

Clay County

2025 – 2045 ***Comprehensive Plan***

ACKNOWLEDGEMENTS

This Comprehensive Plan is a compilation of efforts by many people, organizations, and government entities. This document expresses the great civic pride that exists in Clay County. Through the preparation and adoption of this document, the governing officials of Clay County have expressed their desire for orderly and efficient development in the area.

County Commission and Planning Commission

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The South Eastern Council of Governments prepared this document under the direction of the Planning Commission and County Commission of Clay County, South Dakota.

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I. INTRODUCTION

A. PURPOSE, AUTHORIZATION, AND ADOPTION

1. PURPOSE OF THE COMPREHENSIVE PLAN

The Comprehensive Plan is a general guideline. It neither endorses nor prohibits the development of a certain kind in a certain area. It is intended to guide Clay County in the implementation of zoning regulations, subdivision regulations, capital improvement plans, and other related policies.

There are three primary purposes of this document:

- (1) To address the planning requirements of state law while also providing a sound and logical basis for county growth management strategies; and
- (2) To provide some predictability about the potential land uses and timing of development so that both public and private sectors can make informed decisions in real estate and capital investments; and
- (3) To provide the planning commission and county commission with policies for future planning decisions and the methods and justification to control land use through the zoning and subdivision ordinance, the capital improvements program, and other enforcement controls.

2. AUTHORIZATION UNDER STATE LAW

Under 11-2-11 of South Dakota Codified Laws, "The county planning commission may prepare, or cause to be prepared, a comprehensive plan for the county including those municipalities within the county which are either unincorporated or which have requested by resolution of the governing board of such municipality to be included."

Pursuant to South Dakota Codified Laws 11-2-12, "The comprehensive plan shall be for the purpose of protecting and guiding the physical, social, economic, and environmental development of the county; to protect the tax base; to encourage a distribution of population or mode of land utilization that will facilitate the economical and adequate provisions of transportation, roads, water supply, drainage, sanitation, education, recreation, or other public requirements; to lessen governmental expenditure, and to conserve and develop natural resources."

3. DEVELOPMENT AND ADOPTION

The Clay County Commission has adopted this document in accordance with state law. In developing this Comprehensive Plan, the Clay County Planning Commission and a Comprehensive Plan committee have used background research, detailed inventories and assessments, and discussion sessions at several meetings and public hearings. The Comprehensive Plan is a general guideline, and **neither endorses nor prohibits** the development of a certain kind in a certain area. It is intended to guide the County in its implementation of zoning regulations, subdivision regulations, capital improvement plans, and other related policies.

4. AREA OF PLANNING JURISDICTION

The County shall, under South Dakota statutes, have the authority to control development in the entire County with exception of that area located within the Corporate Limits of the municipalities. Each municipality having filed comprehensive plans will work in cooperation with the County to control growth

and development near the city limits. The City of Vermillion is an exception, wherein the City exercises extraterritorial zoning jurisdiction outside of the established corporate limits.

B. INTERGOVERNMENTAL CONSIDERATIONS

A comprehensive plan affects not only those living in the study area but also (to some extent) those living and working throughout the Clay County area. As a result, the Planning Commission has taken input from:

1. All incorporated municipalities (3)
 - City of Vermillion
 - Town of Irene
 - Town of Wakonda
2. All School Districts within Clay County (6)
 - Beresford School District
 - Centerville School District
 - Gayville-Volin School District
 - Irene-Wakonda School District
 - Vermillion School District
 - Viborg-Hurley School District
3. Rural Water Systems, Rural Electric Cooperatives, and County Solid Waste Management
 - Clay Rural Water System
 - Clay-Union Electric Coop
 - Joint Powers Solid Waste Management
4. All Townships within Clay County (12)
 - Bethel
 - Garfield
 - Glenwood
 - Fairview
 - Meckling
 - Norway
 - Pleasant Valley
 - Prairie Center
 - Riverside Star
 - Spirit Mound
 - Vermillion

C. APPROPRIATE USE OF THE COMPREHENSIVE PLAN

South Dakota laws require that zoning districts and regulations must be in accordance with the Comprehensive Plan. This document intends to show the most appropriate use of land and policies to follow within the study area based on the potential for growth and development of the County.

II. DESCRIPTION OF THE STUDY AREA

The Clay County Comprehensive Plan area excludes the incorporated areas of Vermillion, Wakonda, and Irene. It also excludes the Clay/Vermillion Joint Jurisdictional Planning Area.

Clay County lies in southeastern South Dakota. It is bounded on the east by Union County, on the west by Yankton County, on the south by the Missouri River and the State of Nebraska, and on the north by Turner and Lincoln Counties. Clay County comprises approximately 412 square miles of land area and approximately 417 square miles within the full county boundary which includes the waters of the Missouri River. It is the smallest county by area in South Dakota. Most of the County's population—nearly 80%—reside in Vermillion.

Clay County is an agricultural county with three, incorporated municipalities and two unincorporated towns. The bulk of the County's population is located within the City of Vermillion which houses the University of South Dakota.

The County is comprised mostly of farmland along with some areas of prairie lands. Most of the urban development is located within the cities of Vermillion, Wakonda, and Irene.

III. DEMOGRAPHIC CONDITIONS

This chapter examines aspects of the demographic, social, and economic characteristics of the County. The data in this chapter comes from the United States Census Bureau's decennial census.

A. GENERAL DEMOGRAPHICS

According to the 2020 Census, Clay County gained in population from 2010 to 2020. Clay County's population was 14,967 in 2020. This was a 1,103 person increase from 2010 or a population gain of 7.96%.

Table 1. Population History (Source: U.S. Census Bureau)

Census Year	Population	% Increase	# Increase
1960	10,810	-	-
1970	12,923	+19.6%	+2,113
1980	13,689	+5.9%	+766
1990	13,186	-3.7%	-503
2000	13,537	+2.7%	+351
2010	13,864	+2.4%	+327
2020	14,967	+7.96%	+1,103

Clay County experienced a lower growth rate between 2010 and 2020 than most of the communities within the County and the State. The median age of the County is younger than that of the rest of the State. The numbers show that the young college population of Vermillion lowers the median age of the whole County. In 2023, the median income in Clay County was \$59,982 which is less than the median income for the State. This lower median income also seems to be affected by the college population in Vermillion.

Table 2. Current Demographic Statistics

	Irene	Vermillion	Wakonda	County	South Dakota
2010 Population	420	10,571	321	13,864	814,191
2020 Population	422	11,695	347	14,967	886,667
2010-2020 % Change	+0.47%	+10.63%	+8.1%	+7.96%	+8.9%
Median Age (2023)*	37.3	22.9	53.4	24.5	37.7
Median Household Income (2023)*	\$58,409	\$53,534	\$56,250	\$59,982	\$72,349

Source: *2023 American Community Survey 5-Year Estimates

Between 2010 and 2020, a gain of 533 people in the 0 to 19-year-old age group was the largest increase within any of the defined age cohorts in Clay County. The County also had gains in the 55 to 74 age range with an increase of 485 people. The only population loss was in the 20 to 54 age cohort which shrunk by 3 people.

Table 3. Population by Age

	0-19 years	20-54 years	55-74 years	75 & Over	Total
2000	3,778	7,596	1,436	727	13,537
2010	3,675	7,513	1,967	709	13,864
2020	4,208	7,510	2,452	797	14,967

