

THE CASS PLAN - 2014



NEBRASKA COMPREHENSIVE PLAN



RESOLUTION 2014-25
NOVEMBER 4TH, 2014



JEO CONSULTING GROUP INC
Project #:130377.00

INTENTIONALLY BLANK

ACKNOWLEDGMENTS

CASS COUNTY COMMISSIONERS

District 1 - **John Warsing**
District 2 - **Janet McCartney**, Chairperson
District 3 - **James Peterson**, Vice Chairperson
District 4 - **Dan Henry**
District 5 - **Duane Murdock**

PLANNING COMMISSION

Raymond Althouse, Secretary
Russell Allington
Steve Bruttig, Vice Chairperson
Dennis Keil
David Moll
Ronald Nolte
Roy Smith, Chairperson
Robert Staben
George Tesar, Jr.

CASS COUNTY STAFF



Michael Jensen, CFM, Zoning Administrator/Building Inspector
Floodplain Manager
Marlene Iles, Zoning Office Manager
Planning Commission Recording Secretary
Barbara Wohlers, County Clerk
Nathan Cox, County Attorney

PLANNING CONSULTANT - JEO CONSULTING GROUP, INC.

David Potter, Senior Planner
Michael Gilligan, Planner

JEO Consulting Group would like to take the opportunity to thank the steering committee and county staff, especially Mike Jensen and Marlene Iles, for their work throughout this comprehensive plan update. Their knowledge and continued guidance were invaluable in determining the direction of this project. We would also like to thank the planning commission, residents, and numerous stakeholders who gave great insight and constructive input that helped form this document.

This comprehensive plan was prepared for Cass County residents and could not have been created without their suggestions, opinions and views. The comprehensive plan is a living document that provides valuable information about the county, but also used as a developmental tool to guide growth and protection of natural and cultural resources.



TABLE OF CONTENTS



Introduction



Profile

CASS COUNTY



Envision

CASS COUNTY



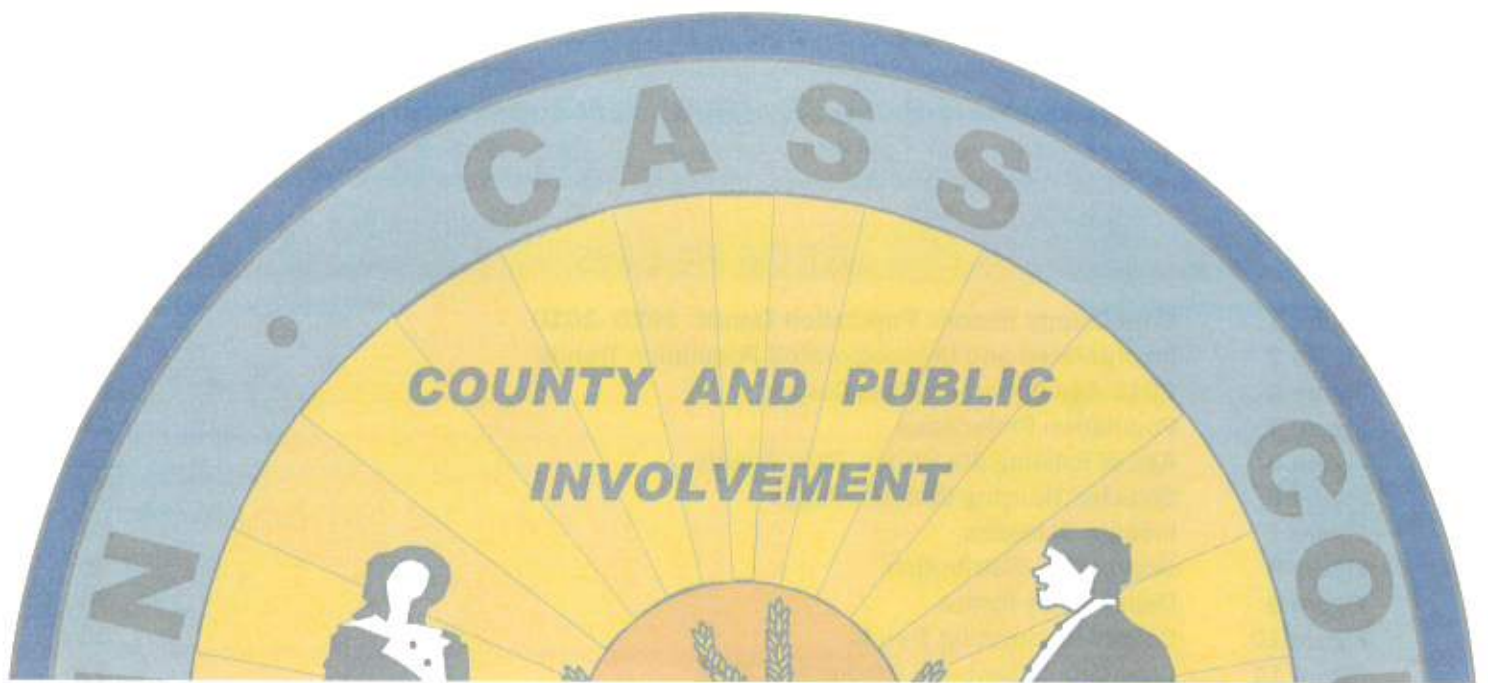
Achieve

CASS COUNTY



Implement

CASS COUNTY



1.1 INTRODUCTION TO CASS COUNTY	10
1.2 THE PURPOSE OF COMPREHENSIVE PLANNING	12
1.3 COMPREHENSIVE PLAN PLANNING PROCESS	14
1.4 COMPREHENSIVE PLAN COMPONENTS	16
1.5 GOVERNMENTAL AND JURISDICTIONAL ORGANIZATION	17
2.1 INTRODUCTION	20
2.2 DEMOGRAPHIC PROFILE	21
2.3 HOUSING PROFILE	29
2.4 ECONOMIC AND EMPLOYMENT	32
2.5 AGRICULTURAL PROFILE	37
2.6 COMMUNITY FACILITIES	47
2.7 UTILITIES	83
2.8 NATURAL AND ENVIRONMENTAL CONDITIONS	111
2.9 EXISTING LAND USE	126
3.1 INTRODUCTION	134
3.2 PUBLIC PARTICIPATION	134
3.3 VISIONING	140
4.1 INTRODUCTION	159
4.2 CONTINUOUS GOALS	160
4.3 FUTURE LAND USE	161
4.4 SPECIAL CHARACTER AREAS	172
4.5 TRANSPORTATION	181
5.1 REALIZING THE COLLECTIVE DIRECTION	194
5.2 PLANNING PROGRAMS	194
5.3 METHODS FOR EVALUATING DEVELOPMENT PROPOSALS	206
5.4 ANNEXATION	206
5.5 ACTION PLAN	207
5.6 CONTINUED PUBLIC PARTICIPATION AND PARTNERSHIPS	210

LIST OF FIGURES

Figure 1	Cass County Historic Population Trends, 1920 -2010	22
Figure 2	Incorporated and Unincorporated Population Trends	25
Figure 3	2010 Age Cohort for Cass County	26
Figure 4	Population Projections	28
Figure 5	Age of Existing Structures, Cass County	29
Figure 6	Selected Housing Characteristics	31
Figure 7	Income Statistics	33
Figure 8	Occupation Distribution	35
Figure 9	Dependency Ratios	35
Figure 10	County Commuting Trends	36
Figure 11	Cass County Soybean Production,2012	37
Figure 12	Cass County Agricultural Land Use Trends	38
Figure 13	Cass County Farmland Quality	39
Figure 14	Dominant Cass County Crops (Acres Planted)	40
Figure 15	Dominant Cass County Livestock	42
Figure 16	Cass County Farm Trends	44
Figure 17	Cass County Land Values	45
Figure 18	East / Southeast Ag Districts Avg Farmer Age (Principal Operator)	46
Figure 19	Cass County Public Recreation	51
Figure 20	Cass County Private Recreation	55
Figure 21	Cass County School Districts	61
Figure 22	Cass County Fire Districts	64
Figure 23	Cass County Roads and Transportation, and Maintenance Shops	79
Figure 24	Cass County Rural Water Facilities	84
Figure 25	Public Power Service Areas, Cass County	92
Figure 26	OPPD Energy Source Breakdown	93
Figure 27	Cass County Commute Times	95
Figure 28	Nebraska's Net Energy Consumption By Fuel Type, 2011	96
Figure 29	Nebraska's Total Energy Consumption By Fuel Type Trend	97
Figure 30	Nebraska / US Total Energy Consumption Per Capita Trend	98
Figure 31	Nebraska's Electricity Expenditures in the Ag Sector Trend	99
Figure 32	Nebraska / Cass County Wind Power Density, 100 meters	101
Figure 33	Annual Global Solar Radiation at Latitude Tilt, 2007	104
Figure 34	Cass County Geology	112
Figure 35	Cass County General Soil Map, 1983	114
Figure 36	Cass County Slopes	116
Figure 37	General Floodplain Diagram	123
Figure 38	Cass County Floodplain	123
Figure 39	Cass County and Surrounding Wellhead Protection Areas	124
Figure 40	Natural Resources Districts Serving Cass County	125
Figure 41	Existing Land Use, 2014	128
Figure 42	Cass County Future Land Use Map	170
Figure 43	Special Character Area #1 - Exit 420	175
Figure 44	Special Character Area #2 - Exit 426	180
Figure 45	Existing Transportation System	184
Figure 46	Future Transportation Map	190

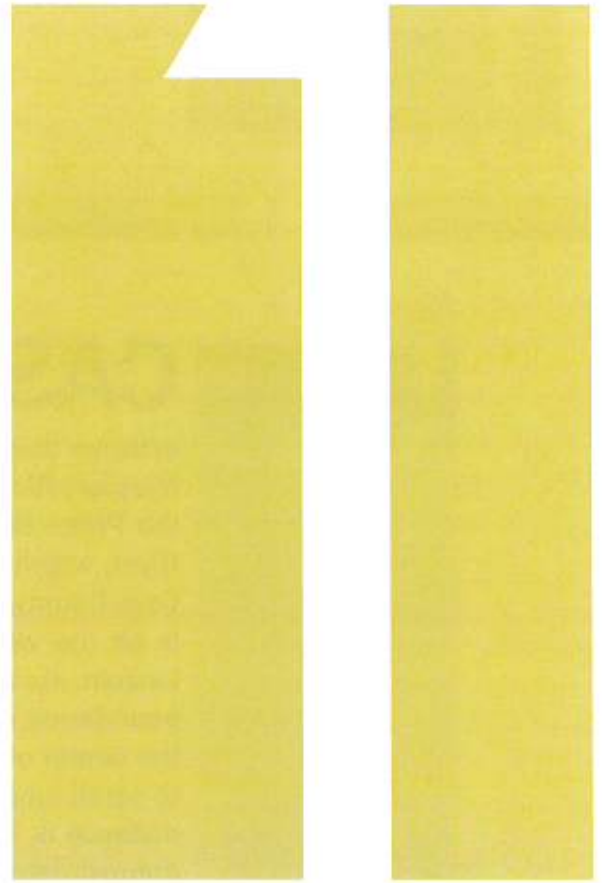
LIST OF TABLES

Table 1	Cass County Communities Historical Population Trends	23
Table 2	Cass County Individual Cohort Trends	27
Table 3	Cass County Housing Trends	30
Table 4	Income and Inflation	32
Table 5	Cass County Occupations by Industries	34
Table 6	Cass County Crops	41
Table 7	Cass County Livestock Trends	43
Table 8	Cass County Farm size distribution	45
Table 9	Cass County School Districts enrollments, 2013	56
Table 10	Surrounding School Districts enrollments, 2013	58
Table 11	Cass County Energy Consumption By Sector	94
Table 12	Nebraska Energy Consumption and Costs By Sector, 2012	97
Table 13	OPPD Wind Capacity Trend	100
Table 14	Cass County Soil Associations and Suitability	118
Table 15	Plan Implementation options	196

APPENDIX

Appendix	Mapbook of Cass County Existing Land Use
----------	--

INTENTIONALLY BLANK



Introduction



10	INTRODUCTION TO CASS COUNTY
12	THE PURPOSE OF COMPREHENSIVE PLANNING
14	COMPREHENSIVE PLAN PLANNING PROCESS
16	COMPREHENSIVE PLAN COMPONENTS
17	GOVERNMENTAL AND JURISDICTIONAL ORGANIZATION



Location

CASS COUNTY

is located in the extreme eastern part of Nebraska at the confluence of the Platte and Missouri Rivers. It is bounded on the north by Saunders County and the Platte River, which separates it from Sarpy County. The Missouri River, which forms Nebraska's state line, is the eastern boundary of Cass County. Otoe County creates the southern edge while Lancaster is on the west. Nebraska's largest metropolitan cities, Omaha and Lincoln, are both located within eight miles of its northern and western boundaries, respectively. The Cass County Fairgrounds is approximately the center of the county near the village of Manley. The longest north to south length of the County is 19 miles and the widest east to west distance is 34 miles. This irregular rectangular county encompasses approximately 566 square miles or 362,165 acres.



History

Originally, Cass County was populated by the Native American tribes of Pawnee, Oto, and Missouriia. The Oto Indians gave Nebraska its name meaning "flat water." Much like the Europeans, the Oto tribe moved west into the Pawnee and Missouriia tribe territories. Nonnative advancements into the region in the form of Mormons, gold seekers and others traveling west were occurring by the mid-nineteenth century and in 1848 ferry service was established across the Missouri River. Settlements were not permitted; however, construction of a trading post was allowed only by special authorization. Following treaties with the Omaha and Oto Indians, the Kansas-Nebraska Act of 1854 opened the Nebraska Territory for settlement. In 1854, the Nebraska Territorial Legislature formally defined the boundaries of Cass County establishing Plattsmouth as the county seat. The county takes its name for Lewis Cass, former Brigadier General, United States Senator, Secretary of War and 1848 Democratic presidential nominee.



Climate

Much like eastern Nebraska, Cass County experiences a wide range of temperatures throughout the year. The coldest month is January with a low average of 21 F. The hottest months of the year are July and August with recorded averages of 76 F.



Topography
and Soils

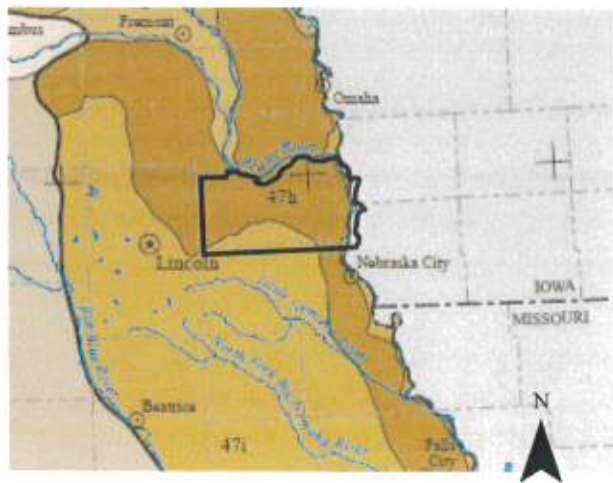
The Cass County landscape is characterized as steep hills on the east with a transition to rolling hills that becomes more level traveling westward. It possesses numerous creeks and streams with Weeping Water Creek being the principal interior waterway. Cass County comprises three general topographic divisions: the uplands, terraces, and river bottoms.

A superficial deposit of drift and loess cover the uplands. The terrain is generally smooth to gently rolling; however erosion has created larger fragmented areas near valleys which cause a wide range of topography and slopes. The northern and eastern edges have deep valleys due to erosion from the Platte and Missouri Rivers. This division is typical gently sloping watersheds. The southern edge is the more steeply rolling terrain, better known as the drift hills. There is a gradual shift between the uplands and the terraces divisions.

The terraces are locations that are elevated above the river bottoms. There are higher and lower terraces, or benches. The higher terraces are located primarily near Salt Creek in the northwestern corner of Cass County as well as a part along the Weeping Water Creek. There are many smaller lower terraces along the streams in Cass County.

The transition between terraces (or benches) and the river bottoms are abrupt. River bottoms are considered flat and range from 1,060 feet above sea level in northwestern Cass County to 928 feet above sea level in the southeast. This topographic division has limited land area mainly along the Salt Creek and Weeping Water Creek. The Platte River on the northern boundary has hard Pennsylvanian rocks, and the Missouri River has an established bluff line with steep terrain. In general, Cass County drains well from five important streams (Platte and Missouri Rivers, Salt and Weeping Water Creeks, and headwaters of the Little Nemaha River).

On a regional scale, Cass County shares environmental and soil attributes found along the Missouri River. The accompanying image is credited to the joint Nebraska and Kansas ecoregion research with nationwide interagency standards that label eastern Nebraska as part of the "Western Corn Belt Plains." The *Profile Chapter* has a detailed soil analysis.



Reference Map
not to scale

1.2 PURPOSE OF COMPREHENSIVE PLANNING

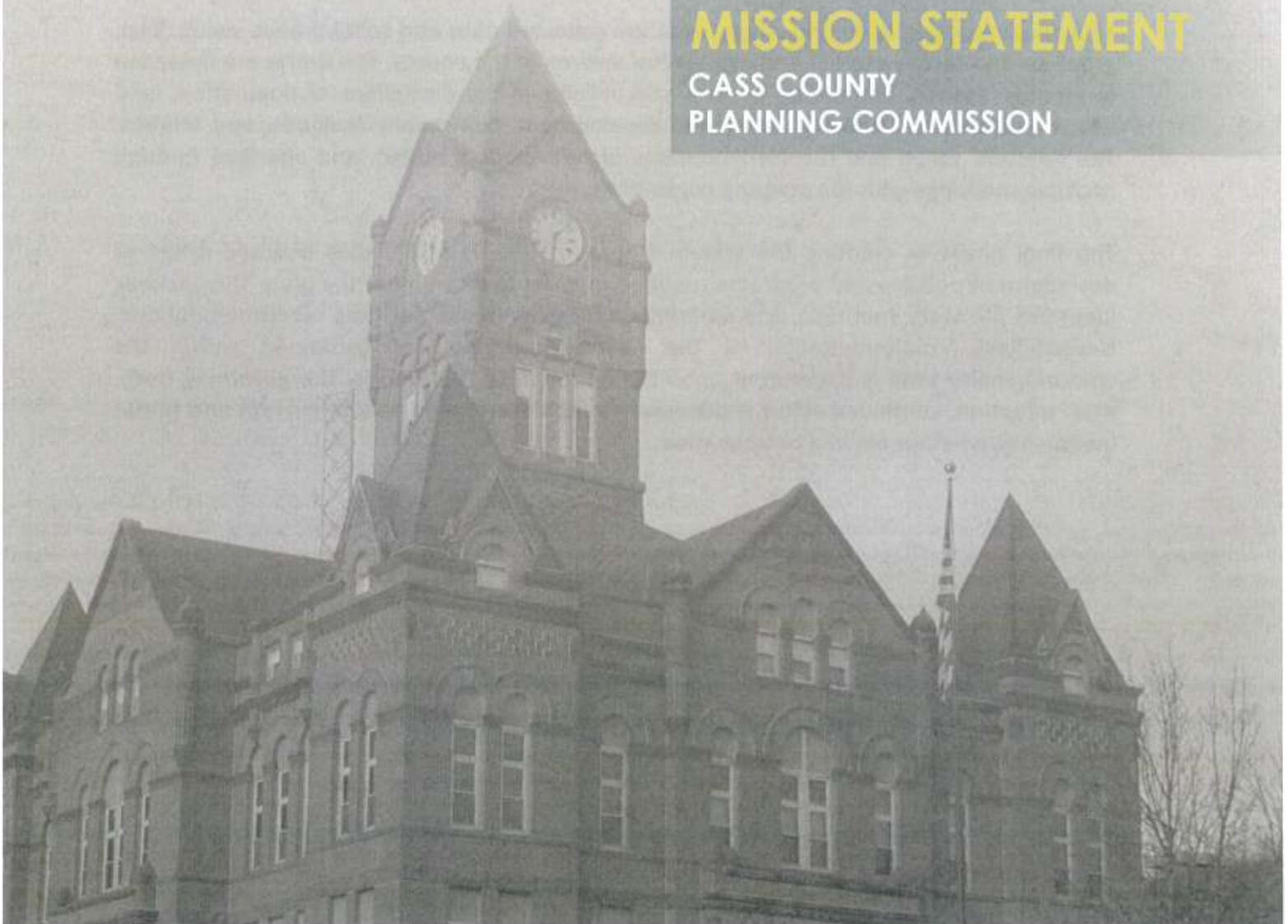
The Cass County Comprehensive Plan update is designed to promote orderly growth and development for the county and communities. The Comprehensive Plan will provide policy guidelines to enable citizens and elected officials to make informed decisions about the future of the County.

This document is a public tool developed as a “road map” that informs and educates the community through change. The comprehensive plan will provide a guideline for the location of future developments within the planning jurisdiction of Cass County. The Comprehensive Development Plan is intended to encourage a strong economic base in order to achieve county goals.

The plan assists Cass County in evaluating the impacts of development (i.e. economic, social, fiscal, service and amenity provision, health, safety and general 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 community—whether a village, city, or 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. This document will ultimately develop actions and policies for the following areas: population, land use, transportation, housing, economic development, community facilities, and public utilities and energy. Planned growth will improve Cass County effectiveness in serving residents, using its resources, and the ability to meet the Cass County standard of living and quality of life.

To guide and promote orderly growth and development through preservation of Cass County's history, agriculture, and natural resources.

MISSION STATEMENT
CASS COUNTY
PLANNING COMMISSION



1.3 THE COMPREHENSIVE PLANNING PROCESS

Comprehensive planning begins with data collection. The collected data establish a “snapshot” of the past and present county conditions. Further analysis provides the basis for developing forecasts for future land-use demands.

The second planning process is the development of general goals and policies, based upon the issues facing the county. Public input and focus groups are brought together to walk through strengths and weaknesses of the community. These sessions establish practical guidelines for improving existing conditions and managing future growth.

This document begins to take shape with the collected data and collaborative vision. Text, graphics and tables explain and display the desires of the county. The drafts are designed to identify, assess, and create actions and policies in the disciplines of population, land use, transportation, housing, economic development, community facilities, and utilities. The finalized vision and recommendations are developed, edited, and changed through multiple meetings with the steering committee.

The final phase is creating the step-by-step guideline. It establishes a broad range of development policies and programs required in order to implement the plan. This process identifies the tools, methods, and programs necessary to carry out the recommendations. Nevertheless, implementation of the development policies contained within the comprehensive plan is dependent upon the adoption of the Plan by the governing body. After adoption, continued effort is necessary to achieve these goals by current and future leadership, whether elected or appointed.

Overall, this comprehensive plan records where Cass County has been, where it is now, and where it likely will be in the next ten years or so. The Comprehensive Plan is an information and management tool for county officials and community leaders to use in their decision-making process when considering future developments. The comprehensive plan is not a static document; it should evolve as changes in the land-use, population, or local economy occur during the planning period. This information is the basis for Cass County's evolution as it achieves its physical, social, and economic goals.

This plan was prepared under the direction of the Cass County Planning Commission and the zoning office, with the assistance and participation of the Cass County Board of Commissioners and citizens of Cass County. The expected time for achieving goals, programs, and developments identified in this process is twenty years. However, the county should review the plan annually and update the document every ten years, or when an identified pressing need arises. Updating the Comprehensive Plan will allow the County to incorporate new ideas and unknown developments from the previous update.

Through periodic monitoring, the County can adapt and adjust to change at the local level. Having the ability to adapt to socio-economic change allows the County to maintain an effective Comprehensive Plan for the future, to enhance the quality of life, and to maintain the standard of living for all residents.

1 Introduction CASS COUNTY

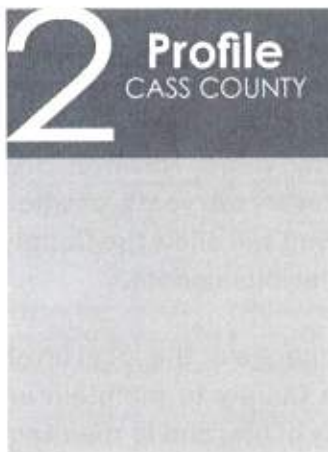
1.4 THE COMPREHENSIVE PLANNING COMPONENTS



Nebraska State Statutes require the inclusion of certain elements in the Comprehensive Plan. These required elements include population, facilities, energy, land use, and transportation.

1 Introduction CASS COUNTY

Introduction states general information about the location and characteristics of the jurisdiction. This chapter also describes the comprehensive plan process.



Definitive information and historical trends comprise the Profile Chapter. Profile establishes where the community has been with demographic and economic data. By analyzing Cass County's past and existing data, including demographic, housing, socio-economic trends, energy usage, and current facilities, future projections of likely conditions are created. 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 does not accurately depict past conditions. Therefore, it is important for Cass County to monitor its population, housing and economic conditions.



The Envision Chapter verifies gathered information and includes public input to begin the formation of the community's future goals. The Envision stage relies heavily on public input to create a comprehensive plan that meets the desires of the community.



The Achieve Chapter is Cass County's projected future. It contains the ideas and vision developed during the Envision Chapter. The Achieve Chapter, to build upon the Envision findings and desires, accounts for constraints and opportunities. The items discussed in Achieve include population projections, infrastructure maintenance and repair, future land use, the transportation system, and master planning for Interstate 80 Exits 420 and 426.



The Implementation Chapter within the Comprehensive Plan is the core of this planning tool. Implementation will identify the action steps that are necessary to achieve the community's envisioned goals.

The Cass County Board of Commissioners, which is a board of elected officials, performs the governmental functions for the county. Each incorporated Cass County community has elected officials and officers that oversee how their community develops and maintain compliance with local and state regulations.

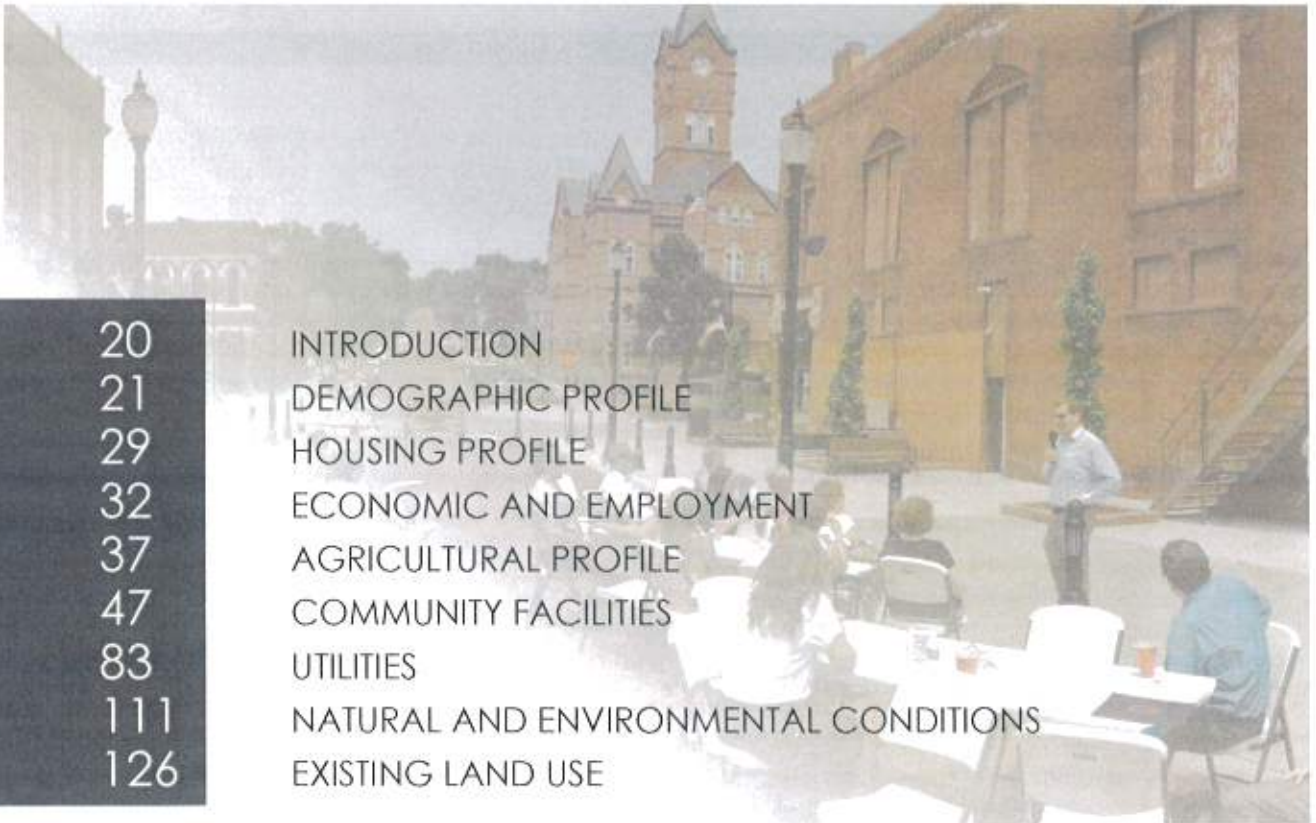
The planning and zoning jurisdiction of Cass County, pursuant to Neb. Rev. Stat. § 23-114 (Reissue 1997) includes all of the unincorporated portions of the county, excluding the established extraterritorial jurisdiction of each incorporated city or village.

Pursuant to Neb. Rev. Stat. § 17-1002 (Reissue 1997), the planning and zoning jurisdiction for the incorporated communities in Cass County that have adopted Comprehensive Planning and Zoning Ordinances, except for Plattsmouth, includes the area within one mile of their corporate limits. The City of Plattsmouth has the authority to exercise planning and zoning jurisdiction throughout a two-mile extraterritorial jurisdiction. As these communities grow and annex land into their corporate limits, their extraterritorial jurisdictions may extend further into the county. There are twelve incorporated communities in Cass County with one mile jurisdictions including Alvo, Cedar Creek, Eagle, Elmwood, Greenwood, Louisville, Manley, Murray, Nehawka, South Bend, Union, and Weeping Water. Murdock and Avoca do not have extraterritorial jurisdictions; therefore, the County's jurisdiction is the edge of their corporate limits.

INTENTIONALLY BLANK



Profile



20
21
29
32
37
47
83
111
126

INTRODUCTION
DEMOGRAPHIC PROFILE
HOUSING PROFILE
ECONOMIC AND EMPLOYMENT
AGRICULTURAL PROFILE
COMMUNITY FACILITIES
UTILITIES
NATURAL AND ENVIRONMENTAL CONDITIONS
EXISTING LAND USE

2.1 INTRODUCTION



The underlying reason for a comprehensive plan is to understand a community. This chapter focuses on how Cass County has grown over the past twenty years and where it currently stands. The Profile Chapter illustrates the typical indicators that determine characteristics of a community. This chapter relays statistics of past decades and how they relate to the current situations. These Profile characteristics will be examined and base the future forecasts of other chapters.

The Cass County Planning Commission took into account the public input and generalized goals presented them. This update is meant to reflect the future goals of the Steering Committee.

To achieve the goals set out by Cass County, the sections of Profile Cass County are: Demographics, Housing, Economic and Employment, Agricultural Profile, Community Facilities, Public Utilities, Natural Environment, and Existing Land Use.

DATA SOURCES



The **United States Census** is taken every ten years to update information through census tracts. This decennial census supplies information which shows both past trends of a community and help to prepare for its future. The United States Census Bureau created a short form Census beginning in 2010. A supplemental program, known as the American Community Survey, collects the omitted data annually.

logos US Census Bureau / US Department of Commerce

The **American Community Survey (ACS)** is an ongoing statistical survey that samples a small percentage of the population every year. The survey will ask about age, sex, race, family and relationships, income and benefits, health insurance, education, veteran status, disabilities, where you work and how you get there, where you live and how much you pay for some essentials. These surveys are combined to form a composite estimate. Its statistics give communities relevant information they need to plan for investments and services. This annual program has 5-year estimates that give a more accurate account of your local data and trends.

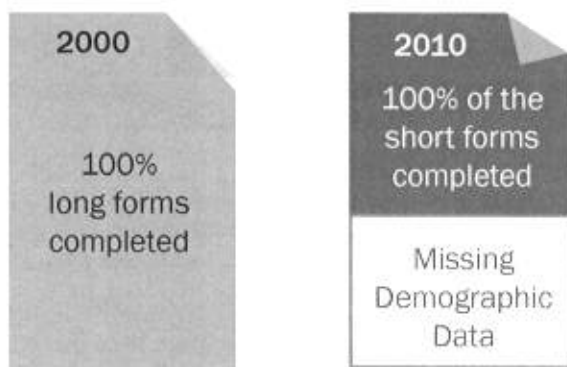
2.2 DEMOGRAPHICS

The Demographics section will look at previous population trends, current demographics, and comparisons within its surrounding communities.

Cass County has continued to grow throughout the decades. Who are these people? Where are they located? This is very important to the county and one of the driving forces of planning future projects and road maintenance.

The County's overall development has followed a similar pattern as Midwest counties. In order to understand Cass County's development, understanding its changing demographics is the

first step. Despite its ideal proximity to both Omaha and Lincoln, Cass County has stayed relatively stable while other surrounding areas have changed dramatically. This stability in its population will become important as preservation and promotion of Cass County to bring additional interest into the area.



ACS Yearly Sample Data
(supplemental to 2010 short form)



Population statistics aid decision-makers by developing a broad picture of Cass County. It is important for Cass County to understand its history and where it appears to be going. Population is the driving force behind housing, the economy, employment, and fiscal stability of communities and counties. Historic population conditions assist in creating future projections, which in turn assist in determining the future needs of the community. Projections provide a logical, practical estimate for the county to base development decisions. Population projections are only estimates and unforeseen factors can effect these projections significantly.

2.2 DEMOGRAPHICS

Population Trends

Population trends allow the community to understand how it's grown. Historically, Cass County had a population of 24,080 during the dominance of the railroad industry in 1890. As industries changed or moved west, Cass County's population continued to decrease. According to Figure 1, this trend reversed in the 1950s with steady growth into the 2000s.

Figure 1 **Cass County Historic Population Trends, 1920 -2010**



source: 1970-2010 US Censuses, *Profile of General Population and Housing Characteristics (DP-1)*

The county's most recent population trends influence its immediate needs and future decisions. In order to determine needs, examining each community within the Cass County jurisdiction will shed light on the changes of its communities and where the population is growing.

Population Trends

Cass County has continued to grow for the past forty years with an additional 7,165 residents. The population trends in Table 1 show that the communities have grown modestly, with the exception of Cedar Creek and Eagle. Both communities more than doubled in size since 1970 but have leveled off since 1990.

Figure 2 established Cass County's most recent growth spurts occurred in the 1970s and 1990s. In order for the County to properly serve the public, it must first determine where this growth has occurred and respond accordingly. An ongoing national trend shows large numbers of Americans moving to metropolitan areas as rural communities continue to lose population. Cass County's more recent population trends resemble the nation's movements.

In the last ten years, only three of fifteen communities gained population. Cass County's incorporated areas lost a total population of 619. The loss may be associated to the national recession experienced nationwide in 2008. The proximity of two metropolitan areas may have prompted the shift for job opportunities.

Table 1 Cass County Communities Historic Population Trends

	POPULATION					GROWTH			
	1970	1980	1990	2000	2010	Since: 1970	1980	1990	2000
Alvo	157	144	164	142	132	-25	-12	-32	-10
Avoca	229	242	254	270	242	13	0	-12	-28
Cedar Creek	119	311	334	396	390	271	79	56	-6
Eagle	441	832	1,047	1,105	1,024	583	192	-23	-81
Elmwood	548	598	584	668	634	86	36	50	-34
Greenwood	506	587	531	544	568	62	-19	37	24
Louisville	1,036	1,022	998	1,046	1,106	70	84	108	60
Manley	150	124	170	191	178	28	54	8	-13
Murdock	262	242	267	269	236	-26	-6	-31	-33
Murray	286	465	418	481	463	177	-2	45	-18
Nehawka	298	270	260	232	204	-94	-66	-56	-28
Plattsmouth	6,271	6,295	6,412	6,887	6,502	231	207	90	-385
South Bend	86	107	93	86	99	13	-8	6	13
Union	275	307	299	260	233	-42	-74	-66	-27
Weeping Water	1,143	1,109	1,002	1,103	1,050	-93	-59	48	-53

source 1970-2010 US Censuses, Profile of General Population and Housing Characteristics (DP-1)

2.2 DEMOGRAPHICS

Population Trends

The suburban areas of metropolitan cities are represented best with increasing populations within Sanitary Improvement Districts (SIDs) and rural subdivisions. As shown in Figure 2, this development resembles an increase of more than 1,500 people in the past decade. Since 1990, the unincorporated area population increased by 3,701 compared to 222 within the incorporated communities.

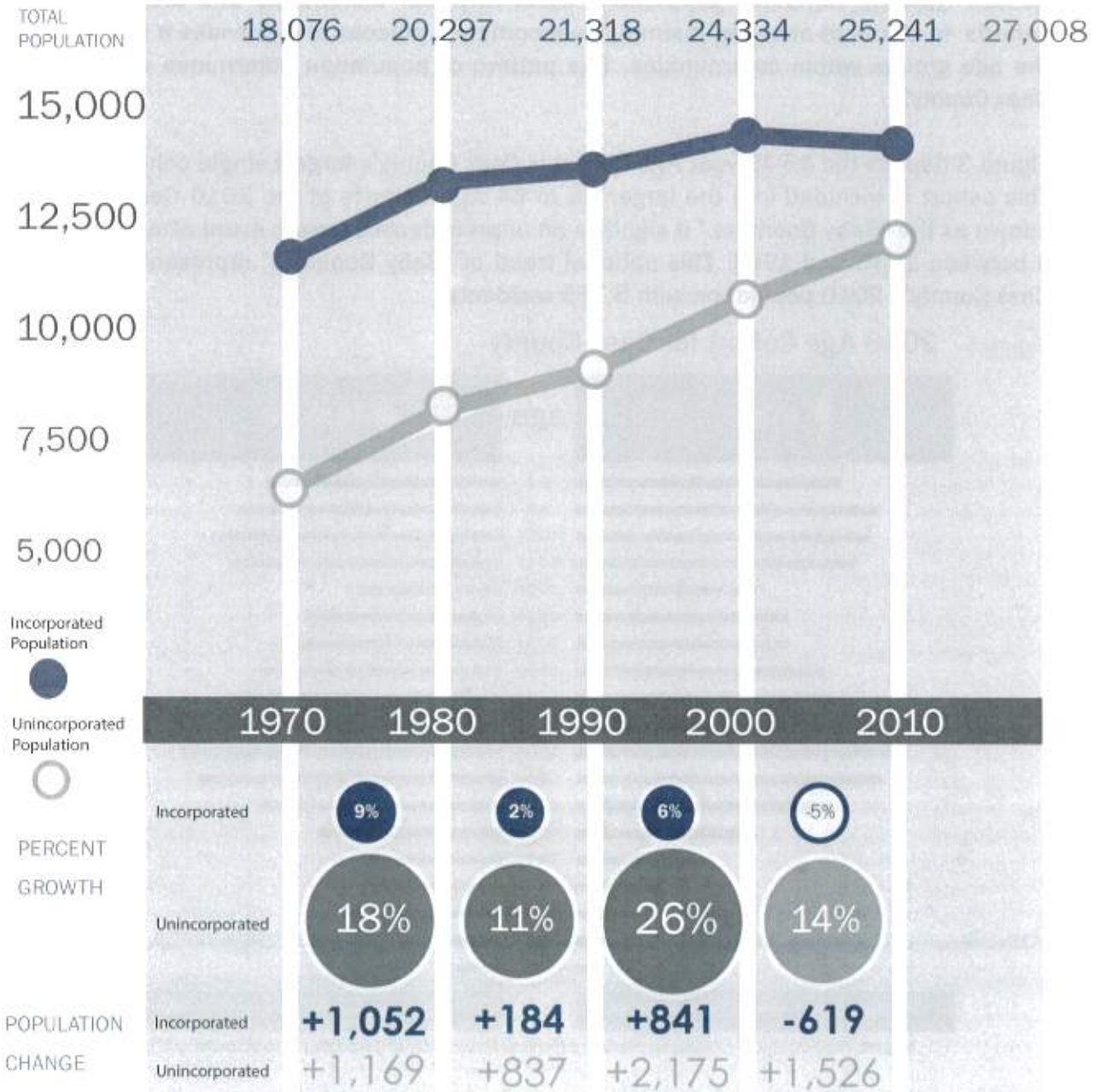
The County's responsibility is directly related to this unincorporated population. As this population continues to increase, the county jurisdiction outside corporate limits and extraterritorial jurisdictions create fiscal pressures. The increase of Sanitary Improvement Districts, rural subdivisions, and acreage developments will continue to stress the importance of the Rural Water Districts and needed maintenance of infrastructure. Strategic, fiscal decisions will be crucial in order to provide for future needs and increased populations.



picture taken in Northeast Cass County

Population Trends

Figure 2 Incorporated and Unincorporated Population Trends



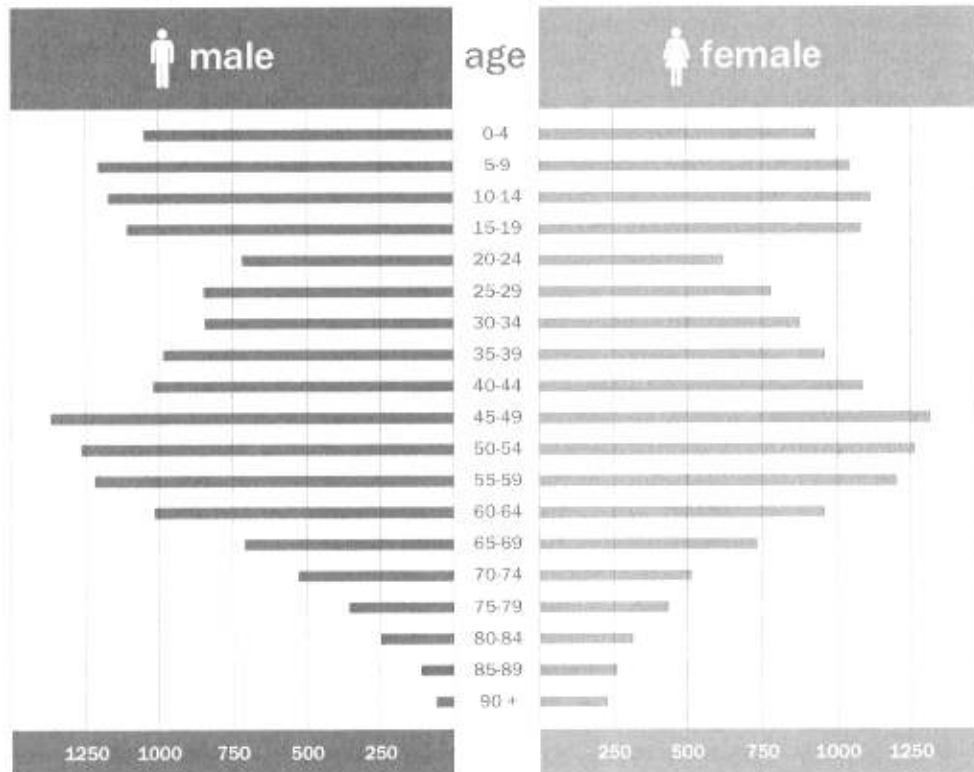
source 1970-2010 US Censuses, Profile of General Population and Housing Characteristics (DP-1)

2.2 DEMOGRAPHICS
Age Structure

As population trends illustrated where and how much growth occurred, another research method analyzes Age Cohorts to determine the county’s population composition. The U.S. Census typically combines populations within five-year increments and are called age cohorts. In terms of analysis, it simplifies a complex process and provides a snapshot of the age groups within communities. This pattern of population determines who lives in Cass County.

Figure 3 depicts the 45-49 year Age Cohort is Cass County’s largest single cohort in 2010. This cohort is included into the larger 45 to 64 Age Cohorts of the 2010 Census, better known as the “Baby Boomers.” It signifies an unprecedented growth event after World War II between 1946 and 1964. This national trend of “Baby Boomers” represents 23.3% of Cass County’s 2010 population with 5,789 residents.

Figure 3 2010 Age Cohort for Cass County



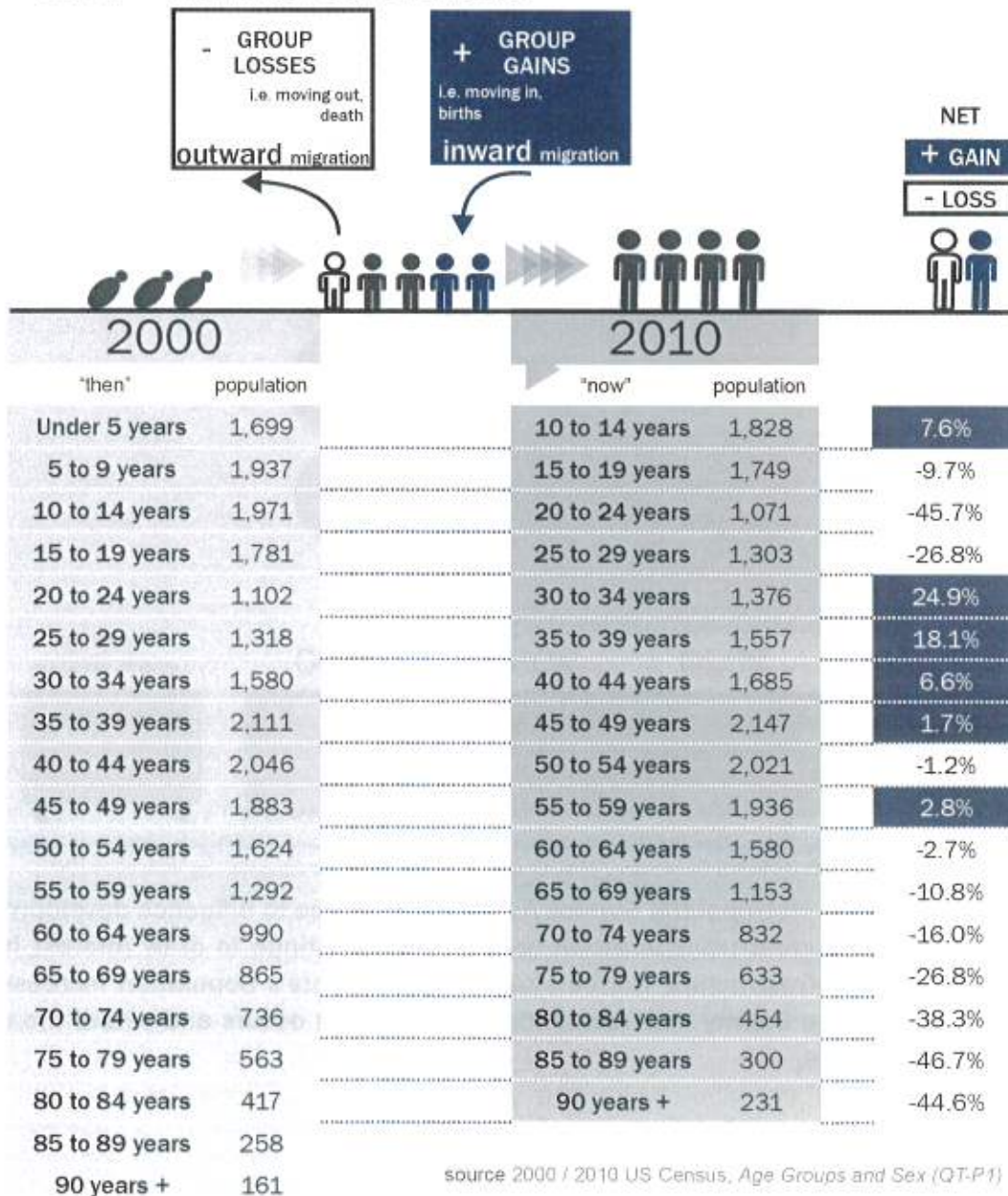
source 1980-2010 US Censuses, Profile of General Population and Housing Characteristics (DP-1)

Researching previous age cohorts as they age is one way to utilize the current composition of a population. When looking for patterns in population change, this breakdown can show what age groups that have lost or gained population. Table 2 shows a ten year progression from the previous census (2000) to the next (2010).

Migration Analysis

For example, the 2000 Under 5 Age Cohort (0-4 years) become the 10 to 14 years Age Cohort. It is typical for a population to see a decrease in the 20 to 24 years Age Cohort but Cass County experienced a loss of 45% over the past decade. This demographic may leave in search of education and job opportunities. A promising sign for natural growth is the 30 to 39 Age Cohorts gained more than 18%. The 40 to 49 Age Cohorts also modestly increased from 2000. However, the population 65 and older decreased by ten percent or more.

Table 2 Individual Cohort Trends



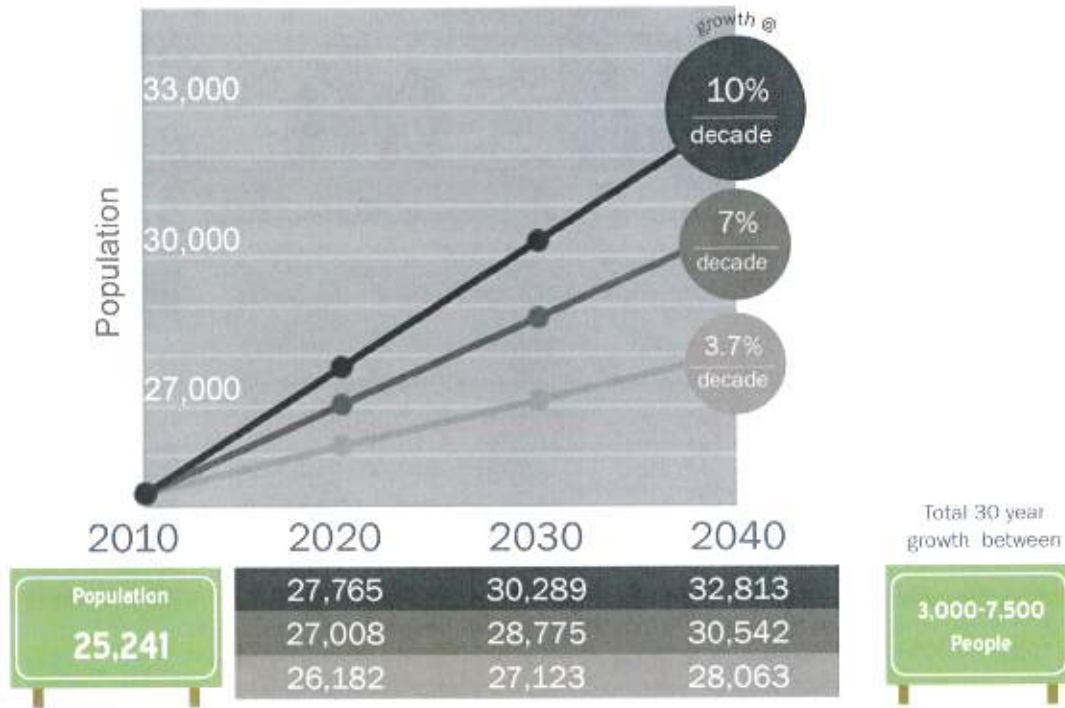
source 2000 / 2010 US Census, Age Groups and Sex (QT-P1)

2.2 DEMOGRAPHICS
Population Projections

Population is closely tied to housing and economics. Cass County communities will need to continue to provide housing options and job opportunities.

