# BANNER COUNTY COMPREHENSIVE PLAN

2022

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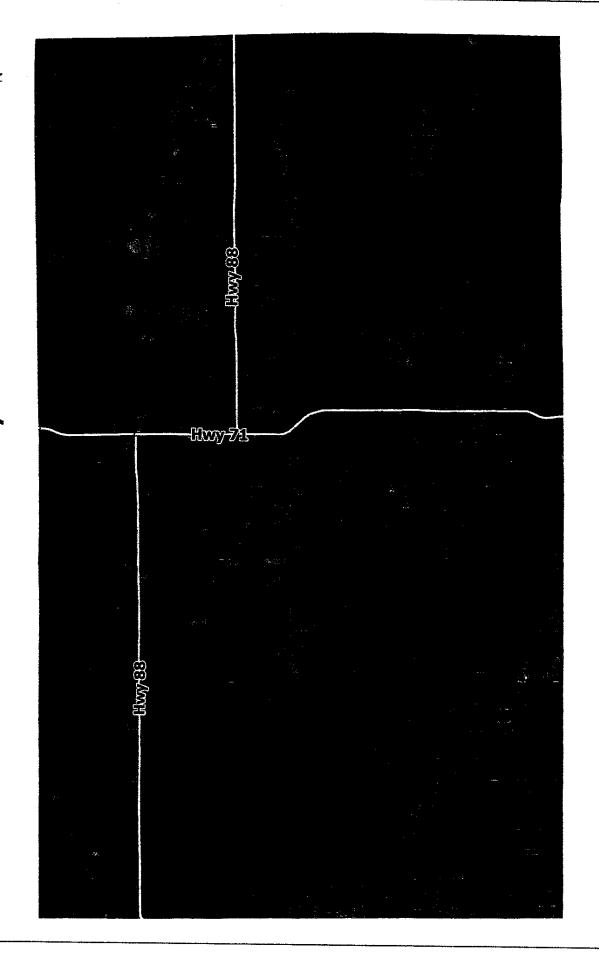
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### INTRODUCTION

The guiding vision for the Banner County Comprehensive Plan is to provide a flexible and adaptable approach to encouraging economic growth while respecting the values of our past, to achieve our common goals, and to plan for a future that enhances our high quality of life and the natural environment. This plan addresses all uses of development.

Our purpose is to protect the unique quality of life characteristics, to preserve our Western agricultural traditions, and to responsibly manage the process of communities through sensibly planned growth and the sustainable use of finite resources.

To best serve the population, our vision is to be flexible and adaptable to the wide variety of needs within the County's distinct regions. The County's recreational and outdoor opportunities, abundant natural beauty, scenic vistas, clean air, forests, grasslands, lakes, and waterways will be protected and preserved through the implementation of the Banner County Comprehensive Plan's goals and objectives.

Our Plan supports public policies that effectively protect the viability of all agriculture, open space, and our rural character. The Plan will support and inform responsible planning and management to provide compatibility among rural, residential, and commercial areas. By working cooperatively together, we maximize the efficient use of available and planned tax and other revenues, natural resources, and public services.

### HISTORY

The first Anglo-Americans to settle in what is now known as Banner County were cattle ranchers in the 1860's. The area was dominated by large open-range ranches until the herd laws of 1870 and 1887 forced the big cattle companies to move farther west.

The first homestead settlement in Banner County was in 1884. Soon afterwards homesteaders flocked into the Pumpkin Creek Valley. In 1888, Banner County was established when Cheyenne County was divided into five counties. Banner County received its name because the original founders of the county wanted it to be the banner county of the state.

In May, 1889, Harrisburg was platted and the following year a courthouse was erected. Settlers continued pouring into the county as it is believed that as many as 4,000 persons lived in the county in the early 1890s. The wave of immigration ceased after 1893 as a severe drought hit the area which resulted in people moving away by the dozens.

By 1900 the county's population had declined to 1,114. The Kinkaid Act of 1904, however, made it possible for persons to homestead a full section of land. This resulted in the population nearly doubling over the next twenty years as the county population was just over 2,000 in 1920. This, though, was the peak of Banner County's population during the 20th century as the population has declined every decade since 1920.

Oil was discovered near Harrisburg in 1951 and provided an economic stimulus to the county. By 1960 over 7,500,000 barrels of oil were produced annually from nearly 400 oil wells in the county. Nearly half of the county's economy was in oil production. Oil production in the county, however, declined rapidly after 1965. Under 800,000 barrels were being produced annually by 1975.

In 1963, the United States government ordered the development of nuclear missiles sites in the area. Twenty missile sites were built in the county during the decade and are all still active.

Today Banner County is primarily an agriculturally based county. Oil production still plays a small role in the county, but livestock, corn, wheat, and alfalfa are the primary products produced in the county.

### **ENVIRONMENT**

The relationship of the natural environment to land use and future development is an important factor to consider while making decisions concerning potential uses of the land. As an understanding has grown about the complexity of relationships between human settlements and the natural environment, conflicts between social and economic forces and the capability of the environment to support development have become more apparent.

Historical development trends nation-wide have located urban development along river corridors where the most fertile soils are generally found. The more recent development trends of an affluent society have placed additional demands upon the natural environment. This has resulted in pressure to allow more intensive uses of the land within, or adjacent to, natural and scenic areas. As a preliminary step in addressing these conflicts and to provide guidance for future decision making, this section of the plan provides a brief overview of the County's natural environment.

### **Geographic Location**

Banner County is located on the western edge of Nebraska in what is generally referred to as the Panhandle. It is bordered by Scotts Bluff County to the north, the state Wyoming to the west, Kimball County to the south, Morrill County to the east and Cheyenne County on the southeast corner. The county is rectangular in shape extending approximately 35 miles east to west and 21 miles north to south. The county encompasses approximately 478,208 acres or 747 square miles.

Denver, the nearest large metropolitan area, is located approximately 182 miles southwest of Harrisburg. Lincoln and Omaha are 408 and 464 miles to the east, respectively. Cheyenne is located approximately 88 miles to the southwest.

### Physiography

Banner County is in the High Plains section of the Great Plains physiographic province. The county's elevation varies from 5,340 feet near the state line in the southwestern part of the county to 3,840 feet in the northeast corner of the county by the North Platte River.

There are three major physiographic features in Banner County. The Cheyenne Tableland, a high plain remnant of the Laramie Range, covers the southern third of the county. The Wildcat Ridge, a steep sided remnant of the high plains, is in the very northern section of the county. Lying between the Cheyenne Tableland and the Wildcat Ridge is the Pumpkin Creek valley. This valley is an extension of the Goshen Hole lowland in eastern Wyoming.

### Climate

Banner County has a semi-arid climate as a result of its location near the center of a large continent and effects caused several features of relief. The Rocky Mountains and the Black Hills significantly affect climatic conditions experienced in the county by blocking and redirecting wind patterns and/or precipitation.

Banner County experiences extreme variances in temperature during the year. In winter, periods

of cold temperatures alternate with milder intervals that often occur as a result of tepid downslope winds. The average temperature in winter is 27 degrees (Fahrenheit) with the average daily low being 13 degrees. The lowest temperature in the county on record occurred in Harrisburg on December 22, 1989, when the temperature dipped to 44 degrees below zero.

The summer, conversely, is warm with periods of very hot weather. The relatively low humidity, however, makes the periods of hot weather more comfortable than in the eastern sections of the state. The average temperature in the summer is 68 degrees with the average daily high being 83 degrees. The highest recorded temperature in the county occurred on July 16, 2006, in Harrisburg when the mercury rose to 105 degrees.

Table 1 Banner County Monthly Average Temperatures (1991-2020)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Max.	40.96	43.11	52.54	59.49	68.77	80.88	88.39	86.63	77.86	63.14	50.54	40.75
Min.	14.73	15.92	23.40	30.45	40.68	50.26	56.79	54.32	44.58	31.79	21.88	14.28

High Plains Regional Climate Center, 2020: County Level Data. Access Dec 10, 2021. https://hprcc.unl.edu/datasets.php?set=CountyData#

Being sheltered by the Rockies, the average annual precipitation is 16.27 inches (High Plains Regional Climate Center, Banner County 1991-2020). The area is susceptible to severe droughts. Approximately two out of every ten years brings less than 5 inches of precipitation between April and September. Periods of heavy rainfall also occur as thunderstorms are experienced about 44 days each year. Occasionally these thunderstorms can be severe and be accompanied by tornadoes. Hailstorms tend to occur during the warmer periods of the year and can damage or even destroy crops in the area.

Snowfall in the area is frequent as an average of 40 days each year have at least one inch of snow cover on the ground. The number of such days varies considerably from year to year and the snow cover usually disappears during the milder winter periods. Blizzards with high winds and drifting snow can hit the area at times. The overall average seasonal snowfall in the area accumulates to 47 inches.