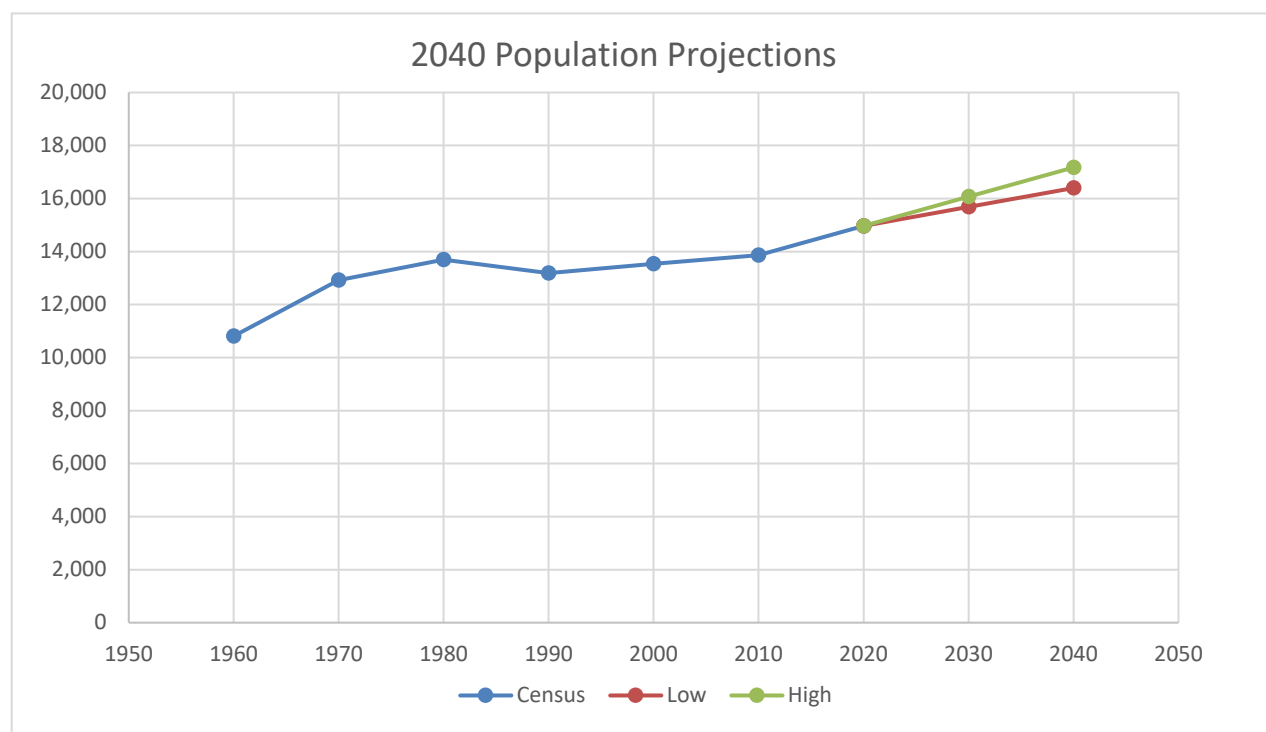
B. POPULATION PROJECTIONS

To explore future growth, a forecast of low and high growth rates was used to ensure sufficient plans are in place for all future growth scenarios. The rates used in this section were based on the average annual percent change using U.S. Census and American Community Survey data. The low forecast is based on the change between 2010 and 2020 and the high forecast was the rate of change between 2000 and 2020.

Based on projections through the study period, Clay County will have a population between 16,397 and 17,173 by the year 2040. Estimating future population helps in planning for community services, recreation, public facilities, and conservation needs to serve residents while retaining the essential community character and natural resources.

Table 4. Population Projections

Year	Census	Low	High
1960	10,810		
1970	12,923		
1980	13,689		
1990	13,186		
2000	13,537		
2010	13,864		
2020	14,967		
2030		15,682	16,070
2040		16,397	17,173



C. ECONOMY

The Clay County economy has historically been very reliant upon the agricultural industry. Agriculture is still particularly important; however, aspects of the industry have changed over the years and the number of farms has declined. More recent estimates show that agriculture employment may be increasing with an increased number of people participating in this type of employment in 2023.

Education services, health care, and social assistance are the largest employment types in Clay County, primarily due to the University of South Dakota in Vermillion. Retail trade employment types have seen steady increases in recent years, indicating a healthy economy within Clay County.

Table 5. Number of Employees by Industry Type

Industry Type	2010*	2015**	2020***	2023****
Agriculture, forestry, fishing and hunting, and mining	337	343	413	499
Construction	475	370	247	263
Manufacturing	413	471	465	593
Wholesale trade	82	96	85	109
Retail trade	986	1,028	1,003	1,047
Transportation and warehousing, and utilities	214	175	186	196
Information	128	156	222	239
Finance and insurance, and real estate and rental and leasing	310	334	213	242
Professional, scientific, management, and administrative and waste management services	407	267	331	423
Educational services, health care, and social assistance	2,717	2,580	2,994	2,772
Arts, entertainment, and recreation, and accommodation and food services	759	1,151	951	969
Other services, except public administration	211	289	245	272
Public administration	173	250	133	157

Source: *2010: American Community Survey 5-Year Estimates

**2015: American Community Survey 5-Year Estimates

***2020: American Community Survey 5-Year Estimates

**** 2023: American Community Survey 5-Year Estimates

D. EMPLOYMENT (CIVILIAN)

Clay County's low unemployment rate is higher than that of surrounding counties. In 2023, surrounding counties had the following unemployment rates: Lincoln: 1.8% (766 unemployed), Turner: 1.3% (61 unemployed), Union: 3.5% (318 unemployed), and Yankton: 1.6% (191 unemployed).

Table 6. Employment and Labor Force

	Labor Force	Employed	Unemployed	Unemployment Rate	South Dakota Unemployment Rate
2010*	7,660	7,212	448	5.8%	6.0%
2020**	8,183	7,488	695	8.5%	3.5%
2023***	8,492	7,781	711	8.4%	2.6%

Source: *2010: American Community Survey 5-Year Estimates

**2020: American Community Survey 5-Year Estimates

***2023: American Community Survey 5-Year Estimates

IV. INFRASTRUCTURE ASSESSMENT

A. TRANSPORTATION

Transportation planning for streets and roads begins with understanding the relationship between land use and road network. Streets and roads balance between the functions of mobility and land access. Mobility is the primary function of the interstate highway network. Land access to farms and residences is the primary service of local roads. In between these two extremes, mobility and land access vary depending on the function of the road network.

Functional classification is the process of grouping streets and roads into classes according to the function they are intended to provide. Listed below is Clay County's functional classification system. The classification is according to the rural system's classification as developed by the Federal Highway Administration.

1. **Principal Arterials** - serve longer trips of a statewide or interstate nature, carry the highest traffic volumes, connect larger urban areas, provide minimal land access, and includes both interstate and non-interstate principal arterial highways.
2. **Minor Arterials** - interconnect the principal arterials, provide less mobility and slightly more land access, and distribute travel to smaller towns and major resorts attracting longer trips.
3. **Major Collectors** - provide both land access and traffic circulation connecting county seats not served by arterials and connect intra-county traffic generators like schools, shipping points, county parks, and important mining and agricultural areas.
4. **Minor Collectors** - collect traffic from local roads and bring all developed areas within a reasonable distance of a collector road.
5. **Local Roads** - provide direct access to adjacent land and the highest classified roads and serve short trips.

A Major Street Plan includes a hierarchy of street classifications for use in identifying and prioritizing the transportation needs of Clay County. The Major Street Plan is listed as **Map 1. Table 7** identifies the transportation maintenance and improvement projects for the next five years, as outlined in the Statewide Transportation Improvement Program (STIP).

Table 7. Transportation Maintenance and Improvement Projects

Year	Location	Project	Project Action Length (in miles)	Source
2025	Structure 3.5 N & 3.2 W of Vermillion on 314 th St over Clay Ck Ditch	Structure Removal, PE	0.2 miles	Tentative 2025-2028 STIP
2025	Structure 3.5 N & 1.3 E of Vermillion on 314 th St over the Vermillion River	Structure Removal, PE	0.2 Miles	Tentative 2025-2028 STIP
2025	I29P	Asphalt Surface Treatment	NA	Tentative 2025-2028 STIP
2025	Wakonda – Along 2 nd St from Nebraska St to Ohio St, along Ohio St from 2 nd St to approximately 100' S	PCC Sidewalk, CE	0.0	Tentative 2025-2028 STIP
2026	SD19 – Street 1.2 N of SD50 Junction over Vermillion River, SD50 – Street 2 NW of Vermillion over SD50WL/BNSF RR	Scour Protection, Berm Repair	0.0	Tentative 2025-2028 STIP
2026	I29N – From S of Exit 38 to Exit 47	Mill, AC Resurfacing of Shoulders & Ramps	NA	Tentative 2025-2028 STIP
2026	I29S	Install Dynamic Message Boards	0.0	Tentative 2025-2028 STIP
2026	I29P	Rout & Seal	NA	Tentative 2025-2028 STIP
2027	SD1806	Underwater Bridge Inspections	0.0	Tentative 2025-2028 STIP

Source: 2025-2028 South Dakota Transportation Improvement Program

B. RAILROADS

Railroads are the most efficient transportation mode for moving goods on the earth's surface. Railroads are of particular importance for the movement of commodities that are heavy and moved in bulk over long distances where the transportation spend represents a large portion of the total delivered cost. The Burlington Northern/Santa Fe Railroad operates in Clay County going through Burbank, Meckling, and Vermillion.

C. WATER FACILITIES

Since its creation in 1975, Clay Rural Water System (CRWS) has been providing water to all of Clay County, two-thirds of Union County (northwest portion), a portion of Yankton County, and a small portion of rural Lincoln and Turner Counties.

CRWS is composed of two Water Treatment Plants (one in Clay County and one in Union County), one ground storage reservoir, six water towers, five booster stations, and two interconnect systems. One of these interconnect systems is located in the Vermillion area while the other is located near the I-29 Beresford exit.

CRWS is dependent upon the interconnect systems for reserve water supply when peak levels of use occur.

Incorporated municipalities receiving CRWS services include Wakonda and Gayville. The unincorporated areas of Meckling and Burbank are also serviced by CRWS. In southern Union County, the System serves four housing developments around McCook Lake and several rural hookups.

D. WASTEWATER FACILITIES

No rural sanitary districts currently exist in Clay County, nor are any planned for the twenty-year study period. Irene, Wakonda, and use lagoons for their wastewater services. A lift station is used for all three lagoons. Vermillion also uses a city wastewater treatment plant which is a secondary activated sludge facility. It is designed to accommodate flows of two million gallons per day. Wastewater is pumped to the treatment facility from the city by two pumping stations. The unincorporated areas of Burbank and Meckling use septic tanks.

E. SOLID WASTE MANAGEMENT

In 1976, a joint effort by Clay County and the City of Vermillion selected and developed a landfill site on Bluff Road four miles north of Vermillion. In 1991/92, this site officially closed, and a new expansion site opened directly to the east of the first site. The new expansion site was engineered under Federal and State regulations and approved by the South Dakota Department of Agriculture and Natural Resources (DANR).

