

HOWARD COUNTY & COMMUNITIES, NEBRASKA

(Including the Communities of Boelus, Cotesfield, Cushing, Dannebrog, Elba, Farwell & Rural Howard County).



COMPREHENSIVE PLAN - 2025.

PREPARED BY:
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COMMUNITY PLANNING & RESEARCH

*COMPREHENSIVE PLANS & ZONING * HOUSING STUDIES *
DOWNTOWN, NEIGHBORHOOD & REDEVELOPMENT PLANNING *
CONSULTANTS FOR AFFORDABLE HOUSING DEVELOPMENTS**

Lincoln, Nebraska 402.464.5383 *

FEBRUARY, 2015

HOWARD COUNTY & COMMUNITIES, NEBRASKA COMPREHENSIVE PLAN – 2025.

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This **Comprehensive Plan** was completed with guidance and direction from the **Howard County Planning Commission**. The **Comprehensive Plan** was funded by the **Howard County Planning Commission**.

TABLE OF CONTENTS

PARTICIPANTS i
TABLE OF CONTENTS ii
LIST OF TABLES iv
LIST OF ILLUSTRATIONS vi

<u>SECTION</u>	<u>TITLE</u>	<u>PAGE</u>
SECTION 1	THE HOWARD COUNTY/COMMUNITY PLANNING PROCESS.....	1.1
	- Introduction.....	1.1
	- Implementation of the Plan	1.2
	- Planning Period.....	1.2
	- Planning Jurisdiction	1.2
	- Authority to Plan	1.2
SECTION 2	GOALS & ACTION STEPS.....	2.1
	- Introduction.....	2.1
	- General County/Village Goals.....	2.2
	- Land Use	2.4
	- Housing.....	2.7
	- Economic Development.....	2.8
	- Public Infrastructure, Facilities & Transportation.....	2.9
	- Plan Maintenance & Implementation.....	2.11
SECTION 3	POPULATION, INCOME, ECONOMIC & HOUSING PROFILE	3.1
	- Introduction.....	3.1
	- General Population & Household Trends & Projections.....	3.1
	- Income Trends & Projections.....	3.12
	- Economic & Employment Trends.....	3.15
	- Housing Stock & Conditions.....	3.18
	- Owner & Renter Housing Costs	3.23
SECTION 4	LAND USE PROFILE & PLAN.....	4.1
	- Introduction.....	4.1
	- Location.....	4.1
	- The Natural Environment.....	4.2
	- Climate	4.2
	- Soils.....	4.2
	- Watersheds.....	4.8
	- Groundwater.....	4.8

TABLE OF CONTENTS (CONTINUED)

<u>SECTION</u>	<u>TITLE</u>	<u>PAGE</u>
	- Existing Land Use Analysis.....	4.9
	- Farms By Size.....	4.11
	- Crop Production Trends	4.12
	- Other Land Uses.....	4.14
	- Community Existing Land Use Profiles	4.15
	- Future Land Use Analysis	4.20
	- Non-Farm Rural Residential Development.....	4.20
	- Community Future Land Use Plans	4.22
SECTION 5	PUBLIC FACILITIES, UTILITIES & TRANSPORTATION	5.1
	- Introduction.....	5.1
	- Public Facilities	5.4
	- Parks & Recreation	5.4
	- Public Administration.....	5.5
	- Education.....	5.8
	- Medical / Elderly Services.....	5.9
	- Public Utilities.....	5.9
	- Transportation	5.9
	- Existing Transportation System.....	5.10
	- Road Classifications.....	5.10
	- Traffic Volume	5.13
	- Future Howard County Transportation System	5.14
SECTION 6	ENERGY ELEMENT	6.1
	- Introduction.....	6.1
	- Public Power Distribution	6.1
	- Renewable Energy Strategic Plan.....	6.1
	- Wind Turbines and “Net Metering”	6.3
	- Energy Consumption.....	6.5
	- Trends in Energy Consumption.....	6.5
	- Increased Energy Costs & Conservation.....	6.6
	- Energy Conservation Policies.....	6.7
	APPENDIX HOWARD COUNTY/VILLAGES ONE- AND SIX-YEAR STREET IMPROVEMENTS PLANS.	

LIST OF TABLES

<u>Table</u>	<u>Page</u>
3.1 Population Trends & Projections Howard County & Communities, Nebraska 2000-2025.....	3.2
3.2 Population Age Distribution Trends & Projections Howard County & Communities, Nebraska 2000-2025.....	3.4
3.3 Specific Household Characteristics Howard County & Communities, Nebraska 2000-2025.....	3.7
3.4 Tenure By Household Howard County & Communities, Nebraska 2000-2025.....	3.9
3.5 Households By Household Size Howard County & Communities, Nebraska 2012 Estimate.....	3.11
3.6 Median Household Income Trends & Projections Howard County & Communities, Nebraska 2000-2025.....	3.12
3.7 Per Capita Income Howard County, Nebraska/State of Nebraska 2002-2025.....	3.13
3.8 Persons Receiving Social Security Income Howard County, Nebraska 2012.....	3.14
3.9 Employment Data Trends & Projections Howard County, Nebraska 2004-2025.....	3.15
3.10 Travel Time To Work Howard County & Communities, Nebraska 2012 Estimate.....	3.16

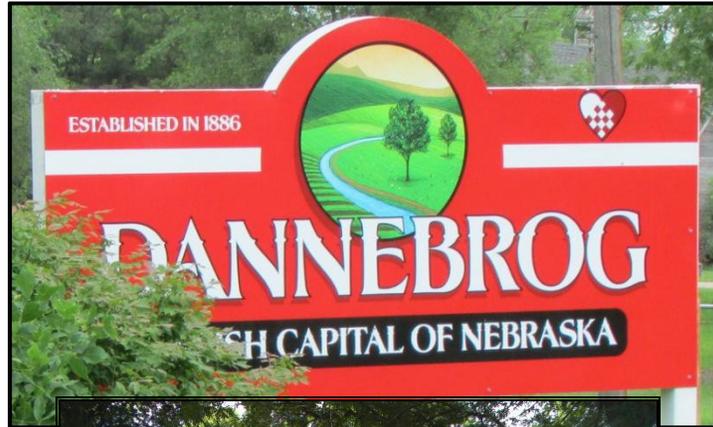
LIST OF TABLES – CONTINUED

<u>Table</u>	<u>Page</u>
3.11 Workforce Employment By Type Howard County, Nebraska 2012-2014.....	3.17
3.12 Housing Stock Profile/Units in Structure Howard County & Communities, Nebraska 2000 & 2012 Estimate.....	3.19
3.13 Housing Stock Profile/Defining Substandard Housing – HUD Howard County & Communities, Nebraska 2012 Estimate.....	3.20
3.14 Housing Stock Profile / Year Structure Built Howard County & Communities, Nebraska 2012 Estimate.....	3.21
3.15 Gross Rent Howard County & Communities, Nebraska 2000-2025.....	3.24
3.16 Owner Occupied Housing Value Howard County & Communities, Nebraska 2000-2025.....	3.26
4.1 Farms By Size Howard County, Nebraska 2002-2012.....	4.11
4.2 Status of Crop Production Howard County, Nebraska 2002-2012.....	4.12
4.3 Harvested Crops By Type Howard County, Nebraska 2002-2012.....	4.13
4.4 Livestock Production Trends Howard County, Nebraska 2002-2012.....	4.14
5.1 Traffic Volume – Average Daily Traffic Counts State And Federal Roads Howard County, Nebraska 2002-2012.....	4.14

LIST OF ILLUSTRATIONS

<u>ILLUSTRATION</u>	<u>TITLE</u>	<u>PAGE</u>
1.1	Area Location Map.....	1.2
4.1	General Soil Associations Map.....	4.3
4.2	Holder-Hastings & Coly-Holder-Uly Soils Topography.....	4.4
4.3	Hord-Hobbs Soil Association.....	4.5
4.4	Valentine-Thurman-Libory Soil Association.....	4.6
4.5	Inavale-Boel-Tryon Soil Association	4.6
4.6	Simeon-O’Neill Soil Association	4.7
4.7	Existing Land Use Map Howard County, Nebraska	4.10
4.8	Existing Land Use Maps Howard County Villages.....	4.16
4.9	Existing Land Use Maps Howard County Villages.....	4.17
4.10	Future Land Use Map Howard County, Nebraska	4.21
4.11	Future Land Use Maps Howard County Villages.....	4.23
4.12	Future Land Use Maps Howard County Villages.....	4.24
5.1	Public Facilities Map.....	5.2
5.2	State Functional Classifications.....	5.11

SECTION 1



**THE HOWARD
COUNTY/COMMUNITY
PLANNING PROCESS.**

SECTION 1

THE HOWARD COUNTY/COMMUNITY PLANNING PROCESS.

INTRODUCTION

This Comprehensive Plan was prepared under the direction of the **Howard County Planning Commission** as a guide for future development of the County and the Villages of Boelus, Cotesfield, Cushing, Dannebrog, Elba, Farwell and the Unincorporated Community of St. Libory, during the 10-year planning period, 2015 to 2025. The Commission is represented by residents of the rural areas and the villages of the County.

The focus of this **Comprehensive Plan** is to concentrate on the potential for growth and development of the unincorporated rural areas of Howard County and within the six Villages in terms of “**Goals & Action Steps,**” “**Population, Economic & Housing Profile,**” “**Land Use Profile & Plan,**” “**Public Facilities, Utilities & Transportation Plan**” and the “**Energy Element.**” The intent of this Comprehensive Plan is also to guide revisions to the Zoning and Subdivision Regulations, as needed, to achieve the specific goals and policies identified in the **Plan.**

The **Howard County Comprehensive Plan** is designed to provide policy guidance which will enable the citizens and elected officials of the County and its Villages to make informed judgments and decisions, based upon the consensus of the Planning Commission, about the future of the County. Plan implementation methods should include incentives to stimulate private action consistent with the Plan and use of Local, State and Federal programs for County-wide economic development activities.

The Planning Commission specifically revisited the fundamental principles of the previous Comprehensive Plan – 2002 to 2012, which implemented goals and policies to guide non-farm residential development to the Planning Jurisdictions of the Communities of the County and to the Highway 58 and 281 Corridors. This effort was formulated to preserve and protect agricultural production areas for agricultural use, but to also identify the areas most suited for rural residential development and to limit the potential for conflict.

The Comprehensive Plan was prepared under the direction of the Howard County Planning Commission and the Planning Consultants, Hanna:Keelan Associates, P.C., of Lincoln, Nebraska.

IMPLEMENTATION OF THE PLAN

PLANNING PERIOD

The planning time period for achieving the goals and action steps, programs and economic development activities identified in this Comprehensive Plan for Howard County and its Villages, is 10 years, 2015 to 2025.

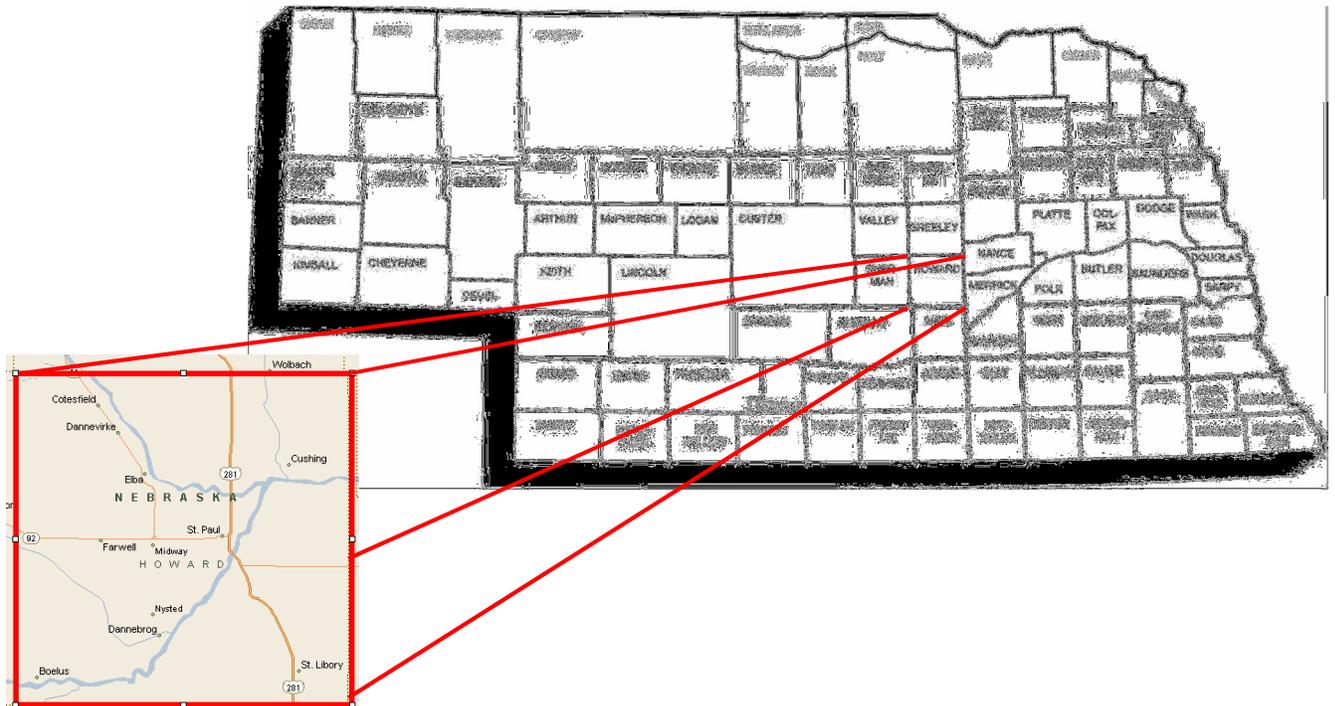
AUTHORITY TO PLAN

This Comprehensive Plan for Howard County is prepared under the Authority of Sections 23-114 to 23-174.10, Nebraska State Statutes 1943, as Amended.

AMENDMENT

The Comprehensive Plan may be amended or updated as the need arises as provided in the Nebraska State Statutes.

ILLUSTRATION 1.1 LOCATION MAP HOWARD COUNTY, NEBRASKA



SECTION 2



GOALS & ACTION STEPS.

SECTION 2 GOALS & ACTION STEPS.

INTRODUCTION

A Comprehensive Plan is an **essential tool** to properly guide the development of a County and its Communities. An important aspect of this planning process is the development of appropriate and specific **Planning Goals and Action Steps** to provide local leaders direction in the administration and overall implementation of the Plan. In essence, **Goals and Action Steps** are the most fundamental elements of the Plan; the premises upon which all other elements of the Plan must relate. The following **Goals and Action Steps** are to be in effect for the period of the **Comprehensive Plan**, pending annual review.

GOALS

Goals are broad statements, identifying the state or condition the citizenry wishes the primary components of the planning area to be or evolve into within a given length of time. Primary components include **land use, housing, infrastructure and facilities, community and economic development and plan maintenance and implementation**. Goals are long-term in nature and, in the case of those identified for this **Comprehensive Plan**, will be active throughout the 10-year planning period.

ACTION STEPS

Action Steps help to further define the meaning of goals. In essence, Action Steps are recommendations for means by which goals can be accomplished. Action Steps, often referred to as objectives, are sub-parts of a Goal and are accomplished in a much shorter time space.

The following **Goals and Action Steps** are the result of both qualitative and quantitative research conducted in association with this **Comprehensive Plan**.

GENERAL COUNTY/VILLAGE GOALS

The first step in developing **Goals and Action Steps** for this Comprehensive Plan was the creation of **general goals**. These Goals, developed for Rural Howard County and each Village, "highlight" **important** elements of this comprehensive planning process, as determined via the identification of "key" issues with the public.

The following represents the general Goals associated with the rural, unincorporated areas of Howard County.

- ◆ Plan for population growth during the next 10 years throughout the unincorporated "rural" areas of Howard County. The rural areas of the County are anticipated to increase by 76 persons, or 2.4 percent between 2015 and 2025. *During the same period, the population of each of the Villages are projected to remain stable.*
- ◆ Actively market the development potential of Howard County to support an increasing population, by broadening the economic base and expanding employment opportunities.
- ◆ The future image of Howard County will greatly depend on the willingness of residents to accept changes in the population and economic structure and their willingness to be a part of the ongoing planning and implementation process of the County.
- ◆ Continue to promote the **preservation of the agricultural industry**, including the diversification of crop developments. Historically, agriculture has been the primary income producing activity for Howard County. This is anticipated to remain as such through the 10-year planning period, 2015 to 2025.
- ◆ Protect the natural resources and living environs of Howard County by controlling and prohibiting, in specific regions, large scale intensive livestock/confinement facilities in areas deemed inappropriate for such activities.
- ◆ Continue to enforce rural conservation districts to limit development in environmentally sensitive areas of the County. These districts are concentrated along the North and Middle Loup River Corridors.
- ◆ Programs of citizen participation should be fostered in rural Howard County to maintain and improve the economic and social quality of life of each Village and the County as a whole.

- ◆ Foster and market the values of rural Howard County to encourage the development of organized local action to preserve and strengthen the County.
- ◆ **Preserve and protect rural lands for agricultural use** and encourage future residential development in close proximity to Howard County Communities, or at appropriate locations along hard surfaced transportation corridors.
- ◆ Monitor the consumption of energy by all sectors of the County and in each of the Villages to promote of the implementation of alternative energy sources such as Wind, Solar, Geothermal, Biomass and Methane, to reduce the reliance on traditional fuel and energy sources.
- ◆ Maintain and strengthen relationships between the County and its Communities to produce planning practices supportive of proper land usage, economic growth, housing, public facilities and services, transportation and recreation opportunities.
- ◆ Continue to strengthen relationships between the County and Howard County Communities to produce planning practices supportive of proper land usage, as well as appropriate planning and zoning administration procedures to ensure the continued implementation of the **Howard County & Communities Land Use Plan**.

LAND USE

Goal 1 – *Provide opportunities for development in an orderly, efficient and environmentally sound manner.*

Action Steps:

- 1.1 Ensure all areas designated for future non-agricultural development in rural Howard County and each Village are equipped with an adequate, modern utility system.
- 1.2 Avoid non-agricultural developments that could result in the contamination of soils and ground water resources.
- 1.3 Limit future non-agricultural developments to locations which are relatively free of environmental constraints relating to soils, slope, flood plain, drainage, ground water, endangered species or other natural resources.
- 1.4 Continue the process of allowing large scale intensive livestock/confinement facilities in appropriate areas of rural Howard County, as a special use permitted exception when in conformance with all local and State regulations.
- 1.5 Provide for the use of alternative energy systems to supplement individual residential and business electric consumption in accordance with Nebraska State Statute 70-1012, August, 2009 as amended. The use of Solar, Methane, Wind, Biomass, Hydropower and Geothermal Energy systems on individual properties to supplement or sell excess energy produced to the local utility district, a process known as “**Net Metering.**”
- 1.6 Promote the development of Commercial Wind Energy Conversion Systems in appropriate areas via a special use permit process, only.

Goal 2 – *Utilize land use development patterns and densities in rural Howard County that conform to uniform planning standards.*

Polices:

- 2.1 Maintain and follow the Land Use Plan for the County and each Village, which is based upon present conditions and the sound forecast of future needs.

- 2.2 Strive to improve blighted and substandard conditions in rural Howard County and within each Village, by providing a planned program for clean-up and reuse of selected areas.
- 2.3 Continue to implement the County Land Use Plan which limits development of intensive livestock/confinement facilities and operations from areas with sensitive soils conditions. Regions along the North and Middle Loup Rivers contain the highest concentration of sensitive soil conditions.
- 2.4 Preserve and protect the highest concentration of irrigated and dry land crop production areas along the North and Middle Loup River Valleys, as well as the southwest quarter of the County, where several tributaries to the Middle Loup River exist. Emphasis on groundwater protection and preservation of agricultural land uses should be emphasized.
- 2.5 Ensure adequate open and recreational space is maintained in the County. Emphasize recreational opportunities associated with the North and Middle Loup River corridors, as well as the proposed “Central Trails Development Plan”.
- 2.6 All intensive livestock facilities should be classified as agricultural uses, allowable as special permitted uses.
- 2.7 Continue to implement zoning and other Action Steps/regulations that will provide incentives for maintenance of agricultural lands for traditional agricultural uses.

Goal 3 – *Encourage compatible adjacent land uses throughout the County and each Village by implementing regulations suited to the unique characteristics and location of each use.*

Action Steps:

- 3.1 Continue to annually review and modify the zoning districts and regulations to encourage both development and redevelopment activities.
- 3.2 Facilitate residential developments that are not detrimental to the environment.

- 3.3 Non-farm residential structures should be developed in close proximity to Howard County Communities. Non-farm dwellings should also be encouraged to locate in rural areas near the City of St. Paul Planning Jurisdiction and generally within a half mile to a mile of Highways 58 and 281.
- 3.4 Industrial and commercial developments should occur within and/or adjacent the Communities of Howard County, or in rural areas with adequate access to transportation systems and utilities.

Goal 4 – *Work cooperatively with Federal, State, and adjoining County governments to develop compatible flood control measures.*

Action Steps:

- 4.1 Enforce State and local regulations protecting the environment from contamination or pollutants.
- 4.2 Require all developments to be consistent with regulations set forth for flood prone areas.
- 4.3 Identify development measures that limit or reduce flood hazards, control water run-off and enhance the quality of surface and ground water.

Goal 5 – *Provide opportunities and incentives for developments that encourage economic stability and strengthen the overall tax base in the County.*

Action Steps:

- 5.1 Encourage the development and redevelopment of local businesses at strategic locations along County highway corridors that are within or adjacent the Planning Jurisdictions of Howard County Villages.
- 5.2 Rural highway commercial uses are recommended along Highway 281 within the un-incorporated Community of St. Libory. Industrial and commercial uses in rural Howard County are also recommended to locate along the Highway or railroad corridors, within the One-Mile Planning Jurisdictions of each Village.
- 5.3 Encourage land uses that complement the “Central Trails Development Plan”, along Highway 11, 92 and 281 Corridors.

HOUSING

Goal 1 – *Provide access to a variety of safe, decent and affordable housing types in rural Howard County, especially for persons and families of low- to moderate income.*

Action Steps:

- 1.1 Improve housing conditions throughout Howard County. Utilize the services of local housing developers, contractors and local, State and Federal funding sources.
- 1.2 Develop housing programs for both the rehabilitation and/or demolition of unsafe housing throughout Rural Howard County and each Village, where needed.
- 1.3 Promote the development of housing in rural Howard County. Consider a variety of styles, prices, densities and quantities, in locations that are in conformance with the Howard County Land Use Plan.

Goal 2 – *Protect and preserve existing rental and owner occupied residential units.*

Action Steps:

- 2.1 Create an ongoing County-wide housing rehabilitation program for both owner and renter housing.
- 2.2 Identify and rehabilitate historically significant housing units in Rural Howard County and each Village. These structures are important for their contributions to the development of Rural Howard County.

Goal 3 – *Encourage future residential developments compatible with and complementary to existing residential areas.*

Action Steps:

- 3.1 Increase education and awareness for housing development throughout the County.
- 3.2 Prohibit residential development in environmentally sensitive areas.

- 3.3 Promote non-farm rural residential developments within the One-Mile Planning Jurisdictions of Howard County Villages, around the City of St. Paul Planning Jurisdiction and along either side of the Highway 58 and 281 Corridors.

ECONOMIC DEVELOPMENT

Goal 1 – *Continue to coordinate economic development efforts in Rural Howard County and each Village.*

Action Steps:

- 1.1 Encourage Village/County development activities that create permanent employment opportunities with competitive wages, especially for low- to moderate income persons and families.
- 1.2 Develop and actively pursue the implementation of a Howard County Tourism Plan to promote recreational and educational uses throughout the County.
- 1.3 Develop a self-guided tour of historic buildings in Howard County, utilizing the Nebraska Historic Buildings Survey of Howard County.

Goal 2 – *Housing and public facility improvements, coupled with economic development opportunities, should be the foundation of community and economic development programming and implementation in Howard County.*

Action Steps:

- 2.1 Community and economic development activities should address County-wide and regional residential and commercial needs.
- 2.2 Ensure job creation is a recognizable issue of any economic development activity implemented in Howard County Communities, with emphasis on benefiting low- to moderate income persons and families.

Goal 3 – *Maximize economic opportunity for all residents, with emphasis on low- to moderate income persons and families.*

Action Steps:

- 3.1 Support the expansion of the agricultural business industry in Rural Howard County.
- 3.2 Ensure all economic development activities be consistent with the Comprehensive Plan.
- 3.3 Target new businesses and industries capable of producing competitive incomes for the residents of Rural Howard County and each Village.
- 3.4 Promote cooperative economic development activities with neighboring Counties.
- 3.5 Continue to support the expansion of existing and development of new hospitality, tourism and recreational industries in Howard County and each Village.

***PUBLIC INFRASTRUCTURE,
FACILITIES & TRANSPORTATION***

Goal 1 – *Plan, program and implement the most effective, safe and cost efficient infrastructure and public facilities systems throughout Rural Howard County and within each Village.*

Action Steps:

- 1.1 Prepare and adopt an annual Capital Improvement Program, or Plan, that is consistent with the goals and Action Steps of the Comprehensive Plan in Rural Howard County and each Village.
- 1.2 Recognize the need for, and improve upon, intergovernmental and regional cooperation to reduce duplication of services.
- 1.3 Maintain modern design standards and Action Steps for public infrastructure improvements throughout Rural Howard County.

Goal 2 – *Provide a transportation system throughout the County that enhances the safe and efficient movement of people, goods and services.*

Action Steps:

- 2.1 Coordinate transportation systems with the planning and development of other elements of the County, including public utilities and facilities.
- 2.2 Continue to develop County road systems in accordance with the standard State of Nebraska street “Functional Classifications”.
- 2.3 Develop a comprehensive trails plan, in accordance with the “Central Trails Development Plan,” to allow for educational and recreational activities throughout the County. Recreational trails and wildlife management areas along the North and Middle Loup River Corridors will provide greater access to Howard County historic and natural environments.

Goal 3 – *Provide adequate, efficient and appropriate public utilities and services to both new and existing agricultural and residential developments.*

Action Steps:

- 3.1 Maintain and improve existing public utilities and services on an as-needed basis.
- 3.2 Provide facilities and services in Rural Howard County and to each Village necessary to prevent degradation of the environment, including modern sewage treatment, refuse collection and disposal, street cleaning, proper disposal of animal waste and similar environmental control processes as necessary.
- 3.3 Ensure rules and regulations governing safe drinking water and sewage treatment are adhered to.

Goal 4 – *Provide for the equitable distribution of public facilities to meet the cultural, educational, social, recreational, safety and health needs of Rural Howard County.*

Action Steps:

- 4.1 Provide adequate public health, safety and crime prevention systems throughout Rural Howard County and each Village.
- 4.2 Promote a social and cultural environment that provides opportunities for Rural Howard County and Village residents to experience, develop and share their values, ambitions and heritage.
- 4.3 Continue to support the evolution of the public educational system and ensure that it is capable of elevating the County’s overall educational level.
- 4.4 Develop and promote programs to educate the residents of Howard County and visitors on the rich heritage and history of the region. Utilize current and future public and cultural facilities such as libraries, the Howard County Historic Society and Museum and North and natural areas of the Middle Loup River Corridors.
- 4.5 Ensure rules and regulations of the Americans with Disabilities Act adhere to at all public facilities.
- 4.6 Expand the availability of supportive services to youth and older adults in Rural Howard County and each Village.

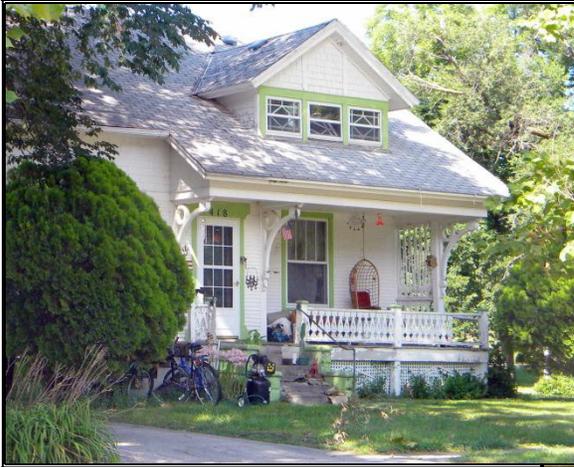
PLAN MAINTENANCE & IMPLEMENTATION

Goal 1 – *Maintain and utilize the Comprehensive Plan as the primary tool for making decisions regarding the physical development of the County.*

Action Steps:

- 1.1 Establish a review process for the Comprehensive Plan and associated Regulations, including Zoning and Subdivision Regulations.
- 1.2 Coordinate local groups and organizations to carry-out the Goals and Action Steps of this Comprehensive Plan.
- 1.3 Coordinate development and land use changes with local, County and State officials.

SECTION 3



**POPULATION, INCOME,
ECONOMIC & HOUSING
PROFILE.**

SECTION 3 POPULATION, INCOME, ECONOMIC & HOUSING PROFILE.

INTRODUCTION

Population, income, economic and housing trends in Howard County serve as valuable indicators of future development needs. The quantity, location and density of population, jobs and housing play an important role in meeting the social and economic needs of the County.

