MOVIN FORWARD

Planning Ahead

MINNEHAHA COUNTY

ENVISION 2035

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Acknowledgments

The Minnehaha County Planning Department extends a special thank you to this group of citizens and community leaders for their time and efforts.

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Table of Contents

Plan Overview 1

Introduction 2
- Vision 3
- Plan Elements 4
- Planning Process 5

Population & Employment Analysis 7
- Population Projections 8
- Projected Employment Opportunities 10
- Development Trends 11

Existing Land Use Analysis 13
- History of County Land Use Planning 13
- Agricultural Development Trends 17
- Residential Development Trends 18
- Commercial/Industrial Development Trends 21

Growth Management 22
- Introduction 22
- Agriculture 23
- Agricultural Tourism 26-27
- Commercial/Industrial 27
- Agriculture - Goals & Actions 28-29
- Agricultural Tourism - Goals & Actions 29
- Commercial/Industrial - Goals & Actions 30-31

Rural Conservation 32
- Introduction 32
- Historic Preservation 33
- Natural Character 35
- Farming & Community 36
- Housing Density 38
- Historic Preservation - Goals & Actions 40
- Natural Character - Goals & Actions 41
- Farming & Community - Goals & Actions 41-42
- Housing Density - Goals & Actions 42

Environmental Stewardship 43
- Introduction 43
- Land Resources 44
  - Soils 44
  - Sand, Gravel, Quartzite Deposits 46
  - Parks & Open Space 48
  - Public/Conservation Lands 51
- Water Resources 54
  - Rivers and Streams 54

*Table of Contents continued on next page

Table of Contents (continued)

Floodplains 55
Lakes and Wetlands 56
Aquifers/Water Source Protection Areas 57-58
Agricultural Drainage 59
Wastewater Treatment & Disposal 60
Stormwater Management 61
Natural Resources and Open Spaces 64
Goals & Actions

Transportation 67
Introduction 67
Rail 68
Highway 71
Transportation Improvements 72
Non-motorized 73
Existing and Future Trails & Routes 76
Access Management 77
Air 78
Transportation - Goals & Actions 79

Future Land Use Plan 81
Introduction 81
Agricultural Production Area 83
Transition Area 84
Rural Service Areas 85
Rural Service Areas - Communities 86
Development Corridors 89
Future Land Use Plan - Goals & Actions 90

Implementation 94
Minnehaha County and Envision 2035 94
Zoning Ordinance 95
Geographic Information Systems (GIS) 96
Intergovernmental Cooperation 97
Public Facilities and Services 98
Implementation - Goals & Actions 105

Appendix 107
County History 107
Planning & Zoning History 111
School District Boundaries Map 113
Zoning Map 114
Existing Land Use Quadrant Maps 115-118
Public Comment and Feedback 119
Agricultural Survey & Results 119
Open-Ended Comments from Open Houses 121
Parks & Recreation Assessment Survey 125

Table of Figures and Maps

Figure 1.1 - Minnehaha County Population Projection 8
Figure 1.2 - Minnehaha County Age Distribution Projection 9
Figure 1.3 - Inflow/Outflow Commute to Work (by Place of Residence) 10
Figure 1.4 - Change in Occupational Cluster Concentration Chart (2002-2012) 11
Figure 1.5 - Total Employment by Industry Cluster 12
Figure 2.1 - Existing Land Use Survey 15
Figure 2.2 - New Single Family Dwelling Units Per Year 19
Figure 3.1 - Total number of farms chart 23
Figure 3.2 - 2002 Ag Census Land Area Breakdown 24
Figure 3.3 - 2012 Ag Census Land Area Breakdown 24
Figure 3.4 - Total Corn and Soybean Harvest in Acres 25
Figure 4.1 - Density Zoning Diagram 38
Figure 4.2 - Transfer of Development Rights Examples 39
Figure 5.1 - Total Number of Drainage Permits Issues (2007—present) 59
Figure 5.2 - Best Management Practices Diagram: Big Sioux River Watershed 62
Figure 5.3 - Vegetated Filter Strip Diagram 63
Figure 6.1 - Rail Volumes by Direction, 2011 & 2040 70
Figure 6.2 - Rumble Strip Design 72

Figure 8.1 - School District Enrollment 103

Map 2.1 - Existing Land Use Map **16**
Map 2.2 - Residential Dwelling Density **20**
Map 5.1 - Distribution of Prime Farmland **45**
Map 5.2 - Parks and Open Spaces **53**
Map 5.3 - Rivers, Streams & Floodplains **54**
Map 5.4 - County Aquifers **57**
Map 5.5 - Water Source Protection Areas **58**
Map 6.1 - Central Plains and Midwest Railroad Network **68**
Map 6.2 - County Railroads **69**
Map 6.3 - Transportation System Functional Classifications **71**
Map 6.4 - Existing & Future Non-Motorized Trails and Routes **75**
Map 7.1 - Future Land Use **82**

Map Data Disclaimer:

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Plan Overview

The purpose of the Envision 2035 Comprehensive Plan is to set the goals and priorities recommended by a multitude of stakeholders including county planning staff, task force members, advisory board, Planning Commission, County Commission, and members of the general public. The plan will provide direction in making land use and development decisions throughout the rural area of Minnehaha County. It will communicate your collective values, goals, and policies for current residents and future generations.

The future of Minnehaha County presents a unique challenge with the constantly changing complexity of the urban/rural dichotomy. The County must support growth management techniques that preserve the foundation of the local economy in order to maintain a high level of efficiency as the state's leading agricultural producer. The County will be expected to address issues relating to the economic growth potential of the Sioux Falls' Metropolitan Statistical Area and effectively managing this outward pressure, rural character and housing density, natural resource conservation and open space planning, transportation, public safety, and intergovernmental cooperation.

Envision 2035 represents an opportunity to engage the stakeholders involved in the planning process and allow for improved communication across forms of government. The process identified a general consensus among members of the public and plan committee members that there should be a strong focus on supporting agricultural production and local farms. The plan is neither a beginning nor ending point, but a continual process for engaging the public in all land use and development decisions.

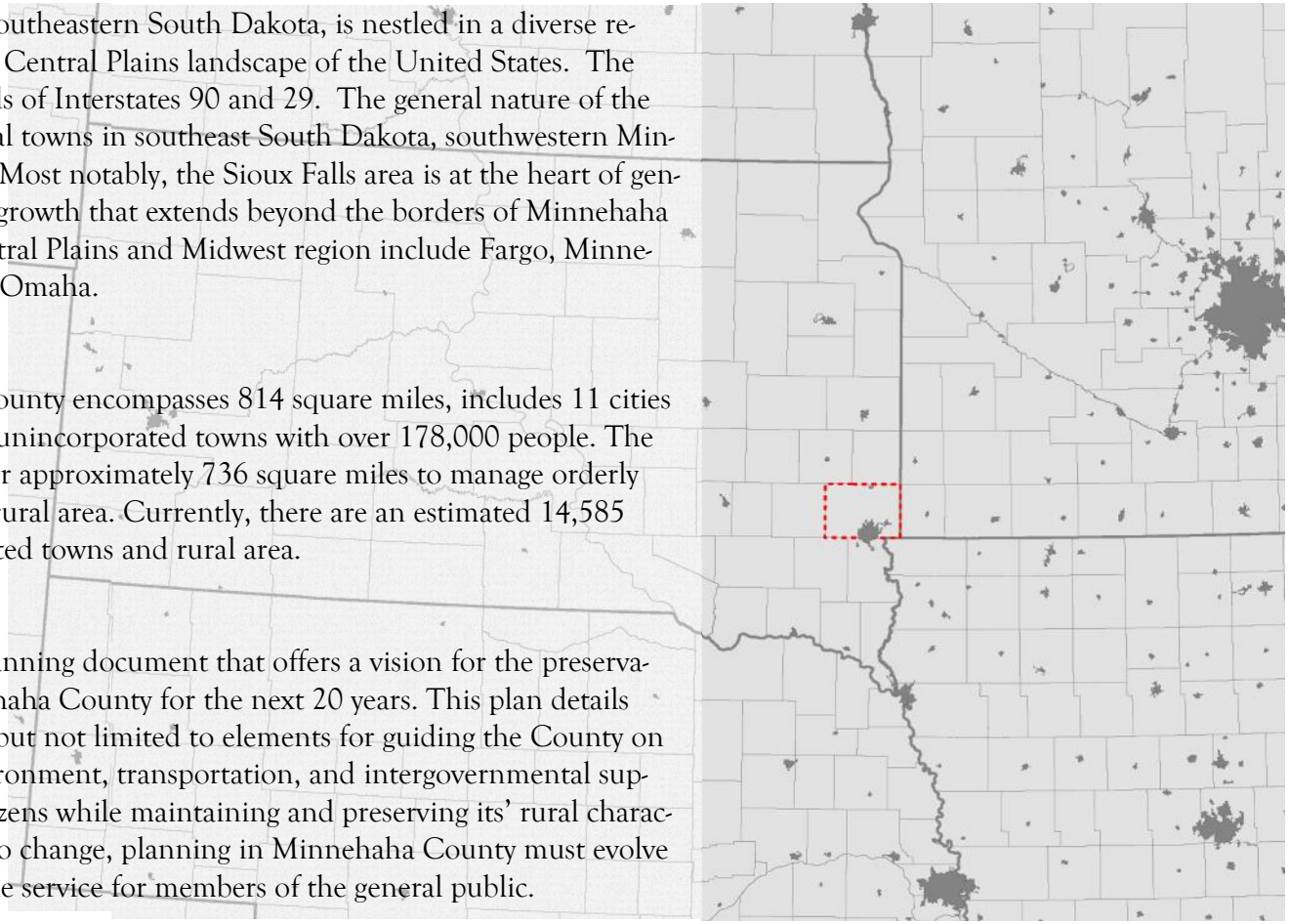
Envision 2035 is a tool to assist community leaders in the better representation of the needs of a growing total population while managing the often contentious issues among the vast differences in types of landowners. The chapters throughout this document describe planning elements in greater detail, and outline the goals and action steps critical to effectively managing the issues presented in this plan.

Introduction

Minnehaha County, located in southeastern South Dakota, is nestled in a diverse region among the Midwestern and Central Plains landscape of the United States. The county is located at the crossroads of Interstates 90 and 29. The general nature of the local region consists of small rural towns in southeast South Dakota, southwestern Minnesota, and northwestern Iowa. Most notably, the Sioux Falls area is at the heart of generating a high level of economic growth that extends beyond the borders of Minnehaha County. Major cities in the Central Plains and Midwest region include Fargo, Minneapolis-St. Paul, Des Moines, and Omaha.

The boundary for Minnehaha County encompasses 814 square miles, includes 11 cities and towns, 23 townships, and 3 unincorporated towns with over 178,000 people. The County exercises jurisdiction over approximately 736 square miles to manage orderly growth and development of the rural area. Currently, there are an estimated 14,585 people living in the unincorporated towns and rural area.

Envision 2035 is a long-range planning document that offers a vision for the preservation and development of Minnehaha County for the next 20 years. This plan details policies and strategies including but not limited to elements for guiding the County on land use, parks, agriculture, environment, transportation, and intergovernmental support to enrich the lives of its' citizens while maintaining and preserving its' rural character. As the landscape continues to change, planning in Minnehaha County must evolve to continually provide responsible service for members of the general public.



Source: United States Census, 2013 Cartographic Boundaries

Vision

ENVISION 2035 AIMS TO ENSURE OPTIMUM GROWTH AND DEVELOPMENT OF THE RURAL AREA WHILE PROVIDING CITIZENS WITH INCREASED OPPORTUNITY FOR A BETTER QUALITY OF LIFE ALONG WITH ENHANCED ECONOMIC AND PHYSICAL VALUE.

Community Principles

Growth & Conservation

- Support the development of sustainable agricultural practices
- Balance rural housing with existing and new agricultural operations
- Consider costs and benefits of all new development proposals

Environmental Stewardship

- Protect & Encourage wildlife habitats, patches, and corridors
- Promote low impact development to maintain rural character
- Provide for the needs of a growing population while protecting the safety and security of the general public

Transportation

- Coordinate efforts with Local, State, and Federal entities
- Encourage growth near major railroads and highway intersections
- Expand access to utilities and infrastructure for new businesses

Plan Elements

Economic Development	Rural Character & Housing Density	Land & Water Resources	Transportation	Future Land Use	Intergovernmental Cooperation
Strengths • Agricultural economy • Tax climate • Entrepreneurial atmosphere	*Strengths* • Density zoning preserves farmland • Good balance for differing land uses	*Strengths* • Availability of natural resources • Strong rural quality of life • Well defined drainage network	*Strengths* • Crossroads of two major interstates • Convenience to major railroads • Proximity to Sioux Falls growth center	*Strengths* • Prime farmland • Existing Rural Service Areas • Park amenities • School facilities	*Strengths* • Joint planning with municipalities • Effective dialogue with State/Federal/ Other Entities • Update services as necessary
Challenges • Mitigate impact of competing land uses • Support existing operations and businesses	*Challenges* • Manage population growth effectively • Potential conflicts with CAFOs & Ag. operations	*Challenges* • Mitigate impact of economic growth • Support individual landowner rights • Conservation of natural resources for future generations.	*Challenges* • Expand access to major services • Provide for the needs of a growing population • Access Management	*Challenges* • Housing demand • Agricultural preservation • Development corridors	*Challenges* • Growth management • Transition area development • Limited funding opportunities • Opportunities for consolidation of government

Envision 2035 Comprehensive Planning Process

Envision 2035 Planning Process

- Organization and Research
- Task Force Education and Analysis
- Public Open Houses
- Envision 2035 Draft
- Adoption
- Implementation

The County Commission appointed fourteen members to the Envision 2035 Task Force. The members included rural residents, business owners, and agricultural producers. In addition to the task force an advisory board was created encompassing state, regional, and local governments, as well as large industry representatives. Over a two to three year period, the task force met monthly.

The process began with educational and fact gathering task force meetings, which brought various speakers of important topics to enhance the task force's knowledge on a variety of subject matter. This was followed by a period of brainstorming, discussions and debates, and idea production. From these sessions, many different land use scenarios were created and contemplated.

A series of community meetings were held throughout the county to involve the county's residents and business owners in the development of this plan. The final months were spent drafting the Envision 2035 plan to exemplify the future of Minnehaha County.

Four community open houses were held in the fall of 2012. In addition, a workshop was held in October 2014 to generate feedback on a few of the chapter topics. A public open house was held in March 2015 to gather feedback on a comprehensive plan draft document. The meeting sites were spread throughout the county to ensure maximum participation.