The construction and operation of the current landfill site meet State of South Dakota rules and regulations as accepted for state primacy by the federal Environmental Protection Agency. DANR inspects the site annually. The landfill expects to provide solid waste disposal until approximately 2080.

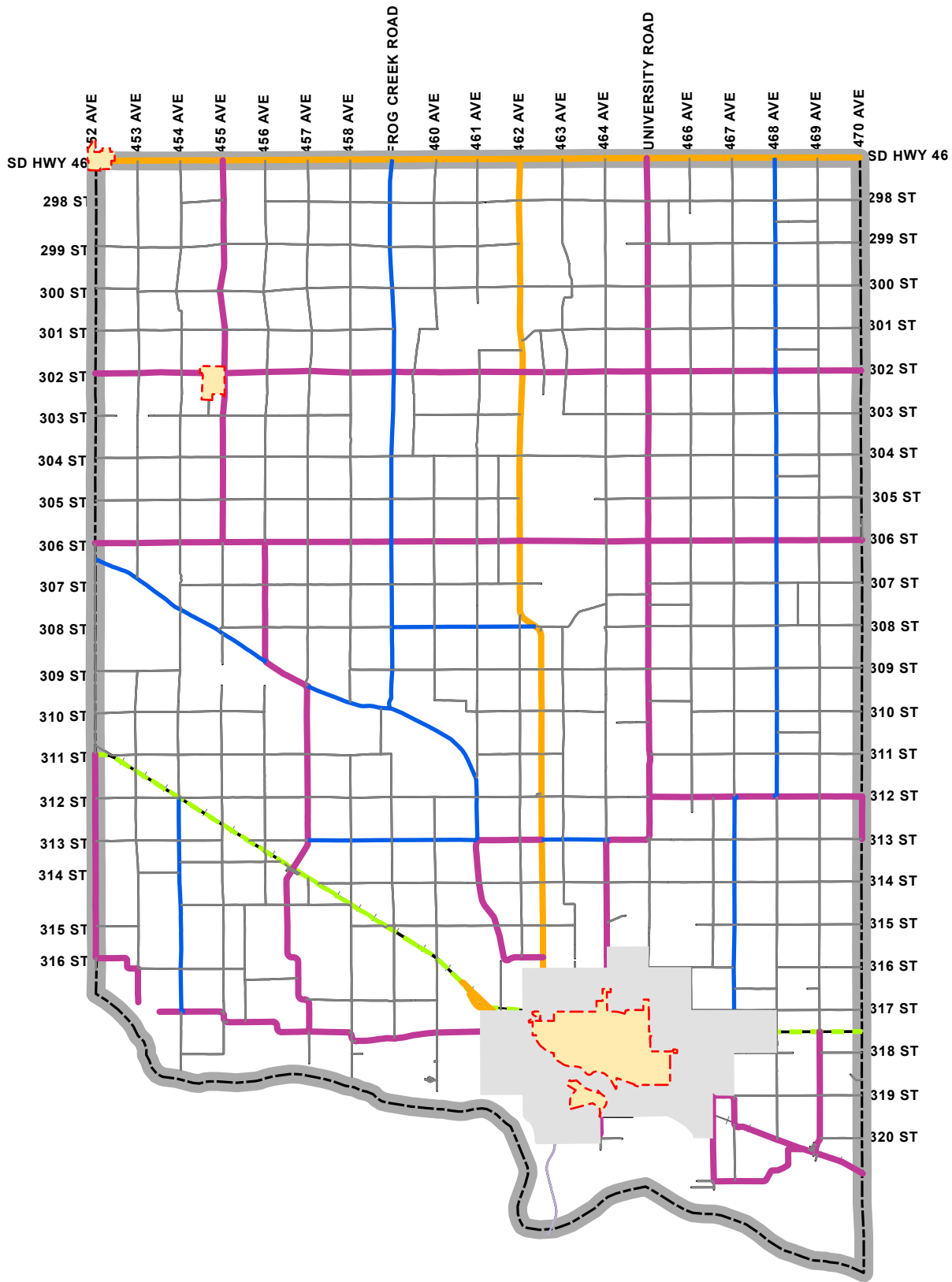
The Missouri Valley Recycling Center is a drop-off facility provided through the cooperative effort of cities and counties in southeastern South Dakota. The facility is available to the public and businesses located in Clay and Yankton County, as well as portions of Union County, and is operated through the Joint Powers Solid Waste Authority. The sale of the materials and landfill fees supports the recycling center.

F. RURAL ELECTRIC

Clay-Union Electric cooperative was established in 1935 by a group of rural residents who were trying to improve the quality of life for their families. Clay-Union Electric helped provide an economic boost that would play a vital role in establishing a rural economy for future generations. Clay-Union Electric provides cost-based services to members who are mostly residents of Clay, Union, and Yankton counties. Municipalities serviced by Clay-Union Electric include Burbank, Gayville, Meckling, Vermillion, Volin, Wakonda, and Yankton.

Clay-Union Electric is part of a three-tiered system of electric cooperatives that provide a balanced supply of traditional generation along with a growing renewable portfolio. The cooperative family is positioned to serve all kinds of residential and commercial development with safe and reliable service through its redundant transmission network.

Clay-Union Electric continues to covert its distribution network from overhead to the underground while planning for future growth within its defined service territory. Clay-Union Electric expects growth in developments along the Missouri River and the highway corridors and will support its members' continually expanding needs. Clay-Union Electric provides financial assistance through the Rural Electric Economic Development Fund to help the growing need for affordable housing developments in their service territory.

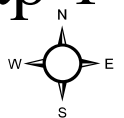


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- 02 - Rural Other Freeways and Expressways
- 04 - Rural Other Principal Arterials
- 06 - Rural Minor Arterial
- 07 - Rural Major Collector
- 08 - Rural Minor Collector
- 09 - Rural Local Roads

Clay County Comprehensive Plan Major Street Plan

Map 1



0 1.5 3 6
Miles



V. SCHOOLS, PARKS, AND OPEN SPACE

A. SCHOOL FACILITIES

Clay County has six K-12 school districts within its borders. The following is a synopsis of each school district including enrollment, facility plans, and other relevant issues affecting the schools. Also located in Clay County is the University of South Dakota, the Flagship University for the state of South Dakota.

Vermillion Independent District Number 13-1 **Enrollment: 1,356**

Vermillion School District covers 179 square miles in Clay County and Union County with an enrollment of 1,356 students. The enrollment experienced steady growth over the last 6 years. The district is made up of one elementary school (PreK - Gr. 5), a middle school (Gr. 6 - 8), and a high school (Gr. 9 - 12). All school facilities lie within Vermillion city limits. Approximately 400 of students ride the bus to and from school with routes extending beyond Vermillion. Students at Vermillion School District have access to a variety of rigorous curricula taught by veteran staff. Graduates of Vermillion High School are awarded advanced educational opportunities and for several years scholarships totaling over a million dollars. Partnerships with Clay County, the City of Vermillion, the University of South Dakota, and many other groups help Vermillion schools thrive. This past decade, the district has added the following additions:

In the fall of 2024, the Vermillion School District constructed a new elementary school as an addition to the middle school. This school consists of grades PreK through 5th. Austin elementary is still in use by the Vermillion boys and girls club, and Jolly elementary was given to the City of Vermillion and demolished.

In the fall of 2020, the Vermillion School District moved the Central Administration Office and the Area Alternative School to the high school. The 6,000 sq. foot addition houses office spaces, additional classroom spaces, and a new security entrance to the high school.

Present/Future Issues:

The school has a steady increase in special needs students, causing an increase in the need for more special education teachers. With a healthy business climate and three years of increased enrollment, the school district is looking to the future needs of the facilities within the community. (Source: Damon R. Alvey, Superintendent)

Beresford School District 61-2 **Enrollment: 633**

The Beresford School District covers 205 square miles in Clay, Union, and Lincoln, Counties with an enrollment of 633 students. The district is made up of one elementary school (JK-Gr. 5), a middle school (Gr. 6-8), and a high school (Gr. 9-12). The Beresford School District has experienced a steady and growing enrollment during the past decade. Approximately 120 students ride the bus to and from school. This past decade, the district has added the following new additions:

South Campus (Grades 6-12)—school shop addition, restroom/concessions building at the stadium, ticket booth and new gating at the stadium, new storage shed at the stadium, HVAC upgrades, new gym bleachers, removal of bus barn and addition of new bus barn, and parking lot repaving.

North Campus (Grades PK-5)—cafeteria/student commons addition and HVAC upgrades.

In October 2019, the Beresford School District had an \$11 million bond election to build a performing arts center, auxiliary gym, lobby, and fitness center at its south campus. The voters defeated the bond by a 2:1 margin.

Present/Future Issues:

Since 2020, the district has experienced a decline in enrollment which has resulted in adjusting the general fund for the district. Although fully staffed, the school district has experienced challenges for staffing while competing with neighboring school districts due to decreasing enrollment and decreasing the general fund. (Source: Dustin Degen, Superintendent)

Irene-Wakonda School District 13-3**Enrollment: 293**

The Irene-Wakonda School District covers 284 square miles in Clay, Yankton, and Turner Counties with an enrollment of 293 students. The district is made up of one school in Wakonda, (PreK – Gr. 6), and one school in Irene (Gr. 7-12).