Table 2 Average Monthly Precipitation in inches (1991-2020)

Jan											
.29	.49	.93	1.77	2.81	2.45	2.04	1.69	1.44	1.29	.58	.49
High Dis	ine Doc	ional Ci	imata C	<u> </u>	200	L					

High Plains Regional Climate Center, 2020: County Level Data. Access Dec 10, 2021, <a href="https://hprcc.unl.edu/datasets.php?set=CountyData#">https://hprcc.unl.edu/datasets.php?set=CountyData#</a>

### **Wellhead Protection**

A wellhead protection area has been established that will maintain a safe source of drinking water for the residents of Harrisburg. Development that could possibly contaminate the well field is prohibited from locating near this area.

### **Water Resources**

The amount of surface and groundwater supplies in Banner County vary considerably throughout the county. The county has just two major streams with Pumpkin Creek and Lawrence Fork. Groundwater in the county is located primarily in the Brule and Chadron Formations. The development of irrigation has caused the water table in Pumpkin Creek Valley to drop.

### Flood Plains

During the 2019 bomb cyclone, flooding washed out many county roads impacting transportation, causing long detours, and impassible roads. The event caused economic loss in the county due to crop loss, lost time due to transportation issues, and increased county road department costs to repair and replace roads.

Banner County experiences a lot of flooding in the southern half of the county. Most often, this is flash flooding, not linked to riverine flooding. Typically, the worst flooding events occur in the spring, when snowmelt is combined with frozen ground, which does not allow infiltration. The biggest issue associated with flooding is low water crossings, which flood quickly during heavy rains. Much of the flood waters drain from Wyoming, which compounds the flooding issues in Banner County. The most common area of concern for the planning team is located on CR-17, and CR-6. When these particular areas flood, the county works to place barricades to prevent residents from attempting to cross the flood waters. Detours from CR-17 and CR-6 may result in a 25-mile detour. To help mitigate the risk of flooding the county is upgrading roads, installing more culverts, and upsizing existing culverts.

(Banner County Profile, North Platte NRD Hazard Mitigation Plan 2021)

### **Prime Farmland**

Preserving prime farmland for the exclusive purpose of agricultural use is important because these soils produce the highest yields with minimal inputs of energy and economic resources and farming them results in the least damage to the environment.

About 193,000 acres, or about 40 percent, of the county has the potential to be prime farmland with adequate moisture. Most of the prime farmland in the county is used for crops, primarily wheat.

### **Windbreaks**

Tree windbreaks continue to be a vital source of wind protection for both the residents and livestock along with helping to minimize erosion on the fine soils of Banner County. Unfortunately, many of the old Elm, Cottonwood, and Pine windbreaks are in a state of decline due to advanced age and disease. Although these old snags and associated grass strips still serve a lesser function, being proactive planting new and renovating these old Windbreaks will be vital in order to sustain the wind protection residents have come to enjoy.

Promoting diversity and a proactive approach will help ensure adequate trees at all stages of life exist so no lags are present between dead and dying trees and the growth of new ones. Promoting diversity will also help ensure that a disease to one species doesn't entirely wipe out all windbreaks because other species are present.

### Woodlands

The steep uplands of the county contain the largest concentrations of woodlands. The acreage of woodland in these areas, however, is small and scattered. Thus, commercial production of these woodlands is of limited value. Ponderosa Pine is the predominant tree in this area. Rocky Mountain Juniper is also common. The bottom lands such as Pumpkin Creek and Hackberry Draw have sparse populations of trees. Cottonwood and Peachleaf Willow are the predominate species on the bottomlands.

### Vegetation

Banner County is in short-grass country. The only native trees in the county are primarily Ponderosa Pine in the uplands and Cottonwoods in the bottomlands.

### Wildlife

Banner County has the necessary food, water, and shelter suitable to a large variety of wildlife. Some of the more common types of wildlife in the county include antelope, deer, moose, elk, big horn sheep, coyotes, badgers, skunks, rabbit, prairie dogs, raccoons, hawks, eagles, owls, pheasants, grouse, ducks, doves, pigeons, turkeys, and geese. Bob cats, mountain lions, and moose can also be seen in the county. Trout and largemouth bass are also common, especially in private owned ponds.

### Planning Issues

- \* Future development policy for the County should encourage in-filling and renewal to minimize the conversion of prime farmland to more intense land uses.
- \* Future development in flood prone areas should be discouraged
- \* The county's unique scenery and geological formations provide good potential for tourism development.
- \* The county's semi-arid climate and moderate winters provide an opportunity to attract future population growth.

### **POPULATION**

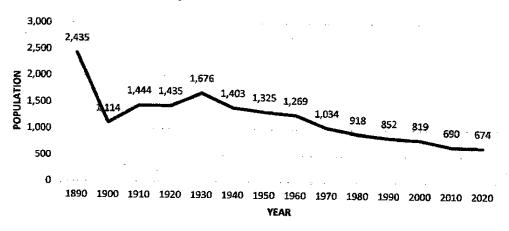
The dynamics of population change is one of the most important variables in the Comprehensive planning process. The county's physical environment has, and will continue to be, developed or preserved to meet the demands of a changing population. Growth or decline in total population, as well as structural changes within the population, can have a profound impact on future uses of the land and the provision of necessary public services and infrastructure.

Change in the total population is measured in two ways. The first of these is called natural change, or the number of births versus the number of deaths experienced. The second is net migration, or the number of persons moving into the area versus the number leaving the area. Both factors have had a tremendous influence on population change in Banner County.

### **Historical Population Change**

Banner County has experienced significant population change over the decades.

Figure 1 Estimated Population 1890-2020



US Census Bureau: 2020 Census Bureau American Community Survey

In general terms it can be stated that the economies of this rural-oriented county have not performed at a level that can sustain population growth. Since 1930, the county has experienced continual population loss. Several factors have influenced this, including a national trend of urbanization, improving agricultural mechanization, the need for farm consolidation, or larger farm operations to produce an adequate income; and a lack of industrial diversification which resulted in fewer employment opportunities, especially for young adults.

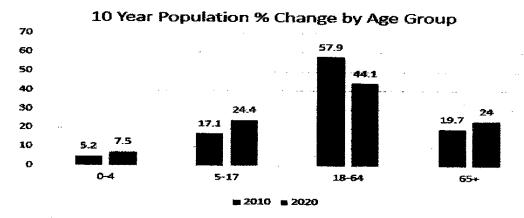
### **Population Composition**

An important consideration in planning for the future is the distribution of the population by age and gender. Trends and projections based upon the age and gender of the population can assist in identifying future needs in areas such as employment, housing, education, and recreation. To

evaluate changes in age group structure, the county's population was divided into four age group categories as follows: children (0-4), school age (5-17), adults (18- 64), and retirement (65 and over). (Figure 2)

From 2010 to 2020, changes among age groups occurred in all age groups. During this time period, the county's adult population decreased by 13.8%. Some of this decrease can be attributed to the young adults leaving to go to college or to find more lucrative employment elsewhere. Infants and school-age children increased over the 10-year period, as next generation families and new residents moving in from neighboring states.

Figure 2 10 Year Population Change by Age Group



US Census Data: Annual County and Resident Population Estimates by Selected Age Groups and Sex: April 1, 2010; (CC-EST2019-AGESEX) 2020 US Census: https://www.census.gov/quickfacts/bannercountynebraska

During the same time period, the number of retirement age persons increased by 4.3%. The increase in retirement age persons can be attributed to persons in the upper end of the middle age group shifting into retirement over the last ten years and a growing population of active retired moving to Banner County.

The percentage of males (48.5%) to females (51.5%) in the general population shifted in the last 10 years, with a slight increase in females as of 2020 county census data. (Table 3)

Table 3 Population by Gender, 10-year Comparison

Year	Total Population	Male %	Female %
2010	690	51.3	48.5
2020	674	48.7	51.5

US Census Data: Annual County and Resident Population Estimates by Selected Age Groups and Sex: April 1, 2010; (CC-EST2019-AGESEX) 2020 US Census: https://www.census.gov/quickfacts/bannercountynebraska

Race and ethnic diversity in Banner County are represented in 7.9% of the population. In 2000, Hispanics made up 3.3% of the minority population. There was a 2.5% increase in the number of Hispanics living in Banner County according to the 2020 Census data. (Table 4)

Table 4. Race and Ethnicity

	Banner County	State of Nebraska
White	97.6%	61.6%
Black	1.3%	12.4%
Hispanic	5.8%	18.%7
Asian	.3%	6%
Two or more races	.5%	10.2%

US Census Data: Population Estimates V2019 updated on 6/25/20 https://www.census.gov/quickfacts/fact/table/bannercountynebraska/RHI125219#RHI125219

### Planning Issues

- \* The population in Banner County has declined over the past ten decades. The smaller population base will place a heavier tax burden on the remaining taxpayers to maintain and improve public facilities.
- \* The area will continue to see an out-migration of young adults unless new, higher paying employment opportunities are provided.
- \* A growing elderly population who requires special services may be forced to migrate to communities that offer those services. Distance to medical services will have a significant influence on their decision.
- \* Many Banner County residents work outside of the county.