The population projections in Figure 4 are drawn from prior trends. The lowest growth projection is based on Cass County's previous ten years of positive 3.7% growth. The largest projection of ten percent growth is based on 1970s and 1990s development. Population projections will be favorable for communities in close proximity to the metro areas and provide desired amenities. In these type of communities, seven and ten percent growth is possible. The future population trends will be tied to its surrounding counties. If the trend of Sarpy County's growth continues, it is not unheard of to experience a large growth spurt in Cass County.

Figure 4 Population Projections



source 1980-2010 US Censuses, Profile of General Population and Housing Characteristics (DP-1)

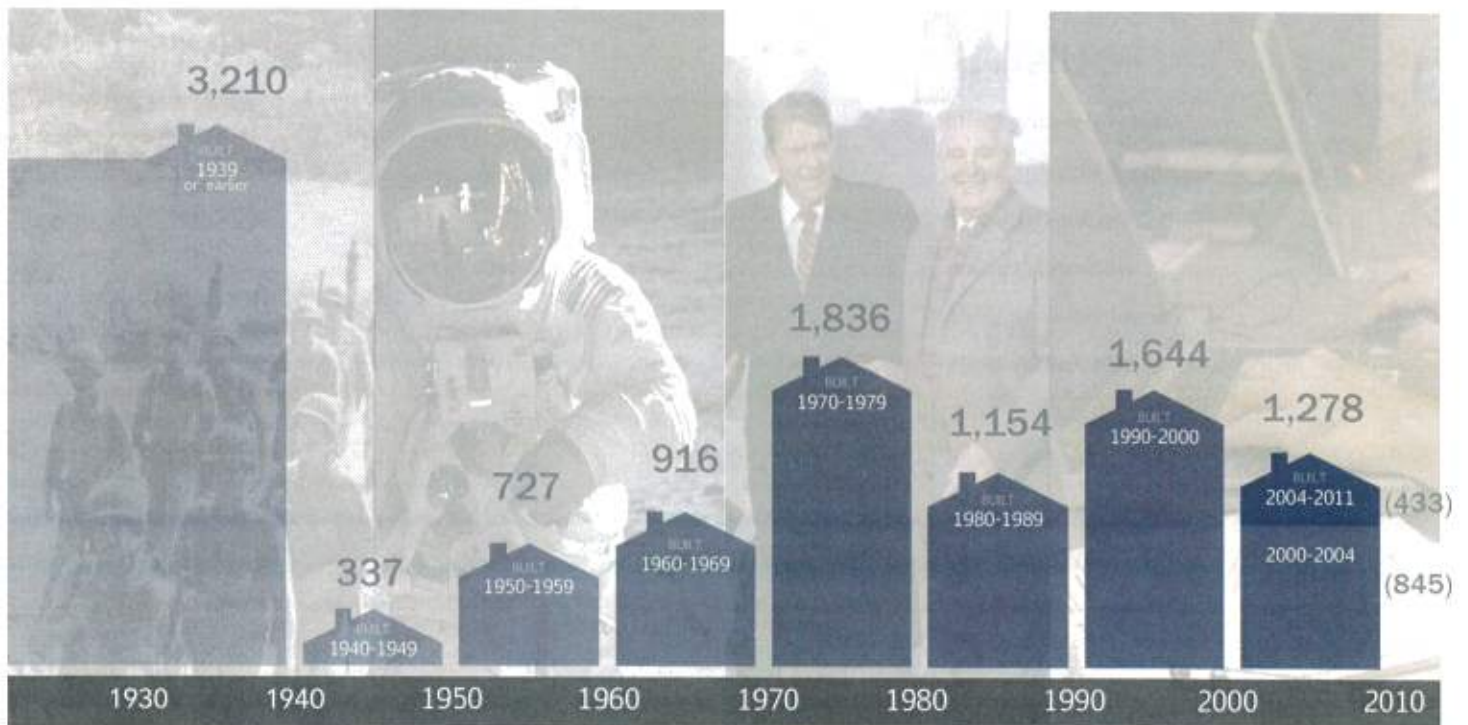
The Omaha and Lincoln Metropolitan Service Areas will continue to influence development within Cass County. Its great transportation corridors will continue to draw interest from developers; however, infrastructure will be vital to Cass County's population increase. It will be paramount to the County how residential development occurs and where the new population choose to live.

2.3 HOUSING

The American Community Survey estimates suggest a third of Cass County housing was built before 1949. The county has demonstrated an ability to preserve the rich architectural heritage with a variety of styles dating back to the 1800s. With measured construction growth following World War II, Figure 5 depicts the county's housing stock expanded significantly during the 1970s and 1990s, mirroring the accelerated population growth in the final decades of the century.

As previous trends showed, the growth of the 1970s was balanced between unincorporated areas and existing municipalities. The 1990s, however, brought increases dominated by rural subdivisions, outside the corporate limits of established communities. Since 2000, the communities of Cass County have experienced population decline while these subdivisions have continued growing. Estimates indicate 85% of the county's living units are single-family detached homes. Cass County has a 71% homeownership rate which is a healthy indicator to maintain housing values throughout the county.

Figure 5 Age of Existing Structures, Cass County



source 2008-11 ACS 5-YEAR ESTIMATES, Selected Housing Characteristics (DP04)

2.3 HOUSING

Housing Age

In order for Cass County to become more attractive and secure long-term growth, it must diversify its housing stock in its communities, providing the apartments and condos widely preferred among younger generations. The national trends have documented that younger people are moving to urban areas and do not want to maintain a large lawn. Much like the nation, Table 3 shows that Cass County has experienced fewer people per household. Cass County's future population will depend on providing the appropriate housing options to attract a younger generation and secure its future growth.

Table 3 **Housing Trends**

	1980	1990	2000	2010*
HOUSEHOLDS				
County Population	20,297	21,318	24,334	25,241
Persons in Households	20,066	21,028	24,083	24,944
Persons in Group Quarters	231	290	251	297
Persons Per Household	2.43	2.7	2.63	2.57
UNITS				
Total Housing Units			10,179	11,117
Occupied Housing Units	7,150	7,797	9,161	9,698
Owner-Occupied	5,495	5,984	7,280	7,839
Renter-Occupied	1,655	1,813	1,881	1,859
Vacant Housing Units	741	1,154	1,018	1,419**
Single Family Units	6,731	7,144	6,806	5,929*
Duplex/Multiple Family	617	637		
Mobile Home	543	1,170		698*
Owner Vacancy Rate	10.50%	2%	1.90%	2.60%
Rental Vacancy	9.80%	7.60%	7.80%	10.20%

sources: 1980-2010 US Censuses, *Profile of General Population and Housing Characteristics (DP-1)*
 *2007-11 ACS 5-YEAR ESTIMATES, *Selected Housing Characteristics (DP04)*
 **Estimated 550 vacant housing units were seasonal or recreation buildings

Figure 6 graphically represents selected Housing Characteristics such as the 2012 estimated owner-occupied values of homes in Cass County as well as the occupancy of housing units in 2010 Census. Cass County, as a whole, had a healthy 71% home ownership percentage.

Selected Characteristics

Figure 6 Selected Housing Characteristics

11,142
HOUSING UNITS



sources 2010 US Census, Profile of General Population and Housing Characteristics (DP-1)
2008-12 ACS 5-YEAR ESTIMATES, Selected Housing Characteristics (DP04)



OWNER-OCCUPIED
VALUES



OCCUPANCY

2.4 ECONOMY AND EMPLOYMENT

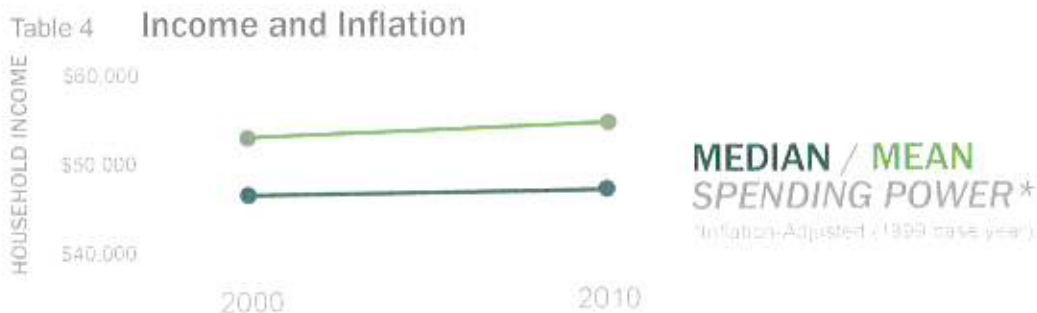


Cass County's location within the Omaha Metropolitan Statistical Area gives the county and its incorporated communities economic advantages that few areas can claim. Cass County is in a unique situation to capitalize on this opportunity. The following data are collected to understand the County's past setting in the greater markets, current activity, and to discover its needs and opportunities.

Nebraska has proceeded well during the 2008 recession. The low unemployment nationwide and local strong economies have given Omaha and Lincoln a chance to keep its young professionals who typically leave for other metropolitan economies. As other larger metropolitan areas recover and provide adequate jobs, there is a true potential for the Omaha and Lincoln area to experience a loss of young talent and disposable incomes to larger regional metropolitan economies. This possibility may affect Cass County's workforce with additional opportunities by vacated positions in Omaha or Lincoln. Cass County will continue to push to provide diverse, well-paying jobs to retain its workforce and attract new talent.

INCOME

Income trends show the purchasing power of a community. Cass County's population is strongly tied to housing and economics. Table 4 and Figure 7 provide an indication of the overall economic well-being of Cass County residents. The average wage of Cass County households increased above the rate of national inflation. The result, combined with the overall population growth of the county, was a greater proportion of households in the upper income brackets. Cass County's spending power, income adjusted for inflation, increased modestly between 2000 and 2010.



Income

Figure 7 Income Statistics

2000

ALL HOUSEHOLDS (9,175)	
\$200,000 +	.9%
\$150,000 - \$199,999	1.4%
\$100,000 - \$149,999	6.0%
\$75,000 - \$99,999	17.1%
\$50,000 - \$74,999	26.5%
\$35,000 - \$49,999	20.0%
\$25,000 - \$34,999	12.9%
\$15,000 - \$24,999	11.9%
\$10,000 - \$14,999	4.9%
Less than \$10,000	4.2%
MEDIAN INCOME	\$46,515
MEAN INCOME	\$53,081



2007-11 (5-year estimates)

ALL HOUSEHOLDS (9,787)		FAMILY HOUSEHOLDS (7,068)	
\$200,000 +	3.1%	\$200,000 +	4.1%
\$150,000 - \$199,999	4.1%	\$150,000 - \$199,999	5.2%
\$100,000 - \$149,999	15.4%	\$100,000 - \$149,999	19.1%
\$75,000 - \$99,999	16.2%	\$75,000 - \$99,999	20.0%
\$50,000 - \$74,999	24.3%	\$50,000 - \$74,999	26.5%
\$35,000 - \$49,999	14.4%	\$35,000 - \$49,999	11.7%
\$25,000 - \$34,999	8.6%	\$25,000 - \$34,999	6.7%
\$15,000 - \$24,999	7.3%	\$15,000 - \$24,999	4.1%
\$10,000 - \$14,999	2.7%	\$10,000 - \$14,999	1.1%
Less than \$10,000	3.8%	Less than \$10,000	1.6%
MEDIAN INCOME	\$63,608	MEDIAN INCOME	\$73,623
MEAN INCOME	\$73,842	MEAN INCOME	\$84,930



source 2000 US Census; Profile of Selected Economic Characteristics (DP-3)
2007-11 ACS 5-YEAR ESTIMATES, Selected Economic Characteristics (DP03)

2.4 ECONOMY / EMPLOYMENT
Industry Employment

A better understanding of the labor force will lead to a better understanding of the county economy as a whole. The Cass County economy is integrated into the larger Omaha and Lincoln economies. The county can better understand its needs and opportunities by translating the current labor force.

The statistics relate to Cass County residents, but not necessarily Cass County jobs. As shown in Table 5, a large majority of Cass County residents are employed in the Educational, Medical, and Social Assistance fields. Beyond the Education and Medical field, employment is evenly spread among other industries. This distribution is a good indication of a stable economy. Cass County can continue to sell outside businesses with its diverse workforce. However, the relative number of occupations in Retail has declined over the past twenty years. Agriculture, Forestry, Fishing and Hunting, and Mining occupations also decreased from 8.9% to 4% of total employment since 1990.

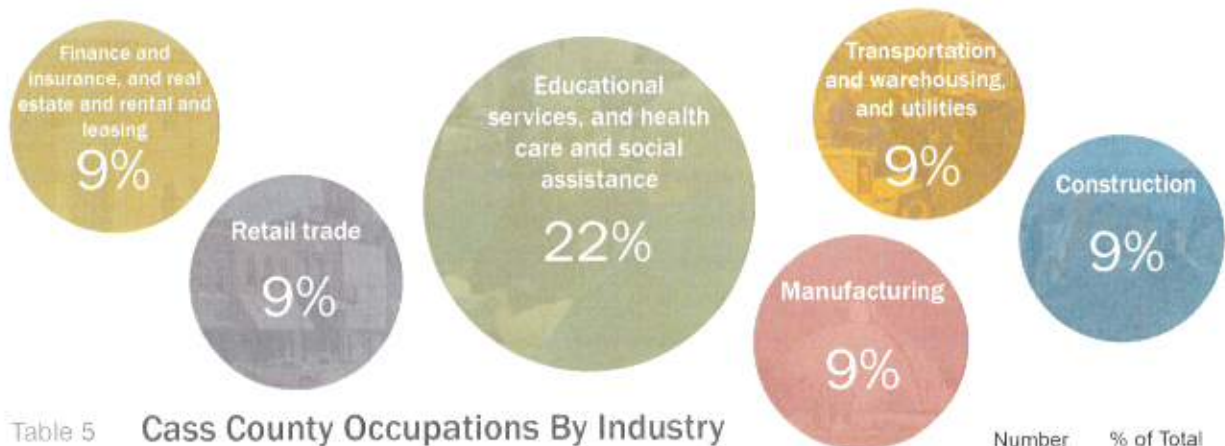


Table 5 **Cass County Occupations By Industry**

	Number	% of Total
Educational services, and health care and social assistance	2,875	22.00%
Retail trade	1,187	9.10%
Finance and insurance, and real estate and rental and leasing	1,189	9.10%
Manufacturing	1,163	8.90%
Transportation and warehousing, and utilities	1,147	8.80%
Construction	1,105	8.50%
Professional, scientific, and management, and administrative and waste management services	1,033	7.90%
Arts, entertainment, and recreation, and accommodation and food services	861	6.60%
Public administration	719	5.50%
Other services, except public administration	662	5.10%
Agriculture, forestry, fishing and hunting, and mining	521	4.00%
Wholesale trade	443	3.40%
Information	147	1.10%

source: 2007-11 ACS 5-YEAR ESTIMATES. *Selected Economic Characteristics (DP03)*

Workforce

OCCUPATION DISTRIBUTION

As illustrated in Figure 8, over a third of Cass County residents acknowledged having occupation industries within management, business, science, and arts. The secondary industry accounts for Sales and office occupations. The direct production, transportation, and material moving industry could be increased with continued economic development along state and federal roadways that connect Cass County to the regional economies of Omaha and Lincoln.

Figure 8 Occupation Distribution



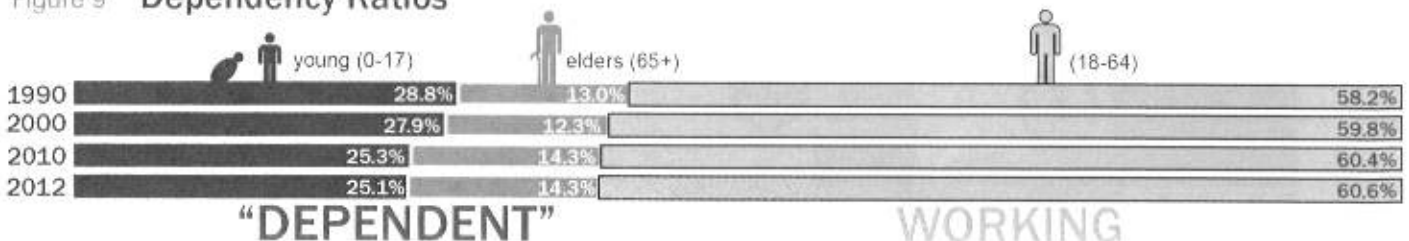
source 2007-11 ACS 5-YEAR ESTIMATES. *Selected Economic Characteristics (DP03)*

DEPENDENCY

The dependency ratio examines how much of a community's proportional earnings are spent supporting age groups typically and historically dependent upon the income of others. The ratio considers children under the age of 18 combined with the elderly aged 65 or older against the remainder of the population that is assumed to be income earners. A ratio of one and under indicates a population that is less dependent and therefore has more disposable income. A ratio over one indicates more dependents in the population than those likely to be supporting them.

Over the past 20 years, the relative number of dependents in Cass County has been steadily decreasing. Figure 9 depicts just over 60% of residents are assumed to be income earners. This trend, along with increasing incomes, indicates more and more disposable income available in the County.

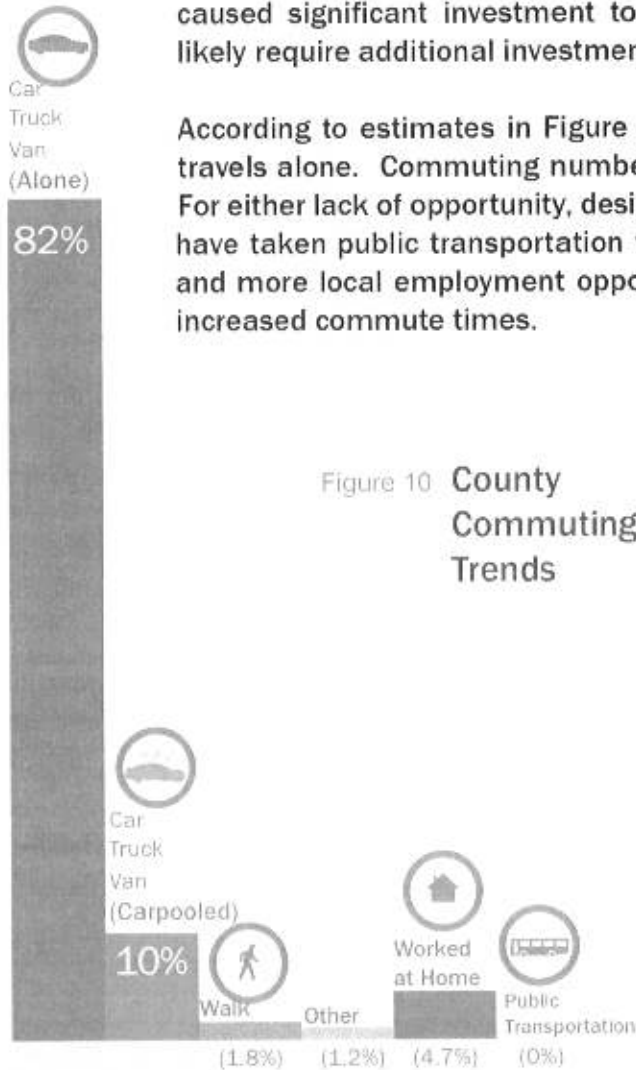
Figure 9 Dependency Ratios



sources 1990-2010 US Census: *Profile of General Population and Housing Characteristics (DP-1)*
2008-12 ACS 5-YEAR ESTIMATES. *Demographic And Housing Estimates (DP05)*

2.4 ECONOMY AND EMPLOYMENT
Commuting Trends

Cass County, located on the southern edge of the Omaha Metropolitan Statistical Area, is well-connected with transportation corridors. The Omaha area's growth to the west and south has created additional employment opportunities for Cass County. Travel time to work has consistently been an average of 25 to 30 minutes. Larger employment centers lie north and west of Cass County; therefore, these locations influence the average travel time. Since southeast Cass County would have farther to travel north or west, it has the highest commuter times. With a growing Cass County population and additional employment opportunities outside of its jurisdiction, this travel time has contributed to additional rush hour traffic in order to reach employment centers. This trend has already caused significant investment to existing transportation corridors and will likely require additional investment in the future.



source 2007-11 ACS 5-YEAR ESTIMATES, Selected Economic Characteristics(DP03)

According to estimates in Figure 10, the majority of the county's workforce travels alone. Commuting numbers have decreased almost 6% since 1990. For either lack of opportunity, desire or both; no commuters were estimated to have taken public transportation to work. Future transportation alternatives and more local employment opportunities will help alleviate congestion and increased commute times.

Figure 10 County Commuting Trends



source 1990-2000 US Censuses, Profile of Selected Economic Characteristics(DP03); 2006-12 ACS 5-YEAR ESTIMATES, Selected Economic Characteristics(DP03)

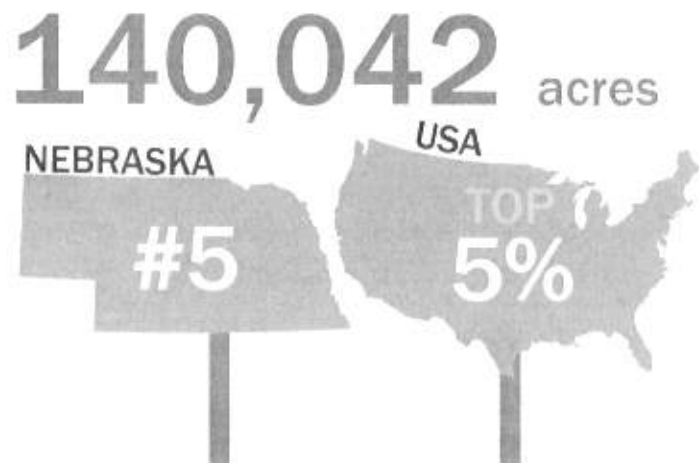
2.5 AGRICULTURAL PROFILE



An agricultural profile enables a county to understand the influence of agriculture on its economy. The U.S. Census Bureau's Census of Agriculture tracked statistics every five years in the period between each decennial census and provided much of the data used to perform the following analysis. Cass County's identity is especially linked to agriculture and has distinguished itself as a national leader in the production of soybeans, one of America's most-produced crops.

During our process, the steering committee stressed the importance of preserving Cass County's agricultural heritage. As shown in Figure 11, Cass County has an agricultural presence in Nebraska and nationally. The county will eventually experience residential development pressures and it will be important for leadership to acknowledge the importance of Cass County's natural resources and agricultural advantages. Leadership is needed to promote countywide cluster development for a balanced economy of residential, commercial, and agricultural uses.

Figure 11 Cass County Soybean Production Rankings, 2012



source: 2012 Census of Agriculture

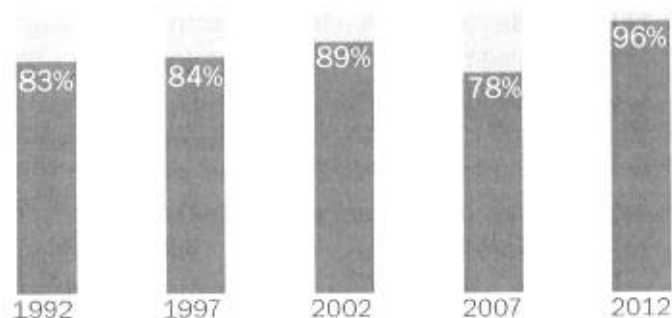
Figure 12 shows the trends of Cass County farmland. An agricultural census is created every five years and allowed selected characteristics from 2012 to be compared with the previous four agricultural figures. For example, the number of acres harvested are calculated to be the highest in recent years. Some statistics can vary pertaining to specific crops as farmers may rotate crops annually and the census is done every five years. Regardless, this creates a broad picture of Cass County's agricultural importance and recent trends.

2.5 AGRICULTURAL PROFILE
Statistics

Figure 12 Cass County Agricultural Land Use



PERCENT OF LAND USED IN FARM PRODUCTION



TOTAL CROPLAND (ACRES)



HARVESTED CROPLAND (ACRES)



source 1992-2012 Censuses of Agriculture

Regional Role

The Center for Rural Entrepreneurship has identified Cass County as an important component in Omaha and Lincoln's growth. The opportunity to supply food for a growing customer base in the Omaha and Lincoln markets can help promote a value-added opportunity for some farmland owners.

SOIL QUALITY

The USDA Natural Resource Conservation Service's Web Soil Survey has identified 260,329 acres, or 72% of Cass County's land to be of statewide importance or prime farmland. These percentages are graphically shown in Figure 13 as well as the number of acres divided into prime farmland, farmland of statewide importance, and not prime farmland.

Figure 13 **Cass County Farmland Quality**



source: 2012 Census of Agriculture

2.5 AGRICULTURAL PROFILE

Crop Trends

The growth of the ethanol industry and international demand for commodities like soybeans and corn, has helped bring about a resurgence of the Nebraska agriculture economy within the past decade. Cass County has seen, in both the recent and extended past, its growth concentrated in these markets with increased acreage dedicated to soybean and corn for grain production. In the competitive soybean market, Cass County ranked fifth among its Nebraska peers and in the top 5% nationally in dedicated-acres in 2012. Over the past five years, Cass County increased its percentage of dedicated land in farm production by 17.8 percent to reach 96.3% in 2012. As referenced earlier, agricultural censuses alternate collecting data in even and odd years that reflect the reports given as farmers rotate between soybeans and corn.

Figure 14 and Table 6 represents both the 2012 statistics as well as the fifteen-year trend of acres planted. While soybeans and corn production ramped up over the last decade, less dominant markets including those for sorghum, wheat, and oats have experienced significant declines in Cass County. Dedicated acres for both wheat and oat production were down double figures between 2012 and 2007, with fewer operations planting fewer crops per farm.

Figure 14 **Dominant Cass County Crops (Acres Planted)**

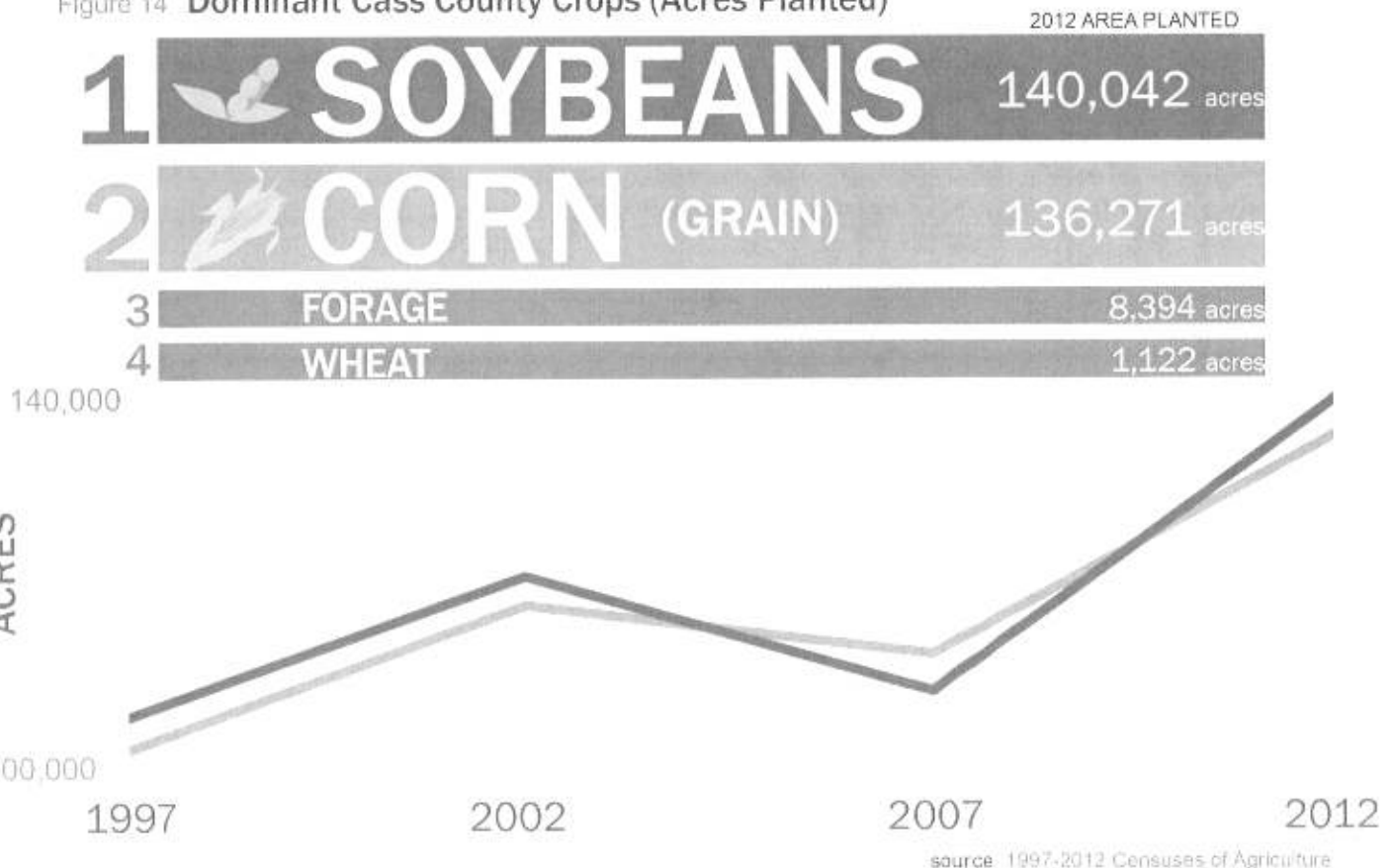









Table 6 Cass County Crops (Acres Planted)

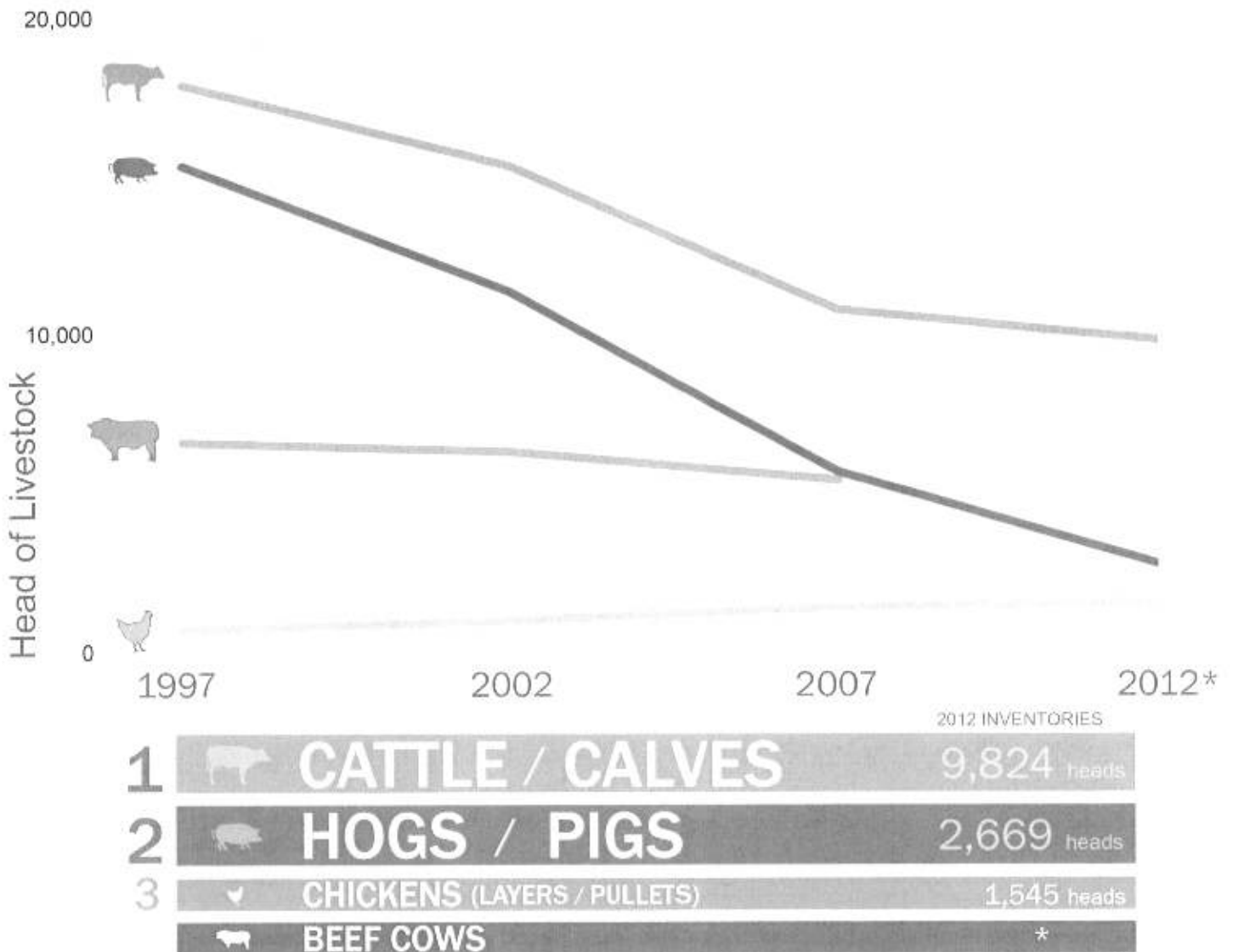
	1997	2002	CHANGE '97-'02	2007	CHANGE '02-'07	2012	CHANGE '07-'12	CHANGE '97-'12	
									ACRES
SOYBEANS									
Farms	473	417	-12%	354	-15%	402	14%	-15%	 GROWTH
Acres	107,961	122,152	13%	110,625	-9%	140,042	27%	30%	
Average Per Farm	228	293	28%	313	7%	348	11%	53%	
CORN FOR GRAIN									
Farms	457	408	-11%	354	-13%	397	12%	-13%	 GROWTH
Acres	104,551	119,239	14%	114,170	-4%	136,271	19%	30%	
Average Per Farm	229	292	28%	323	10%	343	6%	50%	
FORAGE									
Farms	313	283	-10%	217	-23%	226	4%	-28%	 DECLINE
Acres	10,283	11,061	8%	7,710	-30%	8,394	9%	-18%	
Average Per Farm	33	39	19%	36	-9%	37	5%	13%	
WHEAT									
Farms	85	41	-52%	47	15%	21	-55%	-75%	 DECLINE
Acres	3,824	1,419	-63%	3,769	166%	1,122	-70%	-71%	
Average Per Farm	45	35	-23%	80	132%	53	-33%	19%	
CORN FOR SILAGE									
Farms	25	37	48%	16	-57%	11	-31%	-56%	 DECLINE
Acres	1,576	1,704	8%	646	-62%	670	4%	-57%	
Average Per Farm	63	46	-27%	40	-12%	61	51%	-3%	
OATS									
Farms	28	18	-36%	10	-44%	9	-10%	-68%	 DECLINE
Acres	410	410	0%	136	-67%	79	-42%	-81%	
Average Per Farm	15	23	56%	14	-40%	9	-35%	-40%	
SORGHUM FOR GRAIN									
Farms	41	9	-78%	-	-	3	-	-93%	 DECLINE
Acres	3,693	295	-92%	-	-	59	-	-98%	
Average Per Farm	90	33	-64%	-	-	20	-	-78%	

source 1997-2012 Censuses of Agriculture

2.5 AGRICULTURAL PROFILE
Livestock Trends


Livestock figures from the agricultural census indicate the continued decline of the cattle industry as well as the hog and pig industry. Figure 15 also shows increased chicken farming to earn Cass County a high Nebraska rank in pullets for laying flock replacement. Cass County also dominates the state niche market for field and grass seed crops, placing first in dedicated acres among the 13 Nebraska counties with recorded data. Table 7 establishes the fifteen-year statistics of the livestock trends in Cass County.

Figure 15 **Dominant Cass County Livestock**



* Beef Cows inventory not reported in 2012
source: 1997-2012 Censuses of Agriculture

Table 7 Cass County Livestock Trends

	1997	2002	CHANGE '97-'02	2007	CHANGE '02-'07	2012	CHANGE '07-'12	CHANGE '97-'12	
ANIMALS									
CATTLE AND CALVES									
Farms	347	256	-26%	208	-19%	213	2%	-39%	
Animals	17,928	15,379	-14%	10,848	-29%	9,824	-9%	-45%	
Average per farm	52	60	16%	52	-13%	46	-12%	-11%	
HOGS AND PIGS									
Farms	60	36	-40%	26	-28%	23	-12%	-62%	
Animals	15,366	11,379	-26%	5,698	-50%	2,669	-53%	-83%	
Average per farm	256	316	23%	219	-31%	116	-47%	-55%	
BEEF COWS									
Farms	283	206	-27%	172	-17%	179	4%	-37%	
Animals	6,596	6,354	-4%	5,431	-15%	-	-	-	
Average per farm	23	31	32%	32	2%	-	-	-	
CHICKENS (LAYERS, PULLETS)									
Farms	23	20	-13%	44	120%	55	25%	139%	
Animals	668	1,016	52%	1,443	42%	1,545	7%	131%	
Average per farm	29	51	75%	33	-35%	28	-14%	-3%	
SHEEP AND LAMBS									
Farms	22	15	-32%	32	113%	26	-19%	18%	
Animals	523	338	-35%	595	76%	565	-5%	8%	
Average per farm	24	23	-5%	19	-17%	22	17%	-9%	
MILK COWS									
Farms	15	11	-27%	8	-27%	3	-63%	-80%	
Animals	731	461	-37%	149	-68%	-	-	-	
Average per farm	49	42	-14%	19	-56%	-	-	-	

source 1997-2012 Censuses of Agriculture

2.5 AGRICULTURAL PROFILE
Industry Trends

FARMS

Unlike the state as a whole, Cass County had more farms in 2012 than at any measured time in the last quarter century. The county, however, has witnessed a significant restructuring of its stock. Figure 16 shows the trends of number of Cass County farms and average size for the past fifteen years. Table 8 gives detailed statistics on the trend of mid-sized operations largely being replaced by either smaller-sized farms or consolidated, larger operations.

Figure 16 **Cass County Farm Trends**



source: 1992-2012 Censuses of Agriculture

Industry Trends

Table 8 Cass County Farm Size Distribution

source 1992-2012 Censuses of Agriculture

SIZE (ACRES)	1992		1997		2002		2007		2012		CHANGE '97-'12	
1 to 9	56	8%	41	6%	41	6%	76	11%	99	14%	77%	▲
10 to 49	117	16%	116	17%	139	20%	160	23%	150	21%	28%	▲
50 to 179	192	27%	181	26%	166	24%	150	22%	128	18%	-33%	▼
180 to 499	147	20%	160	23%	128	19%	119	17%	127	17%	-14%	▼
500 to 999	121	17%	110	16%	100	15%	79	12%	112	15%	-7%	▼
1,000 or more	88	12%	86	12%	105	15%	98	14%	115	16%	31%	▲
Total	721		694		679		682		731			

source 1992-2012 Censuses of Agriculture

LAND VALUES

Census of Agriculture defines a farm as any place from which \$1,000 of agricultural products were produced and sold, or the potential for such sales, during the census year. As shown in Figure 17, market values for Cass County farms and acres have grown immensely over the last quarter century. 2012 prices for farms increased over 400% from 1992. Between 2007 and 2012 alone the estimated market value for the average farm in Cass County spiked 158%.

Figure 17 Cass County Land Values



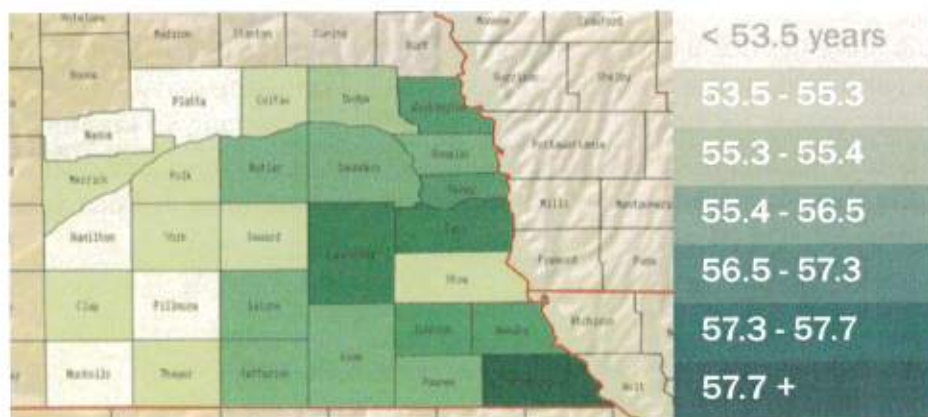
2.5 AGRICULTURAL PROFILE
Industry Trends

AGE OF FARMERS

Compared nationally, Cass County's farm operators appear to be on par and yet below the national aging trend. Cass County's principal farm operators are an average age of 57.7 years old, placing the County in the younger half of United States' average of 58.3 years.

Figure 18 represents the 28 counties within the Nebraska's East and Southeast Districts. Cass County is one of four counties in this area with an average age over 57 years that is among the highest average within the Eastern District. These numbers reflect the principal operator and may not reflect the turnover within families.

Figure 18 **East / Southeast Ag Districts Avg Farmer Age (Principal Operator)**

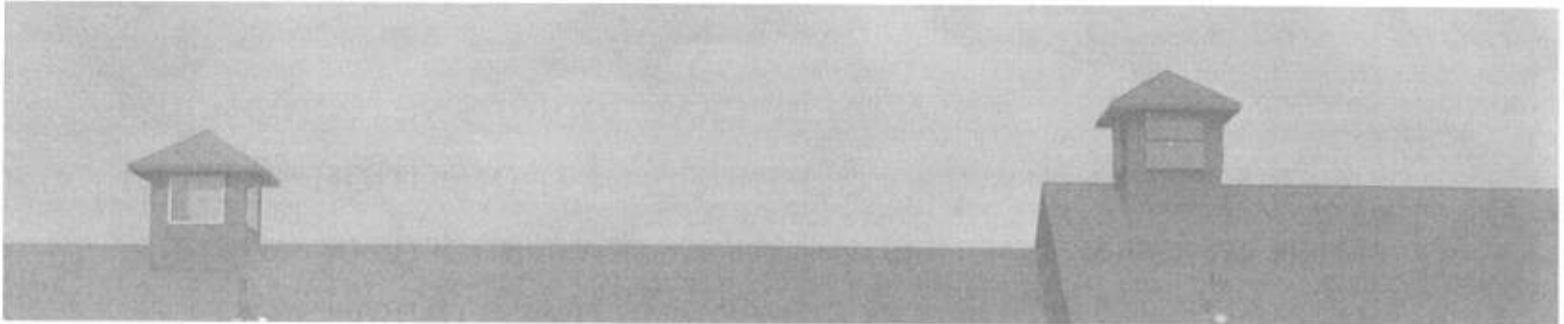


source: 2012 Census of Agriculture (interactive website)

SINCE 2012 AG CENSUS

The tremendous growth experienced in the industry as a whole following the Great Recession has begun to level off. A 2014 report by Creighton University economist, Ernie Goss, and University of Nebraska economist, Eric Thompson, suggest relative prosperity has continued, and will, for the foreseeable future.

2.6 COMMUNITY FACILITIES



State and local governments provide many goods and services for their citizens. The people, buildings, equipment, and land used by the County are referred to as Public Facilities. There are many aspects involved in Public Facilities, and this section contains some private industries that serve the general public, as well.

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 ensure the safety, well-being and enjoyment of the residents of Cass County. These facilities and services provide the Cass County residents with social, cultural, educational, law enforcement, fire protection and recreational opportunities designed to meet area needs. A county must anticipate the future demand for their goods and services if it is to remain strong and vital. The sequential step is to evaluate the current ability of the county to meet future demands.

This section will establish current capacities of all public facilities and services. In order to determine whether the capacity is adequate, an evaluation of the current capacities, demands, and accepted standards will be needed. The established benchmarks, in conjunction with public input of future desires of the Envision Chapter, will be used to create long-term goals found in the Achieve Chapter.



“The **Lower Platte** receives very intensive recreational use since it is within 50 miles of more than 60% of the state’s population. Waterfowl and deer hunting, fishing, and boating occur on this reach (Anderson et al. 1989). State parks and recreation areas along the Lower Platte receive a total of **3-4 million** visits annually.”

GUIDE TO NEBRASKA’S WETLANDS and their conservation needs
Nebraska Game and Parks Commission

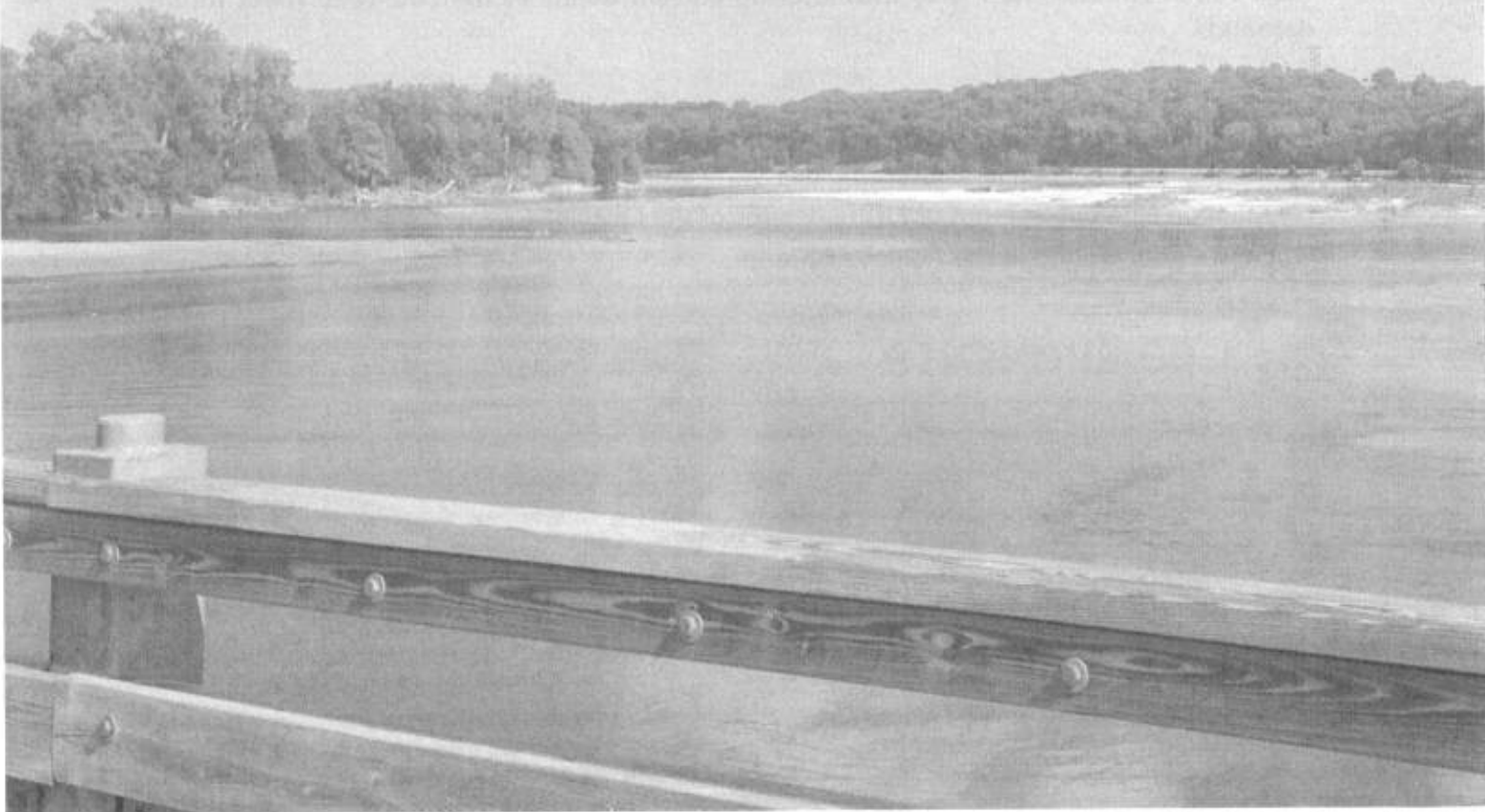


image Platte River Bridge looking south east



Parks and Recreation Facilities

STATE PARKS / RECREATION AREAS



In 2013, the Nebraska Game and Parks Commission had a statewide economic impact of 2.4 million dollars. Eugene T. Mahoney State Park and Platte River State Park are both marketed as a part of the "Metro Parks". Such publicity reinforces Cass County as a center for tourism in a region home to a majority of Nebraska's population.

STATE PARKS

Eugene T. Mahoney State Park is located immediately north of Interstate 80's Exit 426 in the northwestern corner of Cass County. This park features recreational vehicle camping, trail, tent camping, picnic shelters, horseback riding, swimming pool with slides, a putt-putt course, and driving range. Multiple indoor activities include play rooms, theater, arcade rooms, as well as arts and crafts activities. Winter activities include ice skating and a toboggan run. There is also an observation tower that overlooks Mahoney State Park's 673 acres and the Platte River.

Platte River State Park is also located in the northwest corner of Cass County. It offers swimming complex, hiking, horseback riding, nature trails, restroom facilities, cabins, and a restaurant. The Nebraska Game and Parks Commission runs this facility located on 417 acres.

logo Nebraska Game and Parks



image Nebraska Game and Parks



images Nebraska Game and Parks



image Platte River Stat Park entrance

2.6 COMMUNITY FACILITIES

Parks and Recreation

⌘ Recreation & Lower Platte NRD



image Louisville State Recreation Area entrance



image Lied Platte River Bridge looking southwest



image MoPac Trail near Wabash

STATE RECREATION AREAS



Louisville State Recreation Area is found north of Louisville and Highway 50 along the south shores of the Platte River. This recreational area in the northern central Cass County features swimming, fishing, camping equipped with pads, electrical hookups, water fill and waste dump facilities and bathhouses. The Nebraska Game and Parks Commission runs this facility located on 192 acres.

Lower Platte South Natural Resource District's



MoPac East Recreational Trail with Charles L. Warner Equestrian Trail
The MoPac East Trail is a 25-mile crushed limestone recreational trail through some of southeast Nebraska's finest wildlife habitat. It offers year-round recreation for hikers, joggers, bicyclists, horseback riders, cross-country skiers and wildlife watchers.

"The MoPac" stretches east from Lincoln, through the communities of Walton, Eagle, Elmwood and Wabash, featuring a blend of prairie, woodland and agricultural scenery along a former Missouri Pacific Railroad corridor. The MoPac East Trail connects to the MoPac Trail in Lincoln near 84th Street, linking it to the more than 60-mile city trail network. Beyond Wabash is a marked eight-mile county road route to the Platte River Connection and Lied Platte River Bridge near South Bend.

The Charles L. Warner Equestrian Trail begins at 98th and "A" streets in Lincoln and will also take users all the way to Wabash.

logos Nebraska Game and Parks, Lower Platte South NRD



WILDLIFE MANAGEMENT AREAS (WMA)



Wildlife Management Areas are managed by the Nebraska Game and Parks Commission. These public areas are shown in Figure 19 and include:

Cedar Creek Island "WMA" The WMA (island) was founded within the Platte River and originally contained 4.4 acres in north central Cass County.