The open house meetings helped to build understanding of the project and credibility for the process while also allowing staff and task force members to gain an understanding of the needs and interests of the County's constituency.

Five different stations were erected, each focusing on different aspects of the County's future. Through activities and in visiting with staff and task force members, participants were able to make detailed comments, suggestions, and criticisms.

- Task force was formed with representatives from the business, agricultural, and rural resident communities.
- An advisory committee had delegates from various government agencies and local businesses.
- A website was created for the public to review draft documents and provide feedback.
- Monthly updates were presented to the County Planning Commission.
- Planning staff had a booth at the county fair to solicit public input.
- Six community open house meetings were held throughout the county to provide opportunity for public comment.

Population & Employment Analysis

Minnehaha County will be expected to address quality of life and public expenditure issues resulting from a growing population and economic base. Therefore, it is crucial that an up-to-date process be in place to ensure that proper and timely decisions are made in allocating the county's finite physical resources among competing land uses.

Growth presents an abundance of opportunities but it comes with a certainty of change. Rural water systems have been constructed, supplying safe and dependable water to farms and rural residences. In some instances, concentrations of faulty septic systems have been replaced by sanitary districts to eliminate groundwater contamination and health risks. Township supervisors are confronted with the complexities of urban growth, including demands for improved roads and better maintenance. The combined effect of building expansion and municipal facilities such as well fields, sanitary landfills, and wastewater treatment operations have expanded into the rural area while posing significant impacts on traditional agricultural lands.

Uncontrolled growth is usually accompanied by scattered and haphazard development, conflicting land uses, costly public services and improvements, and environmental damage. Significant strides have been taken to minimize the negative impacts associated with growth. This plan is intended to strengthen the county's planning efforts by providing information and direction to decision makers for managing anticipated growth and making change a positive experience for county residents.

Population Projections

Historically, a majority of the population has been concentrated within Sioux Falls. Other incorporated areas comprise a small, but growing portion of the number of residents. Currently, over 90 percent of the total county population resides in a municipality. The unincorporated population, depicted by the red line in the graph on the right, has been influenced by several factors including but not limited to the following: farm consolidation, annexations, and municipal incorporation.

Even with a dramatic increase in housing construction in the rural area, population has actually been decreasing over the past thirty years due to annexation of fringe developments around Sioux Falls along with the incorporation of Crooks and Brandon. As indicated by a slight dip in the line, after reaching a high of over 17,600 residents in 1980 the population declined to just under 13,000 by 1990. In 2000, the rural population was about 15,857 persons. Recently, there has not been such a dramatic change in rural population from 2000 to 2010 as was realized 35 years ago. The current population residing in the unincorporated area is about 14,585. Approximately 80 percent of the 2010 county population lived in Sioux Falls and this trend will likely grow over the planning period. This is an indication that the total rural county population will likely remain relatively stagnant, if not decrease as residential development trends begin to shift with municipal growth rates.

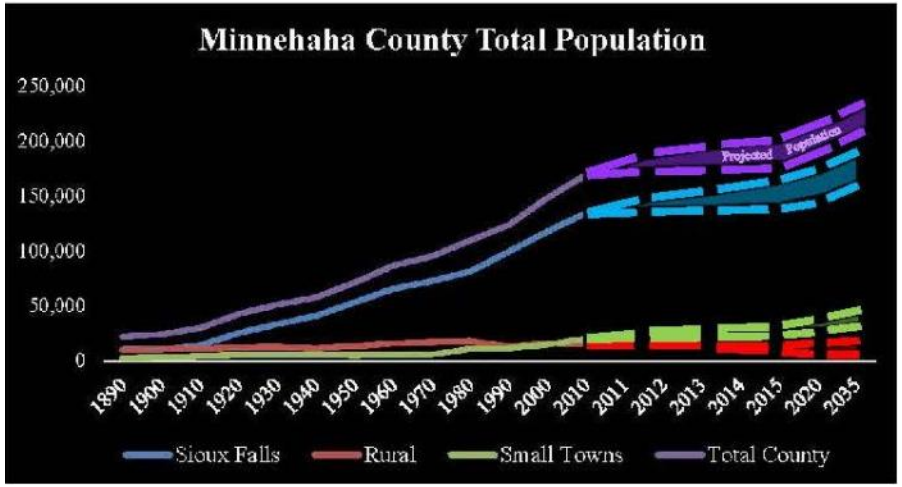


Figure 1.1 - Minnehaha County Population Projection Source: Census.gov

The 2035 Minnehaha County Total Population chart, above, shows a low to high population projection range accounting for various factors associated with the growth of the local, state, and regional economies of scale over the past twenty years. The number of residents projected to live in Sioux Falls is estimated between 76 and 79 percent of the total county population by 2035. The number of residents estimated to be living in one of the small towns will be from 14 to 19 percent and about 1 to 10 percent of the total population residing in the unincorporated area by 2035, respectively.

By the year 2035, the population of Minnehaha County is projected to grow to over 207,000. It is expected that Sioux Falls will contribute substantially, about three-fourths, to the county's future population base; however, the small town population will also increase at a steady rate with Brandon and Hartford contributing the largest share. Dell Rapids and Crooks should also experience strong growth due to proximity to Interstate 29 along with other important growth indicators. Baltic, Garretson, Valley Springs, Humboldt, and Colton will comprise a smaller percentage of total growth among all of the small towns.

It is expected that the combined population of the small towns will surpass that of the rural area during the next couple of decades. It is also unlikely that the unincorporated areas of Ellis, Lyons, Renner, and Rowena will account for any significant growth due to the lack of urban services; however, Corson's industrial development potential may lead to the town's annexation by the City of Brandon.

According to the 2013 American Community Survey, the median age of Minnehaha County residents continues to be on the rise. The median age in 2010 was 34.5, which is expected to continue to rise as the "Baby Boomer" generation ages (Census, 2010). This age group made up 7.2%, or 12,182, of the 2010 total county population. During the planning period, the over 60 age group will increase at about the same rate as about one-fifth of the total population reaches retirement age. The availability of health care facilities in the region will continue to be a primary attraction point for individuals within this segment of the population.

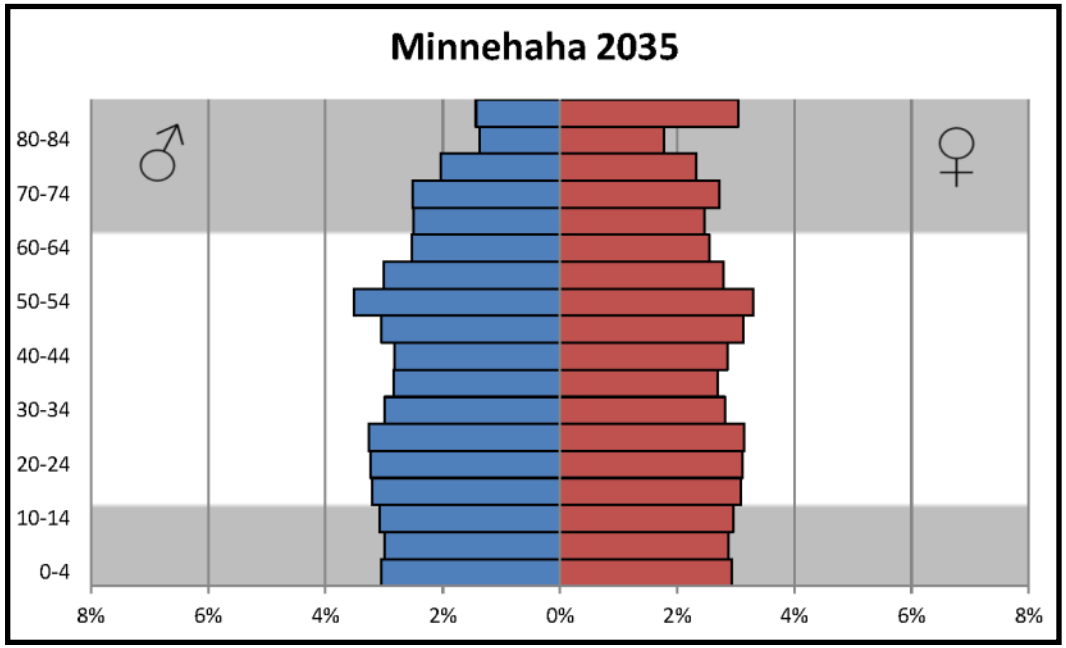


Figure 1.2 - Minnehaha County Age Distribution Projection Source: Census.gov & SDSU

Projected Employment Opportunities

The expansion of employment opportunities are expected to grow during the planning period based on several factors including but not limited to the following: favorable tax climate, high quality of life, and sound work ethic. As the population both expands and ages, the demands upon the service sector will grow. The community's position as a regional health care center will also contribute to the expansion of service related employment. The growth of regional air and highway transportation systems will lead to an increase in economic development potential within the county.

The percentage of the population employed in the work force has nearly doubled since 1970 to about 72% in 2013. The increase in two income families, baby boomers in the work force, and more high school students with jobs all contributed to this trend. The percentage of the population in the work force will be expected to slow or may even begin to decline due to the majority of baby boomers set to retire over the next decade.

In 2011, there were about 65% of the 115,145 people employed in Minnehaha County of all jobs lived in the county and 34% are employed here but living outside the county. There were 82% of the 92,749 people living in the county who lived and worked in the county (Census.gov).

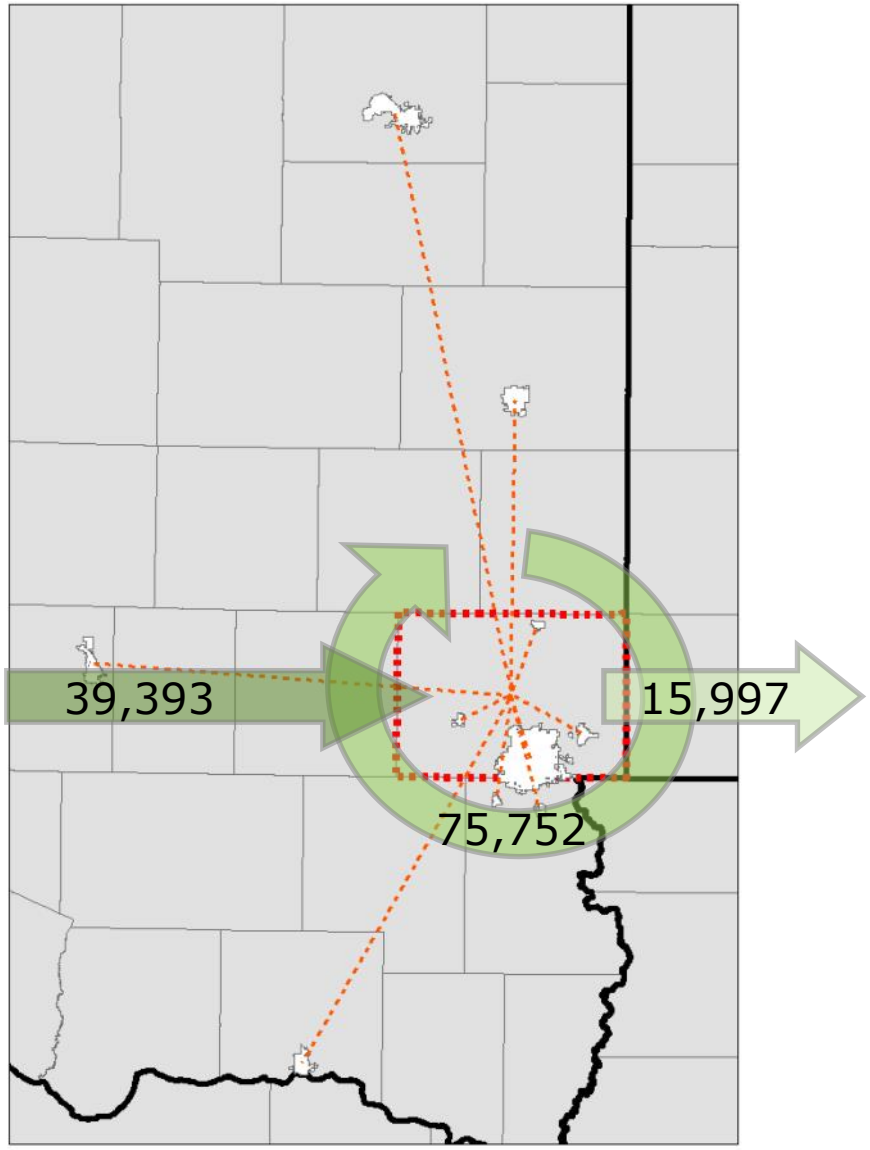
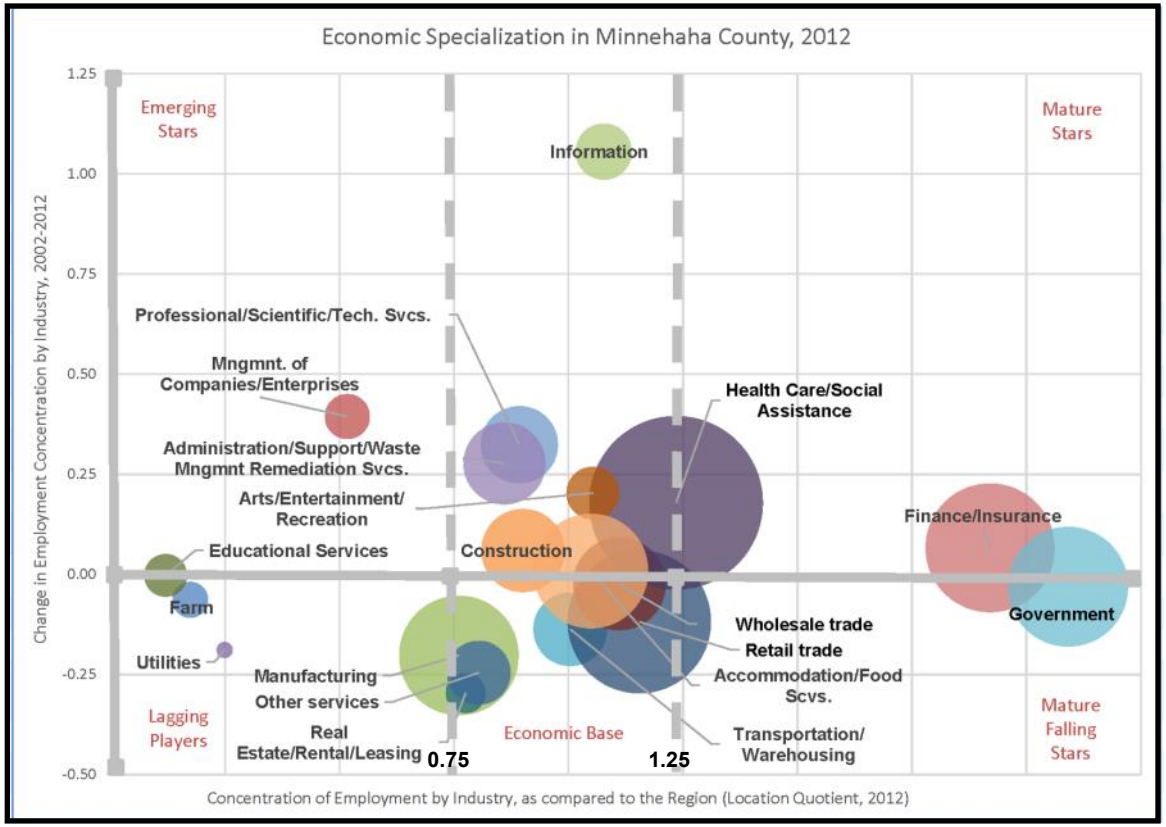


Figure 1.3 - Inflow/Outflow Commute to Work (by Place of Residence)
Data Source: Census.gov - Center for Economic Studies

Development Trends

While preserving a strong agricultural economy, Minnehaha County must continue to adapt to current and emerging trends in development in order for the top industry clusters to remain competitive along with retaining strong job growth of the local economy. The Change in Occupational Cluster Concentration chart, below at right, shows a comparison of economic specializations in each industry between Minnehaha County and the five-state region of South Dakota, North Dakota, Nebraska, Minnesota, and Iowa from 2002 to 2012. The location quotient (LQ) for a particular industry is a ratio comparing the percentage of employment for an industry in the local economy to the percentage of employment for the same industry in the regional economy.