### **ECONOMY**

The future of a county is directly related to the economic well-being of the primary, or base, industries that employ its residents. The economic base of the county can be composed of a variety of industries that produce a product from raw material, add value to a product, or provide a service which can be exported. Base industries may include manufacturing, agriculture, health care, tourism, retail, and service industries. The money received from exports by these industries is distributed throughout the county in the form of wages, benefits, taxes, and purchased services, forming the base upon which the local economy is built.

A detailed analysis of the county's base industries is beyond the scope of this plan. However, a general understanding of the health of the county's base industries can be obtained by evaluating trends in income, poverty, employment, unemployment, and other factors. This type of analysis can provide useful background information to guide future decisions concerning both public and private investment in community and economic development activities.

### Income

Income data are generally used to compare the relative economic well-being between areas. Census data indicate that the county's per capita income (total income divided by the county's total population) has risen dramatically. In 1990, Banner County's per capita income was \$3,332 (30.89%) less than the state average. By 2020, Banner County's per capita income was \$2,577 (8.07%) less than state-wide incomes. (See Table 5) These data suggest that although not at the same pace as the state average, the rate of change in individual income levels in Banner County has risen significantly in the past 30 years.

The county's median family income grew over the last 30 years at approximately the same rate as family median incomes across the state. From 1990 to 2020 the county's median family income grew by \$31,688 (142.89%) while the State's grew by \$37,089 (142.56%). (Table 6)

Table 5 Per Capita Income

	Banner County	State of Nebraska	% Difference
1990	\$9,120	\$12,452	30.89
2020	\$30,628	\$33,205	8.07

U.S. Census Bureau, 2020 American Community Survey 5-Year Estimates; Banner County Comprehensive Plan, 2000.

Table 6 Median Household Income

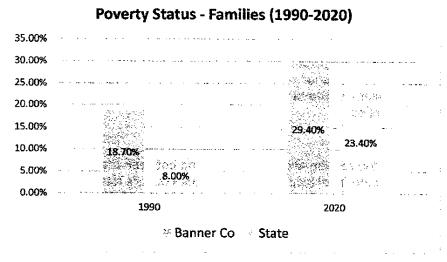
	Banner County	State of Nebraska	% Difference
1990	\$22,176	\$26,016	17.32
2019	\$53,864	\$63,105	15.66

U.S. Census Bureau, 2020 American Community Survey 5-Year Estimates; Banner County Comprehensive Plan, 2000.

### **Poverty**

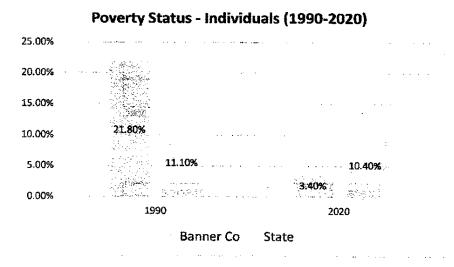
Changes in poverty rates over time provide insight into the health of the local economy. The number of families living in poverty increased by 10.7% over the past 30 years, with 29.4% of families in Banner County living below the poverty level. This is 6% higher than the state average (23.4%). The individual poverty rate in the county has dramatically decreased during this same time, from 21.8% to 3.4%. (See Figures 3 & 4)

Figure 3 Percent Below Poverty (Families), 1990-2020



U.S. Census Bureau, 2020 American Community Survey 5-Year Estimates; Banner County Comprehensive Plan, 2000.

Figure 4 Percent Below Poverty (Individuals), 1990-2020

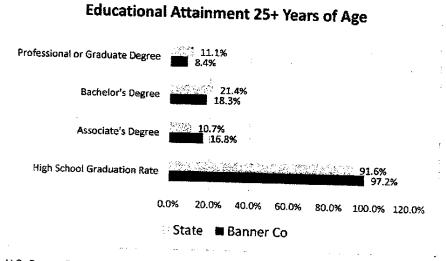


U.S. Census Bureau, 2020 American Community Survey 5-Year Estimates; Banner County Comprehensive Plan, 2000.

### Education

The percentage of the Banner County population age 25 and above with at least a high school education has steadily increased over the past several decades, exceeding the state-wide average by 5.6% in 2020 at 97.2%. The percentage of individuals 25 years and older with a college degree has increased in the past 20 years, from 12% to 18.3%. The state-wide average for Bachelor Degree holders older than 25 is 21.4%. The number of individuals over 25 who have earned an Associate's Degree is higher than the state average by 6.1%, which may suggest an increase in interest in programs and access to community colleges such as Western Nebraska Community College, in Scottsbluff, and Eastern Wyoming College in Torrington, Wyoming. The lower rate of county residents with college and advanced degrees may be partially attributed to the lack of professional jobs in the area causing an out-migration of much of the area's educated population. (See Figure 5)

Figure 5 Educational Attainment of Banner County Residents, 2020



U.S. Census Bureau, 2020 American Community Survey 5-Year Estimates; Banner County Comprehensive Plan, 2000.

### **Labor Force**

The size and composition of the area's labor force is an important factor to consider relative to the county's ability to foster new economic growth. The labor force is defined as all persons aged 16 and above who are either employed, unemployed, or available for employment. Of the 502 individuals over the age of 16 (US CENSUS 2020), 174 are 65 years and older.

For the purposes of this plan, data are reported for individuals 20-64 years old (See Table 7).

By removing those persons from the total labor force who are over 16 but not likely to be available for employment on a full-time basis (senior citizens and students), it is estimated that approximately 54 people are available as a potential labor pool above and beyond those that are currently employed.

However, not all of those available for employment will accept full-time positions. It is estimated that an 80% participation rate for men and a 70% participation rate for women is nearing the practical upper limit. The 2020 participation rates in Banner County for men and women were 88.4% and 77.2%, respectively.

Should a new industry need a substantial increase in employment, an addition to the work force would need to come from outside the county. This would put additional strain on housing resources.

Table 7 Percent of Individuals Employed by Gender

Gender	1990	2020
Мел	73.8%	88.4%
Women	53.2%	77.2%

U.S. Census Bureau, 2020 American Community Survey 5-Year Estimates, Banner County Comprehensive Plan, 2000

### Unemployment

The unemployment rate in the county according to the 2020 US Census was 1.5%. Changes in unemployment and unemployment rates can be analyzed to discover important trends in each area. The changes can be used to determine if new sources of employment exist, or sufficient new jobs have been created.

Unemployment figures, however, do not accurately illustrate total unemployment. Many persons who are not included in the labor force would be interested in employment if the opportunity existed. Also, rural areas have many people who are employed on a less than full-time basis. These people are considered to be employed when underemployed may best describe their situation. Underemployment may be a concern given the high rate of poverty among families in the county. (See Figure 3)

### **Employment**

Evaluating how employment is distributed among, and has changed within, the primary sectors of the economy provides an indication of the overall performance of each sector. This information also indicates the level of economic diversification within the county.

### **Employment by Industry**

Analyzing employment by industry reveals the level of diversification of an area and identifies which industries the area is most dependent upon. A healthy economy includes a range of industries to help sustain it during periods of difficulty within individual economic sectors.

The economy of Banner County has always been largely based on agriculture, which remains a staple industry and employs 36.3% of the workforce over 16 years of age. The number of county residents working in agriculture makes the economy of the entire county rely on the stability of the agricultural industry.

Public sector employment opportunities in the county exist through the school, the County Roads

Department, Court House, County Sheriff Department, and the US Post Office, accounting for approximately 22.5% of full and part-time jobs.

Other industries that provide employment for county residents exist outside of the county and among a small but growing number of individuals who work from their homes. (See Table 8)

The privately owned businesses in the county provide employment for 34 residents among the various sectors listed in Table 8. According to 2020 Business Patterns Census Data, Banner County had 6 business establishments. Table 9 presents the number of establishments, number of paid employees, and the annual payroll in thousands of dollars.

Table 8 Employment by Industry, Civilians 16 Years and Older

Industry	Civilians
	Employed
Agriculture, forestry, fishing and hunting	118
Educational services	30
Finance and insurance	24
Public administration	23
Administrative and support and waste management services	20
Health care and social assistance	17
Accommodation and food services	16
Manufacturing	16
Other services, except public administration	13
Wholesale trade	12
Retail trade	9
Construction	8
Utilities	7
Transportation and warehousing	6
Professional, scientific, and technical services	4
Information	2
Total	325

2020 US Census American Community Survey

https://data.census.gov/cedsci/table?q=employment%20by%20industry&g=0500000US31007

Table 9 County Based Businesses, 2012-2020

	Total Businesses	Number of Paid Employees	Annual Payroll (in Thousands)
2012	8	35	\$1,060
2018	7	38	\$1,253
2020	6	34	\$1,399

US Census Bureau. "2018 Census Bureau American Community Survey: Geography Area Series County Business Patterns 2018 Business Patterns." 2020 Census https://data.census.gov. North Platte NRD Hazard Mitigation Plan, 2021.

### **Commuting Patterns**

While many Banner County residents commute to work in other counties (40.4%), a growing number of residents work from home (24.7%) (see Table 10). According to the 2020 Census, the mean travel time to work for county residents is 27.4 minutes.