The population trends and projections for the years 2000 through 2025 were studied and forecasted, utilizing a process of both trend analysis, U.S. Census population estimates and popular consent. **Howard County is projected to increase in population during the next 10 years.** This anticipated growth will require new businesses, improved public facilities and utilities and the aggressive development of a variety of housing types during the 10-year planning period for Howard County.

GENERAL POPULATION & HOUSEHOLD TRENDS & PROJECTIONS

The analysis and projection of population are at the center of all planning decisions. This process assists in understanding important changes which have and will occur throughout the planning period.

Estimating population size is critical to a planning process. Further, projecting a County's population is extremely complex. Because projections are based on various assumptions about the future, projections must be carefully analyzed and continually re-evaluated due to an area's dynamic economic and social structure.

POPULATION

- ❖ **Table 3.1** identifies **population trends and projections** for Howard County, from 2000 through 2025. Howard County, as a whole, is estimated to have a current (2015) population of 6,370. By 2025, the County is projected to have a population of 6,467, an increase of 1.5 percent, or 97 persons by 2025.
- ❖ The City of St. Paul, as well as the Balance of County, are projected to experience a population increase, during the next 10 years, with the remaining Communities projected to decrease, but remain stable, in population.

**TABLE 3.1
POPULATION TRENDS AND PROJECTIONS
HOWARD COUNTY & COMMUNITIES, NEBRASKA
2000-2025**

	<u>2000</u>	<u>2010</u>	<u>2015</u>	<u>2025</u>	<u>% Change 2015-2025</u>
Howard County:	6,567	6,274	6,370	6,467	+1.5%
St. Paul:	2,218	2,290	2,329	2,380	+2.2%
Boelus:	221	189	188	184	-2.1%
Cotesfield:	66	46	46	44	-4.3%
Cushing:	31	32	32	31	-3.1%
Dannebrog:	352	303	305	300	-1.6%
Elba:	243	215	214	206	-3.7%
Farwell:	148	122	120	110	-8.3%
Balance of County:	3,288	3,077	3,136	3,212	+2.4%

Source: 2000, 2010 Census; 2010-2013 Census Population Estimates.
Hanna:Keelan Associates, P.C., 2015.

AGE DISTRIBUTION

- ❖ For planning purposes, the various cohorts of population are important indicators of the special needs of a County. The cohorts of age, sex and family structure can assist in determining potential labor force and the need for housing, public facilities and other important local services.

An analysis of age characteristics can be used to identify the potential need for public school, recreational areas and short- and long-term health care facilities.

- ❖ **Table 3.2, Pages 3.4 through 3.6** provides **age distribution** for Howard County, from 2000 to 2025. The County is projected to experience an increase in population during the next 10 years of approximately 97 people. By 2025, it is estimated that all population groups 55+ years of age or older will increase, with the 55-64 age group experiencing the largest increase, an estimated 122 persons. The “35-54” age group will remain the largest with an estimated 1,668 persons by 2025.

In 2012, median age in Howard County is an estimated 43.9 years. This median age is projected to increase, by 2025, to 44.8 years.

**TABLE 3.2
POPULATION AGE DISTRIBUTION
TRENDS & PROJECTIONS
HOWARD COUNTY & COMMUNITIES, NEBRASKA
2000-2025**

Howard County

<u>age group</u>	<u>2000</u>	<u>2010</u>	<u>Change</u>	<u>2015</u>	<u>2025</u>	<u>Change</u>
19 and Under	2,004	1,667	-337	1,628	1,534	-94
20-34	982	865	-117	863	837	-26
35-54	1,832	1,715	-117	1,701	1,668	-33
55-64	624	852	+228	938	1,060	+122
65-74	559	587	+18	618	673	+55
75-84	406	405	-1	424	453	+29
85+	160	183	+23	198	234	+36
TOTALS	6,567	6,274	-293	6,370	6,467	+97
Median Age	38.1	43.3	+5.2	43.9	44.8	+0.9

St. Paul

<u>age group</u>	<u>2000</u>	<u>2010</u>	<u>Change</u>	<u>2015</u>	<u>2025</u>	<u>Change</u>
19 and Under	649	643	-6	638	628	-10
20-34	328	360	+32	380	408	+28
35-54	547	525	-22	523	516	-7
55-64	187	279	+92	303	332	+29
65-74	224	191	-33	185	183	-2
75-84	181	176	-5	179	180	+1
85+	102	116	+14	121	133	+12
TOTALS	2,218	2,290	+72	2,329	2,380	+51
Median Age	39.3	40.3	+1.0	40.8	41.8	+1.0

Boelus

<u>age group</u>	<u>2000</u>	<u>2010</u>	<u>Change</u>	<u>2015</u>	<u>2025</u>	<u>Change</u>
19 and Under	69	40	-19	38	25	-13
20-34	35	18	-17	17	10	-7
35-54	58	57	-1	57	54	-3
55-64	17	27	+10	30	39	+9
65-74	13	23	+10	24	33	+9
75-84	19	17	-2	17	19	+2
85+	10	7	-3	5	6	+1
TOTALS	221	189	-32	188	184	-4
Median Age	37.4	48.8	+11.4	49.4	50.9	+1.5

CONTINUED:

TABLE 3.2 (CONTINUED)
POPULATION AGE DISTRIBUTION
TRENDS & PROJECTIONS
HOWARD COUNTY & COMMUNITIES, NEBRASKA
2000-2025

Cotesfield

<u>age group</u>	<u>2000</u>	<u>2010</u>	<u>Change</u>	<u>2015</u>	<u>2025</u>	<u>Change</u>
19 and Under	19	14	-5	13	9	-4
20-34	7	5	-2	5	3	-2
35-54	23	7	-16	6	5	-1
55-64	5	11	+6	13	16	+3
65-74	3	6	+3	7	9	+2
75-84	7	3	-4	2	2	+0
85+	<u>2</u>	<u>0</u>	<u>-2</u>	<u>0</u>	<u>0</u>	<u>+0</u>
TOTALS	66	46	-20	46	44	-2
Median Age	42.0	46.5	+4.5	47.3	48.0	+0.7

Cushing

<u>age group</u>	<u>2000</u>	<u>2010</u>	<u>Change</u>	<u>2015</u>	<u>2025</u>	<u>Change</u>
19 and Under	8	9	+1	8	8	+0
20-34	7	6	-1	5	3	-2
35-54	7	10	+3	11	12	+1
55-64	7	3	-4	3	2	-1
65-74	1	3	+2	4	5	+1
75-84	1	1	+0	1	1	+0
85+	<u>0</u>	<u>0</u>	<u>+0</u>	<u>0</u>	<u>0</u>	<u>+0</u>
TOTALS	31	32	+1	32	31	-1
Median Age	38.3	39.5	+1.2	40.2	41.0	+0.8

Dannebrog

<u>age group</u>	<u>2000</u>	<u>2010</u>	<u>Change</u>	<u>2015</u>	<u>2025</u>	<u>Change</u>
19 and Under	105	86	-19	84	74	-10
20-34	51	36	-15	34	27	-7
35-54	96	96	+0	100	102	+2
55-64	42	35	-7	36	38	+2
65-74	28	22	-6	24	27	+3
75-84	22	17	-5	20	23	+3
85+	<u>8</u>	<u>6</u>	<u>-2</u>	<u>7</u>	<u>9</u>	<u>+2</u>
TOTALS	352	303	-49	305	300	-5
Median Age	38.8	42.5	+3.7	43.0	44.6	+1.6

CONTINUED:

TABLE 3.2 (CONTINUED)
POPULATION AGE DISTRIBUTION
TRENDS & PROJECTIONS
HOWARD COUNTY & COMMUNITIES, NEBRASKA
2000-2025

Elba

<u>age group</u>	<u>2000</u>	<u>2010</u>	<u>Change</u>	<u>2015</u>	<u>2025</u>	<u>Change</u>
19 and Under	74	55	-19	51	44	-7
20-34	43	40	-3	37	31	-6
35-54	64	59	-5	57	53	-4
55-64	21	32	+11	36	40	+4
65-74	17	18	+1	18	20	+2
75-84	17	7	-10	9	10	+1
85+	<u>7</u>	<u>4</u>	<u>-3</u>	<u>6</u>	<u>8</u>	<u>+2</u>
TOTALS	243	215	-28	214	206	-8
Median Age	35.6	39.3	+3.7	40.7	41.9	+1.2

Farwell

<u>age group</u>	<u>2000</u>	<u>2010</u>	<u>Change</u>	<u>2015</u>	<u>2025</u>	<u>Change</u>
19 and Under	39	27	-12	24	16	-8
20-34	21	19	-2	19	14	-5
35-54	38	43	+5	45	48	+3
55-64	22	9	-13	8	5	-3
65-74	15	16	+1	16	16	+0
75-84	10	5	-5	5	7	+2
85+	<u>3</u>	<u>3</u>	<u>+0</u>	<u>3</u>	<u>4</u>	<u>+1</u>
TOTALS	148	122	-26	120	110	-10
Median Age	41.5	39.7	-1.8	39.9	40.5	+0.6

Balance of County

<u>age group</u>	<u>2000</u>	<u>2010</u>	<u>Change</u>	<u>2015</u>	<u>2025</u>	<u>Change</u>
19 and Under	1,041	793	-248	772	730	-42
20-34	490	381	-109	366	341	-25
35-54	999	918	-81	902	878	-24
55-64	323	456	+133	509	588	+79
65-74	258	308	+50	340	380	+40
75-84	149	179	+30	191	211	+20
85+	<u>28</u>	<u>47</u>	<u>+19</u>	<u>56</u>	<u>74</u>	<u>+18</u>
TOTALS	3,288	3,077	-211	3,136	3,212	+76
Median Age	37.1	40.2	+3.1	40.9	43.3	+3.4

Source: 2000, 2010 Census

Hanna:Keelan Associates, P.C., 2015.

HOUSEHOLD CHARACTERISTICS

- ❖ **Table 3.3** identifies **specific household characteristics** of Howard County, from 2000 to 2025. The number of households in the County is projected to increase by an estimated 87 during the next 10 years, or from an estimated 2,705 in 2015, to 2,792 by 2025. From 2015 to 2025, the number of persons per household is projected to decrease, slightly, in Howard County.

Group quarters consist of living quarters that are not considered a household, such as dormitories, nursing care/assisted living centers and correctional facilities. Currently, there are 32 persons residing in group quarters in Howard County, all of which are located in the City of St. Paul. Persons living in group quarters are projected to decrease, slightly, in Howard County, during the next 10 years.

TABLE 3.3
SPECIFIC HOUSEHOLD CHARACTERISTICS
HOWARD COUNTY & COMMUNITIES, NEBRASKA
2000-2025

	<u>Year</u>	<u>Population</u>	<u>Group Quarters</u>	<u>Persons in Households</u>	<u>Households</u>	<u>Persons Per Household</u>
Howard County:	2000	6,567	42	6,525	2,546	2.56
	2010	6,274	35	6,239	2,625	2.37
	2015	6,370	32	6,338	2,705	2.34
	2025	6,467	26	6,441	2,792	2.30
St. Paul:	2000	2,218	42	2,176	935	2.33
	2010	2,290	35	2,255	989	2.28
	2015	2,329	32	2,297	1,016	2.26
	2025	2,380	26	2,354	1,060	2.22
Boelus:	2000	221	0	221	92	2.40
	2010	189	0	189	90	2.10
	2015	188	0	188	90	2.09
	2025	184	0	184	89	2.07
Cotesfield:	2000	66	0	66	26	2.54
	2010	46	0	46	19	2.42
	2015	46	0	46	19	2.39
	2025	44	0	44	19	2.35

CONTINUED:

TABLE 3.3 (CONTINUED)
SPECIFIC HOUSEHOLD CHARACTERISTICS
HOWARD COUNTY & COMMUNITIES, NEBRASKA
2000-2025

	<u>Year</u>	<u>Population</u>	<u>Group</u> <u>Quarters</u>	<u>Persons in</u> <u>Households</u>	<u>Households</u>	<u>Persons Per</u> <u>Household</u>
Cushing:	2000	31	0	31	13	2.38
	2010	32	0	32	14	2.28
	2015	32	0	32	14	2.25
	2025	31	0	31	14	2.21
Dannebrog:	2000	352	0	352	136	2.59
	2010	303	0	303	129	2.35
	2015	305	0	305	130	2.34
	2025	300	0	300	131	2.29
Elba:	2000	243	0	243	102	2.38
	2010	215	0	215	98	2.19
	2015	214	0	214	99	2.15
	2025	206	0	206	98	2.09
Farwell:	2000	148	0	148	63	2.35
	2010	122	0	122	57	2.14
	2015	120	0	120	57	2.10
	2025	110	0	110	54	2.04
Balance of County:	2000	3,288	0	3,288	1,179	2.79
	2010	3,077	0	3,077	1,229	2.50
	2015	3,136	0	3,136	1,280	2.45
	2025	3,212	0	3,212	1,327	2.42

Source: 2000, 2010 Census.

Hanna:Keelan Associates, P.C., 2015.

HOUSEHOLD TENURE

- ❖ **Table 3.4** identifies **tenure by household** for Howard County, for the period 2000 to 2025. The County is currently (2015) comprised of an estimated 2,705 households, consisting of 2,079 owner households and 626 renter households. By 2025, owner households will account for an estimated 77 percent of the total households in Howard County, resulting in 2,151 owner and 641 renter households. Each Community in Howard County is projected to remain stable in the number of owner and renter households.

TABLE 3.4
TENURE BY HOUSEHOLD
HOWARD COUNTY & COMMUNITIES, NEBRASKA
2000-2015

	<u>Year</u>	<u>Total</u> <u>Households</u>	<u>Owner</u>		<u>Renter</u>	
			<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>
Howard County:	2000	2,546	1,959	76.9%	587	23.1%
	2010	2,625	2,013	76.7%	612	23.3%
	2015	2,705	2,079	76.8%	626	23.2%
	2025	2,792	2,151	77.0%	641	23.0%
St. Paul:	2000	935	685	73.3%	250	26.7%
	2010	989	682	68.9%	307	31.1%
	2015	1,016	696	68.5%	320	31.5%
	2025	1,060	720	67.9%	340	32.1%
Boelus:	2000	92	78	84.8%	14	15.2%
	2010	90	75	83.3%	15	16.7%
	2015	90	74	82.9%	16	17.1%
	2025	89	73	82.3%	16	17.7%
Cotesfield:	2000	26	22	84.6%	4	15.4%
	2010	19	15	78.9%	4	21.1%
	2015	19	15	78.9%	4	21.1%
	2025	19	16	84.2%	3	15.8%
Cushing:	2000	13	12	92.3%	1	7.7%
	2010	14	12	85.7%	2	14.3%
	2015	14	12	85.7%	2	14.3%
	2025	14	12	85.7%	2	14.3%

CONTINUED:

TABLE 3.4 (CONTINUED)
TENURE BY HOUSEHOLD
HOWARD COUNTY & COMMUNITIES, NEBRASKA
2000-2015

	<u>Year</u>	<u>Total Households</u>	<u>Owner</u>		<u>Renter</u>	
			<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>
Dannebrog:	2000	136	110	81.0%	26	19.0%
	2010	129	101	78.3%	28	21.7%
	2015	130	101	77.8%	29	22.2%
	2025	131	101	76.8%	30	23.2%
Elba:	2000	102	75	73.5%	27	26.5%
	2010	98	75	76.5%	23	23.5%
	2015	99	76	76.7%	23	23.3%
	2025	98	76	77.5%	22	22.5%
Farwell:	2000	63	55	87.3%	8	12.7%
	2010	57	49	85.9%	8	14.1%
	2015	57	48	85.1%	9	14.9%
	2025	54	45	84.2%	9	15.8%
Balance of County:	2000	1,179	922	78.2%	257	21.8%
	2010	1,229	1,004	81.7%	225	18.3%
	2015	1,280	1,057	82.5%	223	17.5%
	2025	1,327	1,108	83.5%	219	16.5%

Source: 2000, 2010 Census.

Hanna:Keelan Associates, P.C., 2015.

HOUSEHOLD SIZE

- ❖ **Table 3.5** identifies **households by household size** for Howard County and each Community, as per the 2008-2012 American Community Survey estimate. A majority of the County is currently (2015) comprised of one- and two-person households. This trend holds true for each Community, with the exception of Cushing.

TABLE 3.5
HOUSEHOLDS BY HOUSEHOLD SIZE
HOWARD COUNTY & COMMUNITIES, NEBRASKA
2012 ESTIMATE*

	1	2	3	4	5	6	7+
	<u>Person</u>	<u>Persons</u>	<u>Persons</u>	<u>Persons</u>	<u>Persons</u>	<u>Persons</u>	<u>Persons</u>
Howard County:	773	1,052	237	303	155	49	61
St. Paul:	334	315	99	66	53	32	22
Boelus:	44	39	11	12	0	0	0
Cotesfield:	18	2	0	3	0	3	4
Cushing:	7	1	6	0	10	0	0
Dannebrog:	61	61	19	21	3	0	3
Elba:	41	34	6	26	1	3	3
Farwell:	17	26	6	5	0	0	0
Balance of County:	251	574	90	170	88	11	29

*2012 Estimate subject to margin of error.

Source: 2008-2012 American Community Survey.

Hanna:Keelan Associates, P.C., 2015.

INCOME TRENDS & PROJECTIONS

MEDIAN HOUSEHOLD INCOME

- ❖ **Table 3.6** identifies **median household income** for Howard County, Nebraska, from 2000 to 2025. Currently, median income in Howard County is projected at \$53,789. **Median income in the County is projected to increase by an estimated 22.2 percent, to \$65,754 by 2025.**

**TABLE 3.6
MEDIAN HOUSEHOLD INCOME – TRENDS & PROJECTIONS
HOWARD COUNTY & COMMUNITIES, NEBRASKA
2000-2025**

	<u>2000</u>	<u>2012 Est.*</u>	<u>2015</u>	<u>2025</u>
Howard County:	\$33,305	\$48,293	\$53,789	\$65,754
St. Paul:	\$31,818	\$46,280	\$51,543	\$62,442
Boelus:	\$26,500	\$28,750	\$30,004	\$33,451
Cotesfield:	\$14,583	\$31,875	\$33,078	\$37,792
Cushing:	\$20,625	\$48,750	\$49,199	\$52,618
Dannebrog:	\$28,125	\$50,750	\$53,030	\$59,380
Elba:	\$28,750	\$37,500	\$41,413	\$50,357
Farwell:	\$29,063	\$35,000	\$37,228	\$46,054
Balance of County:	\$34,729	\$47,645	\$53,399	\$66,775

*2012 Estimate Subject to margin of error.

NOTE: Four-Person Household, 100% Area Median Income - \$
Source: 2000 Census, 2008-2012 American Community Survey
Nebraska Investment Finance Authority, 2015.
Hanna:Keelan Associates, P.C., 2015.

PER CAPITA INCOME

- ❖ **Table 3.7** identifies **per capita income** for Howard County and the State of Nebraska, from 2002 to 2025. Per capita income is equal to the gross income of an area (State, County, City, Village) divided equally between the residents of the area. **In 2015, per capita income in Howard County is an estimated \$44,745. By 2025, per capita income is projected to increase in the County an estimated 25 percent, to \$55,926.**

TABLE 3.7
PER CAPITA INCOME
HOWARD COUNTY, NEBRASKA / STATE OF NEBRASKA
2002-2025

<u>Year</u>	<u>Howard County</u>		<u>State of Nebraska</u>	
	<u>Per Capita Income</u>	<u>Percent Change</u>	<u>Per Capita Income</u>	<u>Percent Change</u>
2002	\$23,149	--	\$30,314	--
2003	\$26,341	+13.7%	\$32,126	+6.0%
2004	\$25,802	-2.0%	\$33,265	+3.5%
2005	\$27,821	+7.8%	\$34,318	+3.2%
2006	\$26,412	-5.1%	\$35,679	+4.0%
2007	\$30,631	+15.9%	\$37,887	+6.2%
2008	\$34,789	+13.6%	\$40,396	+6.6%
2009	\$34,203	-1.7%	\$38,438	-4.8%
2010	\$35,800	+4.7%	\$39,445	+2.6%
2011	\$40,780	+13.9%	\$42,450	+7.6%
2015	\$44,745	+9.7%	\$47,738	+12.5%
2002-2015	\$23,149-\$44,745	+93.2%	\$28,598-\$47,738	+66.9%
2015-2025	\$44,745-\$55,926	+25.0%	\$47,738-\$58,379	+22.3%

Source: Bureau of Economic Analysis, Regional Economic Information System, 2015.
 Nebraska Department of Economic Development, 2015.
 Hanna: Keelan Associates, P.C., 2015.

SOCIAL SECURITY INCOME

- ❖ **Table 3.8** identifies persons in Howard County, Nebraska **receiving social security income** in 2012. A total of 1,425 persons in Howard County received social security income. Approximately 78.9 percent, or 1,125 persons were 65+ years of age, of which 510 persons were male and 615 persons were female.

TABLE 3.8**PERSONS RECEIVING SOCIAL SECURITY INCOME****HOWARD COUNTY, NEBRASKA****2012**

<u>Social Security Income-2012</u>	<u>Number of Beneficiaries</u>
<u>Retirement Benefits</u>	
Retired Workers	1,010
Wives & Husbands	65
Children	10
<u>Survivor Benefits</u>	
Widows & Widowers	130
Children	40
<u>Disability Benefits</u>	
Disabled Persons	40
Wives & Husbands	125
Children	5
TOTAL	1,425
<u>Aged 65 & Older</u>	
Men	510
Women	615
TOTAL	1,125
<u>Supplemental Security Income-2012</u>	
Aged 65 or Older	N/A
Blind and Disabled	N/A
TOTAL	N/A

N/A = Not Available.

Source: Department of Health and Human Services,
Social Security Administration, 2015.
Hanna: Keelan Associates, P.C., 2015.

EMPLOYMENT & ECONOMIC TRENDS

The most recent and comprehensive employment data available for Howard County is available from the Nebraska Department of Labor. The review and analysis of Howard County labor force statistics provides a general understanding of the economic activity occurring in and around the County.

EMPLOYMENT DATA

- ❖ **Table 3.9** identifies **employment data trends and projections** for Howard County, Nebraska, from 2004 to 2025. In 2015, an estimated 3,530 persons are employed in the County. This number is expected to increase by 130 persons, or 3.6 percent by 2025. The unemployment rate for Howard County is, currently, an estimated 3 percent. The unemployment rate for the County is projected to remain stable during the next 10 years.

**TABLE 3.9
EMPLOYMENT DATA TRENDS AND PROJECTIONS
HOWARD COUNTY, NEBRASKA
2004-2025**

<u>Year</u>	<u>Number of Employed Persons</u>	<u>Change</u>	<u>Percent Unemployed</u>
2004	3,552	--	4.2%
2005	3,554	+2	3.6%
2006	3,610	+56	2.8%
2007	3,618	+8	2.7%
2008	3,706	+88	3.0%
2009	3,579	-127	3.7%
2010	3,596	+17	4.1%
2011	3,588	-8	2.6%
2012	3,409	-179	3.3%
2013	3,480	+71	2.6%
2015	3,530	+50	3.0%
2025	3,682	+152	3.2%
2004-2025	3,552-3,682	+130	4.2%-3.2%

Source: Nebraska Department of Labor, 2015.
Hanna:Keelan Associates, P.C., 2015.

TRAVEL TIME TO WORK

- ❖ **Table 3.10** identifies **travel time to work**, in Howard County, Nebraska, as per the 2008-2012 American Community Survey estimate. An estimated 1,187 employed persons travel less than 20 minutes to work in Howard County. Conversely, the Communities of Boelus, Cotesfield, Cushing and Dannebrog have a majority of employed persons traveling 30 minutes or more to work.

TABLE 3.10
TRAVEL TIME TO WORK
HOWARD COUNTY & COMMUNITIES, NEBRASKA
2012 ESTIMATE*

	9 Minutes or Less	10-19 Minutes	20-29 Minutes	30-39 Minutes	40 Minutes or More
Howard County:	662	525	553	690	451
St. Paul:	365	131	122	313	39
Boelus:	14	9	5	50	20
Cotesfield:	3	10	3	0	18
Cushing:	0	4	0	8	26
Dannebrog:	23	22	42	61	39
Elba:	30	33	34	2	56
Farwell:	12	8	3	12	21
Balance of County:	215	308	344	244	232

*2012 Estimate subject to margin of error.

Source: 2008-2012 American Community Survey.

Hanna:Keelan Associates, P.C., 2015.

CIVILIAN LABOR FORCE

- ❖ **Table 3.11** identifies **workforce employment by type**, in Howard County, Nebraska, from 2012 to 2014. Non-farm employment, in Howard County, increased by an estimated 9.3 percent, from 2012 to 2014. The employment sectors experiencing the largest increases were the Federal Government, Goods Producing and Financial Activities sectors. The only decreases were experienced in the Professional & Business and Other Services sectors.

TABLE 3.11
WORKFORCE EMPLOYMENT BY TYPE
HOWARD COUNTY, NEBRASKA
2012-2014

<u>Workforce</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>% Change</u> <u>2012-2014</u>
Non-Farm Employment (Wage and Salary)	1,412	1,458	1,544	+9.3%
Goods Producing	80	70	112	+40.0%
Manufacturing	*	*	*	*
Natural Resources & Const.**	64	59	70	+9.4%
Service Providing	1,332	1,388	1,432	+7.5%
Trade, Trans, Ware, Util***	324	317	336	+3.7%
Total Trade	274	272	294	+7.3%
Wholesale Trade	87	90	105	+20.7%
Retail Trade	187	182	189	+1.1%
Information	*	*	*	*
Financial Activities	69	71	96	+39.1%
Professional & Business	37	32	27	-27.0%
Education & Health	*	*	*	*
Leisure & Hospitality	93	97	95	+2.1%
Other Services	64	58	62	-3.1%
Total Government	608	663	654	-7.6%
Federal	24	26	35	+45.8%
State	21	20	23	+9.5%
Local	563	617	596	+5.9%

* Data not available because of disclosure suppression

** Natural Resources & Construction

*** Trade, Transportation, Warehousing & Utilities

Source: Nebraska Department of Labor, Labor Market Information, 2015.

Hanna:Keelan Associates, P.C., 2015.

HOUSING STOCK & CONDITIONS

The **Housing Stock & Conditions Section** of this **Comprehensive Plan** presents information that will assist in the determination of the housing demand for Howard County and the rural areas. Included in this analysis is a review of the current housing stock, substandard housing and the cost of housing.

UNITS IN STRUCTURE, SUBSTANDARD HOUSING

- ❖ Substandard housing, as defined by HUD, as per the 2000 Census, included 1.) Housing units lacking complete plumbing and 2.) Housing units with 1.01+ persons per room. **Table 3.12, Page 3.19** identifies the **units in structure**, in Howard County, via the 2000 Census and 2008-2012 American Community Survey estimate, as per this definition. A majority of dwellings in Howard County consist of a single unit. Overall, Howard has increased by an estimated 178 housing units, or by 6.3 percent from 2000 to 2012.

- ❖ **Table 3.13, Page 3.20** identifies **substandard housing**, in Howard County, via the 2000 Census and 2008-2012 American Community Survey estimate. **A total of eight housing units lacked complete plumbing, while 36 housing units were overcrowded.** All eight units lacking complete plumbing are located in Boelus, while the 36 overcrowded units are located in St. Paul, Cotesfield, Elba and the Balance of County.

**TABLE 3.12
HOUSING STOCK PROFILE/UNITS IN STRUCTURE
HOWARD COUNTY & COMMUNITIES, NEBRASKA
2000 & 2012 ESTIMATE***

		Number of Units				
		<u>1 unit</u>	<u>2-9 units</u>	<u>10+ units</u>	<u>Other**</u>	<u>Total</u>
Howard County:	2000	2,356	138	24	264	2,782
	2012	2,563	121	80	196	2,960
St. Paul:	2000	800	119	19	80	1,018
	2012	841	108	75	30	1,054
Boelus:	2000	86	1	3	15	105
	2012	107	0	0	14	121
Cotesfield:	2000	28	0	0	4	32
	2012	33	0	0	0	33
Cushing:	2000	9	0	0	4	13
	2012	30	0	0	0	30
Dannebrog:	2000	127	7	2	12	148
	2012	177	2	2	11	192
Elba:	2000	76	6	0	27	109
	2012	96	8	0	16	120
Farwell:	2000	67	0	0	5	72
	2012	72	0	0	1	73
Balance of County:	2000	1,163	5	0	117	1,285
	2012	1,207	3	3	124	1,337

*2012 Estimate subject to margin of error.

**Other includes mobile homes, vans, RVs, boats, etc.

Source: 2000 Census, 2008-2012 American Community Survey.
Hanna:Keelan Associates, P.C., 2015.