The industry clusters with a location quotient greater than one have a greater concentration of local area employment in the county than the region (likely exporter); whereas, an LQ of less than one indicates a lower concentration of employment in the county (potential importer). If the LQ is equal to one, then the particular industry has the same share of employment in the county as does the region. The industries with an LQ between 0.75 and 1.25 are likely producing enough to meet local economic demand.



Note: The size of the bubbles indicate the total employment in each industry cluster within the county. Source: See Figure 1.5 on next page

Figure 1.4 - Change in Occupational Cluster Concentration Chart (2002-2012)

The chart, below, indicates that the top industry clusters with the highest economic growth in relation to the regional economy are the following:

- Arts/Entertainment/Recreation
- Health Care/Social Assistance
- Professional/Scientific/Technological Services
- Administration/Support/Waste Management Remediation Services
- Information
- Management of Companies
- Finance/Insurance
- Construction

Industry	Minnehaha County		SD, ND, NE, IA, MN					
	2002	2012	2002	2012	2012 Industry Percentage	Location Quotient 2002	Location Quotient 2012	Location Quotient Growth
Farm	920	936	289,945	266,612	0%	0.24	0.17	-0.06
Mgmt.. of Companies/Enterprises	195	1,491	118,836	142,828	1%	0.12	0.52	0.39
Manufacturing	9,413	10,605	730,823	690,387	2%	0.96	0.76	-0.20
Utilities	217	183	37,062	36,383	1%	0.44	0.25	-0.19
Transportation/Warehousing	2,902	4,018	190,194	198,203	2%	1.14	1.00	-0.14
Construction	3,304	5,147	293,676	282,974	2%	0.84	0.90	0.06
Retail trade	11,331	15,269	665,410	654,740	2%	1.27	1.15	-0.12
Wholesale trade	4,330	6,362	285,177	283,488	2%	1.14	1.11	-0.02
Educational Services	809	1,343	493,567	554,342	0%	0.12	0.12	0.00
Health Care/Social Assistance	10,148	22,466	718,414	900,776	2%	1.06	1.23	0.18
Real Estate/Rental/Leasing	1,019	1,169	71,090	74,656	2%	1.07	0.78	-0.30
Arts/Entertainment/Recreation	1,053	2,049	92,596	96,325	2%	0.85	1.05	0.20
Professional/Scientific/Tech. Svcs.	1,554	4,418	204,261	245,065	2%	0.57	0.89	0.32
Finance/Insurance	7,525	12,368	303,363	318,817	4%	1.85	1.92	0.07
Information	1,570	2,335	143,249	107,355	2%	0.02	1.08	1.06
Administration/Support/Waste Mgmt. Remediation Svcs.	1,992	4,984	255,407	286,952	2%	0.58	0.86	0.28
Government	7,060	10,687	248,719	253,030	4%	2.12	2.09	-0.03
Accommodation/Food Scvs.	5,791	9,776	416,082	461,566	2%	1.04	1.05	0.01
Other services	2,490	3,009	177,418	185,364	2%	1.05	0.80	-0.25
Total	**73,623**	**118,615**	**5,503,682**	**5,872,726**	**2%**			

Figure 1.5 - Total Employment by Industry Cluster

Source: South Dakota Department of Labor and Regulation: Labor Market Information Center; North Dakota Workforce Intelligence Network; Iowa Workforce Information Network; Nebraska Department of Labor; Minnesota Department of Labor ; and Economic Census

It is important to note that the City of Sioux Falls is the primary employment and economic development generator within Minnehaha County. The city will continue to drive commercial and industrial development both within the incorporated area as well as in close proximity to major nodes along specific business corridors such as Interstate-29, I-90, South Dakota Highway 42, 38, 11, & 17. The state of South Dakota also provides additional support in the retention and expansion of existing businesses along with the recruitment of new business by offering a low-tax climate and entrepreneurial atmosphere.

Existing Land Use Analysis

History of County Land Use Planning

Minnehaha County has a long history of land use planning, dating back to the 1960's:

- 1966: Appointment of Planning Commission
- 1972: Planning Department was formed to advise Planning Commission and County Commission
- 1973: County Commission adopted the first Comprehensive Plan
- 1973: First Zoning Ordinance was adopted
- 1988: Density Zoning was adopted
- 1990: Revised Zoning Ordinance was adopted
- 1998: The County adopted a new Comprehensive Plan

Along with Sioux Falls and Brandon, many of the small cities within the County have adopted their own comprehensive plans to guide development. The County shares a joint zoning authority with the City of Sioux Falls & the City of Dell Rapids in areas extending from one to three miles beyond the city limits. The County also has a joint platting area with the Cities of Sioux Falls, Brandon, and Hartford.

An accurate depiction of Minnehaha County's current land use pattern is an important step in planning a desirable future land use pattern. To illustrate the distribution of land uses throughout the unincorporated area of the County, a land use inventory was conducted using our Geographic Information System (GIS) and our tax payer information. Figure 2.1 titled "Existing Land Use Survey" divides Minnehaha County's 24 townships into several categories, see page 15.

To manage growth and guide land use decision-making in Minnehaha County over the next 20 years, this chapter contains background information on existing land use patterns, development trends and future land use planning. The purpose of this is to identify areas, intensities, and timing for potential future development as well as for long-term preservation.

The land use pattern in the unincorporated areas of the County is primarily agricultural or undeveloped lands. When the land area of cities (incorporated areas) are excluded, approximately 81.6% (384,789 acres) of the County has an agricultural designation. The majority of the larger farm holdings are located to the north and west of the Sioux Falls Metro Area.

As illustrated in Map 2.2, see page 20, titled "Residential Dwelling Density" much of the residential land uses in the unincorporated portions of the County are located within close proximately to the City of Sioux Falls. Most of this population can be found within the Wall Lake, Wayne, Benton, Mapleton, Brandon and Split Rock Townships. Single Family uses make up approximately 25 percent of the County's unincorporated land area, with most of the development in the 0 to 2 acre lot size range. There are also very few areas with Multi-Family Residential units in the unincorporated areas and 4 Manufactured/Mobile Home parks (Soo Dell, Peterson, Coachman's Manor and Pleasant Valley).

The Commercial and Industrial land uses are mainly concentrated along Interstate 29, Interstate 90, State Highway 42, State Highway 115 and State Highway 11. The uses in these particular areas make less than 1 percent of the unincorporated land base. Commercial and Industrial areas include uses such as offices, retail sales and trade professions, personal services, warehousing, contractor shops, showrooms, logistics, manufacturing, and other similar highway-oriented businesses.

The exiting land use survey and map was created by using land use codes collected from the Planning Office and Equalization and confirmed through various methods. The Land Use Survey chart and Existing Land Use Map, at right, confirm the dominance of agriculture and related land uses. Residential land uses include a significant number of parcels; however the category takes up less that 5% of the total land area. The detailed land use maps expose a pattern of small parcels and residential land uses clustered around a 5 mile radius of Sioux Falls. This is especially true for the areas to the north and the east of the city.

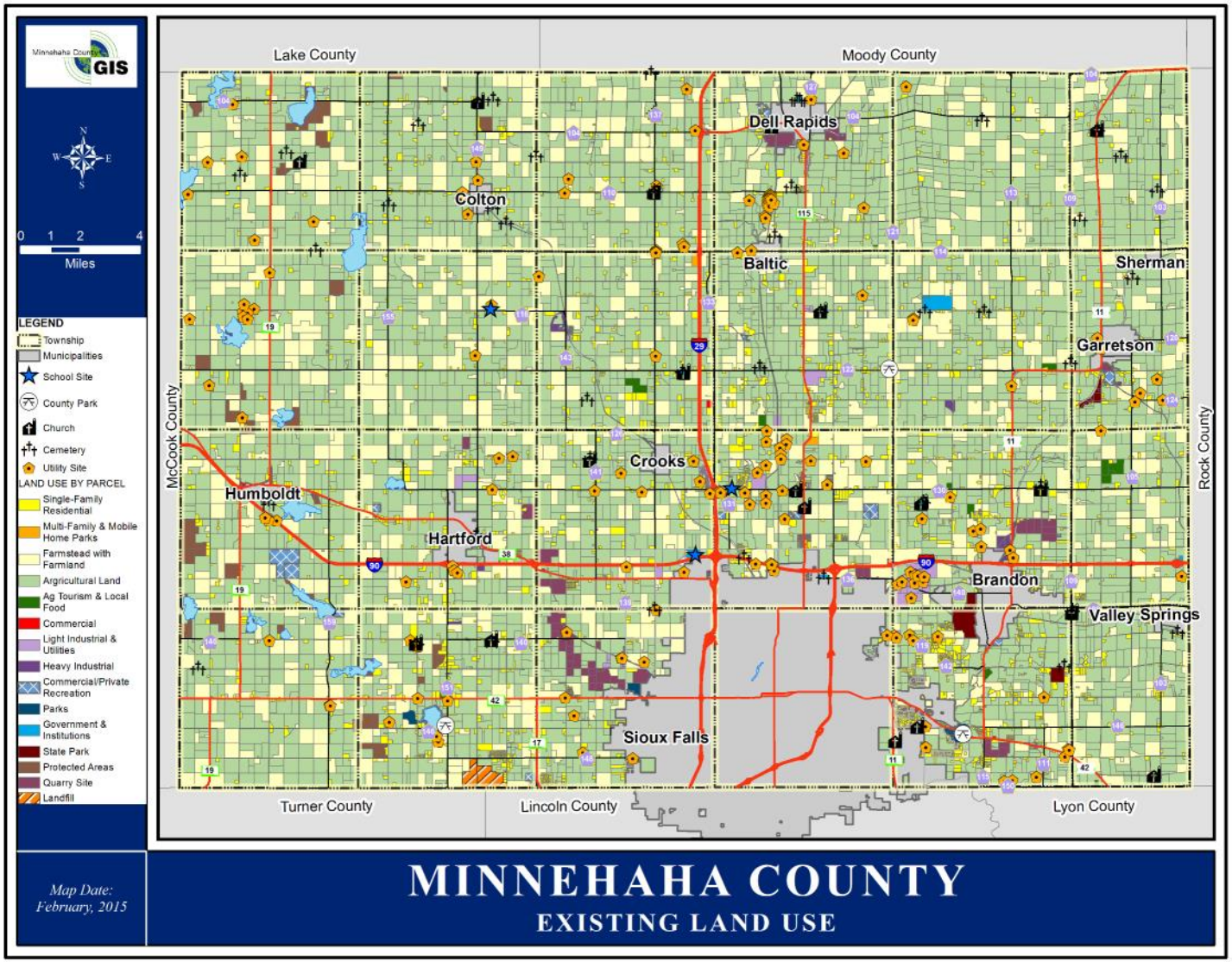
Mining and mineral extraction sites are primarily located along Skunk Creek, Willow Creek and Split Rock Creek. However, there are other sand, gravel, and quartzite extraction sites spread throughout the County. Three stone quarries currently operate within Minnehaha County.

The land uses in the Public and Institutional and Parks and Open Space categories are scattered throughout the county. Much of the protected land is located in the west half of the county where wetlands and lakes are also common.

Land Use Category	Number of Parcels	Number of Acres	% of Total Area (520,758 Total Acres)
Residential			
Single Family (< 5 Acres)	3,513	5,689	1.09%
Single Family (≥ 5 Acres)	1,401	16,772	3.22%
Multi-Family Residential	10	164	0.03%
Subtotal	4,924	22,625	4.34%
Agricultural Land			
Farmstead with Farmland	1,056	99,749	19.15%
Agricultural (<40 Acres)	2,028	30,471	5.85%
Agricultural (>40 Acres)	2,873	283,178	54.38%
Ag Tourism & Local Food	16	840	0.16%
Subtotal	5,973	414,238	79.55%
Non-Residential			
Commercial	98	203	0.04%
Industrial/Utilities	354	2,974	0.57%
Mining/Mineral Extraction	51	3,410	0.65%
Subtotal	503	6,587	1.26%
Parks & Open Space			
County Parks	12	65	0.01%
Other Parks	24	392	0.08%
Commercial/Private Recreation	34	1,308	0.25%
State Parks	16	855	0.16%
Protected Land	89	5,268	1.01%
Subtotal	175	7,888	1.51%
Public/Institutional			
School	3	117	0.02%
Church/Cemeteries	64	201	0.04%
City of Sioux Falls Landfill	2	614	0.12%
USGS EROS Data Center	2	310	0.06%
Other Government Lands	6	59	0.01%
Subtotal	77	1,301	0.25%
Other Land Categories			
Unparceled Lakes	4	1,300	0.25%
Right of Way & Other Unparceled Land	NA	9,182	1.76%
Subtotal	4	10,482	2.01%
Total Unincorporated Area	11,656	463,120	88.93%
11 Incorporated Cities	NA	57,638	11.07%
Total County Area		520,758	100.00%

Figure 2.1 - Existing Land Use Survey Source: Minnehaha County Planning Department

Map 2.1 - Existing Land Use Map*



* See Appendix Pages 115-118 for greater detailed quadrant maps of existing land use.