Table 10 Banner County Residents – Work Location

Work in Banner County	53.4%
Work outside Banner County	40.4%
Work in another state	6.2%
Work from home	24.7%

2020 American Community Survey-Commuting Characteristics: https://data.census.gov/cedsci/table?q=S0801%3A%20COMMUTING%20CHARACTERISTICS%20BY%20SEX&g= 0500000US31007&tid=ACSST5Y2020.S0801

### Strength of the Economy

The local economy relies on a few base industries. The strength of Banner County's economy can be obtained by monitoring trends in the various sectors mentioned above, as well as the potential for future economic development. Agricultural activity has the largest economic impact in the county.

### Agriculture

Agriculture is important to the economic fabric of Banner County and the state of Nebraska as a whole. Banner County's 193 farms cover 423,063 acres of land (Table 11), about 88.6% of the county's total area. Crop and livestock production are the visible parts of the agricultural economy, but many related businesses contribute as well by producing, processing, and marketing farm and food products. These businesses generate income, employment, and economic activity throughout the region.

Agricultural activity, however, is subject to several external factors. A comparison of agricultural product sales and cattle and calf sales between 2012 and 2017 shows a decrease in sales, while the number of farms has increased. (See Tables 12 & 13)

Table 11 Agricultural Inventory

Number of Farms	193
Land in Acres	423,063

United States Department of Agriculture, National Agricultural Statistics Server. 2019. "2017 Census of Agriculture – County Data." https://www.nass.usda.gov/Publications/AgCensus/2017/index.php. North Platte NRD Hazard Mitigation Plan, 2021.

Table 12 Market Value of Agricultural Products Sold – 5-year Comparison

	# Farms	Market Value of Ag Products Sold (in \$1,000s)	Average per Farm
2012	193	\$113,025	\$585,624
2017	239	\$100,509	\$420,542

United States Department of Agriculture, National Agricultural Statistics Server, 2019. 2017 Census of Agriculture - County Data."

Table 13 Cattle & Calf Sales - 5-year Comparison

	# Farms	# Cattle & Calves Sold	Market Value of Ag Products Sold (in \$1,000s)
2012	90	60,143	\$87,474
2017	102	51,142	\$78,562

United States Department of Agriculture, National Agricultural Statistics Server, 2019. 2017 Census of Agriculture - County Data."

### Minuteman Missile Sites

There are 20 Minuteman Missile sites in the county. Plans by the US Air Force to renovate/upgrade the sites beginning 2023 for approximately 7 years. Banner County will see an increase in traffic and equipment at each site during the 7 to 12-month renovation.

### Planning Issues

- \* County income levels are well below State-wide levels and the large percentage of residents in the agricultural sector illustrate the need to diversify the economy and create higher paying jobs. The economy of Banner County is reliant on just a few industries; agriculture and services leading the way.
- \* The current participation rate of the labor force is near the maximum so any new business may need to hire from outside the county.
- \* Increases in labor force participation rates over the past three decades are due in part to the shift toward service industries and the need for a second family income.
- \* Long term development strategies of promoting new homegrown and entrepreneurial business and industry should be expanded.
- \* Availability of reliable Internet for tech-based enterprises, remote work opportunities, and access to online education.

- \* Unemployment is not an issue in the community given the low unemployment rate. However, underemployment may be an issue due to the lower per capita and median family incomes in the community.
- \* Increased traffic on county roads and North-South routes.
- \* Housing availability for increased labor force north and south of the county.

### HOUSING

An important and sometimes deciding factor that potential residents observe when considering a move into an area is the availability of quality, affordable housing. It is also a major determinant in retaining existing residents who desire a larger or more upscale home.

Some residents may desire some sort of retirement housing or other specific type of housing. A community should provide a variety of housing units to fill the needs of a diverse population that includes first time home buyers and persons looking to retire.

### Quantity

A housing unit is defined as any living space that provides separate kitchen and bathroom facilities, i.e., an apartment, townhouse, or single-family home. In 2019, the county contained 327 housing units according to the census. The average household size in 2019 was 2.5 persons/household. County data for the 2022 tax year identify 289 residences.

According to census data estimates, 38 housing units were constructed in the county from 2000 to 2019. During the same time period, the county lost 145 residents. This indicates that even though the total population was decreasing new households were being started and new residents were moving into the county.

### **Quality and Condition**

The quality and condition of housing units in the community can be surmised by evaluating the age of housing units. Banner County has a considerably older housing stock than state-wide averages as 54.9% of the homes in the County were built before 1960. In comparison, 34.8% of homes state-wide were built before 1960. There are 19 homes in the county that were built in 1900 or earlier.

The county assigns a quality and condition rating (from 1-4) to each residence. The average rating is 2.5 or "Fair" with a handful at a rating above a 4. The condition rating also goes from 1-4 and the average for the county is a 3 or "Average."

### **Affordability**

The value of many Banner County's owner-occupied housing units are lower than state-wide averages (Table 14). State-wide, approximately 7.9% of owner-occupied units were valued at less than \$50,000 in 2020. In Banner County 6.8% of owner-occupied units were valued at less than \$50,000 in 2020.

Most homes in Banner County fall into the \$50,000 to \$99,999 range at 25.9%.

The percentage of Banner County homes valued in the range of \$100,000 to \$149,000 (10.5%) is just about half of the state average (20.3%).

Home values in the \$150,000 to \$299,999 range (26.5%) is below the state average for this price range (39.9%).

The median value of owner-occupied homes in Banner County is higher at \$172,900 compared to the state median value of \$164,000.

Table 14 Dollar Value of Owner-Occupied Homes, 2020

	State		Banner	
Owner-occupied units	507,291		162	
Less than \$50,000	39,944	7.9%	11	6.8%
\$50,000 to \$99,999	77,963	15.4%	42	25.9%
\$100,000 to \$149,999	102,831	20.3%	17	10.5%
\$150,000 to \$199,999	98,662	19.4%	19	11.7%
\$200,000 to \$299,999	103,910	20.5%	24	14.8%
\$300,000 to \$499,999	63,717	12.6%	20	12.3%
\$500,000 to \$999,999	16,507	3.3%	26	16.0%
\$1,000,000 or more	3,757	0.7%	3	1.9%
Median (dollars)	\$164,000		\$172,900	

U.S. Census Bureau, 2020 American Community Survey 5-Year Estimates

Less than 50% of Banner County's rental units fall in the low-cost rent category. In Banner County, 45.5% of the rental units have a rental rate of less than \$500. This rate is much higher than the state which has 11.6% in this cost range. The median rent paid across the state is \$857. There is no median rate identified for Banner County due to the low number of rentals and wide range of contract rent paid. Refer to Table 15 for details.

Table 15 Contract Rent in Dollars

	State		Banner	
Occupied units paying rent	244,280		22	
Less than \$500	28,218	11.6%	10	45.5%
\$500 to \$999	134,258	55.0%	3	13.6%
\$1,000 to \$1,499	62,586	25.6%	9	40.9%
\$1,500 to \$1,999	13,759	5.6%	0	0
\$2,000 to \$2,499	2,567	1.1%	0	0
\$2,500 to \$2,999	781	0.3%	0	0
\$3,000 or more	2,111	0.9%	0	0
Median (dollars)	\$857		\$	
No rent paid	15,092		50	

U.S. Census Bureau, 2020 American Community Survey 5-Year Estimates

### **Projected Housing Needs**

Housing projections are difficult to establish. There is some evidence that active retirees are among those who have taken advantage of lower housing costs and the other attractions of the county such as access to nature and less dense population. Anticipated developments in bordering counties such as the expansion of the facility at Clean Harbors in Kimball County and casino/race-track proposals still to be approved in Scottsbluff or Kimball Counties, may have an impact of housing needs. New residents have moved into homes in the town of Harrisburg, dwellings attached to county farms or ranches, and a small number of houses that have become available across the county.

There are no mobile or temporary housing sites in the county. Plans to update the 20 missile sites in the county by the US Air Force and the installation of Windmills for energy production may require temporary housing options for workers on these projects.

### Planning Issues

<sup>\*</sup>Access to housing for permanent and temporary labor force

<sup>\*</sup>Access to affordable housing for teachers, county workers, and retirees.

### **TRANSPORTATION**

The movement of people and goods to, from, or within a given area has more influence upon the way an area will develop than any other factor. The transportation system not only influences the location and types of development but dictates the land use activity to a certain extent.

### **Highways and Roads**

Highway 88 East and Highway 88 West are 35.5 miles. Highway 71 has two north and two south lanes that run 21 miles as the County's major north-south corridor. Spur 4A is also a paved road that runs four miles from Highway 71 to Harrisburg. There are 525 miles of gravel roads and five miles of asphalt in the County (Stegall Road) that are maintained by the Banner County Roads Department.

### **Hazardous Materials**

Banner County experiences a lot of chemical transportation on Highway 71 and Highway 88. According to the county's hazard mitigation local planning team, the specific chemicals which are being transported along these routes are unknown. To the south of Banner County is a chemical recycling/disposal site called "Clean Harbors", typically, trucks will utilize Highway 71 through the center of Banner County to bring waste to the recycling plant. These vehicles are the biggest concern for the county. If a large chemical spill were to occur the Nebraska Hazardous Incident Team or Scottsbluff Fire Department Hazmat Team would respond as there are no hazmat teams in the county. Some individuals in the county are trained on spill response but the county does not have the resources to respond.