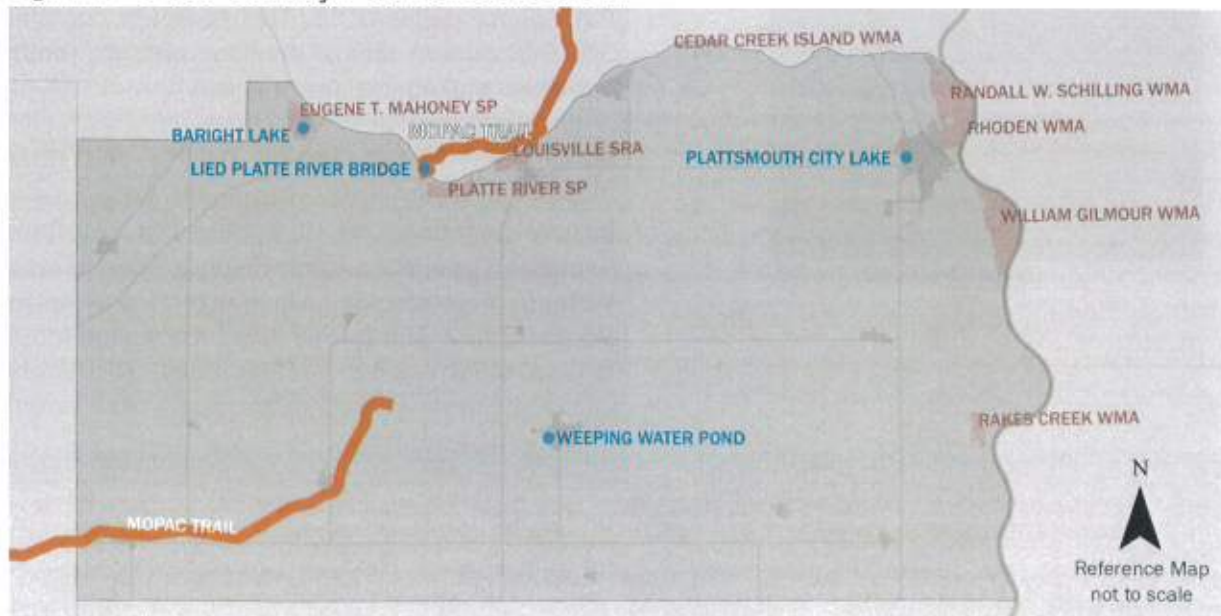
Rakes Creek "WMA" is located southeast of Murray in eastern Cass County. This area covers 316 acres (no water/lakes).

Randall W. Schilling "WMA" is located northeast of Plattsmouth in the northeast corner of Cass County. With 25 acres of water, it provides resting, feeding, and limited breeding grounds for waterfowl. The area is open to fishing and hunting, subject to special area regulations. Other activities include picnicking, wildlife photography, hiking opportunities and nature observation. Here you may also visit the confluence of the Platte and Missouri Rivers, as a site visited by the Lewis and Clark Expedition on their trek west.

Rhoden "WMA" is also northeast of Plattsmouth and borders the southern edge of Schilling WMA. It contains 46 acres (no water).

William Gilmour "WMA" is located along the eastern boundary of Cass County between Plattsmouth and Beaver Lake.

Figure 19 Cass County Public Recreation



2.6 COMMUNITY FACILITIES

Parks and Recreation

Fishing & Private Recreation



Image Lied Platte River Bridge

ADDITIONAL PUBLIC WATERS OUTSIDE STATE PARK AND WMAS FOR FISHING

Baright Lake is a 4 acre lake located west of Mahoney State Park.

Lied Platte River Hike Bike Bridge is located east of South Bend.

The Louisville SRA Platte River is an additional fishing access with concrete boat ramp on the north side of the Platte River and west of Highway 50.

Plattsmouth City Lake is three acres of water available to the public.

Weeping Water Pond is four acres and available to the public.

PRIVATE RECREATIONAL FACILITIES

Strategic Air & Space Museum is found in the northwest corner of Cass County off Interstate 80's Exit 426. It is north of Mahoney State Park along Highway 66. This museum contains 300,000 square foot of exhibits, aircraft, family activities, and special event space.

Thirty-three aircraft are on display and three displays of spacecraft. Permanent exhibit titles include Searching for Humanity, The Heartland Astronaut, Doolittle's Tokyo Raiders, 9th Air Force, Vietnam Memorial Wall, Linebacker II, and Martin Bomber Plant. The facility also host guided tours, a planetarium show, motion rides, overnights, summer camps, birthday blast, and a wide variety of traveling exhibits.



Image Cass County Tourism

Parks and Recreation

Private Recreation Facilities

Lee G. Simmons Conservation Park and Wildlife Safari is located east of Interstate 80 at exit 426. You can drive your car through this 360 acre nature center. There is free-ranging North American wildlife in their natural habitats which include bison, antelope, deer, pronghorn, cranes, bears, and wolves. A portion of the park is reserved for conservation and breeding purposes for rare and endangered wildlife.

The complex has hiking opportunities while enjoying interpretive nature exhibits, beautiful gardens, and small animal exhibits. There is a gift-shop and accessories at Visitor Center where a tram is available for a small fee. This facility also hosts campouts, classes, and school group visits.

Camp Kitaki - For the past sixty years, this YMCA-owned property has been located at 14917 East Park Highway between South Bend and Louisville. The ACA accredited camp has modern facilities on 200 acres of hardwood forest. They serve 2,000 youth each summer and activities include swimming, canoeing, horseback riding, archery, crafts, and climbing tower.

Carol Joy Holling Camp, Conference and Retreat Center is located on a half section of land donated in 1974 to the Nebraska Synod-Lutheran Church in America by George and Irene Holling. This donation is a memorial to their daughter who was tragically killed in a car accident in the early 1950s. It is located in extreme northwest Cass County near the Platte River between Mahoney State Park and Iron Horse Golf Course. The Carol Joy Holling Camp, Conference and Retreat Center annually touches the lives of more than 20,000 individuals through its own programs and by serving conference and retreat groups from a wide variety of community, church, social service, education, business and government organizations from across the country.



image Lee G. Simmons Conservation Park and Wildlife Safari entrance



image Camp Kitaki entrance



image Cass County Tourism

2.6 COMMUNITY FACILITIES

Parks and Recreation

Private Recreation / Golf Courses



Camp of the Good Shepherd (CGS) is located about 4 miles east and a mile south of Louisville, Nebraska. In 2006, the campgrounds were purchased by For God's Children International (Christian Nonprofit serving institutionalized children) for the purpose of providing non-denominational Bible camps and for children and adults in southeast Nebraska and southwest Iowa. Since 2007, CGS has been providing graded summer Bible camps for children from preschool through high school. CGS also sponsors camps for children from the Rosebud and Pine Ridge Lakota Indian Reservations of South Dakota. Camp of the Good Shepherd sponsors camps for hundreds of children and adults each summer (390 people in 2013), and is used by several outside groups for camps, retreats, family reunions, seminars and one-day and weekend events.

GOLF COURSES

Figure 20 shows the locations of various private recreation opportunities.

Quarry Oaks Golf Course is an 18-hole championship course overlooking the Platte River in northwest Cass County. This course is located east from Interstate 80's exit 426 on East Parkway Highway. It has a clubhouse available for meetings, banquets, and social events.



Iron Horse Golf Course is an Ashland golf course in extreme northwest Cass County. Roughly half of this naturally recognized golf course lies within Cass County. This 18-hole golf course is strategically placed around an old rock quarry that has been filled to create a lake which creates incredible views on this beautiful Platte River Valley Bluff.

Ashland Country Club is located three miles south of Ashland along U.S. Highway 6. The course is a semi-private club with an 18-hole course, a clubhouse available for meetings, and swimming facilities.

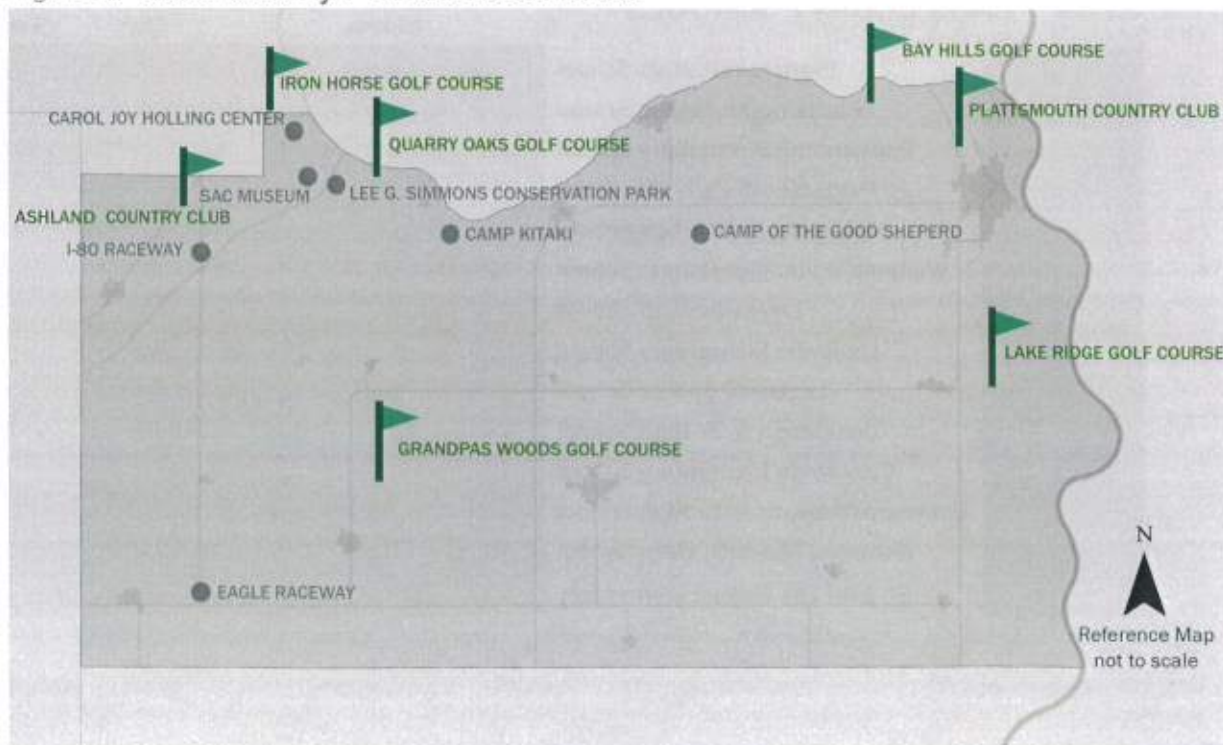
Grandpa's Woods Golf Course is an 18-hole executive course. The course has a clubhouse with meeting rooms available. The course contains meandering creeks and numerous trees and traps. The course is located on Nebraska State Highway 1 north of Elmwood.

Lake Ridge Golf Course is located in eastern Cass County at the intersection of US Highway 75 and Nebraska State Highway 1. This public 9-hole golf course near Beaver Lake has a pro shop and public restaurant and scenic views.

Plattsmouth Country Club is an 18-hole course situated on rolling hills. The course is semi-private and is located off Highway 75 and north of Plattsmouth.

Bay Hills Golf Course at Buccaneer Bay is an 18-hole championship course in northeast Cass County. It is west of Highway 75 with views of the Platte River from its Cass County rolling hills. The course has a full service Pro Shop with professional instruction available.

Figure 20 Cass County Private Recreation



2.6 COMMUNITY FACILITIES

Education

Primary/Secondary



Education Facilities



The six Cass County school districts serve a total of 3,957 students as of December 2013. The 2012 ACS 5-year estimates identify the Under 18 population in Cass County is 6,359. Therefore, approximately 2,400 students are being served by surrounding school districts outside Cass County. The majority of this population would be located in the Eagle and Greenwood communities. Table 9 and 10 give the estimated enrollment for Cass County and surrounding school districts from 2013. The Cass County school district boundaries are shown in Figure 21.

Table 9 CASS COUNTY SCHOOLS

		Address	City	*2013 Enrollment
District 1	Plattsmouth High School	1916 E Hwy 34	Plattsmouth	517
	Plattsmouth Middle School	1724 8th Ave	Plattsmouth	518
	Plattsmouth Elementary School	1724 8th Ave	Plattsmouth	596
	Plattsmouth Early Childhood	902 Main St	Plattsmouth	174
District 22	Weeping Water High School	204 West O	Weeping Water	161
	Weeping Water Elementary School	204 West O	Weeping Water	195
District 32	Louisville High School	202 W 3rd	Louisville	175
	Louisville Elementary School	202 W 3rd	Louisville	267
	Louisville Middle School	202 W 3rd St	Louisville	138
District 56	Conestoga Jr/Sr High School	8404 42nd St	Murray	287
	Conestoga Elementary School	104 E High St	Murray	355
District 97	Elmwood-Murdock Jr/Sr High School	300 Wyoming St	Murdock	200
	Elmwood-Murdock Elem School	400 West F St	Elmwood	214
District 701	St John The Baptist Elementary	500 S 18th St	Plattsmouth	160



PRIMARY-SECONDARY EDUCATION

Plattsmouth Public Schools

The school district has one Elementary and Middle School building and one High School facility. The 2013-2014 General Fund Budget was \$20,447,600 and a \$10,500 per student cost in 2011-2012. The District presently has a bonded indebtedness of \$10,896,570.

The district has recently added to its services with multiple facilities and services. Plattsmouth Learning and Universal Support (also known as P.L.U.S.) Center was established for special education students with behavioral difficulties located in the former Columbian Elementary School building. The Plattsmouth Academic Curriculum and Equipment (P.A.C.E.) Complex is located west of the Plattsmouth High School on the former site of the A & M Green Power Complex and contains more than seven acres. The building currently houses an expanded GED program, a copy center, and maintenance facilities which include the vehicle storage building. The Sports Complex involves turf on the high school football field, a baseball field, track, and a walking trail. There was also a new elementary outdoor classroom.

Weeping Water Public Schools

Weeping Water has an elementary facility and a 7-12 grades high school facility located in the same location. The 2013 general budget is \$5,357,100 with a cost per pupil at \$10,800. The bonded indebtedness is \$12.8 million. Over the past fifteen years, renovations include 10 new classrooms and an east addition with a health education center.

Louisville

The Louisville Public Schools operates one facility which houses students Pre-Kindergarten through 12th grade. The current General Budget is \$7,061,700 which is approximately \$9,800 per student. The District's present enrollment is 584 students. The current valuation of the district is \$422,299,858. The School District contracts with Educational Service Unit #3 in Omaha for support services.

Conestoga

Conestoga, District 56, has three facilities. The Elementary school (Kindergarten to 6th) has 317 students located at 104 East High Street in Murray. This facility also houses the Preschool, Headstart program for three and four year old children, and a daycare. The Junior/Senior High School (7th - 12th) is located west of Murray with 289 students. Conestoga's Alternative Education Program, located in Nehawka, is available to 7th -12th graders who need additional attention and support. An individualized program plan is created in a non-traditional setting.

DISTRICT

1

22

32

56

2.6 COMMUNITY FACILITIES

Education

Primary/Secondary

DISTRICT

The General Budget for the district is \$6,422,100, and the district valuation is \$606,100,000. The School District contracts with Educational Service Unit #3 in Omaha for support services. For financial reasons, the school district had decided to change its school schedule to four days. This extends school days from Tuesday through Friday but saves money on added expenses and has continued positive reactions from the families and students. The school district leases the onsite facility to a private child care business.

97

Elmwood-Murdock

Elmwood-Murdock Public Schools is a Pre-Kindergarten to 12th grade district located in Murdock and Elmwood, Nebraska, with a student population of approximately 436. The mission of the Elmwood-Murdock Public Schools is to "Empower All Students to Achieve Success!"

The Elementary school is located at 400 West F in Elmwood, Nebraska. The Junior/Senior High is located at 300 Wyoming in Murdock, NE. This progressive District just recently completed a School renovation project that roughly doubled the physical plant size.

CASS COUNTY PRIVATE SCHOOLS

701

St. John the Baptist Elementary

This private school (District 701) is located in Plattsmouth at 500 S. 18th Street. The elementary school has reported 160 students for the 2013-2014 school year.

RESIDENTS SERVED ELSEWHERE

Lancaster County District 145	Waverly High School	14511 Heywood Street	Waverly	553
	Waverly Middle School	14511 Heywood Street	Waverly	444
	Eagle Elementary School	600 South 1st Street	Eagle	260
	Evelyn Hamlow Elementary	14511 Heywood Street	Waverly	322
	Waverly Intermediate School	14511 Heywood Street	Waverly	302
Otoe County District 27	High School At Syracuse	1500 Education Dr	Syracuse	247
	Elementary School At Syracuse	550 7th St	Syracuse	227
	Middle School At Syracuse	1430 Education Drive	Syracuse	250
Otoe County District 111	Nebraska City High School	141 Steinhart Park Rd	Nebraska City	428
	Nebraska City Middle School	909 1 st Corso	Nebraska City	299
	Nebraska City Northside Elem	1200 North 14 th Street	Nebraska City	360
	Hayward Elementary School	306 S. 14 th Street	Nebraska City	318
Saunders County District 1	Ashland-Greenwood High School	1842 Furnas St	Ashland	260
	Ashland-Greenwood Elem School	1200 Boyd St	Ashland	417
	Ashland-Greenwood Middle School	1842 Furnas St	Ashland	185



OUTSIDE PUBLIC DISTRICTS THAT SERVE CASS RESIDENTS

Ashland-Greenwood

The combined school districts include Ashland, Greenwood, Memphis and surrounding areas. It consists of portions of Cass, Sarpy, and Saunders Counties covering an area of nearly 60 square miles. The district currently has a General Operating Budget of approximately \$9,000,000 and total Bonded Indebtedness of approximately \$7,000,000. The average cost per student to educate is approximately \$10,000. The total enrollment for the district during the 2013-2014 school year was approximately 850 students. The Ashland-Greenwood district is provided with speech therapy, occupational therapy, physical therapy and psychological counseling through a contract with Educational Service Unit #2. The District continually examines ways to update and renovate existing facilities. In 2012, an athletic facilities renovation project was completed adding new facilities at both the football and track.

The Ashland-Greenwood Senior High School building was constructed in 1966 and is located at 1842 Furnas Street in Ashland. The Senior High is composed of grades 9-12, the Middle School has grades 6-8. Sports and physical education opportunities in the school system include football, basketball, volleyball, wrestling, softball, cross country, track, golf, and baseball.

The Ashland Elementary School, built in 1920, is located at 12th and Boyd Streets. The elementary school includes Kindergarten through 5th.

Nebraska City Public Schools

The Nebraska City district is located in the eastern portion of Otoe County. It serves Union and surrounding areas in extreme southeast corner of Cass County. The district has four buildings, two elementary, one middle school and high school in Nebraska City. Northside Elementary is located at 1200 North 14th Street and serves students from Kindergarten to 2nd Grade. Hayward Elementary, which serves students from 3rd to 5th Grade, is located at 306 S. 14th Street. The Nebraska City Middle School serves 299 students at 909 1st Corso; and 6th to 8th grade students. The Nebraska City High School serves 428 students at 141 Steinhart Park Road.

Syracuse-Dunbar-Avoca School District

This district serves the central and northern portions of Otoe County and Avoca and surrounding areas in south central Cass County. The district has three facilities serving 724 students in the 2013-14 school year. The General Fund Budget for 2013-14 is \$9,716,104 with a cost per pupil of \$11,154. The total bond indebtedness is \$14,256,574. After building a new middle school in 2010, there are no plans for expansion at this time.

DISTRICT

SAUNDERS

1

OTOE

111

OTOE

27

2.6 COMMUNITY FACILITIES

Education



DISTRICT
LANCASTER
145

Waverly

Waverly school covers 300 square miles in northeastern Lancaster County, western Cass County, and the northwest corner of Otoe County. Cass County communities of Eagle and Alvo are within the boundaries as well as the surrounding areas in western Cass County. There are five facilities in District 145 with four in Waverly and one elementary school in Eagle. The Nebraska Department of Education reported that the Waverly District has 1,881 students for 2013-14. The most recent buildings are the Waverly Middle School and Waverly High School within the past 15 years.

POST-SECONDARY

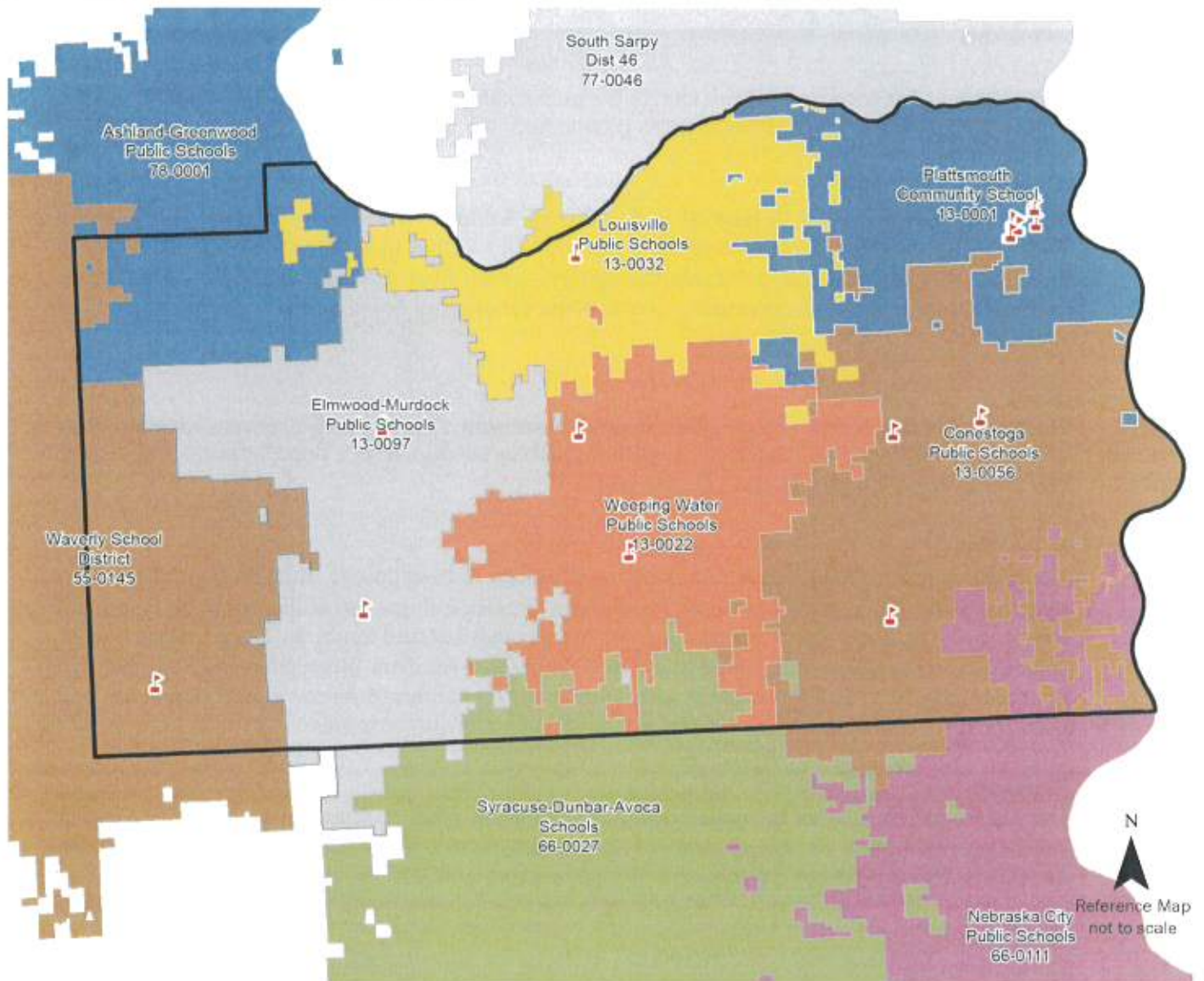
The Post-secondary schools accessible to Cass County commuters are excellent. Depending upon a person's location within Cass County, most of these facilities are in great commuting distances. In addition to the institutions listed, there are a number of Vocational Schools located in the Omaha and Lincoln Metropolitan areas that concentrate in certain areas of expertise.

Post-Secondary in proximity to the residents of Cass County include:

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



Figure 21 Cass County School Districts





Fire and Police Protection

FIRE DEPARTMENTS

The volunteer fire departments are vital to the public safety of Cass County residents and visitors. Figure 22 shows the 12 Cass County Fire District boundaries.

Ashland

The Ashland Fire District is located in the City of Ashland in Saunders County. The Ashland Rural District covers approximately 22.5 square miles within Cass County. The Ashland Rural Fire District is served by 26 volunteer firefighters and 20 Rescue squad volunteers. Emergency medical services are also provided by the Ashland Emergency Service, which operates two EMS units.

Avoca

The Avoca Fire District is located in south central Cass County. The Fire District covers approximately 37.5 square miles within Cass County with the station located at 211 Polar in Avoca, Nebraska. The district includes 20 volunteer firefighters.

Eagle-Alvo

The Eagle-Alvo Fire District covers the southwest corner of Cass County. The Fire District contains approximately 49 square miles of the county. The department has two stations, one at Eagle and one at Alvo. The Eagle Fire Station was completed in 1989 at 706 South 1st Street. Eagle has 21 volunteers which includes 1 paramedic and 6 Emergency Medical Technicians (EMTS). The Alvo station is located at 135 Main Street with 7 volunteer firefighters, 6 rescue squad volunteers and 6 EMTs. The department trains on a monthly basis on all types of issues.

Elmwood

The Elmwood Fire District is located along the southern edge of Cass County. The Fire District covers approximately 43 square miles of Cass County with the Fire Station is located at 601 N. 4th Street. The district has 19 volunteer firefighters and 10 EMTs.

Greenwood

The Greenwood Fire District is located along the west edge of Cass County. The Fire District covers approximately 38.5 square miles of Cass County. The Fire Station in Greenwood consists of 30 volunteer firefighters.

Louisville

Louisville Volunteer Fire & Rural District (LVF & RD) is located along the north central edge of Cass County. The Fire District covers approximately 58 square miles within Cass County. This area also includes the area of Cedar Creek. Presently, there is a fire station located in Cedar Creek. The Fire Station is located in the downtown area of Louisville and was completed in 1997. The department is made up of 28 volunteer firefighters of which 10 are ETMS.

Murdock

The Murdock Volunteer Fire and Rescue Department is located in the approximate center of Cass County. The Fire District covers approximately 55.5 square miles of area within Cass County. The District has 25 volunteer firefighters. The Fire Station is located at 315 Nebraska Street in Murdock.

Murray - The Murray Volunteer Fire and Rescue Department is located along the central east side of Cass County. The Fire District contains approximately 63 square miles of area within Cass County, including the Beaver Lake Subdivision. The Fire Station is located east of Murray at 818 East Main Street (OR 508 Highway 1) with 21 volunteer firefighters of which 12 are EMTs.

Nehawka

The Nehawka Fire District is located near the southeast corner of Cass County. The Fire District covers approximately 41.5 square miles within Cass County. The Fire Station is located at 732 Elm Street in Nehawka. The Fire District is served by 16 volunteer firefighters of which 7 are EMTs.

Plattsmouth

The Plattsmouth Fire District is located at the northeast corner of Cass County. The Fire Station was constructed in 1969 and located at 127 N. 5th Street in Plattsmouth. Plattsmouth Volunteer Fire Department has 49 members who respond to approximately 210 fire calls a year with ten different trucks, three rescue boats, and a water trailer. There are 49 volunteer firefighters with 6 probationary rescue, 2 full-time paid EMTs, and 11 part-time paid EMTs. These firefighters and EMTs cover approximately 60 square miles of area within Cass County.

The Plattsmouth Rural Fire Station was constructed in 1993 and is located 127 N. 5th Street, which is a shared building with the city fire station.

Union

The Union Fire District is located in the southeast corner of Cass County. The Fire District covers approximately 30 square miles within Cass County. The Union Fire Station serves the district with 16 volunteer firefighters and currently do not have EMTs.

2.6 COMMUNITY FACILITIES

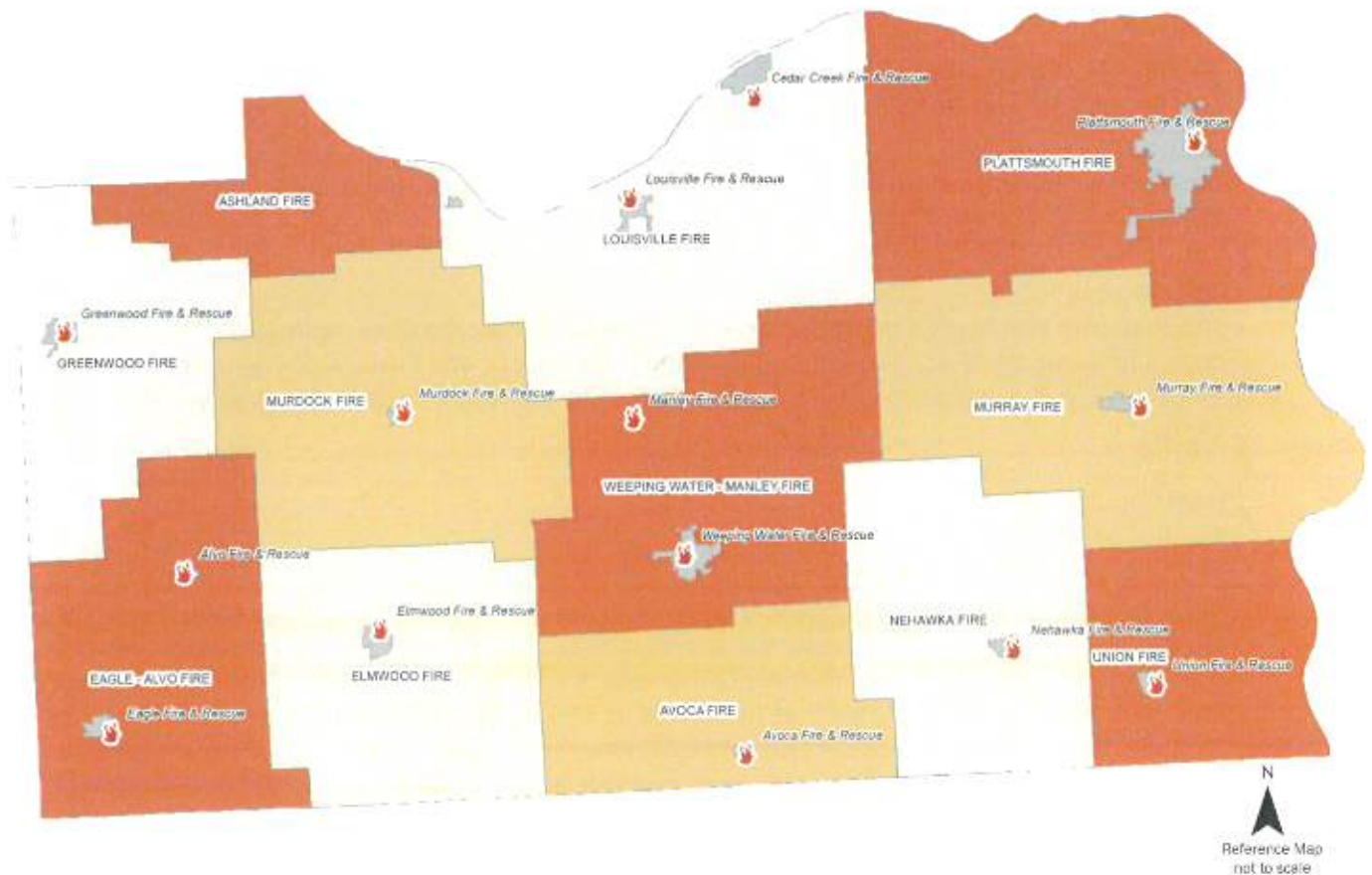
Public Safety

! Fire Departments

Weeping Water

The Weeping Water Fire District is located in central Cass County. The Fire District works in conjunction with Manley to cover approximately 55.5 square miles with 21 volunteer firefighters of which there is one EMT. The Fire Station is located in Weeping Water with a smaller station located in Manley.

Figure 22 Cass County Fire Districts



POLICE PROTECTION



The following information was obtained mainly from the Cass County website as well as Sheriff's Office correspondence.

The mission of the Cass County Sheriff's Department is to enhance the quality of life in our county by working cooperatively with the public and within the framework of the U.S. Constitution to enforce the law, preserve the peace, reduce fear and provide for a safe environment for all of our citizens.

The law enforcement operations of The Cass County Sheriff's Office and Plattsmouth Police Department are located at 336 Main Street. The Law Enforcement Center entrance is on the southwest side facing Main Street near the Courthouse. The Jail entrance is on the northeast corner of the Law Enforcement Center at 303 Avenue A.

The City County Law Enforcement Center is a State of the Art Law Enforcement and Detention facility that Houses the Offices of The Cass County Sheriff, The Plattsmouth Police Department as well a jail facility that has 110 bed general population capacity. Cooperative agreements with the U.S. Marshall Service, as well as other Federal and local agencies, provide a revenue source for Cass County. This offsets the increased staffing and operating costs for the new facility.

The Law Enforcement Center was designed to complement the appearance of the Historic Courthouse building and has a connection to the Courthouse, which enables the movement of prisoners to and from court without taking them outside the facility.

2.6 COMMUNITY FACILITIES

Public Safety

! Police Protection

The Sheriff's Office investigates criminal and drug offenses, traffic accidents, enforces traffic laws, and serves as a representative of the County Coroner in death investigations. Other duties include: collecting delinquent property taxes; execution of complex court orders; and serving summonses, subpoenas and warrants. The Sheriff's Office also has a crime prevention division, 911 Communications Center and operates the county jail.

The Law Enforcement Center which houses the Cass County Sheriff's Office consists of a number of different divisions which include:

Administration consists of the Sheriff, Chief Deputy, Captain and two Lieutenants who oversee the daily operations of all divisions.

The **Investigations** division has three full-time, non-uniformed sworn deputies make up both the criminal and drug investigative units. Their responsibilities include the investigation of all major case crimes and drug violations and are supervised by a Lieutenant.

The **911 Center** is equipped with state of the art technology which dispatches fire, rescue and law enforcement for 17 villages and cities throughout Cass County and is supervised and staffed by civilian personnel.

The **Civil Process** consists of both civilian and sworn personnel conduct paper service for both civil and criminal proceedings.

The **Road Patrol** has fourteen sworn full time road deputies and four part time road deputies when needed. They are supervised by Sergeants and assisted by the K-9 unit and provides law enforcement for all of Cass County, to include the cities, villages, state parks and both rural and lake areas.

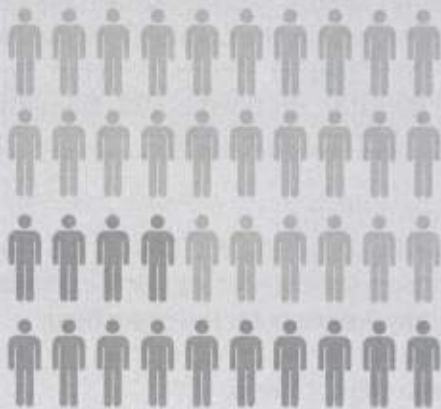
The **Correctional Facility** is comprised of both civilian and sworn personnel who facilitate the 110 bed jail. There are twenty-nine sworn deputies that work in the Corrections Division and are supervised by a Lieutenant, Sergeant and corporals. This staff also provides prisoner transports and courtroom security.

The **Crime Prevention** division provides programs with sworn deputies working with the school system such as D.A.R.E, G.R.E.A.T, and "Just Say No". This unit also assists with public awareness such as Crime Stoppers and Neighborhood Watches throughout Cass County.

Beaver Lake is supported by one sworn deputy from the Cass County Sheriff's Office and funded by the Beaver Lake Association.

The **support staff** includes administrative assistants and clerical staff, maintenance/engineer, a medical physician, 2 registered nurses and inmate foodservice provided by CBM Food Service, Inc.

Cass County has 51 total sworn full-time Deputies and four sworn part-time deputies. The road patrol has 14 full-time deputies. Law enforcement is available to any Cass County community through a contract with the Sheriff's office.



FULL-TIME ROAD-PATROL

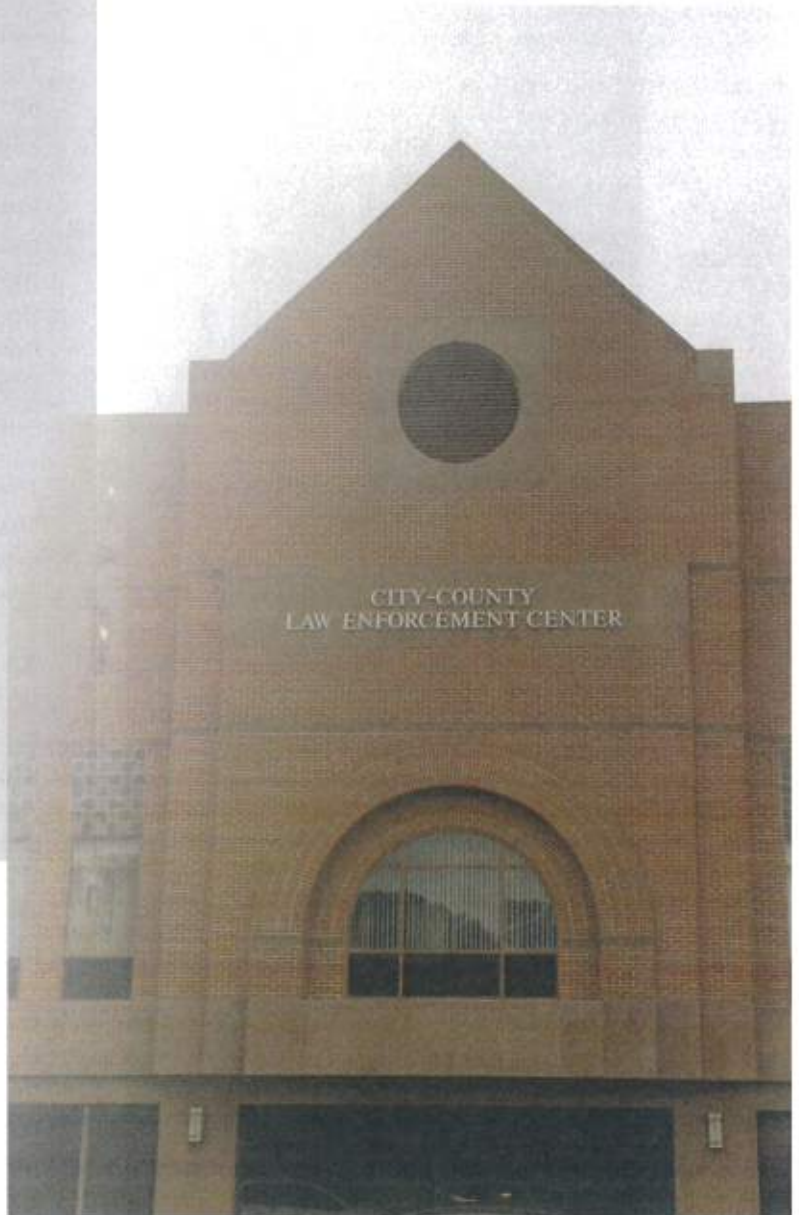



image Cass County Law Enforcement Center

2.6 COMMUNITY FACILITIES

County Buildings

 All-County Facilities

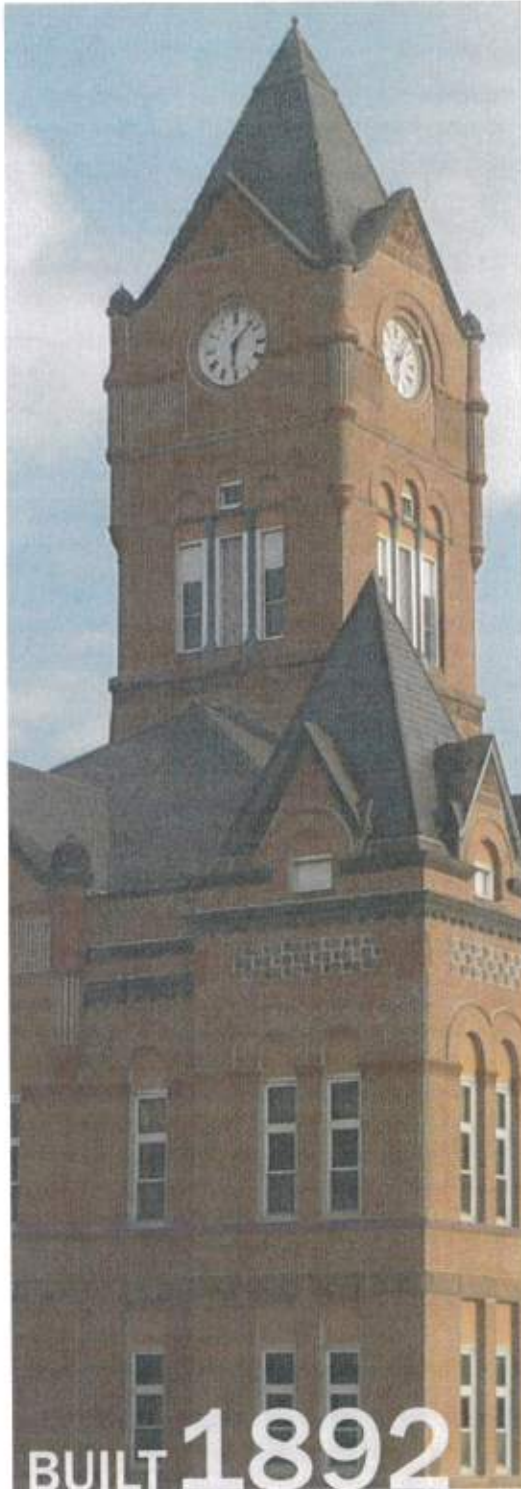


image Cass County Courthouse



County Buildings

COUNTY FACILITIES

County Courthouse

The Cass County Courthouse is located in Plattsmouth at 346 Main Street. The courthouse was constructed in 1892 and is listed on the National Register of Historic Places. The courthouse employs a number of civil workers conducting various functions of the County. Offices located in the Cass County Courthouse include the County Clerk, Treasurer, County and District Courts, Veteran Service Office, Register of Deeds, GIS Department, Surveyor, and County Attorney.

The Annex Building

This building is behind the County Courthouse and houses County Zoning, State Probation, and County Assessor on the main floor.

Additional Departments

201 Main Street in Plattsmouth is the home of the Department of Motor Vehicles, Health and Human services, and the Elections Office.

County Road Department and Maintenance

The county maintains 72 miles of paved roads, 698 miles of gravel roads, 70 miles of minimum maintenance and over 200 bridges. The State of Nebraska encourages all counties to employ a licensed Highway Superintendent. He/she is to be in charge of the construction and maintenance of roads under the county's jurisdiction. The incentive payment to Cass County for having a Class A licensed Highway Superintendent is \$12,000.00 per year.

County Buildings

All-County Facilities

The Highway Superintendent is responsible for the efficient, economic and good faith performance of said work. It is the duty of the board to provide adequate funding to maintain the road system.

In order for the County to receive their full allocation of road use tax monies, each county is required to provide a minimum "local tax effort" set by the state. The local tax effort in Cass County is composed of allocations from the County General Fund. Though there has been some discussion of special tax to go towards the hard surfacing of County Roads, this has not been implemented at this time.

The Cass County Roads Department is located at 13860 12th Street, which is also the location of the Cass County Recycling Center. Cass County also has maintenance and/or material and equipment storage facilities in or near Avoca, Elmwood, Greenwood, Manley, Murdock, Murray, Nehawka and Plattsmouth. There are plans to include the construction of a new maintenance facility centrally located in Cass County that would consolidate two locations into the new site and utilize the previous buildings for other potential uses.

County Historical Museum and Historical Resources

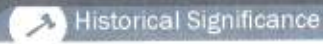
The Cass County Museum is located at 646 Main Street in Plattsmouth and is operated by the Cass County Historical Society. The museum has a variety of displays and is open by appointment only. The building was constructed in 1960 and is in good condition.



image Cass County Historical Society

2.6 COMMUNITY FACILITIES

County Buildings



HISTORICAL SIGNIFICANCE BY COMMUNITY

Cass County has a wealth of historic resources including historic structures and sites located throughout the County and in the various cities and villages. The following are brief community histories from the previous comprehensive plan, a variety of county websites, and notable buildings or sites listed in the Nebraska Building Survey report for Cass County.

Alvo

Alvo was established in 1888 on the Rock Island Railroad. The name derives from the stationmaster's daughter who was the first child born in the town. Alvo has the distinction of being the only community with this name in the United States.

Avoca

Amos Tefft, a settler from Illinois, arrived in the area in 1857 and within a few months, the post office and town had been registered under the name Avoca. A new plat was filed in 1882, and the village was incorporated two years later. Notable buildings include the Avoca Public School, Avoca Town Hall, and the Kehlbeck Farmstead near Avoca.

During their expedition to explore and map the American West, Meriwether Lewis and William Clark's Corps of Discovery reached the confluence the Platte and Missouri Rivers on July 21, 1804. Captain Clark described the event in his journal.



"Arrived at the lower mouth of the Great River Platt... the Great River being much more rapid than the Missouri forces its current against the opposite shore. The current of this river comes with great velocity raking its sands into the Missouri... we found great difficulty in passing around the sand at the mouth of this river."

Plattsmouth: A New Historic Destination, Official 2003 Guide

County Buildings



Historical Significance

Cedar Creek

Cedar Creek was platted as a “paper town” in 1865 by Swiss immigrant John Inhelder and two brothers, Isaac and George Sayles. It was named for a nearby creek with cedar trees growing along its banks. Development was slow but ultimately grew to two banks, lumberyard, hotel, blacksmith, hardware store and dance hall. Fire later consumed many of the commercial buildings in the village. Cedar Creek now has approximately 396 homes on four man made lakes.

Eagle

Samuel Perry, an early settler in the area, had a post office established in his residence under the name of Eagle in November 1869. The post office was originally named Sunlight but was changed based on an eagle he shot in the vicinity. The village was platted in 1886. Eagle had a population of 175 by 1890 and was supported by the hotel, billiard hall, bank, and two grain elevators. Soon other businesses in the village included a dressmaker, confectionery, tobacconist, blacksmith and harness maker, hardware and general merchandise stores. A Methodist Church was constructed in 1890 and Eagle was incorporated on August 11th, 1891.

Elmwood

The post office in the vicinity of Elmwood’s present location was established in the home of Civil War veteran David McCaig in 1868. The village was platted and incorporated in 1886 and named after a grove of elm trees. Products shipped from Elmwood included grain, broom corn, apples, cattle, and hogs. Businesses included a millinery, harness maker, barber, more than one blacksmith, wagon maker, hardware store and drug store. Elmwood is the home of Bess Streeter Aldrich, who is an accomplished author who wrote from experience about the small town and pioneering life. Her home is open to the public and listed on the National Register of Historic Places. She was inducted into Nebraska Hall of Fame in 1971-72. Elmwood is also the home to the American Exchange Bank. Another notable building in Elmwood was the former Christian Church that no longer exists but can be found on the Cass County’s Building Survey.



2.6 COMMUNITY FACILITIES

County Buildings



Greenwood

Silas Greenwood was an early settler who hunted and trapped in the vicinity in the 1850s. Greenwood consisted of a depot, post office, two stores and a few residences by 1873. Six years later the village claimed 100 residents and was incorporated in 1883. A notable building in Greenwood is the United Methodist Church.

Louisville

Louisville was initially settled and surveyed in 1857 by Gardner Powers, as well as incorporated in the same year. The arrival of the Burlington & Missouri Railroad in 1870 was attributed to the efforts of John T. A. Hoover, a landowner in the area who became the first postmaster and a prominent businessman. Louisville was resurveyed in 1872 and reincorporated under state law ten years later. Use of local sandstone as a building material is evident in many of Louisville's historic buildings. One of the better examples is the First Methodist Church. Louisville's Main Street is lined with many historic buildings. The Ash Grove Cement Company building is north of Main Street.

Manley

August R. Wendt, a German immigrant, acquired the land in 1880. Three years later, the townsite for the Village of Manley was surveyed, and a post office was established. Early Manley businesses included two general stores, hardware store, drug store, shoemaker, blacksmith shop, and a creamery. Manley produced some notable writers including Glen Fleischmann, who was an illustrator for the Saturday Evening Post, Good Housekeeping and Collier's, and Sophus Keith Winther, who wrote Take All to Nebraska. A notable building is the Manley School.

Murdock

The Village of Murdock area had been substantially settled prior to the Chicago Rock Island & Pacific Railroad establishing a station at this location in 1890. Murdock was incorporated in 1905, and its population has remained stable throughout its history. A notable building in Murdock is the Gillespie Hotel.

Murray

Settlement came slowly which claimed a single resident in 1872. A church from nearby Rock Bluff community was moved to the vicinity six years later in hopes of supporting a town that would be named Fairview. Confusion over the name led to a change after establishing a post office in 1884. The name was changed



as a tribute to the United Presbyterian Church pastor Reverend George Reed Murray. Murray was a farming community and experienced a devastating fire that destroyed half of its businesses and the community hall in 1927. Although a plat was filed for Murray in 1891, it was not formally incorporated until 1935.

One of the earliest institutions of higher learning founded in Nebraska can be found east of Murray. The Naomi Institute, unassuming in appearance, was built in 1870 with J.D. Patterson serving as headmaster. Patterson advertised “the morals of the place are the very best there is, not a dramshop in the village, and the pupil will be free from the surroundings of vice that are usually found in larger and ‘faster’ towns in the West.” Although initially successful, the school’s debt forced Patterson to sell in 1872. The building later served as the Rock Bluff School. This building is listed on the National register of Historic Places, and the Naomi Institute stands as a testament to the educational pursuits of Nebraska’s pioneers. Another notable building is the Young Cemetery Cabin near Murray and its association with the National Youth Administration. The building materials consist of the original dwelling constructed in 1856 on the William Young family homestead.

Nehawka

The area that ultimately became the Village of Nehawka was settled in 1855 by Samuel M. Kirkpatrick, who arrived from Iowa and established a sawmill. The town was platted in 1857, yet no parcels were sold and the plat was abandoned. In 1875, a post office was approved for the community under the name Nehawka, which derived from an Omaha and Oto Indian word meaning “rustling water”. A different plat was filed in 1887, and the population of Nehawka grew to 200 by 1893.

In 1910, the “Commercial Club” was created to promote village improvements such as street grading, sidewalk construction and the building of an auditorium which was completed in 1914. The Village’s contributions to Nebraska’s political history include sending representatives to the territorial legislature (Samuel Kirkpatrick and Lawson Sheldon) and U.S. Congress (E.M. Pollard) as well as producing the first native-born governor (George Shelton).

The Nehawka Public Library is listed on the National Register of Historic Places as a testament to the efforts taken in combating national unemployment during the Great Depression. Notable buildings lost were the Missouri Pacific Railroad Depot and Nehawka auditorium which are documented in the Cass County Nebraska Historic Building Survey.

2.6 COMMUNITY FACILITIES

County Buildings



Plattsmouth

Shortly after the Kansas-Nebraska Act opened the Nebraska territory for settlement, the Plattsmouth Town Company was formed to survey and plat the town in October 1854. Plattsmouth became the fifth town to be incorporated in Nebraska on March 14th, 1855. Located at the confluence of the Platte and Missouri Rivers, boats would dock on the former riverbank at the foot of Main Street to deliver and ship goods. Plattsmouth also served as a starting point for wagons bringing supplies to Fort Kearney or immigrants and miners moving west.