**TABLE 3.13
HOUSING STOCK PROFILE
DEFINING SUBSTANDARD HOUSING – HUD
HOWARD COUNTY & COMMUNITIES, NEBRASKA
2012 ESTIMATE***

	<u>Total</u>	<u>Complete Plumbing</u>		<u>Lack of Complete Plumbing</u>		<u>Units with 1.01+ Persons per Room</u>	
		<u>Number</u>	<u>% of Total</u>	<u>Number</u>	<u>% of Total</u>	<u>Number</u>	<u>% of Total</u>
Howard County:	2,629	2,621	99.7%	8	0.3%	36	1.3%
St. Paul:	921	921	100.0%	0	0.0%	16	1.7%
Boelus:	106	98	92.5%	8	7.5%	0	0.0%
Cotesfield:	30	30	100.0%	0	0.0%	2	6.6%
Cushing:	24	24	100.0%	0	0.0%	0	0.0%
Dannebrog:	168	168	100.0%	0	0.0%	0	0.0%
Elba:	114	114	100.0%	0	0.0%	3	2.6%
Farwell:	54	54	100.0%	0	0.0%	0	0.0%
Balance of County:	1,212	1,212	100.0%	0	0.0%	15	1.2%

*2012 Estimate subject to margin of error.

Source: 2008-2012 American Community Survey.

Hanna:Keelan Associates, P.C., 2015.

HOUSING UNITS BUILT

- ❖ **Table 3.14** profiles the **estimated housing units built** IN Howard County, as of 2012. Records indicate that an estimated 2,973 housing units exist in Howard County for 2012. Approximately 34.2 percent of all housing units in the County were constructed on or prior to 1939, while 45.6 percent were constructed during or prior to 1959.

TABLE 3.14
HOUSING STOCK PROFILE/YEAR STRUCTURE BUILT
HOWARD COUNTY & COMMUNITIES, NEBRASKA
2012 ESTIMATE*

Year	<u>Howard County</u>	<u>St. Paul</u>	<u>Boelus</u>
2013 to Present	16	10	N/A
2010 to 2012	2	0	0
2000 to 2009	320	89	2
1990 to 1999	347	105	2
1980 to 1989	191	89	8
1970 to 1979	483	205	24
1960 to 1969	257	151	5
1950 to 1959	196	83	0
1940 to 1949	145	79	0
<u>1939 or Before</u>	<u>1,019</u>	<u>253</u>	<u>80</u>
SUBTOTAL	2,976	1,064	121
<u>Units Lost (2013 to Present)</u>	<u>(3)</u>	<u>(2)</u>	<u>(N/A)</u>
TOTAL EST. UNITS – 2015	2,973	1,062	121
% 1939 or Before	34.2%	23.6%	66.1%
% 1959 or Before	45.6%	38.9%	66.1%
	<u>Cotesfield</u>	<u>Cushing</u>	<u>Dannebrog</u>
Year			
2013 to Present	0	0	1
2010 to 2012	0	0	0
2000 to 2009	0	0	0
1990 to 1999	0	0	21
1980 to 1989	3	0	10
1970 to 1979	0	5	3
1960 to 1969	3	0	2
1950 to 1959	7	1	18
1940 to 1949	0	0	7
<u>1939 or Before</u>	<u>20</u>	<u>24</u>	<u>131</u>
SUBTOTAL	33	30	193
<u>Units Lost (2013 to Present)</u>	<u>(0)</u>	<u>(0)</u>	<u>(1)</u>
TOTAL EST. UNITS – 2015	33	30	192
% 1939 or Before	60.6%	80.0%	67.7%
% 1959 or Before	81.8%	83.3%	81.2%

CONTINUED:

TABLE 3.14 (CONTINUED)
HOUSING STOCK PROFILE/YEAR STRUCTURE BUILT
HOWARD COUNTY & COMMUNITIES, NEBRASKA
2012 ESTIMATE*

<u>Year</u>	<u>Elba</u>	<u>Farwell</u>	<u>Balance of County</u>
2013 to Present	N/A	5	(N/A)
2010 to 2012	2	0	0
2000 to 2009	2	0	227
1990 to 1999	13	0	206
1980 to 1989	1	5	75
1970 to 1979	46	1	199
1960 to 1969	9	6	81
1950 to 1959	6	2	79
1940 to 1949	4	3	52
<u>1939 or Before</u>	<u>37</u>	<u>56</u>	<u>418</u>
SUBTOTAL	<u>120</u>	<u>78</u>	<u>1,337</u>
<u>Units Lost (2013 to Present)</u>	<u>(N/A)</u>	<u>(0)</u>	<u>(N/A)</u>
TOTAL EST. UNITS – 2015	120	78	1,337
% 1939 or Before	30.8%	71.8%	31.2%
% 1959 or Before	39.1%	78.2%	41.1%

N/A = Not Available.

*2012 Estimate subject to margin of error.

Source: 2008-2012 American Community Survey; Communities of Howard County, 2015.

Hanna:Keelan Associates, P.C., 2015.

OWNER & RENTER HOUSING COSTS

The cost of housing in any county or community is influenced by many factors, primarily the cost of construction, availability of land and infrastructure and, lastly, the organizational capacity of the County to tie these housing opportunities into an applicable format and secure the appropriate resources. Howard County is challenged to organize needed resources to meet the needs of their residents, including both financial, as well as, organizational resources. A continued effort to upgrade wages, at both existing and new employment settings, should be a top priority.

GROSS RENT & HOUSING VALUE

- ❖ **Table 3.15** identifies **gross rent** for Howard County, Nebraska, from 2000 to 2025. In 2015, the estimated median gross rent for Howard County is \$590. **The estimated median gross rent in Howard County is expected to increase by an estimated 27.7 percent, by 2025, to \$754.**

- ❖ **Table 3.16** identifies **owner occupied housing values** for Howard County, from 2000 to 2025. **The median housing value in Howard County, estimated to be \$102,800 for 2015, is projected to increase by an estimated 20.5 percent, by 2025, to \$123,900.**

**TABLE 3.15
GROSS RENT
HOWARD COUNTY & COMMUNITIES, NEBRASKA
2000-2025**

		<u>Less than \$300</u>	<u>\$300 to \$499</u>	<u>\$500 to \$699</u>	<u>\$700 or More</u>	<u>Total</u>
Howard County:	2000	189	178	61	11	439
	2000 Median Rent	\$403				
	2012 Est.*	119	154	170	95	538
	2012 Med. Rent*	\$563				
	2015	\$590				
2025	\$754					
St. Paul:	2000	99	101	34	5	239
	2000 Median Rent	\$427				
	2012 Est.*	56	86	97	47	286
	2012 Med. Rent*	\$558				
	2015	\$570				
2025	\$723					
Boelus:	2000	7	8	3	0	18
	2000 Median Rent	\$467				
	2012 Est.*	4	14	5	0	23
	2012 Med. Rent*	\$443				
	2015	\$459				
2025	\$481					
Cotesfield:	2000	2	2	0	0	4
	2000 Median Rent	\$375				
	2012 Est.*	3	0	0	0	3
	2012 Med. Rent*	N/A				
	2015	N/A				
2025	N/A					
Cushing:	2000	0	0	2	0	2
	2000 Median Rent	\$575				
	2012 Est.*	0	0	0	0	0
	2012 Med. Rent*	N/A				
	2015	N/A				
2025	N/A					

CONTINUED:

TABLE 3.15 (CONTINUED)
GROSS RENT
HOWARD COUNTY & COMMUNITIES, NEBRASKA
2000-2025

		<u>Less than \$300</u>	<u>\$300 to \$499</u>	<u>\$500 to \$699</u>	<u>\$700 or More</u>	<u>Total</u>
Dannebrog:	2000	21	8	4	2	35
	2000 Median Rent	\$271				
	2012 Est.*	11	2	3	9	25
	2012 Med. Rent*	\$708				
	2015	\$726				
2025	\$774					
Elba:	2000	6	13	2	0	21
	2000 Median Rent	\$331				
	2012 Est.*	4	26	2	0	32
	2012 Med. Rent*	\$413				
	2015	\$429				
2025	\$469					
Farwell:	2000	3	0	2	0	5
	2000 Median Rent	\$525				
	2012 Est.*	0	0	3	0	3
	2012 Med. Rent*	\$588				
	2015	\$615				
2025	\$667					
Balance of County:	2000	51	46	13	4	114
	2000 Median Rent	\$318				
	2012 Est.*	41	26	60	39	166
	2012 Med. Rent*	\$553				
	2015	\$574				
2025	\$662					

*2012 Estimate subject to margin of error.

Source: 2008-2012 American Community Survey.

Hanna:Keelan Associates, P.C., 2015.

**TABLE 3.16
OWNER OCCUPIED HOUSING VALUE
HOWARD COUNTY & COMMUNITIES, NEBRASKA
2000-2025**

		Less than \$50,000	\$50,000 to \$99,999	\$100,000 to \$149,999	\$150,000 to \$199,999	\$200,000 or More	Total
Howard County:	2000	408	557	205	28	19	1,217
	2000 Med. Val.	\$66,100					
	2012*	350	709	400	355	277	2,091
	2012 Med. Val.*	\$98,800					
	2015 2025	\$102,800 \$123,900					
St. Paul:	2000	178	303	116	16	8	621
	2000 Med. Val.	\$68,200					
	2012*	76	298	129	102	30	635
	2012 Med. Val.*	\$89,200					
	2015 2025	\$93,300 \$108,200					
Boelus:	2000	47	11	0	0	0	58
	2000 Med. Val.	\$36,700					
	2012*	34	40	7	2	0	83
	2012 Med. Val.*	\$54,200					
	2015 2025	\$57,500 \$67,600					
Cotesfield:	2000	8	2	5	0	0	15
	2000 Med. Val.	\$14,700					
	2012*	10	14	0	3	0	27
	2012 Med. Val.*	\$53,900					
	2015 2025	\$55,200 \$62,700					
Cushing:	2000	8	0	0	0	0	8
	2000 Med. Val.	\$17,500					
	2012*	22	2	0	0	0	24
	2012 Med. Val.*	\$30,800					
	2015 2025	\$34,900 \$40,800					

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TABLE 3.16 (CONTINUED)
OWNER OCCUPIED HOUSING VALUE
HOWARD COUNTY & COMMUNITIES, NEBRASKA
2000-2025

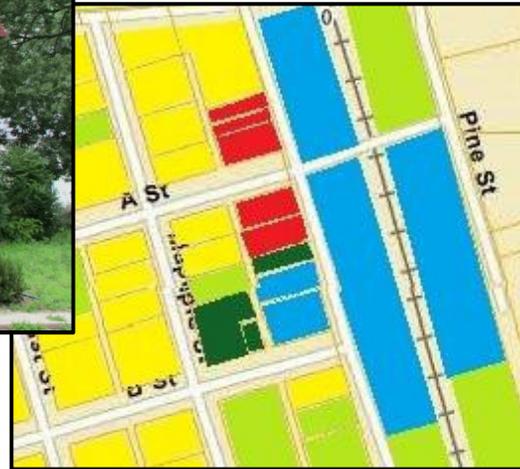
		Less than \$50,000	\$50,000 to \$99,999	\$100,000 to \$149,999	\$150,000 to \$199,999	\$200,000 or More	Total
Dannebrog:	2000	37	31	6	2	0	76
	2000 Med. Val.	\$51,100					
	2012*	43	70	22	8	0	143
	2012 Med. Val.*	\$65,000					
	2015	\$68,300					
	2025	\$76,400					
Elba:	2000	31	17	4	2	0	54
	2000 Med. Val.	\$40,000					
	2012*	31	40	5	6	0	82
	2012 Med. Val.*	\$65,000					
	2015	\$69,200					
	2025	\$77,800					
Farwell:	2000	44	11	0	0	0	55
	2000 Med. Val.	\$37,800					
	2012*	30	19	2	0	0	51
	2012 Med. Val.*	\$42,500					
	2015	\$44,000					
	2025	\$55,100					
Balance of County:	2000	55	182	74	8	11	330
	2000 Med. Val.	\$87,100					
	2012*	104	226	235	234	247	1,046
	2012 Med. Val.*	\$141,100					
	2015	\$148,500					
	2025	\$164,600					

*2012 Estimate subject to margin of error.

Source: 2008-2012 American Community Survey.

Hanna:Keelan Associates, P.C., 2015.

SECTION 4



LAND USE PROFILE & PLAN.

SECTION 4

LAND USE PROFILE & PLAN.

INTRODUCTION

The amount and types of land uses influence current and future conditions in rural areas. The variety of land uses is the result of many influences, both human and natural. Existing land uses throughout Howard County are the result of factors influenced by individuals, roads, highways, economic activities, public and private agencies, commercial and industrial enterprises and the physical landscape. An examination of land use requires an understanding of the physical setting in which the use activities have developed and are continuing to develop. In order to understand the land use situation in the County, it is necessary to understand the existing land use patterns and the potential limiting factors which could influence future development.

The land use section of the Howard County Comprehensive Plan details existing and future land use conditions and development of land throughout the rural portions of the County and the Villages of Boelus, Cotesfield, Cushing, Dannebrog, Elba, and Farwell and the unincorporated community of St. Libory.

LOCATION

Howard County is located in central Nebraska, adjacent the Loup River Valleys. St. Paul, Nebraska is the County Seat of Howard County, which is located in the center of the County. Primary road networks in Howard County include U.S. Highway 281 and State Highways 11, 58 and 92. The County has a total land area of approximately 362,240 acres, or 576 square miles. Major waterways include the North Loup, Middle Loup, South Loup and Loup Rivers, which generally flow west to east. These rivers and their tributaries have sculptured the terrain of Howard County, creating Dissected Plains with rolling hills and canyons in all portions of this central Nebraska County, except for the extreme southeast corner.

The Villages of Cotesfield and Elba are located in the northwest quadrant of the County to the west of the North Loup River, along Highway 11, while Farwell is located along the south side of Highway 92. The southwest quadrant includes the Village of Boelus, just north of the Middle Loup River, located along Highway 58 and Dannebrog at the junction of Highways 11 and 58. The unincorporated community of St. Libory is in the southeast corner of the southeast quadrant along either side of Highway 281. The Village of Cushing is located in the east-central portion of the northwest quadrant, just to the north of the Loup River.

THE NATURAL ENVIRONMENT

The Natural Environment of Howard County includes an overview of the general climate, topography and conditions of the soils, water resources. These physical characteristics not only impact the viability of the production of crops and livestock, but also the sustainability of the Communities and the residents they support.

CLIMATE

The climate of Howard County is continental and characterized by widely ranging seasonal temperatures and rapidly changing weather patterns. The temperature ranges from an average daily minimum of 11° F in January and maximum of 90° F in July. The average annual precipitation is 23.5 inches. The majority of rainfall occurs between the months of April and September.

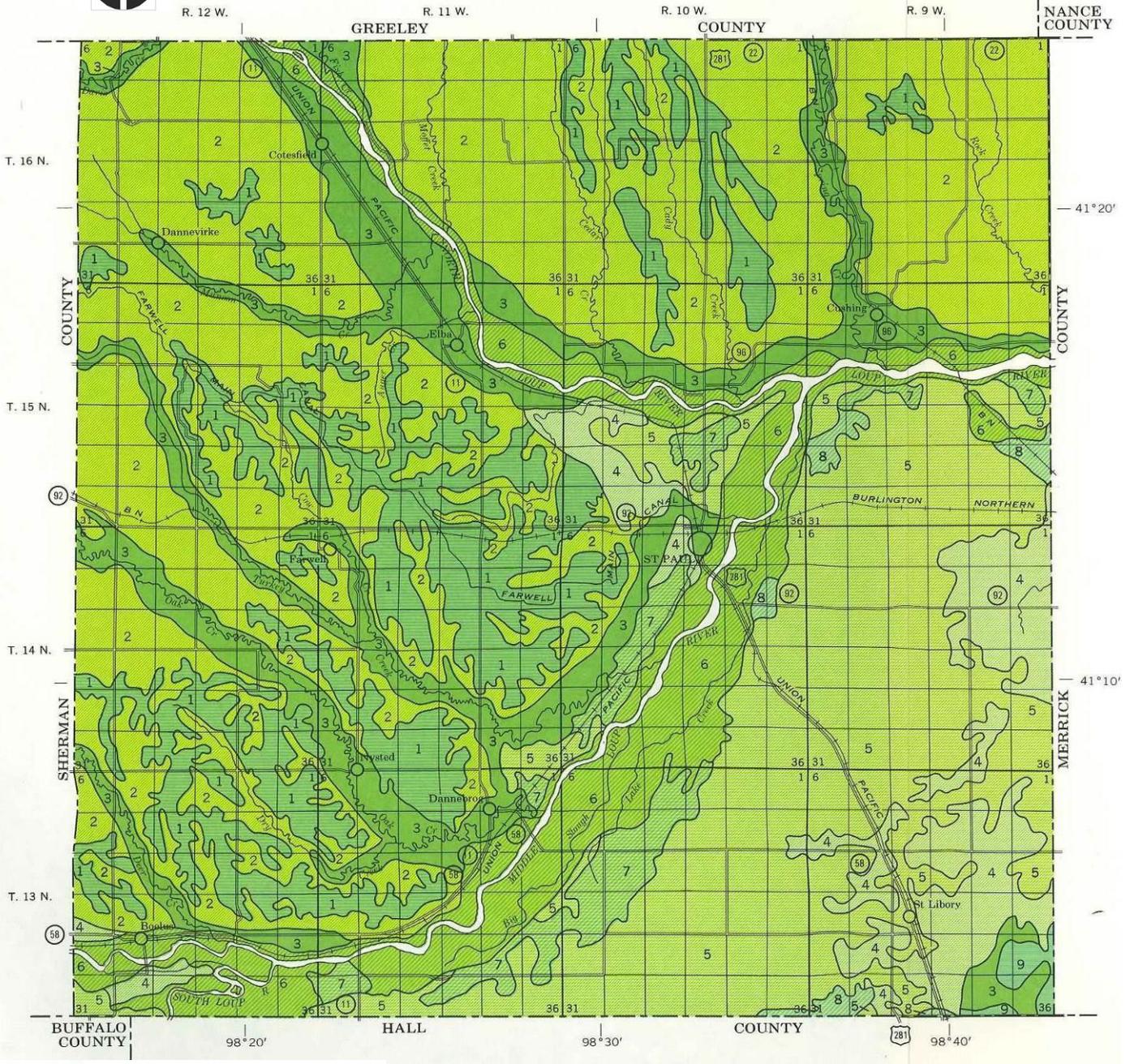
SOILS

Two topographic regions are included in Howard County. The majority of the County is comprised of the “dissected plains” topographic region. The southeastern corner of the County is comprised of the “valleys” topographic region of Nebraska. Soils are used for irrigated and dry cropland, pasture and rangeland. The Soil Conservation Services has identified nine soils associations in the Soil Survey of Howard County. These include: Holder-Hastings, Coly-Holder-Uly, Hord-Hobbs, Kenesaw-Ortello-Libory, Inavale-Boel-Tryon, Simeon-O’Neill, Tryon-Elsmere-Gibbon, and the Silver Creek-Slickspots Soil Associations.

Illustration 4.1 identifies the location of soils associations in Howard County. The map identifies soil types that are conducive for certain types of development. The following narrative describes the general characteristics of the nine soil types. For a detailed analysis, refer to the Soil Survey of Howard County, Nebraska.



GENERAL SOIL ASSOCIATIONS MAP



LEGEND

- 1 HOLDER-HASTINGS ASSOCIATION
- 2 COLY-HOLDER-ULY ASSOCIATION
- 3 HORD-HOBBS ASSOCIATION
- 4 KENESAW-ORTELLO-LIBORY ASSOCIATION
- 5 VALENTINE-THURMAN-LIBORY ASSOCIATION
- 6 INAVALE-BOEL-TRYON ASSOCIATION
- 7 SIMEON-O'NEILL ASSOCIATION
- 8 TRYON-ELSMERE ASSOCIATION
- 9 SILVER CREEK-SLICKSPOTS ASSOCIATION

HANNA:KEELAN ASSOCIATES, P.C.
COMMUNITY PLANNING & RESEARCH

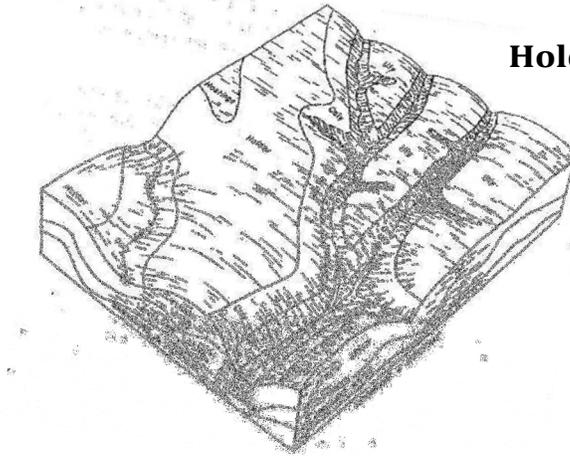
*** Lincoln, Nebraska * 402.464.5383***

ILLUSTRATION 4.1

Holder-Hastings Association

The **Holder-Hastings Association** is on upland flats and ridgetops in western areas between the North and Middle Loup Rivers and in the north-central portion of the County, see **Illustration 4.2**. This Association is characterized as *"deep, nearly level to gently sloping, silty soils on uplands."* The Association comprises about 14 percent of the County. Irrigated croplands are the predominate agricultural uses in this association. Nearly all areas of this Association are cultivated. Many areas are irrigated from the Farwell Irrigation District.

Limitations of the Holder-Hastings Association soils are moderate to severe for both Holder and Hastings soils where moderately slow permeability rates impact septic tank absorption fields and sewage lagoons, requiring lagoons to be lined or sealed.



**Holder-Hastings & Coly-Holder-Uly
Soil Association
Illustration 4.2**

Coly-Holder-Uly Association

The **Coly-Holder-Uly Association** is located in the sides of deep drainage ways in the west and northern portions of the County, see **Illustration 4.1**. The Association is described as *"deep, sloping to steep silty soils on uplands."* This Association occupies approximately 40 percent of the total County area and includes much of the lands within the Villages of Boelus and Farwell. The Association is used for cultivated crops and range land, see **Illustration 4.2**.

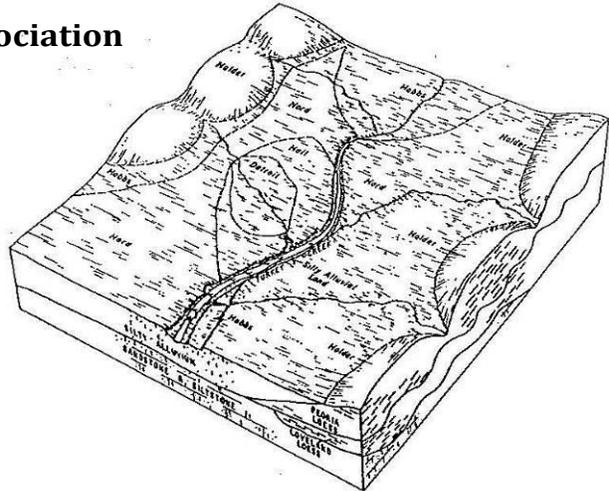
Coly and Uly soils have moderate to severe limitations where steep slopes impact septic tank absorption fields. Severe limitations in steeper areas impact the construction of sewage lagoons. All soils have fair to good bearing capacity for the construction of building foundations.

Hord-Hobbs Association

The **Hord-Hobbs Association** is along stream terraces along the Loup Rivers and bottom lands of major streams and upland drainage ways. The Villages of Cotesfield, Cushing, Dannebrog and Elba are comprised of this Soils Association. These soils comprise just 8 percent of Howard County. The main concerns in management are conserving moisture, controlling runoff, and reducing the risk of erosion. The soils are characterized as *"deep, nearly level to gently sloping, silty soils on stream terraces and bottom lands,"* see **Illustration 4.3** below. Irrigation in approximately 30 percent of this Association has overcome poor dryland crop production.

Moderate to severe limitations impact this Association due to the sloping topography. Limitations for sewer lagoons and septic tank absorption fields exist due to moderate permeability. Lagoons should be protected from flooding and lined.

**Hord-Hobbs Soil Association
Illustration 4.3**



Kenesaw-Ortello-Libory Association

The **Kenesaw-Ortello-Libory Association** is generally located in the southeastern portions of the County and encompasses the eastern half of St. Libory. Soils of this Association are described as *"deep, nearly level to sloping, loamy and sandy soils on stream terraces and uplands."* Approximately 6 percent of the Howard County land area is comprised of this Association. Nearly all of the Association is cultivated.

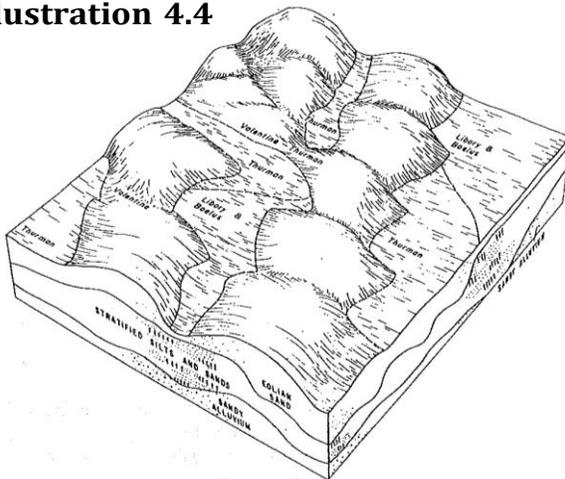
Moderate to severe conditions limit the effectiveness of septic tank absorptions fields and sewage lagoons in steep areas. Rapid permeability of both Kenesaw and Ortello soils types limits the effectiveness of absorption fields and sewage lagoon, requiring lagoons to be lined. Libory soils can support compacted soil for lagoons.

Valentine-Thurman-Libory Association

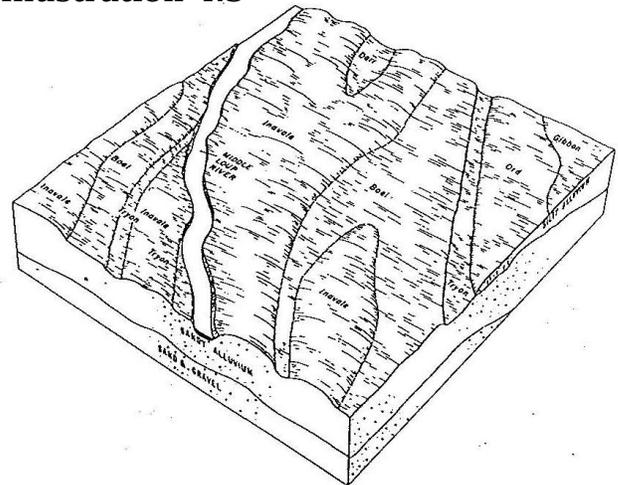
This Association consists of dune like uplands and nearly level stream terraces and are concentrated in the southeast quadrant of the County, including the west side of St. Libory. Soils of this Association are characterized as *“deep, nearly level to strongly sloping, sandy soils on uplands and stream terraces,”* see **Illustration 4.4**. Most of this Association is used as range land due to the steep slopes that make crop development difficult. Approximately 18 percent of the County, is comprised of this Association.

Slopes and moderately slow permeability impact this Association soils with slight to moderate limitations for septic tank filter fields and severe limitations for sewage lagoons. Sewage lagoons are required to be lined.

Valentine-Thurman-Libory Soil Association
Illustration 4.4



Inavale-Boel-Tryon Soil Association
Illustration 4.5



Inavale-Boel-Tryon Association

Inavale-Boel-Tryon Soils are located in bottom lands of the Middle and North Loup Rivers and also include the southern portion of the Village of Boelus. Soils in this Association are described as *“deep, nearly level to gently sloping, sandy and silty soils on bottom lands of the Loup River Valleys,”* see **Illustration 4.5**. The total area included in this Association occupied 10 percent of the total County area. Soils of this Association are mostly of cultivated crops and range.

Severe limitations exist due to shallow depths to the water table and lands are subject to flooding. Tryon soils have 30 inch depth to ground water table, Boel soils have two to six feet. These soils are directly associated with the Loup River and connected streams and are not recommended for sewage lagoons.

Silver Creek-Slickspots Association

Soils of the **Silver Creek-Slickspots Association** are only present in the very extreme southeast corner of Howard County. The Association is characterized as *“deep, nearly level to very gently sloping, saline and alkali soils, on stream terraces, that have a silty surface layer and a clayey subsoil.”* Only one percent of the total area of Howard County is occupied by this Association. Cultivated crops comprise this Association. Moderate limitations exist for filter fields due to slow permeability. Sewage lagoons have severe limitations due to soil permeability requiring protection from overflow.

WATERSHEDS

The topography and terrain of Howard County is varied. Erosion by the North, Middle, South and Loup Rivers and associated tributaries have modified the topography. The topography of Howard County is generally comprised of “dissected plains” in the majority of the County with “valleys” in the southeastern corner of the County. Drainage in the County is generally eastward and southeastward.

GROUNDWATER

Surface drainage and streams account for a small percentage of the Howard County water resources. The majority of the water is in an underground aquifer. Groundwater is of good quality and water yields from 1,000+ gallons per minute can be developed in the southeastern portion of the county. The Farwell Irrigation District, began construction on August 25, 1959 and was completed between 1963 and 1967, generally in the western half of the County, which is fed from the Sherman County Reservoir. The underground water supply for the County is part of the Ogallala Aquifer which flows across the majority of the state. Groundwater levels have remained stable in Howard County. The average depth of irrigation wells is 174 feet. The surface water in drainage ways and depressions seeps into the aquifer to recharge it, thus the surface and ground water are part of one interactive system which cannot be separated.