Agricultural Development Trends

Agriculture is by far the largest land use category in the County and is a vital part of the regional economy. The industry has experienced significant changes over the past few decades, resulting in the consolidation of agricultural land into larger farming enterprises, and the increase in hobby farms and local food production on small parcels of land.

The character and identity of the rural area has been altered due to an increase of non-farm uses. Agricultural land in close proximity to the Sioux Falls municipal area has experienced pressure to convert to residential, commercial, industrial, and recreational uses. Recent trends suggest that non-farm development is pushing even further into traditional rural areas because of an expanding regional population and the willingness of workers to commute from greater distances. Another contributing factor is that people are searching for more isolated sites where scattered nonfarm development has not occurred.

Rural developments have made it more challenging for farmers to continue operating on their land. Farmers are forced to deal with complaints from their non-farm neighbors ranging from livestock odors, to the application of animal waste, to dust from farm fields, and to the late night operation of farming operations. Although farmers should use applicable precautions and best management practices to reduce nuisances, rural residents should recognize that these minor nuisances cannot be eliminated and are a regular part of a productive agricultural area.

Minnehaha County amended its Zoning Ordinance in 1988 to limit residential density on agriculturally zoned property to one dwelling unit per quarter-quarter section of land. However, the continuing increase of non-farm residents in the unincorporated area of the County will increase land use conflicts; this is especially true for complaints based on animal agriculture. The limitation of urban and rural conflicts is important to all citizens quality of life.

Residential Development Trends

According to the 2010 Census, the population of Minnehaha County, which includes the incorporated and unincorporated areas of the County is 169,468. The total number of housing units in Minnehaha County is 71,557 based on the information from the 2010 Census. Housing units in the unincorporated area of Minnehaha County was 6,194 as of December 2014. The distribution of residential dwelling units in the unincorporated area is shown on Map 2.2 on pg. 20. Figure 2.2 provides the totals for new single family building permits since 1990, only two years after density zoning was established.

While most of the residential construction has occurred within the incorporated areas of the County, over 1,240 housing units were built in the unincorporated area since the adoption of the last comprehensive plan in late 1998. Split Rock Township, located east of Sioux Falls, is the fastest growing and most heavily populated township in the County. As of 2014 there were a total of 1,089 residential dwelling units in Split Rock Township.

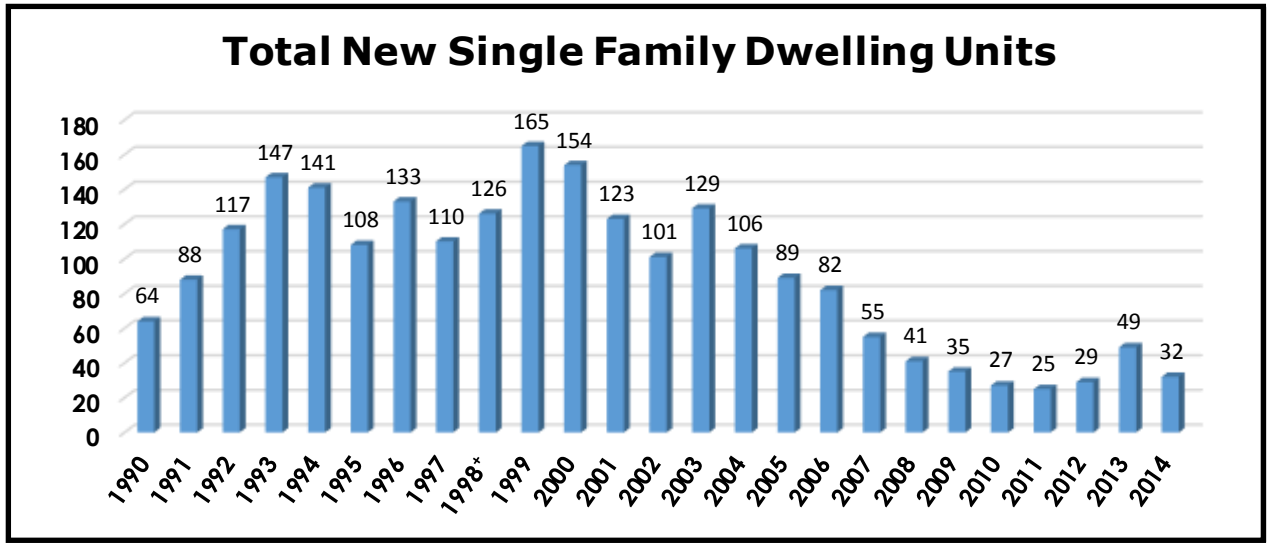
The townships of Mapleton and Wayne, located north and west of Sioux Falls, are the second and third most populated townships in the County. Many fringe developments which occurred in these two townships around the 1970's have been annexed into the City of Sioux Falls. A majority of the housing units in Mapleton Township are concentrated along the State Highway 115 (Cliff Avenue) corridor between Sioux Falls and Renner.

The Wall Lake area, located in Wall Lake Township, is anticipated to be an area that will continue to have demand for additional residential growth. This growth projection is based on existing residential developments around Wall Lake and nearby areas and the presence of sanitary sewer surrounding Wall Lake.

It is anticipated that the incorporated areas within Minnehaha County will continue to provide sufficient land area for the majority of residential growth. The County will still continue to provide residential housing opportunities in the rural area, per the adopted Density Zoning Ordinance regarding housing eligibilities. Figure 2.2, below shows the historic new residential construction demand in the unincorporated portion of the county since 1990, which is shortly after the Density Zoning Ordinance was past. The decrease in the trend line started well before the recession in 2008, therefore the overall demand for housing in the future is difficult to predict.

It is unlikely that either the lowest or the highest construction years will represent future demand.

The County is also anticipating that as the existing subdivisions in the unincorporated area are built out, pressure will increase from developers and land owners to approve new subdivisions in the unincorporated area. In order to deal with this perceived pressure the County will encourage clustering of building eligibilities per the Density Zoning Ordinance. The clustering of building eligibilities/single family residences will promote sustainability by preserving tillable farm ground.



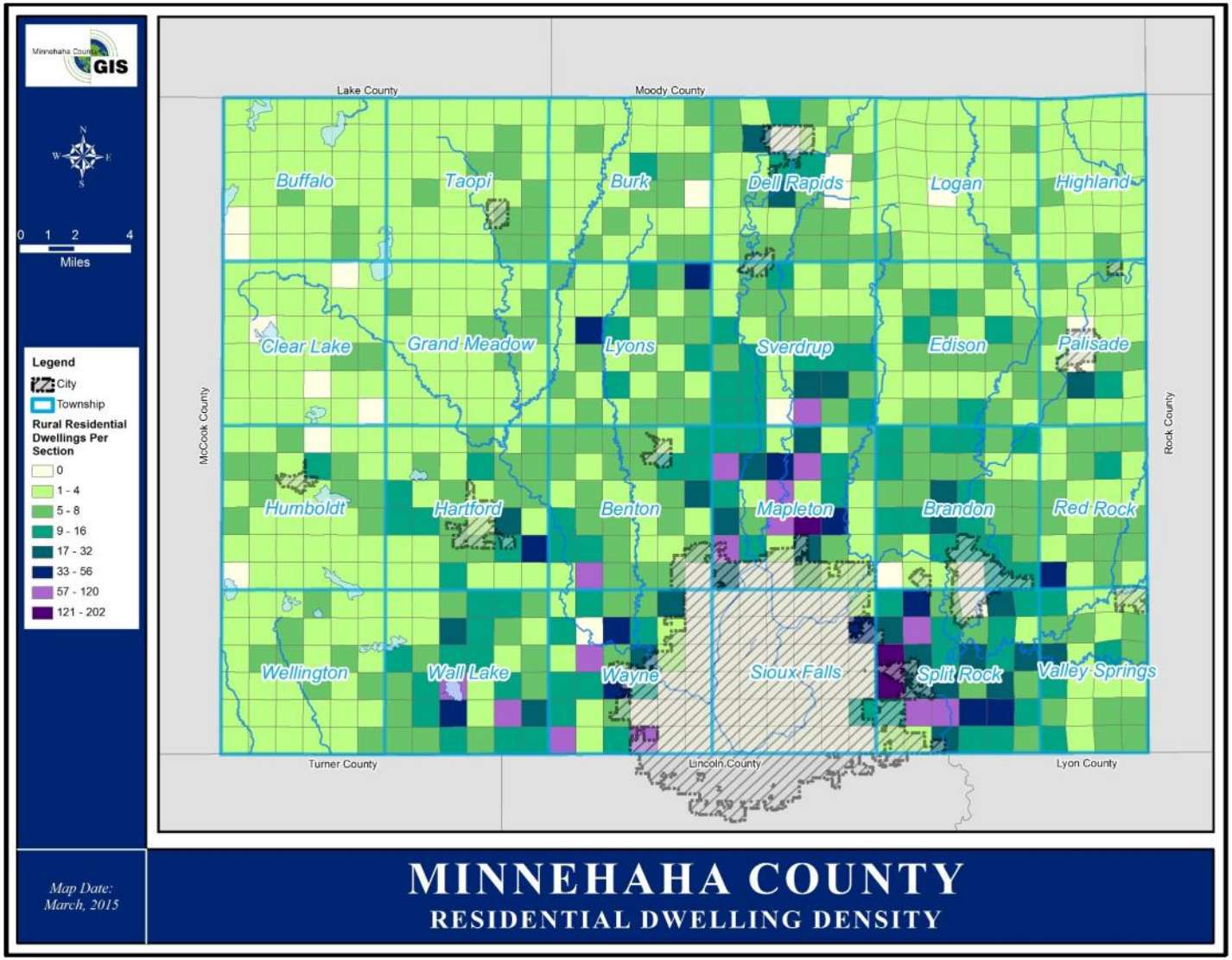
Source: Minnehaha County Planning Department

+ Year that the last comprehensive plan was adopted

Figure 2.2 - New Single Family Dwelling Units Per Year

* Year of last Comprehensive Plan

Map 2.2 - Residential Dwelling Density



This map shows the density of residential dwelling units throughout rural areas of the county. Notice the increasing density in closer proximity to Sioux Falls.

Commercial & Industrial Development Trends

The majority of commercial and industrial development in Minnehaha County are found within the incorporated areas of the County. The commercial and industrial development in the unincorporated area accounts for an extremely small amount of the total acres of the County. The existing commercial land uses are predominantly highway commercial and not intensive types of retail operations. The existing industrial land uses are predominantly manufacturing and transportation oriented. The County's extensive transportation network and land use regulations have encouraged commercial and industrial growth within the unincorporated area of the County.

Minnehaha County has two interstates that intersect along the northwestern border of Sioux Falls. Interstate 90 moves traffic east and west across the County and Interstate 29 moves traffic north and south through the center of the County. Commercial and industrial development has occurred at 10 of the interstate exits in the rural area.

The Crooks/Renner and Dell Rapids interchanges along Interstate 29 have attracted many commercial and industrial uses. The Brandon interchange is a mix of urban industrial uses on the south side of Interstate 90 and agribusiness uses to the north. The Hartford interchange along Interstate 90 has a similar development potential. Commercial and industrial uses have located at these interchanges for its excellent roadway access and close proximity to future municipal services. These interstate interchanges have attracted many different types of uses including light manufacturing, warehousing, trucking firms, contractors and sales businesses.

The County's unincorporated areas will continue to experience pressure to provide locations for both highway type commercial and light and heavy industrial development. Rail access, large contiguous undeveloped land parcels, increased traffic volume, population growth and lower relative land cost will continue to influence future commercial and industrial land use patterns in Minnehaha County.

Growth Management

Introduction

Historically, Minnehaha County has held a long tradition of being an agriculturally-dominant economy. It should be expected that this trend will continue over the next twenty years and beyond. There may be an increased focus on supporting the family farm identity in order to maintain a rich rural quality of life and agricultural land preservation.

Commercial and industrial development will continue to play a role in shaping key areas of the county. The locations most suitable for this type of economic growth are identified on the Future Land Use Map, pg. 82, around the eleven interstate exits, intersections of two major arterials, and within the unincorporated areas of Lyons, Ellis, Renner, Corson, and Rowena.

The interstate exits for Dell Rapids, Baltic, Crooks/Renner, Corson, and Hartford are prime locations for business development due to the ease of access and close proximity to the municipalities experiencing a majority of the population growth in the county. While these locations will continue to attract development, there should be a focus on identifying necessary improvements in order to maintain competitiveness in the regional market. There must be strong economic development policies that encourage retention of existing business and promoting job growth in the commercial, industrial, and agricultural industries as the regional center for much of the business and economic activity in southeast South Dakota.

Agriculture

Agriculture is an integral part of Minnehaha County's economy and land base. According to the United States Department of Agriculture (USDA), agriculture is the dominate land use in the County with approximately 1,157 farms encompassing 407,896 acres and an average farm size of 353 acres (Census of Ag., 2012). Agricultural crops and livestock contribute to the stable and diversified economy in the County. Agribusiness services and facilities supplement and support the farm economy by creating jobs in cultivation and harvesting, equipment sales and services, fertilizer and seed sales, finance and insurance industries, and in food processing related activities. A continued threat to agriculture is the encroachment of development which leads to conflicts between agriculture and non-agricultural uses.

The chart, at right, indicates that there was an increase of about 50 farms ranging in size from 10 to 49 acres over the most recent five-year period according to the 2007 and 2012 Census of Agriculture published by the United States Department of Agriculture (USDA). Comparatively, there were decreases in farm sizes ranging from 180 to 999 acres. This trend may be an indication that small hobby farms are becoming more common and directly correlated hobby farms, local food systems, and the process of estate divisions of land owned by farm families. Despite being the most populated County in South Dakota, Minnehaha County continues to be one of the most agriculturally productive counties in the State. According to the 2012 Census of Agriculture the market value of agricultural products sold was $270,247,000, which contributes to just over ten billion dollars throughout the state. This value is similar among the top ten counties in South Dakota (Census of Ag., 2012). As the total population increases, there will be a greater need to support the local agricultural industry as a viable economic activity and discourage conversion to other incompatible uses through policies designed to promote the agricultural economy at all scales for the direct benefit of Minnehaha County and the State of South Dakota. Other county governments have adopted ordinance requirements that are aimed at easing land use restrictions that pose regulatory barriers to a healthy, sustainable agricultural economy while promoting entrepreneurism.