The Burlington & Missouri Railroad was a significant presence in Plattsmouth. City officials and the railroad reached an agreement that placed the Nebraska headquarters of the Burlington & Missouri in Plattsmouth in 1869. This complex covered 14 acres with multiple railroad industry shops and three roundhouses by the 1880s.

Civic improvements matched the pace of business prosperity. By 1890, Main Street had been surfaced with granite pavers and the city boasted an electric plant, extensive water and sewer systems, and even an electric streetcar line. Plattsmouth had secured the county seat in 1888 and subsequently approved the construction plans for a new courthouse. The Cass County Courthouse was built in 1892 in the Romanesque Revival style and was designed by architect William Gray.

The Plattsmouth Main Street Historic District is roughly bounded between 3rd and 7th Streets. It is comprised of commercial and government buildings dated to the late nineteenth century with Commercial Italianate style. This district has been listed on the National Register of Historic Places and has new infrastructure installed with a new streetscape for beautification. The Fitzgerald Building, built in 1871, was extensively rehabilitated and is now part of the Plattsmouth Main Street Historic District.

There are many other buildings that are noteworthy. Some notable Plattsmouth buildings include the former Plattsmouth Public Library, F.R. Guthmann House, Oliver Dovey House, the Nebraska Masonic Home, and the Plattsmouth Bridge.

South Bend

Named for its location on the "south bend" of the Platte River, the area was settled by W.H. Hill and T.W. Fountain in 1856 and was platted a year later. CH. Pinkham established a store in town in 1872 from which he also operated the post office. The town was incorporated in 1885.



Union

Union was surveyed in 1887 by the Missouri Pacific Railroad with the planning of the line between Nebraska City and Lincoln. That same year, G.A. Rose established a store in anticipation of the arrival of rail service. Union was officially organized in 1892 and serviced by eight passenger trains daily by 1893. The schoolhouse was built in Union in 1889; however, the building burned in 1912. It was replaced by a large brick school that served the community until 1956 when the Union school district merged with the Nebraska City district. Other notable buildings are the former Union Jail and Hotel.

Weeping Water

An Indian legend claims that the nearby Weeping Water Creek, from which the town is named, was created following a battle between two tribes. The sorrow and tears of family members created the Weeping Water Creek. Originally settled in 1855, Weeping Water was platted in 1869 and subsequently incorporated a year later.

With the arrival of the Missouri Pacific Railroad and new businesses, Weeping Water quickly grew to 1,350 residents by 1890. The economy of Weeping Water includes its limestone quarries. Many buildings in the city were constructed from this limestone, which, due to the concentration of iron ore in the stone, creates distinctive staining patterns.

The former Congregational Church and parsonage were constructed between 1867 and 1870. They are listed on the National Register of Historic Places along with Dr. Fate Office as part of the Weeping Water Historic District. Other notable buildings are the United Methodist Church and Davis Block, to a lesser extent, the former Congregational Church and parsonage. These latter two buildings were constructed between 1867 and 1870 and are now listed on the National Register of Historic Places as part of the Weeping Water Historic District. The Cass County Agricultural Society building was built using federal funding during President Roosevelt's administration. The Cass County Agricultural Society was originally formed in 1920 as the Cass County Agricultural Association and involved in organizing and developing the Cass County Fair.



OTHER HISTORIC SITES

Ashland Site

Several episodes of Native American occupation have been documented at this site. Excavations uncovered both square and circular earth lodge ruins and a diverse assortment of native and European artifacts. The earliest occupation was by a late prehistoric (A.D. 1000-1400) group, followed by very early historic (around 1650-1750) Oto and Pawnee villages. Etienne Veniard de Bourgmont mentioned an occupied Oto village at or near this location during his 1714 visit to the region.

Walker Gilmore Site

Successive layers of cultural deposits exposed in the cut bank of Sterns Creek are the remains of one of the most important prehistoric cultures in the eastern Great Plains. The Sterns Creek Phase, dating A.D. 800-1200, is an early group which relied heavily for food on wild plants, animals and the cultivation of gourds and squash. Archaeological work at the site has recovered an abundance of food refuse, stone, bone, and ceramic artifacts, and evidence of both thatched roof dwellings and food drying or processing racks.

Nehawka Flint Quarries

Early archaeologists observed nearly 300 unusual depressions in flint-rich areas of Pennsylvania limestone formation along Weeping Water Creek. These features proved to be quarry pits dug by prehistoric Nebraskans to depths of over ten feet. The massive amount of labor expended to obtain flint testifies to the importance of chipped stone to prehistoric people. The group most responsible for the mines is the Nebraska Phase, a farming and hunting culture that flourished in eastern Nebraska from A.D. 1100-1400.

Theodore Davis Site

On a prominent natural terrace of Weeping Water Creek, the Davis village is the most extensively studied community of the Nebraska Phase. This culture flourished along the Missouri River and its tributaries from A.D. 1100-1400, and represents the beginning of a new way of life for eastern Plains Indians typified by construction of substantial timber-frame, earth-covered dwellings; a sedentary settlement pattern; and increased reliance on domestic plant foods, particularly corn.



OTHER HISTORIC BUILDINGS

Kehlbeck Farmstead

The Kehlbeck Farmstead is a remarkably well-preserved farmstead composed of twenty-three buildings illustrating an early twentieth century general farm operation. Noteworthy buildings include the two-story frame house, built in 1907, and the large frame barn, constructed around 1910 to house both horses and cattle. Several of the buildings, as well as the landscaping, reflect the German background of Henry Frederick Kehlbeck, who immigrated to the United States in 1885. One of the most striking features of the farmstead is the system of alleys created by cedar tree plantings framing the main farm lane and the front yard.



The Elms (Bess Streeter Aldrich House)

Located in Elmwood, "The Elms" was the home and study of Bess Streeter Aldrich, a prominent writer born at Cedar Falls, Iowa, in 1888. After a teaching career in Iowa and Utah, she moved to Elmwood, Nebraska in 1909. Mrs. Aldrich's novels and short stories depict life on the Nebraska prairie in the late nineteenth and early twentieth centuries and provide authentic interpretations of Midwestern small towns. The two-story frame dwelling was constructed in 1922.



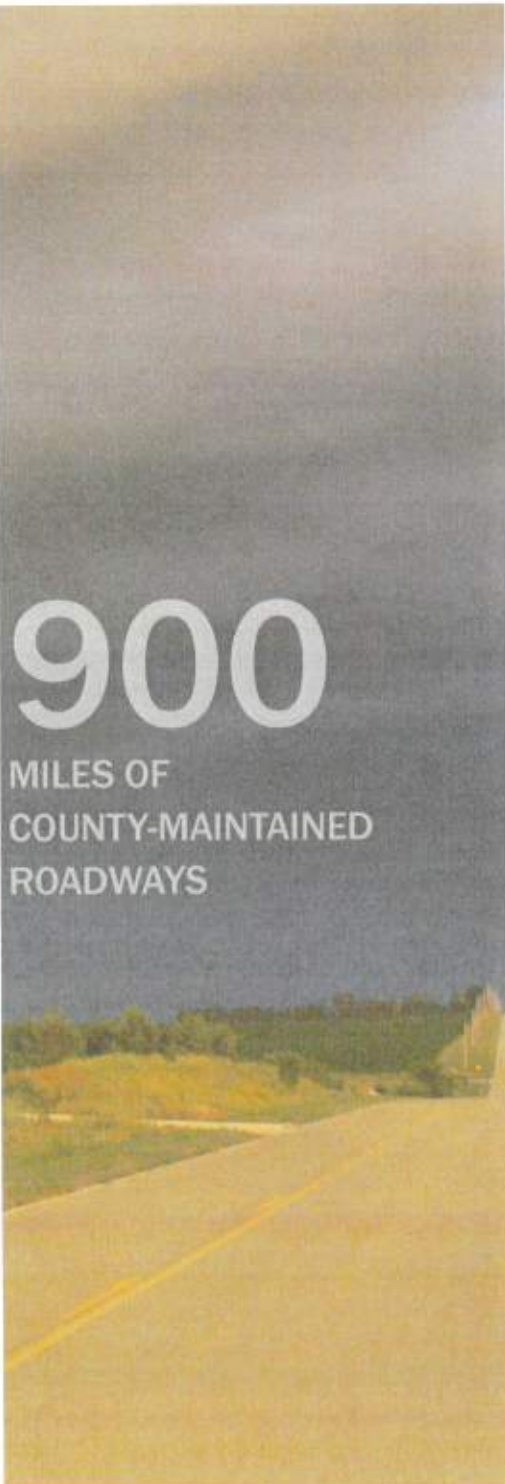
McLaughlin-Waugh-Dovey House

The McLaughlin-Waugh-Dovey House was built in 1883 for A.W. McLaughlin, an early cashier of the First National Bank in Plattsmouth. The property served as the home for succeeding cashiers of the bank (Samuel Waugh, Horatio Dovey) for nearly forty-five years, and thus, this became known to area residents as the "Banker's House." The house has long been a Plattsmouth landmark as a fine example of the Queen Anne style.



2.6 COMMUNITY FACILITIES

Transportation



900
MILES OF
COUNTY-MAINTAINED
ROADWAYS



Transportation Facilities

Cass County's location between Omaha and Lincoln provides potential for expanding economic growth. Its transportation corridors are in very good condition and will continue to be vital to the success of the County. This important asset will continually be maintained and updated as Cass County develops. The highways of Cass County are heavily traveled by trucking industry. This requires additional funds for maintenance but also leads to potential for economic opportunities. The location of Cass County and its transportation corridors combine to help Cass County be competitive for attracting new industries and jobs. Through master plans and specific land uses, Cass County can better utilize its interstate exits while capitalizing on its existing network.

Figure 23 depicts the various modes of transportation in Cass County as well as the County Road maintenance shop locations. The vast majority of traffic is based upon the automobile. Railroads no longer offer passenger services, but serve commercial businesses.

Highways

Cass County is served by Interstate 80 and U.S. Highways 34 and 75. In addition, there are several Nebraska State Highways serving Cass County; these are Nebraska 50, 43, 63, 66, 67 and 1. Cass County is served by approximately 900 miles of County maintained hard surface and gravel roadways.

Truck Line Service

Cass County is served by various intrastate and interstate carriers originating out of Cass County, Omaha and Lincoln.

Railroad Service

The Burlington Northern Santa Fe and Union Pacific railroads serve Cass County. The nearest rail terminal is located in both Omaha and Lincoln.

Bus Service

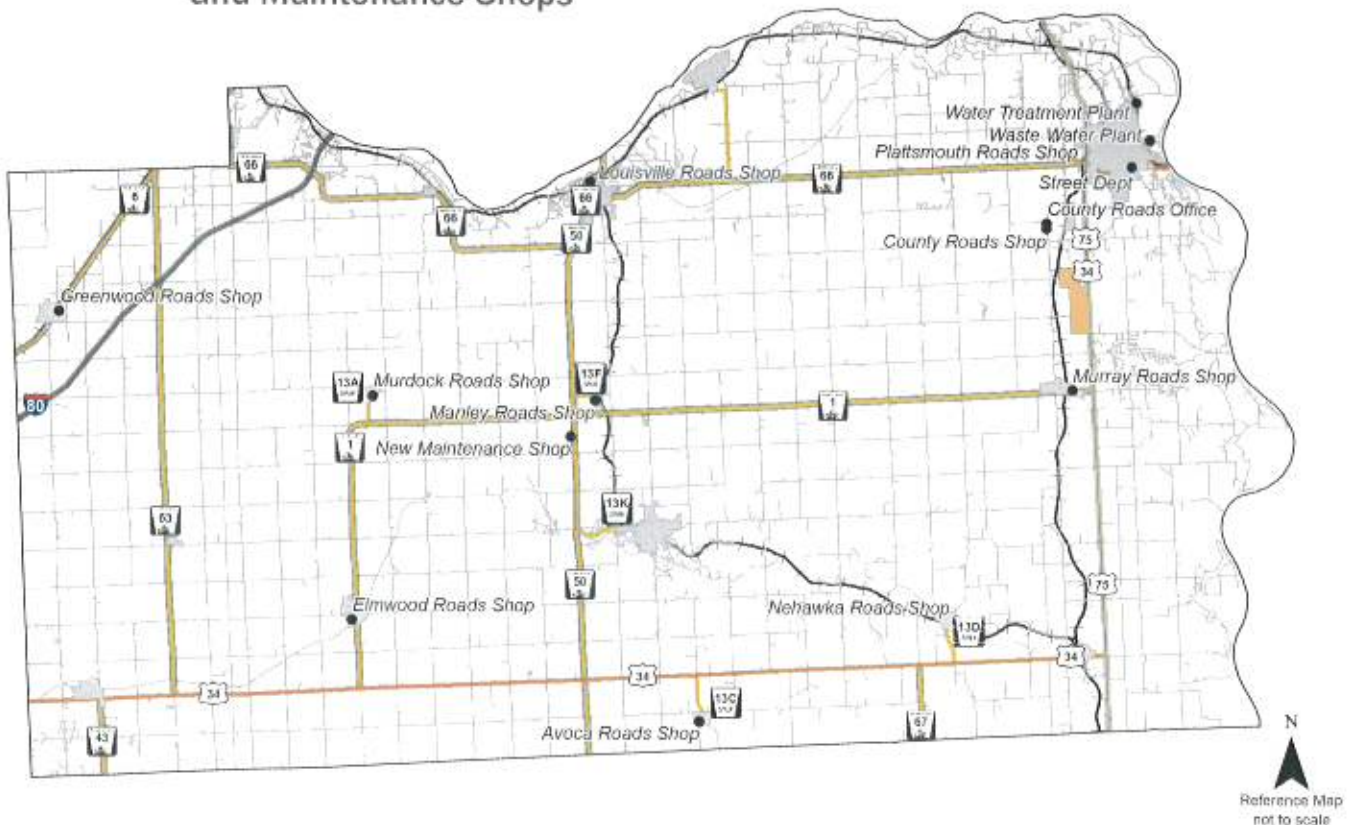
There is no bus service to or from locations in Cass County. The nearest bus terminal is located in Omaha.

Airports

The nearest passenger and freight service airports and terminals are Eppley Airfield in Omaha and the Municipal Airport in Lincoln. Local private service is offered at the Plattsmouth Airport.

Plattsmouth Municipal Airport is located south and west of Plattsmouth. The airport is at an elevation of 1,201 feet above sea level. The runway designation is at 34 and 16. The runway is hard surfaced with dimensions of 100 feet in width and 4,100 feet in length. The hours of operation are during normal daylight hours. Fuel types include 100LL and Jet A.

Figure 23 **Cass County Roads and Transportation, and Maintenance Shops**





Communication Facilities (public/private)

Communications will play a large role in Cass County for the next fifteen years. Its importance may determine a location decision for future industries. These economic opportunities rely on the demands of business interaction and the need to transmit large amounts of data. There is a need to upgrade throughout Cass County. This includes everything from Broadband services for economic growth and Emergency Response communications to save lives.

Telephone Services

Local telecommunication services in Cass County are provided by Windstream and various internet providers.

Television and Radio

There is currently no television station located within Cass County. There are a number of regional radio and television stations which carry local news and programming located in Omaha and Lincoln.

Newspapers

Various newspapers of local and regional circulation are available throughout Cass County. The Omaha World Herald's Southeast Region office is located in downtown Plattsmouth and produces the local "Plattsmouth Journal" is the legal newspaper for the County government. Cassgram is a daily circulation distributed throughout the county.



Health Facilities

MEDICAL CLINICS

Weeping Water Med Center is located at 204 Randolph in Weeping Water.

University of Nebraska Medical Center Physicians is located at 1938 E. Highway 34 in Plattsmouth.

Cass Family Medicine operated by OneWorld was located at 409 Main Street in Plattsmouth. They were using a mobile clinic while deciding if and where the new location would be.

Family Physicians is located at 2302 8th Ave, Suite 3 in Plattsmouth.

These facilities provide the necessary staffing to meet the needs of the service area. Additional or specialized care is available through facilities in Omaha and Lincoln.

HOSPITALS

The nearest hospitals are located in Bellevue, Papillion, Omaha, Lincoln, and Nebraska City. These facilities include:

Bellevue Medical Center is located at 2500 Bellevue Medical Center Drive in Bellevue, NE 68123.

Midlands Community Hospital located at 11111 S. 84th Street in Papillion, Nebraska.

Bergan Mercy Medical Center is located at 7500 Mercy Road in Omaha.

The Nebraska Medical Center is located at 4242 Dewey Ave in Omaha.

Omaha Veterans Affairs Medical Center at 4101 Woolworth Ave in Omaha.

Creighton University Medical Center - Saint Joseph is located at 601 N. 30th Street in Omaha.

Saint Elizabeth Regional Medical Center is located at 555 S 70th Street in Lincoln.

Bryan LGH Medical Center East is located at 1600 S 48th Street in Lincoln.

Madonna Rehabilitation Hospital is located at 5401 South Street in Lincoln.

Linc Care East provides urgent care at 1601 N. 86th Street in Lincoln.

St. Mary's Community Hospital is located at 1314 3rd Avenue in Nebraska City, NE. In 2012, the Hospital announced a \$47 million project to combine with Nebraska City Medical Clinic.

2.6 COMMUNITY FACILITIES

Health

+ Nursing Home / Assisted Living

NURSING HOME AND ASSISTED LIVING FACILITIES

Cass County offers a range of options for nursing home and assisted living care. Three facilities are located in Plattsmouth, the other in Louisville. Numerous other options are available in the larger Omaha and Lincoln Metropolitan Areas.

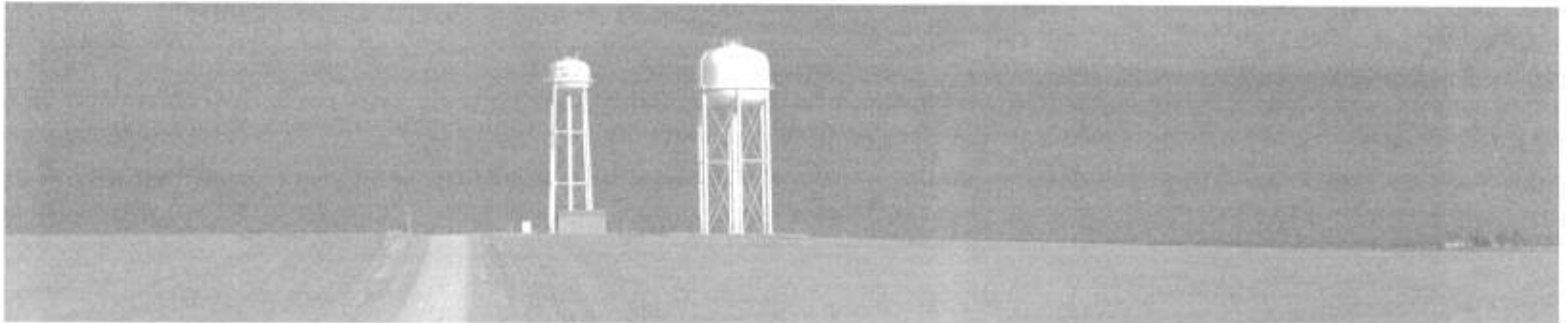
Golden Living Center is located at 602 S. 18th Street in Plattsmouth. The facility is part of a larger organization with 300 locations. The Plattsmouth location provides cardiac care, dialysis care, diabetic care, dementia and Alzheimer's care, pain management, restorative care, and stroke care. The facility is licensed for 111 beds, including a 14 bed Alzheimer's Unit. The facility is staffed by 30 RNs and LPNs, 35 Nursing Aids and a Medical Director on site. Besides these staff members, the facility has occupational therapy, physical therapy and speech therapy available on site. The facility is a licensed Medicare provider.

Louisville Care Center is located at 410 West 5th Street in Louisville. The facility is licensed by the State of Nebraska as a nursing facility with 61 (active certified and licensed) beds. There are six Title 18 beds and 55 Title 18/19 beds. It was built in 1972 by the Village of Louisville, with a major addition having been completed in 1991. Seven rooms are licensed as private rooms, with 55 beds being certified for Medicaid. A staff of 66 full and part-time employees include: 41 Nursing; including 10 Registered Nurses (RN's) and two (2) Licensed Practical Nurses (LPN's). Services of various consultants including a registered dietician, medical records, and pharmacy consultant complement the staff. Physical, occupational, and speech therapies are available to all residents. Laboratory, x-ray services, and podiatry services are available on site. The nursing facility does not have any specialty care unit; however, Hospice care is provided through contracts with both Tabitha Hospice and Hospice of Nebraska. Assisted Living has a capacity for 26 beds.



Nebraska Masonic Home is located in Plattsmouth at 1300 Avenue D. The Nebraska Masonic Home was founded in 1903 and is a retirement community that offers 35 apartments for independent living with assisted living as needed. The facility also has a total active licensed inventory of 72 beds, 24 hour care center that offers minimum to maximum nursing care. The Home currently employs 115 people from Plattsmouth and the surrounding communities. The medical staff includes an on-call Medical Director, and professional nurses who are on duty 24 hours a day. Nebraska Masons and their wives, widows, sisters, and daughters are eligible to apply for admission. The assisted living portion of the Masonic Home has a capacity for 56 residents.

WoodBridge Assisted Living facility is located in Plattsmouth at 1913 Highway 34 East. The facility is an Assisted Living Facility with accommodations for 34 to 38 residents in 29 apartments. Currently, the staff includes 3 LPNs, 9 CMAs, and 2 consulting RNs.


2.7 UTILITIES



COMPONENTS

-  Public Utilities and Rural Water Districts
-  Energy Element



 **Public Utilities and Rural Water Districts**

Future development is strongly tied to available infrastructure and utilities. Fiscally/Strategically improving the infrastructure will help Cass County develop in a manageable way for future generations to maintain.

Electricity
Electric service is provided by both the Omaha Public Power District and the Nebraska Public Power District.

Gas
Gas distribution service is provided by Black Hills Energy.

Rural Sanitary Sewer
Sanitary Improvement Districts (SIDs) and other residential subdivisions are located throughout Cass County. These developments and rural residential must follow Title 124 to be in compliance of Nebraska Department of Environmental Quality's requirements.

Rural Water Districts (RWD)

As shown in Figure 24, there are three main rural water districts serving Cass County: Cass County Rural Water District Number 1, Cass County Rural Water District 2, and Otoe County Rural Water District Number 3.

Cass County Rural Water District #1 provides water to the eastern third of the County.

Cass County Rural Water District #2 serves most of the western third of the county.

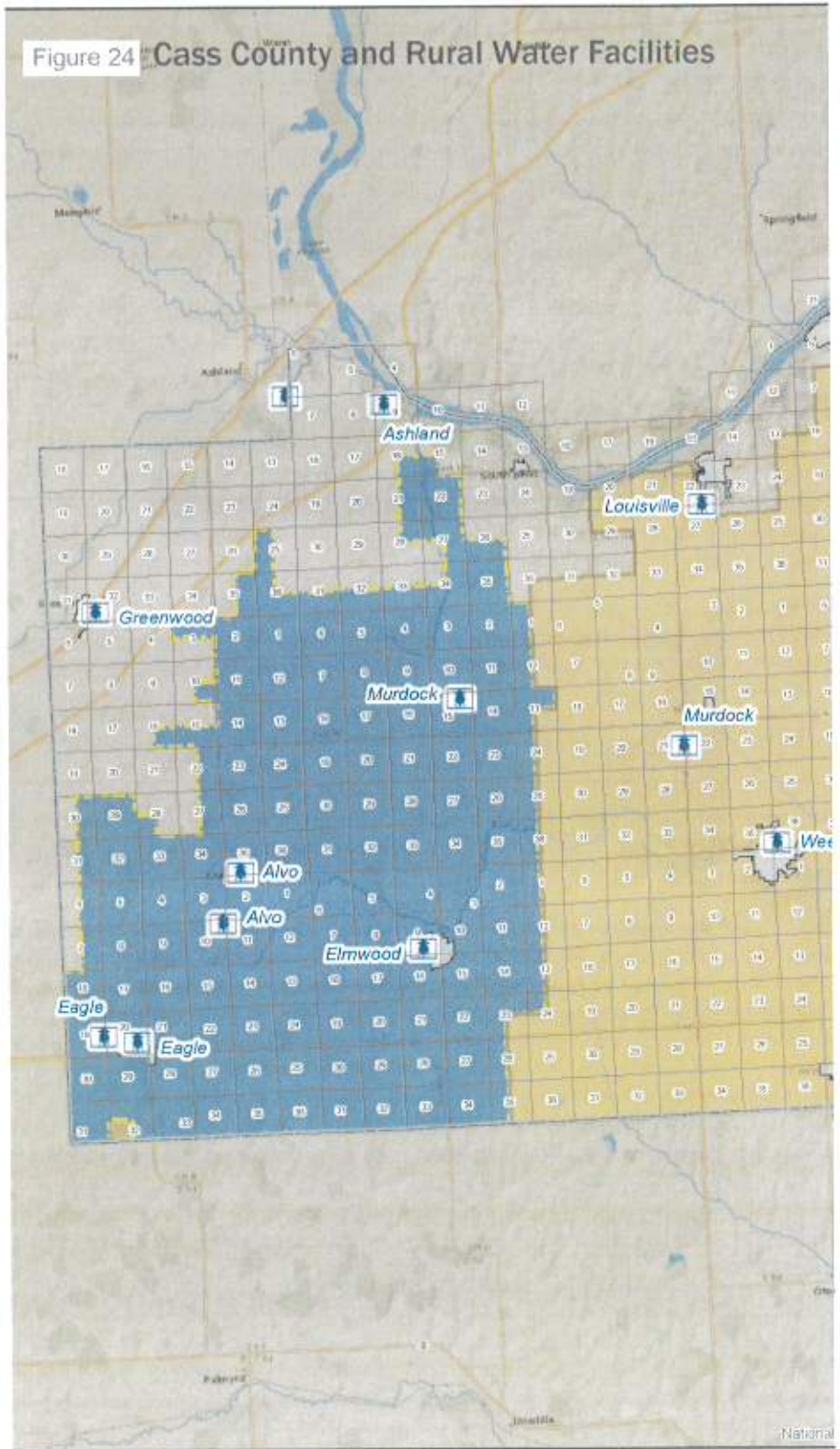
Otoe County Rural Water District #3 serves the central third of Cass County that except Louisville.

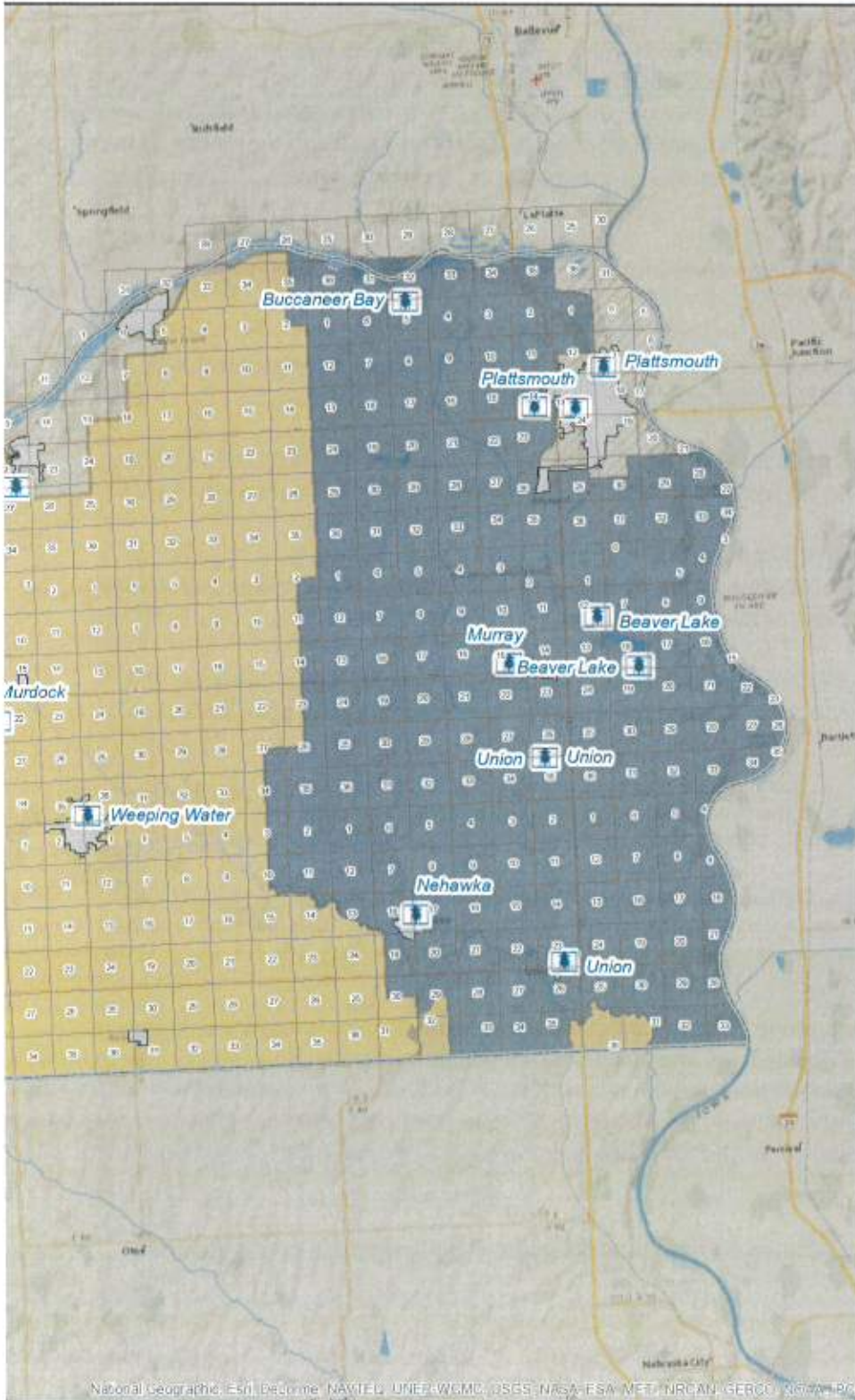
Smaller portions of Cass County are served by Lancaster County RWD #1 and Otoe County RWD #1. Greenwood, South Bend, Louisville and Plattsmouth provide their own water to their municipalities.

The interstate exits of 420 and 426 will need to have more infrastructure installed in order to supply the adequate needs for major improvements. Focus groups and additional meetings were coordinated during this update to explore the possibility of an additional rural water district in northwest corner of Cass County.

The Cass County and Rural Water Facilities Map illustrates the district boundaries and major storage tank locations.

Figure 24 Cass County and Rural Water Facilities





Rural Water Districts & Local Facilities

Cass County, NE

Legend

- Water Towers
- County Boundary
- Sections
- Corporate Limits as of October 2013

Rural Water Districts

All Water Districts

- CASS CO RURAL WATER DIST #1
- CASS CO RURAL WATER DIST #2
- CITY OF ASHLAND
- CITY OF PLATTSMOUTH
- LANCASTER CO RURAL WATER DIST #1
- OTOE CO RURAL WATER DIST #1
- OTOE CO RURAL WATER DIST #3



Created By: MBG
 Date: 12/26/2013
 Software: ArcGIS 10.2
 File: 130377.00



This map was prepared using information from record drawings supplied by JCO and/or other applicable city, county, federal, or public or private entities. JCO does not guarantee the accuracy of the data or the information used to prepare this map. This is not a scaled plan.

The following Sanitary Improvement Districts (SID) and other residential subdivisions are located in Cass County, see the accompanying map for general locations:

SID 1 - Lake Wa Con Da is located in southeast Cass County. The residents are on private septic systems in this lake development. There are a total of 215 lots originally platted and 212 homes located the SID.

SID 2 - Greenwood Interchange which is located along Interstate 80. This SID primarily serves commercial development.

SID 3 - Equestrian Hills is located along the Cass County/Saunders County border. The development has a total of 10 lots platted with 5 lots within Cass County.

SID 4 - Eagle Lake is located in southwest Cass County near the community of Eagle. The SID was platted with 65 lots, and currently has 49 lots sold with 49 homes constructed.

SID 5 - Buccaneer Bay is located approximately 2 miles west of U.S. Highway 75 adjacent to the Platte River. Currently, the SID has roughly 425 homes in the subdivision. The SID also has a golf course located adjacent to the development.

SID 6 - Copper Dollar Cove is located approximately four miles west of Plattsmouth. The development was platted with 136 lots and has approximately 76 lots sold with 70 homes constructed.

SID 7 - On The Green Plat II is located adjacent to the north corporate limits of the City of Plattsmouth. This SID is presently connected to the City of Plattsmouth for services.

SID 8 - Swallow Hills Estates is located north of Plattsmouth and adjacent to the wildlife preserve. This subdivision was originally created with 42 lots in 1981 and currently connected to the City of Plattsmouth for water, electricity, and telephone from the streets.

SID 9 - Iron Horse is located along Highway 6 between Cass and Saunders counties. There are over a hundred lots in Cass County. The residential development is supplied by a water tower on the southwest portion of Iron Horse.

SID 10 - Osage Ranch is adjacent to Plattsmouth's southern edge of corporate limit with over 80 lots platted.

SID 11 - Wiles Crossing was located on the southern edge of Plattsmouth's corporate limits and was disbanded.



Energy Element

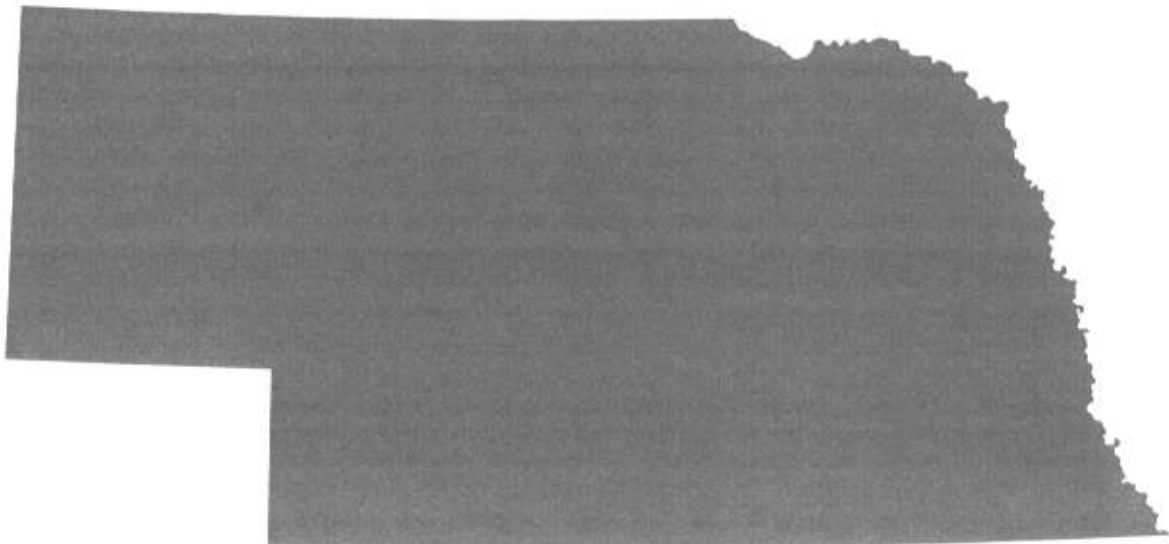
Energy plays a crucial role in nearly every aspect of our lives. It is used to grow our food, to move us from place to place, to light our homes, and to make the products we buy. The vast majority of our energy is currently supplied by fossil fuels, which will inevitably run out. Federal regulations are tightening emission rules for power plants, thus increasing the cost of using fossil fuels. By planning for energy, Cass County will save money, have a more resilient economy, help the environment, and be better prepared for the future.

NEBRASKA ENERGY POLICY OVERVIEW

Nebraska Legislation LB997

In 2010, Nebraska Legislators passed LB 997 requiring comprehensive plans to include an energy element. The following energy element was included within the Cass County's Comprehensive Plan to fulfill the requirement of LB 997. Energy elements are required to address three components:

1. Energy infrastructure and energy use by sector, including residential, commercial, and industrial sectors.
2. Utilization of renewable energy sources.
3. Energy conservation measures that benefit the community.





NEBRASKA ENERGY PLAN

The Nebraska Energy Office's vision statement is to promote the efficient, economic, and environmentally responsible use of energy. The 2011 Nebraska Energy Plan outlines 14 strategies for the state to consider in meeting the following objectives:

- 1 Ensure access to affordable and reliable energy for Nebraskans to use responsibly
- 2 Advance implementation and innovation of renewable energy in the state
- 3 Reduce petroleum consumption in Nebraska's transportation sector

The fourteen strategies include:

- Continue support of Nebraska's unique public power system
- Increase opportunities for demand-side energy management and energy efficiencies
- Maximize the investment in Nebraska's coal plants
- Expand Nebraska's nuclear power generation capacity
- Increase opportunities for industrial and municipal waste-to-energy projects
- Optimize the use of Nebraska's water resources for hydroelectric power generation
- Improve municipal water and wastewater management strategies and water quality
- Continue building Nebraska's wind energy through public-private partnerships
- Increase opportunities for methane recovery from agricultural and community biomass resources
- Increase opportunities for woody biomass in Nebraska
- Support distributed generation of renewable technologies
- Increase ethanol production, blended and delivered across Nebraska and to markets outside the state
- Increase development and use of other alternative fuels
- Diversify and expand opportunities for renewable diesel in Nebraska



ENERGY CODES

Under §81-1608 to 81-1616, the State of Nebraska has adopted the International Energy Conservation Code as the Nebraska Energy Code. Any community or county may adopt and enforce the Nebraska Energy Code or an equivalent energy code. If a community or county does not adopt an energy code, the Nebraska Energy Office will enforce the Nebraska Energy Code in the jurisdiction. The purpose of the Code, under §81-1608, is to ensure that newly built houses or buildings meet uniform energy efficiency standards. The statute finds

that there is a need to adopt the . . . International Energy Conservation Code in order (1) to ensure that a minimum energy efficiency standard is maintained throughout the state, (2) to harmonize and clarify energy building code statutory references, (3) to ensure compliance with the National Energy Policy Act of 1992, (4) to increase energy savings for all Nebraska consumers, especially low-income Nebraskans, (5) to reduce the cost of state programs that provide assistance to low-income Nebraskans, (6) to reduce the amount of money expended to import energy, (7) to reduce the growth of energy consumption, (8) to lessen the need for new power plants, and (9) to provide training for local code officials and residential and commercial builders who implement the . . . International Energy Conservation Code.

The Code applies to all new buildings, as well as renovations of or additions to any existing buildings. Only those renovations that will cost more than 50 percent of the replacement cost of the building must comply with the Code. If the owner of a building submits a request, the State will inspect the site for compliance. As of June 2014, Cass County is in the process of adopting the 2012 Energy Code. Updating to the latest energy code will result in energy savings for Cass County residents.



<http://www.sos.ne.gov/seal.html>

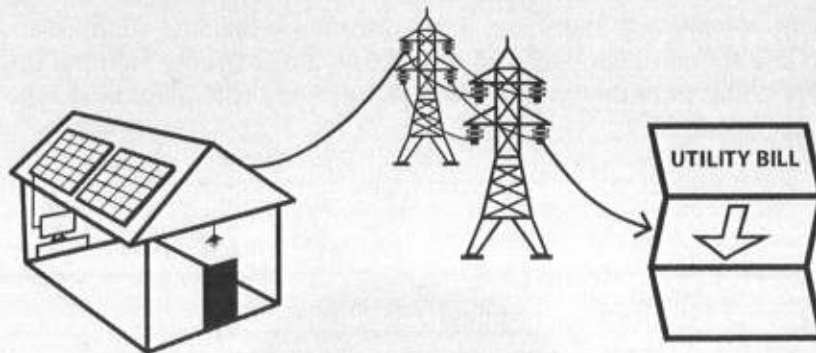


NET METERING

Nebraska Legislation LB436

The Nebraska Legislature passed LB436 which allows for net metering. The legislation permits citizens to generate their own energy as the credits of generated energy are purchased back from the local utility company. This procedure is in the public interest because it encourages customer-owned renewable energy resources. Onsite energy generation can stimulate economic growth, encourage diversification of the energy resources used, and maintain low-cost, reliable electric service for the State of Nebraska. By supplementing your electric bill through these "credits" from the utility company, the citizens of Cass County can save money while alleviating pressure on the OPPD or NPPD utility grid.

According to their websites, NPPD and OPPD have offered net metering since 2008 and 2009 respectively. They both allow net metering for any consumer that has a qualified generator using methane, wind, solar, biomass, hydropower or geothermal energy with a total capacity of 25 kilowatts or less. As of December 31, 2013, NPPD had 32 qualified facilities with total generating capacity of 196.2 kilowatts and OPPD had 44 qualified facilities with total generating capacity of 280 kilowatts. In 2013, the total estimated amount of energy produced by these customer generators was 620,071 kilowatt-hours, and the net received from them was 10,007 kilowatt-hours.



Solar and Wind Easements and Local Option Rights Laws

Nebraska's solar and wind easement provisions allow property owners to create binding solar and wind easements in order to protect and maintain proper access to sunlight and wind. Counties and municipalities are allowed to develop zoning regulations, ordinances, or development plans that protect access to solar and wind energy resources. Local governing bodies may also grant zoning variances to solar and wind energy systems that would be restricted under existing regulations, so long as the variance is not substantially detrimental to the public good.

For summaries of additional programs, incentives and policies in Nebraska visit the Database of State Incentives for Renewables & Efficiency (DSIRE) website.



Logos: OPPD, NPPD,
Black Hills Energy

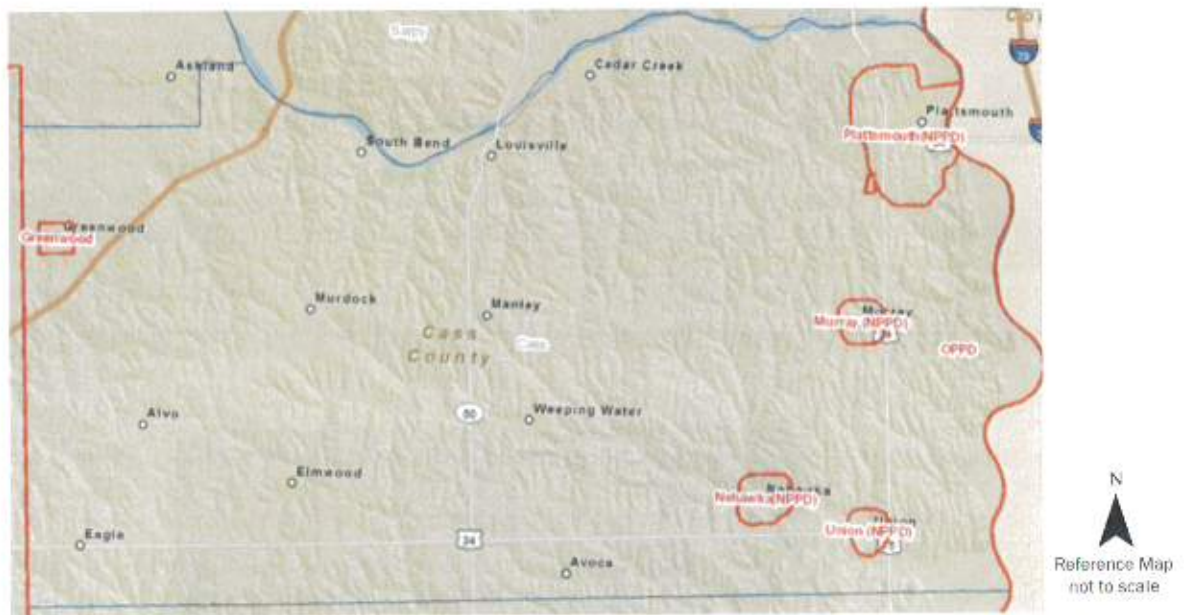
Cass County's electricity providers are Omaha Public Power District (OPPD) and Nebraska Public Power District (NPPD). Black Hills Energy provides natural gas for the County. Figure 25 shows the service areas of the electric providers. The areas encircled in red receive their electricity from NPPD; all other areas receive their electricity through OPPD. OPPD's Cass County Station power plant consists of two natural gas turbine units. The 323.1 MW facility was dedicated in 2003 and is located two miles south and four miles west of Plattsmouth.



source: OPPD website

OPPD's Cass County Station was dedicated in 2003 with two natural gas turbine units. This station serves the communities and unincorporated areas of Cass County as seen in the Public Power Service Areas map. The station is located southwest of Plattsmouth.

Figure 25 Public Power Service Areas, Cass County



In 2014, OPPD created a plan to lower its carbon emissions in reaction to new proposed EPA regulations. The OPPD board adopted a plan to:

- Retire units 1-3 of the North Omaha coal plant by 2016
- Retrofit units 4-5 of North Omaha in 2016
- Convert units 4-5 of North Omaha to natural gas by 2023
- Retrofit Nebraska City One by 2016
- Maintain at least 33% of their portfolio in renewable energy beginning in 2018
- Reduce demand by 300 MW through energy efficiency and demand side management program

This plan would reduce:

- Carbon dioxide emissions by 49%
- Mercury emissions by 85%
- NOx (nitric oxide and nitrogen dioxide) emissions by 74%
- SOx (sulfur oxide) emissions by 68%



OPPD ENERGY MAKEUP

Figure 26 illustrates OPPD's framework of energy resources it uses to generate electricity. Fossil fuels (coal, natural gas, and oil) are the energy source for 72% of OPPD's electricity generation. Using these fossil fuels for electricity generation results in emissions that have been linked to climate change. Currently, 13.7% of OPPD's electricity is generated from renewable energy sources, most of which comes from wind.

Figure 26 OPPD Energy Source Breakdown



CONSUMPTION BY SECTOR

According to Table 11, electricity use increased in every sector from 2012 to 2013. In 2013, just over 38% of the electricity use in Cass County was for the residential sector. Commercial and residential sectors were responsible for 56.9% of the energy use within these communities. Since most of the electricity used in the commercial and residential sectors is for heating, cooling, and lighting, it is logical that strategies should focus on reducing the consumption for those needs. Municipal operations are responsible for about 2.2% of the total electric usage. The Cass County government should strive to set an example for its citizens by reducing its energy consumption. Cass County can do that by following the goals and strategies described later in this energy element.

The industrial sector is the largest consumer of electricity in Cass County in 2013, with over 40% of the total consumption. Cass County should encourage industries to invest in energy efficiencies to conserve energy and save money. Some companies within the county have already begun to make energy conscious decisions. In Louisville, Ash Grove's new office facility is designed to meet EPA Energy Star standards for energy efficiency.

Table 11 Cass County Energy Consumption By Sector

	2012		2013	
	KWH	% OF TOTAL	KWH	% OF TOTAL
Industrial	172,062,589	41.4%	175,930,183	40.5%
Commercial	75,612,847	18.2%	79,643,817	18.3%
Residential	156,710,668	37.8%	167,604,506	38.6%
Street Lights	1,701,673	0.4%	1,735,314	0.4%
Municipal*	9,028,976	2.2%	9,625,018	2.2%
TOTAL	415,116,753		434,538,838	

* Municipal is the combined data for NPPD communities of Plattsmouth, Murray, Union and Nehawka
source: NPPD and ORPD

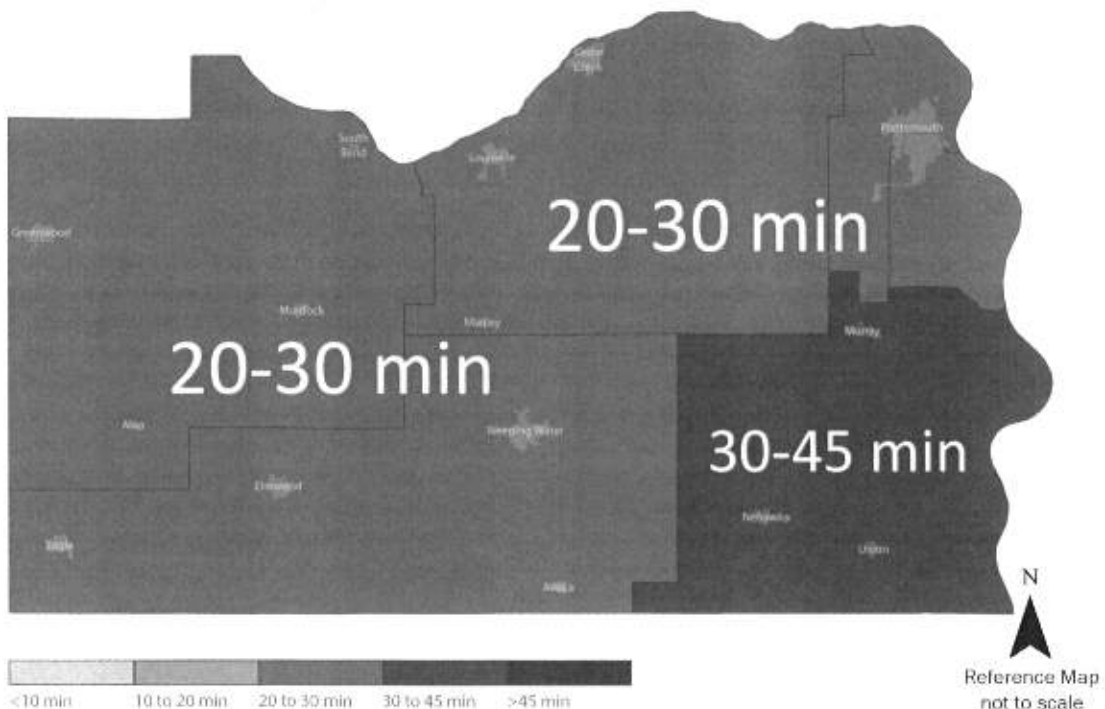
COMMUTE TIME

According to data from the US Census and American Community Survey, the average commute to work in 2012 took 28 minutes in Cass County. This is an increase from 27 minutes in 2000 and 24 minutes in 1990. As shown in Figure 27, the southeastern part of Cass County has the longest average commute of 32 minutes.

These data are supported by the Economic and Demographic Trends report done by NPPD in April 2014. The report states that 73.6% of Plattsmouth workers leave the county for work. Many people move from the Omaha and Lincoln metro areas to Cass County for the quality of life. Without a supply of desirable and well-paying jobs in Cass County, residents will continue to commute elsewhere for employment.

The Corporate Average Fuel Economy standards will nearly double vehicle fuel economy by 2025 to 54.5 miles per gallon. Without any action, this will lower fuel consumption per capita in Cass County. Finding strategies to lower the commute time will result in further energy conservation.