The District runs five bus routes and shuttle buses between the two facilities.

Present/Future Issues:

In the summer of 2016, the 1922 Wakonda school was demolished a new addition and a paved parking lot was built in the existing space.

The new addition consisted of replacing existing library space from the demolition and the following: secured entrance from the paved parking lot, memorabilia/meeting room, preschool room, locker room, referee room, and storage room.

The Irene site is currently in the process of designing and bidding on a 22,000 sq. foot addition. This will include a new gymnasium, concessions, a band/vocal room, and a shop (building trades area with classroom). (Source: David Hutchison, Superintendent)

Centerville School District 60-1**Enrollment: 255**

The Centerville School District covers 139 square miles in Clay and Turner Counties with an enrollment of 255 students. The school district has seen a decrease in enrollment over the last few years. The district is made up of one school facility (Gr. K – 12). The original school burned in 1951 and was replaced at that time. This structure is in good condition today and has no plans to replace any facilities. The Centerville School District plans for the following additions in the future:

Present/Future Issues:

Decreased enrollment will come with challenges as the Centerville School District will reduce the general funds, however no staffing changes are planned. The Centerville School District is in the planning stages of adding a career and technical education facility, but the school district must find funding for this with the general fund being reduced. The Centerville School District does hope to build capital outlay funds for this project. (Source: Eric Knight, Superintendent)

Viborg-Hurley School District 60-6**Enrollment: 418**

Viborg-Hurley School District 60-6 operates mostly in Turner County with a small area in Clay County along 455th Avenue and 297th Street. The school district covers 206 square miles with an enrollment of 418 students. The school district is made up of two elementary schools (Viborg-Hurley PreK - Gr. 4, Cameron Colony PreK - Gr. 8), one middle school (Gr. 5 - 8), and one high school (Gr. 9 - 12).

Gayville-Volin School District 63-1**Enrollment: 289**

The Gayville-Volin School District covers 72 square miles in Clay and Yankton Counties with an enrollment of

289 students. The school district is made up of one school that encompasses grades k-12.

B. PARKS AND OPEN SPACE

County Park

Clay County Park is 198 acres in area, with an additional 111 acres run by the state of South Dakota. Clay County Park borders the Missouri River, which establishes a natural boundary between South Dakota and Nebraska.

State Park

Spirit Mound State Park is located within Clay County. Spirit Mound State Park has 313 acres of prairie around a prominent hill on the Great Plains. Spirit Mound State Park is approximately 7 miles north of Vermillion off State Route 19.

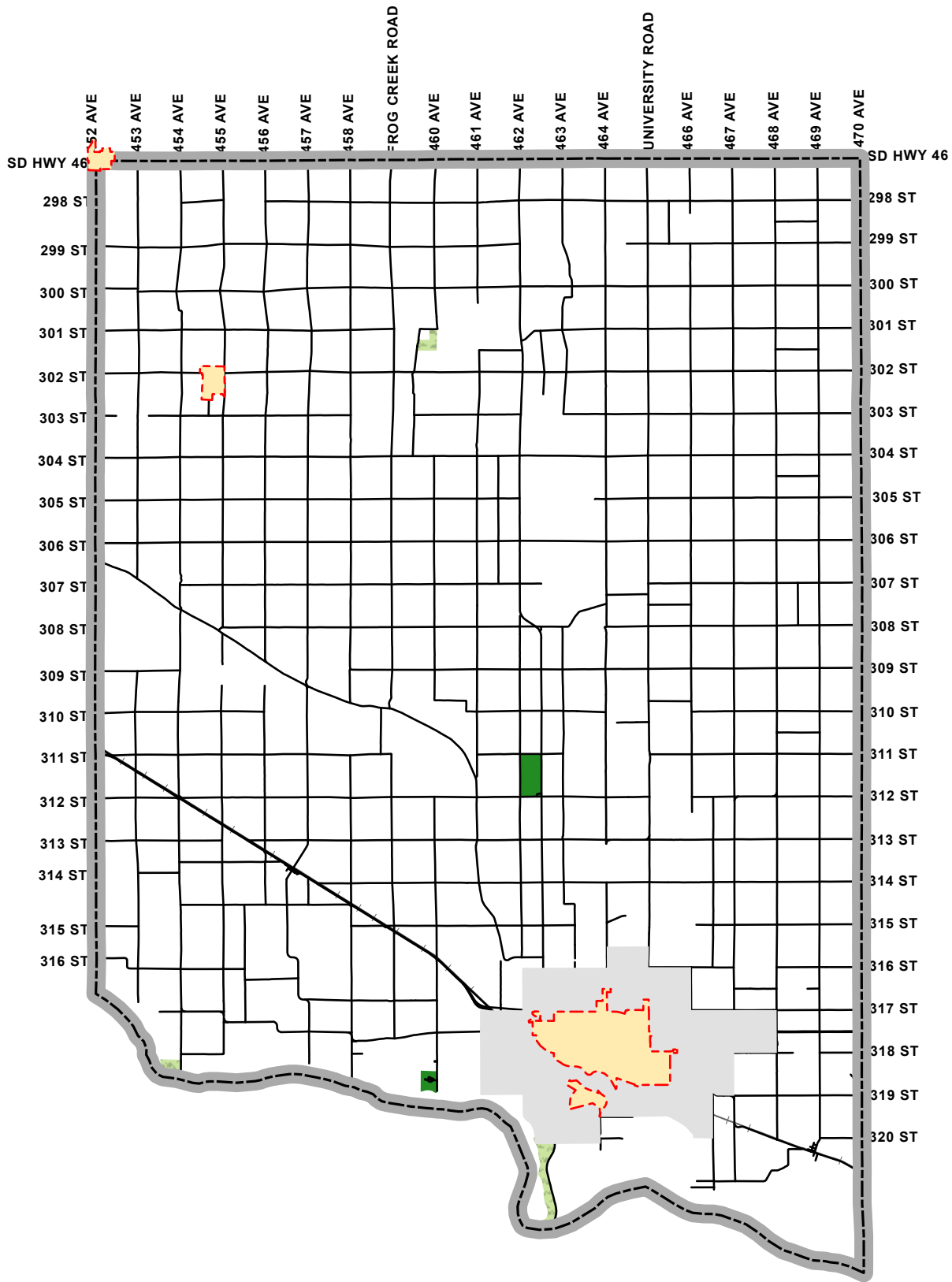
Federal Lands

The Missouri National Recreational River is a 59-mile stretch along the border between Nebraska and South Dakota. It encompasses all the southern boundary of Clay County along the Missouri River. Another federally protected area is the North Alabama Bend Wildlife Area which lies about 3 miles southwest of Vermillion.

Preservation of Open Space

Open space is an important feature in Clay County. To maintain the environmental balance in the County, certain areas should be preserved in their natural state. Such areas include waterfowl protection areas, state game production areas, aquifer protection areas, floodplain protection areas, and agricultural areas.

A map showing the Parks and Open Space will be on **Map 2**.



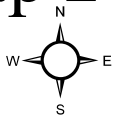
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 Game Production Areas

 Parks

Clay County Comprehensive Plan Parks and Open Space

Map 2



0 1.5 3 6
Miles



VI. ENVIRONMENTAL CONSTRAINTS

This chapter examines the presence of environmental constraints to provide background information for County leaders which they may consult when making decisions regarding future development. It should be noted that environmental constraints identified in this chapter, including but not limited to wetlands identified on the National Wetland Inventory, floodplains identified by the Federal Emergency Management Agency (FEMA), and soil limitations as identified by Natural Resources Conservation Service (NRCS) will present constraints to future development. Some significant natural features/areas exist in the County.

A. PHYSICAL GEOGRAPHY

Clay County lies in southeastern South Dakota along the Missouri River. The topography of Clay County is primarily flat to gently rolling. Elevations gently slope toward the Vermillion River basin and there is a pronounced bluff in the lower third of the County that opens to a large and flat basin extending toward the Missouri River. If the small area of river basin bluff is avoided, there are few areas of steep slope in the County that could impact development.

B. FLOODPLAINS

Floodplains are areas adjacent to creeks, rivers, and lakes that are subject to periodic inundation. This inundation can be caused by rapid snowmelt, heavy rain, or a combination of both. Any development in floodplain or floodways, also known as special flood hazard zones, needs to be carefully considered so as not to increase the duration or extent of a potential flood event. Federal Emergency Management Association (FEMA) has identified areas of special flood hazard in the County, primarily in the basins of the Vermillion River and the Clay Creek ditch. There are numerous smaller areas of floodplain in the smaller creeks that feed into these waterways and also in old oxbows left behind near the Missouri as that river has shifted over time. The floodplains of Clay County are shown on **Map 3**. It is important to note that the floodplain depicted in **Map 3** is the preliminary updated extent released from FEMA. Though this data is not what is currently adopted, it is important to show the most up-to-date information to protect residents in the future.

C. WETLANDS

The National Wetlands Inventory was used to identify the general location of wetlands. Wetlands are considered areas of high constraint and importance because of their value for habitat, groundwater recharge, and surface water storage and filtration. They are generally regulated by State and Federal agencies. These natural resources provide many functions that are important to the health and welfare of the community. The wetlands of Clay County are also shown on **Map 3**.