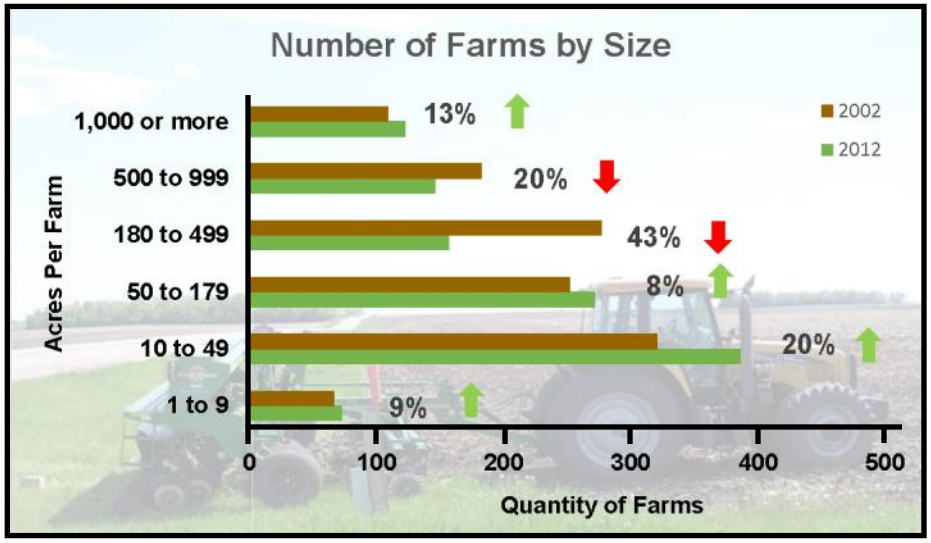


Figure 3.1 - Total number of farms chart Source: USDA

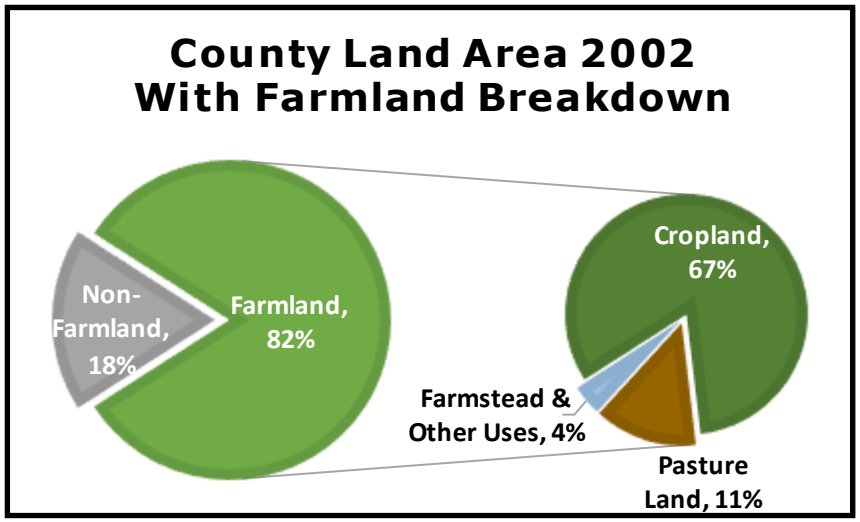


Figure 3.2 - 2002 Ag Census Land Area Breakdown Source: USDA

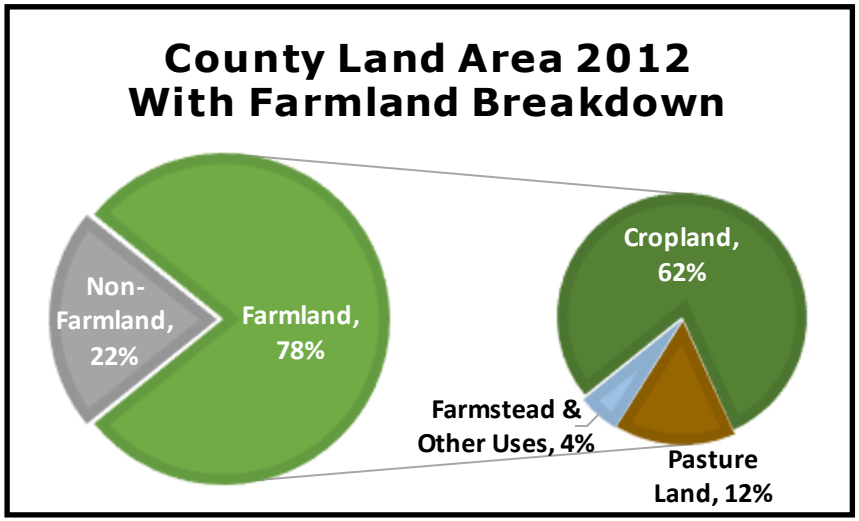


Figure 3.3 - 2012 Ag Census Land Area Breakdown Source: USDA

The charts, above and above at right, shows the overall breakdown between farmland and non-farmland from 2002-2012 as reported by the United States Department of Agriculture (USDA) Census of Agriculture. This data indicates a four percent farmland loss over the ten-year period. During the last twenty five years, the amount of land lost to non-farmland purposes is equivalent to roughly 39 square miles, or five percent of total land area in Minnehaha County (USDA). This analysis presents a challenge over the course of the planning period to manage resources more effectively and promote sustainable agricultural operations further highlighting the importance of local agriculture to both urban and rural residents. In an effort to balance the competing interests of municipal growth and agricultural land preservation, there should be a strong emphasis on identifying alternatives to the conversion of farmland by implementing sustainable rural economic development policies that empower farmers to attempt new, innovative endeavors in support and promotion of local agricultural production.

Corn and soybeans are the primary row crops produced in the county. Since 1924 there have been a consistent number of acres of corn harvested, averaging approximately 159,000 acres (USDA). Less detailed information is available about soybeans prior to 1949, but the average number of soybeans harvested has been in decline since 1997. The chart, below, indicates that soybean acres harvested has rebounded by a small margin since 2007. Livestock production is dominated by cattle/calves operations as well as milk and other dairy products from cows. Hogs are also well represented in Minnehaha County from nursery stock to finisher swine.

While not as prominent, an increasingly significant number of sheep, horses, and bees are raised within the county. According to the USDA Census of Agriculture, the number of farms raising poultry increased by more than twice the amount in 2002 to a total of 75 farms in 2012. About one-third of this total is made up of poultry farms ranging in size from 1 to 49 acres. It is important to note that this number does not include the increasing demand for county residents to raise domesticated chickens in rural residential subdivisions for the convenience of enjoying fresh, local produce while maintaining a commitment to healthy lifestyles.

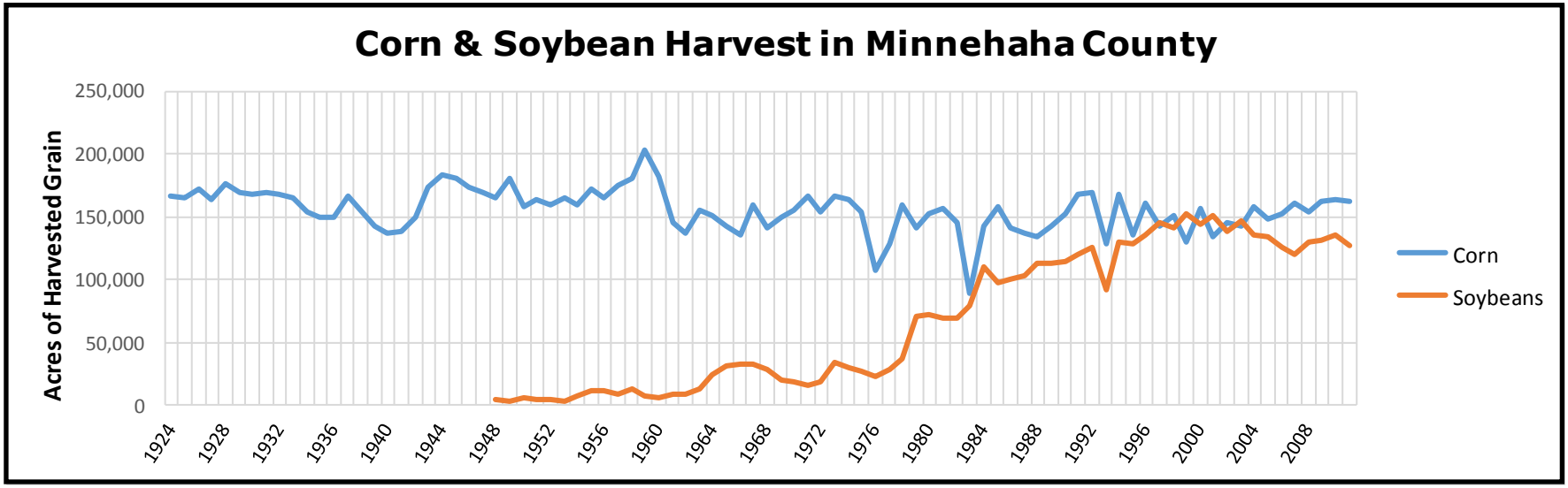


Figure 3.4 - Total Corn and Soybean Harvest in Acres

Source: USDA

Agricultural Tourism

Minnehaha County supports agricultural tourism by providing for uses which help to promote and maintain local farming operations, are complementary to agriculture, help maintain an agricultural heritage and rural character, and help to sustain the local farming community. The interest in tourism was initiated by the agricultural community who recognized that there were secondary opportunities for economic development involving agricultural and assorted related activities as well as opportunities for extra income from agribusiness activities. To assist and guide agricultural tourism the zoning ordinance was amended, adding a section based on three principals.

- Selection of the types of activities and experiences that are farm based or support farming that should be permitted uses in an agriculturally zoned district.
- Ensure that the public health, safety, and welfare concerns would be met by County regulations.
- Creation of an administrative review process which would still allow an opportunity for public input.

Allowing agricultural tourism development enhances the viability of farms and provides additional opportunities to create an income source on site. It also is a means of educating urban and visiting populations on the importance of agriculture to the local and state economy. As there becomes a further disconnect between the rural and urban populations of Minnehaha County, these interactions and educational opportunities become increasingly important.

Agricultural Tourism

Agriculturally related accessory uses, that are subordinate to the growing of crops or the raising of livestock, designed to bring the public to the farm on a temporary or continuous basis, such as U-pick farm sales, farm stands, farm mazes, pumpkin patches, farm animal viewing and petting, wagon rides, thrashing bees, farmland and activities tours, horticulture nurseries, and associated display gardens, cider pressing, classes or workshops, wine or cheese tasting, and similar uses.

To ensure that agricultural tourism is a benefit and not a detriment to the farming community, proposed uses must have their operating procedures reviewed. Issues that are taken into consideration during the application process include visitor management, use of agricultural products, hours of operation, impact on transportation system, availability of parking, safety and health issues, impact on neighboring properties, land use compatibility, and management of special or large events.

The adopted definition for agricultural tourism encourages farming related activities such as wineries, on-site farm experiences, farmer's markets or u-pick operations, corn mazes, or events anchored in traditional farming practices such as thrashing bees. These land uses help maintain a rich agricultural heritage and rural character while promoting sustainable development of the local, regional, and state economy.

Commercial/Industrial

The rural service areas identified in the Future Land Use Plan, pg. 84, are among the locations that have received modest growth pressure. While a majority of the economic development will be focused towards municipalities and transition areas, most rural commercial and industrial development will be encouraged to cluster around interstate interchanges as well as major highway crossings identified on pg. 82. The availability of public services and attractive industrial park-like areas will contribute to a majority of the commercial and industrial land uses locating within municipalities.

Rural service areas identified in the Future Land Use Plan with substandard infrastructure presents several issues that must be addressed in order to encourage better management of growth in the county's economic base, and promote cohesive and attractive development in the rural area while providing its' citizenry with a better quality of life as well as enhanced economic value of their property.

Agriculture - Goals & Actions

Goal 1. Conserve agricultural land for long-term agricultural use in order to protect the productive natural resources of the County and maintain the farm and farm-related economy of the County.

Action 1.1 Create more restrictive standards for residential building eligibility transfers outside of municipal growth boundaries.

Action 1.2 Reinforce that residential eligibility transfers are not a permissive use.

Action 1.3 Continue requiring the right-to-farm notice covenant on all residential building sites.

Goal 2. Discourage rural residential development in agricultural production areas.

Action 2.1 Allow the clustering of residential structures on non-productive agricultural land through the use of density zoning in the A-1 Agricultural and R/C Recreation/ Conservation zoning districts.

Action 2.2 Adopt setback standards which would limit new dwellings from locating in close proximity to concentrated animal feeding operations.

Goal 3. Develop a community food system study in support of the agricultural industry and maintaining healthy lifestyles.

Action 3.1 Initiate public outreach through education and awareness to assess priorities.

Action 3.2 Identify policies directly affecting the promotion and implementation of community food systems.

Goal 4. Stem the premature and unnecessary conversion of agricultural land to urban uses.

Action 3.1 Ensure that municipal utilities are available or planned for the area prior to conversion.

Action 3.2 Initiate a Farm Advisory Board to support the future of farm operations in Minnehaha County.

Goal 5. Recognize that agricultural lands have a definite public value as open space, and the preservation in agricultural production of such lands constitutes an important physical, social, aesthetic, and economic asset.

Action 4.1 Promote sustainable use and management of productive landscapes.

Action 4.2 Maintain economic links to the value of rural land other than development uses.

Goal 6. Develop historical and educational information to publicize the importance of agriculture to Minnehaha County.

Action 3.1 Instigate an "adopt a farmer" education program with local schools.

Action 3.2 Work with the Siouxland Heritage Museums to research and publish the history of agriculture in Minnehaha County.

Agricultural Tourism - Goals & Actions

Goal 1. Promote the development of agricultural tourism.

Action 1.1 Create a webpage, brochures, and other means to advance agricultural tourism businesses in Minnehaha County.

Action 1.2 Develop a marketing plan to promote agricultural tourism.

Action 1.3 Design directional signage unique to agricultural tourism operations.

Goal 2. Collaborate with other agencies to advertise County agricultural tourism.

Action 2.1 Establish connections between County and State tourism websites.

Action 2.2 Produce an assistance guide for new agricultural tourism operators.