Figure 27 Cass County Commute Times



sources American Community Survey, 2008 -2011 Five-year estimates, Social Explorer

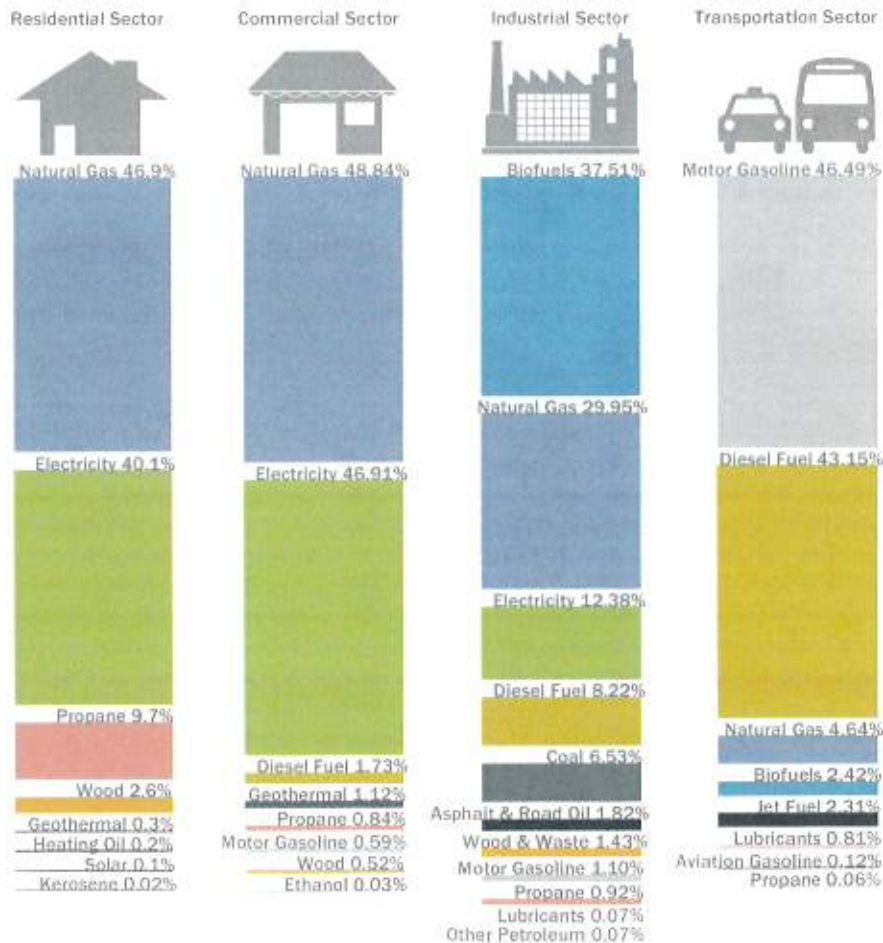


NEBRASKA ENERGY STATISTICS

Figure 28 illustrates Nebraska's net energy consumption by fuel type is broken down by residential, commercial, industrial and transportation sectors. A majority of the energy spent in the residential and commercial sectors in the form of natural gas and electricity is for heating, cooling, and lighting buildings. The industrial sector relies on biofuels for 37.51% of its energy consumption.

In 2011, the state of Nebraska relied on fossil fuels for an overwhelming majority of their energy needs. As Figure 29 depicts, energy consumption has continued to increase from year to year as Nebraskans consumed 871 trillion Btu's. Natural gas and renewable energy consumption are expected to increase in the future as concerns of climate change increase and as these sources become more economical.

Figure 28 Nebraska's Net Energy Consumption By Fuel Type, 2011



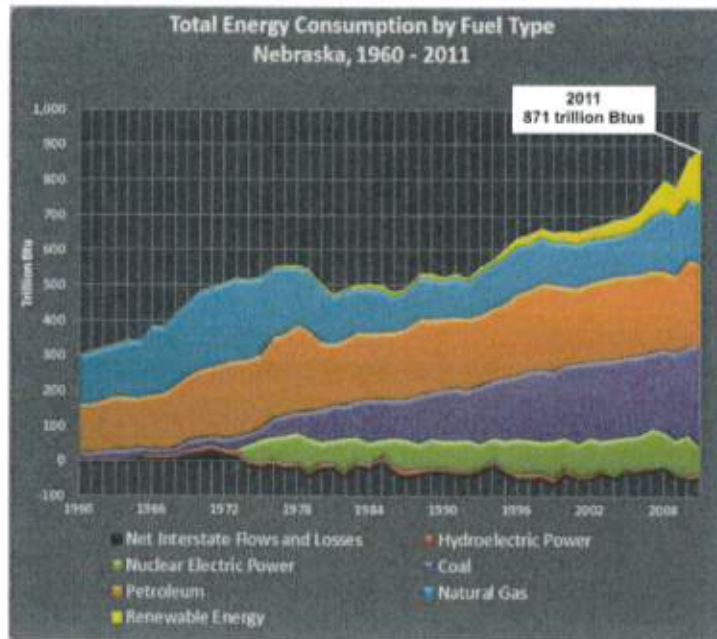
data source Nebraska League of Municipalities

2.7 UTILITIES

Energy Element

NE Energy Statistics





Figure 29 Nebraska's Total Energy Consumption By Fuel Type Trend



Sources: State Energy Data Report, Energy Information Administration, Washington, DC; Nebraska Energy Office, Lincoln, NE.

Table 12 reports how much energy Nebraska consumed in 2012 and how much money Nebraska spent on energy in 2012. Total energy consumption decreased by 10 trillion Btu from 2011 to 2012, or 1%. Even though transportation consumption was just under 23% of the total in 2012, Nebraska spent more money on transportation than residential, commercial and industrial energy uses combined. Cass County should look into strategies that will lower the consumption and cost of transportation because of the large expenditures of the state and the long average commute time in the County.

Table 12 Nebraska Energy Consumption and Costs By Sector, 2012

	 Residential	 Commercial	 Industrial	 Transportation	TOTAL
ENERGY IN TRILLION BTU					
	147.0	131.9	384.8	196.9	860.6
	17.1%	15.3%	44.7%	22.9%	100%
COSTS IN MILLIONS OF \$					
	1,390.3	990.5	2,289.5	5,423.0	10,093.3
	13.8%	9.8%	22.7%	53.7%	100%

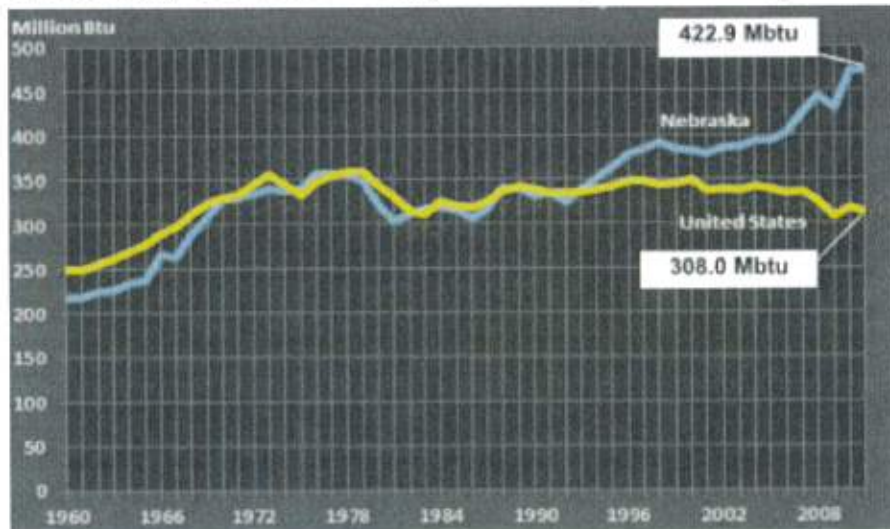
source Energy Information Administration (EIA), 2012.

NEBRASKA AGRICULTURE ENERGY STATISTICS

Prior to 1994, Nebraska and the U.S. were relatively parallel in per capita energy consumption, as seen in Figure 30. Between 1994 and 2011, Nebraska's per capita energy consumption continued to outpace that of the nation. One of the causes of this discrepancy was ethanol production. Ethanol facilities use considerable amounts of electricity and natural gas. In 1994, only 78.9 million gallons of ethanol were produced. In 2007, 1.282 billion gallons of ethanol were being produced in Nebraska.

The increase of ethanol production, along with other circumstances, led agricultural producers to change what was planted. From 2000-2010, Nebraska agricultural producers have routinely surpassed the billion bushel mark for corn harvested, reaching more than 1.469 billion bushels of corn for grain production in 2010. Irrigated corn is a more energy-intensive crop than soybeans, wheat or grain sorghum. Another cause of this increase is that many agricultural producers have switched from diesel to electricity to power irrigation systems. This trend can have multiple reasons but the statistics in Figure 31 show the long-term trend of electricity expenditures.

Figure 30 Nebraska / US Total Energy Consumption Per Capita Trend



sources State Energy Data Report, Energy Information Administration, Washington, DC. Nebraska Energy Office, Lincoln, NE.

2.7 UTILITIES

Energy Element



NE Energy Statistics

Figure 31 Nebraska's Electricity Expenditures in the Ag Sector Trend



sources State Energy Data Report. Energy Information Administration, Washington, DC.
Nebraska Energy Office, Lincoln, NE.

Cass County should encourage the use of conservation methods within agricultural production as well as encourage the use of renewable energy within agriculture. A Nebraska example of using renewable energy in agricultural production is the solar assisted center pivot irrigation system at the Beller farm near Lindsay.

RENEWABLE ENERGY SOURCES

Nebraska is the only state in the U.S. that is 100% public power. Since they are not seeking profits, public power districts have been able to maintain some of the lowest electricity prices in the nation. The low cost of energy is one of the reasons that Nebraska has not fully taken advantage of its renewable energy potential. Unlike places such as California, where electricity prices are high, renewable energy systems have historically not been economical for Nebraska.

With new proposed federal regulations, power plants will have to lower their carbon emissions by 30% by 2030. This means that heavy carbon emitters such as coal power plants will require retrofits or improvements in order to meet that goal. Since a large amount of the electrical energy consumed in Cass County comes from coal, this will most likely affect the price of electricity coming from these power plants. Therefore, it would be in Cass County's best economic interest to decrease per capita energy consumption and increase the amount of renewable energy produced in Cass County. Below is a summary of potential renewable energy options for Cass County. Although the focus of this subsection is on wind, hydro, solar, geothermal and biomass, all sources of renewable energy should be considered by Cass County in the future for their feasibility.

WIND

According to the American Wind Energy Association, Nebraska has one of the best wind resources in the United States, 92% of Nebraska has the adequate wind speeds for a utility scale wind farm. Nebraska ranks 3rd in the U.S. in gigawatt hour (GWh) wind generation potential, but has been slow in utilizing this resource compared to other states. Nebraska currently ranks 23rd in total megawatts (MW) installed with 534 MW. According to the National Renewable Energy Laboratory, Nebraska's wind potential at 80 meters hub height is 917,999 MW. Wind Power is capable of meeting more than 118 times the state's current electricity needs. Table 13 explains how OPPD has annually added wind capacity with 321.3 MW of wind capacity since 2011.

Table 13. Wind Capacity Additions Per Year

2011	124.5 MW
2012	122 MW
2013	74.8 MW
Total	321.3 MW

source: OPPD 2014 Annual Report

2.7 UTILITIES

Energy Element

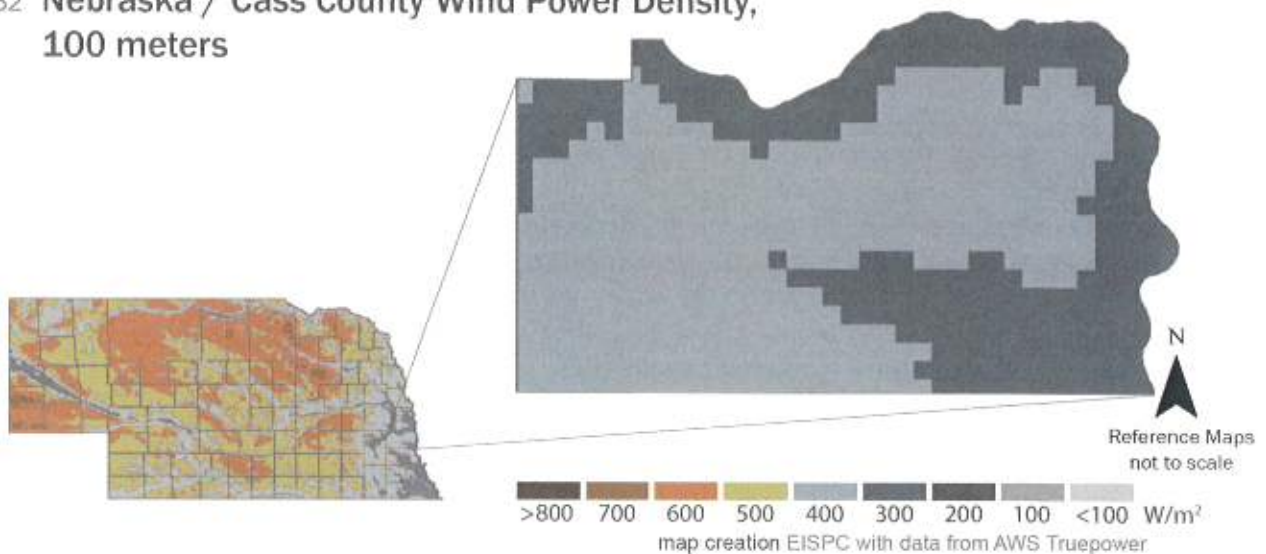


Renewable Energy Sources

WIND (CONTINUED)

Figure 32 represents the gross estimated annual average wind power density for Nebraska and Cass County. These data indicate how much energy is available for conversion by a wind turbine at a particular location. This map was created by the EISPC with data from AWS Truepower.

Figure 32 Nebraska / Cass County Wind Power Density, 100 meters



As the wind power density map indicates, Cass County and the rest of southeastern Nebraska have some of the lower wind energy resources in the state. Despite this, areas in Cass County may be suitable for a wind energy operation. Electricity produced through wind power is currently most cost effective on the utility/commercial scale in terms of dollars per kilowatt. Small scale wind systems for homes and businesses may not be as cost effective, but they should not be discouraged. Small scale wind systems can be utilized to lower the owner's monthly utility bill in areas with net metering.



HYDRO POWER

The electricity from hydropower consumed in Nebraska comes from the 11 dams in or on the border of the state and purchases from Western Area Power Administration. The amount of electricity produced from hydropower is relatively the same every year, unless affected by drought or an offline facility. According to the Nebraska Energy Office, studies conducted in 1981 and 1997 concluded that nearly all of the potential hydro resources had been developed, and that even under the most optimistic scenarios, less than 150 MW of additional power could be produced from existing or new hydro resources. Despite this, there are indications that micro-hydroelectric dams would be feasible in a number of settings across the state.

BIOMASS

Cass County should consider the feasibility of renewable energy generation from biomass because of the agriculture located in the County. Biomass (biodiesel, ethanol, landfill gas, methane, wood and wood waste) accounted for 81.7% of all renewable energy generated in Nebraska in 2011. The use of biomass can reduce the dependence on foreign oil because biofuels are the only renewable liquid transportation fuels available.

Direct-fired system

Most biomass plants that generate electricity use direct-fired systems. Simply, these plants burn biomass feedstock directly to produce steam. This steam turns a turbine, which turns a generator that converts the power into electricity. The feedstock for direct systems can be a number of things: wood and wood waste, agricultural residues, municipal solid waste, industrial waste and many others.

Biodiesel

The two Nebraska commercial scale plants in Arlington and Scribner have the estimated production capacity of 5.4 million gallons per year, but both have recently closed due to the price of soybeans used for feedstock.

Ethanol

Ethanol produced from corn and grain sorghum is a growing energy resource in Nebraska. According to the Renewable Fuels Association, Nebraska has the second largest ethanol production capacity in the nation and the second largest current operating production in the nation. Approximately 14% of the nation's ethanol capacity is in Nebraska's 27 ethanol plants.

91% of Nebraska's ethanol production goes to U.S. domestic markets, 5% is exported to other countries, and 4% is used by Nebraskans. The state's Ethanol Board estimates that 40% of Nebraska's corn crop and 75% of the state's grain sorghum crop are used in the production of ethanol.



BIOMASS (CONTINUED)

Ethanol consumption is mainly in the form of blended gasoline. Both ethanol production and consumption are expected to continue to increase as national legislation continues to affect state policies. The Renewable Fuel Standard, established in 2005 as a part of the Energy Policy Act, requires a minimum of 36 billion gallons of renewable fuel to be used in the nation’s gasoline supply by 2022. In 2013, 87 octane fuel without ethanol began to be phased out and replaced with an ethanol-blended 87 octane gas.

Landfill Gas

Landfill gas is extracted methane from landfill waste. OPPD’s Elk City Station facility uses landfill gas as a fuel source. Landfill gas is currently not a renewable energy option for Cass County as it does not have a landfill of its own. If circumstances change and Cass County does site a landfill within the county, a landfill gas operation should be considered.

Biogas

Biogas is a product of the decomposition of manure, via anaerobic digestion, and is typically made of about 60% methane, and 40% carbon dioxide. Biogas can be used to generate electricity, as a boiler fuel for space or water heating, upgraded to natural gas pipeline quality, or other uses. After the production of biogas, the remaining effluent is low in odor and rich in nutrients. The byproducts of biogas production can be used as fertilizer, livestock bedding, soil amendments or biodegradable planting pots. The feasibility of a biogas operation in Cass County should be explored.

For additional information about biogas visit: epa.gov/agstar/anaerobic/

SOLAR POWER

According to the National Renewable Energy Laboratory, Nebraska is ranked 13th in solar energy potential. Figure 33 depicts Cass County at a typical production range for Eastern Nebraska. Currently, solar technologies are marginally used in Nebraska because it has historically been difficult for solar technologies to compete with the state’s low electric rates. As of 2013, Nebraska has solar panel facilities at three sites: NPPD Norfolk Operations Center, OPPD Elkhorn Service Center, and LES Hyde Observatory (Nebraska Energy Office). According to the Department of Energy, the average hardware cost of solar panels has dropped more than 60%. Many utilities have incentives to help with the cost of solar, but additional steps should be taken to increase the amount of solar energy generated in Cass County.

As the cost of solar panels continues to decrease, solar can be utilized at an individual home or business scale to help supplement electrical needs. Solar can be useful in remote locations such as farms or ranches where solar systems can be less expensive than installing new transmission lines.



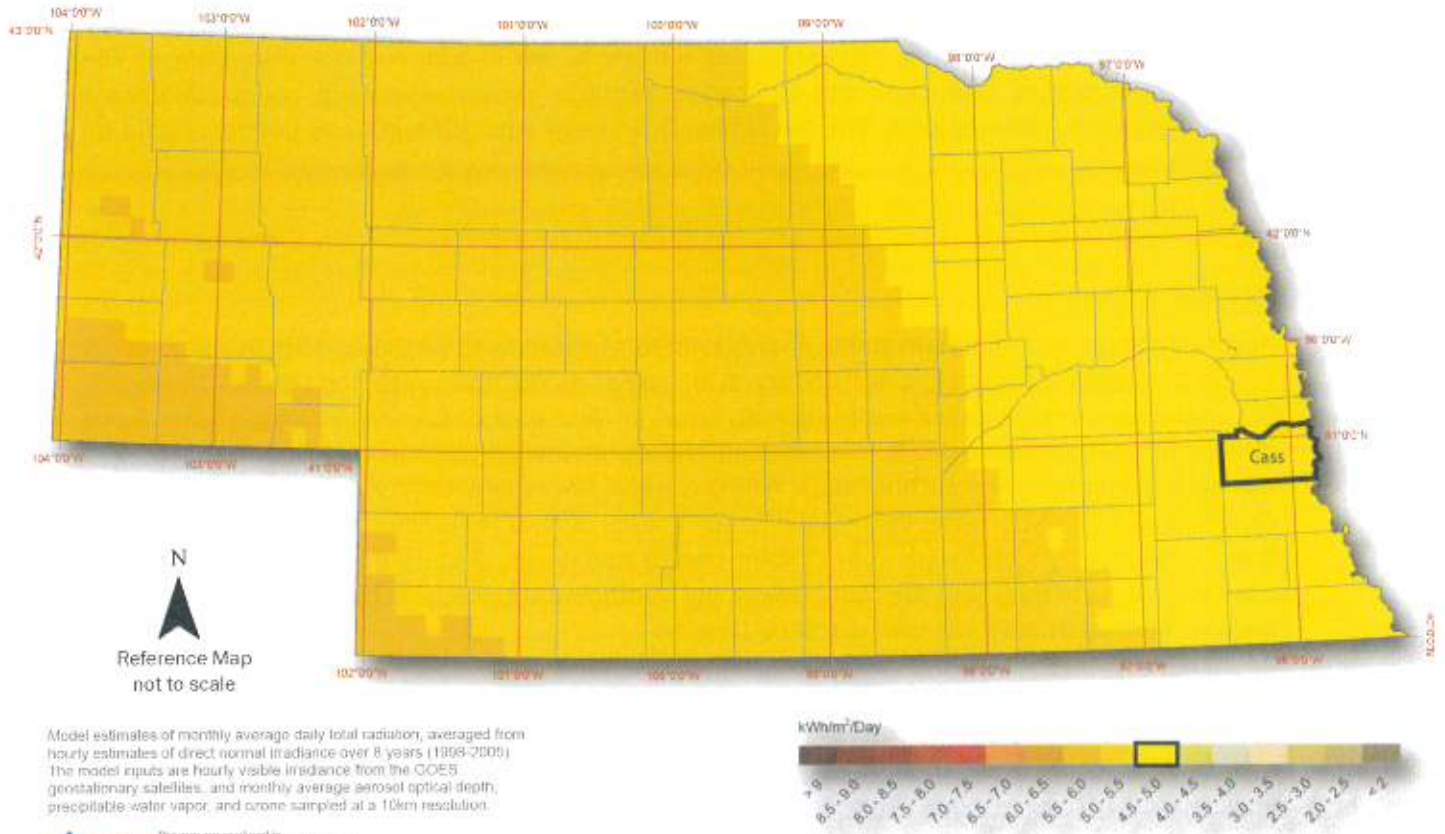
Passive solar

Passive solar design takes advantage of a building's site, climate, and materials to minimize energy use. A well-designed passive solar home first reduces energy use for heating and cooling through energy-efficiency strategies and then meets the reduced need in whole or part with solar energy. In simple terms, a passive solar home collects heat as the sun shines through south-facing windows and retains it in materials that store heat, known as thermal mass.

This National Renewable Energy Laboratory (NREL) map has additional detailed information that may be hard to read. It states:

"Model estimates of monthly average daily radiation, averaged from hourly estimates of direct normal irradiance over 8 years (1998-2005). The model inputs are hourly visible irradiance from the GOES geostationary satellites, and monthly average aerosol optical depth, precipitable water vapor, and ozone sampled at a 10km resolution."

Figure 33 Annual Global Solar Radiation at Latitude Tilt, 2007



Model estimates of monthly average daily total radiation, averaged from hourly estimates of direct normal irradiance over 8 years (1998-2005). The model inputs are hourly visible irradiance from the GOES geostationary satellites, and monthly average aerosol optical depth, precipitable water vapor, and ozone sampled at a 10km resolution.



This map was produced by
the National Renewable Energy Laboratory
for the U.S. Department of Energy
September 25, 2007



GEOHERMAL

There are three geothermal resource applications: electricity production, direct use, and geothermal systems. Although the utilization of geothermal energy has the potential of environmental impacts due to differing temperatures and the release of chemicals and metals from the earth, the impacts are minimal compared to the impacts of traditional forms of energy. Potential impacts from geothermal energy can be easily mitigated using existing strategies and technologies.

Electricity Production

Generating electricity from geothermal resources requires drilling a well into an underground reservoir of water that can be as hot as 700 degrees Fahrenheit. The trapped steam is brought to the surface to turn a turbine that produces electricity. This resource can also be utilized on the surface at hot springs or geysers.

Direct Use

In direct use systems, a well is drilled into a geothermal reservoir to provide a steady stream of hot water ranging between 50 and 60 Fahrenheit. Water is brought up through the well and a system of piping, a heat exchanger, and controls delivers the heat directly for its intended use. A disposal system then either injects the cooled water underground or disposes of it on the surface.

Geothermal hot water can be used for many applications that require heat (up to 145 degrees for radiant applications). Its current uses include heating buildings, raising plants in greenhouses, drying crops, heating water at fish farms, and several industrial processes.

Geothermal systems

The type of geothermal application that is most practical and economical for the residents of Cass County is the use of geothermal heat pumps. Geothermal heat pumps are slowly becoming a popular method of heating and cooling buildings. Heat pumps use much less energy than traditional heating and cooling systems. This translates into energy and money savings while also reducing air pollution. There are many state and utility level incentives to help with the initial cost of geothermal energy.

There are two different types of heat pumps: closed loop systems and open loop systems also known as "pump and dump." Closed loop systems move fluids through continuous pipeline loops that are buried underground at depths where the temperature does not fluctuate much. Heat picked up by the circulating fluid is delivered to a building through a traditional duct system. Geothermal heat pumps discharge waste heat into the ground in the summer months and extract heat from the ground in the winter months.

Open loop systems require an ample source of ground water. An open loop system pumps water directly from a ground water source into a building where it is used for heating and cooling. The used water is either deposited on the surface in a pond or river, or back into the water source. Open loop systems may have environmental impacts due to introducing higher temperatures and minerals into the water sources. Open loop systems may also deplete the surrounding water supply.

EDUCATION

Cass County will not be able to achieve their energy goals without the help of its citizens. Cass County should educate the public on the benefits of energy efficiency and the most feasible renewable energy systems. In the following subsections there are resources provided that Cass County can use to raise awareness regarding energy efficiency and renewable energy systems.

Energy Saving Tips

Cass County residents and businesses are encouraged to take advantage of the following energy saving information:

The Nebraska Energy Office has listed ways to save money on energy bills for the home, farm, business, or vehicle. Options for energy savings are listed on the Office's web site at neo.ne.gov/tips/tips.htm.

On their homepage, www.nppd.com, Nebraska Public Power District has a Save Energy website which has more informational energy tips and incentives for your home and business.

Cornhusker Power has links to many energy saving videos:
cornhusker-power.com/index.asp

The U.S. Department of Energy created a document that explains tips on saving money and energy at home: energy.gov/sites/prod/files/2014/05/f16/Energy_Saver_Guide_Phase1_Final.pdf

Energy Assistance Programs

Residents wanting help paying their utility bills can visit this website with links to many programs in Nebraska: nebraskaenergyassistance.com/assistance/

The Weatherization Assistance Program helps lower income families save on their utility bills by making their homes more energy efficient. The Nebraska Energy Office administers the federally-funded program. In May 2012, the Southeast Nebraska Community Action (SENCA) completed weatherizing their 300th home which was located in Avoca.

This website describes the program and how to apply: <http://www.neo.ne.gov/wx/wxindex.htm>

Financial Incentives

Nebraska has a number of financial incentives for renewable energy production and energy efficiency:

- Renewable Energy Tax Credit (Corporate)
- Renewable Energy Tax Credit (Personal)
- Property Tax Exemption for Wind Energy Generation Facilities
- Sales and Use Tax Exemption for Community Wind Projects
- Sales and Use Tax Exemption for Renewable Energy Property
- Dollar and Energy Savings Loans (State Loan Program)



Many Utilities have rebate programs for energy efficiency or renewable energy systems. For summaries of additional programs, incentives and policies in Nebraska visit the Database of State Incentives for Renewables & Efficiency (DSIRE) website:

dsireusa.org/incentives/index.cfm?re=0&ee=0&spv=0&st=0&srp=1&state=NE

Jobs and Economic Development Impact Models (JEDI)

Developed for the National Renewable Energy Laboratory, the JEDI models were created to demonstrate the economic benefits associated with renewable energy systems in the United States. This model can be used by anyone: government officials, decision makers, citizens. The model is simple, the user enters in information about the project and it will generate economic impact data such as jobs, local sales tax revenue etc.

Recycling and Composting

Recycling and composting preserves energy by reducing the energy needed to extract raw materials. These practices also reduce the amount of solid waste, which lessens the need for a landfill within Cass County. The Cass County Stewardship Council has been formed to research the future of Cass County's needs and in the process of updating the county's 1994 Solid Waste Plan. Cass County recycling is in the form of single stream. Therefore, residents bring their recyclables to a trailer in town, and that trailer is brought to a collecting station in Omaha. As of 2014, few communities in Cass County have curbside recycling as a part of their normal trash collection. Recycling and composting should be encouraged within Cass County.

In 2014, Keep Cass County Beautiful (KCCB) was awarded a grant from the Nebraska Department of Environmental Quality. This grant is to be used to provide public education on the subjects of litter awareness, litter reduction and recycling services. KCCB will use funds towards recycling education in schools, civic organizations, local governments, local fairs and other venues. The grant will also be used to provide recycling bins and cigarette litter receptacles to requesting communities.



Conestoga FFA members during the Great American Cleanup
source www.keepcasscountybeautiful.com



GOALS AND STRATEGIES

The following is a summary of the goals and strategies suggested for Cass County.

GOAL 1

Reduce per capita energy consumption within Cass County

CONSERVATION STRATEGIES INCLUDE

- 1** Create local jobs. Economic development that increases the number of quality jobs in the county will reduce the need for commuting
- 2** Encourage rideshare and car-share programs
- 3** As county vehicles are decommissioned, consider replacing them with alternative fuel or fuel efficient vehicles
- 4** Continue to make energy efficiency upgrades to county buildings and operations
 - Consider energy audits for county buildings
 - Make a policy that as light fixtures and appliances need replacing, they are replaced with ENERGY STAR certified products or equivalent
 - Consider creating green funds from energy savings that pay for continuous energy efficiency and renewable upgrades within county operations
- 5** Consider zoning bonuses or waiving fees for buildings with energy efficiency or renewable energy systems
- 6** Encourage recycling and composting throughout the County



GOAL 2

Increase the amount of renewable energy produced within Cass County

RENEWABLE ENERGY STRATEGIES INCLUDE

- 1 Renewable energy strategies include
 - Encourage renewable energy systems in all sectors
 - Solar- buildings and agricultural operations
 - Geothermal- buildings
- 2 Wind- commercial/utility scale and small scale
- 3 Determine the feasibility of a biomass or biogas operation within Cass County
- 4 Ensure zoning requirements do not unnecessarily restrict renewable energy systems
- 5 Streamline permit process to reduce the soft costs of installing renewable energy systems
- 6 Consider including solar access requirements in zoning ordinance for onsite net metering
- 7 Encourage passive solar in new subdivisions
- 8 Consider installing renewable energy system to a county building as a pilot project

GOAL 3

Educate Cass County residents on the benefits of energy efficiency and renewable energy and programs that help with the costs

EDUCATION STRATEGIES INCLUDE

- 1 Provide links to energy efficiency and renewable energy resources on the Cass County website
- 2 Continue to support Keep Cass County Beautiful and The Stewardship Council
- 3 Encourage the use of energy tracking tools such as EPA's Energy Star
- 4 Recognize and promote projects that advance the goals and strategies of the energy element
- 5 Report results of energy savings to the public



ACKNOWLEDGMENTS

This energy element was created using data and graphics from the following:

- The Nebraska Energy Office
- National Renewable Energy Laboratories (NREL)
- U.S. Department of Energy (DOE)
- Omaha Public Power District (OPPD)
- Nebraska Public Power District (NPPD)
- U.S. Energy Information Administration (EIA)
- Eastern Interconnection States' Planning Council (EISPC)
- AWS Truepower
- American Wind Energy Association
- U.S. Environmental Protection Agency
- American Community Survey
- Social Explorer

2.8 NATURAL AND ENVIRONMENTAL CONDITIONS



This section will review different environmental and natural resource issues which will provide opportunities and constraints upon future development within Cass County. In 1987, the United Nations World Commission on the Environment and Development defined the term “sustainable development.” This phrase states that our environment must be protected, and resources used in an efficient and logical manner. If the world’s economy is to develop completely and society’s present and future needs are to be satisfied, development should occur without jeopardizing the ability of future generations to satisfy their needs and desires.

CASS COUNTY LOCATION AND HISTORY

Cass County’s natural characteristics feature two major rivers, and the underlying geology has formed the county into a unique Nebraska natural habitat (experience). Visitors can experience the topography which yields great views overlooking vast valleys. Cass County’s fertile soil increases crop yield for dryland farming. Residents and their livelihoods have been affected both positively and negatively by its natural environment and conditions since Cass County settlers arrived in the 1800s.

Natural disasters have affected the Cass County communities. For example, evidence of flooding is found in historical photographs of Louisville’s 1923 Platte River flood to the present day experience of the Missouri River flood which affected Plattsmouth’s downtown in 2011.

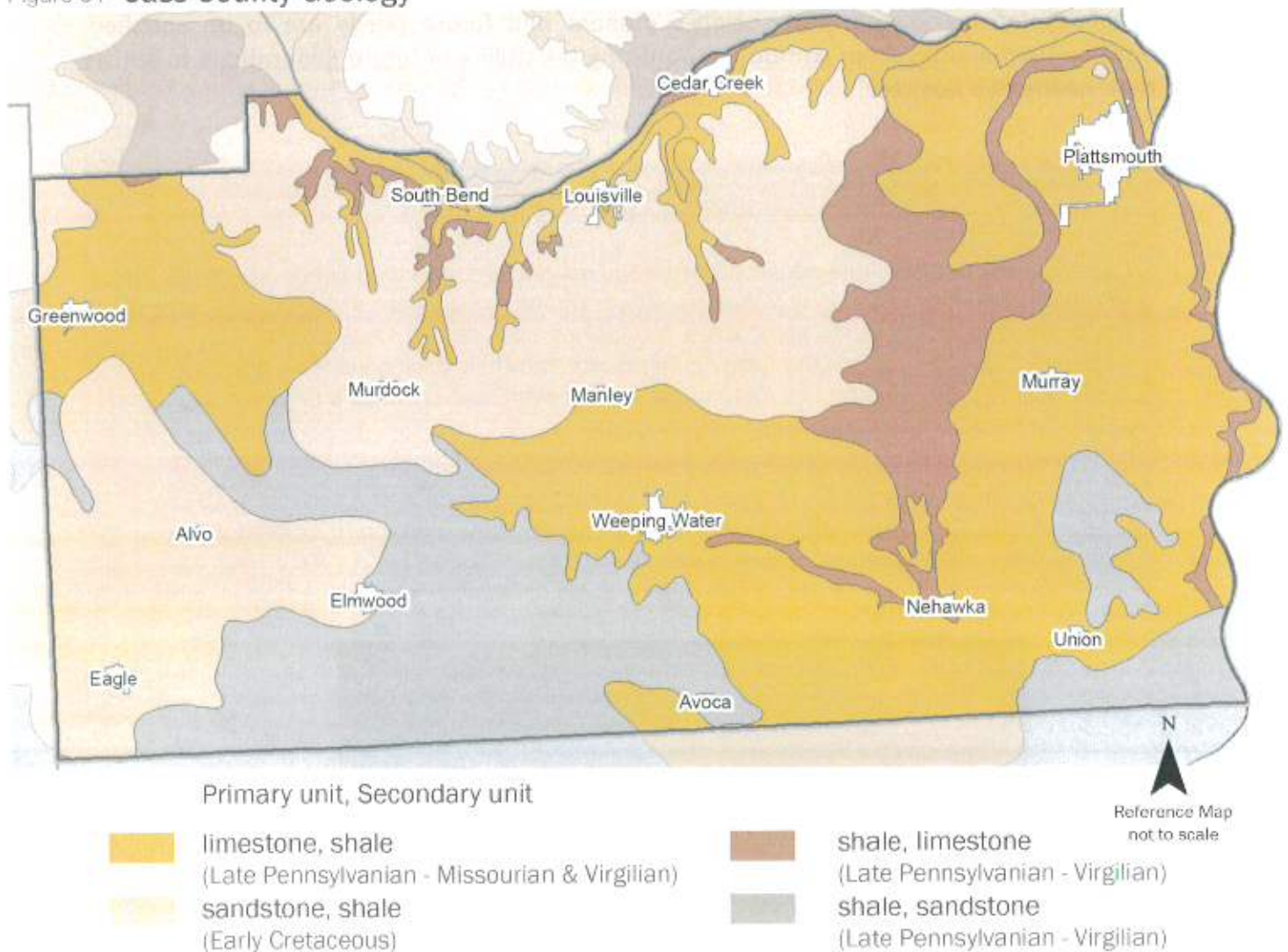


2.8 NATURAL AND ENVIRONMENTAL CONDITIONS
History

GEOLOGY

There are a number of natural constraints which determine future land uses in the county. Cass County's productive agricultural land has limestone quarries underneath. Figure 34 depicts the generalized, geologic boundaries in Cass County. The composition of limestone varies as well as the quality and age. The limestone age is either Late Pennsylvanian - Missourian or Late Pennsylvanian - Virgilian. Private companies extract this resource with surface and underground mining. This industry gives Cass County unique occupations and correlates both the current land uses and future land uses.

Figure 34 **Cass County Geology**



Soils

SOILS

There are a number of natural constraints which determine future land uses in the county. The interaction of materials that have been deposited or accumulated by geologic process produced Cass County soils.

The characteristics of the soil at any given point are determined by:

- (1) the physical and mineralogical composition of the parent material;
- (2) the climate under which the soil material has accumulated and existed since accumulation;
- (3) the plant and animal life on and in the soil;
- (4) the relief, or lay of the land; and
- (5) the length of time the forces of soil development have acted on the soil material.

SOIL ASSOCIATIONS

The type of soils found throughout the county can be a major factor on what types of activity will be present in the area. Certain soils are more compatible to dryland crop production, while some soils do not lend themselves well to any crop production, and others are compatible to handle the demands of residential, commercial and industrial developments. As shown in Figure 35, the 1983 Generalized Soil Map, Cass County's general soil associations still accurate with a couple name changes in the association categories. The Sharpsburg soil was removed, shown as number 4, 5, and 10 in the 1983 general soils drawing, and since replaced with a mixture of Yutan and Aksarben Soil Associations. The majority of the County has either Yutan Association or Marshall Association. These areas contain the majority of prime farmland within Cass County.

1 **Kennebec-Colo-Zook Association**

Deep, nearly level, moderately well drained to poorly drained silty and clayey soils that formed in alluvium; on bottom lands

2 **Nodaway-Judson-Colo Association**

Deep, nearly level to gently sloping, well drained to poorly drained, silty soils that formed in alluvium and colluvium; on bottom lands and foot slopes

3 **Haynie-Sarpy-Onawa Association**

Deep, nearly level and very gently sloping, somewhat poorly drained to excessively drained, silty, clayey, and sandy soils that formed in alluvium; on bottom lands

4 **Aksarben Association**

Very Deep, nearly level to strongly sloping, moderately well-drained, silty soils on uplands

5 **Yutan Association**

Very Deep, gently to strongly sloping, well drained, silty clay loam soils that formed in loess; on uplands

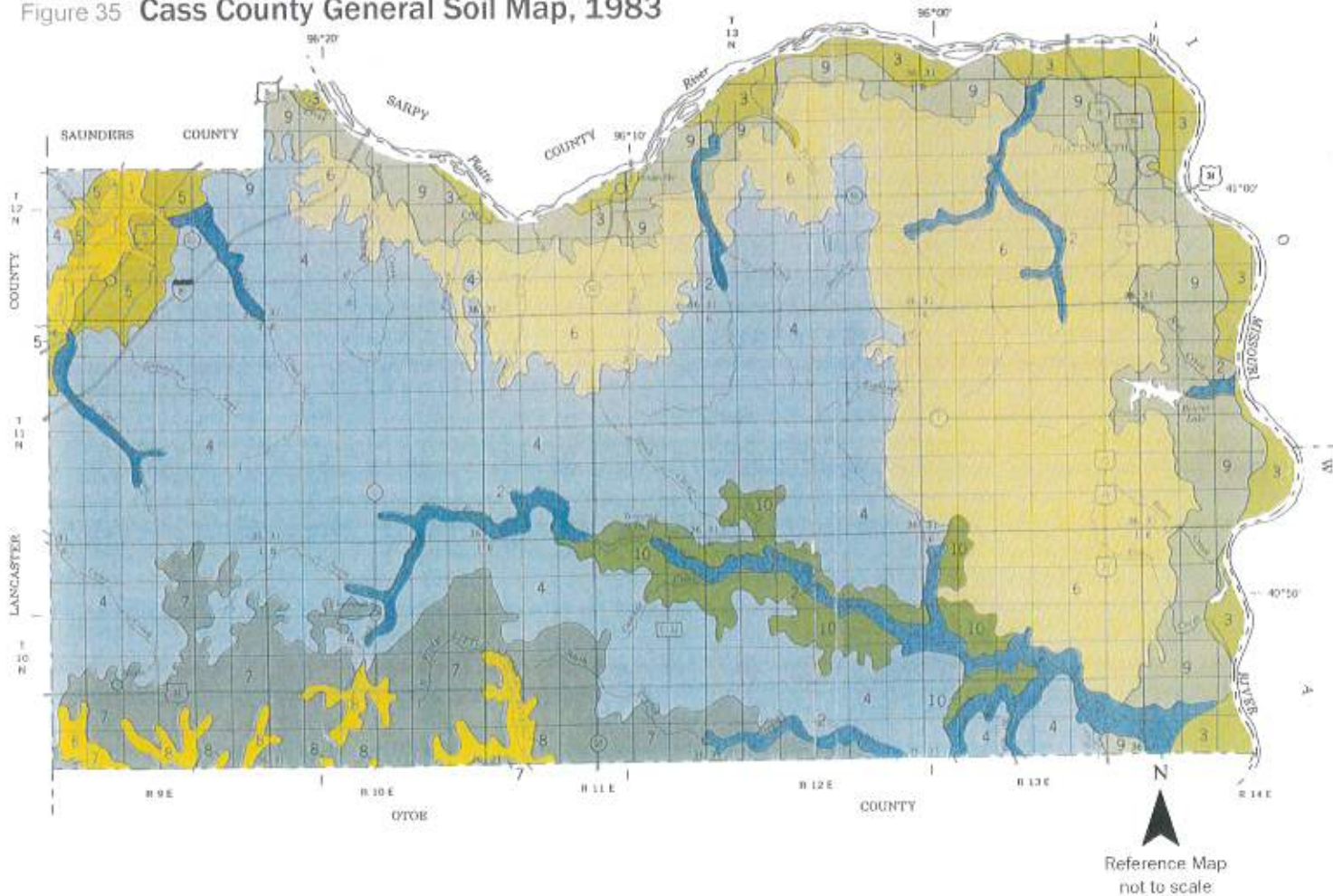
2.8 NATURAL AND ENVIRONMENTAL CONDITIONS

Soils

Soil Associations

- 6** **Marshall Association**
Deep, gently sloping to moderately steep, well drained, silty soils that formed in loess; on uplands
- 7** **Wymore Association**
Deep, nearly level to strongly sloping, moderately well drained, silty soils that formed in loess; on uplands
- 8** **Mayberry-Nodaway-Pawnee Association**
Deep, nearly level to strongly sloping, moderately well drained, silty and loamy soils that formed in glacial deposits and alluvium; on uplands and bottom lands
- 9** **Monona Association**
Deep, gently sloping to very steep, well drained, silty soils that formed in loess; on uplands
loess on uplands and stream terraces.

Figure 35 Cass County General Soil Map, 1983



SOIL CONSTRAINTS

SLOPE

The slope of soils within a county can have an impact on the types of uses performed. Cass County has a wide variety of slopes located throughout the county. The County has steep slopes on one end and nearly level slopes on the other as shown in Figure 36.

Cass County has steep sloping soils along the Platte River and the Missouri River. These slopes tend to form a boundary along the north county line and the State line on the east. The slopes tend to be setback approximately one-half mile to one-mile from the respective rivers. Steep soils are typical of Monona Association and cover approximately 9 percent of the County's total area. Due to the steepness of the slopes, farming operations tend to be limited to the ridgetops and the gently and strongly sloping areas. The steepest areas tend to have grass and trees. The areas between the steeper slopes and the Platte and Missouri Rivers are nearly flat and are a part of the river valleys. As stated from multiple soil surveys and the slope map, the majority of the County is covered with nearly level to moderately steep areas.

SUITABILITY FOR SEPTIC SYSTEMS

Soil suitability for septic systems is critical in determining areas where septic system do not present a contamination risk to the local environment. With the growth Cass County has seen in its population and rural residential development, these data are important for determining future residential, commercial and industrial developments. Larger development of these types should be discouraged if septic systems are the only means of waste disposal.

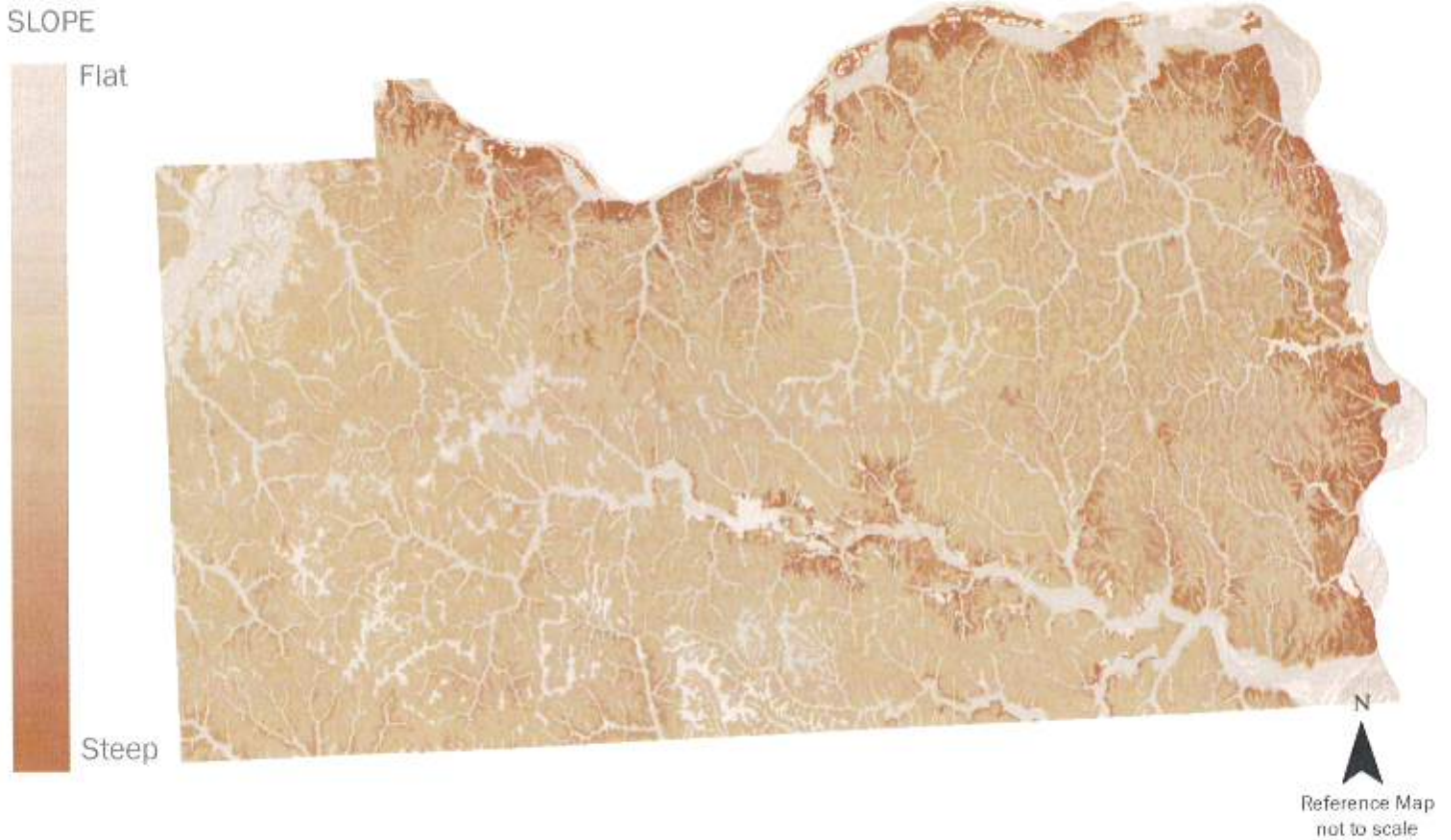
The primary location for soils which present a severe condition for septic systems are along the Platte and Missouri Rivers, and in the Eagle vicinity east along the Cass and Otoe County line. As development occurs throughout Cass County, caution needs to be taken in the severe areas; however, these data are generalized and septic systems may be acceptable in some locations.

In order to determine if an area is acceptable or not, the proper testing, as prescribed by the Nebraska Department of Health and Human Services and the Nebraska Department of Environmental Quality, should be performed. Where soils types present problems for septic systems, there may be means available to accommodate development, this may include a central waste collection system with a treatment facility or lagoon. However, lagoons may present a potential problem which are examined in this section.

Soils which have a severe condition regarding septic systems may have any number of contributing factors involved with this determination. Examples of this include:

- too much clay
- too sandy
- too much slope
- located within floodplain

Figure 36 Cass County Slopes



Picture taken in Northwest Cass County

SUITABILITY FOR LAGOONS

Soil suitability for lagoon systems is similar to those for septic systems. These data can be used to determine if lagoons are suitable in a particular area. Steps need to be undertaken to assure that wastewater is adequately handled in areas with severe conditions. The Nebraska Department of Health and Human Services and the Nebraska Department of Environmental Quality have specific guidelines and regulations to follow.

Some of the conditions which affect the construction of lagoon systems are:

- soil types
- slope
- floodplains and floodways

In most cases, soils containing clay are adequate to handle lagoons while sandy soils are undesirable. Sandy soils are undesirable due to the potential for wastewater to seep into the ground and groundwater before proper biological processes are allowed to occur, and the treated water discharged. Steep slopes create concern for the construction of lagoon systems due to the difficulty associated with the engineering and construction. However, some strong sloping and steep sloped areas do not have the proper soils as indicated in the above paragraph. Lagoons should be placed in a level to moderately sloping area in order to minimize complicated engineering and construction.

Construction of lagoon systems within a floodplain or floodway fringe should occur only as a last resort. The Nebraska Department of Environmental Quality, Nebraska Department of Health and Human Services, Nebraska Natural Resources Commission, United States Environmental Protection Agency (US EPA) and the Federal Emergency Management Agency (FEMA) have laws and regulations governing the construction in flood-prone areas. Construction of a lagoon system within a floodplain can create problems during years when flooding is present. Flood waters can either harm the integrity of the lagoons containment structure or overflow into the lagoon. If the integrity of the lagoon structure is jeopardized, the potential becomes greater for the lagoon dike to collapse and discharge untreated wastewater and solids. Thus, contamination of downstream waters and soils. Under no circumstances will a lagoon system be allowed to be constructed within the floodway.

A majority of Cass County's soils has a severe condition related to lagoon systems. The first impression would suggest that development is difficult or impossible in Cass County. However, there are ways to overcome these severe conditions, a few steps are as follows:

soil testing in these areas may find small pockets of soils which are adequate for lagoons, lagoons can be constructed provided that the proper soils are transported into Cass County for the construction of the lagoon system

lagoons might be constructed in these areas if the proper liners (synthetic or natural) are installed along the floor and walls of the lagoon.

Areas with severe limitations do not indicate where development must not occur, only where special consideration and actions will be needed when constructing a lagoon system for any development.

2.8 NATURAL AND ENVIRONMENTAL CONDITIONS

Soils

Suitability Inventory

SUITABILITY INVENTORY

Each development should be reviewed to meet the recommended criteria in Table 14 as well as previous suggestions. Each soil designation is a generalized category and conditions may vary slightly at individual sites. Developers who work within Cass County are recommended to provide the specific soil data to the County regarding each particular development and any special engineering which will be required to overcome any soil limitations.