(Source: North Platte NRD Hazard Mitigation Plan, 2021)

### Other Transportation Services

Banner County has no railroad, commercial airport, or navigable waterways. Kimball County Transit Services, located in Kimball, provides transportation to regional events, airports, and medical appointments by appointment from Harrisburg.

### Planning Issues

- \* One North-South and One East-West corridor limit local access and potential for development.
- \* Implement actions identified in the North Platte NRD Hazard Mitigation Plan
- \* Maintenance of unpaved county roads by county roads department.

### **PUBLIC FACILITIES**

### School

Banner County was the first county in the state to have a county-wide school district. The county has a high school, middle school, and an elementary school located in Harrisburg. The 4-day Preschool program is the only early childhood development program in the county.

### Community Impact

Banner County School provides meeting and activity space for local organizations such as 4-H, Mat Cats, and the Banner County Historical Society. Student organizations and sports are extracurricular activities that contribute to the community by developing character and leadership among students and opportunities for community members to interact at events. School programs include: FFA, National Honor Society, Cats Committed, STUCO, Speech, One Act, Quiz Bowl, MathCounts, Spelling and Geography Bee. The athletics roster includes football, basketball, volleyball, wrestling, track, and cross-country. The school facility is available to county patrons by request.

### **Employment**

Banner County School provides full-time employment with health care benefits to 31 county residents. This represents 70% of the school staff.

Eight county residents work part-time at the school as substitute teachers, substitute bus drivers, or summer and part-time custodial maintenance workers.

Eight county residents have retired from the school district and receive a school-based pension.

### Economic Impact

Cooperative bidding and purchasing agreements between Banner County School and Banner County Government realize substantial savings on Gas, Diesel, and Propane costs.

Banner County School contributes to the local economy by utilizing local service providers, such as Pack Rat Enterprises, Inc., Wildcat Surveying, Double L Country Store, and local contractors. The school radio communication is a cooperative agreement with the county roads and emergency services.

Approximately 25% of the Harrisburg Post Office sales and mail count can be attributed to Banner County School.

All of Banner County School's banking is through Banner Capital Bank, Harrisburg Branch.

### School Nutrition Program

Over 70% of Banner County School students are eligible for free or reduced lunch based on income or receipt of certain state or federal benefits. Banner County School participates in a National School Lunch and School Breakfast Program called the Community Eligibility Provision

(CEP), which provides free lunch and breakfast to every student enrolled in the school.

Banner County School participates in the Aging Office of Western Nebraska Senior lunch program, offering \$3.00 lunches to adults over 60 every day at noon during the regular lunch program service.

### **Emergency Services**

Residents of Banner County are served by dedicated volunteers in both the Fire Department and Emergency Medical Services.

Banner County Fire Department covers most of the county. McGrew Volunteer Fire Department covers the northeast section of about 9 square miles. Banner County has a Fire Chief and about 46 trained volunteers. The equipment includes a Class A pumper, 3 Type 6 fire engines, and 2 Type 4 fire engines. There are 30 fire hydrants located in Harrisburg.

The courthouse is equipped with a generator to provide shelter for extreme weather or power outages.

### **Parks**

The Wildcat Hills State Recreation Area and Nature Center is on the northern border of Banner County and Scotts Bluff County. The recreation area has some of the most scenic views in the state, in addition, it has hiking trails, camping, and picnic shelters. The Wildcat Hills Shooting Sports Complex is a new addition to the area.

### **Historical and Tourist Sites**

### Banner County Historical Museum

The Banner County Historical Museum is located in Harrisburg and is the home of the Flowerfield School. In partnership with Educational Service Unit #13 (ESU13) in Scottsbluff each Fall, area fourth graders attend school as it was in 1888. Students wear period clothing, bring their lunches in "lard buckets," and do penmanship with a quill pen and ink. Each year, approximately 800 students get a peek at what life was like in pioneer days.

The museum consists of a main building with hundreds of artifacts and articles from the prehistoric through the pioneer "sodbuster" days. Featured displays are a completely furnished kitchen, living room, and bedroom. An iron lung, a still, and many Native American artifacts are included in the collections. The museum grounds feature an old Monitor windmill along with a machine shed, a furnished log house, a church, a general store, the Flowerfield School building, a drug store, the first bank in Harrisburg, a gas station, and the latest addition is a large barn. A shelter with tables is available for picnics.

The museum hosts a Historical day on the first Saturday in June each year with a parade, various speakers, vendors, and games for the kids. Everyone is welcome to come and spend the day and then enjoy a carry-in supper in the evening.

The museum is open on Sunday from 2:00 p.m. until 5:00 p.m. from Memorial Day through Labor Day. The museum can be visited at any time by making an appointment with one of the board members. Phone numbers are displayed at the museum entrance.

### **Churches and Cemeteries**

### Churches

There are four churches in the county.

Harrisburg Community Church, Park St., Harrisburg

Good Shepherd of the Plains Episcopal Church, Park St., Harrisburg

Kirk Chapel, CR 14 & CR 61

Primitive Baptist Church, CR 8 approx. 2 miles west of Hwy 71

### Cemeteries

There are several cemeteries in Banner County-some with active boards and others that are used occasionally.

Pleasant Hill Cemetery (SW4 30-20-57), located in northwest part of the county, was laid out in 1888 and is an active cemetery which also includes several Civil war Union soldiers.

Gabe Rock (NE4NE4 3-18-57), located west of Harrisburg, was deeded as a cemetery in 1896 and is anactive cemetery.

Kirk Cemetery (NE4 30-18-53), located in the southeast part of the county, was deeded February 5, 1902 as the Swedish Mission Church and is an active cemetery.

Chalk Creek Cemetery (Hackberry) (NW4 12-18-53), was deeded March 10, 1911 and is active.

Cemetery of Harrisburg, located southeast of Harrisburg, was deeded February 22, 1895 and is used occasionally.

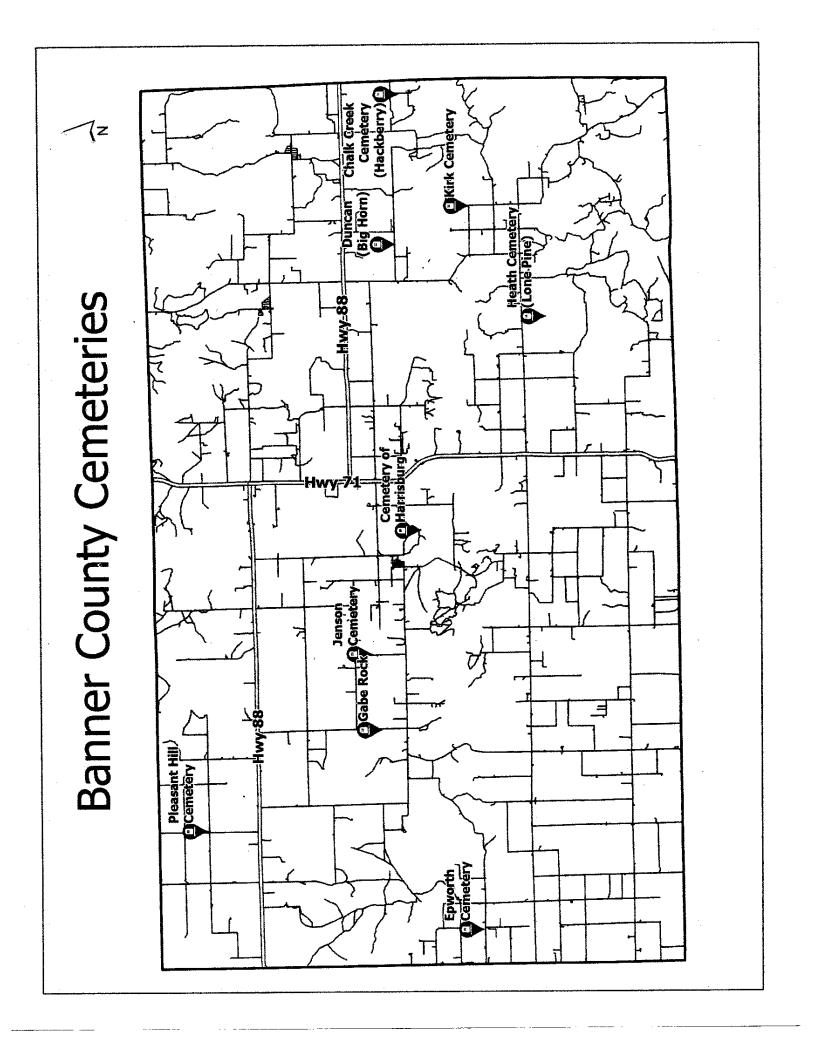
Epworth Cemetery (SE4SE4 20-18-58), was deeded February 14, 1910 and is used occasionally Deaton Hill has 4 burials and is inactive.