Commercial/Industrial - Goals & Actions

Goal 1. Support and encourage growth of the county's economic base and promote the retention/expansion of job creation.

Action 1.1 Coordinate the siting of industrial uses with the Minnehaha County Economic Development Association.

Action 1.2 Enhance industrial development by restricting incompatible land uses where rail access is available.

Action 1.3 Discourage strip commercial development along transportation arteries, particularly those which serve as gateways to municipalities and attractions.

Action 1.4 Locate commercial uses at interstate highway interchanges and high traffic intersections to support highway users.

Goal 2. Enhance communication and cooperation among the several governmental and quasi-governmental entities who have the potential to impact and influence development patterns.

Action 2.1 Encourage a pattern of development in transition areas that can be integrated into municipal planning areas without the need for costly and inefficient public infrastructure expenditures.

Action 2.2 Promote cooperative efforts with municipalities in dealing with growth and development issues.

Action 2.3 Encourage annexation of potential development sites within municipal fringe areas before development plans are approved.

Goal 3. Ensure maximum efficiency in the provision of public services and facilities to promote cohesive and attractive development in the rural area.

Action 3.1 Work with Minnehaha Community Water Corporation to ensure that future water system improvements do not conflict with county development policies and the long term viability of agricultural operations.

Action 3.2 Limit rural densities so that current service levels are not exceeded to avoid the creation of additional special purpose districts (i.e. sanitary, water, and road districts).

Action 3.3 Utilize the planned development zoning district to accommodate a mix of land uses, promote the arrangement of uses on a comprehensive rather than piecemeal basis, and address problems related to existing land use patterns.

Rural Conservation

Introduction

Minnehaha County expresses at least two very different styles of character. The City of Sioux Falls provides a strong urban atmosphere because of its size and regional status, and the unincorporated area and small town centers have remained strongly rural in character. Agriculture trends and increasing populations are, however, changing the rural area. Large parcels of row crops, pastures, and family farmsteads are still a common sight in the country while many of the county's natural areas provide habitat for wildlife and recreation for visitors. Small towns and service centers still cater to the rural lifestyle with various amenities and gathering places. The rural area of Minnehaha County includes a wide range of qualities that distinguishes the character of the landscape. The history of the county is as diverse as the people living in it. The natural character of the county is becoming increasingly important as urban and rural development encroach on what is remaining. The family farm is changing as hobby farms, agricultural tourism, and acreages continue to expand in quantity and significance. The growth and density of residential houses change the county's landscape and character. Preserving and enhancing the rural character of the unincorporated area of Minnehaha County benefits everyone now and into the future.

Historic Preservation

Historic resources, like living objects, require thoughtful care and maintenance to enjoy a long, useful life. Each historic object is a reflection of a specific time in history. Over time, a collection of these specific resources can define an area's social, stylistic, cultural and economic heritage. The historic buildings, sites, districts, and objects of a place weave together to form a fabric that connects multiple generations, provides sense of place, and creates a community. The obvious historic resources are highly visible including sites of historic events, historic town sites, historic gathering places such as churches and public buildings, cemeteries and burial mounds, etc. Many more pieces of history, however, are used in daily life such as houses, barns, and storage structures for grain or equipment. These historic places form a base for the rural character of the county. The county should support the preservation of all types of historic places.

Tri-State Marker—Original placed in 1859, this stone pillar marked the junction of Minnesota, Iowa, and Dakota Territory by the Federal Land Office survey of Minnesota's western boundary.

Historic Images Source: Siouxland Heritage Museums

Every year many historic structures such as houses and barns are neglected as lifestyles and methods of farming evolve. Sound preservation planning and implementation offer benefits in a variety of ways. Fewer natural resources are needed to renovate an existing structure rather than tearing down and replacing the building. The architecture of existing buildings provide interaction between the past and present that creates a sense of place for area residents. There are economic benefits associated with increased real estate values and tourism of historic buildings and sites. Educational benefits follow when historic sites provide meaning and animation for the lessons of past lifestyles and stories.

This 1888 Barn, located at Arrowhead Park, has lasted generations and will continue to last because of careful and continual preservation

One of the primary methods of maintaining historical structures is the adaptive reuse of buildings. This means that an existing building, especially one that is historical or architecturally significant, is converted to a use other than the original intent while the exterior of the structure retains its integrity. This strategy also allows new uses of the land to be more compatible with surrounding existing land uses.

This carefully preserved privately owned barn has an aesthetic quality that maintains the agricultural heritage of the county while still providing function for the current landowner.

Natural Character

The land cover of Minnehaha County is dominated by agriculture and the developed land of incorporated municipalities. This does not, however, diminish the importance of the natural and semi-natural landscapes within the county. These landscapes can be found in the un-farmable wetland areas, slopes, and floodplains. Other natural areas take the form of shelter belts around farmsteads and publicly owned land for parks and preserves.

These natural landscapes provide a variety of benefits through what is known as "ecosystem services". Native plants and animals utilize these spaces as habitat and corridors for migration. Recreational opportunities for hunting, fishing, boating, and nature watching can be found along rivers and multiple public lands and parks within the county. As more people from Sioux

Falls and surrounding area look to escape the 'concrete jungle', the need to preserve and possibly create more natural areas such as parks and trails will grow.

Categories of Ecosystem Services

- **Supporting Services**
  - underlying natural processes such as the water cycle and soil creation
- **Provisioning Services**
  - harvestable products such as food and timber
- **Regulating Services**
  - moderation of the natural environment such as pollination, erosion control, and water purification
- **Cultural Services**
  - human experiences of the natural environment including recreation, spiritual, and cultural

Farming & Community

The country lifestyle, is often associated with hard work, land stewardship, and sense of community. This is especially applicable among the family run farms that fill the rural area. Over the years the business of farming has changed, causing the many farm operations to either consolidate or shrink. Since 1997, the number of farms larger than 2,000 acres and smaller than 70 acres have greatly increased; while the number of farms between 100 to 1,000 acres have noticeably decreased (USDA 2012 Census of Ag). Small farms remain possible because the growing popularity of 'hobby farms' that are owned by operators who simply want the farm lifestyle and by increasing use of agricultural tourism. Both of these farm types are influenced by the increasing population and proximity of Sioux Falls. It is important to recognize the changes in rural lifestyles and farming to ensure the viability of modern agricultural land uses.

Agricultural production is a vital part of the rural character. It also produces dust, smoke, noise, odors, and uses pesticides, fertilizers, odd hours of operation, and other items that may be considered offensive to residents not well acquainted with life in the rural area. In order to inform property owners of this potential conflict, the Right-To-Farm Notice covenant has been required for all new houses since 2006 and continuation of this requirement is important for future growth.

The residents of rural communities utilize small towns and rural service areas as gathering spots, employment, and convenience shopping. The character of these service areas contribute to the rural sense of place through local activities, gathering places, and community pride. Rural service areas are changing as commercial and industrial districts expand services to attract customers from Sioux Falls and the larger region.

Expansion of these service areas and towns will occur and the Comprehensive Plan should assist in the orderly development of these important places of rural character. Several rural service areas have populations greater than small incorporated towns. Homeowners in these service areas increasingly desire more urban like amenities such as roads, sewer, and nuisance enforcement. Regulations and ordinances should be evaluated as to their appropriateness and effectiveness for town-like areas.

Housing Density

Rural character with its country lifestyle and natural landscapes attract many people to live in the unincorporated area of the county; however, the continual development of new houses threatens to diminish the very aspects of rural character that many residents seek. Once farm and natural land is converted to a higher intensity use, such as residential housing, it is highly unlikely to return to its previous farm or natural use. The primary tool that Minnehaha County uses to limit development and maintain rural density and prevent sprawl is density zoning standards. These standards that have been in place since 1988, allow one residential building eligibility (BE) per 40 acres or per lot of record at the time of the law. Low densities of residential houses maintain the visual character of the rural area. It also preserves large tracts of farmable land rather than fragmented segments between residential parcels.

Density zoning restricts the total number of residential houses allowed in the county. The limiting of residential dwellings has caused each BE to be regarded as a highly valuable 'commodity' for land owners. There are still approximately 9,295 building available eligibilities within the unincorporated areas of the county. If the average development rate continues as it has in the last 25 years, then 1,813 new housing units will be built through the year 2035.

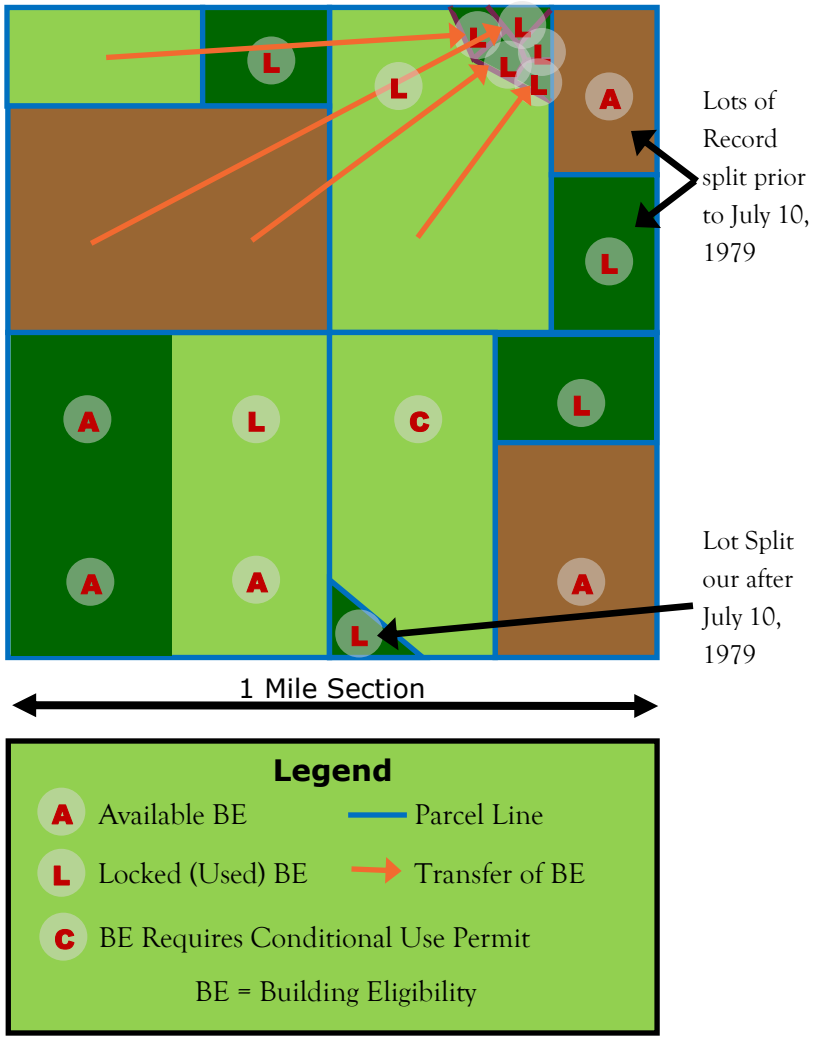


Figure 4.1 - Density Zoning Diagram: This diagram demonstrates the building eligibility assignment for a fictional county section including lots of record and transfers to create a cluster of building eligibilities.

Although density zoning prevents over development considerably well, the placement of one house on every 40 acres can create its own set of problems. Randomly placed residential sites can fragment farmland, cause houses to locate nearer to conflicting land uses such as CAFOs, and require costly extensions from rural services. When residential units are clustered together the houses create a micro-community, and this prevents much of the undesirable effects of spread out development. These housing clusters may not appear "rural" because of close proximity to one another. Despite the aesthetics of housing clusters, the transfer and clustering of residential building eligibilities should be encouraged when development is pending because of the benefits that clustering provides.

Even at a low density, the loosely defined pattern of growth can create unnecessary and costly sprawl. Conversely, further growth in some areas of the county is welcome and desirable. One option for satisfying both of these requirements may be permitting the transfer of development rights (TDR).

A TDR process would allow a building eligibility to be transferred (sold) from a sending zone (productive farmland, environmentally sensitive land, etc.) to a receiving zone (growth area usually with a certain level of infrastructure). The total number of county wide residential houses would not increase, while agricultural land and character will be preserved in the sending zone. This and other land preserving techniques should be explored for potential feasibility and public support.

Existing Rural Village / Rural Service Center

Conventional Pattern of Development

Development Pattern with TDR

Figure 4.2 - Transfer of Development Rights Examples

Source: Massachusetts Smart Growth / Smart Growth Toolkit

Historic Preservation - Goals & Actions

Goal 1. Recognize and promote Minnehaha County's history and historical character.

Action 1.1 Expand the County's website for educational purposes to include information on historical places and structures.

Action 1.2 Integrate historic preservation values into county planning, land use, and other policies.

Action 1.3 Develop cultural and heritage tourism opportunities through various means including driving tours and online experiences.

Action 1.4 Develop a program to recognize outstanding preservation work of individual historic buildings and places including barns and farm houses.

Action 1.5 Support and encourage museum activities/ programs and exhibits that preserve, display, analyze, and educate on Minnehaha County's history.

Goal 2. Make use of a broad range of preservation tools and strategies to permanently protect the county's historic assets.

Action 2.1 Promote the adaptive reuse of historic structures for public and private uses.

Action 2.2 Create a historic resource inventory and integrate it into the county's information systems including Geographic Information System (GIS).

Action 2.3 Support the development, preservation, and interpretation of efforts of local museums and historic organizations.

Action 2.4 Work with the cemetery board to develop a website to promote the history and genealogy of local cemeteries.

Natural Character - Goals & Actions

Goal 1. Recognize and promote the use and preservation of places with natural character throughout the county.

Action 1.1 Lead by example, by utilizing natural landscaping, buffers, lake front restorations, and green construction where appropriate on county-owned land and parks.

Action 1.2 Provide education opportunities about the natural environment and its benefits with signs and brochures at the county parks.

Action 1.3 Encourage new residences to plant trees and naturalized landscaping as an alternative to extensive areas of turfgrass.

Farming & Community - Goals & Actions

Goal 1. Support the country lifestyle including all aspects of agricultural operations.

Action 1.1 Preserve the rural aesthetic through minimum landscape standards for new housing starts and subdivisions.

Action 1.2 Continue to require the Right-to-Farm Notice Covenant for new housing starts and support farm operators with expansion requests where expansion is appropriate.

Action 1.3 Prevent the development of conflicting neighboring development by limiting commercial and industrial development to highway intersections and residential subdivisions in rural service areas.

Goal 2. Support rural service areas as an essential and interconnected part of the rural economy and character.