The Villages of Cotesfield and Cushing are the only Communities within Howard County that do not participate in the Wellhead Protection Program. The boundaries are shown on both the Existing and Future Land Use Maps for Howard County, **Illustrations 4.7 and 4.10**. These WHP boundaries should be protected from possible industrial and commercial contaminants, but must also be monitored and protected from agricultural contaminants.

EXISTING LAND USE ANALYSIS

Howard County contains approximately 362,240 acres of land area. **Existing land uses** in Howard County are identified in **Illustration 4.7**. Current land uses types, such as agricultural, residential, commercial, industrial, park and recreation and public/quasi-public, are illustrated. Subsequent **Illustrations 4.8** and **4.9** depict the Existing Land Use Maps of the six Howard County Villages and the unincorporated Community of St. Libory.

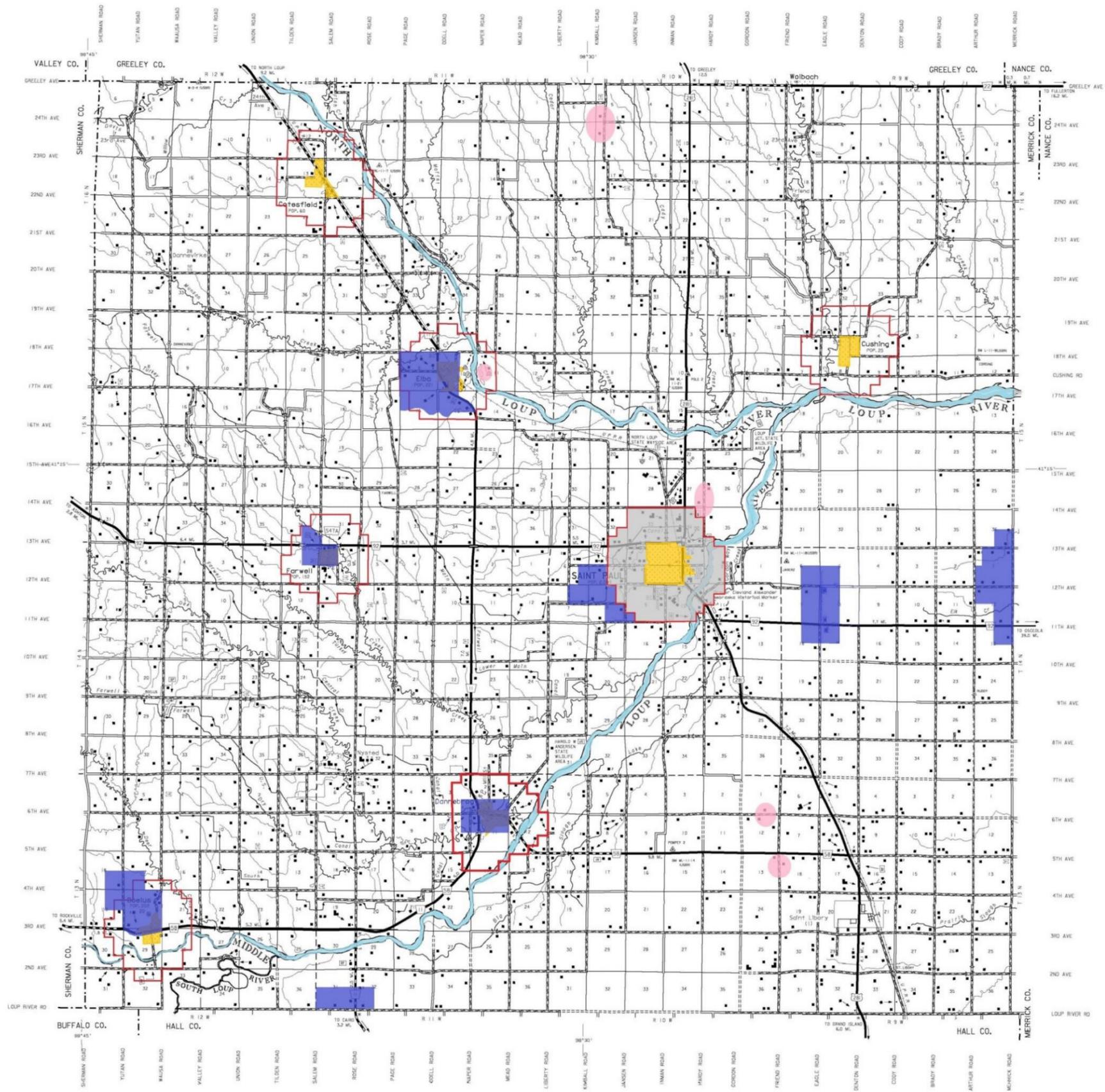
Rural Land Use

Rural residential land use is located throughout the County. There are an estimated 1,212 households in rural Howard County, including the unincorporated community of St. Libory, as well as rural subdivision areas. Housing is limited to single family or mobile homes in rural Howard County. Soil conditions and a lack of rural roads have resulted in more sparsely developed rural areas in the northeastern third of the county and the area directly east of the Middle Loup River. Likewise, portions of Howard County area similarly less developed in “pockets” throughout the County.

As is evident from the existing land use map, **Illustration 4.7**, topographical constraints and lack of roads have limited development in the northeastern third of Howard County and along the eastern side of the Middle Loup River. Future development in Howard County is expected to be concentrated in close proximity to each of the communities and in selected areas, along Highway 281 north of St. Paul and south to the Hall County Line, as well as along Highway 58, between the Sherman County Line and Highway 281. Coordination between local and County Officials is imperative to insure adjacent land uses are compatible, especially within the planning jurisdiction of communities.

EXISTING LAND USE MAP

HOWARD COUNTY, NEBRASKA



LEGEND

- HOWARD COUNTY LINE
- HIGHWAY/MAJOR ARTERIAL ROADS
- CITY/VILLAGE CORPORATE LIMITS
- PLANNING JURISDICTIONS (BOELUS, COTESFIELD, CUSHING, DANNEBROG, ELBA, FARWELL)
- ST. PAUL PLANNING JURISDICTION
- BODY OF WATER
- WELLHEAD PROTECTION AREA
- CONFINED ANIMAL FEEDING OPERATION-WASTE AREA

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ILLUSTRATION 4.7

The Size of Farms...

Agriculture has historically been the primary focus of the Howard County economy and its communities. Statistics released by the Nebraska Department of Labor and the Nebraska Census of Agriculture, however, indicate the Howard County economy is becoming more diversified.

Increases in the number of total farms in Howard County between 2002 and 2012, of 82 total new farms, or 13.7 percent, could lead to the conclusion that more high school and College graduates are choosing to become farmers. The total acreage of Land in Farms increased during the same period by 72,697 acres in Howard County. Although there were 21 additional farms of at least 1,000 acres or more, there were also a total of 182 new farms in the three smallest size categories of 1 to 9, 10 to 49 and 50 to 179 Acres. This could indicate that the majority of the newest farms are smaller, start-up farms that potentially have a 40 hour job in town and farm as their second job or second income.

Farm size is further detailed in **Table 4.1**. Throughout the 10 year period of 2002 to 2012 the only two farm size categories that declined in were the “180 to 499” acres and “500 to 999” acre farms.

**TABLE 4.1
FARMS BY SIZE
HOWARD COUNTY, NEBRASKA
2002 – 2012**

Size	2002	2007	2012	% Change 2002 - 2007	% Change 2002 - 2012
1 to 9 Acres	27	31	60	+14.8%	+122.2%
10 to 49 Acres	76	105	118	+38.2%	+55.2%
50 to 179 Acres	109	118	162	+8.3%	+48.6%
180 to 499 Acres	194	132	144	-32.0%	-25.8%
500 to 999 Acres	116	90	99	-22.4%	-14.7%
<u>1,000 to Acres or More</u>	<u>78</u>	<u>88</u>	<u>99</u>	<u>+12.8%</u>	<u>+26.9%</u>
Total Farms	600	564	682	-6.0%	+13.7%
Total Crop Land	184,959	157,759	182,496	-14.7%	-1.3%
Land in Farms	239,537	278,876	312,234	+16.4%	+30.4%
Average Farm Size	489	494	458	+1.0%	-6.3
Median Farm Size	320	240	183	-25%	-42.8

Source: Nebraska Census of Agriculture, 2002, 2007 & 2012.
Hanna:Keelan Associates, P.C., 2014.

Crop Production Trends

Farms in Howard County are increasing in number at a rate that is generally larger than the number of farms that are consolidating into ever larger farms. Statistics from the Nebraska Census of Agriculture show that the total acres of **cropland** actually declined by 2,463 acres, or by 1.3 percent. However, the amount of harvested crop land increased by 19.4 percent, or by 26,875 acres between 2002 and 2012, see **Table 4.2**. Irrigated cropland amounted to 103,499 acres in 2002 (28.6 percent of the total Howard County area) and increased to 115,436 acres, or 31.9 percent of the County, as of 2012. Non-irrigated cropland during the 10-year period decreased by 14,400 acres, while irrigated cropland increased by 11,937 acres.

**TABLE 4.2
STATUS OF CROP PRODUCTION
HOWARD COUNTY, NEBRASKA
2002 – 2012**

	<u>2002</u>	<u>2007</u>	<u>2012</u>	<u>% Change 2002 - 2007</u>	<u>% Change 2002 - 2012</u>
<i>HARVESTED CROP LAND</i>					
Farms	455	398	503	-12.5%	+10.6%
Acres	138,884	137,705	165,759	-0.8%	+19.4%
<i>IRRIGATED CROP LAND</i>					
Farms	338	273	329	-19.2%	-2.7%
Acres	<u>103,499</u>	<u>104,273</u>	<u>115,436</u>	<u>+0.8%</u>	<u>+11.5%</u>
<i>TOTAL CROP LAND</i>					
Farms	539	458	548	-15.0%	+1.7%
Acres	184,959	157,759	182,496	-14.7%	-1.3%

Source: Nebraska Census of Agriculture, 2002, 2007 & 2012.
Hanna:Keelan Associates, P.C., 2014.

The consumption of harvested corn by the ethanol industry in Nebraska, approximately 40 percent of the total crop, is thought to have stimulated the conversion of land to corn production.

Agricultural production in Howard County drastically increased in the categories of “Corn for Grain or Seed” and “Soybean for Beans” production. Total acres planted in corn for grain or seed increased from 80,121 acres in 2002 to 95,501 acres in 2007, a 19.2 percent increase. Acres utilized for soybean production increased by 45.6 percent from 2002 to 2012, or by an increase of 10,935 acres. Corn for Silage or Green Chop, Oats for Grain and Hay-alf, Other Wild, Silage as indicated in **Table 4.3**, each decreased significantly during the same 10-year period.

TABLE 4.3
HARVESTED CROPS BY TYPE
HOWARD COUNTY, NEBRASKA
2002-2012

CROP BY TYPE	Production in Acres			% Change	% Change
	2002	2007	2012	2002-2007	2002-2012
Corn for Grain or Seed	80,121	90,755	95,501	+13.3%	+19.2%
Corn for Silage or Green Chop	5,863	1,217	4,999	-79.2%	-14.7%
Sorghum for Grain or Seed	277	542	370	+95.7%	+33.6%
Wheat for Grain	988	4,799	1,328	+385.7%	+34.4%
Oats for Grain	361	61	90	-83.1%	-75.1%
Soybeans for Beans	23,990	19,773	34,925	-17.6%	+45.6%
Hay-alf, Other Wild, Silage	29,238	22,662	27,956	-22.5%	-4.4%

Source: Nebraska Census of Agriculture, 2002, 2007 & 2012.
 Hanna:Keelan Associates, P.C., 2014.

Livestock production between 2002 and 2012 increased in every livestock category, except “Milk Cows” and “Hogs and Pigs” identified in Table 4.4 below. The total number of Milk Cows decreased by 58.8 percent between 2002 and 2012, as well as the number of producers declined from 17 to seven. Hogs and Pigs decreased in number of produces from 58 in 2002 to 20 in 2012, a 65.5 percent decline. The number of Hogs and Pigs decreased from 13,254 in 2002 to 4,704 in 2012, or by 64.5 percent. Cattle and calves increased by 9,536 head (+13.5 percent) between 2002 and 2012.

**TABLE 4.4
LIVESTOCK PRODUCTION TRENDS
HOWARD COUNTY, NEBRASKA
2002 – 2012**

Size	Total Farms / Total Animals			% Change	% Change
	2002	2007	2012	2002 - 2007	2002 - 2012
Cattle/Calves	348 / 70,739	301 / 83,123	361 / 80,275	-13.5% / +17.5%	+3.7% / +13.5%
Beef Cows	303 / 18,783	254 / 20,456	297 / 21,754	-16.2% / -1.1%	+2.0% / +15.8%
Milk Cows	17 / 611	7 / 299	7 / 62	-58.8% / -51.1%	-58.8% / -89.8%
Hogs and Pigs	58 / 13,254	26 / 7,811	20 / 4,704	-55.2% / -41.1%	-65.5% / -64.5%
Sheep and Lamb	21 / 623	16 / 557	20 / 2,733	-23.8% / -10.6%	-4.8% / +338.7%

*Farms less than 180 acres in size were not included in this analysis.
Source: Nebraska Census of Agriculture, 2002, 2007 & 2012.
Hanna:Keelan Associates, P.C., 2014

Other Land Uses.

Commercial and industrial land uses, throughout Howard County, are generally located within the Planning Jurisdictions of Communities.

Public/quasi-public land uses such as churches, cemeteries and public utility lines are located throughout the County. Recreation/wildlife areas include the North Loup State Recreational Area, as well as numerous wildlife management areas.

As identified in Illustration 4.7, the most dominate land use in Howard County is open space or vacant agriculture. Cropland in Howard County is located throughout the County and is predominately irrigated.

COMMUNITY EXISTING LAND USE PROFILES

Village of Boelus

The Village of Boelus is located in the southeastern corner of Howard County, just north of the Middle Loup River along either side of Highway 58. The northern half of the Community is comprised of single family residential uses, with larger vacant tracks of vacant land located at the northeast and northwest corners of the Village. A large grain elevator and a few other industrial uses occupy the strip of blocks adjacent the south side of the Highway 58, between the Highway and 7th Street. The southern half of the Community includes Downtown Boelus along either side of Delaware Street, from 5th to 7th Streets. The predominate land use type south of 7th Street is single family residential, with several individual mobile homes concentrated around the Downtown. The largest areas of vacant land are located in the southeast and southwestern portions of the southern half of Boelus.

Village of Cotesfield

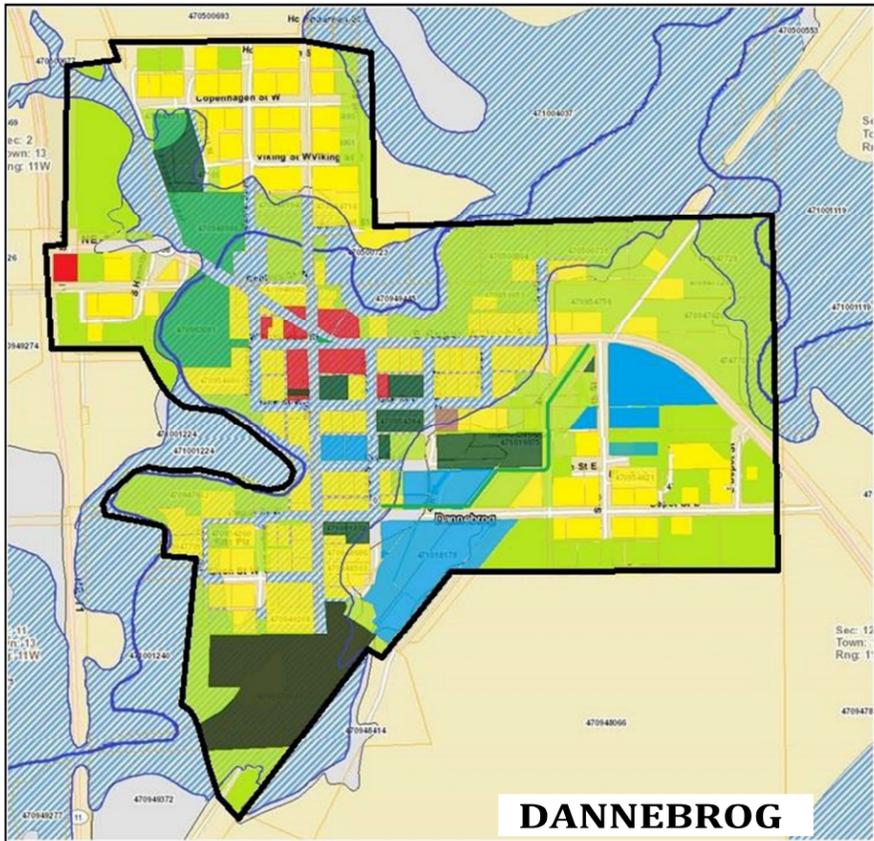
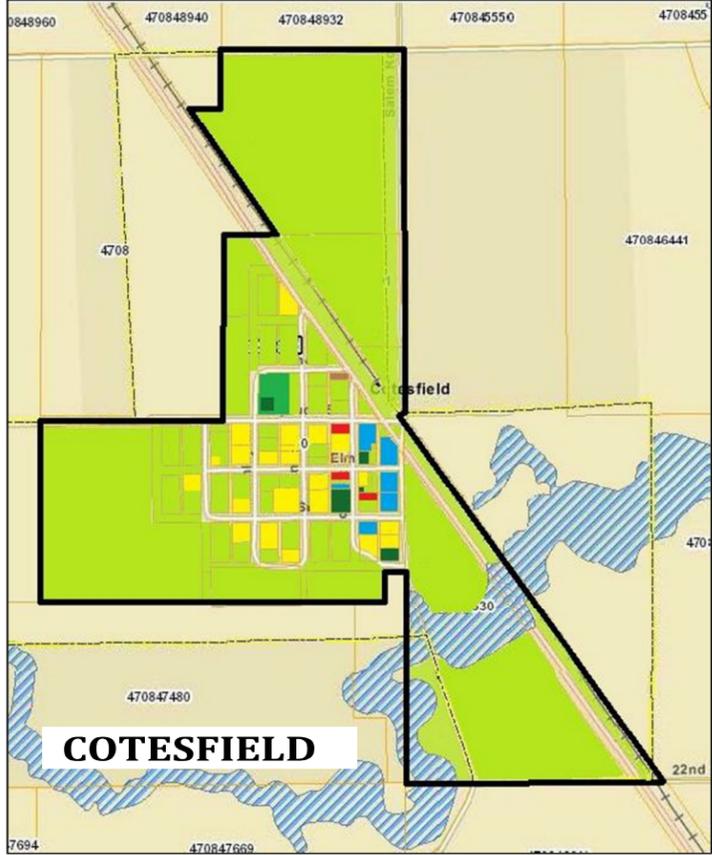
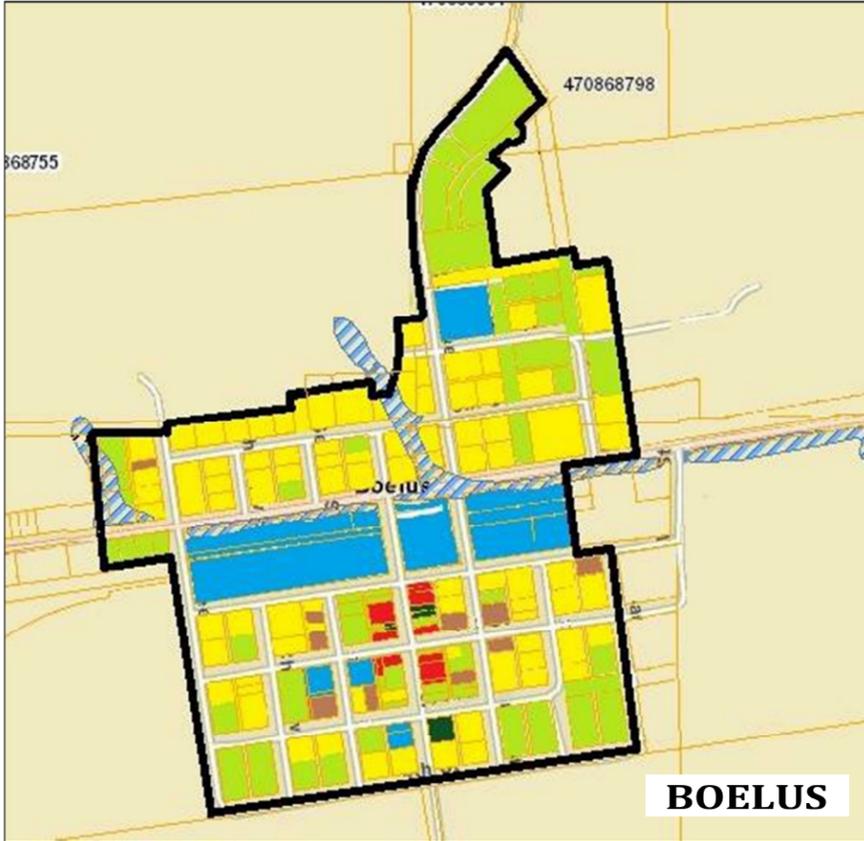
The Village of Cotesfield is located in the northwestern corner of the County, along the west side of Highway 11, and the Nebraska Central Railroad Company (NCRC) Corridor abuts the east side of the Highway. Cotesfield contains approximately 12 city blocks in the center of the Community, with very large tracks of vacant lands extending to the southeast along Highway 11, secondly to the west of the Village and lastly to the north beyond of the Highway and railroad corridor. Vacant and abandoned commercial and industrial buildings are located on either side of Lincoln Street in the former Downtown area. The current post office consists of a series of mail boxes in a kiosk at the northeast corner of Lincoln and Elm Streets. The most notable facility in the Village is the Community Center and Park at the northeast corner of Grand and Spruce Streets. Single family residential uses comprise the rest of the Community to the west of Lincoln Streets, while several industrial uses are at the eastern edge of the Village.

Village of Cushing

Cushing is the only Community located in the northeast quadrant of Howard County and is only accessible by County Roads. Cushing Road is the primary access road extending east of Highway 281 approximately eight miles to the Village. Cushing retains a couple of businesses in its Downtown, along with a Community center and several single family residences. Although the Village is concentrated in a six block area in the center of the Community, large tracks of vacant land surround Cushing on all sides forming a “P” shape.

EXISTING LAND USEMAPS

HOWARD COUNTY VILLAGES
CORPORATE LIMITS



LEGEND

- VACANT
- PARKS / RECREATION / OPEN SPACE
- PUBLIC / QUASI-PUBLIC
- RESIDENTIAL - SINGLE FAMILY
- RESIDENTIAL - MOBILE HOME
- COMMERCIAL
- INDUSTRIAL
- 100-YEAR FLOOD PLAIN
- VILLAGE CORPORATE LIMITS

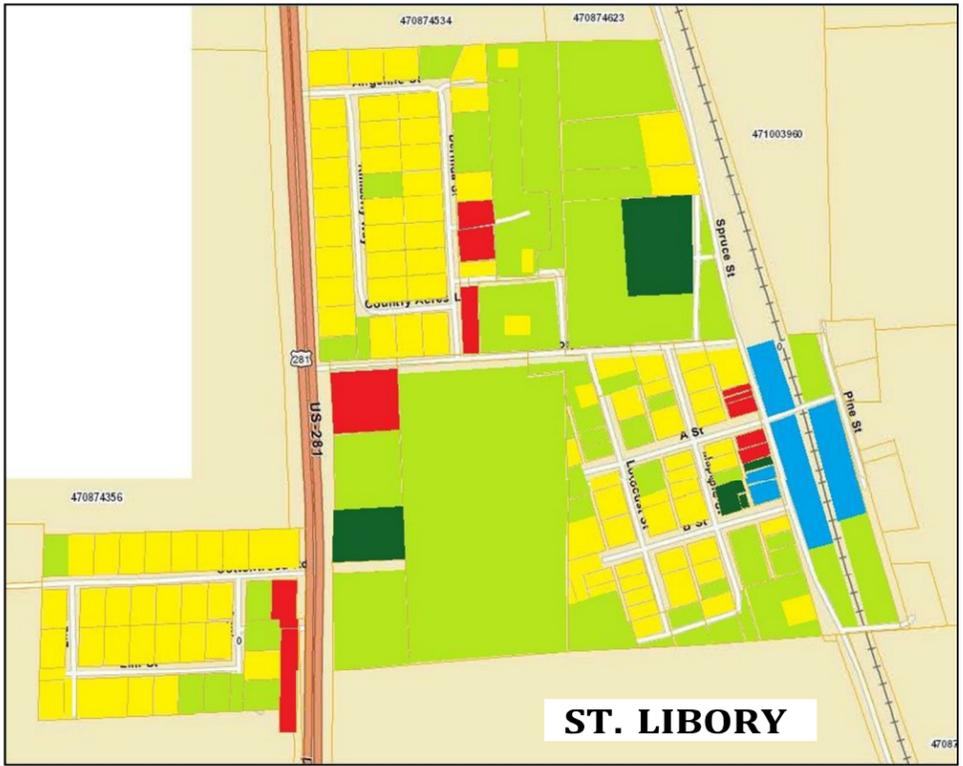
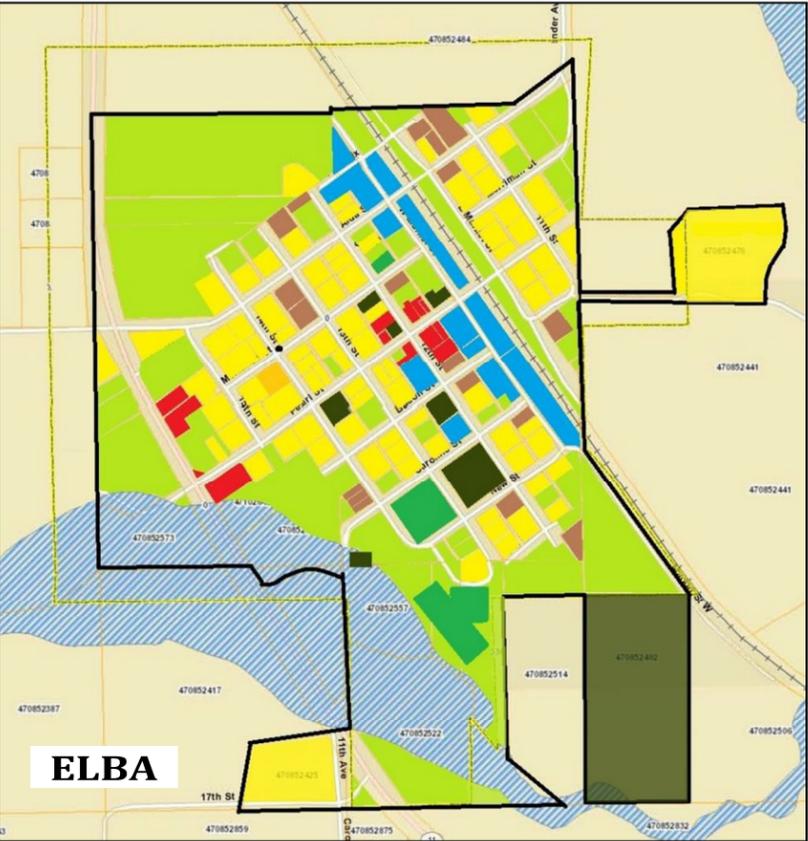
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ILLUSTRATION 4.8

EXISTING LAND USE MAPS

HOWARD COUNTY VILLAGES
CORPORATE LIMITS



- LEGEND**
- VACANT
 - PARKS / RECREATION / OPEN SPACE
 - PUBLIC / QUASI-PUBLIC
 - RESIDENTIAL - SINGLE FAMILY
 - RESIDENTIAL - MOBILE HOME
 - COMMERCIAL
 - INDUSTRIAL
 - 100-YEAR FLOOD PLAIN
 - VILLAGE CORPORATE LIMITS

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ILLUSTRATION 4.9



Village of Dannebrog

Dannebrog is a unique community in Howard County, as approximately 75 percent of its area is included in the floodplains of the Dry Creek. The abandoned route of the former railroad runs along the ridge line of highest elevation in town, from the northeast corner southwesterly to the southwest corner of Dannebrog. Industrial and public/quasi-public land uses, including a grain elevator, trucking businesses and the Howard County Roads Department, Cemetery and Village lagoons are all located along this linear corridor. The majority of the Village, including the Downtown, parks and single family residential neighborhoods, are all located to the west of the former railway corridor, generally ending at the north/south Highway 11 Corridor. Portions of the Village in the extreme northwest and east/southeast are located above the flood plains of the Dry Creek and have the opportunity for further development of residential uses with several areas of vacant land.

Village of Elba

The Village of Elba is located in the northwest quadrant of the County, along the east side of Highway 11, approximately five miles north of the intersection of Highways 11 and 92 an extensive industrial business base located along the west and 92. The largest portion of the Village is located between Highway 11 and the NCRC Railroad. Downtown Elba fronts on either side of 12th Street, between Merriman and Bacon Streets and is separated from the railway corridor by industrial uses that front on the entire length of the corridor through the Village. A mixture of single family residential uses and individual mobile homes are scattered throughout the Community, while an elderly four-unit apartment building provides housing options for retirees. Public/quasi-public uses consist of the Village Office, Post Office, Community Center, Elba Public Schools and the large tract of land at the southeast corner of the Village that includes the waste water treatment facility. Vacant lands exist in the northwest and southeast portions of the Village that will support growth, while a tributary of the North Loup River runs through the southwest corner of the Village with an associated floodplain that prohibits development.