Duncan (Big Horn) (NW4 12-18-54), was deeded September 2, 1902, has 4 burials and is inactive

Heath Cemetery (Lone Pine) (SE4 4-17-54), was deeded September 28, 1901, reported to be the burial for Calvary soldiers killed in Banner County and is inactive.

Jenson Cemetery (NW 32-19-56) has 8 burials and is inactive.

Next page: Figure 6 Map of Cemeteries



### Water System

Public water in Harrisburg meets all federal and state government regulations on public drinking water and provides an abundant supply of quality water that consistently meets the needs of the village's residents and school.

The North Platte Natural Resources District (NPNRD) is charged with enforcing the groundwater regulations in Banner, Scottsbluff, Garden, Morrill, and southern Sioux counties. When pivots became economical and available to turn formerly dryland acres into irrigated acres, many pivots were installed in Banner County. A moratorium was placed on drilling new wells in Banner County in 2001 in order to preserve ground water and surface water irrigation.

Consequently, the Nebraska Department of Natural Resources considers much of Banner County overdeveloped: the equivalent of the Over Appropriated area (OA) of the NPNRD along the North Platte River. The vulnerability of the groundwater is measured in depletion levels to the river, or in this case depletions to Pumpkin Creek, which is a tributary of the North Platte River. Areas closer to the creek have a higher depletion factor than those away from the creek. A special management area was established along Pumpkin Creek and its tributaries with an allocation of 12 inches per acre per year of groundwater allowed to be applied to certified acres in the areas with the highest depletion factors. Further out away from the creek is the Fully Appropriated (FA) area, where there are no allocations, but all of the other rules (i.e., certified acres and flowmeters) must be followed. There are other ways of administering the allocation, as allocation periods allow for averages to be used spanning several years. Designated Allocation Units allow for uses of wells on multiple pivots.

In both the OA and the FA areas, acres of irrigated cropland are certified and the wells that supply them must be registered. No new acres of irrigated cropland may be added, and no new irrigation wells may be drilled unless they are a replacement of equal or less capacity than the original well, which must be decommissioned or reduced in capacity to less than 50 gallons per minute. There are pivots in the far west end of the county that cannot draw enough water to meet the allocation and must be farmed accordingly, some drawing 6-10 inches before running out of water.

Flowmeters are required in both the OA special management area and the FA, preferably measuring water use in gallons and acre-inches. These meters must be from the approved meter manufacturer list. The list is approved by the NPNRD Board of Directors. These meters are read every year starting October 1st, as that is counted as the end of the water year. This information is put into a database and ensures that the allocation is being followed. NPNRD services and repairs some types of meters on a rotating basis. Mechanical meters get the bearings greased and new gaskets. If a larger problem is encountered, the meters are removed and taken to the shop in Scottsbluff for repairs.

Early in the 20<sup>th</sup> century it was thought that perhaps an irrigation canal diversion project from the North Platte River or Horse Creek would come down through Banner County south of Lyman and there would be surface water irrigation in Banner County. Surface water canals and irrigation would also help recharge the groundwater as it does along the North Platte River. This scenario never developed, and most of Banner County remained dryland. There were irrigation rights on a limited number of acres using surface water from Pumpkin Creek. Several small dams were

installed for diversions of surface water from the creek. As the creek receded over time these irrigation rights became useless. Although it had run strongly up until the late 1960s, the groundwater development, changing geology, and changing weather gradually dried up Pumpkin Creek. This led to more steps being taken to preserve the groundwater, as the NPNRD was accused of not doing enough to alleviate the situation.

The red obelisk-shaped metal boxes seen near many roadways in Banner County are monitoring wells, used to monitor groundwater levels throughout the NPNRD. These are measured each spring and each fall to keep track of the changing groundwater levels in that area. Recently, a nitrate study has been initiated using samples taken from the monitoring wells to measure nitrates in the groundwater. Samples have been taken from all of these wells and will continue to be taken as part of this study. Some of the southern part of Banner County drains toward Lodgepole Creek instead of Pumpkin Creek. This in the FA area. The monitoring wells are located there and throughout the NPNRD to represent all drainages.

Within the last 3 to 4 years there have been some significant changes in geology or groundwater flow patterns in some parts of Banner County. Throughout much of its length, Pumpkin Creek is flowing again. In some areas, the creek had not flowed at that location in 40 years and is now flowing. Some certified acres are now flooded, causing landowners to change irrigation, certified acre, and pivot layouts. Water has come to the surface of the ground in some fields about 1 ½ miles south of Pumpkin Creek on both sides of Highway 71. Evidence of this is water standing on both sides of the highway. Cattails and young trees are growing in fields and pivots because it is too swampy for the farmers to work the field or for the pivot to complete the circle. This water slowly drains towards the creek but cannot escape quickly enough from the fields to drain them. Evidence of this water build-up is seen for another ¾ of a mile to the south, especially in the fields on the west side of the road.

No one seems to know what has caused these changes, although several pivots in Wyoming near Lagrange were shut down preceding this. This does not seem to account for enough water to be the answer. Groundwater is known to follow layers of Brule clay that underlie much of this area, so perhaps it has come from quite a distance. It is encouraging for many people along the creek in Banner and Morrill counties, but frustrating for farmers with developed fields that have lost the use of them.

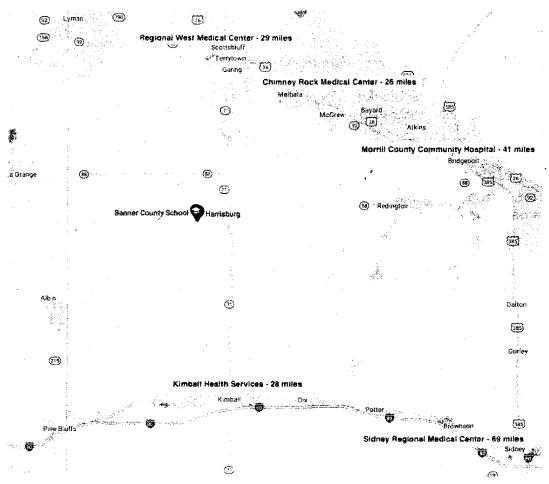
Information provided by Dave Christian of North Platte NRD, 6/30/2021

### Hospital

Banner County does not have a hospital, but the volunteer EMS service consists of 12 EMTs and two paramedics. They receive assistance from the Valley Ambulance Services, Kimball County Ambulance Services, Morrill County Ambulance Services, and Air Link's medical flight services.

Regional West Medical Center in Scottsbluff is the largest local hospital. There are hospitals and/or clinics in Kimball, Bayard, Bridgeport, and Sidney. Pine Bluffs, Wyoming, also has a clinic. (See Figure 6).

Figure 7 Map of Hospitals and Medical Centers



### **Internet Services**

Internet service is available throughout the county but is weak or unreliable in several areas. Service providers include Vista Beam, Viero, Verizon, Hughes Net, and Century Link. Starlink satellite Internet service is also available.

FirstNet is a high-speed wireless broadband network dedicated to public safety and is available to first responders.

### Planning Issues

- \*Water supply for expanded agricultural, residential, and commercial use
- \*County-wide reliable Internet access
- \*Access to medical and emergency services

### **LAND USE**

Covering 747.0 square miles, Banner County, Nebraska is the 30th-largest county in Nebraska by area. Banner County, Nebraska is bordered by Goshen County, Wyoming, Morrill County, Nebraska, Kimball County, Nebraska, Cheyenne County, Nebraska, Laramie County, Wyoming, and Scotts Bluff County, Nebraska.

### Agricultural

Banner County is recognized as a "Livestock Friendly" county by the state of Nebraska.

Winter wheat is the main crop in the county. Other crops include alfalfa, corn, oats, barley, millet, rye, dry beans, potatoes, and sunflowers. About 14 percent of the cropland is irrigated.

### Commercial

The only commercial land use outside of Harrisburg is a cafe along Highway 71.

### **Public Land**

This category includes land developed and maintained for recreational purposes such as schools, public parks and monuments, land and buildings owned by governmental entities for administrative purposes, service delivery, and utilities. In addition, land uses that serve other general community needs such as churches and hospitals are included.

Banner County has very little public land outside of Harrisburg. The Wildcat Hills Recreation Area is the only significant piece of public land.

### **Rural Residential Areas**

Most of the residential land use in Banner County are farming homesteads.

### Transportation

This category includes land platted and/or currently used for transportation purposes, specifically highways and roads.

### **Land Use Inventory**

Results of the land use survey indicate that there are approximately 477,510 acres of land within Banner County. According to the 2017 USDA Census of Agriculture, 88.5% or 423,063 acres, of land is in farms or ranches. In 1992, the county had 8.8% or 42,016 acres of federal reduction land.

Transportation rights-of-way account for approximately 6,424 acres or 1.3%. Public Land uses approximately 2,935 acres or 0.6%. The remaining 19,040 acres, or approximately 4.0%, are either in vacant or other land use. Table 16 describes current land use estimates.