Action 2.1 Encourage expansion, updates, and repair of special purpose districts such as roads and sewer districts to allow for reasonable growth in rural service centers.

Action 2.2 Support festivals and events to promote community spirit in rural service centers and towns.

Action 2.3 Allow and support the orderly growth of rural service centers including growth in commercial, industrial, and residential development.

Housing Density - Goals & Actions

Goal 1. Maintain and strengthen low density residential standards in the agriculture district.

Action 1.1 Continue to maintain accurate records of location and quantity of used and available building eligibilities.

Action 6.2 Encourage residential eligibilities to be placed on the least productive agriculture ground and cluster eligibility developments when possible.

Action 6.3 Work with property owners to encourage eligibilities, lots, and houses to be clustered together when developed.

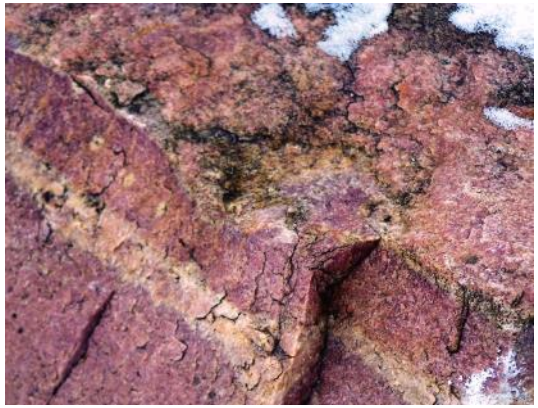
Action 6.4 Develop a feasibility study and draft for a transfer of development rights program.

Action 6.5 Utilize tougher residential building restrictions and standards within high agricultural production areas.

Action 6.6 Encourage the annexation of fringe developments located adjacent to municipal boundaries.

Environmental Stewardship

Introduction



Direct and indirect development impacts on natural resources makes it vital that full consideration is given in land use planning decision-making efforts. Natural resources found throughout the county are water, productive soil, sand and gravel, and Sioux quartzite. The protection of native flora and fauna along with the corresponding ecosystems in which all things live is as important as ever before to maintain ecological biodiversity. In the years ahead, runoff and soil erosion will be a major problem that needs to be addressed properly for agriculture to remain strong in a growing economy. Wildlife habitat is supported by the density, diversity, and productivity of land and water resources.

Soil can be considered the most important natural resource as it provides a growing medium for crops and for the grasses grazed by livestock. The importance of maintaining high quality soil conditions will be an integral task for all landowners. The entire county was once glaciated and in the eastern two-thirds of the county the glacial till is covered in most places by loess (NRCS).

Sand and gravel deposits can be found in the aquifer basins while the Sioux quartzite has been quarried since the county was settled. The county is fortunate to have available gravel and stone for many uses ranging from sub-grade material for roads to concrete aggregate for riverbank stabilization (NRCS). The County includes thousands of acres of protected land through the resources of various agencies and governments, see Map 5.2 on pg. 53. These protected lands and open spaces will grow in importance as population and demand for land and resources increases.

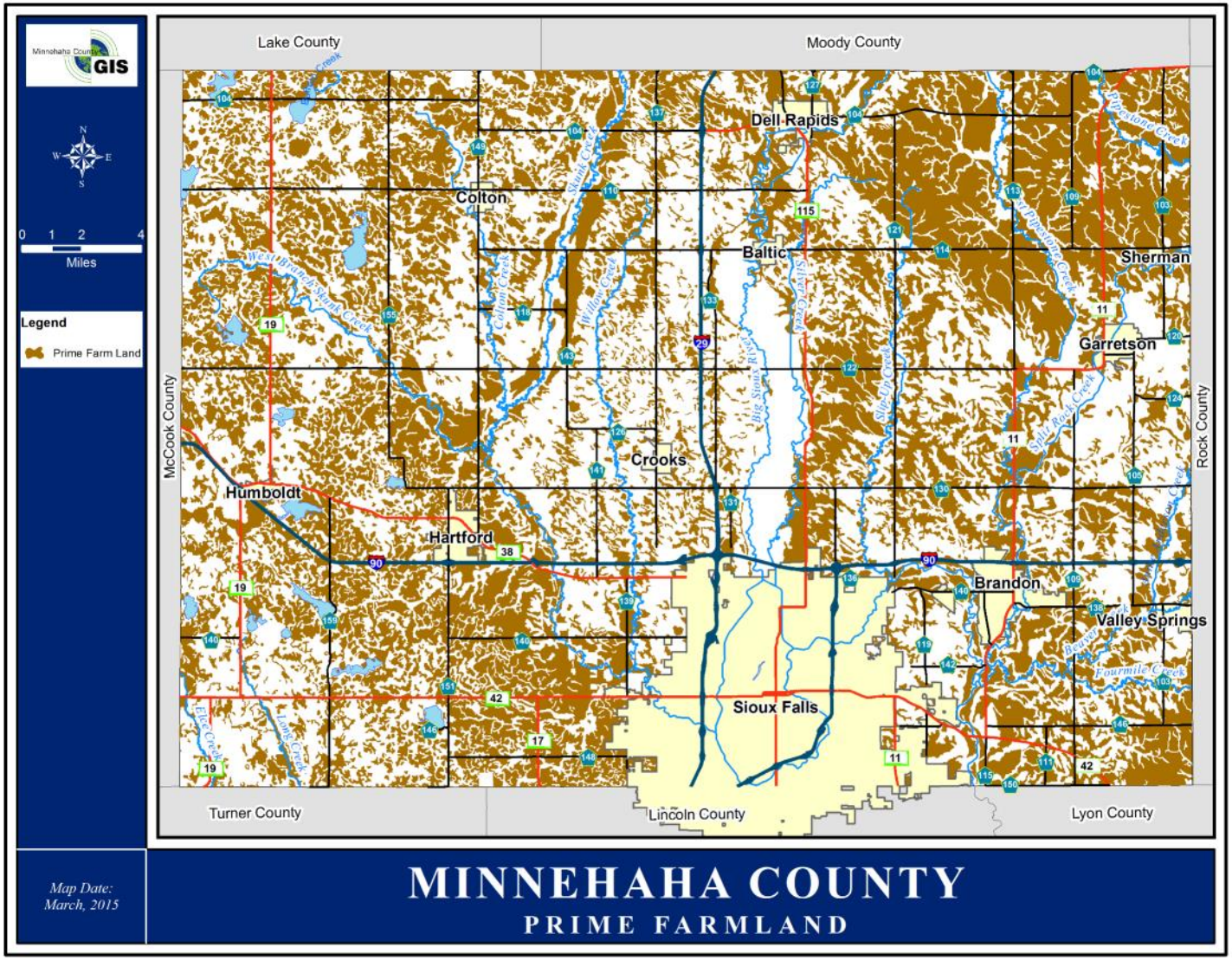
Land Resources

Soils

Soil is one of the most important natural resources in Minnehaha County because of the large presence of agriculture production. Before settlers came to the area, tall grass prairie dominated the landscape and assisted in creating some of the most fertile soils throughout the nation. Now, much of the prairie is gone and the hundreds of thousands of acres of fertile soil is utilized in producing crops. About 300,000 acres in Minnehaha County are considered 'prime farmland' by the U.S. Department of Agriculture, see Map 5.1 on pg. 45; and soil characteristics are the primary factor in the determination of prime farmland. Every year, development and land degradation threatens prime farmland. Sprawling and fragmenting land development should be avoided to protect this vital resource. Good farming practices are critical in preventing soil degradation. These practices are becoming more common as agriculture becomes more precise. The health of Minnehaha County soils is vital to maintain and improve in order to provide greater productivity for increasing local and global populations.

Managing for soil health, improved soil function, is mostly a matter of maintaining suitable habitat for the myriad of creatures that comprise the soil food web. Managing for soil health can be accomplished by disturbing the soil as little as possible, growing as many different species of plants as practical, keeping living plants in the soil as often as possible, and keeping the soil covered all the time.

Map 5.1 - Distribution of Prime Farmland



Prime Farmland - This map shows the land area that is considered to be prime farmland according to the USDA soil classification. The abundant area of prime farmland is important to protect as development encroaches into the unincorporated areas of the county.

Sand, Gravel, & Quartzite Deposits

Sand, gravel, and quartzite are among Minnehaha County's major natural resources. The mining industry is significant to the county and is likely to continue to be so in the future. Most of the sand and gravel deposits are found along river and stream beds where the porous material allows for groundwater to accumulate into shallow aquifers. Quartzite is the bedrock for the entire county and can be found sporadically near the surface in the eastern half of the county.

The process of extracting sand, gravel, and quartzite disturbs the land surface more than any other land use. This disturbance is evident in aerial photography of the area surrounding Skunk Creek to the west of Sioux Falls (below).

The vast disturbance of land through quarry operations necessitates a reclamation process for returning the land to a useable state. The proposed use of reclaimed land should match up with this plan. Naturalized reclamation areas should include provisions to create viable habitat such as slope alterations, soil replacement, vegetation, and wetland creation where applicable. Development may be done in some instances such as the Cherry Lake Reserve on the northwest corner of SD Highway 42 and Ellis Road in Sioux Falls.

Image Left: Lakes created by high groundwater in former gravel quarries. Active quarry sites can be seen in the approximate center of photo; while city annexed land is developing into a residential neighborhood along the bottom. Recreation is seen on the right side of the photo where Family Park is located and is operated by the City of Sioux Falls.

The potential for surface and ground water alteration and contamination is also a concern with gravel extraction. The permitting process for new and expanding quarry operations should continue to require a hydrologic study to ensure that no adverse effects will be made to surface and ground water. Extraction operations generate sizable amounts of truck traffic. Truck traffic problems are a key concern to county residents in regards to this industry. In some cases the hauling of mineral resources on County, State, and Township roads necessitates additional maintenance costs that can be mitigated by the company doing the extraction.

Noise and safety on public rights-of-way are also serious concerns associated with truck traffic. Some operations are restricted to certain roadways while other operations are required to spray gravel roads to reduce the limit of dust generated by the trucks.

Mining operations are regulated in Minnehaha County through the Zoning Ordinance. Mining is allowed in the agricultural and recreation/ conservation zoning districts through the conditional use permit process. This allows the public and other affected parties to have a voice in the permitting process. There are also State regulations which must be adhered to as well.

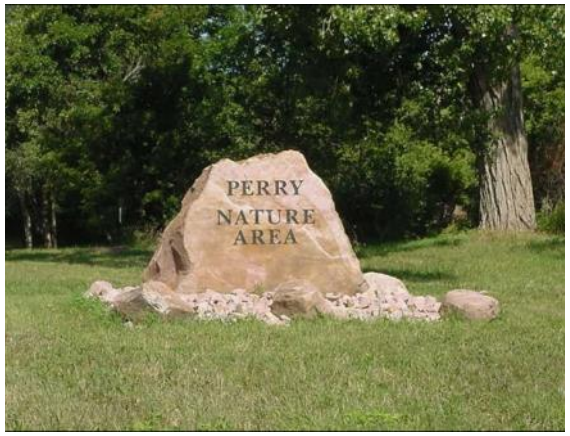
County Parks
Minnehaha County recognizes the value and importance in providing our citizens with opportunities for the use and appreciation of the county's natural resources. Our parks provide a place for healthy outdoor recreation, cultural education, and interaction with nature. Each of the County's three parks exist due to acts of generosity through the donation of land.

Wall Lake Park
Wall Lake Park is a 25-acre public use area and the county's oldest park. It lies adjacent to Wall Lake and has the county's only public swimming beach. In 1917 a sandy strip of land was dedicated for the beach.

The park encompasses property that was willed to Minnehaha County in 1949 to be used for public parks and recreational purposes. It wasn't until 1985 that the county took steps to develop the park and improve the beach. Picnic tables and grills are provided at several sites and a picnic shelter overlooks the lake from a hilltop. Children can enjoy the playground equipment and a spacious open area is available for field sports. This is the busiest of the County parks in part because of the swimming beach. Future improvement considerations for this park should include potential activities for open spaces and demonstrations of sustainable practices such as beach front restoration.

Bucher Prairie

The tract of land that became Bucher Prairie was dedicated with the request that the park be a reflection of the prairie that would have been historically present on the site. Eastern South Dakota once was a tall grass prairie, the wettest prairie ecosystem. Grass and flowers of this ecosystem would have included bluestem, switch grass, Indian grass, pasque flower, goldenrod and purple coneflower. Many of these native plants have been re-introduced into the 20 acre park. The park includes a trail system, intermittent streams with pond, and a picnic shelter. This prairie restoration park provides a good opportunity to include educational materials of the native flora and fauna of Minnehaha County.



Perry Nature Area

The Perry Nature Area encompasses 23 acres of diverse ecosystems including woodlands, upland grasslands and riparian areas that are home to a wide variety of native plants and numerous species of wildlife. In addition to these natural features, the area is linked to a rich community history. The nature area is the former East Sioux Falls town site, a community established in the late nineteenth century in relation to the nearby quarrying of Sioux quartzite. The stone from these quarries was used in many historic buildings in the region. Perry Nature Area is dedicated to the preservation of the wonderful natural treasures of the site and the storied history of this once bustling city. The Perry Nature Area is currently operated in conjunction with the Mary Jo Wegner Arboretum and the City of Sioux Falls.

State Parks
Minnehaha County contains three state parks. All three are located in the diversified terrain found on the eastern side of the county. Each state park offers varied opportunities for recreation and education.

Beaver Creek Nature Area
Beaver Creek Nature Area was developed to increase environmental awareness of visitors and to highlight natural and historical resources in the vicinity. Pioneers named the creek for the numerous beaver they found along the winding spring-fed stream. The stream flows year-round, supplying numerous plants and animals with water, and in turn, supplying visitors with opportunities to observe nature up-close.

Big Sioux Recreation Area
Big Sioux Recreation Area lies on the banks of South Dakota's Big Sioux River near the City of Brandon. This park is popular among campers, canoers, history buffs, and archers. Volleyball courts and a disc golf course are also available.

Palisades State Park
Palisades State Park is one of the most unique places in South Dakota. Split Rock Creek, which flows through the park, is lined with Sioux quartzite formations varying from shelves several feet above the water to 50-foot vertical cliffs. The quartzite cliffs differentiate Palisades State Park as perhaps the best rock climbing location on the east side of the state.

Public Lands

The South Dakota Game, Fish & Parks (GF&P) operates thirteen game production areas in Minnehaha County. This land encompasses 2,531 acres with the majority of it composed of water and various wetlands. In addition, the United States Fish and Wildlife Service preserves 4,202 acres of wetlands and associated uplands in Waterfowl Production Areas.

