regarding the relative conformance to the goals and policies
- consideration of professional staff recommendations