Village of Farwell

Farwell is located approximately one-quarter of a mile south of Highway 92 in the west-central portion of the County, approximately four miles west of the intersection of Highways 11 and 92. Cow Creek runs along the north side of the Village, with several industrial businesses fronting on the south side of the Creek. The remaining portions of the Village are located up a steep embankment, north of Oakley Street. Downtown Farwell consists of several occupied and vacant storefronts along either side of Lander Avenue and extends for three blocks to the southern boundary of the Village. Single family dwellings occupy nearly all of the remaining parcels to the east and west of the Downtown. A limited number of vacant tracts of land are located in these residential areas, with the largest concentration of developable land in the eastern portion of the Community, but have accessibility issues.

Un-incorporated Community of St. Libory

St. Libory, an un-incorporated Community in the southeastern portion of Howard County is located on either side of the Highway 281. Three separate developed areas comprise this subdivision with the oldest portion of the community being located adjacent the NCRC Railroad. Two other concentrated areas exist along either side of the Highway 281 Expressway. Two of the most notable structures are the St. Libory Fire & E.M.S. and the Pump and Pantry Convenience Store, both located on the east side of the Expressway.



FUTURE LAND USE ANALYSIS

The population of rural Howard County is expected to increase by 76 persons by 2025. However, all incorporated Villages within the County, are expected to experience slight declines in population, remaining fairly stable during the 10-year planning period, 2015 to 2025. The Howard County Planning Commission should encourage future development to occur in close proximity to existing communities to preserve agricultural lands. Such planning practices will also allow for the efficient use of existing infrastructure features, including streets, electrical, water and sewer systems.

A generalized future land use map for Howard County is presented in **Illustration 4.10**. Agricultural production, which currently accounts for an estimated 57 percent of the County land use, will continue to be located in the rural areas of Howard County. The northern third of the County is impacted by rolling hills and steep topography. Although less populated and large areas lack rural roads, non-farm related dwellings could be attracted to this area of the County. Provisions to limit the density of development in this area is strongly recommended.

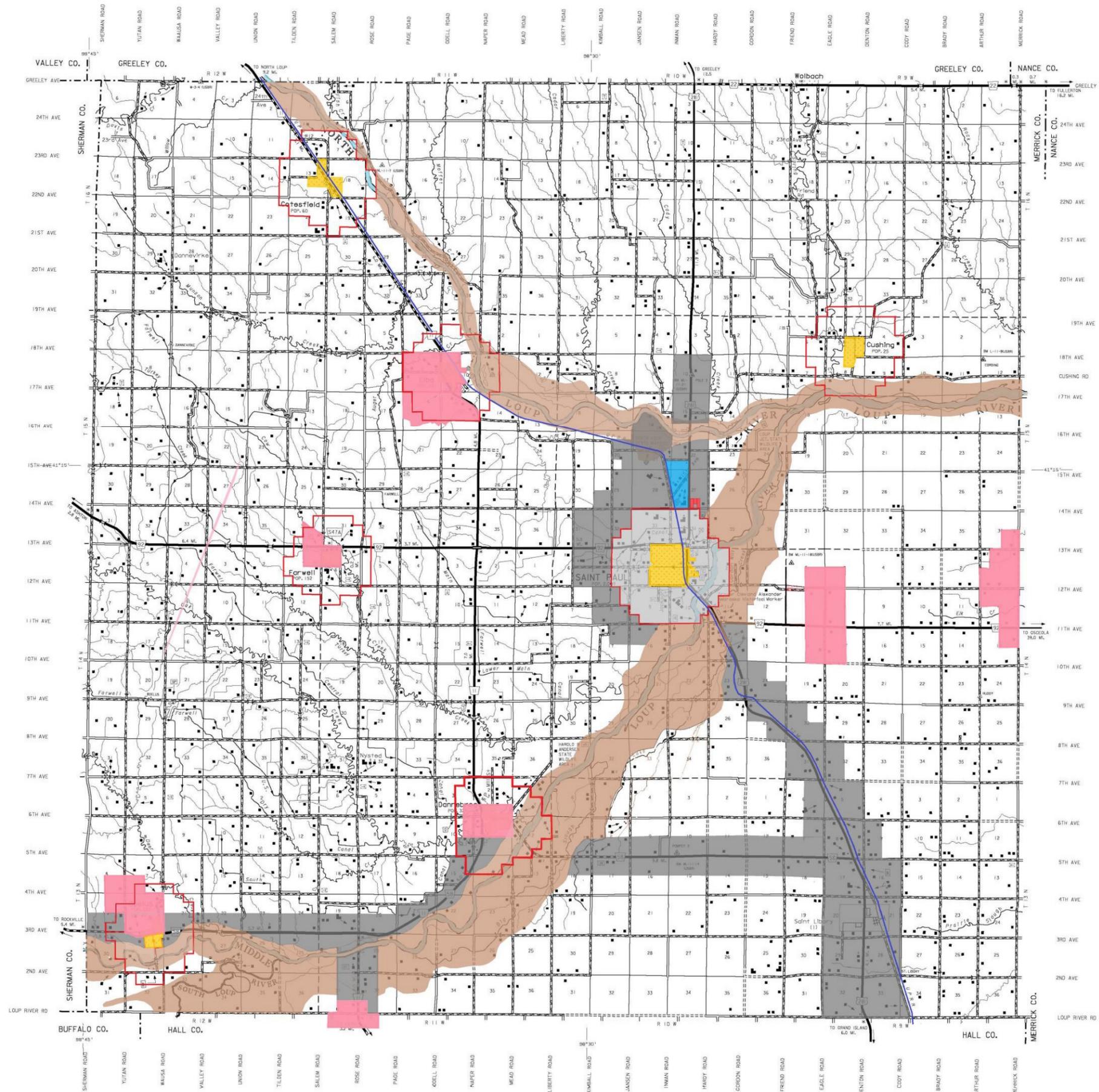
NON-FARM RURAL RESIDENTIAL DEVELOPMENT

Future rural residential subdivisions are recommended to be located in the planning jurisdictions of communities, selected rural areas and adjacent hard surfaced rural roads along portions of Highways 58 and 281. These areas would be for small acreages. A minimum of three acre parcels are needed to maintain adequate spacing for wells and sewage disposal systems, if a modern, community water and sanitary sewer facility is not provided.

The Planning Commission chose to continue the practice of encouraging non-farm residential development along either side of Highway 281 from the Hall County Line north to approximately two miles north of the North Loup River. The Highway 58 corridor was also targeted as an area to support the development of non-farm rural residential growth. The last area identified to promote non-farm residential development was a two mile area just beyond the north, west and southwest boundaries of the Planning Jurisdiction of the City of St. Paul. Several non-farm dwellings and rural subdivisions have developed in this region.

FUTURE LAND USE MAP

HOWARD COUNTY, NEBRASKA



LEGEND

- RURAL CONSERVATION AREA
- TRANSITIONAL AGRICULTURE
- COMMERCIAL
- INDUSTRIAL
- WELLHEAD PROTECTION AREA
- CITY/VILLAGE CORPORATE LIMITS
- PLANNING JURISDICTIONS (BOELUS, COTESFIELD, CUSHING, DANNEBROG, ELBA, FARWELL)
- ST. PAUL PLANNING JURISDICTION
- HIGHWAY/MAJOR ARTERIAL ROADS
- RAILROAD CORRIDOR

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ILLUSTRATION 4.10

Future industrial usage is encouraged to locate in close proximity to major transportation routes within the Planning Jurisdiction of each community or in specific rural areas such as along railroad or highway corridors. The types of industries which should be encouraged in these areas include “light manufacturing” types, such as high tech or agriculture related industries. These types of industries are typically clean and efficient in operation and provide varied classifications of employment opportunities.

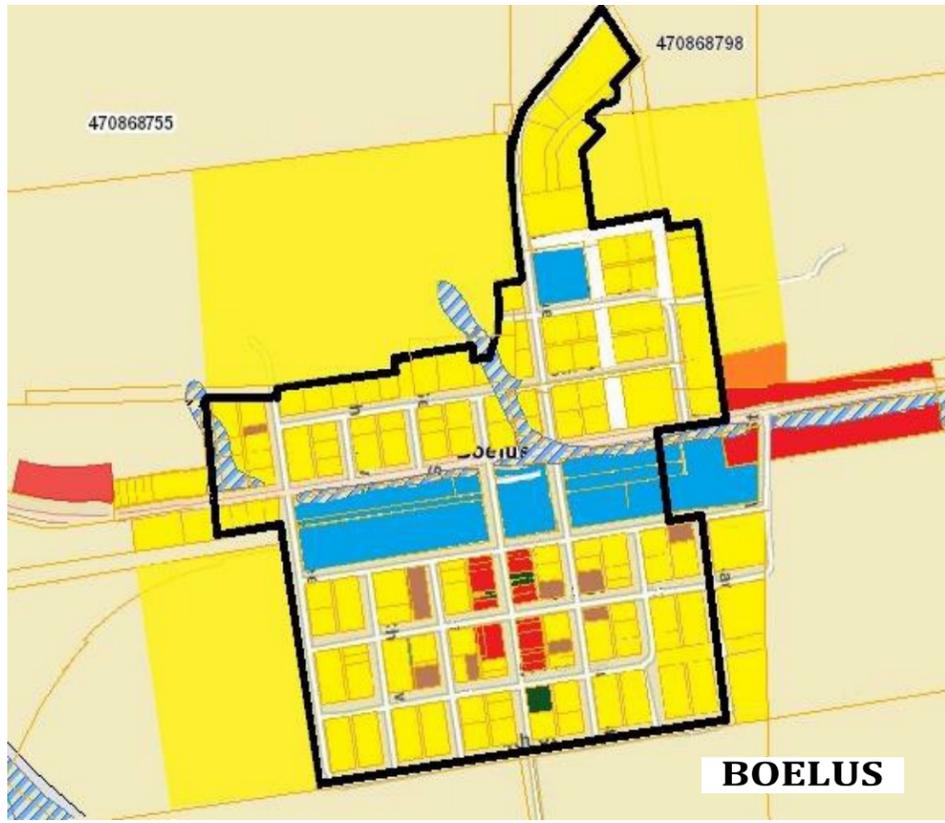
The expansion or development of new animal confinement facilities should be carefully reviewed to insure conformance with the land use goals and expectations of the County. Animal confinement facilities should not be located within floodplain designated areas along rivers, creeks and streams, in areas which have topographical or soils constraints, or within the One-Mile Planning Jurisdictions of the six Villages of Howard County.

Future commercial land uses in Howard County will be primarily of one type, highway commercial. Highway commercial land use should be located within the planning jurisdiction of each of the communities, and in limited instances, be considered at the junctions of major highways in rural Howard County. Development should be limited to commercial types capable of meeting the needs of local highway motorists. This would include such types as gasoline convenience shops, truck and freight terminals and farm implement sales and service.

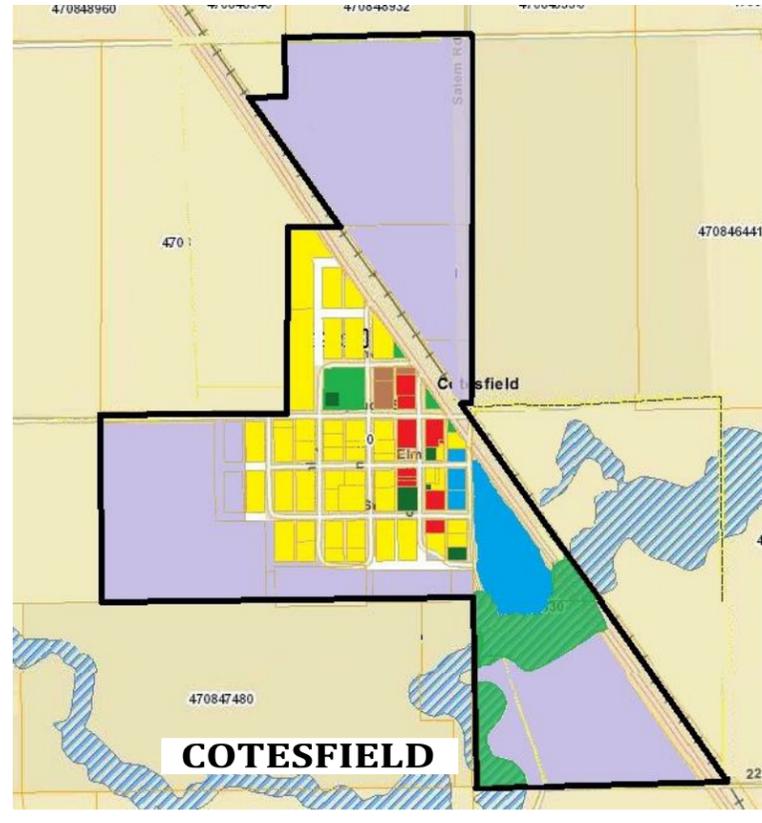
The future land use in the unincorporated community of St. Libory will essentially remain the same during the planning period, providing, primarily, residential and public/quasi-public land uses.

COMMUNITY FUTURE LAND USE PLANS

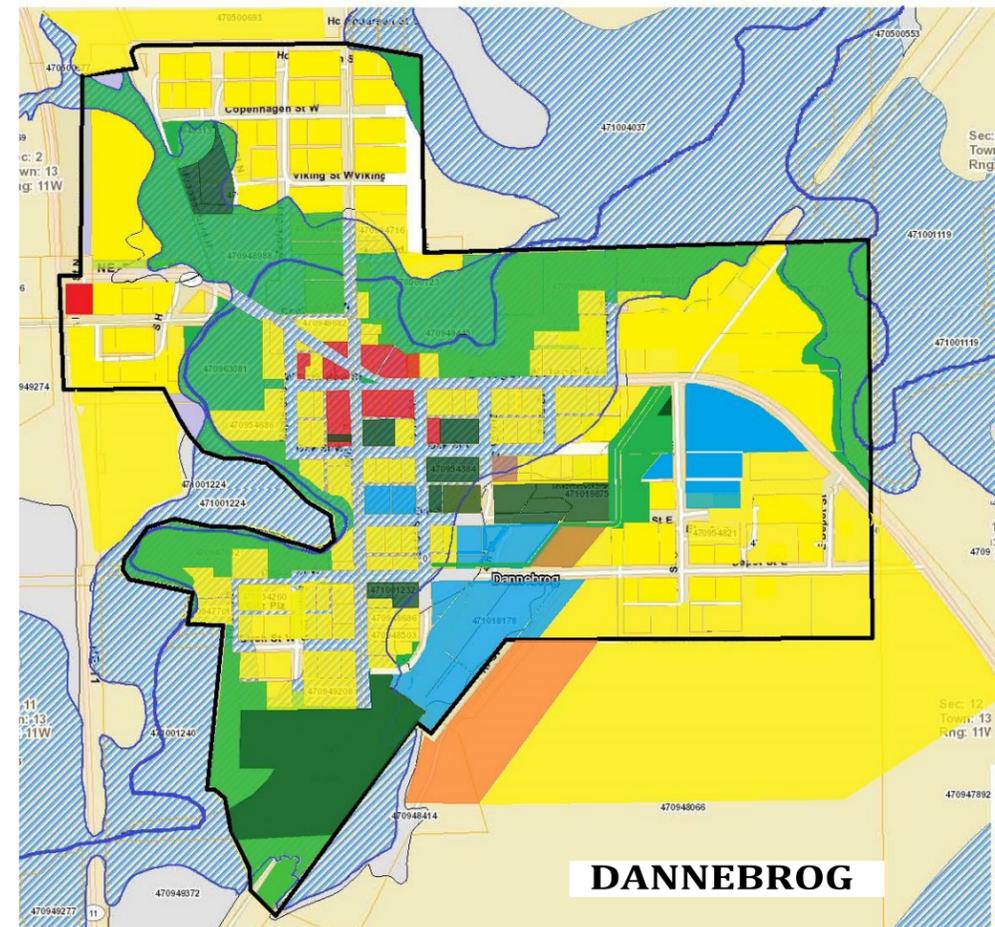
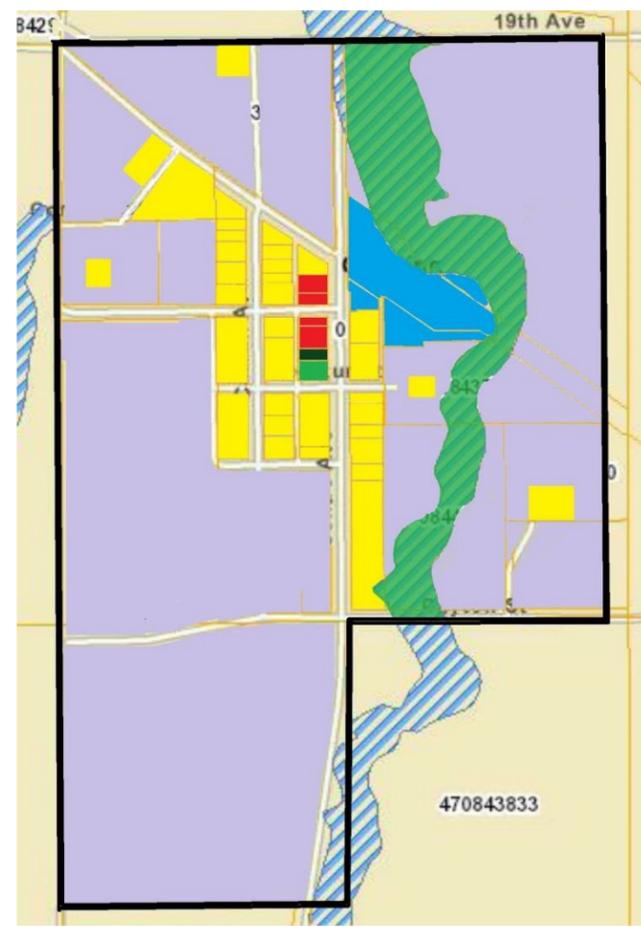
The Future Land Use Plans for each of the six Villages will include recommendations for development and growth within the Corporate Limits and the One-Mile Planning Jurisdictions of each of the Communities. Potentially, only the Villages of Boelus and Dannebrog have an immediate need to establish residential, commercial and industrial growth areas beyond the current Corporate Limits, see **Illustration 4.10**. However, by establishing the One-Mile Planning Jurisdiction, the local Village Board of Trustees determine the ultimate development of these areas as opposed to the County Board of Supervisors.



BOELUS



COTESFIELD



DANNEBROG

FUTURE LAND USE MAPS
 HOWARD COUNTY VILLAGES
 CORPORATE LIMITS



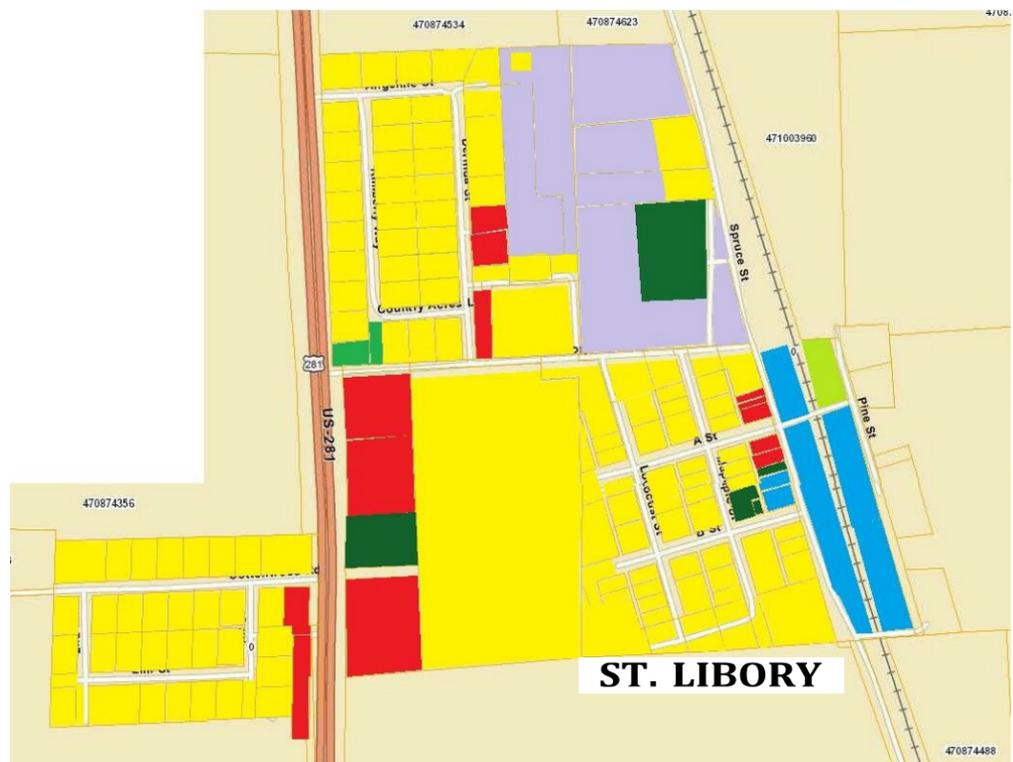
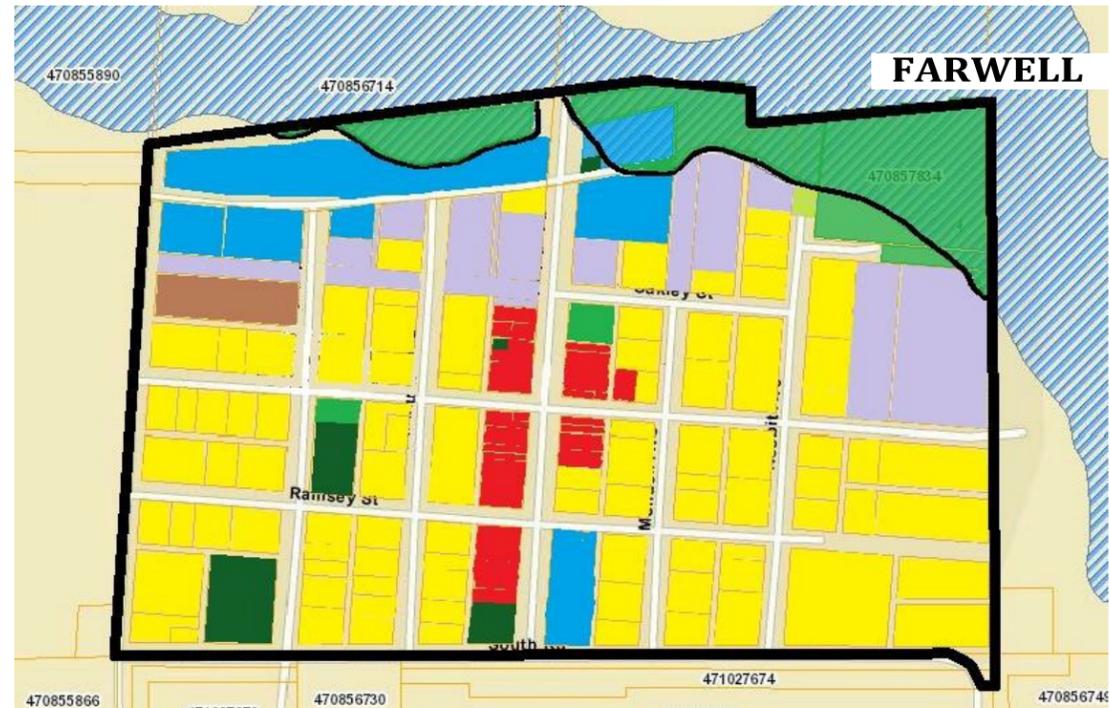
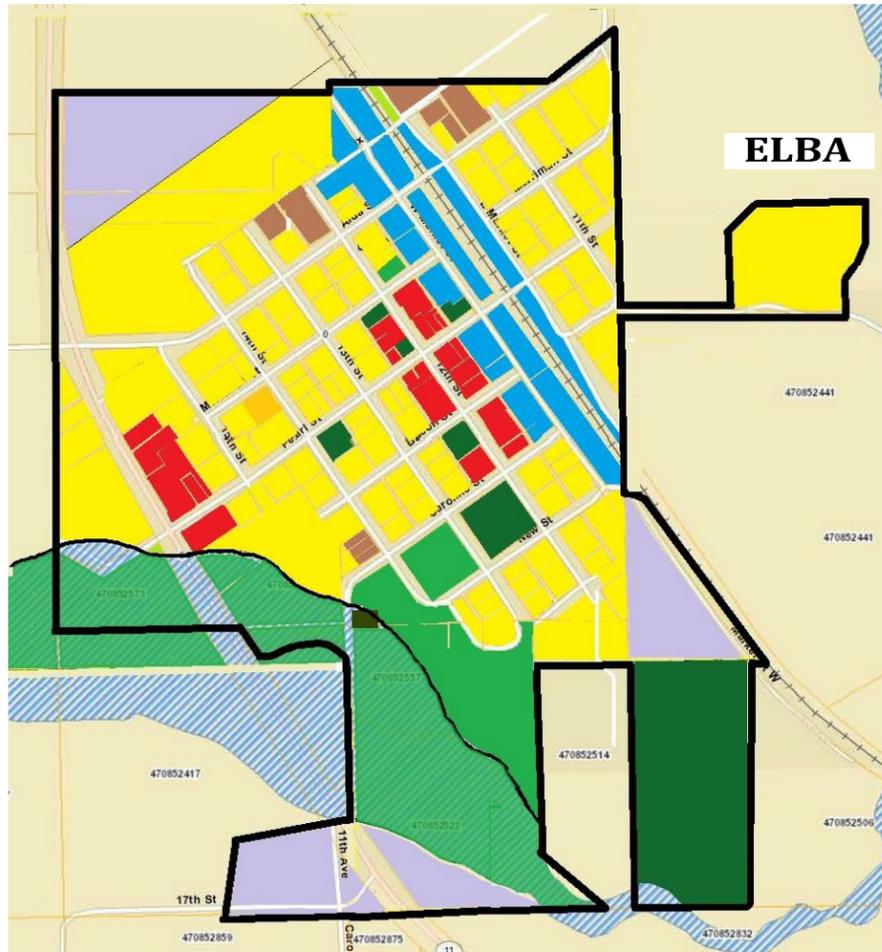
LEGEND

- URBAN RESERVE
- PARKS/RECREATION
- PUBLIC/QUASI-PUBLIC
- SINGLE FAMILY RESIDENTIAL
- MOBILE HOME RESIDENTIAL
- MULTIFAMILY RESIDENTIAL
- COMMERCIAL
- INDUSTRIAL
- CORPORATE LIMITS LINE

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ILLUSTRATION 4.11



FUTURE LAND USE MAPS

HOWARD COUNTY VILLAGES
CORPORATE LIMITS



LEGEND

-  URBAN RESERVE
-  PARKS/RECREATION
-  PUBLIC/QUASI-PUBLIC
-  SINGLE FAMILY RESIDENTIAL
-  MULTIFAMILY RESIDENTIAL
-  COMMERCIAL
-  INDUSTRIAL
-  CORPORATE LIMITS LINE

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ILLUSTRATION 4.12

The general trend would be for the Villages to promote non-farm rural residential uses to develop within these One-Mile Planning Jurisdictions of the Villages. This practice would concentrate rural dwellings within close proximities to Communities where access to utilities, public facilities and emergency medical care, while at the same time preventing these non-farm houses from developing within agricultural production areas and potentially conflicting with these agricultural uses.

Village of Boelus

The lands within the current Corporate Limits of the Village of Boelus will accommodate the amount of residential development needed to house its residents throughout the next 10-Year Planning Period, 2015 to 2025. However, if significant amounts of vacant land were potentially not for sale within the current Corporate Limits, lands adjacent and beyond the Community should be identified for development. The 100 Year Floodplains of the Middle Loup River substantially limit development opportunities to the south of Highway 58. Due to these constraints, highway commercial uses are recommended along either side of Highway 58 with industrial uses to the south of the commercial corridor and a combination of multifamily and single family residential uses further to the north. Single family residential uses are also recommended in the areas to the northwest and southwest of the Village, see **Illustrations 4.10 and 4.11**.

Village of Cotesfield

The Village of Cotesfield has approximately four times the amount of vacant land within its current Corporate Limits than that of the entire developed area of Cotesfield. Commercial and industrial uses are recommended to expand in place at the eastern edge of the Village. Single family residential uses are first recommended to infill vacant lots adjacent the existing street network within the Community. If lands beyond these developed areas of the Community are needed in the future, areas adjacent existing residences to the south, west and north should be targeted to sustain residential growth opportunities. All of the outlying areas of the Village are recommended to be designated Open Space Reserve.

Village of Cushing

Cushing has ample amounts of vacant tracts of land located within the current incorporated areas of the Village. However, a tributary of the Loup River does limit development opportunities to the east of the developed portions of Cushing. The existing road network within and adjacent the Village would support additional single family development within the core of the Village and to the south, west and north. All of the outlying areas of the Village are recommended to be designated Open Space Reserve.

Commercial and public/quasi-public uses are recommended to expand in place along Centre Avenue, while any additional industrial uses should be located near existing industrial uses to the northeast and east of the “Downtown Area.”