D. SOILS

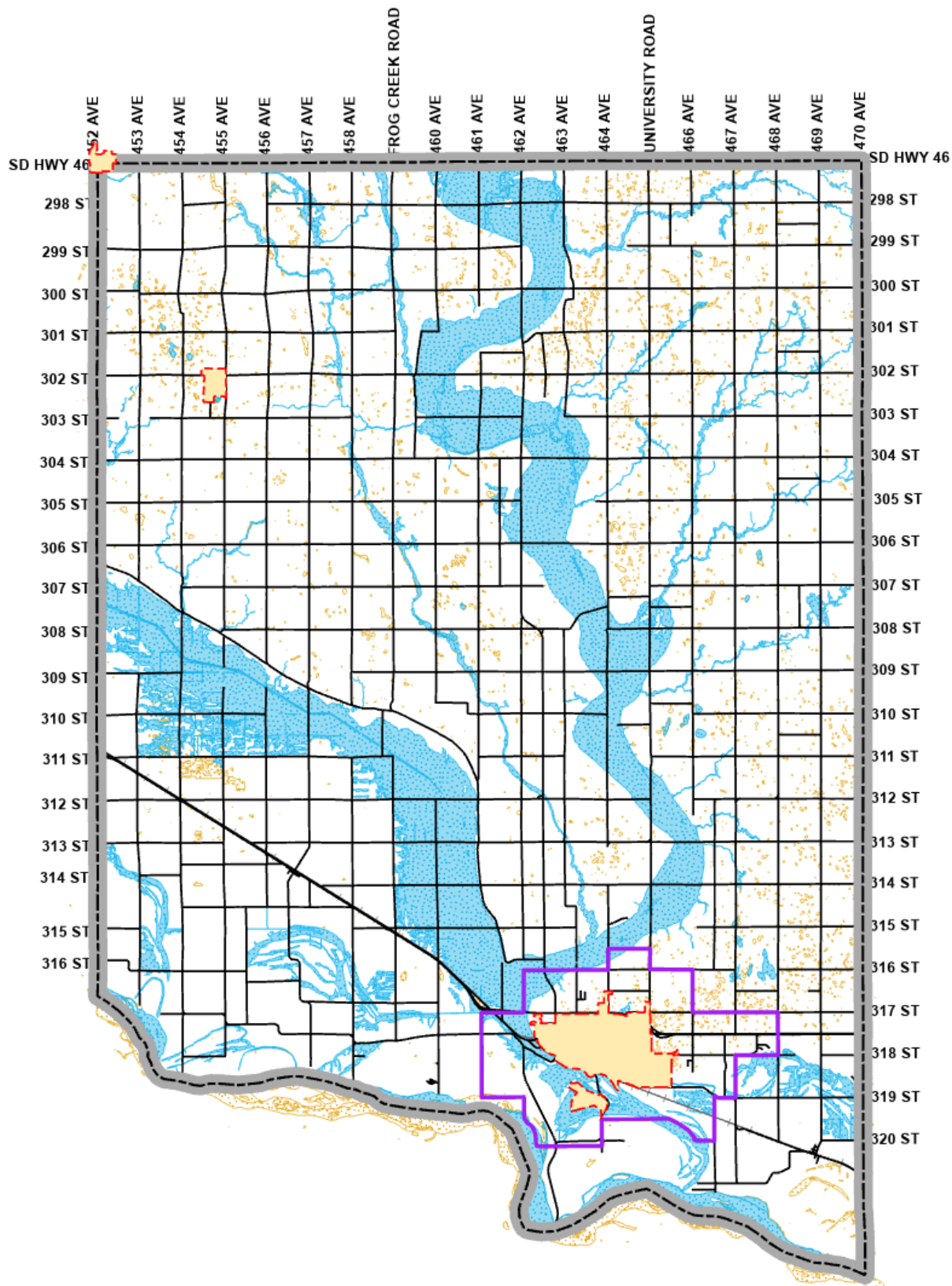
There may be some developmental concerns in Clay County, due to soil constraints. Development should be limited due to environmental constraints such as high water, poor drainage, and unstable soils. Poor surface drainage causes storm drainage and street maintenance problems, while the high-water table creates problems with basement sumps and septic drain fields. A map of septic tank absorption fields for Clay County is located on **Map 4**. The map indicates areas that may pose limitations for septic tanks.

Septic systems are regulated by the State of South Dakota. The United States Department of Agriculture, Natural Resource Conservation Service defined the absorption fields on **Map 4** via the Web Soil Service. Very limited soils (indicated in peach) indicates that the soil has one or more features that are unfavorable for septic tank installation. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive

installation procedures. Somewhat limited soils (indicated in green) represents that the soil has features that are moderately favorable for septic tank installation. The limitations can be overcome or minimized by special planning, design, or installation. Reasons for these limitations include:

- Slow water movement
- Flooding
- Depth to saturated zone
- Seepage

A Shallow Water Aquifer Materials map is provided on **Map 5** for a broader spectrum of geological reference. This map was created using data from the South Dakota Geological Survey of depth to first detected aquifer material. This map indicates the depth to the first occurrence of aquifers below the land service.