Table 16 Banner County Land Use (Approximate Acres)

Land Use Type	Acres	Percent
Farms/Ranches (Improved & Unimproved)	1096	.2%
Irrigated Land	23,942	5%
Dryland	124,449	26.2%
Grassland	, 258,216	54.4%
CRP	34,314	7.2%
Other Ag Land	3,966	.8%
Other Non-Ag Land	167	.03%
Game & Parks	4,270	.9%
Roads & ditches	3,388	.7%
Residential (Improved & Unimproved)	250	.05%
Wasteland	20,899	4.4%
Total	474,957	

Source: Banner County Assessor. Abstract, Acres/Value by LCG March 19, 2022

## Land Use Projection

The amount of land needed to accommodate future growth is dependent upon a variety of factors. Population change, health of the area economy, land costs, and development policy will all affect changes in land use.

The future land use policy of this comprehensive development plan implies the philosophy of directing growth to areas that have the existing facilities to efficiently accommodate growth. Nonfarm rural development cannot occur without some expense to the county, whether direct or indirect. Non-farm rural development may also adversely affect farmers by raising agricultural taxes through speculation.

Factors to be considered when planning residential, commercial, or industrial use not in or adjacent to Harrisburg:

- A) Adjacent to adequately paved roads and in clusters to promote efficient development patterns where public and/or private facilities are present or planned to include: streets, water, sanitary sewer, and parks.
- B) A service district or other means are established to maintain and operate any public facilities

created in the area.

- C) Environmental constraints are applied to control erosion and sewage affluent.
- D) An analysis is made of both long- and short-term County expenses and revenues resulting from the project and it is shown that the County is not being obligated for direct or indirect services beyond the value of the revenues received from the project
- E) The development is not disruptive to existing agricultural activities.
- F) It is demonstrated that there is a recognized need for such development.
- G) The development is secure from fire, floods, and other dangers.

## Planning Issues

- \*Future residential, commercial, and industrial development should consider the impact on county infrastructure.
- \*Development in flood prone areas should be strongly discouraged to protect both the natural resources found in these areas as well as property owners.
- \*Any Conservation Easement Application made by a landowner must not conflict with the Comprehensive Plan and requires approval by the Planning Committee (first level) and County Commissioners (second level) prior to final (IRS) approval, according in NE Statute 76-2,112.

# **Chapter 10**

#### **ENERGY ELEMENT**

The Nebraska Legislature passed LB 997 in 2010. This requires all municipalities and counties, apart from villages, to adopt an energy element into their comprehensive plan.

Energy consumption comes in several forms, such as:

- Lighting our homes, businesses, and industries
- Heating our homes, businesses, and industries
- · Heating our water for homes, businesses, and industries
- Food preparation
- Transportation both personal and business related
- Agricultural equipment
- Recreation and Entertainment vehicular, computers, music, etc.

There are a number of activities that can be undertaken and pursued to make an impact in Banner County. The following information will perform at a minimum the requirements of LB 997.

## **Energy Infrastructure**

Electrical power is supplied by High West Energy, Inc. and Wyrulec Co. The overall distribution system is in good condition and updated and maintained as needed.

#### **Crude Oil Production**

Banner County is one of twenty two counties in Nebraska that produces crude oil. In 2021, Banner County's Production included the following.

Table 17 Crude Oil Production

COUNTY	OIL (BBL)	CASINGHEAD (MCF)	DRY GAS (MCF)	WATER (BBL)
Banner	91,542	2,392		932,124

Table 18 Oil Wells as of December 31, 2021

COUNTY	PRODUCING OIL WELLS	INACTIVE OIL	PRODUCING GAS	INACTIVE GAS	ACTIVE EOR and SWD WELLS	INACTIVE EOR and SWD WELLS
Banner	94	49			11	21

The above information is from the Nebraska Oil & Gas Commission.

There are two hazardous liquid pipelines that cross Banner County. Specific locations cannot be shown due to security reasons. The below map shows the general area.

Figure 8 Map of Oil Pipelines



Source: Pipeline & Hazardous Material Safety Administration.

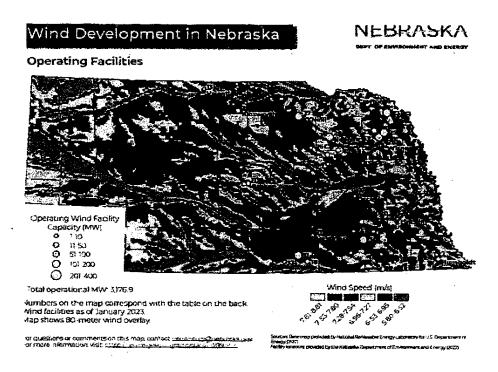
## RENEWABLE ENERGY

Renewable energy sources, according to most definitions include natural resources such as the wind, the sun, water, the earth (geothermal), and even methane (from natural resources or manmade situations) that can be used over and over again with minimal or no depletion. The most common source of renewable energy used in Nebraska is the wind, sun, water and earth.

#### Wind

According to the Nebraska Department of Environment and Energy, Nebraska ranks 15<sup>th</sup> in Wind Energy Facilities Installed Capacity. In 2015, Nebraska ranked 20th. Nebraska added a significant amount of wind capacity in recent years. From the map below, Banner County's Wind Speed (m/s) ranges from 5.80-6.52 to 7.81-8.81. As seen on the map, Banner County has some of the best wind resources in the state. Small- and large-scale wind systems should be encouraged in appropriate settings.

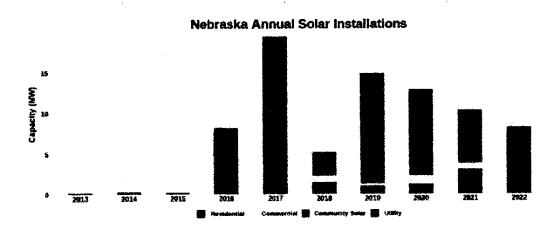
Figure 9 Wind Development in Nebraska



#### Solar

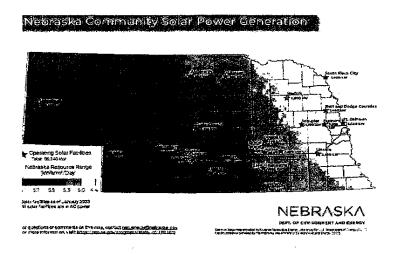
Nebraska is ranked thirteenth in the United States with the greatest energy potential from solar power, according to the sun index developed by the National Renewable Energy Lab. Yet, through Q4 2022, Nebraska was ranked 47th in the country for solar installations, with only 83 MW installed, or enough to power just under 10,000 homes.

Figure 10 Nebraska Annual Solar Installations



Based upon the diagram below there is a great solar potential in the state of Nebraska.

Figure 11 Nebraska Community Solar Power Generation



### **Net Metering**

LB436, signed in May 2009, established statewide net metering rules for all electric utilities in Nebraska. This 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. Below is the Nebraska Net Metering Report for 2021 for Banner County's electrical power suppliers.

Table 19 Nebraska Net Metering Report for 2021

UTILITY	TOTAL NUMBER OF QF 2021	TOTAL ESTIMATED RATED GENERATING CAPACITY OF QUALIFIED FACILITIES (kilowatts)	TOTAL ESTIMATED NET KILOWATT- HOURS RECEIVED FROM CUSTOMER- GENERATOR	TOTAL ESTIMATED AMOUNT OF ENERGY PRODUCED BY THE CUSTOMER- GENERATORS (kilowatt- hours)
High West Energy, Inc.	3	6	22.42	34,897.00
Wyrulec Company	3	45	0	48,996.00

## **Goals and Strategies**

- 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.
- 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.
- Reduce energy consumption within Banner County operations.
- Educate citizens regarding energy elements.

# Chapter 11

## **DEVELOPMENT PLAN**

This section of the plan contains a series of recommended goals, objectives, and policies that are based upon the information gathered and evaluated during the preparation of this report. The goals, objectives, and policies are intended to provide guidance to the county in the preparation and implementation of land use controls and development projects.

The section begins with a presentation of overall development goals, which are by necessity, broad and general in nature. The goals reflect the desires and aspirations of the county by describing basic concepts that should be used to guide all future development. Objectives are provided that coincide with each section of the plan. The objectives recommend specific actions and development programs addressing each topic area of these areas. Policy statements are then provided which offer specific guidance and direction for the formulation of future land use and development controls.

## **Development Goals**

- To ensure orderly and efficient growth of residential, commercial, industrial and public land uses in order to maintain, improve, and protect the general welfare of the residents of Banner County.
- 2. To protect and conserve the unique natural and physical resource base of the county.
- 3. To maintain and improve the county by undertaking improvements that will provide a high-quality living and working environment.
- 4. To maintain and foster a strong balanced economy capable of ensuring the economic future of all residents.

## **Development Objectives**

#### Environmental

- \* To develop design standards and/or monitor construction practices on soils that exhibit the need for special foundation design.
- \* To discourage development from locating in agricultural areas where conflicts may arise with farming and efficient farm practices.

### Population

- \* To create an economic environment that will encourage the retention of young adults and the location of new residents to the county.
- \* To ensure that facility and infrastructure improvements are developed with an awareness of the growing percentage of elderly residents.
- \* To expand economic efforts to reverse previous out-migration trends.