Village of Dannebrog

The designation of developable land outside of the 100-Year Floodplains of the Dry Creek and its tributaries is vitally important for the Village of Dannebrog. Specifically, the areas to the southeast of the Village, generally west of Highway 58 as it enters the Community from the east and north of the floodplain associated with the Middle Loup River. A second area in the northwest corner of the Village is also located above the Dry Creek floodplains within the Community and the areas located directly north of the Corporate Limits, east of Highway 11 would facilitate future growth opportunities for residential development. Vacant lands within the developed core of the Village are negatively impacted for 100-year floodplains of the Middle Loup River and its tributaries and are not suited for development.

Village of Elba

The Village of Elba contains sufficient amounts of vacant land within its current Corporate Limits to sustain growth and development throughout the next 10-Year Planning Period and beyond. The southwest corner of the Community is limited by the 100-year floodplains of tributaries of the North Loup River. Sufficient vacant lands suited for development exist in the remaining portions of the Village to the northwest, northeast and southeast corners. Industrial lands are recommended to develop adjacent existing industrial uses along the NCRC Railroad corridor and commercial uses should expand within the Downtown and along the Highway 11 corridor. Residential uses are recommended to infill vacant lots adjacent existing streets in the core of the Community and expand, when needed, into the vacant tracts to the northwest, northeast and southeast. Open Space Reserve areas identified in the extreme south and northwest portions of Elba and not needed for urban development in the near future.

Village of Farwell

Farwell has sufficient vacant lands in the northern portion of the Village to support the continued development of industrial lands adjacent existing industrial uses. Downtown Farwell is recommended to support current and future commercial development. Several scattered vacant lots exist within developed residential areas that can support new residential uses to take advantage of existing infrastructure adjacent these parcels. Open Space Reserve lands are designated on lands above the Cow Creek where topography and slopes could limit development.

Longer range residential uses are planned to occur in the large vacant tract of land in the southeast corner of the Village. Open Space Reserve lands are identified in the northern portions of the Community within the 100-year floodplain of Cow Creek and where topographic slope will impact develop opportunities.

St. Libory

St. Libory is an un-incorporated community and is therefore viewed as a rural subdivision. While individual parcels accommodate houses on lots ranging in size from 6,000 square feet to approximately one acre in size, they are too close in proximity to one another to all have their own water wells and septic systems. Current engineering standards advocate no smaller than three acres for adjacent dwellings that have their own water and sewer systems. If further development of the vacant parcels in St. Libory is to continue, it is the recommendation of this Comprehensive Plan that property owners first receive clearance from the Nebraska Departments of Natural Resources and the Health and Human Services for lots smaller than three acres, prior to being issued zoning and building permits.

SECTION 5



**PUBLIC FACILITIES,
UTILITIES & TRANSPORTATION.**

SECTION 5

PUBLIC FACILITIES, UTILITIES & TRANSPORTATION.

INTRODUCTION

Public facilities, utilities and transportation are vital to the quality of life in a community. Public facilities utilities and transportation systems are developed out of necessity. Each requires financial commitment, and therefore, necessitates the careful review and planning for future need.

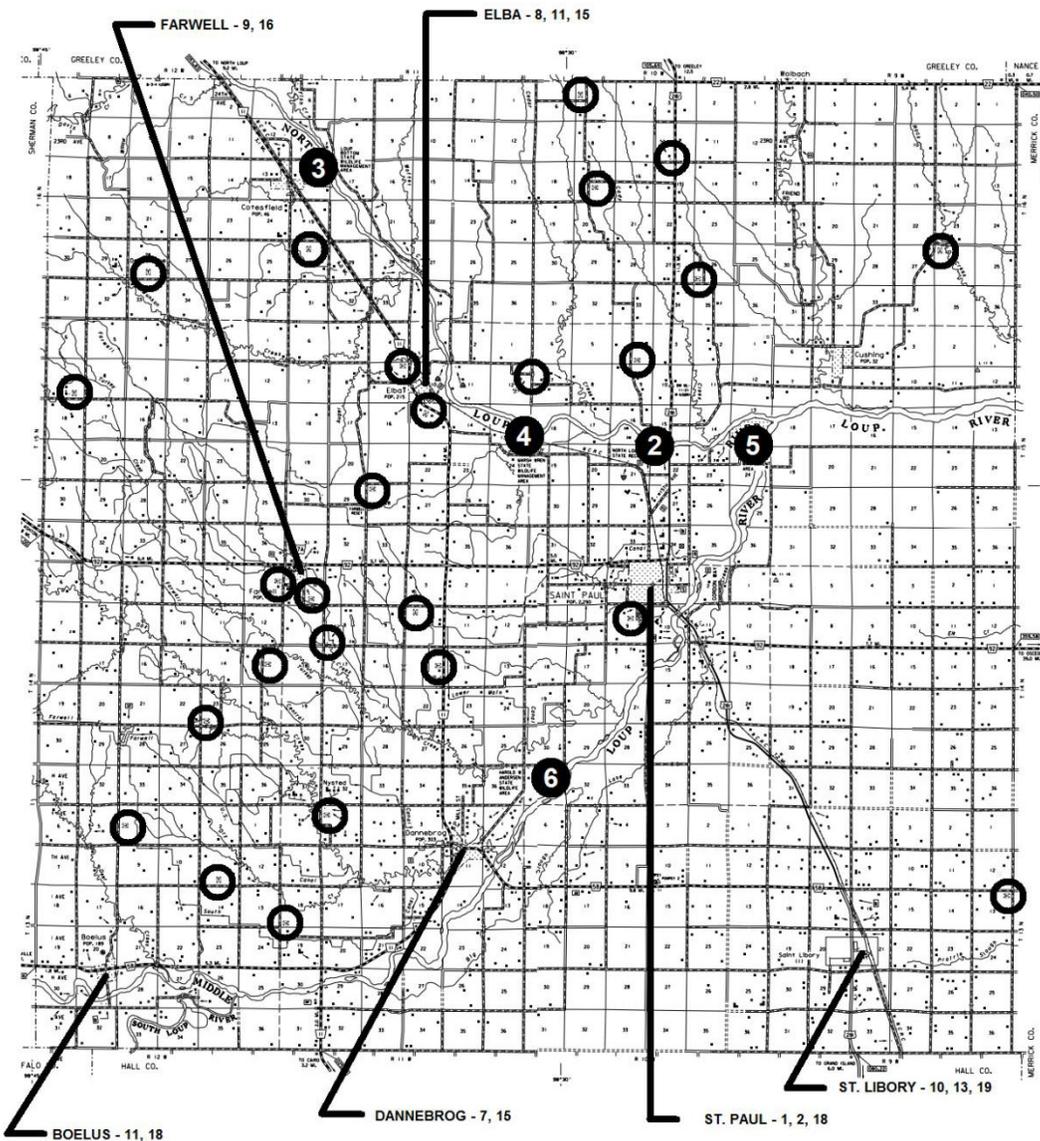
Public Facilities identify existing facilities in Howard County and determine future needs and desires during the 10-year planning period. Public Facilities provide citizens with social, cultural and educational opportunities. Facilities in the County and each Village include, but are not limited to city government, law enforcement, education, police/fire protection and recreational facilities such as parks and athletic fields. **Unless otherwise identified, general maintenance is planned for all public facilities in each Village, which also implies that the identified facility is adequate and meets the needs of the Villages through the 10-year planning period.** The locations of these public facilities are identified in the **Public Facilities Map, Illustration 5.1.**

Public Utilities address the water, wastewater and other related utility systems in the Communities, including current condition and capacity. It is the responsibility of any community to provide a sound public infrastructure for its citizens, as well as to provide for anticipated growth. Therefore, it is important the expansion and maintenance of these systems be coordinated with the growth of the County and each Village. Analysis of these infrastructure systems, via conversations with maintenance and utility personnel, confirmed that the County and each Village must continue to maintain and improve these utility systems.

Transportation examines the systems that provide for safe travel of pedestrians and automobiles. Howard County and each Village has aggressively utilized federal funding opportunities to reconstruct major arterial streets, leveraging millions of dollars for transportation improvements. The availability of a convenient and efficient transportation system is essential to continued economic and physical development. An adequate transportation system is required to transport goods and services to and from major travel routes and market centers and provide for the circulation needs within each Village. The overall purpose of the transportation plan is to provide the necessary guidelines for the safe movement of people and vehicles throughout the County and each Village.

PUBLIC FACILITIES MAP

HOWARD COUNTY, NEBRASKA



1. County Courthouse
County Sheriff Department
County Civil Defense
2. North Loup State Rec. Area
3. Loup Bottoms State Wildlife Mgt. Area
4. Marsh Wren Wildlife Mgt. Area
5. Lenard Kozial Wildlife Mgt. Area
6. Harold Anderson Wildlife Mgt. Area
7. Dannebrog Post Office
8. Elba Post Office
9. Farwell Post Office
10. St. Libory Post Office
11. Boelus Post Office
12. Elba Public School
13. St. Libory Elementary School
14. Boelus Fire Department
15. Dannebrog Fire Department
16. Elba Fire Department
17. Farwell Fire Department
18. St. Paul Rural Fire Department
19. St. Libory Fire Department

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ILLUSTRATION 5.1

LEGEND

Primitive Road.....	=====	Filling Station.....	↑
Unimproved Road.....	=====	Grain Elevator.....	↑
Gravel or Crushed Rock.....	=====	Aggregate Pit.....	⬆
Asphalt/Bituminous Surface.....	=====	Agricultural Experimental Station.....	↓
Multiple Lane Undivided Highway Asphalt/Bituminous Surface	=====	Educational Institutions.....	↓
Concrete/Brick Surface	=====	Public Use Area.....	SP
Multiple Lane Undivided Highway Concrete/Brick Surface	=====	(camp site, picnic ground, swimming pool, etc.)	
Divided Highway.....	=====	Recreational Facilities.....	RP
Interstate Highway with Full Control of Access.....	=====	(athletic field, country club, fairground, etc.)	
Side Roads and Streets.....	=====	Rest Area.....	☆
911 NAMED/Numbered Roads..... ADAMS ROAD		Ranger Station.....	⊙
Interstate-Numbered Highway.....	Ⓢ	Fish Hatchery.....	🐟
US-Numbered Highway.....	Ⓢ	Community Hall.....	↓
State-Numbered Highway.....	Ⓢ	Correctional Institution.....	Ⓜ
State-Numbered Highway Spur.....	S5B	Tourist Court or Motel.....	↑
State-Numbered Highway Link.....	LBC	Monument-Small.....	↑
Highway Reference Post Number.....	000,000	Museum.....	🏛️
Interstate Exit Number.....	269	Firestation.....	🚒
Wide Stream.....	~~~~~	Courthouse.....	🏛️
Narrow Stream.....	~~~~~	Armory.....	🏠
Irrigation Ditch.....	~~~~~	Post Office.....	↓
Reservoir, Pond or Lake.....	🌊	Highway Maintenance Yard.....	ⓧ
Reservoir, With Dam.....	🌊	Dump Area.....	ⓓ
Highway Bridge-Any Type..... (over 20' span)	⚙️	Sewage Disposal Plant.....	Ⓢ
Small Bridges-Closely Spaced..... (abutments indicate limits within which bridges are grouped)	⚙️	Water Supply Stand Pipe.....	Ⓢ
General Bridge (W-wood, S-steel, C-concrete)	⚙️	Radio or TV Station.....	↑
Arch Bridge.....	⚙️	Weight Station or Port of Entry.....	↑
Truss Bridge.....	⚙️	Commercial or Municipal Airport.....	⬠
Pedestrian Underpass.....	⚙️	Airport with Paved Runways.....	⚡
Pedestrian Overpass.....	⚙️	State Boundary.....	-----
Railroad Overpass.....	⚙️	County Boundary.....	- - - - -
Railroad Underpass.....	⚙️	Township Line.....	-----
Railroad.....	⚙️	Section Line.....	-----
Dam with Road on Top.....	⚙️	Corporate Limit Lines.....	-----
Cattle Guard.....	⚙️	Parks and Other Reservations.....	⋯⋯⋯
Dwelling.....	■	Boundary Limits of Area Shown in Enlargements (see enlargements for cultural.....)	Ⓜ
Row of Dwellings.....	■	State Capital.....	Ⓜ
Cemetery.....	☠️	County Seat.....	Ⓜ
Church or Other Religious Institution.....	Ⓜ	Other Cities and Villages.....	○
Church with Cemetery Adjacent.....	Ⓜ	Incorporated City or Village.....	🏠
Hospital.....	Ⓜ	Triangulation Station.....	STATION
Business.....	Ⓜ	Points Between Which Distances Are Measured Indicated Thus.....	Ⓜ
Industrial Plant.....	Ⓜ	Latitude and Longitude.....	100°15' 41°45'

PUBLIC FACILITIES

PARKS AND RECREATION

An integral part of the quality of life in a community is the park system and recreational opportunities provided to its residents and visitors. Recreational opportunities and the availability of open space plays an important role in enhancing a community's "quality of life." The County and each Village's role in adequately planning for open space and providing a full range of recreational opportunities directly impacts the community and economic development activities. **Parks are located in each Village that feature playground equipment, picnic shelters and open space for additional recreation. General maintenance is planned for the parks of each Village.**

North Loup State Recreation Area is centrally located in Howard County, four miles North of the City of St. Paul. The Recreational Area covers 20 acres which includes public and wildlife management areas. Facilities are available for camping, such as; trailer hook ups, charcoal grills, picnic tables and toilets. The Area is open seasonally.

Howard County has four recreational/wildlife management areas: Loup Bottoms, Marsh Wren, Lenard A. Kozial, and Harold W. Anderson. **Loup Bottoms Wildlife Management Area** is located 0.5 miles North and 0.5 miles East of Cotesfield, Nebraska. Loup Bottoms area contains 80 acres of wildlife environment.

Marsh Wren Wildlife Management Area is located 1.5 miles South and two miles East of Elba, Nebraska. Marsh Wren contains 153 acres of recreation wildlife area.

Lenard A. Kozial Wildlife Management Area contains 328 acres of land within Howard County and is located 1.5 miles East and three miles North of St Paul, Nebraska.

Harold W. Anderson Wildlife Management Area contains 272 acres of wildlife area and is located two miles North-East of Dannebrog, Nebraska.

The **Howard County Fairgrounds** are located along Highway 281 in St. Paul, Nebraska. Fairground facilities include an outdoor arena, grandstands, bleachers, outbuildings for displaying goods, animal barns, 4-H buildings, a stage, and bathroom facilities. Also available are three main reception halls which can be rented out year round.

PUBLIC ADMINISTRATION

Public Administration facilities are designed to serve citizens of the community and provide a location to conduct the business of the government.

Howard County Courthouse

The **Howard County Courthouse** is located at 612 Indian Street in the City of St. Paul, Nebraska and was built in 1901. The County Courthouse is soon to be updating their heating and cooling systems. Offices located in the courthouse include:

- County Assessor
- County Attorney
- County Clerk
- County Treasurer
- County Sheriff
- County Commissioner
- Extension's Office

Law Enforcement

The **Howard County Sheriff Department** is located at 612 Indian Street in St. Paul, Nebraska.

Fire Protection

Howard County Fire Protection services are provided by the St. Paul Rural Fire Department and four departments in the communities of Boelus, Dannebrog, Elba, and Farwell. The Fire Services of Cushing, Nebraska are provided by the St. Paul Fire Department, and the Cotesfield area is served by the Elba Fire Department.

The **St. Paul Rural Fire Department and Rescue Squad** is located at 824 6th Street in St. Paul Nebraska. The St. Paul Fire Department services a 135 square mile area and has an ISO rating of "5". The Department serves most of the central portion of Howard County. The Department's average response time is 7 to 8 minutes.

The **Boelus Fire Department** has 18 volunteers and an insurance classification rating of "8". The Department responds to an average of 20 fire-related calls per year.

The **Dannebrog Fire Department** has 18 volunteer fire firefighters and six EMT's. The Fire Department has an insurance classification rating of "8" in city limits, and "10" for the rural area. The Department receives approximately 15 fire calls per year and 60 to 70 EMT calls per year (EMT services are also provided for Boelus). The Department has an average response time (city/rural) of 10 minutes. The Department has the following fire equipment:

- One 1990 Pumper
- Three Grass Rigs
- One 2,000 and one 1,000 gallon Tanker
- One ambulance
- One 2006 Pumper (receiving in May, 2015)

The **Elba Fire Department** is located at 713 12th Street. The Department has 28 volunteer firefighters and a insurance classification rating of "8". The Department responds to an average of 15-20 calls per year.

The **Farwell Fire Department** located along Lander Avenue currently has 21 volunteer firefighters. The Department has an insurance classification rating of "8". The Department receives between 5 to 10 calls per year.

Civil Defense

The present **Civil Defense Services** in Howard County are provided by Region 10 Emergency Management, a multi-county service area based in Columbus, Nebraska.

The planning and preparation for natural disasters and man-made emergencies consist of:

- Mitigation
- Preparation
- Response
- Recovery

Examples of natural and man-made disasters include floods, tornadoes, winter storms, chemical spills, explosions, plane crashes, etc. Other services include weather alert of severe weather, tornado awareness week education, winter time road services, etc.

Village Offices

The Communities of Dannebrog, Elba and Farwell have designated facilities for Village government activities. The Dannebrog Village Office is located at 102 South Mill Street, the Elba office located at 701 12th Street and the Farwell office located at 300 South Road. Village Board and Planning Commission meetings are held at these facilities.

Postal Services

Postal Services are located in five of the seven towns of Howard County. The towns of Boelus, Cotesfield, and Cushing, are served by intermediate routes through the neighboring Communities.

The **Post Office of Dannebrog** is located at 118 South Mill Street. The wood frame building was built in 1989 and does meet ADA standards. The Post Office has 200 postal boxes, and services one rural route. The post office currently has two part time employees.

The **Elba Post Office** is located at 608 Pearl Street. The modular building was constructed in 1997 and does meet ADA standards. The Post Office has 160 postal boxes and provides one rural route to the community. This office currently has two employees, one full-time and one part-time.

The **Post Office of Farwell** is located on Lander Ave in Farwell, Nebraska. The block building was constructed in 1900 and has been updated to meet ADA standards. The Post Office holds 110 postal boxes and provides one rural route. This office currently employs two staff members, one part-time and one full-time.

The **St. Libory Post Office** is located at 303 Spruce Street. The brick building does meet ADA standards and has approximately 100 postal boxes. The Post Office has one part-time employee.

Cemeteries

A total of **25 Cemeteries** are located within Rural Howard County. A Cemetery is also located in the southern portion of Dannebrog.

EDUCATION

Education is becoming increasingly important as the need for a broader-based education, with emphasis on technical and human relation skills, increases in today's society. Standards developed by educators and planners can provide guidance in the creation of, and addition to, the community's educational facilities. Schools should meet the following standards/guidelines:

- Schools should be centrally located;
- Schools should not be located near high traffic or heavily concentrated areas with high noise levels;
- Land acquisition should be made with future expansion in mind; and
- Adequate open space should be available to students.

Public Schools

Centura Public School is located at 201 Highway 11, in Cairo, Nebraska and serves the Howard County Communities of Boelus and Dannebrog. The school was constructed in 1969 and offers grades kindergarten through twelfth grade. The school employs 86 staff of which 45 are certified teachers, and an enrollment of 504 students. The school has 40 classrooms with approximately 40 computers with internet access. The school has two computer labs and two library areas where the computers are located.

Elba Public School is located at 711 Caroline Street in Elba, Nebraska. The School was constructed in the 1940's and offers grades kindergarten through twelfth grade. The School has a total enrollment of 98 students, and employs 30 staff members. The School has 18 certified teachers and a student to teacher ratio of 5:1. Elba Public School has 18 classrooms with an internet accessible computer in every room.

St. Libory Elementary School is located at 435 St. Paul Road in St. Libory, Nebraska. The School was constructed in 1984 and offers grades kindergarten through eighth. The school employs 16 staff, 13 of which are certified teachers. The School has nine classrooms and a total enrollment of 87, with a student to teacher ratio of 10:1. The School does have internet capabilities and does offer some special education classes.

MEDICAL / ELDERLY SERVICES

Currently, all medical services are provided at the Howard County Medical Center, located at 1113 Sherman Street, in the City of St. Paul, Nebraska. Elderly services, including skilled nursing and assisted living, are also located in St. Paul.

PUBLIC UTILITIES

The Public Utilities section serves to identify existing water and sewer utilities throughout Howard County. The existing condition and future needs and improvements of utilities are discussed in this section for the 10-year planning period.

The public utilities of a community are those utilities which are most directly concerned with the health and welfare of the population. The water supply, and sewage disposal facilities, solid waste disposal facilities, and electrical services are the services most frequently considered. A comprehensive plan allows for the coordination of these services with projected growth patterns. Planning for these utilities should be interrelated with future land use, zoning and housing needs.

Each Village in Howard County provides a modern utility system to its residents. The Communities of Dannebrog and Elba also possess water storage tanks, while Boelus, Dannebrog and Farwell have solid waste lagoons within or near their respective corporate limits. Portions of the water and sewer transmission lines that are undersized or aging in each Village should be monitored closely for any possible breakage, with replacement being recommended for the future.

TRANSPORTATION

The availability of a convenient and efficient transportation system is essential to the continued economic and physical development of Howard County. An adequate transportation system is required to transport goods and services to and from major travel routes and market centers within and outside the County. The overall purpose of the Transportation Plan is to provide the necessary guidelines for the safe movement of people and vehicles throughout the planning area.

The primary sources of information utilized to develop the Transportation Plan were (1) The AOne and Six Year Roads Plan@ for Howard County and the Communities of Boelus, Dannebrog, Elba and Farwell, and (2) State of Nebraska Department of Roads ANebraska Highway Program@ (Fiscal Years 2015-2020 and Beyond).

EXISTING TRANSPORTATION SYSTEM

Illustration 5.2, State Functional Classifications, as identified by the Nebraska Department of Roads, depicts the transportation system in Howard County. The transportation system is comprised of “*Major Arterial*” U.S. Highway 281, and State Highways 11, 22 (Howard/Greeley County Line), 58 and 92. All other streets and roads within Howard County are classified as “*Rural Minor Collectors*,” County roads, local streets and minimum maintenance roads. Collectors and local streets provide transportation to and throughout the Cities and Villages of the County, while the Interstate and U.S. and state highways provide transportation into the County, adjacent Counties, Communities and areas beyond.

ROAD CLASSIFICATIONS

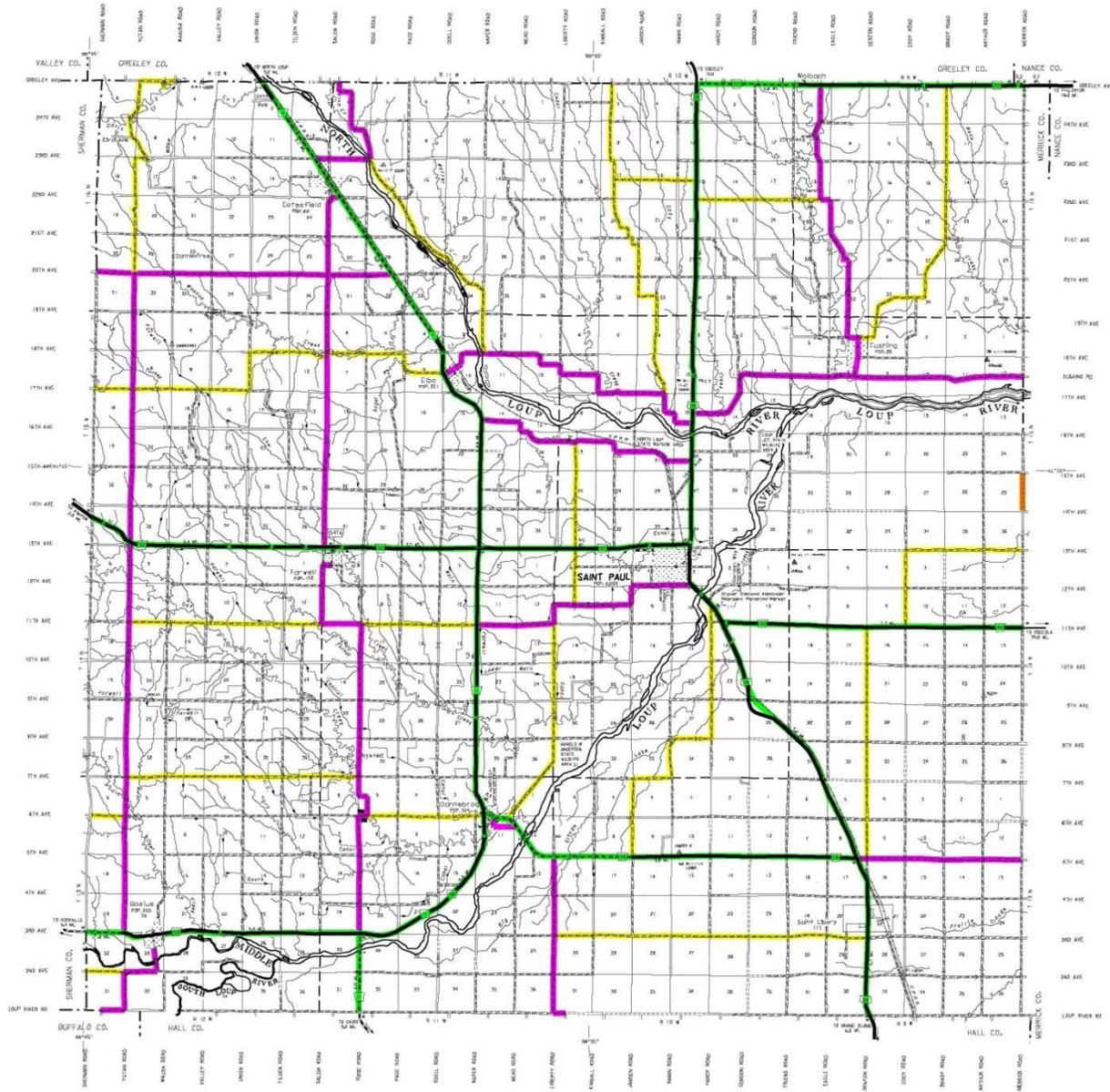
Nebraska Highway Law identifies the eight functional classifications of rural highways as follows:

- (1) **Interstate:** Which shall consist of the federally designated National System of Interstate and Defense Highways;
- (2) **Expressway:** Second in importance to Interstate. Shall consist of a group of highways following major traffic desires in Nebraska and ultimately should be developed to multilane divided highway standards;
- (3) **Major Arterial:** Consists of the balance of routes which serve major statewide interests for highway transportation in Nebraska. Characterized by high speed, relatively long distances, and travel patterns;
- (4) **Scenic-Recreation:** Consists of highways or roads located within or which provide access to or through state parks, recreation or wilderness areas, other areas of geological, historical, 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 which would serve places of smaller population and smaller recreation areas not served by the higher systems;
- (6) **Collector:** Which shall consist of a group of highways which 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;
- (8) **Minimum Maintenance:** Which shall consist of (a) roads used occasionally by a limited number of people as alternative access roads for area 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.

The rural highways classified, under subdivisions (1) thru (3) of this section should, combined, serve every incorporated municipality having a minimum population of 100 inhabitants or sufficient commerce, a part of which will be served by stubs or spurs, and along with rural highways classified under subsection (4) of this section, should serve the major recreational areas of the State. Sufficient commerce shall mean a minimum of two hundred thousand dollars of gross receipts under the Nebraska Revenue Act of 1967.

STATE FUNCTIONAL CLASSIFICATIONS HOWARD COUNTY, NEBRASKA



LEGEND

STATE FUNCTIONAL CLASSIFICATION:

- EXPRESSWAY.....
- MAJOR ARTERIAL.....
- OTHER ARTERIAL.....
- COLLECTOR.....
- MINIMUM MAINTENANCE.....

Revised March 11, 2007
All Roads Not Otherwise Indicated Are Classified As Local.



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ILLUSTRATION 5.2

TRAFFIC VOLUME

The Nebraska Department of Roads monitors traffic volume in the Howard County area, for County roads and State and Federal highways. This tabulation process is done to identify appropriate existing road classification and engineering standards. **Table 5.1** also identifies the average daily traffic counts for State and Federal transportation routes around Howard County.