Legend

- 100-Year Flood Plain
- Wetlands
- Joint Jurisdiction

Clay County

Comprehensive Plan

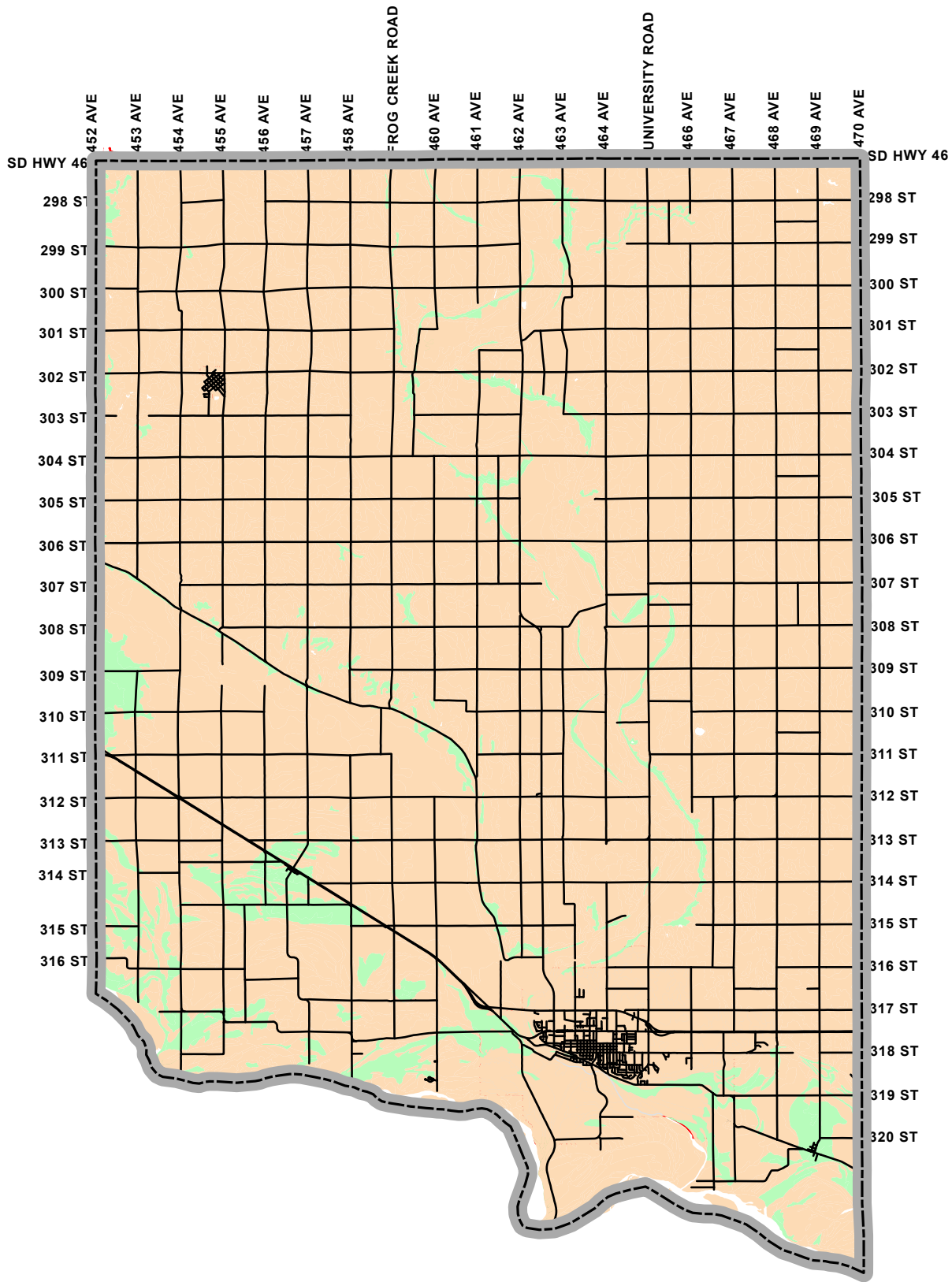
Floodplains and Wetlands

Map 3



0 1.5 3 6 Miles





Legend

— Roads

Soil Limitations

Septic Tank Absorption

Somewhat Limited

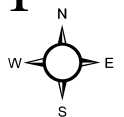
Very Limited

Clay County

Comprehensive Plan

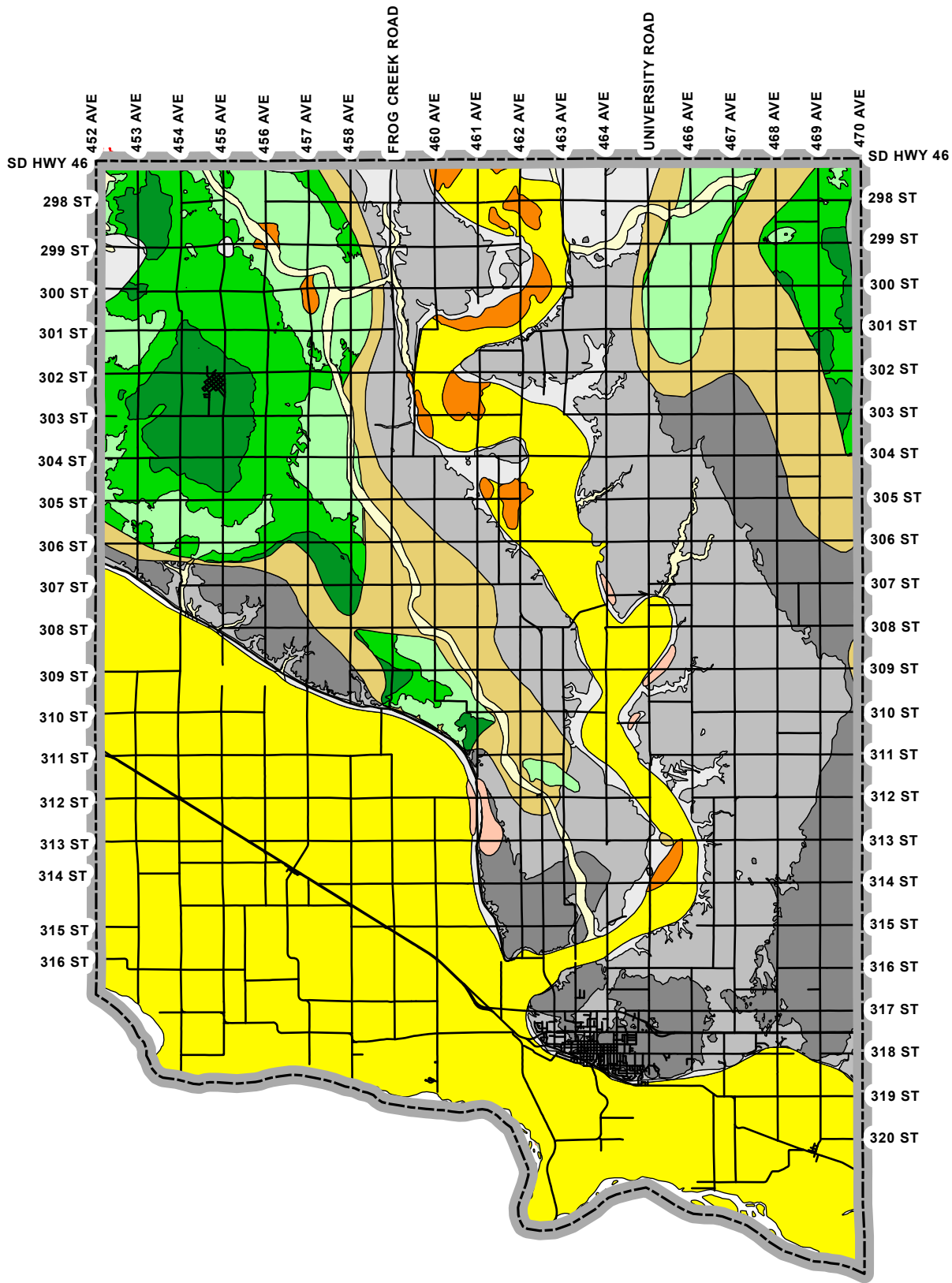
Septic Tank Absorption Fields

Map 4



0 1.5 3 6
Miles





Legend

Aquifer Materials

Category

Alluvium

Outwash

Alluvium-No Aquifer

Eolian Sands

Niobrara Formation 0-50

Niobrara Formation 50-100

Niobrara Formation 100+

Sand and Gravel 0-50

Sand and Gravel 50-100

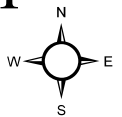
Sand and Gravel 100+

Dakota Formation 100+

— Roads

Clay County Comprehensive Plan Aquifer Materials Map

Map 5



0 1.5 3 6
Miles



VII. EXISTING LAND USE

A. EVALUATION OF LAND USE IN CLAY COUNTY

Most of the land in Clay County is dominated by agricultural uses. However, there are some industrial and commercial areas along the major highway corridors. Farmsteads and rural acreages are dotted throughout the County with higher density rural residential located through the southern third of the County.

B. CATEGORIES OF LAND USE IN CLAY COUNTY

To simplify the preparation of this plan, land uses have been grouped into different categories for Clay County. Some examples follow:

(1) Rural Residential

The purpose of this district is to provide locations for single-family residential areas with low population densities.

(2) Agricultural

The purpose of this district is to provide for a vigorous agricultural industry by preserving agricultural production those agricultural lands beyond areas of planned development.

(3) Commercial

The purpose of this district is to provide for a wide variety of commercial uses generally located at major intersections and along major roads with specific attention to the carrying capacity of roads and streets and to encourage the provision of adequate off-street parking and loading spaces.

(4) Light Industrial

The purpose of this district is to provide for a number of light manufacturing, wholesale, warehousing, and service uses in an attractive industrial park-like setting.

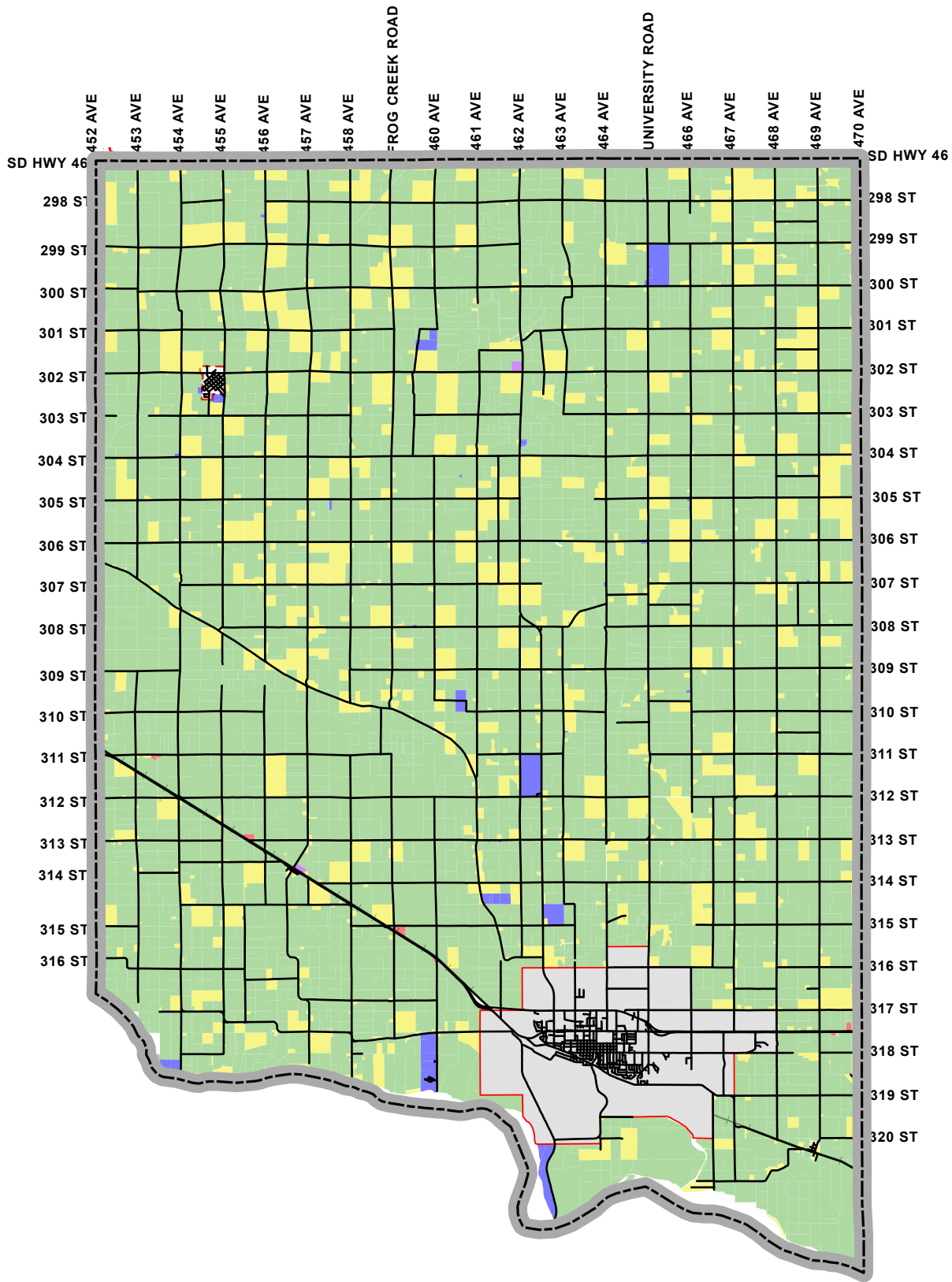
(5) General Industrial

The purpose of this district is to provide for general industrial uses which may create some nuisance, and which are not properly associated with, nor compatible with residential, office, or commercial establishments.