Table 14 **Cass County Soil Associations And Suitability**

Soils	LIMITATIONS FOR SEPTIC SYSTEMS	LIMITATIONS FOR LAGOON SYSTEMS
Kennebec	Severe; flooding and wetness	Severe; flooding and wetness
Colo	Severe; wetness, flooding and perks slowly	Severe; wetness and flooding
Zook	Severe; percolates slowly, wetness and flooding	Severe; wetness and flooding
Nodaway	Severe; flooding and wetness	Severe; flooding and wetness
Judson	Slight;	Moderate; seepage and slope
Haynie	Severe; flooding	Severe; flooding
Sarpy	Severe; flooding and poor filter	Severe; seepage and flooding
Onawa	Severe; wetness and flooding	Severe; wetness, seepage and flooding
Sharpsburg	Moderate; percolates slowly and slope	Moderate; seepage and slope
Fillmore	Severe; percolates slowly and ponding	Severe; ponding
Marshall	Slight; Moderate; slope	Moderate; seepage and slope Severe; slope
Wymore	Severe; wetness, percolates slowly, and flooding	Slight; Moderate, slope; Severe; slope, wetness and flooding
Mayberry	Severe; wetness and percolates slowly	Severe; slope
Pawnee	Severe; percolates slowly and wetness	Severe; slope
Monona	Slight; Moderate; slope	Moderate; seepage and slope Severe; slope
Sogn	Severe; depth of rock and slope	Severe; depth of rock and slope
Aksarben	Moderate to severe; slope	Moderate; seepage and slope
Yutan	Moderate to severe; slope	Moderate; seepage and slope

sources Soil Survey of Cass County, Nebraska, USDA Soil Conservation Service, 1983; USDA NRCS Web Soil Survey, Custom Soil Resource
* The descriptions vary due to fluctuating percentages and slopes found in Cass County

LAND CAPABILITY CLASSES

The USDA Land Capability Classification System is a grouping of specific soil properties. The land capability classifications varies throughout Cass County, but the majority of Prime Farmland was IIe or IIIe which are both good soils with a concern or history of erosion problems. The prime farmland map depicts a large number of acres as statewide importance, this soil designation is related to runoff potential with higher slopes. Despite the related slopes, most of Cass County soil is prime farmland due to terracing for maximum production of the land.

Land Generally Suitable for Cultivation

Class I: land is on well-drained, nearly level soils.

Class II: land has a few limitations that reduce the choice of crops and require moderate conservation practices.

Class III: land has severe limitations that reduce the choice of plants and require special conservation practices.

Class IV: land has very severe limitations that restrict the choice of plants and require very careful management.

Land Generally NOT Suited for Cultivation

Class V: land has little or no erosion hazard, but has other factors that limit its use largely to pasture, range, woodland, or wildlife food and cover.

Class VI: land has very severe limitations that make it generally unsuited for cultivation and limit its use to pasture or range, woodland, or wildlife food and cover.

Class VII: land has very severe limitations that make it unsuited for cultivation and that restrict its use largely to grazing, woodland, or wildlife.

Class VIII: land consists of landforms that have conditions that severely limit their use for commercial plant production and restrict their use to wildlife, recreation, water supply or aesthetic purposes.

HYDROLOGIC SOIL GROUPS

The hydrologic soil groups of the five, largest associations in Cass County varied between Group B, C, and D. The soils that are of Statewide Importance were generally Group D which identifies those soils as "moderately high runoff potential." The majority of Prime Farmland consistently had Group C. This categorizes the soils to have moderately high runoff potential when thoroughly wet. Group C soil typically has 20 to 40% clay and less than 50 percent sand and have loam.

There are additional smaller areas scattered throughout the county. They may be more productive but smaller in size. These data are provided to assist in identifying locations where agricultural activities might be preserved. It has been the goal of the steering committee and public concern to preserve the agricultural industry and these statistics and coverage of the map support this desire.

However, this does not mean that all these areas must be preserved, nor does it indicate that only these areas in Cass County are suitable for preservation. These data may be instrumental in the development of future land uses and growth policies for Cass County.

Hydrologic Groups

Group A: low runoff, less than 10% clay and more than 90% sand and gravel

Group B: moderately low runoff potential, 10-20% clay and 50-90% percent sand, gravel, sandy loam textures

Group C: moderately high runoff potential, 20-40% clay and less than 50% sand and have loam, silty clay loam textures

Group D: high runoff potential, more than 40% clay, less than 50% sand with clayey textures, high shrink-swell potential

PRIME FARMLAND

Prime Farmland is determined by three factors: the type of soils, the slopes of the soils, and the ability for the soil to drain properly. The largest amount of Prime Farmland and Statewide Importance is the Yutan Association (formerly Sharpsburg) with over 100,000 acres. The next largest farming soil is the Marshall Association with more than 24,000 acres and an additional 40,000 of Statewide Importance. Three other large soil associations contain a fair amount of Prime Farmland are the Aksarben Association with over 24,000 acres, Wymore Association with 19,000 acres, and Judson Association with more than 17,000 acres.

Cass County has a long standing for an abundance of quality soils for its successful agricultural economy. The 'Prime Farmland' and 'Farmland of Statewide importance' labels are designations that represent a soil that produces well when the proper agricultural techniques are applied to its associated erosion issues. With proper agricultural intervention, the vast majority of Cass County has the equivalent of Prime Farmland if the erosion problems are addressed.



Floodplain

FLOODPLAIN

Flood Hazard Areas represent another set of environmental issues that need to be dealt with properly. As shown in the Floodplain diagram (Figure 37), floodplains include the Channel, the Floodway, and the Floodway Fringe (flat area adjacent to the channel of a stream or river that has been covered with floodwater). The Floodway includes the main channel of a stream or river and the area which handles the additional flows during times of flooding. The Floodway Fringe is the relatively flat area adjacent to the Floodway. Fringe area includes the total area engulfed by flood waters plus an additional 25% of the regulatory base flood discharge. The Floodway Fringe, when combined with the Floodway, is known as the 100-year Floodplain. Other floodplains can consist of a 10-year, 50-year, and 500-year storm event. The 100-year floodplain represents an area that has a 1% chance of flooding every year or 100% chance of flooding at least once in a 100-year period. The 100-year floodplain is used as a guide for development areas within counties and communities.

Figure 38 depicts the considerable amount of Cass County land within the Flood Hazard Area. The primary areas for this designation is along the Platte River, North Folk Little Nemaha River, and the Missouri River. Besides these three rivers, the other areas where Flood Hazard Areas are present include several major creeks (Weeping Water Creek, Greenwood Creek, etc.). Within these areas, special construction and development criteria must be undertaken in order to eliminate the potential for extreme damage and loss of life during a flood event. The Nebraska Natural Resources Commission and the Federal Emergency Management Agency (FEMA) administrate the laws governing these Flood Hazard Areas. Specific restrictions in the Flood Hazard Area include:

Finished Floor elevations on structures must be at least one foot above the base flood elevation within the Floodway Fringe. Habitable basements are not allowed within the 100-year floodplain; however, uninhabitable basements may be below the 100-year base flood elevation.

Structures are prohibited to being constructed within the Floodway if there is an increase in the base flood elevation. An engineering analysis needs to be completed, and its findings supported by a No-rise Certification that states the proposed development in the floodway will not raise the water surface more than 0.00 feet.

Cass County has significant floodplains located alongside its many waterways. Development should be aware of its surroundings and take precautions with new federal regulations and higher flood insurance premiums. Building within a floodplain is discouraged due to the difficulty of ensuring safety and the potential damage a development can have on that natural environment. Alternative land uses for 100-year floodplains are less intensive uses such as agriculture, recreation, or open space.

Floodplain

Figure 37 General Floodplain Diagram

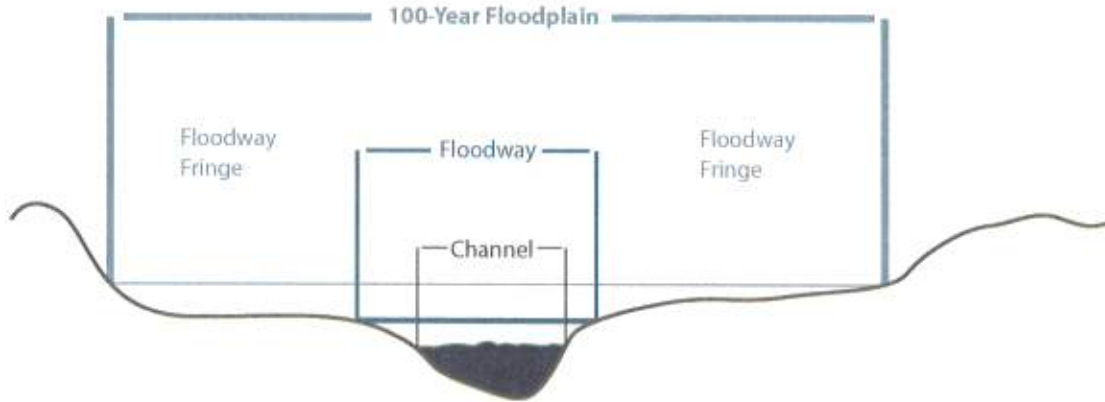
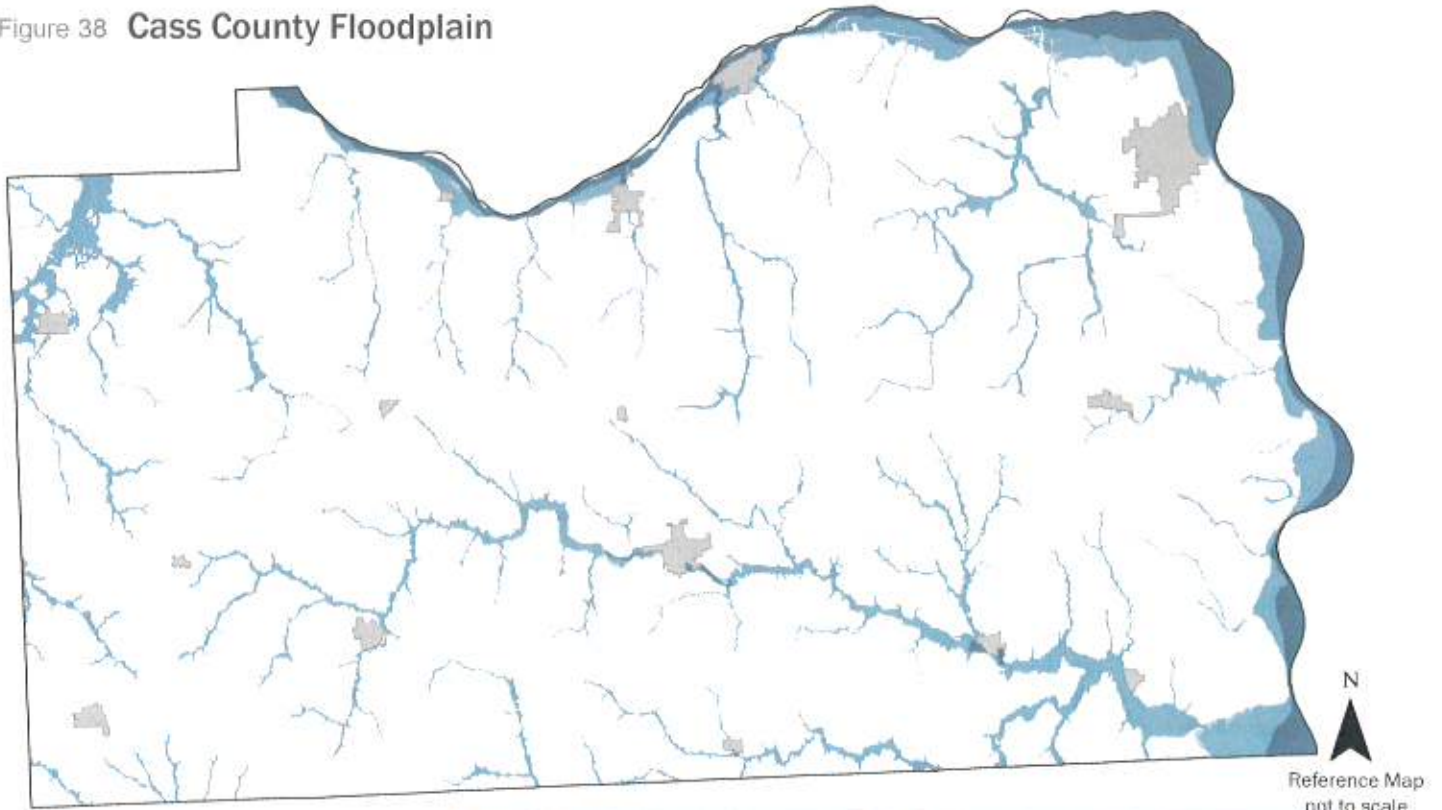


Figure 38 Cass County Floodplain



FLOODWAY
100-YEAR FLOODPLAIN = 1% ANNUAL CHANCE OF FLOODING
500-YEAR FLOODPLAIN = 0.2% ANNUAL CHANCE OF FLOODING

2.8 NATURAL AND ENVIRONMENTAL CONDITIONS
Wellhead Protection

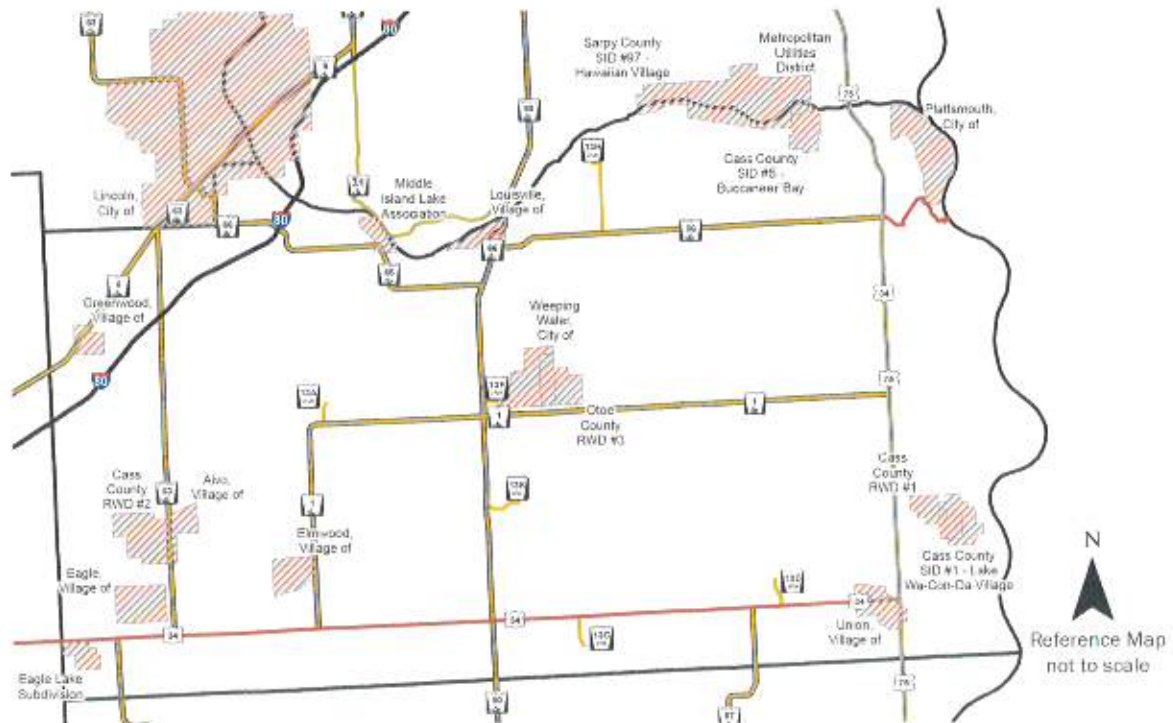
WELLHEAD PROTECTION AREAS

As the Nebraska Department of Environmental Quality (NDEQ) website states: "Nebraska's Wellhead Protection (WHP) Program is a voluntary program which assists communities and other public water suppliers in preventing contamination of their water supplies." The Nebraska Legislature passed LB 1161 in 1998 (Neb. Rev. Stat. §46-1501 - 46-1509), authorizing the Wellhead Protection Area Act. This Act sets up a process for public water supply systems to use if they choose to implement a local Wellhead Protection plan. The Nebraska Department of Environmental Quality (NDEQ) is the lead agency for Wellhead Protection (WHP) Plan approval.

The goal of Nebraska's Wellhead Protection Program is to protect the land and groundwater surrounding public drinking water supply wells from contamination. Since approximately 85% of Nebraskans receive their drinking water from groundwater, preventing groundwater contamination is vital.

Since 2004, every community within the State of Nebraska has a delineated wellhead protection area. As shown in Figure 39, Cass County has 18 documented Wellhead Protection Areas that extend over the community's corporate limits as well as designated growth areas. While these areas do not severely impact the types of land use that can be allowed in them, care should be taken to ensure the protection of the wells from possible contamination due to development.

Figure 39 Cass County and Surrounding Wellhead Protection Areas



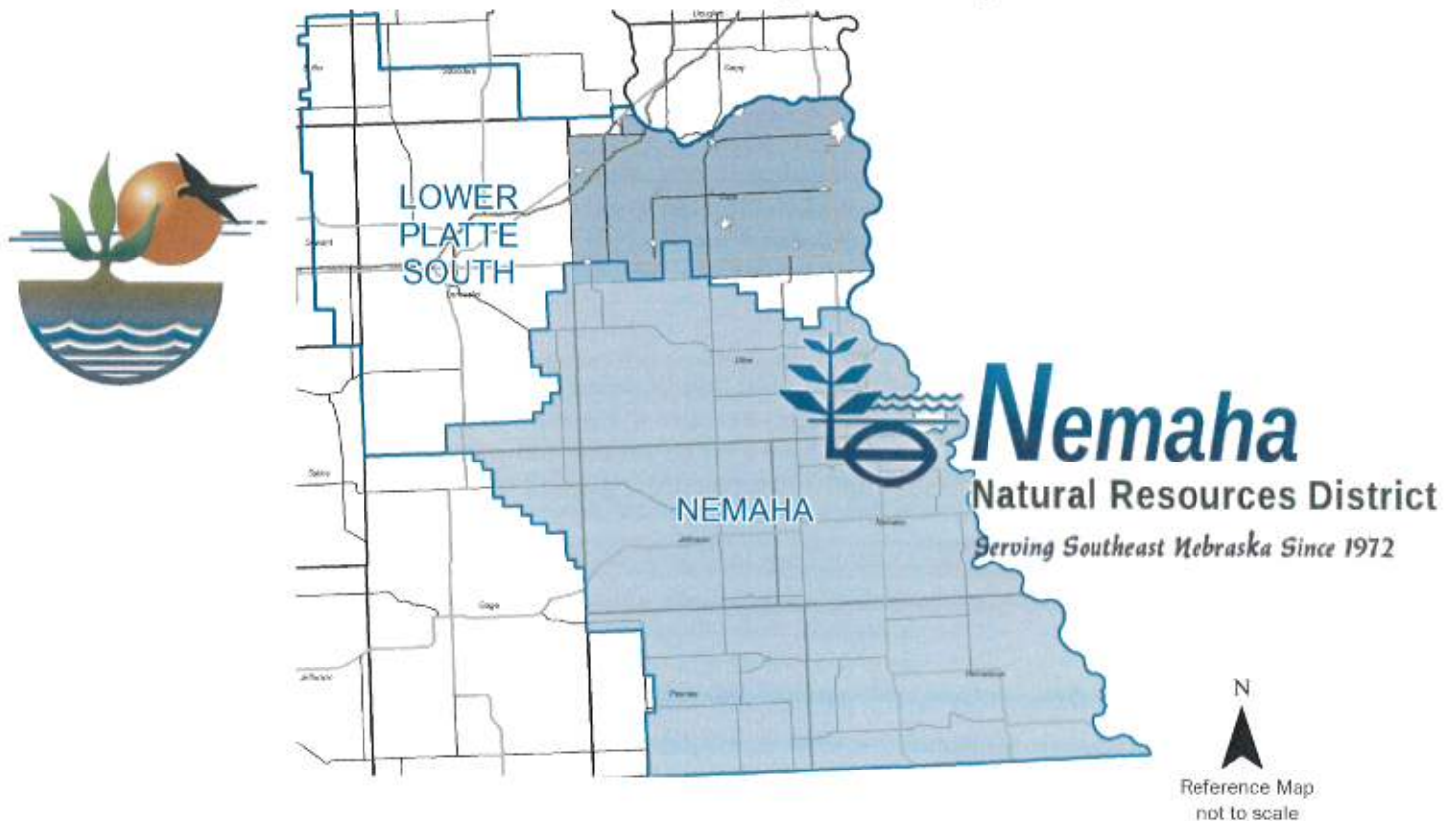
Hazard Mitigation

HAZARD MITIGATION PLANNING

Much like the Wellhead Protection Areas, the goal of any hazard mitigation plan (HMP) is to identify threats to the public. The HMP document addresses both natural and man-made risks and is updated every five years in order to obey to federal regulations. Therefore, short- and long-term solutions of regional or local issues can be addressed. This document plays an important role for future land uses.

Cass County participates in two Multi-Jurisdictional Hazard Mitigation Plans developed by the two Natural Resources Districts (Figure 40). The majority of Cass County residents live in the Lower Platte South Natural Resources District. The residents south of Eagle, such as Eagle Lake Subdivision, and southeast of Elmwood are within the Nemaha Natural Resources District. As the floodplain map shows (Figure 38), both of these areas drain to the Otoe County line and affect residents outside of Cass County. Likewise, residents of northeast Otoe County have the potential to make decisions that disrupt downstream. The hazard mitigation process invites all of communities, as well as neighboring jurisdictions, to come together, communicate, and coordinate their plans. This is a great opportunity to voice any concerns and discuss potential projects.

Figure 40 **Natural Resources Districts Serving Cass County**








2.9 EXISTING LAND USE

INTRODUCTION

Evaluating the land uses that presently exist within Cass County is critical to the formulation of the Comprehensive Development Plan. In order to realistically plan for future growth and development in Cass County, the starting point is the existing shape, form, and amount of land presently used to provide for county functions. The analysis of land including location, size and characteristics are important in understanding the pattern of development, past land use trends and other significant factors shaping the existing layout of Cass County. This analysis is essential to the preparation of the Future Land Use and Transportation Plans. It also assists in the formulation of workable zoning regulations to protect existing uses.

EXISTING LAND USE CATEGORIES

Evaluation of the existing land uses in Cass County required a land use survey to be undertaken. The evaluation included a visual overview using recent color aerial photographs, Cass County GIS, input from the planning commission members and zoning administrator and visual review by driving certain areas to confirm specific uses. The location of each specific use of land is shown graphically on the Existing Land Use Map, Figure 41. Enlarged maps of the existing land use survey can be found in the 11x17 map book located in the Appendix. The existing land uses of Cass County were classified under the following categories:

- Agriculture  Row crop, alfalfa, pastureland and all grain crops are considered agriculture land uses.
- Unincorporated Community  This includes those areas in the county where a community was apparently platted at one time but was not or is no longer incorporated.
- Rural Subdivision  This use includes those residential subdivisions located throughout the county outside the zoning jurisdiction of the communities. Although there may be two and three homes located close together, this category includes those residential uses platted as subdivisions and is likely located around old mining operations and are likely located around old mining operations
- Commercial  Uses in this category consist of convenient stores; feed, seed, automobile and machinery sales; petroleum sales, etc. Commercial uses tend to be located near urban areas or in proximity to major arterials and other highways for accessibility.
- Industrial  Land uses of this nature may include communication plants, light manufacturing, commercial storage, industrial parks, composting, waste transfer stations, salvage yards, petroleum or fertilizer plants and heavy manufacturing.

2.9 EXISTING LAND USE

Public		This category consists of most of the historical markers, nature preserves, school facilities, etc. and are scattered throughout the county.
Quasi-Public		The quasi-public category includes rural churches, meeting halls, and cemeteries. Cemeteries near churches or along roadsides range in size from several acres to a few graves. Included in this land use category are historical cemeteries.
Park, Recreation, and Open Space		This category includes State Recreational Areas and/or Wildlife Management Areas, camping areas, museums, racetracks, golf courses, and private hunting/recreational areas or camps owned and operated by state and local clubs or organizations.
Mining		This land use recognizes the existing mining operations within the county, both surface and sub-surface.
Transportation and Utilities		This land use category recognizes all public and private airports, active rail lines, substations, water storage, etc.
Communication Towers		This category deals with all types of telecommunication towers including cellular, repeater towers, and television towers in the county's jurisdiction.
Rural Residential		(Farmsteads/Acreages) Uses in this category are residential dwellings that have adjacent agricultural operations, including agriculture buildings and/or family livestock operations. This use also comprises residential dwellings that are not related to agriculture or feedlots but outside of a platted subdivision or community.
Agriculture Storage		This category consists of abandoned farmsteads and uses related to agricultural storage, including grain, livestock or mechanical storage. Storage buildings or structures can range from grain bins to abandoned buildings, with no human occupancy.
Large Livestock Confinement / Operations		Feedlots and confinements of high production densities comprise the uses of livestock confinement areas. These uses may be large or small, a family operation, or a commercial operation. Also included in this category are commercial kennels and hog/cattle confinements or feedlots that are no longer in operation.

Figure 41 Existing Land Use, 2014



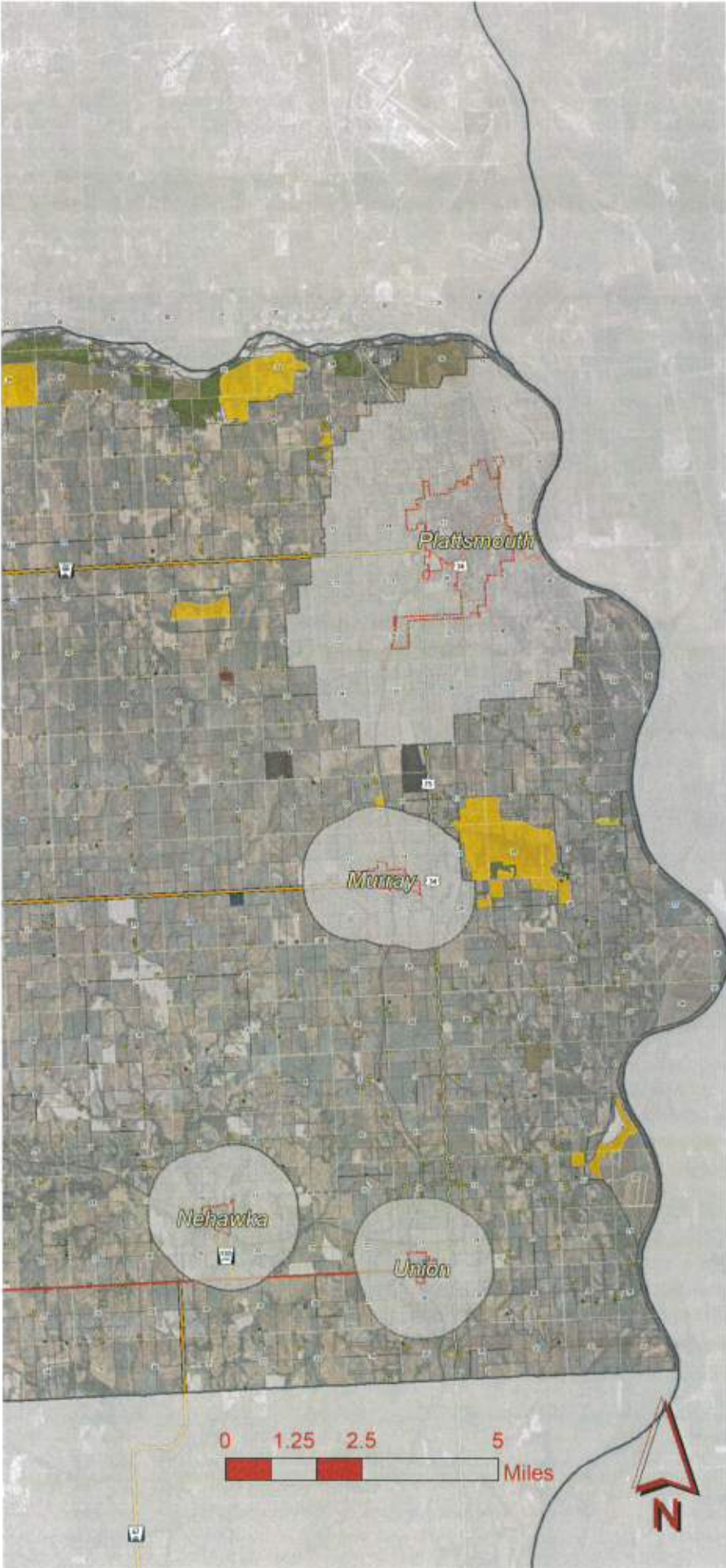
Cass County, Nebraska Existing Land Use

Legend

-  Corporate Limits
-  Sections
-  Interstate
-  Expressway
-  Major Arterial - Continuous (Principal)
-  Major Arterial - Continuous (Intermediate)
-  Major Arterial - Non-Continuous
-  Major Arterial - Scenic Recreation

Existing Land Use

-  Agriculture
-  Unincorporated Community
-  Rural Subdivision
-  Commercial
-  Industrial
-  Public
-  Quasi-Public
-  Park, Recreation, and Open Space
-  Mining
-  Transportation and Utilities
-  Communication Towers
-  Rural Residential
-  Agriculture Storage
-  Large Livestock Confinement / Operations



Created By: TKC
 Date: June 3, 2014
 Revised: July 21, 2014
 Software: ArcGIS 10.2
 File: 130377



This map was prepared using information from record drawings supplied by JEO and/or other applicable city, county, federal, or public or private entities. JEO does not guarantee the accuracy of this map or the information used to prepare this map. This is not a scaled plan.

PHYSICAL CHARACTER OF CASS COUNTY

One of the most critical factors, concerning land use development in any area is the physical characteristics of the area. The physical character of Cass County is dominated at the eastern portion of the county by rolling hills with small areas of flatter ground. Historically, this area has seen a combination of some row crops and pasture; grazing has been located in areas where the slopes are too steep to plant and harvest crops. Most of the residential development has been low density residential or commonly known as acreage development.

In contrast to the eastern portion of Cass County are the level plains of the western portion of the county. This for the most part has been untouched by urban development, except for the communities located in the area. Most of this area remains in agricultural production.

RURAL UNINCORPORATED LAND USES

Agriculture

Cass County is largely an agriculturally based county, and the existing land use map verifies these uses. The most predominant type of agriculture production in the county is row crops (corn and soybeans). There is no color applied to this land use category.

Rural Subdivision

There are number of rural subdivision located in the county. Most are located in the northeastern part of Cass County close to Highways 66 and 75. Additional subdivisions are also located near Eagle on the western side of the county closer to Lincoln. Most of these large lot subdivisions are operating with individual wells and septic systems.

Commercial

Figure 41 indicates the amount of rural commercial development is limited in Cass County. The majority of most commercial operations and businesses are located within the corporate limits of the Cass County communities. However, there are several commercial developments located around Exit 420 on Interstate 80, south of Manley, and north of Union.

Light Industrial

These uses tend to be located near municipalities and major transportation routes for accessibility purposes. Figure 41 specifies different industrial sites located within Cass County. The major industrial uses in the county include those east of Louisville, west of Plattsmouth, south of Manley, southwest of Weeping Water, and at Exit 420 on I-80.

Public/Quasi-Public Development

As shown in Figure 41, Public/Quasi-Public land uses are located throughout Cass County. These uses are generally located in close proximity to the major transportation routes of the County,

EXISTING LAND USE

including Highways 34, 1, 66 and 75, Interstate 80, Church Road, and/or near the urban areas of the County. There are also several rural cemeteries scattered throughout the County. Many rural schoolhouses are abandoned or have other uses now.

Park, Recreation, Open Space

Cass County currently has a substantial amount of land designated as State Recreational Areas and/or State Wildlife Areas. Details of these areas can be found in the County Facilities section of the Profile Cass. Most of these areas are located along the Platte and Missouri Rivers.

Mining

As shown in Figure 41, this land use is predominantly west and south of Weeping Water where there is surface and sub-surface limestone mining. There are also a number of sand and gravel mining operations along the Platte River between Louisville and Plattsmouth.

Transportation, Utilities, and Communication Towers

This land use is located throughout the county with a number of transportation routes, airstrips, cell towers, and utilities such as rural water.

Rural Residential (Farmsteads and Acreages)

As indicated in Figure 41, farmsteads are scattered throughout Cass County. Examination of the land use pattern, with regard to farmstead development, reveals no specific pattern aside from the fact that the majority of farmsteads were developed in areas where the soils are the most conducive to crop production and near a major transportation route. Limited farmstead development has occurred in areas of the County where the soils are not conducive to crop production, which, in most instances, is in areas where there are steeper slopes.

Non-farm rural residential development has been a growing trend, throughout the State of Nebraska, over the past three decades. This has been driven by market demand for larger parcels of land and larger homes. In most instances, larger parcels of land are not available within the corporate limits of smaller cities or villages; as a result, the development has occurred in rural areas. Pressure will likely continue for this trend to occur throughout the county during the planning period. It is important for the governing body of Cass County to acknowledge the potential increase in non-farm residents in the future, and design regulations that adequately manage their impact on the existing uses within the county.

Non-farm rural residential development has occurred throughout the county; however, the majority of the growth pressure has been in the eastern portions of the county or around the city of Plattsmouth and in the western portions of the county outside of Eagle. This increase is due in part of Cass County's proximity to the Lincoln and Omaha Metro Areas and the scenic nature of the region.

Agriculture Storage

Figure 41 shows the location of the agriculture storage in Cass County. As stated before, this land use could include vacant farmsteads, mechanical storage and agriculture storage such as grain. Usually this type of land use has a relatively low impact on the land. These storage facilities are evenly distributed throughout the county; usually close to a farmstead, with some existing as stand-alone structures. Some of these uses could be seasonal, thus when locating future agriculture storage sites certain guidelines should be established.

Large Livestock Confinement/Operations

Livestock operations of varying sizes, including confined livestock feeding operations, are minimal within Cass County. These uses are indicated as Livestock Confinement on the existing land use map (Figure 41). Generally, many of the livestock operations are located in areas where rural farmsteads are the predominant land use. The development of these uses in close proximity with farmsteads in the county has occurred for the same reasons original farmsteads were constructed; the availability of adequate water, supplies, higher crop production potentials and the desire to have the feeding facilities located near the producers' farming or ranching operations.

EXISTING LAND USE SUMMARY

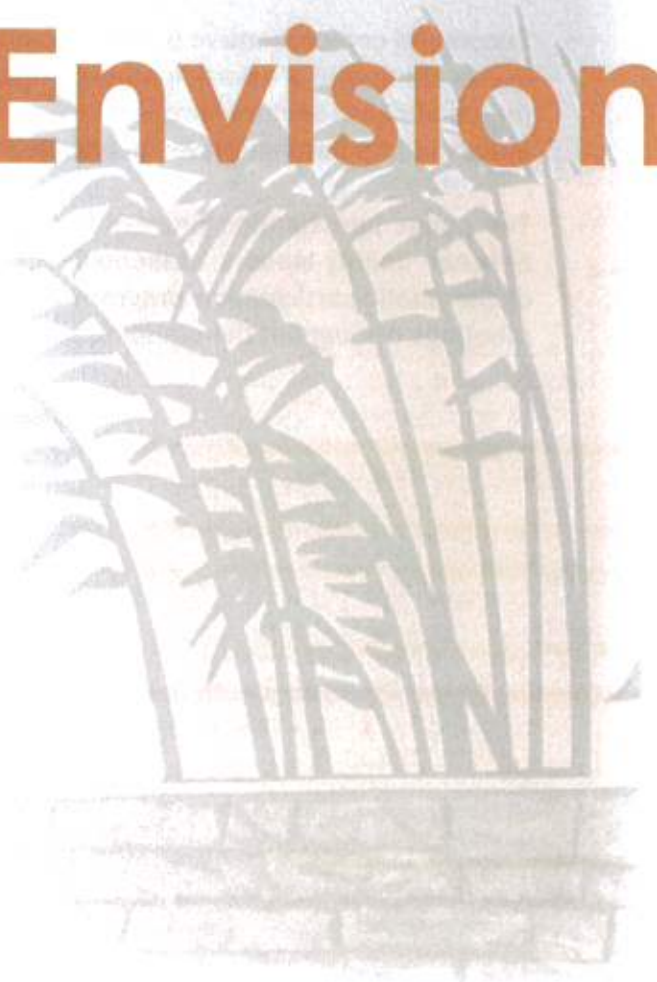
The existing land use pattern in the rural portions of the County should have implications with the development of land uses in the future. There should be a place for each type of development (i.e. farming, non-farm residents, mining, commercial, industrial, and recreation) within the rural portions of Cass County, but locating these uses should be extensively evaluated. If Cass 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 Regulations, which effectively balance development and minimize conflicting land uses.

Major issues that have been are currently impacting existing uses include:

- Groundwater availability
- Transportation issues ranging from the Interstate to minimum maintenance roads
- Natural resources areas
- Topography
- State owned wildlife and recreation areas
- Growth pressures from Lincoln and Omaha Metro Areas



Envision



134
140

PUBLIC PARTICIPATION
VISIONING

3.1 INTRODUCTION

This portion of the planning process creates a “wish list” of items identified within the public input process. The development of a comprehensive plan is an on-going process of goal setting and problem solving. The desired results will encourage and enhance economic opportunities and quality of life. The planning process focuses upon ways of solving existing issues within the county and providing a management tool enabling citizens to achieve their vision for the future.

3.2 PUBLIC PARTICIPATION

Successful comprehensive plans involve the community to represent their needs and vision. The over-arching goal of a participatory comprehensive planning is to provide a variety of opportunities for the public to become involved in the decision-making process. Community members are well informed and have intimate knowledge to make the most of Cass County's potential.

The public participation process included several elements designed to create a partnership between county leaders, stakeholders, citizens, and the planning consultant. Key components of the public-participation program include town hall meetings and more specific focus group meetings throughout the planning process.

3.2 PUBLIC PARTICIPATION

Meetings

Kickoff & Town Halls

KICKOFF MEETING

The official kickoff for Cass County's comprehensive plan began on January 20th, 2014. The presentation to the steering committee began with data from the Profile Chapter, which allowed the committee to ask questions, give information, and begin the planning process. This meeting gave the consultant team additional understanding of Cass County prior to public meetings. Key issues for the committee were to preserve, enhance, and promote Cass County's unique characteristics. Discussion began with Cass County's parks and recreation opportunities along Highway 66 as important components. The agricultural and mining industries were additional assets of importance and preservation. The steering committee was anxious to begin the public input and planning process since the current Cass County comprehensive plan was last updated in 1998.

TOWN HALL MEETINGS

These public meetings were coordinated to provide an overview of the planning process, gather information of the County, and allow the public to participate. In consideration of traveling times, each meeting was located around the County to allow residents to attend a meeting nearby.

FEBRUARY 3, 2014

The first of three Town Hall Meetings held at Round the Bend Steakhouse gathered input from citizens of western Cass County. This meeting set the tone for the entire comprehensive plan update. The majority of the conversation revolved around agricultural importance and the rural water districts.

Strengths

The strengths discussed during this meeting reflect a high quality of life in western Cass County. The natural environment provides a plethora of recreation opportunities within the region. Interstate and Highway networks are readily accessible throughout the county. The low-volume traffic of the transportation network creates a high level of connectivity within the county. As discussed in most meetings, Cass County has great access to greater metropolitan regions. The school system, represented by five independent school districts, was also a highlighted strength throughout the county.

Weaknesses

Utilities and infrastructure were the prevailing concerns from citizens at the meeting. A county-wide lack of water and sewer infrastructure was concerning for prospective economic and residential development. Consistent with recent trends over the past twenty years, many rural subdivisions have developed without connections to municipalities' infrastructure. The group saw this as a long term problem that will need to have a solution. Another countywide concern was the abundance of above-ground electrical infrastructure - a hazard concern due to

3.2 PUBLIC PARTICIPATION

Meetings

Town Halls

FEBRUARY 3RD "WEAKNESSES" (CONTINUED)

exposure. Other economic development concerns related to a lack of population and tax base, skilled labor force, and education gap reducing the potential for growth. The lack of connectedness to high-speed internet was considered a barrier to economic growth. Citizens identified schools as a strength in the county, but supporting growth was an expressed concern. Small population bases are potentially at risk with school bonds required to expand district capacity. These issues and more have citizens of Cass County concerned of a negative perception of the county and its communities.

FEBRUARY 12, 2014

Held at the Cass County Fairgrounds in Weeping Water, central Cass County, this meeting had the largest number of attendees. With this turnout, three separate groups had discussions with varying interests of the attendees. In this meeting, the conversation expanded to include potential projects and overall vision for the planning process.

Strengths

An important strength to the group was Cass County's quality of life in its strong, small towns. The connectivity and location of Cass County to the metropolitan areas highlight its possibilities. Priority was given to the Cass County Fair as a promotional opportunity. Discussions reinforced the countryside and natural environment as an asset for recreation and tourism. The environmental amenities led to lodging taxes, strong agriculture, and potential development - especially surrounding Interstate exits.

Weaknesses

Additional discussion revolved around the need for infrastructure development throughout the county. Attendees cited road improvements, including Church Road east of Hwy. 50 and an additional bridge crossing the Platte River at 84th Street. Other infrastructure concerns related to limitations and restrictions on rural water, inconsistent development, and infrastructure necessary for additional tourism development. More lodging opportunities could lead to additional revenue. An aging housing stock along with struggling Main Streets of Cass County villages may become a threat to the quality of life in the county. These issues discussed led to one conclusion that Cass County may have an "identity crisis."

Issues

Water and other infrastructure discussed again as a prevailing issue across the county. There is a growing concern related to encroaching sprawl from the Omaha and Lincoln. A countywide effort to avoid spot zoning was identified as a priority.

Meetings

Town Halls

Projects

- Additional bridge over the Platte River on 84th Street
- Recycling program
- Sewer and Infrastructure development for Greenwood and I-80
- Expand recreation and tourism opportunities
- Multi-modal transportation development

Vision

The vision developed around this session related to the **balance of rural and urban interests, with planning that honors that balance while preserving an agricultural economy.** The attendee's vision included organized planning for quality of life with lower taxes and respect towards green space, and its relationship toward tourism and recreation. The vision includes a unified Cass County with gateway development throughout the state highway systems.

FEBRUARY 13, 2014

To accommodate the eastern third of Cass County, the final town hall meeting was held at the Cass County Courthouse in Plattsmouth. This meeting had a good turnout with productive discussions.

Strengths

The regional geography and natural amenities highlighted the conversation as an asset to the region. Fertile land and the water aquifer contribute to a strong agricultural economy. Other natural amenities lend themselves to recreational opportunities and eco-tourism. Highway 75 provides a strong connection to the Omaha metro area, specifically the rapid growth of Sarpy County. This connectivity, complemented by excellent schools and diversity of housing proves to be strengths for Cass County.

Weaknesses

Most concerns of the conversation related to hydrology, more specifically the availability of water, and floodplain prevalence. There was a need expressed regarding the enforcement of zoning regulations with a desire to increase communication between the county and individual communities. There was concern for the lack of shovel ready sites for economic development. Discussion began on solid waste removal, its related study, and future plans for Cass County. The variety of individual community goals and lack of unity within the County led to a discussion on the topic of general resistance to growth and fear of change within the county.

Issues

County-wide economic development was identified as a priority issue during the

3.2 PUBLIC PARTICIPATION

Meetings

Town Halls & Focus Groups

FEBRUARY 13TH "ISSUES" (CONTINUED)

discussion. Conversations revolved around the development in agricultural land, expanding the tax base, diversification, and seeking appropriate businesses for Cass County. The lack of shovel-ready sites was a major issue discussed in regards to economic development. Attendees sought an appropriate balance between agriculture, housing and commercial developments.

Quality of life was also a topic of discussion. A concern developed relating to emergency response and rescue with such a heavy reliance on volunteers who work out of town. A solid waste plan with a focus on recycling was also repeated as a desired amenity in the county.

Projects

- County-wide infrastructure development plan
- Additional bridge over the Platte River on 84th Street
- Follow-through with solid waste and recycling programs
- Complete Hwy 75 project to Nebraska City
- FEMA Community Rating System
- Develop more shovel-ready sites for industrial
- Additional lake development
- Comprehensive Traffic Plan

Vision

Promote and develop current recreational assets with Nebraska Game and Parks and private entities. Continue growing along existing patterns to promote industrial and commercial developments.

FOCUS GROUP MEETINGS

Four focus group meetings were conducted during the month of March and held at Round the Bend Steakhouse, Cass County Fairgrounds, Louisville City Hall, and the Cass County Courthouse. These meetings were designed to seek additional input from specific interest groups vested in Cass County or company representatives with specialties in the identified areas. The focus groups covered the following topical areas:

- Tourism
- Environmental
- County Government
- Interstate Exit businesses
- Mining Industry

Meetings

Focus Groups

Reinforced throughout the focus group meetings was the recognition of the importance of maintaining a balance of new development with the existing natural environment and its assets. The top industries for prioritization were agriculture and mining. Maintenance of the natural environment also yields additional recreation and tourism opportunities while complementing the existing attractions. However, additional steps can be taken to promote the existing draws to the area. Multi-modal connectivity of existing recreational sites was noted multiple times. Likewise, individuals repeatedly stated that interstate exits 420 and 426 have the opportunity for recreation and entertainment development.

It was recommended that any new development to take place should be restricted to prioritized areas and well-designed to the environment. The creation of aesthetic gateways into and within the county would help advance the effort of unifying the county and its communities. However, for any significant development to occur, substantial infrastructure improvements are required. The availability of water, wastewater, and electrical capacity is not uniform or readily available. Therefore, significant planning and investment are necessary to extend infrastructure systems to enable future development, especially in western Cass County.

A growing concern is the ability to provide emergency response for both residents of the county and visitors to the many recreation centers spread throughout the county. Both infrastructure and volunteer personnel capacity is a growing concern for the availability of a quick and effective response.

Strengths

- Recreation
- Agriculture
- Travel corridors
- Scenic landscape
- Attractions

Weaknesses

- Lack of unity
- Limited opportunities for economic development
- Availability of infrastructure

Issues

- Utilities and infrastructure
- Emergency response
- Protection of agriculture and farmland
- Making lots available for industrial growth

Vision

- Controlled and managed growth
- Preservation of open/green space and protection of scenic vistas

3.3 VISIONING

The resonating point of conversation throughout the visioning process was the high quality of life that Cass County residents enjoy. The region represents a balance of rural and urban amenities with excellent access to employment and recreation opportunities. The ambitious goals set forth in this section are aimed at capitalizing on and further developing this quality of life.

Input from the public participation process as well as other meetings with the planning commission/steering committee will be developed into goals and objectives to further develop the county. It is clear that a large commitment to the development of infrastructure will be required to enhance the economic and residential opportunities currently available. However, these investments must be cognizant of the agricultural and recreational amenities currently in place. Development will need to represent the urban/rural balance that residents have prioritized.

GOALS, OBJECTIVES, POLICIES

As depicted in the Implementation Chapter, many goals of this comprehensive plan will be met by guiding residential development in the county as well as creating both recreational and economic development opportunities. The Achieve Chapter offers suggestions of development plans that can benefit the county and municipalities within their jurisdiction with additional population and economic development. The county will have the opportunity to change priorities over the period covered by this plan regarding where new housing, population, and economic development should occur.

Cass County claims some of the best farmland available in the state. The county also contains some of the best opportunity for housing and economic development via its proximity to the Omaha and Lincoln metros. Finding the proper balance of development within these areas will take an extraordinary commitment to proper planning and diligence.

VISION STATEMENT

A vision statement is a vivid, idealized description of the desired outcome that inspires, energizes, and helps the community create a mental picture of their target. The vision could be a part of life, or the outcome of a project or goal. As the Cass County Comprehensive Plan vision statement was being formed, it became apparent to establish its agricultural heritage to be included and not simply implied. The following vision statement, repeated from the Introduction, was created through the public meetings and revised by the Planning Commission.

To guide and promote orderly growth and development through preservation of Cass County's history, agriculture, and natural resources.



GOALS AND OBJECTIVES

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 Cass County. This is where a consensus is formed on "what is good growth?" and "how to manage change in order to provide the greatest benefit to the county at-large?" The Cass 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

Issues can be positive or negative occurrences that have already occurred in the past, currently exist, or have the potential to cause problems in the future. In all cases, issues are items that affect the quality of life within Cass County.

GOALS

Goals are desires, necessities and issues that should be attained in the future. A goal should be established in a manner that can 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.

OBJECTIVES

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 provide a secondary function beyond directing change. They assure the Comprehensive Plan accomplishes functions desired by the residents of Cass County. For this reason, this chapter 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.

CONSERVATION / ENVIRONMENT



GOAL

The natural resources and environment of Cass County shall be protected and managed to ensure long-term quality and availability. The goal of this plan is to guide growth in a manner that conserves and protects the natural resources while allowing for specific development opportunities.

OBJECTIVES

- 1 Establish zoning and subdivision standards that support conservation of natural resources, especially in the Platte River area. This can be accomplished by the creation of Planned Unit or Mixed Use Developments implementing the use of Conservation Easements and other tools. Overlay districts and design guidelines should also be examined and implemented.
- 2 General land use regulations should require all development in the jurisdiction of Cass County to demonstrate a limited impact upon the soil, groundwater, surface water, and air.
- 3 Cass County can work with Natural Resource Districts (NRDs) to encourage improved watershed management practices and the construction of watershed storage projects for flood control.
- 4 Discourage designated prime agricultural land and soils from conversion to non-agricultural uses by targeting less productive agricultural soils (crops) for urban or non-farm uses. Establish a hierarchy of minimum lot sizes to encourage non-farm growth in the appropriate locations.
- 5 Protect all water supplies and aquifers from development activities that may affect the quality and/or quantity of water. Development shall demonstrate a limited impact on ground water supplies.
- 6 Groundwater supplies will be protected from critical draw-downs or disrupted flows where municipal watersheds exist. This is accomplished through public education, NDEQ, and local Wellhead Protection Areas.
- 7 Encourage conservation of hillsides and scenic vistas by establishing criteria and limiting development along specific slopes in the county.
- 8 Promote quality land management through the development of erosion control design standards for rural subdivisions and larger commercial and industrial developments.

Parks / Recreation

- 9** Cass County will continue participation in the FEMA National Flood Insurance Program to prevent flood-caused loss of life and property, by identifying and mapping the floodplains and floodways of the county.
- 10** Cass County will discourage land use development within the floodplains of the county.
- 11** Encourage conservation areas in flood prone areas and in areas of water features so that may increase tourism possibilities.

PARKS / RECREATION



GOAL

Support park and recreational projects that can further economic development, conserve natural resources and preserve important environmental features. Cass County shall utilize policies and capital improvement planning to maintain and preserve existing open space and provide areas for future parks, recreation areas and open space activities. In addition, Cass County should work closely with the Nebraska Game and Parks Commission regarding the existing and expanding State Parks.

OBJECTIVES

- 1** Encourage supportive recreational businesses and amenities to offer year-round enjoyment.
- 2** Set standards that require or promote dedication of parks and open space within rural subdivisions.
- 3** Utilize agriculture conservation techniques to provide recreational opportunities. For example, areas around a stormwater retention areas or detention ponds can be utilized for recreation throughout the year except during stormwater events in these floodprone areas.
- 4** Continue to assist in the development and enhancement of the local State Parks and the other recreation areas noted in the County Profile Chapter of this plan.
- 5** When possible, provide for parks and recreational facilities that are reasonably accessible to residents of Cass County.