#### **Economic**

- \* To provide a broad range of employment opportunities to meet the needs of a diverse population.
- \* To encourage and facilitate the creation and/or location of businesses and industries that will provide wages resulting in higher per capita and median family incomes.
- \* To encourage and facilitate efforts to retrain and provide continuing education opportunities to the local labor force.
- \* To encourage and facilitate efforts to expand existing or attract new industries that will diversify the local economy.
- \* To encourage and facilitate efforts to expand and/or attract industries that employ higher percentages of professional, managerial, and technical occupations.
- \* To assist existing business and industry with their efforts to expand, diversify, and achieve higher growth rates.
- \* To ensure adequate public facilities, infrastructure, and housing opportunities are available to accommodate potential new residents and businesses.

### Housing

- \* To encourage the removal of dilapidated structures and renewal efforts in the county.
- \* To ensure that adequate land is available to meet future demands for new housing construction.

## Transportation

- \* To provide efficient circulation routes connecting all areas of the county with important social, economic, and education functions.
- \* To provide for the safe flow of vehicular traffic throughout the county.
- \* To carefully monitor the location of rural residential, commercial, industrial, and agricultural developments to ensure roadways are designed to safely carry potential traffic volumes.

#### **Public Facilities**

- \* To assess the need for improvements to existing, or the development of new, public facilities.
- \* To encourage cooperative efforts with local government and/or the private sector in the development of new public facilities or provision of public services.

### Land Use

- \* To encourage the efficient use of existing public facilities and infrastructure.
- \* To ensure that adequate amounts of land are available to accommodate future growth.
- \* To encourage adequate planning, plan revision, and policy development efforts are undertaken to preserve and improve the unique rural character of the county.

### Land Use Policy

#### General

- \* Planned residential, commercial, and industrial parks will be encouraged as opposed to strip development patterns.
- New residential, commercial, and industrial developments will be encouraged to locate within Harrisburg and other existing subdivisions.
- \* While Banner County encourages development to locate within Harrisburg and existing subdivisions and Harrisburg, it recognizes that some development in rural areas is both necessary and desirable. The following guidelines have been drafted to assist in reviewing proposed new development in unincorporated areas. In as much as possible, development should occur:
  - adjacent to adequately paved roads and in clusters to promote efficient development patterns, where public and/or private facilities are present or planned to include: streets, water, sanitary sewer, and parks.
  - in areas near existing employment centers and commercial areas so as not to encourage sprawl and unplanned scattered development.
  - where it is least disruptive to existing agricultural activities.
  - in stable environmental areas.
  - where it can be demonstrated that there is a recognized need for such development.
  - in a manner that secures safety from fire, floods, and other dangers and protects the health and general welfare of the public.
  - in a manner that avoids undue concentration of the population and prevents the overcrowding of land.

The provision of public infrastructure will be used to guide future development patterns.

#### Natural and Rural Environment

- \* In-filling and revitalization of existing developed areas will be encouraged to minimize the conversion of prime farmland to more intense urban uses.
- \* Landscaping and design standards will be incorporated into future commercial, industrial, and other high-density development projects, particularly when located along major thoroughfares and environmentally sensitive areas.

#### Residential

- \* Residential development will be encouraged to locate on existing lots within Harrisburg or in existing platted subdivisions. However, residential development may be allowed to locate on existing platted lots and small parcels of land in the rural areas of the county.
- Concentrated residential developments in rural areas will be encouraged to create a sanitary

sewer and/or water district.

- \* High density residential projects will be directed toward areas that have the infrastructure to accommodate such development.
- \* All rural residential lots, not located in a sanitary sewer and water district, shall be of sufficient size to ensure the safe installation and long-term operation of wells and leach systems.

#### Commercial

\* Landscaping, design, and signage schemes that coincide with historical and environmental areas will be encouraged for all developments located near such sites.

#### Industrial

\* Industrial uses will be promoted in rural areas where the need for such location can be demonstrated.

## Agricultural

- \* Large feedlots, farrowing pens, other confinement operations, and poultry farms not associated with a family farm are considered commercial endeavors.
- \* As a means of protecting both the operator (whether commercial or agricultural), the rural resident, and public recreational areas, a buffer area based on the number of animals should be established. All existing and proposed endeavors are encouraged to establish buffer zones.

# **Chapter 12**

#### **DEVELOPMENT STRATEGIES**

## **Environmental Strategies**

#### Increase the Number of Windbreaks

Windbreaks are an important factor in farm and ranch operations because they reduce calf mortality rates, reduce livestock feeding costs, reduce soil erosion and prevent roads from drifting shut while increasing crop productivity and irrigation efficiency. The county should attempt to increase the number of windbreaks in the county by promoting tree planting and programs such as Natural Resource District cost-share program.

## Protect Historical Resource Areas

Sites identified as historical resource areas should be protected from the encroachment of intense development. Preservation zones with specific development guidelines should be established around these sites to protect their value as a historic and economic resource.

## **Development Within Flood Plains**

Currently Banner County is in the process of being mapped for flood plains.

#### Preserve Park Areas

The Wildcat Hills Recreation Area and other natural areas should be protected from conflicting land uses that would potentially destroy their value as a recreational resource for county residents.

## **Demographic Strategies**

# Improve the Ability to Retain and Attract Young Adults

Young adults leaving the area is the major reason substantial population declines have occurred in Banner County in the past. Employment and social opportunities that are directed toward young adults need to be implemented.

## **Economic Strategies**

# Maintain and Expand the County's Economic Base

Banner County will always rely heavily on agriculture. However, the heavy reliance on agriculture has made the county very susceptible to economic downswings. The county should thus make efforts to diversify the economy.

## Develop Tourism Related Businesses

Banner County cannot receive much benefit from attracting tourism if tourists have nowhere to spend their money in the county. The county should consider promoting business development

geared toward tourism. Some areas in which the county has untapped potential is in development of bed and breakfasts, fee hunting, and dude ranching.

Banner County has an ideal setting for a bed & breakfast. The county's scenic beauty and isolation would be a perfect setting for persons wishing to spend a few days in a quiet country setting. There has also been a large increase in the number of travelers who wish to stay at bed & breakfasts.

The county's wildlife resources create an opportunity for farms and ranches to supplement their income from fee hunting. Fee hunting has become a big business in many surrounding states and provides many spin-off expenditures for items such as meals, lodging, and equipment.

## Regional Tourism Network

Banner County has two quality tourist attractions in the Banner County Museum, which hosts Flowerfield School and Historical Day in June each year, and Wildcat Hill Recreation Area. These sites alone, though, are not significant enough to attract visitors from a long distance. The entire Panhandle Region with sites such as Scotts Bluff National Monument and Chimney Rock, however, can attract visitors to the area. The county should focus its tourism efforts as part of the Panhandle Tourism Coalition. By attracting visitors to the entire Panhandle Region, Banner County can attract more tourists with fewer dollars than trying to market their county alone.

## Support Employment Opportunities in Neighboring Counties

Many of Banner County's residents work in Scottsbluff/Gering, Kimball, and Bridgeport. County officials should be supportive of efforts to create new employment opportunities in these communities.

## **Housing Strategies**

#### Retirement Housing

Although 23.8% of Banner County's population is over 65 years old, the county does not have any retirement facilities (U.S. Census Bureau, Population Estimates Program (PEP), 2021). This is causing many retirement persons to either occupy a family sized house or else move out of the county. The county should promote the development of low-income and market rate elderly housing facilities.

#### Capture Growth from Nearby Employment Centers

Employment opportunities in Banner County are limited, thereby decreasing the chance to capture in-migration. However, nearby areas are growing and are suffering from a shortage of housing. If the county is to grow in population, it will need to promote its rural quality of life to capture some of the growth from these communities.

#### **Public Facility Strategies**

## Share Equipment and Services with Other Counties/Communities

Banner County's small tax base makes it difficult to provide certain types of services or buy

needed equipment. Efforts to develop shared services agreements with larger cities and counties should continue to be pursued. This may provide improved services in the county at a reduced cost.

## Land Use Strategies

## Develop Nuisance Buffers Around Feedlot Areas

The existing feedlot operations identified should be protected from the encroachment of conflicting land uses.

## Establish Industrial/Commercial Areas

Future industrial or commercial development should consider the information contained in this Comprehensive Plan.

#### Private Land

The intent of this Comprehensive Plan is not to encroach upon the individual rights of county property owners.

On <u>Aug 21</u>	, 2023, it was moved	by Lyle	Auffman
and seconded by	_	that:	\$ U

In accordance with the laws of the State of Nebraska, we, the members of the Banner County Planning Commission, duly appointed and acting in accordance with the law, have prepared and do hereby adopt a Comprehensive Development Plan, to be the general plan for the improvement and development of Banner County, and herewith recommend approval and adoption by the Banner County Board of Commissioners in accordance with the law.

Charlie Singleton (Chair)

Lyle Huffman (Co-Chair)

Gary Beals

Tina Childers

Kyle Ann Hopkins lyle an Hopker

Ryan Olsen Absort

Joe Singleton

Tanner Groves