(6) Parks/Open Space

The purpose of this district is to preserve lands best suited for natural drainage areas, public open space, and agricultural uses from encroachment by incompatible uses.

A map of **current land uses** in Clay County is included on **Map 6**.



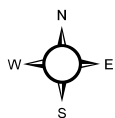
- Legend**
- | | |
|------------------|--------------------|
| CURRENT LAND USE | Commercial |
| Residential | Industrial |
| Agriculture | Roads |
| Institutional | Joint Jurisdiction |

Clay County

Comprehensive Plan

Current Land Use

Map 6



0 1.5 3 6
Miles



VIII. PLANNING POLICY FRAMEWORK

Clay County will adopt this Comprehensive Plan to provide a framework for specific future land-use and growth management policies and recommendations. It is designed to be a dynamic and flexible process to accommodate the changing needs of a growing rural and urban population, yet steady enough to allow for reasonable long-term investment strategies by both public and private sectors.

GROWTH MANAGEMENT STRATEGY

The following **Goals and Guiding Policies** should provide direction to Clay County's decision-making process on an ongoing basis. These objectives and policy guidelines, together with the current Zoning Map and Major Street Plan, form the Comprehensive Plan for Clay County. The Clay County Future Land Use Map includes the following planned areas as described in the Planning Policy Framework:

1. Transition Area
2. Agricultural Area
3. Major Highway Corridor Future Development Area

Within each area, specific future land uses are identified to be followed as a part of the implementation process of Clay County. The Future Land Use is shown on **Map 7**.

TRANSITION AREA POLICY GUIDELINES

The area of urban development consists of lands along the urban fringe where new development may occur in the future. This area is designated on the Future Land Use **Map 7**, as Transition Area. The following are policy guidelines through which the communities of Irene, Wakonda, and Clay County can use to promote orderly and attractive growth. The Transition Area surrounding Vermillion is under a Joint Jurisdiction Zoning agreement and has its own Comprehensive Plan laying out development goals for this area.

GOAL: Help and assist municipalities in planning for expansion.

GUIDING POLICIES

1. In Clay County, annexation is the preferred method of extending a city's land-use restrictions beyond its existing Corporate Limits. At the same time, the County can help communities to achieve their development goals.
2. Maintain an adequate supply of development land within the urban service area at all times.
3. Encourage that new development to be compatible with existing adjacent development. If commercial or industrial uses develop near residential, soften the transition through zoning policies designed to create additional buffers.
4. Avoid driveway entrances on arterial streets and wherever possible on collector streets.
5. Reduce visual clutter and safety hazards by encouraging aesthetic standards and design requirements to maintain and improve the County's visual appeal and image (including but not limited to towers and signage).
6. Maintain the current standards for concentrated animal feedlot operations, including but not limited to odor and manure management, separation/setback distances, and other performance standards.

AGRICULTURAL AREA POLICY GUIDELINES

The areas designated on the Future Land Use Map as Agricultural Area have been and are projected to continue being agriculturally dominated areas. Both city residents and the farming community have a fundamental interest in preventing scattered and haphazard development patterns in this area. The limitation of future urban and rural conflicts is important to all citizens' quality of life. Conflicts to be mitigated include increased noise, traffic, flooding and erosion from storm drainage, road maintenance concerns, odors, and groundwater pollution from septic systems.

The future land use plan encourages most large commercial and large industrial development to locate within cities or along the major highway corridors. However, there may be the potential for low-intensity commercial growth in the agricultural area. Ideally, these low-intensity commercial operations should be located along paved County roads, but with instruments like township road haul agreements, these operations may be located in other parts of the County.

GUIDING POLICIES:

1. Maintain a residential density of not more than one building site per two acres. In addition, every effort should be made, when reasonable, to cluster the residential uses and preserve the remaining area for agricultural activities and open space.
2. Allow higher density residential (one-acre) development *if* the following standards are complied with:
 - a). Septic tank installation
 - b). Private road agreements
 - c). Rural water system agreements
 - d). No adverse environmental impacts
 - e). No impacts to the farming community (i.e., location to animal confinements)
 - f). Agreements to right-to-farm of all residents
 - g). Less than one-acre residential development shall be allowed if the following conditions are met:
 - 1) pending the use of advanced sewer systems
 - 2) compliance with sections a-g.
3. When considering the location of agri-business, commercial, and industrial developments there should be consideration for road infrastructure, utility access, drainage, environmental impact, and safety.
4. Limit construction on sites that are environmentally unsuited for buildings or septic systems through the two acres rule, limiting residential rezoning, or providing a sewage treatment system.
5. Provide public services and facilities at a level sufficient to meet the needs of the County's agricultural population and anticipated growth in the major highway corridors development.
6. Maintain an addressing system to create consistency for the safety and convenience of businesses, visitors, and local citizens.
7. Preserve the environmental quality of the county while encouraging economic development that is environmentally sensitive.
8. Design driveway access points with public and highway safety in mind.
9. Preserve adequate right-of-way for future arterial traffic routes.

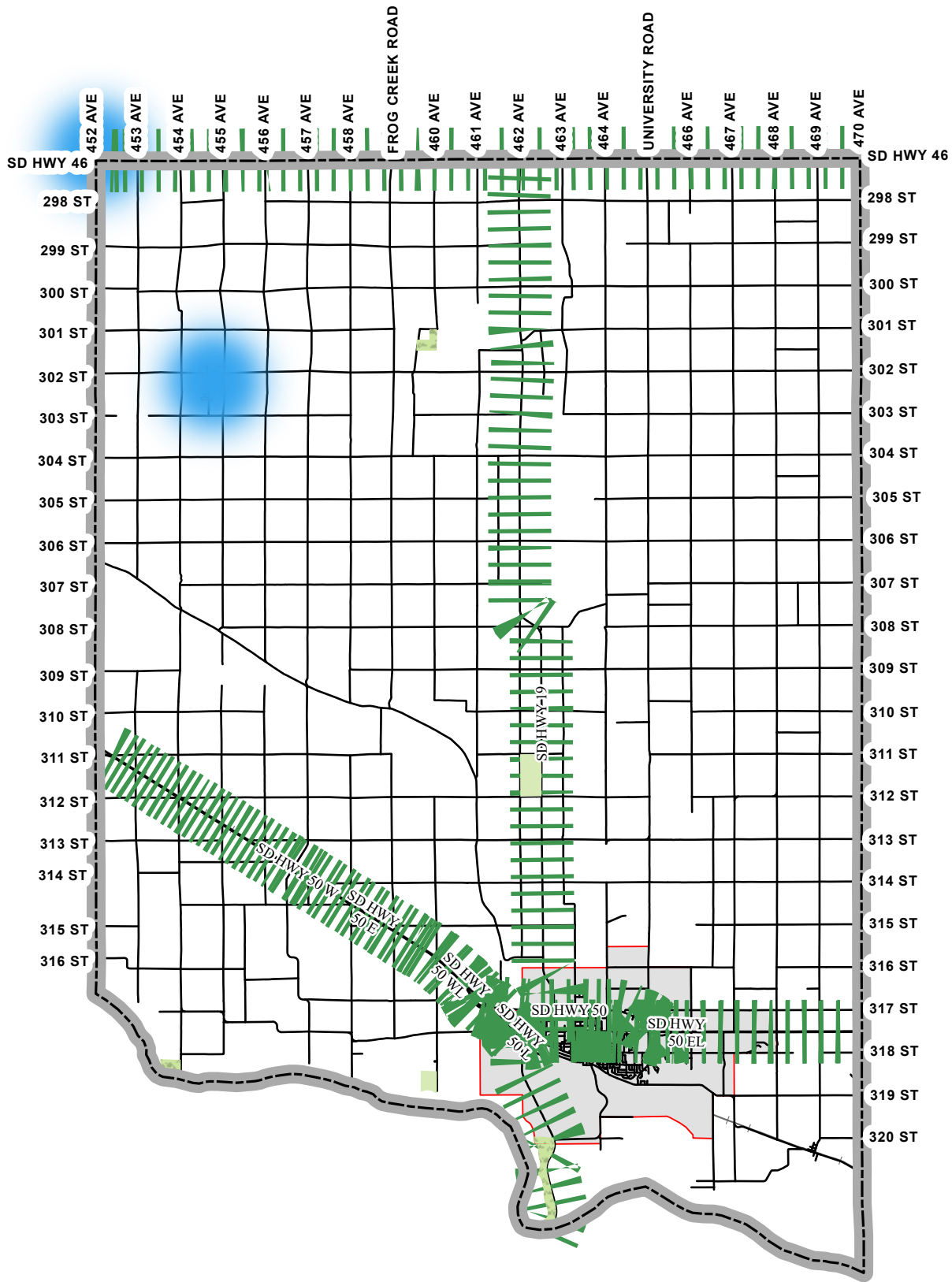
10. Reduce visual clutter and safety hazards by encouraging aesthetic standards and design requirements to maintain and improve the county's visual appeal and image (including but not limited to towers and signage).