FACILITIES / OPERATIONS



GOAL

The priority of the county is to provide adequate facilities and services to all residents by ensuring cost-effective services and conscientious investment of public resources.

OBJECTIVES

- 1** Support area historical and cultural activities.
- 2** Provide services to the public in an efficient and cost effective manner by utilizing a benefit/cost ratio (or similar) in evaluating whether to contract out for services or to use county personnel (privatization versus in-house staff).
- 3** Examine areas where the county and the incorporated communities might consolidate services and facilities through inter-local agreements. These may include law enforcement, street and road maintenance, and other services.
- 4** Continually evaluate the staffing needs of the Sheriff's Department. As the population continues to grow, the county may need to hire additional deputies and jailers in order to meet the level of protection desired by the public.
- 5** The county and/or fire districts need to examine the current fire district boundaries to determine quality and quantity of services provided as well as potential equipment needs.
- 6** The county should work as the catalyst to continue the expansion of rural water across the entire county. The county should work with the Lower Platte South NRD in establishing a new rural water district around Exits 420 and 426.
- 7** Continue work on and adopt a County Solid Waste Plan that emphasizes recycling programs in the county.

Economy / Economic Development

ECONOMY / ECONOMIC DEVELOPMENT



GOAL

Quality growth includes healthy support for business and industry diversity and expansion. It also includes long range development plans to ensure that limited, public resources are used to the greatest benefit. An economic goal for Cass County is to support growth of existing and new, diverse enterprises that will effectively utilize existing public investments and further the quality of life available to residents. Such economic development efforts should be in conjunction with the communities of Cass County. By cooperating with the communities it is seen as a win-win scenario since the entire county will benefit.

OBJECTIVES

- 1** Expand and promote agriculture and agricultural employment opportunities in the county. These might include value-added agricultural industries.
- 2** Cass County will encourage economic development projects, which do not conflict with the agricultural and recreational character of the county.
- 3** Work with Cass County Economic Development in marketing Cass County for opportunities and develop additional opportunities through the availability of shovel-ready sites.
- 4** Continue to use recreational and cultural amenities in the county to further promote recreation and tourism.
- 5** Work with communities to encourage industrial investment near the outlying districts of municipalities with appropriate transportation access.
- 6** Take maximum advantage of available federal, state and local government and private sector resources to promote business/industrial development in the county.
- 7** Expand tax base with diversified industries.

EDUCATION



GOAL

The county's role is limited, but policies will be established and followed for locating development to ensure cost effective use of existing facilities. Also, the county can coordinate with all school districts to determine adequate areas for future educational needs. Above all, the main goal is to encourage excellence in the public school curriculum and facilities.

OBJECTIVES

- 1 Set development standards that coordinate reservation of land for future educational needs.
- 2 Cooperate with school systems in expanding public uses of educational facilities.
- 3 Encourage partnerships that expand school curriculum to meet the needs of, and promote the amenities of the region. This includes educating students of the career opportunities in Cass County through agriculture and local businesses, as well as the recreational and quality of life amenities that environmental preservation yields.
- 4 Work with colleges and universities in the state in order to establish a satellite campus in Cass County.
- 5 Look to options of locating a vocational training center in the county to train and retain population for existing and new industrial and commercial businesses.

Health / Safety

HEALTH / SAFETY



GOAL

Cass County's goal is to continue to support health care, fire protection, and law enforcement programs by exploring programs and alternative services to ensure optimum service levels and reasonable public costs.

OBJECTIVES

- 1** Regulation of land use development and operations that affect the health, safety and general welfare of the public.
- 2** Clean and regulate nuisances and poorly maintained properties. This includes the continued efforts to regulate junk cars, salvage yards, and dilapidated/deteriorated residences/farm yards across the county.
- 3** Establish/review regulations that protect the county residents from the secondary effects of adult entertainment.
- 4** Develop and promote public events and programming in conjunction with Nebraska Game and Parks Commission that encourage public use and protection of state parks, the natural environment, and its amenities.
- 5** Continually evaluate the staffing needs of the Sheriff's Department. Continued population growth may require the county to hire additional deputies and jailers in order to meet the level of protection desired by the public.
- 6** Likewise, evaluate new developments as they relate to the corresponding Fire Districts.
- 7** Investigate a county-wide emergency operations study to ensure that appropriate response resources are available as the county population continues to grow.

HOUSING

GOAL

A goal of Cass County is to explore programs and policies to increase and support safe, affordable and alternative housing. The county intends to guide rural residential development to areas of existing development and compatible development conditions. Future residential conflicts with designated prime agricultural lands are to be minimized and such rural residential and subdivision development should be on public infrastructure systems.



OBJECTIVES

- 1 Establish specific location, design, and financial standards for acreage development.
- 2 Discourage residential or acreage (non-farm) development in designated "prime agriculture" areas and in areas utilized or designated for mining.
- 3 Encourage new residential development of smaller acreage lots and subdivisions to locate near community centers with direct access to existing, hard-surfaced roads or highways.
- 4 Utilize soils and other environmental data in determining the suitability of areas for housing development.
- 5 Establish zoning and subdivision design standards that require buffers and screening standards for new development – new developments are required to provide buffers next to established uses.
- 6 Establish zoning and subdivision standards that require public water and sanitary sewer systems for rural subdivisions.
- 7 Revise existing regulations to improve the review process for preliminary and final plats and site plans. Strengthen the requirements for public water and sanitary sewer for rural subdivisions.
- 8 Encourage the development of additional elderly housing throughout the county.
- 9 Encourage the preservation and rehabilitation of existing housing in the county to maintain a diverse housing stock.

Public Works



PUBLIC WORKS

GOAL

Cass County shall pursue programs and facilities to ensure adequate utilities will be considered and will be compatible with the county's land use policies. Goals include protecting current and future water well fields and aquifers; promote development that utilizes existing facilities and capacities; and develop new utility system facilities and capacities that support development goals.

OBJECTIVES

- 1 Implement development / design standards that protect the area around any municipal well fields and/or rural water well fields located in the county.
- 2 Utilize soil suitability from this plan and the Cass County soils survey when evaluating development proposals proposing septic system or lagoons for sewage treatment. Ultimately, decisions should be made based upon actual soil data collected by a professional engineer and certified laboratory.
- 3 Discourage residential development proposals that would result in new long-term independent utility (water, sanitary sewer) systems.
- 4 Encourage future expansion and upgrading of the rural water systems within Cass County.
- 5 Work with local communities and Lower Platte South NRD in establishing a new rural water district to Exits 420 and 426.
- 6 Work with Nebraska Department of Roads to locate needed utilities and infrastructure within right-of-way where needed.
- 7 Cass County will utilize county right-of-way to locate needed utilities and infrastructure and look to expand such right-of-way when warranted.
- 8 Prioritize the development of high-speed internet capability throughout Cass County.
- 9 Cass County will coordinate with the cities and villages within its jurisdiction to provide an orderly phasing of water, sanitary sewer, and storm drainage and other public services and facilities within the urban growth boundaries.
- 10 The establishment of community water supply systems will be supported where such systems conform to all applicable water quality and engineering design criteria, in addition, the system's supply wells shall not negatively impact neighboring properties.
- 11 The county will work with the Lower Platte South NRD and Nemaha NRD in the maintenance and update of their Hazard Mitigation Plans.

LAND USE

GOAL

Cass County seeks to provide a wide variety of development opportunities that contribute to effective use of public resources and protection/maintenance of natural resources. Future land use will be a key management issue in order to achieve a prosperous county. Cass County will need to coordinate future growth policies with agriculture and mining and each of its communities. The land use goals of Cass County are to utilize a combination of development policies and regulations to manage future growth and development and to guide said growth in the direction of the effective use of the land.



OBJECTIVES

- 1 Develop a policy requiring the coordination and review of all planning and zoning activities as they relate to the corporate limits of the communities and the unincorporated portion of the county. This policy would require a joint review and comment on the proposed activity by the adjacent communities and/or the county before the activity proceeds to the next step.
- 2 New development shall be reviewed with due consideration to the carrying capacity of the existing road system in the area, and development should be discouraged from occurring in areas where the road system is insufficient to handle any additional traffic load.
- 3 Future growth areas will be based upon the efficient and economical expansion of public infrastructure, which will maintain and improve the quality of life for Cass County residents.
- 4 Consult specialized agencies, when necessary, when reviewing proposals. This allows the county to make the most intelligent decision possible with local expertise.
- 5 Establish a series of land use development districts that will identify areas of the county best suited for specific uses and allow some flexibility for future development.
- 6 Explore design and signage guidelines along specific transportation corridors into and throughout the county. Enhancing gateways will assist in unifying the county through design and alleviate negative perceptions about the county.

AGRICULTURE

- 1 Protect prime farmland and ground water while promoting agriculture as the main industry in county.
- 2 Non-agricultural development within agricultural areas should be allowed only in specifically designated areas where the impact on agriculture is minimal.

Land Use

- 3 Support livestock production and related agricultural businesses that are designed, operated and located consistent with maintaining the health, safety and welfare of all county residents.
- 4 Provide separation between livestock and urban/community development. Avoid locating new livestock operations next to communities and/or residential developments when possible.
- 5 Develop public awareness and education of fertilizers, herbicides and pesticides in agricultural uses.
- 6 Protection from soil erosion through regulations that minimize future increases in water run-off.

RESIDENTIAL

- 1 Regulate acreage (non-farm) development throughout the county.
- 2 Encourage residential development around the perimeter of each community.
- 3 Work with developers on a continual basis in evaluating regulations and to locate appropriate areas for development.
- 4 Promote low to zero non-farm densities in prime farmland areas and agricultural districts by providing proper distances between residential and agricultural uses.
- 5 Propose regulation of residential development densities per section and with lot sizes.
- 6 Consider soils, floodplain, road and bridge development or maintenance when identifying areas for development. Discourage development in flood plain and down side of a high hazard flood control or dam structures.
- 7 Establish regulations for development on minimum maintenance roads.
- 8 Develop public awareness and education of fertilizers, herbicides and pesticides in rural residential areas.
- 9 Discourage residential development in areas that are identified for areas of current or future mining.

COMMERCIAL

- 1 Focus development on paved roads with existing/provided services, near communities providing supporting services and infrastructure, and at Exits 420 and 426.
- 2 Identify potential areas for development along major highways.
- 3 Require frontage roads when locating along major roads/highways.
- 4 Require landscaping and architectural standards for all new commercial construction and expansion to existing operations along major corridors and in designated protected areas.

INDUSTRIAL

- 1 Support industrial development and related businesses.
- 2 Promote industrial sites to locate with access to communities and highways and at Exit 420.
- 3 Use of frontage roads when locating on major roads/highways.
- 4 Regulate distances between industrial uses and residential uses.
- 5 Designate between heavy and light industrial land uses.
- 6 Identify areas of expanded mining operations.

PARKS / RECREATION

- 1 The county and its residents should continue to strive to protect the Platte and Missouri River Areas of Cass County through potential public ownership and/or recreational uses.
- 2 The county should continue to work with the Nebraska Game and Parks Commission to maintain and promote the existing State Parks in the county.
- 3 Develop a countywide parks and trails plan that will connect recreational amenities throughout the county.

Transportation / Energy

TRANSPORTATION / ENERGY

GOAL

Development in Cass County shall be guided to utilize existing public investment in roads, and programs to reduce road development or maintenance. One Cass County Transportation and Energy Goal is to support an efficient road system to serve current and future circulation and access needs and to look to reducing energy consumption in the county. *Additional goals and objectives specific to energy are found in the Energy Element within the Profile Chapter of this plan.*



OBJECTIVES

- 1 Continue updating the county's maintenance equipment as needed.
- 2 Develop a plan of education/action to prevent and cleanup roadside dumping in the rural areas of the county.
- 3 Cass County will encourage bicycle and pedestrian traffic as an element of the transportation system by coordinating with the municipalities within the county to develop an integrated system of safe and convenient bicycle and pedestrian ways to complement other modes of transportation.
- 4 Recognize the development of an integrated bicycle and pedestrian trail system to provide recreational opportunities and to link open space, communities, and State Park areas throughout Cass County and to Regional connections.
- 5 Continue working with Nebraska Department of Roads to upgrade highways in and through the county by either resurfacing or widening of existing State and County Highways.
- 6 Examine existing collectors and arterials throughout the county and evaluate the need to reclassify the designations or expand right-of-ways in order to accommodate current and future needs. Additional right-of-way should be considered for future infrastructure as well as transportation needs.
- 7 Consider increasing building setback requirements on road/streets designated as collectors and arterials to avoid future conflicts and encroachment when additional right-of-way is needed for expansion, development, and utilities..
- 8 Consider paving Church road east of Highway 50.

3.2 VISIONING

Transportation / Energy

- 9** Conduct study and work with Sarpy County on potential bridge across Platte River at or near 84th Street.
- 10** Continue involvement in regional transportation planning efforts to ensure that Cass County maintains a high level of connectivity along prioritized corridors while minimizing traffic pressures on local service roads.
- 11** Continue working with the Nebraska Department of Roads and provide public input on the upgrading of the Interstate, as well as State and Federal highways.



Achieve



159
160
161
172
181

INTRODUCTION
CONTINUOUS GOALS
FUTURE LAND USE
SPECIAL CHARACTER AREAS
TRANSPORTATION



4.1 INTRODUCTION

The Achieve Chapter informs the public about the intended direction of Cass County leadership. This direction combines the analysis of the Profile Chapter with the desires of the Envision Chapter. In order to accomplish its stated mission, the county intends to seek the following for its people:

- Fiscally responsible residential developments
- Protection of farmland from irresponsible development
- Economic development within designated areas that may include transitional agriculture
- Well-paying jobs and technical training to retain talent
- Safe and healthy living
- Maintain County character and natural resources

The Achieve Chapter includes:

- 4.2 CONTINUOUS GOALS
- 4.3 FUTURE LAND USE
- 4.4 SPECIAL CHARACTER AREAS (Exits 420 & 426)
- 4.5 TRANSPORTATION PLAN

4.2 CONTINUOUS GOALS

Future Land Use

The county plans to direct land resources to underdeveloped uses while continuing to invest in existing strengths. The agricultural impact of non-contiguous housing and recreation development, for example, is an important point of consideration in land-use discussions.

New Residential Development

The county will continue working to foster environments ideal for living, working, shopping and playing. Aiming future development towards areas with existing infrastructure such as highways 34, 50, and 75 will help ensure growth that is fiscally responsible. The exit developments considered later in this chapter, for example, will utilize existing road networks around the interstate, mitigating both immediate and long-term construction and maintenance costs.

Economic Development

Cass County can determine optimal sites for economic development outside municipal jurisdictions by working with communities, utility providers, Nebraska Department of Roads, and other stakeholders. Master plans were developed for exits 420 and 426 along I-80. These projects are discussed in more detail in the Achieve Chapter's Special Character Areas.

4.3 FUTURE LAND USE

Utilization of the Cass County Future Land Use Plan will result in the guidance and protection of existing land uses throughout its jurisdiction. Adherence to the land use policies outlined will assist the county in avoiding conflicts between incompatible land uses. The concept of lessening Cass County's future impact is based upon investments in public infrastructure (roads) and preserving vital tax dollars to allow for fiscally responsible developments in the county for years to come.

The Future Land Use Plan represents a generalized "countywide" view of where future development should occur. It is important to utilize the graphic data from Natural and Environmental Conditions (Section 2.8) in conjunction with the Future Land Use Map, in order to properly locate future uses. The countywide map is general in nature and on-site investigation will be necessary when rural area developments are proposed in Cass County.

The information provided within this comprehensive plan, which includes the Future Land Use Map, is meant to be a guide for future development and not a static document that hinders growth. It is important to reference this information prior to making decisions about Cass County's future land uses and zoning.

Like any planning jurisdiction, there will be changes in land uses throughout the planning period. The Future Land Use Section reflects the collective analysis of the previous sections to determine the best-use available. Cass County has enormous economic potential due to its relation to Omaha and Lincoln markets. The natural amenities of the Platte and Missouri Rivers give the county an exciting environment to develop additional tourism and recreational opportunities.

It is not possible, nor realistic, to preserve all the agricultural land in the county. Due to the juxtaposition of public infrastructure, for example, Interstate 80 and existing interchanges, adjacent farmland properties have a different "best land use available" associated to them than most of Cass County's farmland. Economic and residential development will continue to be present in transitional agriculture land uses. Farmland is important to the county residents and development pressures need to be considerate of that. Development that ultimately occurs will, hopefully, materialize within transitional agriculture and not the agricultural land use. Transitional agriculture has development potential due to locations of adjacent to existing roadways that limit the county's fiscal commitment for maintaining additional roads.

As part of the comprehensive plan update, Cass County's two Interstate 80 exits were predetermined to require additional research and meetings in order to develop master plans for future land use development. These master plans were *not* created to claim this farmland is not valued in Cass County, but rather that there are regional indicators hinting other land uses can be of more economic value to the county.


Objectives


The land use plan of the county can be amended to reflect fluctuating needs and new opportunities. Such changes, however, require forethought and due diligence. The following objectives are meant to direct policy makers in efforts to maintain a land use plan that promotes “orderly growth and development”.

- Identify past trends in demand for various land use categories and determine which are working and which may need modification.
- Combine the county goals with estimated future demands to project future land use needs.
- Establish policies and land use suitability standards to:
 - Protect and enhance current and future building/land use
 - Provide reasonable alternatives and locations for various land uses
 - Promote efficient use of public facilities and utilities

4.3 FUTURE LAND USE

The following future land use designations have general development guidelines to be applied in the future. Figure 42, Cass County Future Land Use Map, is located after the designations.

<p>AG</p> 	<p>Agriculture</p> <p>The AG district is intended to protect and promote the continuation of agricultural operations whenever possible. These areas are predominately located in areas where the soil suitability for prime farmland is greatest. The adjacent items are examples of what is intended for this land use classification.</p> <ul style="list-style-type: none"> • Residential development in this district will be highly discouraged. • Farmsteads and necessary structures associated with the farming operations are permitted. • Larger industrial livestock confinement operations will be regulated in order to minimize their effect on the environment and other natural resources. Limitations on the proximity of these operations to other land uses will be highly encouraged. • Agricultural activities are encouraged. • Parks and golf courses
--	--

<p>AG/M</p> 	<p>Agriculture / Mining</p> <p>The AG/M district is intended to protect and promote the continuation of agricultural and mining operations. These areas are predominately located around Weeping Water and Louisville. Another area is located east of Weeping Water along the Weeping Water Creek. The adjacent uses are examples of intentions for this land use classification.</p> <ul style="list-style-type: none"> • Continued farming operations are encouraged including crop ground and pasture. • Residential development in this district will be highly discouraged. • Areas for future underground and strip mining of mineral deposits need to be protected for future extraction. • Larger Industrial Livestock Confinement operations will be regulated in order to minimize their effect on the environment and other natural resources. Limitations on the proximity of these operations to other land uses will be highly encouraged. • Agricultural activities are encouraged.
---	---

AG/REC

Agriculture / Recreation



This land use district provides for the development of recreational facilities within the county while allowing established agriculture operations and practices to continue. The adjacent uses and activities are intended for this district.

- State and local parks and associated uses
- Golf courses
- Historical sites and monuments
- Agricultural operations including production crops and pasture land
- Governmental facilities
- Controlled residential development.
- Agricultural activities are encouraged.
- Livestock confinements are discouraged to locate or expand in this district when adjacent to recreational facilities/areas.

TA

Transitional Agriculture



The TA district represents a transitional area in the county where agricultural functions are protected and where acreage development may occur. The location of these districts will be near jurisdictional intersections, near established Sanitary Improvement Districts and Homeowner Associations. The district is intended to provide a location where agriculture can continue to thrive, but may at some point in the future be influenced by growth in the municipalities of Cass County. This designation provides an agricultural buffer between more intensive agricultural activities and the growth areas of the municipalities. Uses and activities intended for this district are outlined in the adjacent column.

- Agriculture, primarily row crop agriculture
- Controlled Residential Development
- Farmsteads and necessary structures associated with the farming operations
- Livestock confinements are highly discouraged to locate or expand in this district.
- Parks and golf courses
- Support services, i.e., churches are permitted

Land Use Designations

GC

General Commercial



This land use district is intended to accommodate commercial uses at various locations throughout Cass County. The designated areas are intended to be near existing municipalities, at major intersections of Highways and Major County Roads, near established or proposed developments, and at interchanges of Interstate 80. Allowable uses in this district are outlined in the adjacent column.

- Larger commercial developments requiring onsite parking
- Businesses and services supplying retail products
- Offices for professional employment
- Governmental facilities
- Automobile race tracks
- Businesses supplying goods and services to residents in need of fast transactions (examples: convenience stores, laundromats, and small restaurants)
- Auto and travel related uses (such as service stations, motels, fast food restaurants, Automobile dealerships)
- Agricultural related commercial services (nurseries, implement dealerships, orchards)
- Residential development is highly discouraged

FLEX

Flex



This land use district is intended to accommodate commercial uses and smaller, less intensive industrial uses as well as recreational uses, campgrounds, warehousing, self-storage, and employment centers. Location is important, as proximity to major roads can help ensure heavy traffic will avoid residential areas and prominent pedestrian activity centers. Ideal areas for this land use designation would be Exit 420 and allowable uses would include those listed at right.

- Businesses and services supplying retail products
- Governmental facilities
- Automobile race tracks
- Private campgrounds
- Auto and travel related uses (such as service stations, motels, fast food restaurants, automobile dealerships)
- Agricultural related commercial services (nurseries, implement dealerships, orchards)
- Small scale production business
- Production with minimal odors, noise and other pollution and water usage with material enclosed or within fenced yards.
- Full scale wholesaler/distributors
- Residential development is highly discouraged

IND/AG Industrial Agriculture



This land use district is to provide for logical development of industrial facilities within the county while allowing agricultural operation to continue into the future. The types of uses and activities intended for this district include those listed at right.

- Agricultural related commercial services (nurseries, implement dealerships, orchards)
- Agricultural operations including production crops and pasture land
- Governmental facilities
- Small scale production business
- Production with minimal odors, noise and other pollution and water usage.
- Full scale wholesaler/distributors
- Residential development is highly discouraged

LI Light Industrial



This district is intended to accommodate less intensive manufacturing companies. These facilities will be located along major transportation routes in order to minimize damage and upgrading of the existing county road system. These districts will be located in close proximity to municipalities, major Highway intersections, and along interchanges on Interstate 80. The types of uses intended for this district include those at right.

- Production businesses
- Production with minimal odors, noise and other pollution and water usage
- Full scale wholesaler / distributors
- Residential Development is highly discouraged

P/QP Public / Quasi-Public



This district is located at areas where a large amount of land is required for public uses. These areas include such uses as the public school building sites, municipality and county facilities, and cemeteries. There are other public facilities scattered around the county, and these will be accommodated in the particular land use districts. Future allowable uses in this district include those at right.

- Continuation of existing public uses such as public and parochial schools, municipal and county properties
- Health care facility options
- Secondary Education campuses/facilities
- Parks

Land Use Designations

REC

Parks and Recreation



This district accommodates the existing parks and recreational facilities throughout Cass County and expands these facilities to begin the development of a recreational corridor within the County. The proposed recreational corridor will build upon the recreational facilities already established or proposed in Cass County. These are located primarily in the northwest corner of Cass County. This land use district will connect the recreational amenities while improving the County's quality of life. Additional areas will include lands along the Platte River north of Plattsmouth. The types of uses intended for this land use designation are outlined at right.

- Businesses and services which are subordinate to the recreational use
- Parks and zoological operations
- Lodging and dining facilities when subordinate to the primary uses and when included within a mixed-use development
- Trails and trailhead development
- Fishing and hunting preserves when remotely located from other major activities
- Residential Development is highly discouraged

RT

Rural Tourism



This land use district is to accommodate those recreational and tourism uses at or near Exit 426 and has been identified as an area to preserve. Limited development should preserve the natural environment, complement the existing recreational uses in the area, and involve strict design guidelines in order to assure quality development. Landscaping and berming should be used in any development to help screen the uses and protect the scenic views. The land use district will connect the Mahoney State Park, Strategic Air Command Museum, and the Lee G. Simmons Conservation Park and Wildlife Safari Park while allowing for support services and business to locate adjacent to these existing uses. The types of uses and activities intended for this district include:

- Museums, parks, golf courses, outdoor concert facilities, zoological operations and support services
- Trails and trailhead development
- Lodging and dining facilities when subordinate to the primary use or when included with a mixed use development.
- Tourism and information centers
- Educational and training facilities pertaining to tourism and/or natural resources.
- Businesses and services that compliment the recreation and tourism uses and are located and in harmony with the natural environment.
- Residential Development is highly discouraged.

RES Residential



This land use district is intended to accommodate denser residential development. The location of these districts will be near existing residential developments located within the municipal jurisdiction or adjacent to existing Sanitary Improvement Districts. This land use category is intended to accommodate future residential development and expansion associated with larger tracts of land. Areas designated as RES will eventually be an expansion of an existing development or will be annexed into a municipality in the future. The intended uses in this district will be required to be serviced by new or expanded centralized water and wastewater systems.

- Flexibility in density along floodplains
- Single-family units in subdivisions on smaller lots
- Including support services such as churches

RR Rural Residential



This district is intended to accommodate residential development that lies in undeveloped or underdeveloped areas of Cass County. These developments will be supported by centralized water and wastewater, or each lot will have independent wells and septic tank absorption fields. In the case of septic tank absorption fields, the soil suitability of the area should be reviewed for potential limitations. All proposed septic systems will be required to have soil tests. Where soils are determined to be incompatible for septic systems, special Nebraska Department of Environment Quality (NDEQ) and Nebraska Department of Health and Human Services (NDHHS) approved engineering solutions will be required. In the case of a centralized wastewater disposal system, soil suitability should also be reviewed for potential limitations. The appropriate certified soil testing should be undertaken, and appropriate NDEQ and NDHHS engineering solutions should be implemented to minimize impacts on the environment. The intended uses for this district include those listed at right.

- Flexibility in density along flood plains
- Single-family Units on smaller acreages
- Including support services and facilities such as churches and parks

Land Use Designations

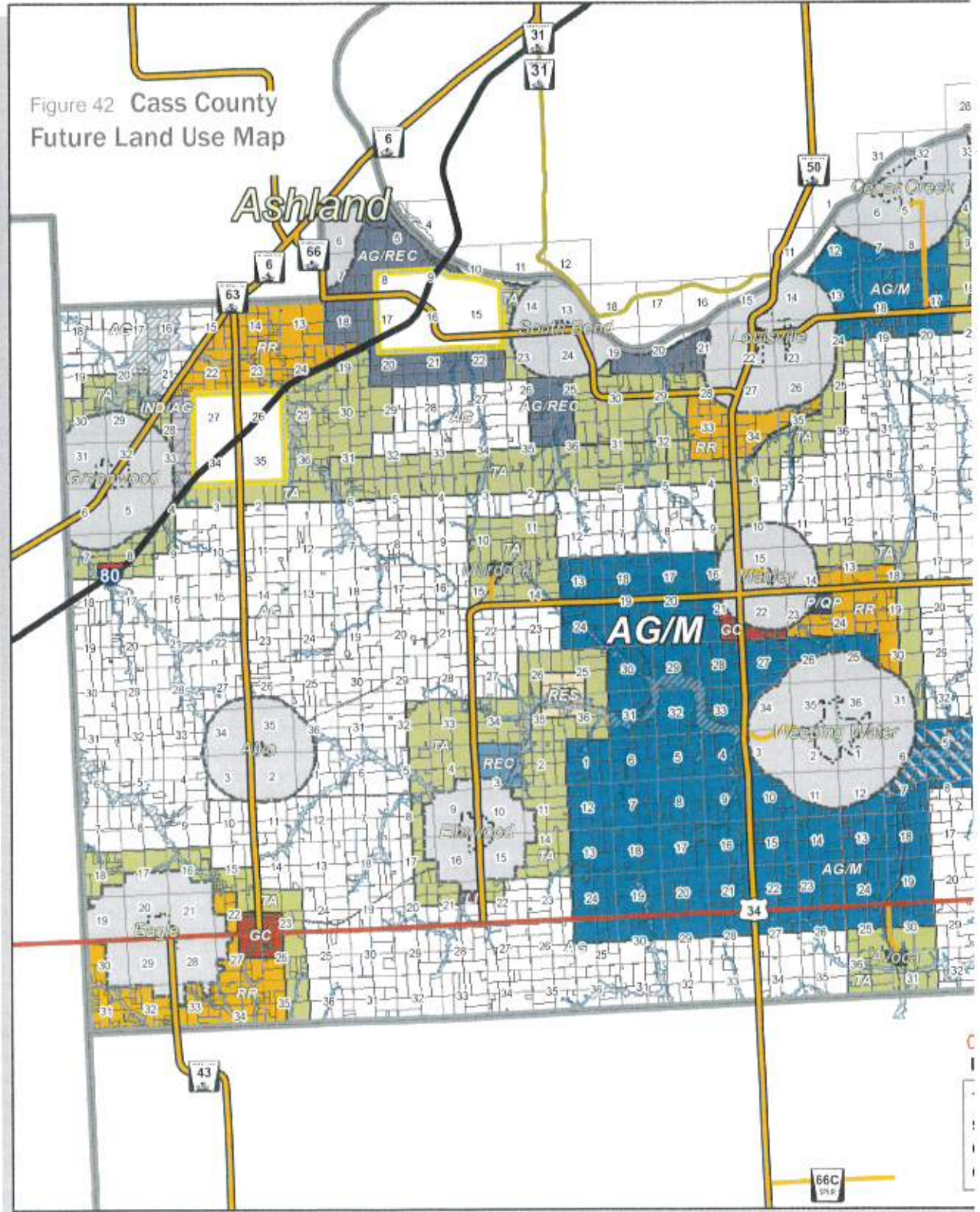
CO Conservation Overlay



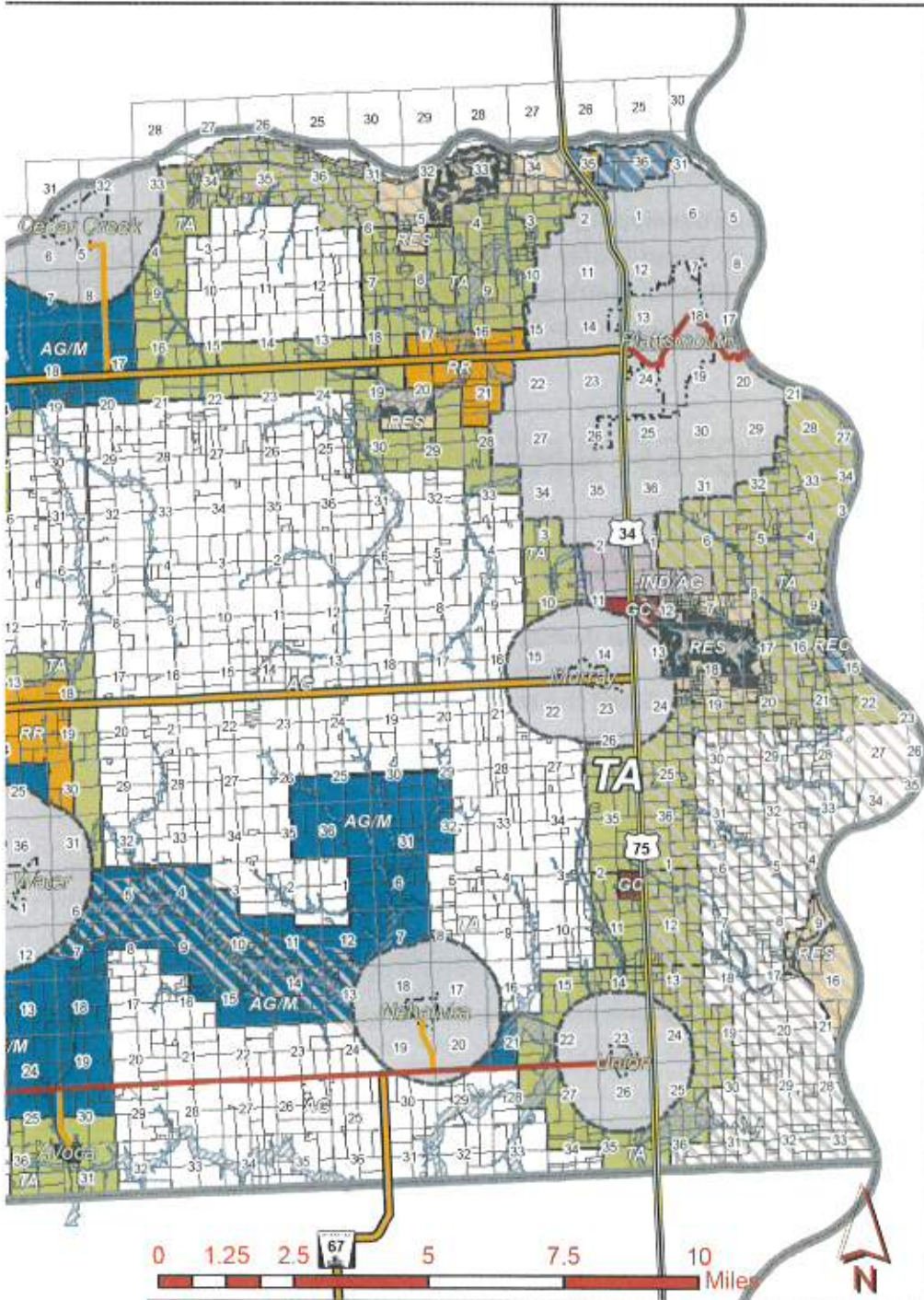
This land use district may accommodate several different types of uses. However, the intention of the conservation district is to preserve as much of the natural environment, primarily wooded areas along the bluffs of the rivers. New development would be limited to the amount of wooded area that could be disturbed. Streams and rivers should be protected from encroaching development. Setbacks along such waterways should be increased. Development in the floodplain should be discouraged. The types of uses intended for this land use designation are listed at right.

- Rural Residential Subdivisions
- Limited Commercial Development
- Parks and nature preserves

4.3 FUTURE LAND USE



4.3 FUTURE LAND USE



This map was prepared using information from record drawings supplied by JEO and/or other applicable city, county, federal, or public or private entities. JEO does not guarantee the accuracy of this map or the information used to prepare this map. This is not a scaled plat.

**Future Land Use
Cass County, Nebraska**

Legend

- Sections Lines
- Corporate Limits
- Community ETJ
- Cass Parcels
- Floodplain**
- 100-Year Floodplain
- Land Use**
- Agriculture (AG)
- Agriculture/Mining (AG/M)
- Agriculture/Recreation (AG/REC)
- Rural Tourism (RT)
- General Commercial (GC)
- Flex (FLEX)
- Industrial Agriculture (IND/AG)
- Light Industrial (LI)
- Public / Quasi-Public (P/QP)
- Recreational (REC)
- Residential (RES)
- Rural Residential (RR)
- Transitional Agriculture (TA)
- Conservation Overlay (CO)
- Special Character Areas

Created By: SMS
Date: Jan 2014
Revised: Dec 2014
Software: ArcGIS 10.2
File: 130377.00



4.4 SPECIAL CHARACTER AREAS

The concepts for Exits 420 and 426, developed through the planning commission and influenced by public input, will become important catalysts to develop Cass County's goals of preserving the natural environment while developing economic opportunities.

There are many hurdles in the process of developing these two exits. As discussed previously in Section 2.8, Cass County is served by Rural Water Districts. However, in these two study areas there is no rural water supply. Master plans were developed with a great deal of discussion on how to provide needed infrastructure to the areas and the necessary steps to provide utilities.

SPECIAL CHARACTER AREA 1 - EXIT 420

AREA DEFINITION AND DESCRIPTION

Character Area 1 is defined as the area at and near Exit 420 on Interstate 80. Exit 420 is an interchange between Omaha and Lincoln providing significant visitor services. The interchange includes the Nebraska Raceway Park, light industrial development and a Nebraska Department of Roads maintenance facility. It is often referred to as the 'Greenwood Interchange.' Highway 63, the crossing road, connects the north from Highway 6 and the south from Alvo and Eagle (via Highway 34).

INTENT

Exit 420 provides a midway point between Lincoln and Omaha along Interstate 80. This area can service the two metro areas and many surrounding communities. The large flat tracts of land near this interchange are conducive to larger industrial and distribution uses. The quality and character of the new development in this area should be directed by the following concepts, compatible uses, and policies.

INTERCHANGE CONCEPTS

Character/Theme

- Motor sports, based on Nebraska Raceway Park
- Agriculture and research, reflecting the large grain elevators at Greenwood and Waverly that form part of the viewscape from I-80
- Distribution, light industrial and logistic use developments.

Land Use and Development Directions

- Develop a green corridor along I-80 with intensive landscaping around and within the interchange diamond.
- Gateway feature at the Highway 63 intersections.
- Travel services at existing sites and on the northwest quadrant of the interchange.
- New service road extending Greenwood Drive to Davey Road
- Expand the Nebraska Raceway Park as a major spectator recreation feature.
- General industry with design standards along Highway 63 north to Davey Road and immediately south of the interchange.
- Attract agricultural research facilities as a transition from the interchange development area to the agricultural landscape.
- Expansion of the NDOR facility as growth requires.
- Sustainable stormwater management practices using natural drainage patterns.

COMPATIBLE USES

The proposed development at Exit 420 would include highway commercial, light industrial, flex, and industrial agriculture and the following compatible uses:

Commercial

- Retail
 - Locally owned businesses
 - National and regional chains
- Restaurants and convenience stores
- Commercial Parks
- Traveler services and lodging

Public/Quasi-Public

- Governmental Facilities
- Recreation/Community Centers
- Parks/Trails

Industrial and Flex

- Agriculture Retail
- Service uses
- Automotive Repair and enclosed storage yard
- Self-storage
- Warehousing/distribution
- Employment centers
- Low- to medium-impact (minimal water usage, minimal smoke output, minimal waste production) industrial uses
- Fully enclosed uses

4.4 SPECIAL CHARACTER AREAS

POLICIES

- Frontage roads should be considered to lessen congestion with future development.
- Development in this area should allow for commercial, light industrial, flex, and governmental facility
- All development shall follow stormwater policies recommended by the County and Natural Resources District (NRD).

Use of sustainable stormwater management practices and maintenance of natural drainage patterns, incorporating water courses into the design of commercial and industrial features.

- Cass County shall market land for development.

DESIGN GUIDELINES

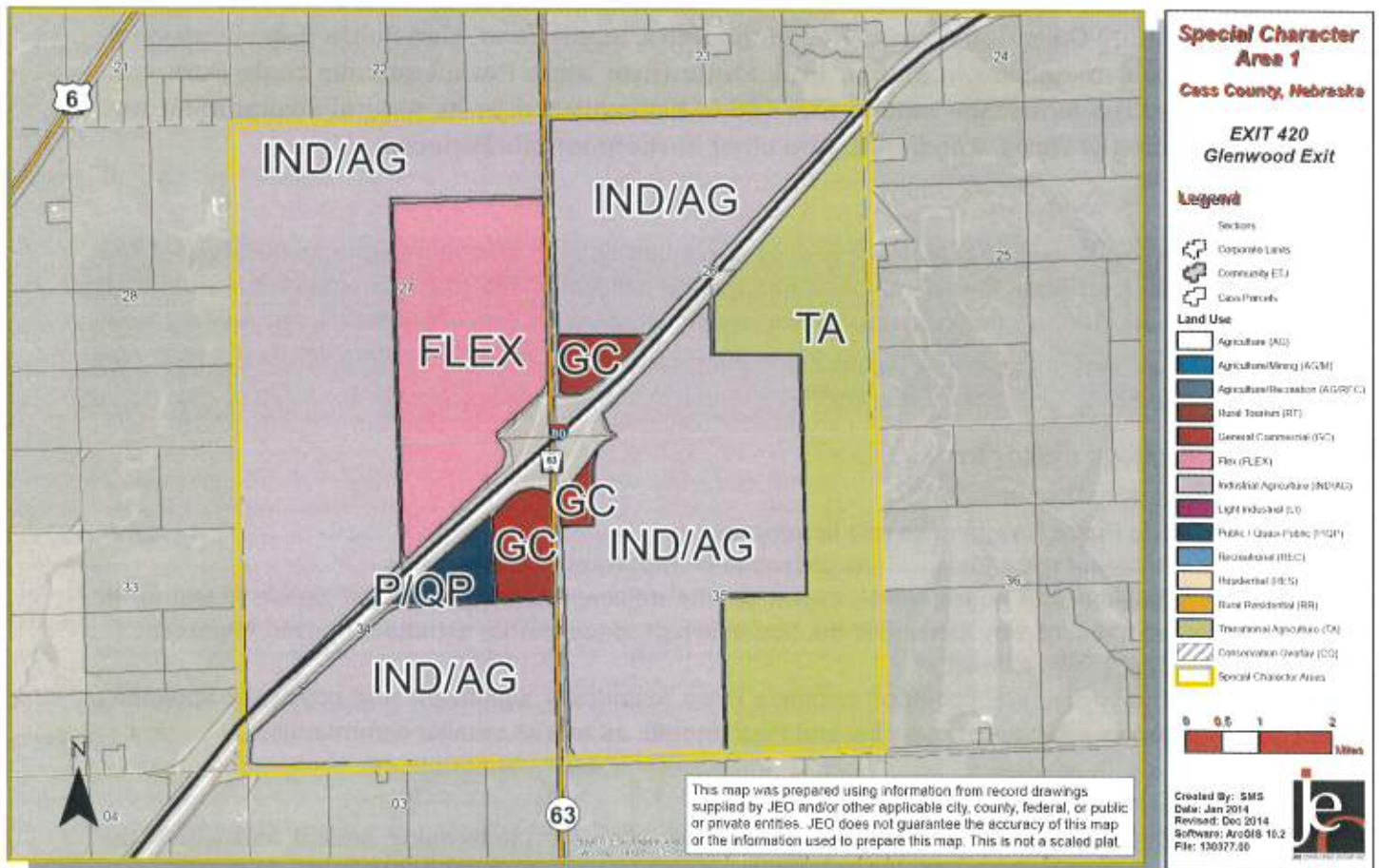
In addition to any design regulations implemented through zoning, the following guidelines are highly encouraged:

1. Development should incorporate green/sustainable strategies.
 - Natural habitat and drainage and waterways should be preserved and measure to ensure their conservation should be pursued.
 - Buildings should employ energy efficient design
2. Parking areas should be designed to include natural landscaping and softer surfaces that break the expanse of hard paving. They should be located away from the street right-of-way or behind buildings and should be well-screened.
3. Landscaping designs should include trees and vegetation that will enhance Exit 420. Proper plant selection and placement can create buffers between uses, visual screens, and pedestrian protection.
4. A variety of paving materials and textures should be utilized to designate significant paved areas. (i.e. crosswalks, sidewalks, etc.)
5. Lighting should reflect the character of the area.
6. Wayfinding signage should be designed to reflect the character of the area and be strategically located to avoid interference with traffic safety.
7. Signage should be consolidated and limited to those necessary to identify tenants and direct traffic.
8. Earthen berms and/or plantings shall be incorporated into site plans to increase aesthetics and reduce negative visual impacts of parking lots and structures from public right-of-ways.

4.4 SPECIAL CHARACTER AREAS
#1: Exit 420

Special Character Area #1 Exit 420 - 'Greenwood Interchange'

Figure 43 Special Character Area #1 - Exit 420



SPECIAL CHARACTER AREA #2 - EXIT 426

AREA DEFINITION AND DESCRIPTION

Character Area 2 is defined as the area at and near Exit 426 on Interstate 80. This exit, just south of the Platte River, is distinguished by a scenic landscape and a unique cluster of destinations. Eugene T. Mahoney State Park, Lee G. Simmons Wildlife Safari, and the Strategic Air and Space Museum are three of Nebraska's most frequently visited attractions. They are grouped at the interchange of 426 and Highway 66. To the west, Highway 66 connects these regional destinations to Ashland three miles away. To the east, the highway serves Quarry Oaks Golf Course, Round the Bend, South Bend, Lied Platte River Crossing of the future Omaha-Lincoln MoPac Trail, Platte River State Park, Louisville State Park, and Louisville. The landscape around Exit 426 is distinguished by its natural environment and preservation of views, woodlands, and other environmental resources.

INTENT

The interchange at Exit 426 has provided for much sought after development because of the Platte River and State Parks. This area has natural amenities and must be protected with limited development. The use of design guidelines should complement and enhance the surrounding area. The quality and character of the new development in this area should be directed by the following concepts, compatible uses, and policies.

INTERCHANGE CONCEPTS

Character/Theme

- The Platte River and its role in Nebraska
- Regional recreation, with its collection of important visitor features
- Aviation and space travel, based on the adjacent Strategic Air and Space Museum. In addition, nearby Ashland is the hometown of space shuttle astronaut Clayton Anderson
- Small town character.
- The Highway 66 corridor connects three historically significant and physically appealing towns – Ashland, Louisville, and Plattsmouth, as well as smaller communities.

Land Use and Development Directions

- Develop a green corridor along I-80 with intensive landscaping around and within the interchange diamond
- Preservation of woodland areas and natural environments.

- Development of very high quality visitor service facilities at the interchange and the cluster of regional attractions. Development standards for these limited sites must be extremely restrictive to be consistent with the preserved natural area and the quality of surrounding features.
 - Limited, specific conservation development southeast of the interchange, buffered by woodland areas parallel to the highway.
 - Continue the development of West and East Park Highway (Nebraska Highway 66) as a multi-modal corridor with good bicycle accommodations, landscaping, and wayfinding signage.
 - Sustainable stormwater management practices, using natural drainage patterns.

COMPATIBLE USES

Commercial

- Retail
 - In conjunction with the primary use
 - Locally owned businesses
- Restaurants
- Educational and Training Facilities
- Lodging
 - Services in conjunction with primary uses

Residential

- Townhomes with mixed use development
- Condominiums with mixed use development

Public/Quasi-Public

- Governmental Facilities
- Libraries/Museums
- Recreation/Community Centers
- Parks/Trails

4.4 SPECIAL CHARACTER AREAS

POLICIES

All development shall utilize colors and building materials that are natural and appropriate to the area and complement the structures at the regional attractions of Mahoney State Park and Wildlife Safari. Structure and parking lots shall be screened with the use of plant material and berming.

All residential uses within this Character Area should have greater setbacks from any highway or arterial.

Green Space requirements:

- A ten-foot landscape buffer along any highway or major arterial in addition to any required yard setbacks. Such buffer should be designated adjacent to the right-of-way.
- An additional 8% of the entire development site should be allocated for green space in any non-residential development. This green space can include:
 - Required green space within parking areas
 - Internal trails systems
 - Natural drainage ways
 - Internal boulevard systems
 - Green space at the intersection of highways and major arterial
- Parking requirements for commercial/office/industrial:
 - No more than two drive lanes should be allowed without an intervening green/landscape median/island. Three or four drive lanes shall require such median/island of at least five feet in width for adequate vegetative growth.

All development shall follow stormwater policies recommended by the County and Natural Resources District (NRD).

- Use of sustainable stormwater management practices and maintenance of natural drainage patterns, incorporating water courses into the design of neighborhoods and commercial development.
- Landscaping should be provided in naturalistic groupings rather than linear manner.
- All site design elements should be integrated and relate to one another as well as to the overall character of Exit 426. Site and building design should enhance the natural environment and integrate with natural features, such as topography, trees, viewsheds, etc.
- Stormwater facilities should appear natural through the use of appropriate landscaping and naturalistic shapes.
- Commercial uses should be screened from nearby residential uses and school sites using berms, fences, or landscaping.

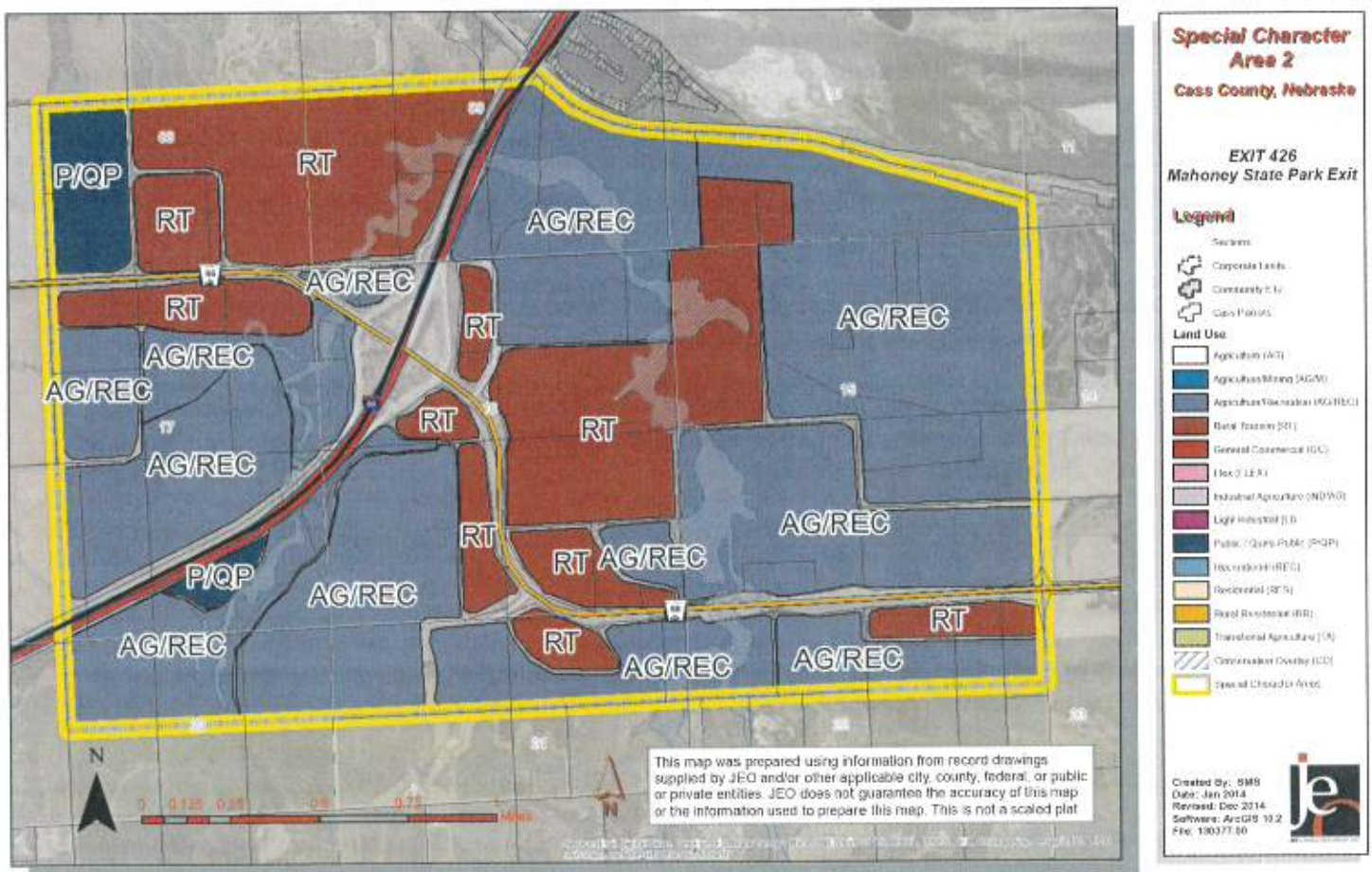
DESIGN GUIDELINES

In addition to any design regulations implemented through zoning, the following guidelines are highly encouraged:

1. **Brick, masonry, and tile materials should be the primary building material palette of choice**
 - Integration of materials is encouraged (stucco, ironwork, glass, etc.)
 - Metal and pre-fabricated buildings are strongly discouraged unless designed to meet the character of the area
2. **Façades shall consider views of buildings from all public right-of-ways.**
3. **Developments should be designed to a human scale**
 - The street-facing façade should be penetrable. It should include windows and openings to allow a connection between the building interior and the sidewalk.
 - Shopping and dining areas should be oriented toward and friendly to the pedestrian rather than the automobile.
 - Awnings should be placed on the main level to provide shelter and protection for pedestrians on the sidewalk.
4. **Public spaces should be incorporated into all developments. These spaces can include plazas, pedestrian corridors, seating areas, and more.**
5. **Parking areas should be designed to include natural landscaping and softer surfaces that break the expanse of hard paving. They should be located away from the street right-of-way or behind buildings and should be well-screened.**
6. **Landscaping designs should include trees and vegetation that will enhance the Area. Proper plant selection and placement can create buffers between uses, visual screens, and pedestrian protection**
7. **A variety of paving materials and textures should be utilized to designate significant paved areas. (i.e. crosswalks, sidewalks, etc.)**
8. **Lighting should be decorative in nature and reflect the character of the Area.**
9. **Wayfinding Signage should be designed to reflect the character of the Area and be strategically located to avoid interference with traffic safety.**
10. **Signage should be consolidated and limited to those necessary to identify tenants within the development and direct traffic. Such signage should be low profile/monument style signs.**
11. **Earthen berms and/or plantings shall be incorporated into site plans to increase aesthetics and reduce negative visual impacts of parking lots and structures from public right-of-ways and residential areas.**

Special Character Area #2 Exit 426 - 'Mahoney State Park'

Figure 44 Special Character Area #2 - Exit 426



4.5 TRANSPORTATION

The Transportation section addresses issues of connectivity by considering their far-reaching effect on broader community interests. Among these are tourism, economic development, talent attraction and retention, safety, healthy living, housing variety, and environmental preservation.