	2008	2010	2012
Highway 281, S of St. Libory	5,005/350	5,365/375	5,555/390
Highway 281, N of HWY 58 Intersection	4,015/285	4,310/305	4,560/325
Highway 281, S of HWY 92 Intersection	4,135/325	4,350/375	4,315/380
Highway 281, Between HWY 92 & St. Paul	4,945/465	5,285/560	5,285/545
Highway 281, at HWY 92 Intersection North of St. Paul	2,580/230	2,835/250	3,015/265
Highway 281, North of St. Paul	1,865/200	2,025/215	2,080/220
Highway 11, S of HWY 58 Intersection	1,815/160	1,840/160	1,955/170
Highway 11/58, S of Dannebrog	695/70	880/90	905/90
Highway 11, N of Dannebrog	790/80	960/95	875/75
Highway 11, S of Elba	1,440/125	1,605/140	1,745/150
Highway 11, N of Elba	1,100/115	1,250/130	1,300/135
Highway 11, N of Cotesfield	965/120	1,100/135	1,165/130
Highway 22, W of Wolbach (Greeley Co.)	620/65	655/70	765/80
Highway 22, E of Wolbach (Greeley Co.)	445/60	445/60	370/50
Highway 58, E of Boelus	1,295/125	1,230/120	1,415/140
Highway 58, E of Dannebrog	735/70	925/90	930/90
Highway 58, W of HWY 281 Intersection	615/55	720/65	705/65
Highway 92, W of Farwell	805/100	1,105/135	935/115
Highway 92, Farwell	385/45	380/45	435/50
Highway 92,E of HWY 281 Intersection	1,035/105	1,020/120	1,040/135
Highway 92, W of HWY 281 Intersection	2,345/230	2,390/280	2,380/245
Highway 92, N of St. Paul	2,370/240	3,005/305	2,610/265
Highway 92, E of HWY 281 Intersection	1,050/167	1,185/212	1,220/200
*Total Vehicles/Commercial Vehicles. Source: Nebraska Department of Roads, 2015. Hanna:Keelan Associates, P.C., 2015.			

FUTURE HOWARD COUNTY TRANSPORTATION SYSTEM

The Future Transportation System in Howard County is outlined in the **One and Six Year Street Improvements Plans** For Howard County and the Communities of Boelus, Dannebrog, Elba and Farwell. The County's and each Village's One-Year Plan is for projects to be undertaken in 2015, while the Six-Year Plan is for projects to be undertaken through 2020, or earlier if funding becomes available. Plans for the Villages of Cotesfield and Cushing are not included, as they are anticipating "maintenance only" during the one- and six-year periods. The official One- and Six-Year Roads Plan project lists are available in the **Appendix** of this **Comprehensive Plan**.

SECTION 6



ENERGY ELEMENT.

SECTION 6 ENERGY ELEMENT

INTRODUCTION

This **Section** of the **Howard County Comprehensive Plan** complies with a July 2010 amendment to Nebraska State Statutes 23-114.02, requiring an “**Energy Element.**” This component of the **Plan** assesses the energy infrastructure and energy use by sector, including residential, commercial, and industrial. This section is also intended to evaluate the utilization of renewable energy sources and promote energy conservation measures.

PUBLIC POWER DISTRIBUTION

Energy usage and consumption throughout Howard County has followed the trends prevalent in the State of Nebraska. Electrical power is distributed throughout Howard County by the **Howard-Greeley Public Power District (HGPPD)**. The HGPPD is supplied electricity by the **Nebraska Public Power District (NPPD)**. The HGPPD Utility District does not generate electricity; 100 percent of the electricity they distribute originates from NPPD.

As the largest electric generating utility in the State of Nebraska, NPPD provides electricity to all or parts of 91 of the State’s 93 Counties. The source of NPPD’s generating facilities includes coal, oil, natural gas and nuclear energy. Additionally, NPPD also purchases electricity from the **Western Area Power Administration (WAPA)**, which markets and transmits electricity from federally owned hydropower facilities.

RENEWABLE ENERGY STRATEGIC PLAN

As of July 2011 and continuing through the 2014, the NPPD Strategic Plan states:

“NPPD will evaluate all forms of renewable resources feasible in Nebraska and incorporate them in the total mix of NPPD-owned generation and contract purchases with a goal of achieving 10 percent of our energy supply for NPPD’s native load from renewable resources by 2020”.

The Strategic Plan promotes the addition of a minimum 80 megawatts of wind-generated power during every two-year period, reaching the 10 percent goal by 2020.

As of 2013, approximately 56.6 percent of NPPD's energy generation was from coal, 30 percent nuclear, 2.5 percent hydro, 0.8 percent natural gas & oil, **and 4.6 percent from wind alternative energy sources**. The remaining 4.8 percent of NPPD's energy was supplied through purchases, with 4.3 percent from the WAPA and 1.2 percent from other sources. This results in NPPD having 42 percent of its energy resources originating from carbon free energy

In order for NPPD to meet its goal of 10 percent of its generating capacity originating from renewable resources, *primarily wind*, the Utility District will need to develop 334 Megawatts of total wind generation by 2020. NPPD, according to the 2014 Strategic Plan, purchases 100 percent of the energy produced at seven Nebraska wind farms, but resells 24 percent to other utility districts. NPPD states in the Plan that it has passed the half-way point of meeting the 2020 production goal, or having 10 percent of its power generation coming from Renewable resources.

As of 2013, the entire State of Nebraska had a total wind turbine production of 734.8 megawatts produced by 422 operational turbines. This power would generate enough electricity to power approximately 244,880 homes.



Broken Bow Nebraska Wind Facility

WIND TURBINES AND “NET METERING”

Commercial, large scale wind turbines, or “Wind Conversion Systems,” are being promoted in Nebraska Counties by companies and local property owners alike. Wind towers of up to 400’ in height are typically developed as “wind farms,” where multiple wind towers are constructed in a single area, or linearly along a ridge line, such as Laredo Ridge Wind Farm, east of Petersburg in Boone County, for example. This facility consists of 54 individual 1.5 megawatt (MW) turbines.



Laredo Ridge, Petersburg, Nebraska

As of August, 2009, the State of Nebraska Legislature approved and signed into law, LB 439 (**Nebraska State Statute §70-2001 to 2005**), which is also referred to as “**Net Metering**.” This law allows individual residences and businesses to supplement their standard electric service with one, or combinations of, five alternate energy systems, including Solar, Methane, Wind, Biomass, Hydropower and Geothermal. By implementing these types of alternative energy systems, the desire of the individual is to reduce their reliance on public utility systems, potentially by where they generate more electricity than they can use and profit by having the public utility district purchase their excess energy.



Net Metering Small Wind Energy System
Rural Furnas County, Nebraska



Net Metering Small Wind Energy Systems
Winnebago, Nebraska

The Howard County Planning Commission chose to allow residences and businesses to utilize the provisions of Net Metering, specifically Small Wind Energy Systems. These same small Wind Energy Systems are permissible as Special Uses in each of the Districts of the County Zoning Regulations.

Commercial Wind Energy Conversion Systems, or what are commonly known as “Wind Farms” are potentially permitted as Special Uses in the “AG-1 and AG-2 Agricultural Districts” and “RC Rural Conservation” Districts.

ENERGY CONSUMPTION

According to the Nebraska Energy Office, the only available energy consumption statistics by Sector are the State totals. As of the 2013 Annual Energy Report, the Industrial Sector consumed 41.8 percent, or more than a third of the Total Energy Consumption of the State of Nebraska. The other three Sectors comprised nearly equal portions, at 17 percent in the Commercial Sector, 19.6 percent for the Residential Sector and 21.6 percent in the Transportation Sector. The Total Energy Consumption, in 2010, was 843.8 trillion British Thermal Units (BTU), which more than doubled, since 1960, when total consumption was 308.3 trillion BTU, an increase of 173.7 percent.

The energy consumption data from the **Howard-Greeley Public Power District (HGPPD)** for Howard County was not available from their offices in St. Paul, Nebraska.

TRENDS IN ENERGY CONSUMPTION

During the last 51 years, the State of Nebraska, as a whole, has vastly increased energy consumption. The Nebraska Energy Office “Annual Report – 2013,” (the latest publication available) details the most recent state-wide statistics from 2011. Throughout Nebraska, energy consumption as a percentage share of personnel income has remained constant. **In 1970, 11.8 percent of personnel income was spent on energy. As of 2011, 12 percent was spent on energy usage. The peak percentage occurred in 1980 at 17.1 percent.**

Trends in the Total Energy Consumption for the State of Nebraska is mirrored in each of the individual energy categories, coal, natural gas, gasoline and distillate fuel oil (primarily diesel fuel), nuclear power and hydroelectric production. Each of these energy types are detailed between 1960 and 2011, as follows:

- Coal consumption increased from 20 trillion BTUs in 1960 to 285.4 trillion BTUs, as of 2011.
- Natural gas consumption rose and fell during the 51 year period between 1960 and 2011, beginning at 140.4 trillion BTU, peaking in 1973 at 230.7 trillion BTU and by 2011 increasing again back up to 173.6 trillion BTU.

- Gasoline and diesel fuel consumption increased in Nebraska between 1960 and 2011. Overall, petroleum consumption overall peaked in 1978 at 246.1 trillion BTU. Gasoline consumption rose by 25 percent, from 78.8 to 97.8 trillion BTU, as of 2011 but peaked in 1978 at 115.9 trillion BTU. During the same time period, diesel fuel consumption quadrupled from 24.1 trillion BTU to 113.1 trillion BTU.
- Nuclear power generation began in Nebraska in 1973 at 6.5 trillion BTU and has increased to 72.5 trillion BTU as of 2011, but peaked in 2007 at 115.7 trillion BTU.
- Renewable energy consumption from 1960 to 2011 increased and decreased throughout the decades, beginning in 1960 at 13.4 trillion BTU to 2011 at 164.9 trillion BTU. Hydropower was the primary renewable energy source between 1960 and 1994, but as of 1995, biofuels (ethanol) production began at levels equaling hydropower, and production soared. By 2011, 69.3 percent of all renewable energy produced in that year came from biofuels, 9.5 percent from hydroelectric power, 6.2 percent from wood and wood waste.

INCREASED ENERGY COSTS & CONSERVATION

High fuel costs or limited availability of a particular energy type increases the desire for energy efficiency practices. For example, historic peak prices for natural gas in 2008 motivated farmers to convert natural gas and propane fueled irrigation equipment to electric power; to limit frequency and amount of applications of anhydrous ammonia fertilizer (a natural gas product); and to increase the use of conservation tillage practices to reduce crop cultivation. Access to low-cost financing through the Nebraska Energy Office and locally available low-interest loans to modernize agricultural equipment have led to conservation increases in the Agricultural Sector.

The U.S. Department of Agriculture issued a report in 2008 that concluded that farmers have increased conservation practices. Since the 1970s, total farm energy consumption fell by 26 percent, while farm production increased by 63 percent. This figure is even more significant when the consolidation of farms is taken into account.

In 1966, just 3.1 million acres of Nebraska crop lands were irrigated, but as of 2011, 9.1 million acres were irrigated. Thus, approximately forty-six percent of the total cropland in Nebraska was irrigated.

Ethanol production in Nebraska has consumed an increasing amount of corn produced annually and in the process expanding irrigation practices. **In 2011, more than 40 percent of the corn crop was utilized by ethanol facilities across the State.**

ENERGY CONSERVATION POLICIES

The most effective means for Howard County to reduce its total energy consumption in each of the Energy Sectors (and by energy type) is by conservation practices and by promoting the conversion to alternative energy systems when appropriate.

The following is a list of policies to guide energy practices throughout rural Howard County:

- ❖ **Promote the use of “Net Metering” or the use of one, or combinations, of the five alternative energy sources to reduce rural residential and agricultural facilities consumption of energy.**
 - Utilize the Howard County Zoning Regulations to control the placement and operation of alternative energy systems.
 - Require compliance with the Accessory or Conditional Use permit processes so that established conditions are met by the applicant.
 - Promote the development of vocational education opportunities in local high schools, regional trade schools, and in state colleges and universities to educate the current and future workforce in alternative energy design, fabrication of equipment and maintenance.
- ❖ **Promote the use and placement of large scale Commercial/Utility Grade Wind Energy Conversion Systems, commonly referred to as “Wind Farms.”**
 - Utilize the Howard County Zoning Regulations to guide the potential use and placement of large scale Commercial Wind Energy Conversion Systems.

- ❖ **As other sources of Alternative Energy Systems are developed or become cost-effective for use in Nebraska, amend Howard County planning documents to locate and control their operation.**

- ❖ **Promote the use of conservation methods to reduce the consumption of Energy Usage in each of the individual sectors including residential, commercial, industrial, agricultural and transportation.**
 - Promote the use of weatherization methods and energy efficient or “green building” materials in conformance with the “LEED” Certified Building techniques.
 - Support and provide incentives for the expanded use of agricultural practices to reduce energy consumption. Techniques such as conservation tillage, high efficiency irrigation equipment and cost effective fuel sources to power irrigation systems.
 - Support State and Federal incentive programs to continue to provide low-cost financing to purchase modern agricultural equipment such as low-pressure pivots and no-till equipment. Programs such as the U.S. Department of Agriculture’s Rural Energy for America Program (REAP) that finances irrigation efficiency improvements switching diesel, propane and natural gas pumps to electric.
 - Promote the availability of incentives provided by public power districts to develop alternative energy sources for and from agricultural practices. Modern methods such as producing methane gas from livestock confinement facilities to power agricultural equipment, is just one example.
 - Promote the expanded use of solar and geothermal exchange energy systems for agricultural applications that power equipment and heat/cool farm buildings.

APPENDIX



HOWARD COUNTY/VILLAGES ONE- AND SIX-YEAR STREET IMPROVEMENTS PLANS.

Board of Public Roads Classifications and Standards
Form 7 One- and Six-Year Plan
Highway or Street Improvement Project

County: Howard City: _____ Village: _____

Location Description:
 Greeley County bridge C003915010. Located in the NE corner of the NE 1/4 of Sec. 1 T 16N, R 12W, of the 6th P.M., Howard County. Bridge crosses Fish Creek on Greeley Ave.

Existing Surface Type and Structures: (Such as dirt, gravel, asphalt, concrete, culvert, or bridge)
Gravel

Average Daily Traffic: _____ Classification Type: (As shown on Function/ Classification Map)
Local

PROPOSED IMPROVEMENT

Design Standard Number.	<u>Surfacing</u>	Thickness: _____	Width: _____
<input type="radio"/> Grading	<input type="radio"/> Concrete	<input type="radio"/> Right of Way	<input checked="" type="radio"/> Lighting
<input type="radio"/> Aggregate	<input type="radio"/> Curb & Gutter	<input type="radio"/> Utility Adjustments	<input type="radio"/>
<input type="radio"/> Armor Coat	<input checked="" type="radio"/> 181 Drainage Structures	<input type="radio"/> Fencing	<input type="radio"/>
<input type="radio"/> Asphalt	<input checked="" type="radio"/> 181 Erosion Control	<input type="radio"/> Sidewalks	<input type="radio"/>

Bridges to Remain In Place	Roadway Width: _____	Length: _____	Type: _____
New Bridge	Roadway Width: _____	Length: _____	Type: _____
Box Culvert	Span: _____ Rise: _____	Length: _____	Type: _____
Culvert	Diameter: _____	Length: _____	Type: _____

Bridges and Culverts Sized | Yes NA Hydraulic Analysis Pending

Other Construction Features:
 Joint Greeley and Howard County Project, replace Greeley County bridge C003915010 over Fish Creek.

ESTIMATED COST (In Thousands)	* COUNTY	* CITY	* STATE	* FEDERAL	* OTHER	TOTAL
* OPTIONAL	12.5					

Project Length: (Nearst Tenth, State Unit of Measure) 0.1 mile Project No.: C47-(216)

County Highway Superintendent Date:

Board of Public Roads Classifications and Standards
Form 7 One- and Six-Year Plan
Highway or Street Improvement Project

County: <u>Howard</u>	City: _____	Village: _____								
Location Description: <u>Inman Road between 6th Avenue and 7th Avenue, between Sec. 3 and 4 Township 13N Range 10W.</u>										
Existing Surface Type and Structures: <i>(Such as dirt, gravel, asphalt, concrete, colvert, or bridge)</i> <u>Gravel</u>										
Thickness: _____										
Design Standard Number: _____										
Average Daily Traffic: _____	Classification Type: <i>(As shown on Functionat Classiflceffon Msp)</i> <u>Local</u>									
PROPOSED IMPROVEMENT										
Surfacing										
<u>RL2</u>										
<input type="checkbox"/> Grading	<input type="checkbox"/> Concrete	<input checked="" type="checkbox"/> Right of Way								
<input checked="" type="checkbox"/> Aggregate	<input checked="" type="checkbox"/> Curb & Gutter	<input type="checkbox"/> Utility Adjustments								
<input type="checkbox"/> Armor Coat	<input type="checkbox"/> Drainage Structures	<input type="checkbox"/> Fencing								
<input type="checkbox"/> Asphalt	<input checked="" type="checkbox"/> Erosion Control	<input type="checkbox"/> Sidewalks								
<input checked="" type="checkbox"/> Lighting										
Roadway Width: _____	Length: _____	Type: _____								
Bridges and Culverts Sized <input type="checkbox"/> Yes @ N/A <input checked="" type="checkbox"/> Hydraulic Analysis Pending										
Other construction Features: _____ _____										
<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:25%;"></td> <td style="width:25%;"></td> <td style="width:25%;"></td> <td style="width:25%;"></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> </table>										
ESTIMATED COST <i>(In Thousand*)</i>										
* COUNTY	* CITY	* STATE	* FEDERAL							
* OTHER	TOTAL									
* OPTIONAL	5	5	5							

Project Length: *(Nearest Tenth, State Unit of Measure)*
1.0 mile

Project No.: _____

C-47(2151)

ITIUe: _____

Howard County Superintendent

Date: 1,15' / 0 / 1

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Board of Public Roads Classifications and Standards
Form 7 One- and Six-Year Plan
Highway or Street Improvement Project

County: Howard City: _____ Village: _____

Location Description:
Inman Road between 7th Avenue and 8th Avenue, between Sec. 33 and 34 Township 14N Range 10W.

Existing Surface Type and Structures: *(Such as dirt, gravel, asphalt, concrete, culvert, or bridge)*
Gravel

Average Daily Traffic: _____ Classification Type: *(As shown on Functional Classification Map)*
Collector

PROPOSED IMPROVEMENT

Design Standard Number: BC2 Surfacing: _____ Width: _____

Grading Concrete Right of Way Lighting
 Aggregate Curb & Gutter Utility Adjustments
 Armor Coat Drainage Structures Fencing
 Asphalt Erosion Control Sidewalks

Bridge to Remain in Place	Roadway Width: _____	Length: _____	Type: _____
New Bridge	Roadway Width: _____	Length: _____	Type: _____
Box Culvert	Span: _____ Rise: _____	Length: _____	Type: _____
Culvert	Diameter: _____	Length: _____	Type: _____

Bridges and Culverts Sized Yes N/A Hydraulic Analysis Pending

Other Construction Features:

ESTIMATED COST	* COUNTY	* CITY	* STATE	* FEDERAL	* OTHER	TOTAL
<u>OPTIONAL</u>	<u>1.0 mile</u>				<u>C-47 (214)</u>	<u>5</u>

Project Length: *(Nearest Tenth, State Unit of Measure)* 1.0 mile Project No.: _____

Title: Howard County Superintendent Date: <2/-?\$/.,;0/</

Board of Public Roads Classifications and Standards
Form 7 One- and Six-Year Plan
Highway or Street Improvement Project

County: Howard City: _____ Village: _____

Location Description:
 At the intersection of Yutan Road and 6th Avenue, between Sec. 5, 6, 7, and 8, Township 13N, Range 12W.

Existing Surface Type and Structures: (Such as dirt, gravel, asphalt, concrete, culvert, or bridge)
 Gravel

Average Daily Traffic: _____ Classification Type: (As shown on Functional Classification Map)
 _____ Other Arterial

PROPOSED IMPROVEMENT

Design Standard Number: ROA-3 Thickness: _____ Width: _____

Surfacing

Grading Concrete Right of Way Lighting
 Aggregate Curb & Gutter Utility Adjustments 0
 Armor Coat Drainage Structures Fencing 0
 Asphalt Erosion Control Sidewalks 0

Bridge to Remain in Place	Roadway Width: _____	Length: _____	Type: _____
New Bridge	Roadway Width: _____	Length: _____	Type: _____
Box Culvert	Span: _____	Rise: _____	Length: _____
Culvert	Diameter: _____	Length: _____	Type: _____

Bridges and Culverts Sized Yes NA Hydraulic Analysis Pending

Other Construction Features:
 Rebuild intersection

ESTIMATED COST	* COUNTY	* CITY	* STATE	* FEDERAL	* OTHER	TOTAL
(* To be paid)	5.0					5.0

Project Length: (Nearest Tenth, Slaw Unit of Measure) 0.25 mile Project No.: C-47(217)

Title: _____ Date: 01/05/2011
 _____ County Highway Superintendent

Board of Public Roads Classifications and Standards
Form 7 One- and Six-Year Plan
Highway or Street Improvement Project

County: Howard City: _____ Village: _____

Location Description:
Fifth Avenue from Highway 281 to Merrick Road, along Sec. 8, 9, 10, 11, 12, 13, 14, 15, 16, and 17, Township 13N, Range 9W.

Existing Surface Type and Structures: *(Such as dirt, gravel, asphalt, concrete, culvert, or bridge)*
Gravel

Average Daily Traffic: _____ Classification Type: *(As shown on Functional Classification Map)*
other Arterial

PROPOSED IMPROVEMENT

Design Standard Number: ROA-3 Surfacing _____ Thickness: _____ Width: _____

- | | | | |
|----------------------------------|---|--|---|
| <input type="radio"/> Grading | <input type="radio"/> Concrete | <input type="radio"/> Right of Way | <input checked="" type="radio"/> Lighting |
| <input type="radio"/> Aggregate | <input type="radio"/> Curb & Gutter | <input type="radio"/> Utility Adjustments | <input type="radio"/> |
| <input type="radio"/> Armor Coat | <input type="radio"/> Drainage Structures | <input type="radio"/> Fencing | <input type="radio"/> |
| <input type="radio"/> Asphalt | <input type="radio"/> Erosion Control | <input checked="" type="radio"/> Sidewalks | <input type="radio"/> |

Bridge to Remain in Place	Roadway Width: _____	Length: _____	Type: _____
New Bridge	Roadway Width: _____	Length: _____	Type: _____
Box Culvert	Span: _____	Rise: _____ Length: _____	Type: _____
Culvert	Diameter: _____	Length: _____	Type: _____

Bridges and Culverts Sized | Yes | N/A | Hydraulic Analysis Pending

Other Construction Features:
Rebuild road

ESTIMATED COST <i>(In Thousands)</i>	* COUNTY	* CITY	* STATE	* FEDERAL	* OTHER	TOTAL
OPTIONAL	10.0					5.0

Project Length: *(Nearest Tenth, State Unit of Measure)* 4.25 miles Project No.: C-471-218

Date: 6/2/17

County Highway Superintendent

Board of Public Roads Classifications and Standards
Form 7 One- and Six-Year Plan
Highway or Street Improvement Project

County: Howard City: _____ Village: _____

Location Description:
Liberty Road north of Dannebrog between Nebraska Highway 58 and 8th Ave..

Existing Surface Type and Structure.: (Such as dirt, gravel, asphalt, concrete, culvert, or bridge)
Bridge, Sand

Average Daily Traffic: _____ Classification Type: (As shown on Functions/ Classification Map)
Other Arterial

PROPOSED IMPROVEMENT

Design Standard Number: ROA-3 Surfacing _____ Thickness: 3" Width: 24'

- | | | | |
|---|--|--|-----------------------------------|
| <input checked="" type="checkbox"/> Grading | <input type="checkbox"/> Concrete | <input type="checkbox"/> Right of Way | <input type="checkbox"/> Lighting |
| <input checked="" type="checkbox"/> Aggregate | <input type="checkbox"/> Curb & Gutter | <input type="checkbox"/> Utility Adjustments | 0 |
| <input type="checkbox"/> Armor Coat | <input type="checkbox"/> Drainage Structures | <input type="checkbox"/> Fencing | 0 |
| <input type="checkbox"/> Asphalt | <input type="checkbox"/> Erosion Control | <input type="checkbox"/> Sidewalks | 0 |

Bridge to Remain in Place	Roadway Width: _____ Length: _____	Type: _____
New Bridge	Roadway Width: _____ Length: _____	Type: _____
Box Culvert	Span: _____ Rise: _____ Length: _____	Type: _____
Culvert	Diameter: _____ Length: _____	Type: _____

Bridges and Culverts Sized Yes N/A Hydraulic Analysis Pending

Other Construction Features:
Top sand surface with clay top

ESTIMATED COST	* COUNTY	* CITY	* STATE	* FEDERAL	* OTHER	TOTAL
(in Thousands) OPTIONAL	20.0					20.0

Project length: (Nearest Tenth, State Unit of Measure) 2.0 miles Project No.: C-47 (2071)
 Title: _____ Date: 06/11/2011
 County Highway Superintendent _____

Board of Public Roads Classifications and Standards
Form 7 One- and Six-Year Plan
Highway or Street Improvement Project

County: Howard City: _____ Village: _____

Location Description:
 On Arthur Road between Sec. 35 and 36, T 13 N, R 9 W

Existing Surface Type and Structures: *(Such as dirt, gravel, asphalt, concrete, culvert, or bridge)*
 CMP culverts and gravel road

Average Daily Traffic: _____ Classification Type: *(As shown on Functional Classification Map)*
 Local

PROPOSED IMPROVEMENT

Design Standard Number: RL-3 Surfacing Thickness: _____ Width: _____

Grading Concrete Right of Way Lighting
 Aggregate Curb & Gutter Utility Adjustments
 Armor Coat Drainage Structures Fencing
 Asphalt Erosion Control Sidewalks

Bridge to Remain in Place	Roadway Width: _____	Length: _____	Type: _____
New Bridge	Roadway Width: _____	Length: _____	Type: _____
Box Culvert	Span: _____	Rise: _____	Length: _____
Culvert	Diameter: _____	Length: _____	Type: _____

Bridges and Culverts Sized | Yes N/A Hydraulic Analysis Pending

Other Construction Features:

ESTIMATED COST	COUNTY	CITY	STATE	FEDERAL	OTHER	TOTAL
<i>(in Thousands)</i> OPTIONAL	5.0					5.0

Project Length: *(Nearest Tenth, State Unit of Measure)* 0.1 mile Project No.: C-47 (210)

County Highway Superintendent _____ Date: ..?/cf .5/,, ?o/ q

Board of Public Roads Classifications and Standards
Form 7 One- and Six-Year Plan
Highway or Street Improvement Project

County: Howard City: _____ Village: _____

Location Description:
On east and west road between Sec. 18 and 19, T 16N, R 9W, on Spring Creek

Existing Surface Type and Structures: *(Such as dirt, gravel, sspheff, concncte, culvert, or bridge)*
Single Span bridge 54' x 16'

Average Daily Traffic: _____ Classification Type: *(As shown on Functional Class/Postion Map)*
Collector

PROPOSED IMPROVEMENT

Design Standard Number: RC-2 Surfacing _____ Thickness: _____ Width: _____

Grading Concrete Right of Way Lighting
 Aggregate Curb & Gutter Utility Adjustments 0
 Armor Coat Drainage Structures Fencing 0
 Asphalt Erosion Control Sidewalks 0

Bridge to Remain in Place	Roadway Width: _____	Length: _____	Type: _____
New Bridge	Roadway Width: _____	Length: _____	Type: _____
Box Culvert	Span: _____	Rise: _____	Length: _____
Culvert	Diameter: _____	Length: _____	Type: _____

Bridges and Culverts Sized Yes N/A Hydraulic Analysis Pending

Other Construction Features:
Rehab Bridge #30820

ESTIMATED COST <i>(in Millions)</i>	* COUNTY	* CITY	* STATE	* FEDERAL	* OTHER	TOTAL
* OPTIONAL	10.0					10.0

Project Length: *(Nearest Tenth, State Unit of Measure)* 0.1 mile Project No.: C-47 (169)

Title: _____ Date: 04/21/07
County Highway Superintendent

Board of Public Roads Classifications and Standards
Form 7 One- and Six-Year Plan
Highway or Street Improvement Project

County: Howard [City: _____] Village: _____

Location Description:
 From US Highway 281 east to Merrick Road which is the county line with Merrick County on Cushing Road

Existing Surface Type and Structures: (Such as dill, gravel, asphalt, concrete, culvert, or bridge)
 Gravel

Average Daily Traffic: _____ Classification Type: (As shown on Functional Classification Map)
 Other Arterial

PROPOSED IMPROVEMENT

Design Standard Number: ROA-2 **Surfacing** Thickness: 8" Width: 28'

<input type="radio"/> [8:1 Grading	<input type="radio"/> Concrete	<input type="radio"/> [8:1 Right of Way	<input checked="" type="radio"/> Lighting
<input type="radio"/> [8:1 Aggregate	<input type="radio"/> Curb & Gutter	<input type="radio"/> [8:1 Utility Adjustments	<input type="radio"/>
<input type="radio"/> Armor Coat	<input type="radio"/> [8:1 Drainage Structures	<input type="radio"/> [8:1 Fencing	<input type="radio"/>
<input type="radio"/> Asphalt	<input type="radio"/> [8:1 Erosion Control	<input checked="" type="radio"/> Sidewalks	<input type="radio"/>

Bridge to Remain in Place	Roadway Width: _____	Length: _____	Type: _____
New Bridge	Roadway Width: _____	Length: _____	Type: _____
Box Culvert	Span: _____	'Rise: _____	'Length: _____
Culvert	Diameter: _____	Length: _____	Type: _____

Bridges and Culverts Sized Yes NA [8:1 Hydraulic Analysis Pending

Other Construction Features:
 Rebuild road with drainage structures, with clay surface

ESTIMATED COST (In Thousands) OPTIONAL	* COUNTY	* CITY	* STATE	* FEDERAL	* OTHER	TOTAL
	3,000.0					3,000.0

Project Length: (Nearest Tenth, Statute Unit of Measure) 9.5 miles Project No.: C-47(188)

S _____, _____ County Highway Superintendent Date: 1/4.5/01

Board of Public Roads Classifications and Standards
Form 7 One- and Six-Year Plan
Highway or Street Improvement Project

County: Howard City: _____ Village: _____

Location Description:
West of Nebraska Highway 281 on Twin Forks Lane to Jansen Road going North into subdivision. This will be about 1.6 miles in Sec. 21 and 22, T 15 N, R 10 W.