MAJOR HIGHWAY CORRIDOR FUTURE DEVELOPMENT AREA POLICY GUIDELINES

This Comprehensive Plan intends to encourage the development of commercial and industrial operations along the major highway corridors of South Dakota Highways 19, 46, and 50. Through planned development and use of the zoning and subdivision regulations, the major highway corridors of Clay County can offer more business opportunities in the area.

GUIDING POLICIES:

1. Encourage planned development of businesses (particularly agriculturally oriented) along the designated major highway corridor development area.
2. When possible, locate these commercial and industrial uses along the major highways and their respective interchanges. Such uses should be developed in a nodal pattern and geared to the support of highway users.
3. Promote development patterns that maintain the safety and carrying capacity of major roads.
4. Prior to development along the major highway corridor future development area, it should be proven that such construction is compatible with the area's soil types and other environmental factors.

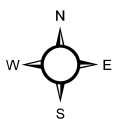


- Legend**
- Roads
 - Joint Jurisdiction
 - ▨ Major Highway Corridor Area
 - Transition Area
 - Game Production Areas
 - State Parks

Clay County Map 7

Comprehensive Plan

Future Land Use



0 1.5 3 6 Miles



IX. PLANNING STRATEGY

Clay County has committed to shaping the future of the community to enhance economic development and maintain a high quality of life for all citizens of the community. The following goals, objectives, and policies will guide the County Commission and are the basis for regulations contained within Clay County's zoning and subdivision ordinances.

Goal 1. Ensure the Health and Safety of Citizens

Objective 1 - Separate structures for health and safety

Policy 1 - All setbacks will be greater than the requirements for fire code

Policy 2 - Ensure buildings and structures do not encroach on residential building air space

Policy 3 - Maintain current setbacks from animal confinement operations

Policy 4 - Allow adjustments to setbacks for additions to existing non-conforming structures that do not encroach closer to the lot line than the existing building

Objective 2 - Design lots and blocks to emphasize cost efficiency and community values

Policy 1 - Review the lot and block designs based upon subdivision design standards

Objective 3 - All streets need adequate visibility at intersections and driveways

Policy 1 - Ensure adequate visibility at intersections by ensuring structures and fences do not obstruct the view of intersecting traffic

Policy 2 - Provide an adequate setback for shelterbelts

Objective 4 - Design local streets to emphasize land access and safety

Policy 1 - All non-section line roads will be managed by a private road association, or by a township, only should said township agrees to accept the street

Objective 5 - Design major streets to emphasize mobility and safety

Policy 1 - Preserve adequate right-of-way for future arterial traffic routes, collectors, and service roads

Goal 2. Protect Natural Resources

Objective 1 - Retain runoff with open drainage systems

Policy 1 - Any development should be platted to incorporate as much natural drainage as possible

Objective 2 - Create greenways and linear open spaces within floodplain areas

Policy 1 - Follow the Floodplain Ordinance to control development within the floodplain areas as designated by the FEMA map on file with Clay County

Objective 3 - Design around significant wetlands

Policy 1 - Encourage development to utilize wetlands as a part of the natural drainage basin

Objective 4 - Monitor development on steep slopes

Policy 1 - All subdivision reviews should require developments to locate off steep slope areas and minimize stripping of vegetation for erosion control

Objective 5 - Preserve and enhance Missouri River riparian areas

Policy 1 - The County values the preservation of Missouri River riparian habitat for the natural and scenic qualities of the Missouri National Recreational River and encourages development that preserves and enhances these areas

Goal 3. Enhance the Visual Quality of the County

Objective 1 - Separate heavy industrial and residential uses

Policy 1 - When considering the location of commercial and industrial development, the County should use setbacks to minimize conflict with nearby residences

Objective 2 - Soften the look of all uses to enhance the County's image as an attractive place

Policy 1 - Setbacks will provide reasonable separation for rural living in agricultural areas

Objective 3 - Encourage the appropriate siting and concentration of uses and structures

Policy 1 - Enact appropriate guidelines for development through zoning and subdivision ordinances

Objective 4 - Residential zoning districts established prior to development

Objective 5 - Encourage the planting of trees and shrubs

X. PLAN IMPLEMENTATION

The best possible way to implement a comprehensive plan is to utilize all the administrative tools available to influence development in a positive manner. There are many tools that can be utilized, including zoning regulations, subdivision regulations, policy plans, capital improvement plans, annexation studies, and well-rounded community involvement.

Local Governing and Advisory Boards. Circumstances will continue to change in the future, and the Clay County Comprehensive Plan will require modifications and refinements to be kept up to date. Some of its proposals will be found unworkable and other solutions will continue to emerge. Changes that are needed should be carefully noted and thoroughly considered as part of Annual Plan Updates and Major Plan Revisions. As change occurs, however, Clay County's vision should remain the central theme and provide a unifying element. This plan's importance lies in the commitment of citizens to agree on the County's purpose for the future and to apply that consensus in continuing efforts that focus on the betterment of the area.

Annual Plan Amendment Process

Annual plan amendments, when necessary, will provide opportunities for relatively minor plan updates and revisions such as changes in land use plan designations; implementation actions for identified goals, objectives, and policies; and review of plan consistency with ordinances and regulations. A plan amendment should be prepared and distributed in the form of an addendum to the adopted Comprehensive Plan. Identifying potential plan amendments should be an ongoing process by the Planning Commission throughout the year; input from the general public should be solicited for any plan amendments. Proposed plan amendments should be reviewed and approved by the Planning Commission with final approval from the County Commission, mirroring the initial adoption of this Comprehensive Plan; plan amendments shall be in the form of a resolution.

Major Updates of the Comprehensive Plan

Major updating of the Comprehensive Plan should occur every five to ten years. These updates will ensure the renewal and continued utility of the Comprehensive Plan for use by the Planning Commission and County Commission. Annual plan amendments from previous years should be incorporated into the next major plan update. Plan updates will be a significant undertaking involving County officials, the Planning Commission, a steering committee, and citizens. The result of major plan updates will be a "new" comprehensive plan for the County, including new identification of up-to-date goals, objectives, policies, and implementation actions.

The Continuous Planning Process. The key players in the implementation of a Comprehensive Plan are the Planning Commission and the County Commission. It is the duty of the governing bodies of Clay County and its municipalities to encourage progress by utilizing all of the tools available so that orderly growth and development can take place. With public input, the Planning Commission and the County Commission can create a balance between industry, commerce, and housing, and can utilize all of the resources available to facilitate civic improvement.

Zoning Regulations. Zoning is the most commonly used legal mechanism to achieve the goals and policies of a comprehensive plan. The County's zoning ordinance regulates land use activities in the unincorporated area. The Comprehensive Plan stresses the importance of avoiding scattered and sprawl development in rural areas.

Joint Zoning. South Dakota Codified Laws allow counties and cities of the state to enter into joint planning and zoning agreements. While working jointly can be beneficial to both the county and the municipality, the granting of joint jurisdictional power is at the County Commission's discretion and is not a right of the municipality. Should a joint planning and zoning agreement be approved, it should be regularly updated to maintain uniformity with the county ordinance and incorporate changes based on the Growth Management Plans adopted by the municipality.

Procedural Requirements for Joint Zoning Requests.

To ensure that any authorization of joint zoning jurisdiction is constitutionally defensible, the county has set forth the following requirements to be met by a municipality proposing joint zoning control outside corporate boundaries.

1. The municipality must have adopted a comprehensive plan or updated a previously adopted plan within the past three years. The plan shall include the following elements:
 - a. Population component, including past and present trends, and projected population for the 20-year planning period shown in ten-year increments.
 - b. Forecast of land consumption during the planning period for residential, commercial, and industrial uses based on projected population.
 - c. Location and supply of vacant developable land presently within Corporate Limits and the classification of these areas for residential, commercial, or industrial use.
 - d. Net land area required beyond the corporate limits during the planning period.
 - e. Feasibility and timetable for extending municipal utilities to serve future development areas.
2. The municipality shall present its comprehensive plan to the Clay County Planning/Zoning Administrator. The Clay County Planning/Zoning Administrator shall review the document for completeness and accuracy before making a recommendation to the Planning Commission. The plan shall include the proposed boundary of the joint jurisdiction.
3. The Planning Commission shall make a recommendation to the Board of County Commissioners as to the need for joint jurisdiction. The Planning Commission may recommend a different boundary or recommend denial of the municipal request.
4. If the Board authorizes joint zoning jurisdiction for a municipality, the county and city planning commissions shall meet jointly to propose a zoning ordinance for the area. The zoning ordinance should conform as much as possible to the existing zoning regulations of the county. Administration of the regulations should rest with the county.
5. Joint action by the county and city in adopting the ordinance shall constitute the agreement for the joint zoning jurisdiction.

Dissolution of Joint Jurisdiction Regulations

State law fails to address the procedure necessary to terminate a previously agreed upon joint jurisdiction. It is assumed that this can be accomplished by mutual agreement of the county and city or the county can unilaterally terminate an existing joint jurisdiction on the basis that State law requires both entities to approve a substantially identical zoning ordinance. If the county does not agree with the city on a zoning ordinance, there can be no joint jurisdiction.