State Functional Classification

All of the public highways, roads, and streets in Nebraska are divided into two broad categories, and each category is divided into multiple functional classifications. The two broad categories are Rural Highways and Municipal Streets. State statute defines Rural Highways as “all public highways and roads outside the limits of any incorporated municipality,” and Municipal Streets as “all public streets within the limits of any incorporated municipality.” Neb. Rev. Stat. § 39-2102 (RRS 1998)

The functional classifications are used to define typical traffic patterns and jurisdictional responsibility. The functional classifications for Rural Highways are defined by state statute as follows:

- (1) Interstate, which shall consist of the federally designated National System of Interstate and Defense Highways;
- (2) Expressway, which shall consist of a group of highways following major traffic desires in Nebraska that rank next in importance to the National System of Interstate and Defense Highways. The expressway system is one which ultimately should be developed to multi-lane divided highway standards;

4.5 TRANSPORTATION
State Functional Classification

- (3) Major Arterial, which shall consist of the balance of routes that serve major statewide interests for highway transportation. This system is characterized by high-speed, relatively long distance travel patterns;
- (4) Scenic-Recreation, which shall consist of highways or roads located within or which provide access to or through state parks, recreation or wilderness areas, other areas of geographical, historical, geological, recreational, biological, or archaeological significance, or areas of scenic beauty;
- (5) Other Arterial, which shall consist of a group of highways of less importance as through-travel routes that would serve smaller populations and smaller recreation areas not served by the higher systems;
- (6) Collector, which shall consist of a group of highways that pick up traffic from many local or land-service roads and carry it to community centers or to the arterial systems. They are the main school bus routes, mail routes, and farm-to-market routes;
- (7) Local, which shall consist of all remaining rural roads, except minimum maintenance roads; and
- (8) Minimum Maintenance, which shall consist of (a) roads used occasionally by a limited number of people as alternative access roads for areas served primarily by local, collector, or arterial roads, or (b) roads which are the principal access roads to agricultural lands for farm machinery and which are not primarily used by passenger or commercial vehicles.

Neb. Rev. Stat. § 39-2103 (RRS 1998).

The statute goes further by stating that certain rural highways classified under subdivisions (1) to (3) of section 39-2103 "should, combined, serve every incorporated municipality having a minimum population of one hundred inhabitants or sufficient commerce, part of which will be served by stubs or spurs, and along with rural highways classified under subdivision (4) of this section, should serve the major recreational areas of the state." Sufficient commerce, defined in Neb. Rev. Stat. § 39-2103, is "a minimum of two hundred thousand dollars of gross receipts under the Nebraska Revenue Act of 1967." In other words, every incorporated municipality with a population of 100 or greater, or one that has sufficient commerce, should be served by either a (1) Interstate, (2) Expressway or (3) Major Arterial.

4.5 TRANSPORTATION

Existing Transportation

EXISTING TRANSPORTATION SYSTEM

ROADS/HIGHWAYS

The Nebraska Department of Roads maintains its State Highways and splits Cass County into two districts. The Cass County Department of Roads department maintains county highways and the rural road system. The various road highway designations for Cass County are illustrated on the Existing Transportation System Map (Figure 45).

PUBLIC TRANSPORTATION

There are no public transportation or metropolitan bus lines in Cass County. However, the Eastern Nebraska Office on Aging (ENOA) provides rural transportation to rural Cass County population. Residents may call and request a ride between Monday through Friday (8am to 5pm). Requests need 24-hour advance notice. Costs are based on a one way trip and vary by distance traveled.

RAILROADS

Many Cass County communities were established as rail towns and their histories are linked to the rail industry. Currently, the county is served by the Burlington Northern Santa Fe Railway Company and Union Pacific.

There are no passenger services within Cass County; however, there is passenger rail service located at Amtrak stations in Downtown Lincoln and Downtown Omaha. The railroad industry continues to provide opportunities for Cass County residents. The former Missouri Pacific Railroad abandoned rail line, as well as its bridge, has been repurposed for alternative transportation along its right-of-way for the MoPac Trail. Trails may now connect communities that were once connected by rails.

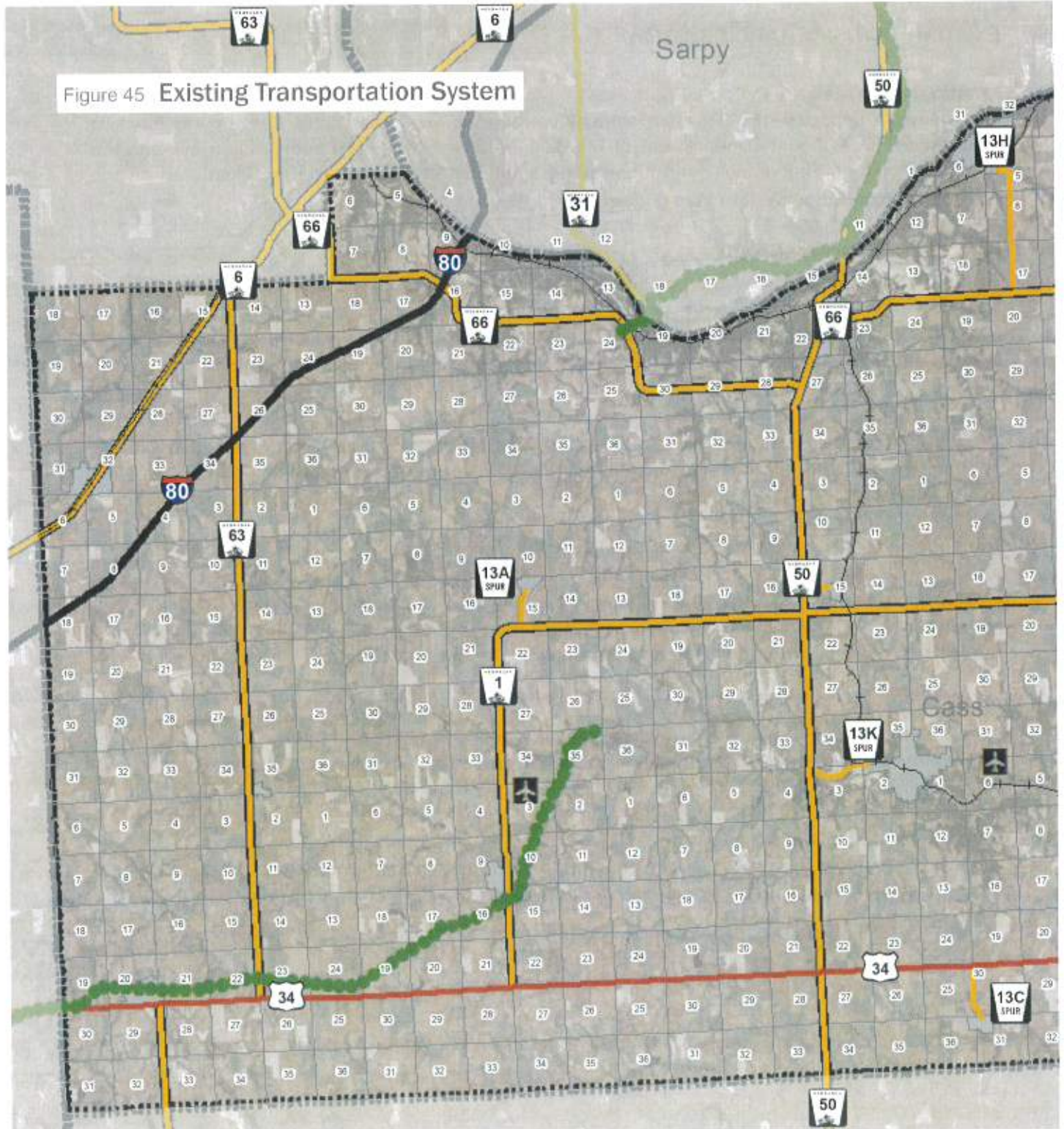
AIRPORTS

Cass County has multiple private airfields as well as a public-use airport in Plattsmouth. Commercial services are available at the Lincoln Municipal Airport and Eppley Airport in Omaha.

For Plattsmouth's public-use airport, there is a need to incorporate appropriate development and transportation to reflect the needs of its approach and turning zones. New state legislation, LB140, extends Plattsmouth Airport Authority's protected area from 3 to 10 miles. Height restrictions should be considered when decisions involve nearby airfield locations.

4.5 TRANSPORTATION

Existing Transportation Map





Existing Transportation System

Cass County, Nebraska

Legend

Alternative Transportation

- Existing Trails
- Airports or Airfields
- Interstate
- Expressway
- Major Arterial - Continuous (Principal)
- Major Arterial - Continuous (Intermediate)
- Major Arterial - Non-Continuous
- Major Arterial - Scenic Recreation
- Rail Roads
- Corporate Limits as of October 2013
- Sections

Created By: MBG
 Date: DEC 2013
 Revised: August 2014
 Software: ArcGIS 10.2
 File: 130577.00

This map was checked every 1000 feet from street centerlines supplied by the vendor after appropriate city, county, federal, or state permits were within. J.E. and partners warrant the accuracy of the data in the information contained on this map. This is not a warranty.

4.5 TRANSPORTATION

FUTURE TRANSPORTATION PLAN

The future transportation plan incorporates reports and plans from the county and the Nebraska Department of Roads together with the public input from town hall meetings, focus groups, the steering committee/planning commission, and the County Board of Commissioners. Cass County's Transportation Plan recognizes the Nebraska Department of Roads projects and those projects within the county's one and six year plan and includes recommended projects identified in Future Road Development and Future Trails Development.

Nebraska Department of Roads (NDOR) Projects

Cass County has recently received substantial assistance from Nebraska Department of Roads (NDOR) District 2 for a few projects. Highway 75 has been widened to improve traffic flow and Highway 34, which previously traveled through Plattsmouth, has been rerouted farther north into Sarpy County. Despite the re-routing of Highway 34, this improvement can have a large impact for eastern Cass County development.

On a regional scale, both NDOR Districts 1 and 2 improvement plans identify future projects in Cass County. In the immediate NDOR 2015 Fiscal Year, there are three Cass County projects scheduled in District 1 and 2. These budgets include:

- Highway 63 north of Highway 34 to Alvo will be resurfaced.
- Highway 66 between Interstate 80 and South Bend will be milled and resurfaced.
- Highway 50 resurfacing and bridge repair between Louisville and Springfield in Sarpy County.

Other Cass County projects were identified for the Fiscal Years 2016-2020 Planning Program. Budgeting or available funding for such improvements is not guaranteed and subject to priorities.

NDOR District One, consisting of the west and south side of Cass County, identifies the Fiscal Years 2016-2020 planning program as:

- Highway 63 from Alvo to Interstate 80.
- Highway 66 from South Bend to Highway 50 will be milled, resurfaced and have bridge repair done as well as Phase 2 of Highway 66 interchange to Interstate 80 .
- Highway 43 south of Eagle will be milled and resurfaced to Highway 2 in Otoe County.
- US 34 has two projects identified between Highway 50 and Union in which the roads will be milled, resurfaced, and receive bridge repair.

4.5 TRANSPORTATION

Future Road Plans

- The road connecting Weeping Water to Highway 50, Spur 13K, is expected to be resurfaced and have bridge repair done.

NDOR District Two, the eastern half of Cass County, identifies four highways to improve between FY 2016-2020.

- Highway 1 has three projects identified between Manley and Highway 75. These include roads to be milled and resurfaced.
- US 34 between Union and Plattsmouth is scheduled to be resurfaced and have bridge repair.
- Highway 66 is to be resurfaced between Louisville and Plattsmouth.
- Highway 75 between Murray and Plattsmouth will be widened to a four-lane highway.

Cass County One- and Six- Year Road Plan

The current Cass County one- and six-year road plan identifies roads and bridges in need of repair. As per state statute, the county must update their one- and six-year plans annually. The county should closely monitor its growth and development to determine if any additional roads would be necessary. As rural subdivisions are allowed to locate throughout the county, there will be a greater demand for hard surfaced roads. The county should examine whether hard surfacing should be assessed against property owners, paid for by the county or in a joint effort between residents and county. This policy should be established and maintained in order to avoid any unfair treatment or the appearance of such unfair treatment. Future development is encouraged to locate near municipalities and current hard-surfaced roads to mitigate the maintenance costs that strain limited budgets.

Some of the major projects identified in the Cass County One- and Six- Year Plan include:

- Replacing Maintenance shop in Plattsmouth to Mynard
- Repairing or replacing multiple bridges

Additional projects are found in the one- and six- year road plan prepared by the County Highway Department and approved by the County Board. Such plans should take into consideration and reviewed with the comprehensive plan.

Future Road Development

The Future Transportation Map (Figure 46) also includes possible projects described during the public input process. One suggested project was a proposed bridge over the Platte River located between 72nd and 96th Streets. The additional bridge would provide a third connection between Cass County and Sarpy County. A second project would be a proposed collector on 84th Street that would connect Highway 34 in Cass County to Platteview Road in Sarpy County. Another proposed collector includes a potential bypass southeast of Louisville connecting Highway 50 to Highway 66.

Future Trails Development

Recent years have seen an increased interest in another form of transportation involving hiking/biking trails. There has become a large demand for such facilities in rural areas. The demand is primarily from urban residents wanting to escape the urban environment. With the development of the State Parks system and other recreational facilities in Cass County, there will be even greater demand for trails in the future to connect these areas of interest. In order to meet future demands for trails, the county should take a proactive approach. The county government should propose and direct future trails development to land that is already tax exempt, or to areas that will maintain their taxable status. One approach to using tax-exempt land would be to coordinate with the Nebraska Department of Roads to construct wider surfaced shoulders along major state highways to accommodate this recreational traffic or to allow construction of trails separate from the pavement but within the right-of-way. The use of county roads and rights-of-ways should also be examined for trail development. Trails within Cass County, if approached properly, can mean a great deal of economic development for the county and its municipalities.

The Future Transportation Map (Figure 46) has identified the existing and proposed trails in Cass County. The existing MoPac East Trail utilizes an abandoned railroad corridor and is owned and managed by the Lower Platte South Natural Resources District. A proposed trail from the MoPac East Trail to the Lied Platte River Bridge through Cass County will complete a regional trail connection between the cities of Lincoln and Omaha. This and other trails throughout the county are planned to connect some of the communities in Cass County to some of the recreational areas and to regional points of interest.

4.5 TRANSPORTATION

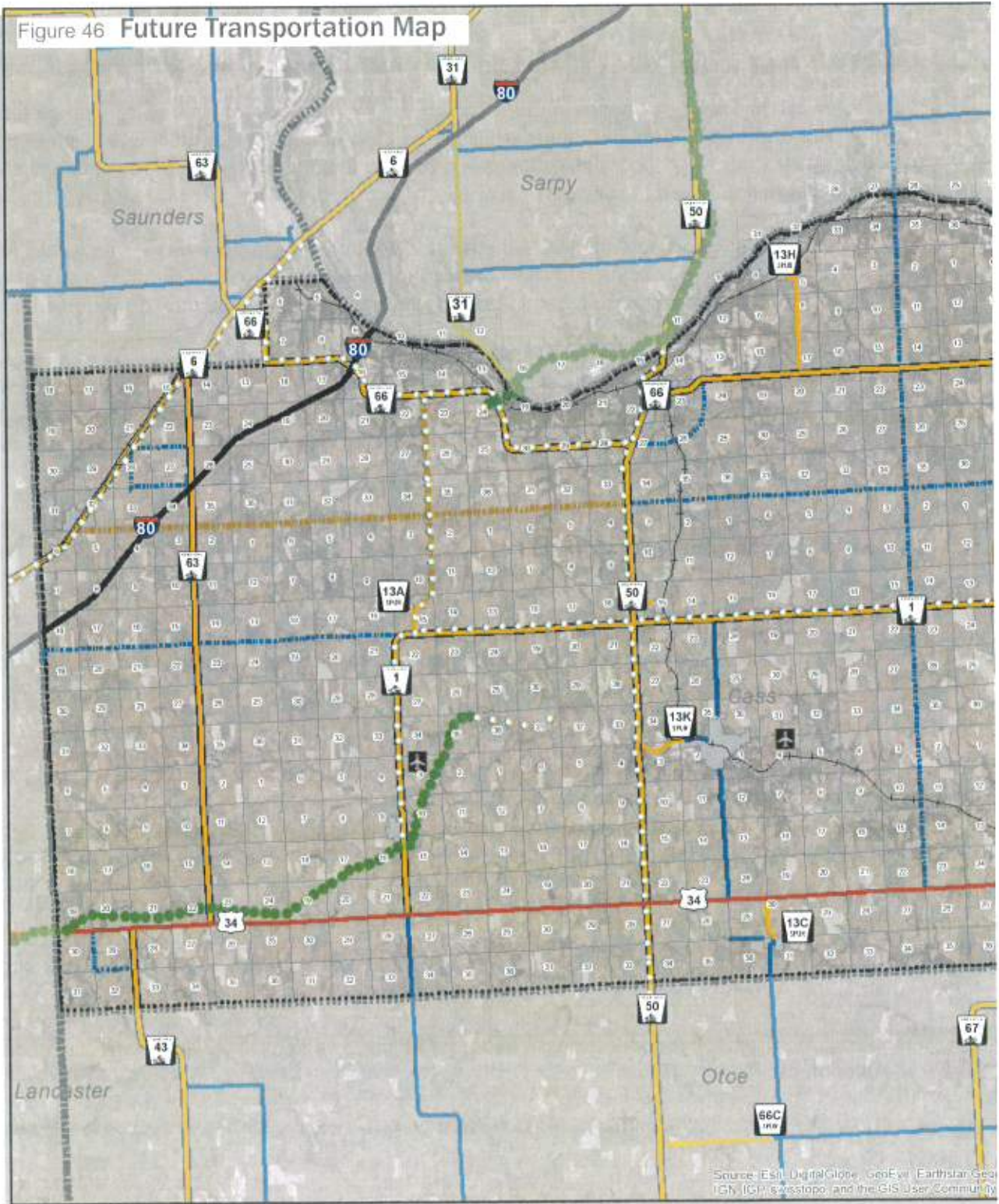
Proposed Trail Routes

Some of the proposed trails in the County Plan are also part of a Statewide Plan. The following is a listing of proposed trail routes in Cass County identified the Nebraska Trails Plan, called "Network of Discovery: A Comprehensive Trails Plan for the State of Nebraska," completed in 1994. This Trails Plan identified future trails within Cass County. These trails would either pass through Cass County, connect designations within Cass County, or connect to regional and state trails of Nebraska.

- Ashland to Louisville via Mahoney and Platte River State Parks - This would be a multi-use trail using Nebraska State Highway 66 and East Park Highway rights-of-way to tie the parks to neighboring communities. This trail would total 14.8 miles.
- US 75, Platte River to Nebraska City - This would be a multi-use trail connecting Nebraska City with the Papio Trail System. This trail is currently possible with the allocated right of way built into the design. A contract with Sarpy County is needed to begin discussions on the future of this trail and its funding. This trail would total 25.0 miles.
- Missouri River Trail, Blair to Nebraska City - This would be a multi-use trail with greenways. The trail system has incorporated into and consistent with the US Army Corps of Engineers Corridor Plan. This trail would total 64.8 miles.
- Nebraska State Highway 50, Louisville to Syracuse - This would be a trail connecting the two communities using primarily shoulders along Nebraska State Highway 50. This trail would total 26.0 miles.
- US Highway 6 and Nebraska State Highway 31, Lincoln to Elkhorn - This trail would pass through Cass County on US Highway 6, and would use the shoulder of highways primarily. This trial would total 52.0 miles.

Trails have become a larger part of people's lives. Trails are being used as a means of relaxation and physical fitness. The development of a trails system in Cass County will be key to future transportation demands. A trails system can act as a means of connecting communities as well as tourist attractions. Cass County's efforts will need have coordinated efforts between the communities, the Nebraska Department of Roads, Lower Platte South Natural Resources District, US Army Corps of Engineers, developers, and the County. Once connections are made with other trail systems, Cass County will see additional recreational and economic development opportunities from these connections. A trails system can be and typically is a means of economic development.

4.5 TRANSPORTATION
Future Transportation



4.5 TRANSPORTATION

Future Transportation



**Future
Transportation Map**

Cass County, Nebraska

Legend

-  Sections
-  Corporate Limits as of October 2013
-  Interstate
-  Expressway
-  Major Arterial - Continuous (Principal)
-  Major Arterial - Continuous (Intermediate)
-  Major Arterial - Non-Continuous
-  Major Arterial - Scenic Recreation
-  Collectors
-  Proposed Collectors
-  Proposed Other Arterials
-  Airports or Airfields
-  Existing Trails
-  Proposed Trails
-  Rail Roads

Created By: MBG
Date: DEC 2013
Revised: DEC 2014
Software: ArcGIS 10.2
File: 130377.00



This map was prepared using information from records drawings provided by JEO and other applicable county, federal, or public or private entities. JEO does not guarantee the accuracy of the map or the information used to prepare the map. This is not a scaled plot.

INTENTIONALLY BLANK



Implement

194
194
206
206
207
210

REALIZING THE COLLECTIVE DIRECTION
PLANNING PROGRAMS
METHODS FOR EVALUATING DEVELOPMENT PROPOSALS
ANNEXATION
ACTION PLAN
CONTINUED PUBLIC PARTICIPATION AND PARTNERSHIPS

5.1 REALIZING THE COLLECTIVE DIRECTION

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.

5.2 PLANNING PROGRAMS

There are numerous goals and objectives in this plan. Each should be reviewed for continued relevance during planning and budget setting sessions annually. Various planning programs will be necessary to enforce this Plan. Each can play a vital role in the success of Cass County’s planning efforts. These programs include Plan maintenance and review, Plan amendment, and various implementation tools.

Plan Maintenance and Review

A relevant, up-to-date plan is critical to the on-going planning success. To maintain both public and private sector confidence; evaluate the effectiveness of planning activities; and, most importantly, make mid-plan corrections on the use of community 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 to provide 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:

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

The Planning Commission should recommend changes or further study if they find significant policy issues. Major changes in basic assumptions or conditions may necessitate Comprehensive Plan revisions that may lead to the identification of Comprehensive Plan amendments.

5.2 PLANNING PROGRAMS

Plan Amendment

The Planning Commission is expected to receive comments and suggestions from individuals and groups to amend the Comprehensive Plan. This anticipated action of receiving proposals throughout a calendar year is best-addressed by consolidating the proposals and review them together in conjunction with a predetermined, scheduled Annual Review. By reviewing all proposed amendments of the previous year at one time, the effects of each request can be evaluated for resulting impacts upon other proposals. Therefore, all proposals can be reviewed and assessed for their net impact on the Comprehensive Plan.

The County should compile this list, prepare a report providing applicable 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 provide for the organized participation and involvement of citizens.

Unanticipated Opportunities

A plan amendment may be proposed and considered separately from the Annual Review if significant development opportunities arise which impact several elements of the Plan. If such a development occurs and determined to be of importance, a special amendment process may be initiated.

Plan Implementation

Plan implementation is the process through which the recommendations and policies adopted by the Comprehensive Plan are brought to bear on the evolution of the County. While the Plan is an invaluable tool for planning growth and development, it alone cannot accomplish much without action. The Comprehensive Plan is an advisory document, and its recommendations and policies are implemented through specific ordinances, programs, and improvement projects.

Implementation is the key to effectively planning for growth. A statement of goals and objectives is an important first step in planning. In the final analysis, however, a combination of regulation, incentives, acquisition, and public improvements may be necessary to address a particular problem effectively. Developing the right combination of implementation strategies requires creativity, sensitivity, experimentation and a thorough understanding of all the aspects of the problem.

Implementation can be the most creative aspect of land use planning. Several types of measures can be employed to implement the Comprehensive Plan. Zoning regulates the use of land. It specifies what can and cannot be done to develop or use land within the county. A Capital Improvements Plan is an implementation tool that directs public decisions about how to spend dollars. All land uses and land development require supporting facilities and services. The County's decisions about the level of public investment which will be spent in what locations at what time for such facilities has a significant effect on when, where and the cost of development. Through impact fees and other measures, communities can require developers to finance a proportionate share of the facilities to support each development.

5.2 PLANNING PROGRAMS

Implementation options

A variety of implementation tools is available to implement the Cass County Comprehensive Plan. In general, implementation strategies can be placed into one of four categories, distinguished by the degree of regulatory power and enforcement employed by each. The four categories are 1) Non-regulatory, 2) Voluntary, 3) Incentive-based, and 4) Regulatory. The following discussion provides an overview of each category. Table 15 displays examples of various implementation tools.

Table 15 Plan Implementation Tools

Example Implementation Tools			
Non-Regulatory	Voluntary	Incentive-Based	Regulatory
Education	Conservation easement	Transfer of development rights (TDR)	Zoning
Grant and assistance procurement	Purchase of development rights (PDR)	Density bonus	Land subdivision control
Special purpose plans	Land donation		Site plan review
Capital improvement programming and Concurrence			Design standards (i.e. landscaping, signage)
Community partnerships		Shared services	Performance standards
		Revenue sharing	Interim regulations (i.e. moratoria)

Non-regulatory Plan Implementation

One of the easiest and most effective methods is simply conducting an education outreach effort to inform county residents about what this Plan does and does not mean to them. In addition to education, other non-regulatory tools can be used individually or in conjunction with one another. For instance, during the preparation of the comprehensive plan, the need to prepare additional plans or studies examining specific resources, issues or locations of concern may be identified as an implementation action. Further, many local governments utilize a public investment or capital improvement plan to outline how to fund various plan implementation programs over the next one to five years. Infrastructure upgrades and land acquisition may be among those items funded. Finally, as implementation efforts identify the need for internal coordination and additional funding for new programs, local governments may need to participate in grant writing or hire new planning staff.

Education

One of the most important yet often overlooked implementation tools is the use of education. Successfully informing and involving citizens and local decision-makers throughout the planning process results in plans that are more reflective of community desires and are easier to implement. Education should also be designed to accompany other plan implementation tools in order to increase the rate of acceptance, participation and overall success of those tools.

Non-regulatory

Citizen education programs should ensure all county residents the ability to be involved in all phases of the planning process. The program should include clearly defined procedures for on-going involvement. An education program should also be appropriate to the scale of the planning effort and provide for continuity of participation and information that enables citizens to identify and comprehend issues. A citizen education program may consist of the following components:

1. Encourage widespread citizen involvement – A cross-section of affected citizens should be involved in the development and execution of the education program. Citizen involvement during program formation can ensure the program is designed to maximize the effectiveness and minimize communication errors.
2. Assure effective two-way communication – Mechanisms for communication should be chosen based on their applicability to the message being distributed, ease of use and understanding, and must provide for effective communication between citizens and elected and appointed officials.
3. Provide opportunities for citizens to be involved in all phases of the planning process – Citizen involvement should be an included component of all planning efforts, including the preparation of plans and implementation measures, development of plan content, establishment of goals and policies
4. Distribute technical information in an understandable form – Information necessary for the casual observer to make informed decisions should be presented in simplified, understandable language. Further, such information should be made available in convenient locations, such as the County Courthouse, public libraries, or on the County website.
5. Present citizens with timely feedback from policy-makers – Recommendations and suggestions provided through citizen involvement should be responded to within a reasonable time, with a response made directly to the source of the input. In addition, any policy recommendations that result from public input should be made available for further public review and assessment.
6. Allocate adequate resources to support an effective citizen education program – Adequate human, financial, and informational resources must regularly be allocated to maintain an effective citizen education program.

Grant and Assistance Procurement

The construction of needed infrastructure often presents a financial burden on county governments. However, utilizing grants and financial assistance programs can be a valuable and viable option. There are numerous programs that provide funding help to local governments, as well as private foundations, organizations, and the federal government. Funds can be awarded for projects addressing various infrastructure system improvements including water systems, sanitary sewer systems, roads and drainage, natural resources preservation, and economic development.

Special Purpose Plans

Special purpose plans allow the County to prepare plan documents for specific areas within the county or specific uses. These documents typically provide greater detail and more specific guidance than is addressed in this Plan. Special purpose plans typically include a map of a specific area and text which describes the plan for the area. A special purpose plan has varying level of detail that can be tailored to the needs of the County at the time the plan is prepared and used as part of planning process that may include subsequent planning actions and plans.

Common Uses for Special Purpose Plans

- Utilities – planning for the provision or installation of utilities in specific areas
- Roadways – establishing the location of roadways and roadway rights-of-ways
- Improvements – coordinating the provision of improvements such as noise barriers or fencing
- Aesthetics – establishing aesthetic standards for specific areas
- Parking – providing comprehensive parking plans for specific commercial areas
- Commercial Recreation – planning for areas that provide commercial recreation opportunities

Capital Improvement Programming and Concurrency

Public investment strategies are the key to implementing many of the infrastructure and utility improvement projects that will be necessary during the planning period of this Plan. These strategies should address the phasing of improvement projects, coordination of project resources, and the necessary details to support a successful project. Public investment strategies are often closely tied to a regularly updated Capital Improvement Program.

Capital improvement programming plays a vital role in determining when and where the County will grow. Public infrastructure, including transportation facilities, water and sewer services, schools and libraries, are all essential to the health, safety, and general welfare of county residents. As the County grows and changes over time, it is desirable that these facilities be developed concurrently, or at the same time as, that growth and development. Through a capital improvement program, Cass County can prioritize its funding resources to projects that are most important, while alerting the development community to the locations that will be best suited, both economically and politically, to future development.

The quality of development and quality of life in the County will suffer if growth occurs without the development of adequate public facilities or construction of public facilities occurs too long after the growth it should have served. Existing facilities will likely become overused and overcrowded, and necessary public amenities may not even be available, thereby threatening the health, safety, and general welfare of county residents.

Non-regulatory / Voluntary

County resources are wasted if the development of adequate public facilities occurs too far in advance of the growth anticipated to serve. Public facilities and infrastructure should not be built if they are not needed currently or in the near future. A concurrency program offers a way to balance the need for public facilities with the need to conserve finite County resources.

Concurrency planning policies, combined with a clear understanding of growth preferences, can be designed to address the timing of public facility improvements, as well as the location and quality of those facilities. These policies can then be used to assist in the development of a capital improvement program that effectively supports the growth policies of this Plan and supports the development of the necessary public facilities.

Community Partnerships

The final non-regulatory planning program involves community partnerships. The planning jurisdiction for Cass County includes a vast rural and agricultural area, as well as many individual communities. During the preparation of this Plan, all communities in the county were contacted for input and participation in the development of the vision for the future of Cass County. This spirit of cooperation and collaboration should be continued throughout the implementation and revision of this Plan in the coming years. In addition, the County and communities can form partnerships in specific implementation actions, such as jointly seeking funding for public improvement projects, the provision of public services, and shared development review.

Voluntary Plan Implementation

Voluntary implementation tools aim to build awareness and change behavior based on someone's intrinsic motivation. Many healthy, vibrant communities rely on their residents to take actions that will benefit the community as a whole. Common voluntary programs include conservation easements and the purchase of development rights. Communities can ensure appropriate land uses practices by increasing awareness about land conservation and encouraging individuals to participate on a voluntary basis.

Conservation Easements

Conservation easements are a common tool used in many locations, and allow landowners to limit future development on their property permanently. A conservation easement is a voluntary legal agreement between the owner of the land and a public agency or nonprofit organization. The landowner retains ownership and the right to use the land according to the terms outlined in the agreement. Conservation easements are occasionally purchased, but frequently donated. Provided that certain conditions are met, donated easements may be eligible for income, estate, or property tax benefits. Conservation easements serve as the principal legal mechanism used to limit future development of land in a Purchase of Development Rights (PDR) or Transfer of Development Rights (TDR) program.

Property owners can grant conservation easements in order to protect their agricultural property from unwanted development while retaining ownership of their land. A landowner grant a conservation easement to assure the property will be protected in the future, regardless of who owns the land. The activities allowed on land covered by a conservation easement depend on the property owner's wishes and the property characteristics, but agricultural uses are commonly allowed without limitation. Under some easements, no further development is allowed on the land; under other easements, additional development is allowed, but the amount and type of development are limited to something less than would otherwise be allowed. Conservation easements may be designed to cover all or only a portion of the property. Every easement is unique, tailored to a particular landowner's goals and their land.

Purchase of Development Rights (PDR)

The purchase of development rights program is an economic and conservation tool that can be utilized to protect valuable farmland that is important to the Cass County economy and quality of life. A PDR program is a voluntary system in which a property owner sells the development rights of their land to a local government or qualified organization, such as a land trust. The property owner is compensated for their willingness to accept a permanent deed restriction limiting future development of the land for non-agricultural purposes. Property owners are compensated for the fair market value of the land, based on the difference between what it could be sold for on the open market with no restrictions for developmental purposes and what it can be sold for if used for agricultural purposes.

After an agreement is reached with the property owner, an agricultural conservation easement is executed, protecting the agricultural use of the land for future generations. Once the easement is in place, the property owner still owns the land and retains all private property rights. The owner can sell the land or pass it on to heirs while already been fairly compensated for not exercising the development rights. The goal of this program is to create blocks of protected farmland, helping to create a long-term business environment for agriculture to continue to operate. PDR programs recognize that owners of undeveloped land provide valuable amenities to the County. Buying development rights from willing property owners provides a market-driven and compensatory approach to preserving those amenities and one option to regulatory forms of land management.

Land Donation

Another option for county property owners to protect their land from development is to donate it to a nature conservancy, land trust, or county agency that has the ability to monitor the land and protect it as open space. Rather than donate all of the land, the property owner also has the option to sell the property at a rate lower than the appraised value, effectively selling some of the land and donating the remainder. The anticipated costs to maintain and monitor the land, and enforce any easements that may be created, may impact the interest an organization will have in accepting the land donation.

Incentive-Based

Incentive-Based Plan Implementation

Incentive-based implementation strategies rely upon the use of financial rewards, directly or indirectly, to encourage the development that would achieve Plan goals. These tools are becoming popular because they allow landowners and developers to conserve open space by developing away from sensitive areas at a higher density. Some examples of these tools include transfer of development rights and density bonuses. However, effective incentive-based techniques are often supported by a zoning ordinance and tied to a site plan approval process to ensure the granting of the bonus does not have an adverse effect on adjacent properties. This sort of tool can be tied to development agreements ensuring property rights and density-protected areas remain valid if regulatory changes occur. In addition, this tool may be combined with other incentives for the developer such as permit fee waivers, expedited permitting processes, and local financial assistance, among others.

Transfer of Development Rights (TDR)

The transfer of development rights program creates a market for buying and selling the rights to develop property. Under a TDR program, certain lands are identified as "sending areas," where land conservation is sought, and other lands are identified as "receiving areas," where development of property is desired and can be served adequately by existing or planned infrastructure. The main goals of the program are to protect the natural, scenic, or agricultural qualities of land while compensating landowners in the sending areas for their development rights. Local governments often have great flexibility in designing a TDR program, including goals, timing, reimbursement, density, and type of development.

An effective TDR program must include owners of sending property who are motivated to sell their development rights rather than develop their land themselves, and appropriately identified receiving property. In the absence of regulatory controls that limit development density, choosing areas that face development constraints can help motivate property owners to protect their land. Examples of effective development constraints include state and federal environmental regulations and site and topography difficulties. Also, providing a favorable transfer ratio from the sending property to the receiving property can help improve demand for development rights. Effective receiving areas are those that experience high development pressures, and are, usually, located along major transportation corridors, and in areas where infrastructure is readily available.

Density Bonuses

Density bonuses can be used to allow a developer to increase the maximum allowable development on a property in exchange for helping the County achieve its public policy goals. Bonuses allow the development of a parcel to accommodate additional building space or additional units beyond the maximum for which the parcel is allowed and often exchanges for the preservation of an amenity at the same site or at another location. For example, landowners may be allowed to build at a higher density than permitted on the property if they agree to preserve and maintain open

space, consolidate public services, or purchase development rights or easements in sensitive areas located elsewhere in the jurisdiction. Density bonuses can also be used to encourage the provision of affordable housing in exchange for the development of more overall housing units.

Shared Services

Shared services refer to the concentration or consolidation of functions, activities, services, or resources into one provider. By sharing services, local government organizations have the potential to realize increased efficiency and quality of service while enjoying decreased costs and level of risk. In the public sector, the services most often shared tend to be from the financial, administrative, or support areas such as human resources, finance, information technology, and procurement. However, benefits may also be procured through sharing public services, such as police and fire protection, waste disposal, and water treatment. The opportunity to share services between Cass County and its communities or neighboring counties represent cutting costs associated with providing certain public services in order to fund projects that benefit the county as a whole, such as transportation improvements and economic development or job creation programs.

Revenue Sharing

Revenue sharing arrangements between public and private entities, often called public/private partnerships, can take many forms. Although there is no single, widely accepted definition, these are generally characterized as arrangements between a government and private sector entity to deliver a governmental asset (usually infrastructure or a public facility), and even the related public service. In a traditional government project, most of the risk associated with a project remains with the government. Revenue sharing arrangements allow the local government to shift some of the risks associated with a project to a private sector partner.

The allocation of revenue and risk can be quite complex, depending on the project. Therefore, careful consideration must be given to topics such as accounting and financial reporting, control over the use of the property, allocation of revenue and risk, and governmental accountability for the asset or service. However, entering into these agreements can be beneficial for a variety of reasons, including:

- They provide the government with the ability to leverage existing infrastructure and public facility assets to generate additional available resources in the form of up-front payments from the private sector entity for the right to operate such assets.
- They may be used to facilitate construction of necessary new infrastructure and public facility assets and transfer the risks associated with their construction and maintenance to a private entity.
- They may be used to provide services to the government's constituencies on what is intended to be a more efficient and cost-effective basis.

Regulatory

Regulatory Plan Implementation

Regulation is the most common tool used by local governments when it comes to land use management. Regulatory tools should provide clear direction about what can and cannot be done, but may lack flexibility in dealing with unique cases. Common examples of regulatory tools include zoning and land subdivision regulations. Zoning ordinances regulate how a parcel of land in a community may be used. They also may regulate the size and shape of lots along with the density, height, shape, bulk, and placement of structures. General zoning power is granted to counties, towns, cities, and villages to protect public health, safety, and general well-being. Because it is so frequently utilized, many confuse the use of zoning regulations to implement a plan with planning itself.

Regulatory implementation techniques should be based on a well-thought out and accepted land use plan. The land use categories and locations shown on the land use plan provide the foundation for developing zoning districts and the policies used to develop the land use plan form the basis for zoning changes. This Plan provides many goals and objectives that can be developed further into a land use plan.

Zoning

Zoning is a device of land use regulation used to control the physical development of a community. Zoning laws typically designate various uses of land into mapped areas of the county which separate one set of land uses from another. Zoning often regulates not only the particular land use and its location in the county, but also the location of the use on the property (through setbacks), building height, lot coverage, parking spaces, signage, and other characteristics. Allowed uses can be permitted by-right, meaning they are allowed without further government approval. Other uses may be required to obtain a conditional use permit prior to commencement. Zoning also prohibits uses, those that are considered too incompatible for the community or its infrastructure capabilities.

The process of zoning a community has its legal basis in the local government's police power, which allows the government to create regulations aimed at protecting the general health, safety, and welfare of its residents. However, zoning also represents a loss of control by private property owners. Once enacted, zoning sets limits on the type of uses that may be conducted on any given parcel of land. On the other hand, zoning also introduces a level of certainty for the community in that incompatible land uses will be segregated, and land values preserved. It is precisely this balance of give and take that must be resolved by the local community before an effective and acceptable zoning law can be prepared.

Land Subdivision Control

Land subdivision regulations define how a large parcel of land is divided into smaller parcels for development, and ensures the proper design of new developments including infrastructure such as roads, sidewalks, water, sewer, etc. In addition, land subdivision regulations determine who is responsible for financing and maintenance costs associated with new developments. By exercising land subdivision control, the County is afforded advance notice of an intent to develop land, whether for commercial or residential uses. Land subdivision control also aids the county in the creation and tracking of land according to state statutes.

Site Plan Review

Site plan review is closely tied to both zoning and subdivision controls. In the zoning context, site plan review allows the government to ensure the building size, location, setbacks, etc. meet the required zoning regulations. During the land subdivision process, site plan review provides the government the opportunity to confirm the layout meets the minimum requirements of lot size and area, infrastructure design and location, as well as the provision of easements when necessary. Site plan review can also be used in conjunction with planned unit and mixed-use developments to arrange the various uses according to minimum requirements.

Design Standards

Design standards refer to the minimum required standards for the design of specific project elements. Often, these standards refer to accepted engineering practices in the design of streets, water and sewer systems, and land preparation and grading activities. Such standards can also be expanded to incorporate required landscaping and screening provisions between uses or along major traffic corridors, allow acceptable alternative standards in specific situations, and address aesthetic and character considerations. Although some design standards already exist in Cass County, such as road cross-sections and surfacing standards and corridor design guidelines, these can be expanded and incorporated as part of a regulatory approach.

Performance Standards

Performance standards often accompany zoning ordinances. These standards apply additional requirements on specific uses. In the case of a salvage operation, it may be required to provide opaque screening and landscaping around its entire perimeter, only load/unload material within the enclosed portion of the facility, and stack material no higher than the top of the fence enclosure. Performance standards can also be used to regulate parking lot and exterior building lighting, noise and vibration emission, traffic circulation, and hours of operation. This method of using performance standards is commonly used within a zoning scheme to regulate uses further when additional controls are deemed necessary to control potential negative impacts.

Regulatory

Performance standards can also be tied to a scoring or point system. Under this scenario, certain design, construction, and performance criteria are defined and allocated a point value. In order to gain approval or necessary permits, the developer is required to obtain a minimum number of points. They are given the freedom, however, to choose the points that make the most sense for their development or are most economical for their project. Within this scheme, points can be allocated based upon those project aspects deemed most important to the county. For instance, utilizing stormwater retention/detention facilities to keep runoff onsite for longer periods of time may exceed the otherwise required standard and provide some minimum point level. However, utilizing bioswales and other filtration mechanisms in order to treat runoff prior to release may be worth a greater number of points. This method of giving more points for preferred actions is frequently used to persuade developers to build projects that meet green or sustainable objectives.

Interim Regulations

Interim regulations are used to address a specific need in the short term, usually while a longer duration study or project is ongoing. For example, moratoria are enacted when a community wants to delay specific activities pending some change to the regulations that govern those activities: a moratorium on approving new subdivisions may be issued while the community engages in revising or rewriting their subdivision regulations. Interim regulations can also be used to address topics not covered by current regulations. When specific uses, such as ethanol plants or wind generation facilities, are not addressed in zoning or some other regulation, they may be addressed on an interim, or temporary, basis pending the creation and adoption of a permanent regulation.

Effective Plan Implementation

Choosing the most appropriate Plan implementation strategy is extremely important in the process of utilizing this Plan in order to achieve the future described herein. The most appropriate implementation strategy will be one that is acceptable and agreeable to the residents of Cass County, enforceable by Cass County leaders and officials, and effective at guiding development and growth decision consistent with the goals and objectives adopted by this Plan. A variety of plan implementation techniques has been described and any number of these can be implemented at various levels or combined to create a unique strategy that fits Cass County.

5.3 METHODS FOR EVALUATING PROPOSALS

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

If a development proposal is not in conformance or consistent with the policies developed in the Comprehensive 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 community 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 County staff recommendations

5.4 ANNEXATION

The incorporated communities of Cass County have the legal right to annex land according to Nebraska Law. With any annexation, the village or city may extend their extraterritorial zoning jurisdiction as provided by State Statute. The County shall keep an accurate record of such changes and update the County's official zoning map accordingly. County leadership will continue to coordinate with these communities to help in annexation matters and overall growth of Cass County.

5.5 ACTION PLAN

The effectiveness of a comprehensive plan is determined by the ability to strategically finance and implement projects based on the conclusions of the planning process. By prioritizing projects in a short, medium, and long term timeframes, Cass County can ensure the best utilization of public resources. The actual investment in the implementation of any project should take into consideration any external and internal forces and opportunities. The goal of the action plan is to assist the county in the budget process and prioritization of its goals and objectives.

There were many important goals and objectives identified throughout the planning process and all are important to the residents of the county and to the preservation and economic well-being of the county as a whole. This section of the Cass Plan identifies the top items and objectives from the Envision Chapter and places implementable projects in short-term (0-5 years), medium-term (6-10 years), and long-term (over 10 years) timeframes. The action plan provides the county and its residents a start in implementing the new comprehensive plan in a successful way.

TRANSPORTATION

Short Term (1-5 years)

The citizens of Cass County value the quality of life via the balance of urban/rural developments and the opportunities that are presented within the area. In order to protect and enhance this relationship, the county transportation network must be strategically and systematically developed. County-wide guidelines should be adopted that regulate the construction and expansion of new streets, roads, highways, and trails in a manner that protects scenic vistas/corridors and encourages multi-modal transportation. Regulations that correlate with road classifications should be adopted in order to protect and reserve areas for future road and infrastructure expansion.

Transportation (cont.)

Medium Term (5-10 years)

Cass County can enhance existing recreational assets by ensuring maximum connectivity between attractions. Studying a trail network that connects recreation centers within the county will promote the full utilization of these amenities by Cass County residents and tourists alike. A county-wide parks and trails plan should be developed to explore this opportunity.

Long Term (Over 10 years)

Residents stressed the desire for an additional bridge over the Platte River at, or near, 84th street for improved access to the Omaha metro. While this would represent a sizable investment, Cass County should consider the feasibility while working with the Department of Roads. This access, combined with expanded infrastructure to the area could leverage significant economic development investment.

WATER/WASTEWATER

Short Term (5-10 years)

Throughout the planning process, public sentiment revolved around the need for upgrades and expansion required of water/wastewater infrastructure. There is a strong consensus that economic development potential around Interstate 80 is underutilized due to a lack of water. A comprehensive infrastructure plan is a crucial step to develop an implementable plan for the expansion of infrastructure to these prioritized areas.

The identification of potential infrastructure corridors should be made.

A multi-jurisdictional effort for developing county-wide subdivision and zoning regulations will promote the balance of urban/rural lifestyles while protecting the integral agriculture economy in Cass County.

Medium Term (5-10 years)

To facilitate the growth of municipalities within Cass County, the county should coordinate an orderly and systematic phasing of water, sanitary sewer, and storm drainage facilities within the urban growth boundaries.

Long Term (Over 10 years)

Cass County can work with the NRDs and coordinate actions to expand or upgrade the rural water system to encourage growth and economic development within the jurisdiction. Interstate 80 Exits 420 and 426 should be prioritized for infrastructure growth to promote economic development.

PROGRAMMING

Short Term (1-5 years)

A county-wide promotional and marketing program will enhance the attraction to Cass County recreation amenities.

Medium Term (5-10 years)

During public meetings, Cass County citizens expressed a desire for a county-wide recycling program. County recycling will lessen the burden on landfills while providing a sustainable quality of life for residents.

Long Term (Over 10 years)

Cass County residents shared concerns about a lack of cohesion and identity for Cass County and the municipalities within. A comprehensive branding and design effort for the County will assist in creating a sense of place and identity for Cass County and its communities. This type of effort can enhance the attractiveness of the county for residential growth, tourism, and economic development.

5.5 ACTION PLAN

ZONING AND SUBDIVISION REGULATIONS

Zoning regulations are a means to shape the physical development of the county to ensure attractive, functional, and compatible uses of public and private space. The strategic phasing of regulations will ensure quality development throughout the county.

Short Term (1-5 years)

In order to protect the agriculture economy, Cass County shall designate “prime agriculture” areas. Utilizing regulations, the county shall discourage residential or acreage (non-farm) development in these designated areas.

Medium Term (5-10 years)

To protect the natural resources and amenities in Cass County, the County should coordinate with local municipalities in establishing uniform zoning and subdivision standards that support conservation of agriculture and other natural resources especially in the Platte River area. This can be accomplished by the creation of mixed-use developments implementing the use of Conservation Easements and other tools.

Long Term (Over 10 years)

To facilitate proper, compatible development, Cass County shall develop policies requiring the coordination and review of all planning and zoning activities as they relate to the corporate limits of the local municipalities and the unincorporated portion of the county. Policies should require a joint review and comment on the proposed activity by the adjacent communities or jurisdictions.

This comprehensive plan brought many people together with similar visions of Cass County. The collective momentum can continue at the local, regional, and statewide levels by coordination and inform other entities of the opportunities within Cass County. Continuing this participatory process may align a Cass County project to another organization's budget or plans.

Cass County leadership should strive to maintain the partnership with municipalities and continue to participate and attend other organization's meetings. Many organizations affect Cass County directly, indirectly, or both and the abbreviated lists include:

Directly

Cass County communities, Cass County Economic Development, Keep Cass County Beautiful

Indirectly

Neighboring metropolitan areas (Omaha and Lincoln) as well as adjacent counties and communities

Both

Nebraska Department of Roads, Nebraska State Game and Parks, other regional groups

Changing needs and conditions will necessitate future review, evaluation, and updating of the comprehensive plan and its supporting documents. Intergovernmental coordination of all planning activities affecting land uses within the county is necessary to assure an integrated, comprehensive plan for Cass County.

APPENDIX

Due to scale of the map and the size of Cass County, it was determined to create a mapbook in order to show the existing land uses with better clarity for Cass County's decision makers.

- 2014 Existing Land Use Mapbook