Existing Surface Type and Structures: *(Such as dirt, gravel, asphalt, concrete, culvert, or bridge)*
Gravel

Average Daily Traffic: _____ Classification Type: *(As shown on Functional Classification Map)*
Other Arterial

Design Standard Number: **ROA-1** **PROPOSED IMPROVEMENT**
Surfacing Thickness: **8"** Width: **28'**

[81 Grading Concrete [81 Right of Way Lighting
 [81 Aggregate Curb & Gutter [81 Utility Adjustments
 Armor Coat [81 Drainage Structures [81 Fencing
 Asphalt [81 Erosion Control Sidewalks

Bridge to Remain in Place	Roadway Width: _____	Length: _____	Type: _____
New Bridge	Roadway Width: _____	Length: _____	Type: _____
Box Culvert	Span: _____ Rise: _____	Length: _____	Type: _____
Culvert	Diameter: _____	Length: _____	Type: _____

Bridges and Culverts Sized Yes NA [81 Hydraulic Analysis Pending

Other Construction Features:
Rebuild road with drainage structures, with clay surfaces

ESTIMATED COST <i>(in thousands)</i> OPTIONAL	* COUNTY	* CITY	* STATE	* FEDERAL	* OTHER	TOTAL
	15					15

Project Length: *(Nearest Tenth, State Unit of Measure)* **1.6 mile** Project No.: **C-47 (200)**
 _____ Date: **8/15/01**
 _____ County Highway Superintendent

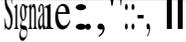
Board of Public Roads Classifications and Standards
Form 7 One- and Six-Year Plan
Highway or Street Improvement Project

County: Howard	City:	Village:				
Location Description: Approx. 1550' south of the northwest corner of Sec. 6, T 15 N, R 8 W, of the 6th P.M., Merrick Co. Northeast corner of Sec. 1, T 15 N, R 9 W, of the 6th P.M., Howard County						
Existing Surface Type and Structures: (Such as cllrt, gravel, asphsf, concreto, culvert, or bridge) Gravel						
Average Daily Traffic:	Classification Type: (As shown on Functional Classification Map) Local					
PROPOSED IMPROVEMENT						
Design Standard Number: RL-3	Surfacing	Thickness: 3" Width: 24'				
Grading <input type="checkbox"/> Concrete <input type="checkbox"/> Right of Way <input type="checkbox"/> Lighting <input type="checkbox"/>	<input type="checkbox"/> Aggregate <input type="checkbox"/> Curb & Gutter <input type="checkbox"/> Utility Adjustments <input type="checkbox"/>	<input type="checkbox"/> Armor Coat <input type="checkbox"/> Drainage Structures <input type="checkbox"/> Fencing <input type="checkbox"/>				
<input type="checkbox"/> Asphalt <input type="checkbox"/> Erosion Control <input type="checkbox"/> Sidewalks <input type="checkbox"/>						
Bridge to Remain in Place	Roadway Width:	Length: Type:				
New Bridge	Roadway Width:	Length: Type:				
Box Culvert	Span: 12 Rise: 6 Length: 42	Type: Concrete				
Culvert	Diameter:	Length: Type:				
Bridges and Culverts Sized	Yes <input type="checkbox"/> N/A <input type="checkbox"/> Hydraulic Analysis Pending <input type="checkbox"/>					
Other Construction Features: Joint Merrick and Howard County Project, BR0-7061 (27)/Palmer t'NV Replace 2 span timber bridge 16'wide by 50' long over Rock Creek						
ESTIMATED COST (* Thousands) OPTIONAL	COUNTY 24.375	CITY	STATE 16.25	FEDERAL 260.00	OTHER 24.375	TOTAL 325.00
Project Length: (Neerost Tenth, Stele Unit of Measuro) 0.1 mile			Project No.: C-47 (183)			
County Highway Superintendent			Date: .. /t:1.;' /,.,.,o/ ef			

Board of Public Roads Classifications and Standards
Form 7 One- and Six-Year Plan
Hwy or Street Improvement Project

County: Howard	City:	Village: Boelus, Nebraska
Location Description: Sixth Street from Cheyenne Street to Sioux Street; and Sioux Street from Sixth Street to Seventh Street		
Existing Surface Type and Structures: <i>(Such as dirt, gravel, asphalt, concrete, culvert or bridge)</i> Gravel		
Average Daily Traffic: 20 15 • >50 ADT 20 35 • >50 ADT <small>.....</small>		Classification 1 {As shown on Functional Classification Map} Local
PROPOSED IMPROVEMENT		
Design Standard Number: Municipal	Asphalt Surfacin,.,	Thickness: 4" Width: 22'
[K] Grading <input checked="" type="checkbox"/> Concrete <input checked="" type="checkbox"/> Right of Way <input checked="" type="checkbox"/> Lighting	<input checked="" type="checkbox"/> Aggregate <input checked="" type="checkbox"/> Curb & Gutter <input checked="" type="checkbox"/> Utility Adjustments	<input type="checkbox"/> O
<input checked="" type="checkbox"/> Armor Coat <input checked="" type="checkbox"/> Drainage Structures <input checked="" type="checkbox"/> Fencing <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> [K] Asphalt <input checked="" type="checkbox"/> [K] Erosion Control <input type="checkbox"/> sidewalks <input type="checkbox"/>	
Bridges to Remain in Place:	Roadway Width: Length:	Type:
New Bridges:	Roadway Width: Length:	Type:
Box Culvert:	Span: Rise: Length:	Type:
Culvert:	Diameter: Length:	Type:
Bridges and Culverts Sized <input type="checkbox"/> Yes <input checked="" type="checkbox"/> N A <input checked="" type="checkbox"/> Hydraulic Analysis Pending		
Other Construction Features:		
ESTIMATED COST (In Thousands)		
	COUNTY	CITY
*OPTIONAL		16.5
	STATE	FEDERAL
	*OTHER	TOTAL
		16.5
Project Length: (Nearest Tenth, State Unit of Measure) / Project Number.		
0.1 miles		M-162120\
Signal! (n, . "" / }		Date:
evin L. Prior Street Superintendent		February 3, 2015

Board of Public Roads Classifications and Standards
Form 7 One- and Six-Year Plan
Highway or Street Improvement Project

County: Howard	City: Boelus, Nebraska	Village: Boelus, Nebraska
Location Description: Tenth Street from Cheyenne Street to Santee Street		
Existing Surface Type and Structures: <i>(Such as dirt, gravel, asphalt, concrete, culvert or bridge)</i> Gravel		
Average Daily Traffic: 20 _____ 15 = _____ 50 ADT _____ 20 _____ 35 = _____ >50 ADT _____ <small>(est.) (esU)</small>		Classification 1 <i>(As shown on Functional Classification Map)</i> Local
PROPOSED IMPROVEMENT		
Design Standard Number: Municipal	Asphalt Surfactnn	Thickness: 4" \ Width: 22'
<input checked="" type="checkbox"/> Grading	<input type="checkbox"/> Concrete	<input checked="" type="checkbox"/> Right of Way
<input checked="" type="checkbox"/> Aggregate	<input type="checkbox"/> Curb & Gutter	<input checked="" type="checkbox"/> Utility Adjustments
<input type="checkbox"/> Armor Coat	<input checked="" type="checkbox"/> Drainage Structures	<input checked="" type="checkbox"/> Fencing
<input checked="" type="checkbox"/> Asphalt	<input checked="" type="checkbox"/> Erosion Control	<input checked="" type="checkbox"/> Sidewalks
<input checked="" type="checkbox"/> Lighting		
Bridges and Culverts Sized <input type="checkbox"/> Yes <input checked="" type="checkbox"/> N A <input checked="" type="checkbox"/> Hydraulic Analysis Pending		
Other Construction Features:		
ESTIMATED COST <i>(In Thousands)</i>		
<input type="checkbox"/> OPTIONAL	- coUNTY	•cJTY
		16.5
	•srATE	'FEDERAI
	'OTHER	TOTAL
		16.5
Project Length: <i>(Nearest Tenth, State Unit of Measure)</i> 0.1 miles		Project Number: M-162123\
Signature: 		Date: February 3, 2015
Kevin L. Prior Street Superintendent		

FORM 7 ONE-AND SIX-YEAR PLAN

HIGHWAY OR STREET IMPROVEMENT PROJECT

COUNTY:		CITY:		VILLAGE: Dannebrog		
LOCATION DESCRIPTION:						
Viking Street from Mill Street to Maple Street						
EXISTING SURFACE & STRUCTURES: (Such as dirt, gravel, asphalt, concrete, culvert or bridge)						
Bituminous						
AVERAGE DAILY TRAFFIC: (Est.) 20 = , 20 =			CLASSIFICATION TYPE: (as shown on Functional Classification Map) Local			
PROPOSED IMPROVEMENT						
DESIGN STANDARD NUMBER: Munlc.		SURFACING:		THICKNESS: 4"	WIDTH: 20'	
GRADING		CONCRETE		RIGHT OF WAY	LIGHTNING	
AGGREGATE		CURB & GUTTER		UTILITY ADJUSTMENTS		
PRIME OR COAT		DRAINAGE STRUCTURES		FENCING		
X ASPHALT		EROSION CONTROL		SIDEWALKS		
BRIDGE TO REMAIN IN PLACE:		ROADWAY WIDTH =	LENGTH =	TYPE =		
NEW BRIDGE:		ROADWAY WIDTH =	LENGTH =	TYPE =		
BOX CULVERT:	SPAN:	RISE =	LENGTH =	TYPE =		
CULVERT:		DIAMETER = Variable	LENGTH =	TYPE =		
BRIDGES AND CULVERTS SIZED		YES <input checked="" type="checkbox"/> N/A		HYDRAULIC ANALYSIS PENDING		
OTHER CONSTRUCTION FEATURES:						
Shouldering						
ESTIMATED COST (IN THOUSANDS)						
	*COUNTY	*CITY	*STATE	*FEDERAL	*OTHER	*TOTAL
OPTIONAL		23.5				23.5
PROJECT LENGTH = 0.1 MILES (NEAREST TENTH)			PROJECT NUMBER: M-235(13-A)			
SIGNATURE:		TITLE:			DATE: 12-10-13	
		THOMAS L. KRUEGER STREET SUPERINTENDENT, S-724				

FORM 7 ONE-AND SIX-YEAR PLAN

HIGHWAY OR STREET IMPROVEMENT PROJECT

COUNTY; _____		CITY; _____		VILLAGE; Dannebrog		
LOCATION DESCRIPTION:						
Maple Street from Viking Street to Copenhagen Street						
Copenhagen Street from Maple Street to Mill Street						
EXISTING SURFACE & STRUCTURES: (Such as dirt, gravel, asphalt, etc., culvert or bridge)						
Gravel and Bituminous						
AVERAGE DAILY TRAFFIC: (Est.) 20 = _____, 20= _____			CLASSIFICATION TYPE: (as shown on Functional Classification Map) Local			
PROPOSED IMPROVEMENT						
DESIGN STANDARD NUMBER: Muncl. _____		SURFACING: _____		THICKNESS: 4'	WIDTH: 20'	
GRADING	CONCRETE	RIGHT OF WAY		LIGHTNING		
AGGREGATE	CURB & GUTTER	UTILITY ADJUSTMENTS				
ARMOR COAT	DRAINAGE STRUCTURES	FENCING				
X ASPHALT	EROSION CONTROL	SIDEWALKS				
BRIDGE TO REMAIN IN PLACE:		ROADWAY WIDTH=	LENGTH=	TYPE=		
NEW BRIDGE:		ROADWAY WIDTH=	LENGTH=	TYPE=		
BOX CULVERT:	SPAN=	RISE=	LENGTH:	TYPE=		
CULVERT:	DIA" AETER, Varies	LENGTH =	TYPE=			
BRIDGES AND CULVERTS SIZED YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>			HYDRAULIC ANALYSIS PENDING _____			
OTHER CONSTRUCTION FEATURES:						
ESTIMATED COST (IN THOUSANDS)						
	COUNTY	CITY	STATE	FEDERAL	OTHER	TOTAL
OPTIONAL		50				50
PROJECT LENGTH" 0.1 MILES _____ (NEAREST TENTH) (STATE UNIT OF MEASURE)			PROJECT NUMBER: M.235(13-B)			
SIGNATURE: 			TITLE: THOMAS . KRUEGER STREET SUPERINTENDENT, S-724		DATE: 12-10-13	

Board of Public Roads Classifications and Standards
Form 7 One- and Six-Year Plan
Highway or Street Improvement Project

County: Howard		City: _____		Village: Elba, Nebraska		
Location Description: From Market Street West on Merriam Street to the Railroad Tracks From Merriam Street along the Railroad Tracks Southeasterly to the Village limits						
Existing Surface Type and Structures: (Such as dirt, gravel, asphalt, concrete, culvert or bridge) Gravel - Dirt						
Average Daily Traffic: 20 14 = <100 rest\			Classification Type: (As shown on, Functional Classification Map) Drainage Ditch			
PROPOSED IMPROVEMENT						
Design Standard Number: Municipal		Surface		Thickness:	Width:	
<input checked="" type="checkbox"/> Grading	<input type="checkbox"/> Concrete	<input type="checkbox"/> Right of Way	<input type="checkbox"/> Lighting	<input type="checkbox"/> Aggregate	<input type="checkbox"/> Curb & Gutter	
<input type="checkbox"/> Armor Coat	<input checked="" type="checkbox"/> Drainage Structures	<input checked="" type="checkbox"/> Utility Adjustments	<input type="checkbox"/> Fencing	<input type="checkbox"/> Asphalt	<input checked="" type="checkbox"/> Erosion Control	
<input type="checkbox"/> Sidewalks	<input type="checkbox"/> _____	<input type="checkbox"/> _____	<input type="checkbox"/> _____	<input type="checkbox"/> _____	<input type="checkbox"/> _____	
Bridge to Remain In Place:		Roadway Width:	Length:	Type:		
New Bridge:		Roadway Width:	Length:	Type:		
Box Culvert:	Span:	Rise:	Length:	Type:		
Culvert:	Diameter:	Length:	Type:			
Bridges and Culverts Sized <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> Hydraulic Analysis Pending						
Other Construction Features: Storm Sewer - Grading and Realigning Present Waterway						
ESTIMATED COST (In Thousands)	'COUNTY	'CITY	'STATE	'FEDERAL	'OTHER	TOTAL
*OPTIONAL						138.1
Project Length: (Nearest Tenth, State Unit of Measure)	Project Number:	Title:	Date:	M-263(13)		
0.3 miles	5.0	Sigiz's, (tfd)?	Jeff R. Palik	Street Superintendent	February 4, 2014	

Board of Public Roads Classifications and Standards
Form 7 One- and Six-Year Plan
Hwy or Street Improvement Project

County: <u>Howard</u>		City: _____		Village: <u>Elba, Nebraska</u>			
Location Description: _____ 13th Street from Pearl Street to Caroline Street							
Existing Surface Type and Structures: (Such as dirt, gravel, asphalt, concrete, culvert or bridge) Gravel							
Average Daily Traffic: 2014 = <100 (test) 2034 = <100 " " " " " "			Classification Type: (As shown on Functional Classification Map) Local				
PROPOSED IMPROVEMENT							
Design Standard Number: Municipal		Surface: <u>N</u>		Thickness: 6'	Width: 32'		
<input checked="" type="checkbox"/> Grading	<input checked="" type="checkbox"/> Concrete	<input type="checkbox"/> Right of Way	<input type="checkbox"/> Lighting				
<input type="checkbox"/> Aggregate	<input checked="" type="checkbox"/> Curb & Gutter	<input type="checkbox"/> Utility Adjustments	<input type="checkbox"/>				
<input type="checkbox"/> Armor Coat	<input checked="" type="checkbox"/> Drainage Structures	<input type="checkbox"/> Fencing	<input type="checkbox"/>				
<input type="checkbox"/> Asphalt	<input type="checkbox"/> Erosion Control	<input checked="" type="checkbox"/> Sidewalks	<input type="checkbox"/>				
Bridges to Remain in Place:		Roadway Width:	Length:	Type:			
New Bridges:		Roadway Width:	Length:	Type:			
Box Culvert:		Span:	Rise: _____	Length:	Type:		
Culvert:		Diameter:	Length:	Type:			
Bridges and Culverts Sized		<input type="checkbox"/> Yes	<input type="checkbox"/> N/A	<input type="checkbox"/> Hydraulic Analysis Pending			
Other Construction Features: 							
ESTIMATED COST (In Thousands)		* COUNTY	* CITY	* STATE	* FEDERAL	* OTHER	TOTAL
: OPTIONAL							256.2
Project Length: (Nearest Tenth, State Unit of Measure)		Project Number:		Date:			
0.1 miles		Title:			M-263(14)		
Jeff R. Palik		Street Superintendent			February 4, 2014		

Board of Public Roads Classifications and Standards
Form 7 One- and Six-Year Plan
Highway or Street Improvement Project

County: Howard	City: Elba, Nebraska	Village: Elba, Nebraska
Location Description: 13th Street from Alda Street to Pearl Street		
Existing Surface Type and Structures: (Such as dirt, gravel, asphalt, concrete, culvert or bridge) Gravel		
Average Daily Traffic: 2014 = 100, 2034 = 100		Classification Type: (As shown on Functional Classification Map) Local
PROPOSED IMPROVEMENT		
Design Standard Number: Municipal	Surface: Surfacinn	Thickness: 5" Width: 24'
<input checked="" type="checkbox"/> Grading	<input type="checkbox"/> Concrete	<input type="checkbox"/> Right of Way
<input type="checkbox"/> Aggregate	<input type="checkbox"/> Curb & Gutter	<input type="checkbox"/> Utility Adjustments
<input type="checkbox"/> Armor Coat	<input checked="" type="checkbox"/> Drainage Structures	<input type="checkbox"/> Fencing
<input checked="" type="checkbox"/> Asphalt	<input checked="" type="checkbox"/> Erosion Control	<input type="checkbox"/> Sidewalks
<input type="checkbox"/> Lighting		
Bridges and Culverts Sized <input type="checkbox"/> Yes <input type="checkbox"/> NIA <input type="checkbox"/> Hydraulic Analysis Pending		
Other Construction Features:		
ESTIMATED COST		
* COUNTY	* CITY	* STATE
*OPTIONAL		Number:
0.1 miles		M-2631191
s:gnatlf/JA Jeff R. Palik		Title: Street Superintendent
		Date: February 4, 2014

Board of Public Roads Classifications and Standards
Form 7 One- and Six-Year Plan
Highway or Street Improvement Project

County: Howard	City: Elba, Nebraska	Village:				
Location Description: 13th Street from Caroline Street to New Street						
Existing Surface Type and Structures: <i>(Such as dirt, gravel, asphalt, concrete, culvert or bridge)</i> Gravel						
Average Daily Traffic: 20 14 = 100, 20 34 = 100, <100		Classification Type: <i>(As shown on Functional Classification Map)</i> Local				
PROPOSED IMPROVEMENT						
Design Standard Number: Municipal	Surface: Surf	Thickness: 6" Width: 32'				
<input checked="" type="checkbox"/> Grading	<input checked="" type="checkbox"/> Concrete	<input checked="" type="checkbox"/> Right of Way	<input checked="" type="checkbox"/> Lighting			
<input checked="" type="checkbox"/> Aggregate	<input checked="" type="checkbox"/> Curb & Gutter	<input checked="" type="checkbox"/> Utility Adjustments	<input checked="" type="checkbox"/>			
<input type="checkbox"/> Armor Coat	<input checked="" type="checkbox"/> Drainage Structures	<input checked="" type="checkbox"/> Fencing	<input checked="" type="checkbox"/>			
<input type="checkbox"/> Asphalt	<input checked="" type="checkbox"/> Erosion Control	<input checked="" type="checkbox"/> Sidewalks	<input type="checkbox"/>			
Bridge to Remain in Place:	Roadway Width:	Length:	Type:			
New Bridge:	Roadway Width:	Length:	Type:			
Box Culvert:	Span:	Rise:	Length:	Type:		
Culvert:	Diameter:	Length:	Type:			
Bridges and Culverts Sized <input type="checkbox"/> Yes <input checked="" type="checkbox"/> NIA <input checked="" type="checkbox"/> Hydraulic Analysis Pending						
Other Construction Features:						
ESTIMATED COST <i>(In Thousands, Nearest Tenth, State Unit of Measure)</i>	COUNTY	CITY	STATE	FEDERAL	OTHER	TOTAL
OPTIONAL			Project Number			125.1
0.1 miles				M-263120\		
Signed: 		Title: Street Superintendent		Date: February 4, 2014		

Board of Public Roads Classifications and Standards
Form 7 One- and Six-Year Plan
Highway or Street Improvement Project

County: Howard	City: 	Village: Elba, Nebraska
Location Description: New Street from 12th Street to 13th Street		
Existing Surface Type and Structures: <i>(Such as dirt, gravel, asphalt, concrete, culvert or bridge)</i> Gravel		
Average Daily Traffic: 2014 = <input type="checkbox"/> < 100 BSI 2034 = <input type="checkbox"/> < 100 cesil		Classification Type: <i>(As shown on Functional Classification Map)</i> Local
PROPOSED IMPROVEMENT		
Design Standard Number: Municloal	Surfacln"	Thickness: 5" Width: 24'
<input type="checkbox"/> Grading	<input type="checkbox"/> Concrete	<input type="checkbox"/> Right of Way
<input type="checkbox"/> Aggregate	<input type="checkbox"/> Curb & Gutter	<input type="checkbox"/> Utility Adjustments
<input type="checkbox"/> Armor Coat	<input type="checkbox"/> Drainage Structures	<input type="checkbox"/> Fencing
<input type="checkbox"/> Asphalt	<input type="checkbox"/> Erosion Control	<input type="checkbox"/> Sidewalks
Bridge to Remain in Place:	Roadway Width:	Length:
New Bridge:	Roadway Width:	Length:
Box Culvert:	Span:	Rise:
Culvert:	Diameter:	Length:
Bridges and Culverts Sized <input type="checkbox"/> Yes <input type="checkbox"/> N/A <input type="checkbox"/> Hydraulic Analysis Pending		
Other Construction Features: 		
ESTIMATED COST <i>(In Thousands)</i> *OPTIONAL	* COUNTY	* CITY
	* STATE	* FEDERAL
	* OTHER	TOTAL
		66.8
Project Length: <i>(Nearest Tenth, State Unit of Measure)</i> 0.1 miles		Project Number: M-263(21)
Sign, 11 (/); J, Jeff R. Palik		Title: Street Superintendent Date: February 4, 2014

Board of Public Roads Classifications and Standards
Form 7 One- and Six-Year Plan
Highway or Street Improvement Project

County: Howard		City: Elba, Nebraska		Village: Elba, Nebraska		
Location Description: Caroline Street from 13th Street to Hwy 11						
Existing Surface Type and Structures: (Such as dirt, gravel, asphalt, concrete, culvert or bridge) Gravel						
Average Daily Traffic: 2014 = 100 2034 = <100 'tes\S'			Classification Type: (As shown on Functional Classification A1ap) Local			
PROPOSED IMPROVEMENT						
Design Standard Number: Munclcoal		Surface:nn		Thickness: 5"	Width: 31'	
<input type="checkbox"/> Grading	<input checked="" type="checkbox"/> Concrete	<input type="checkbox"/> Right of Way	<input type="checkbox"/> Lighting			
<input type="checkbox"/> Aggregate	<input type="checkbox"/> Curb & Gutter	<input type="checkbox"/> Utility Adjustments	<input type="checkbox"/>			
<input type="checkbox"/> Armor Coat	<input checked="" type="checkbox"/> Drainage Structures	<input type="checkbox"/> Fencing	<input type="checkbox"/>			
<input checked="" type="checkbox"/> Asphalt	<input checked="" type="checkbox"/> Erosion Control	<input type="checkbox"/> Sidewalks	<input type="checkbox"/>			
Bridges to Remain in Place:		Roadway Width:	Length:	Type:		
New Bridges:		Roadway Width:	Length:	Type:		
Box Culvert:		Span:	Rise:	Length:	Type:	
Culvert:		Diameter:	Length:	Type:		
Bridges and Culverts Sized		<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> N/A	<input type="checkbox"/> Hydraulic Analysis Pending		
Other Construction Features:						
ESTIMATED COST (In Thousands) *OPTIONAL						
	* COUNTY	* CITY	* STATE	* FEDERAL	* OTHER	TOTAL
						240.3
Project Length: (Nearest Tenth, State Unit of Measure) 0.3 miles			Project Number: M-263122\			
Signature: g4A;CW			Title: Jeff R. Palik Street Superintendent		Date: February 4, 2014	

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HOWARD COUNTY
NEBRASKA

POPULATION 148 (2000 CENSUS)

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Six Year Plan Maintenance

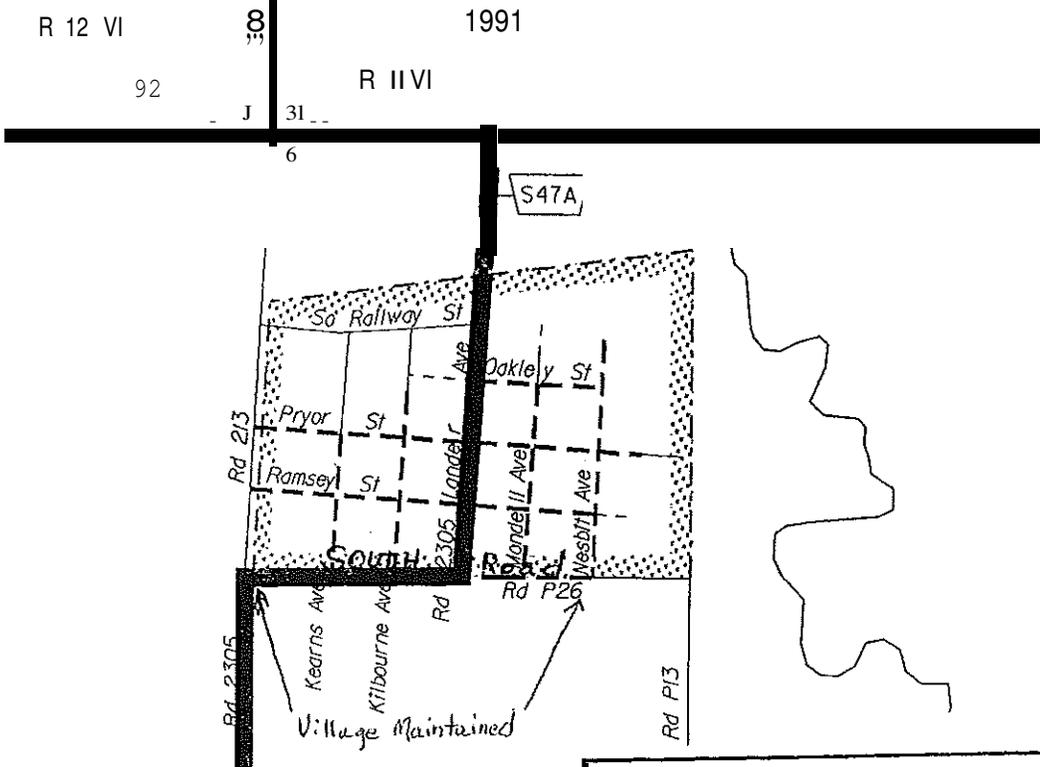
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HOWARD COUNTY
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POPULATION 148 (2000 CENSUS)
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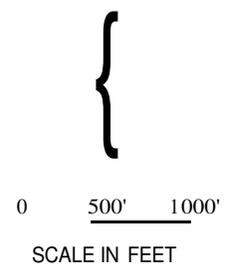
- STATE HIGHWAYS**
- Groveler Crushed Rock
 - Asphalt/Bituminous Surface
 - Concrete/Brick Surface
- CITY STREETS AND COUNTY ROADS**
- Primitive or Unimproved
 - Groveler Crushed Rock
 - Asphalt/Bituminous Surface
 - Concrete/Brick Surface
 - Interstate Numbered Routes
 - @ U.S. Numbered Routes
 - Vi] State Numbered Routes
 - State Numbered Spurs
 - V34C/ State Numbered links
 - AA St Unnamed Routes
 - In 116 Inventoried Numbered Routes
 - RO 767 911 NAMED/Numbered Routes
 - @ City Center
 - ... Corporate Limits

LEGEND

STATE FUNCTIONAL CLASSIFICATION:

- INTERSTATE
- EXPRESSWAY TM
- MAJOR ARTERIAL
- OTHER ARTERIAL
- COLLECTOR
- MINIMUM MAINTENANCE

All S — Hot Oil, or, ... Indtoawd Ar. Cl-f., d Ao Lookol



CORPORATE LIMITS AS OF 1994
STATE HIGHWAYS CORRECTED TO 1994



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