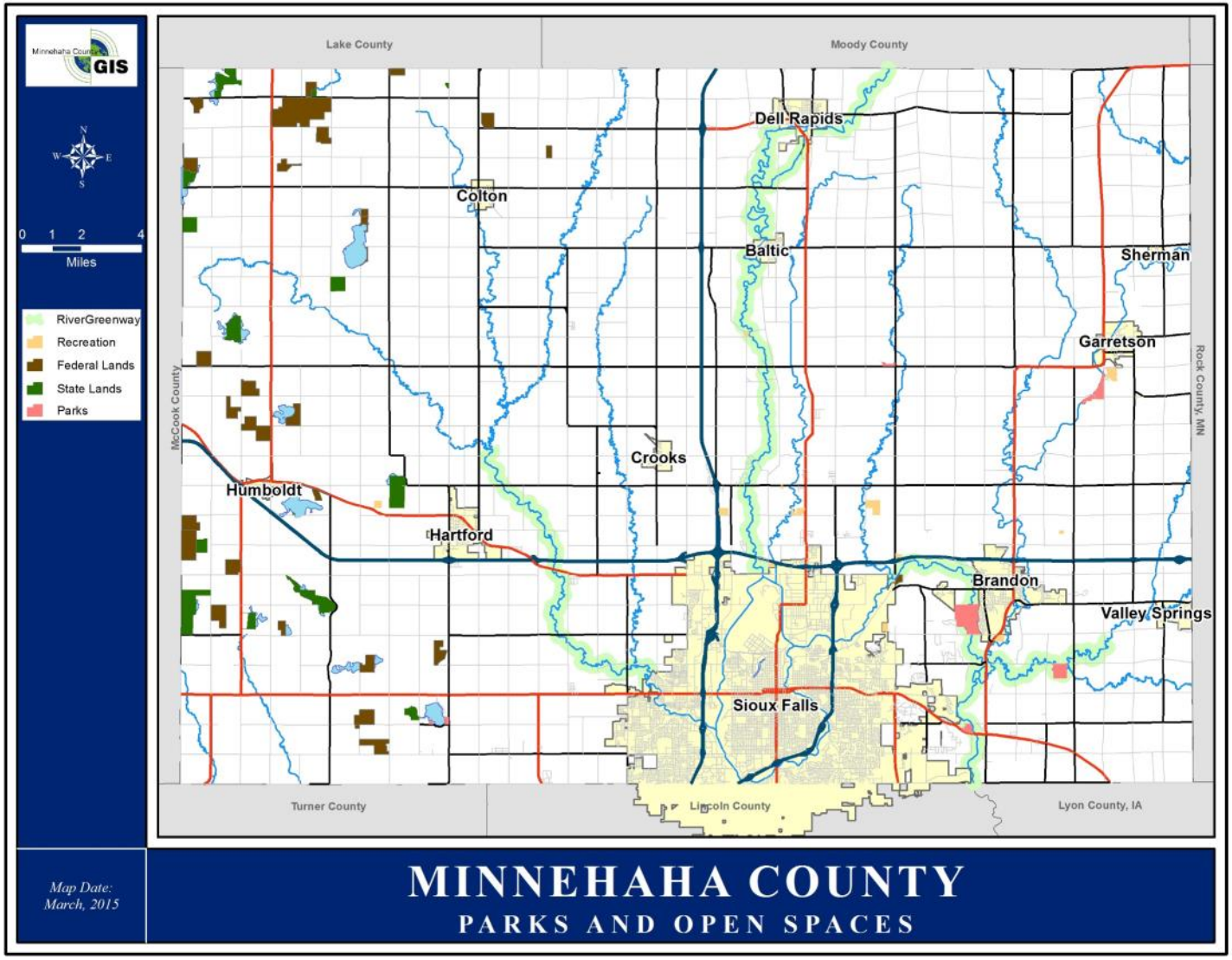
The preserved lands are predominately located in the western portion of the county which consists of many pothole lakes that are conducive for wetland and grassland dependent species. The primary focus of preserving this land is to provide opportunities for game production and for public hunting and fishing.

Greenways and Trails

Parks and conservation land provide valuable habitat for natural resources and recreation opportunities for the public; however many of these locations are spread out and fragmented making it difficult for wildlife to utilize multiple green spaces and difficult for the public to visit without a personal vehicle for transportation. Naturalized greenways consisting of natural landscapes with little to no development could be utilized to act as corridors for wildlife to move freely between the pockets of parks and conservation lands. The most appropriate places to locate greenways and multi-use trails would be to begin near rivers and streams where wildlife and ecosystems services are naturally present.

Greenways can provide benefits to the county through promoting ecosystem services, such as water filtration and flood control; greenways may also double in purpose by providing locations for activities such as multi-use trails. Trails can connect green spaces and communities with each other while providing for recreation and transportation benefits. These trails should interact with existing municipal greenways, municipal trails, and county non-motorized transportation and recreation routes to provide convenient access for members of the public. The non-motorized section of the Transportation chapter describes potential routes and trails in more detail as well as on Map 5.2 on pg. 53.

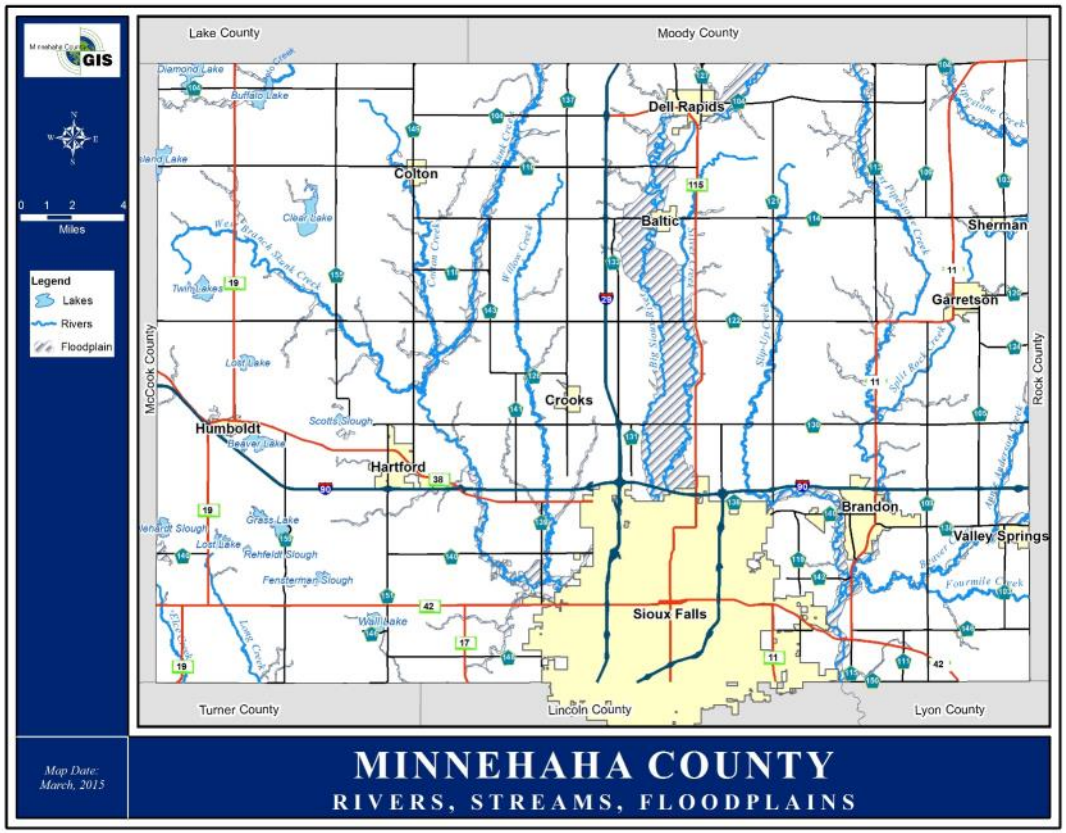
Map 5.2 - Parks and Open Spaces



Rivers and Streams

The Big Sioux River, along with the Skunk and Split Rock Creek tributaries, form the major surface drainage features in the county. The Big Sioux begins in the northeast part of South Dakota then flows through Dell Rapids, Baltic, loops around Sioux Falls, and near Brandon on its journey to the Missouri River. In the eastern two-thirds of the county the stream network is well defined. The remainder of the county has more poorly defined drainage, and this is visible in Map 5.3 where lakes become common and large gaps separate named streams. Significant natural features are apparent in Garretson, Dell Rapids, and Sioux Falls. For example, the Dells of the Sioux is characterized by steep, vertical quartzite walls where it splits from the river. Dell Rapids, Garretson, and Sioux Falls utilized an essential natural resource to promote the area as a major public asset and tourist destination. Skunk Creek and its west fork tributary drain the western portion of the county, joining the Big Sioux in western Sioux Falls. Split Rock Creek, which drains into the Big Sioux south of Brandon, forms the dominant drainage feature in the eastern part of the county. The natural beauty of the stream is prominently displayed in Garretson within the city park and south of the city at Palisades State Park, where steep quartzite walls and ledges accent these recreational amenities.

Map 5.3 - Rivers, Streams & Floodplains



Floodplains
Minnehaha County maintains eligibility in the National Flood Insurance Program by enforcing the Floodplain Ordinance. This ordinance restricts residential structures in the floodways and requires specific construction measures in the floodplain. There are approximately 43,910 acres of floodplain designated on the November 16, 2011 & October 10, 2009 FEMA maps, of which 3,856 acres are in the floodway. Many homestead sites and small enclaves, such as the Village of Renner, have endured the spring floods for generations.

Floodplains offer some of the most beautiful landscapes, productive wetlands, fertile soils, significant plant and animal life, and valuable historical and archaeological features in the county. Water has long been critical to human survival, providing transportation and commerce, and settlement patterns largely influenced by natural systems. Since early development frequently encroached into flood prone areas, certain areas of the county may be subject to flooding hazards similar to the images shown at right.

The village of Renner has had a history of flooding. The images to the right include floods from 1960 and 2011
Images courtesy of : George Carlson of sodcity.com

Lakes & Wetlands

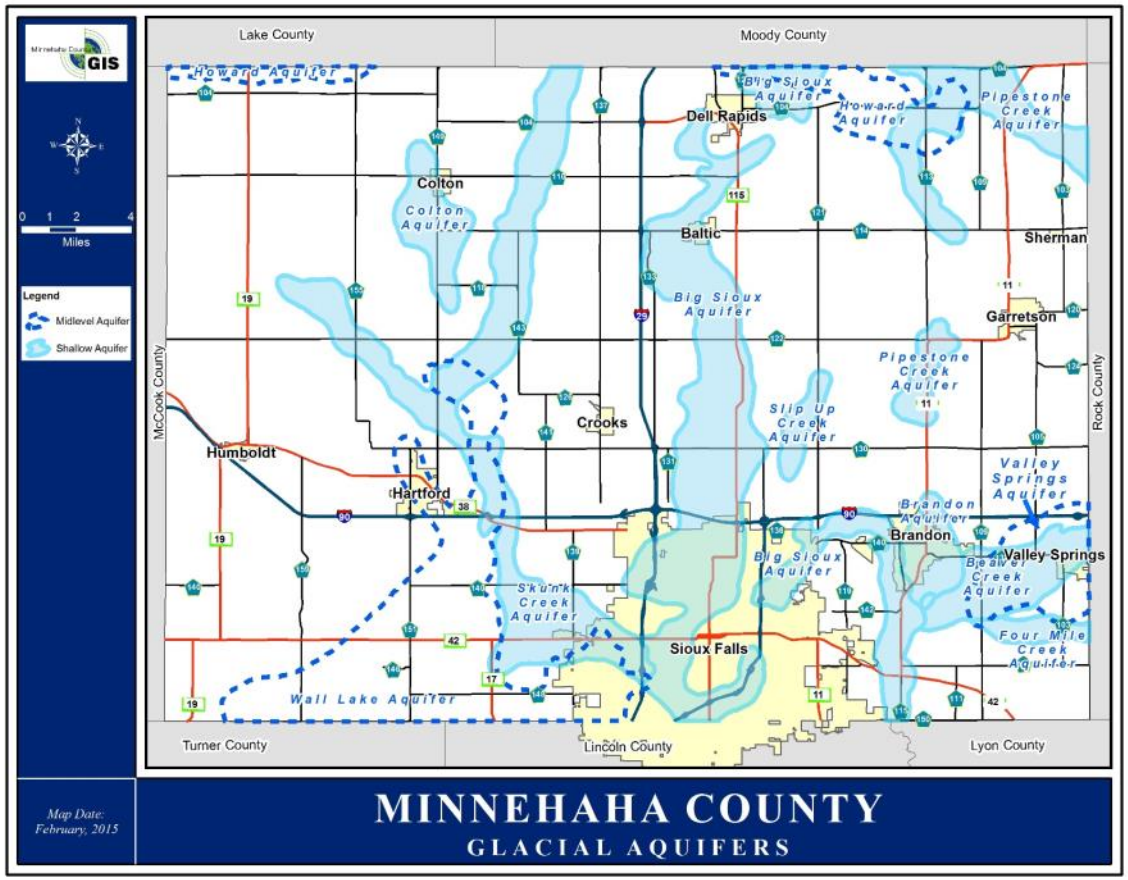
Numerous prairie lakes were created in eastern South Dakota by the last glaciation period. While they are most prevalent in the northeastern part of the state, a few prairie lakes were formed in the western portion of Minnehaha County. When the last glacier retreated from this area, glacial till filled many depressions formed by earlier glaciers leaving shallow pot holes and wetland areas rather than well defined, deeper lakes. Wall Lake, with a surface area of 220 acres, is the only significant lake in the county. The lake was dredged of silt nearly twenty years ago and now has a depth in excess of 20 feet. Other water bodies include, but are not limited to Grass, Beaver, Lost, Clear, Buffalo, and Diamond Lakes, which are exceptionally shallow and function primarily as large wetland areas.

Wetlands are predominantly located in the western part of the county, but are incrementally disappearing due to the demands of certain agricultural and drainage tile practices. They perform several key functions by serving as natural water purifiers by filtering out pollutants; therefore, enhancing surface and groundwater quality, increasing wildlife and fish habitat, and providing recreational opportunities. Wetlands are also essential agents in reducing siltation and flood control by slowing runoff during rapid snow melt and heavy rainfall, releasing water gradually to minimize erosion and downstream flooding. It is important to note that Minnehaha County discourages the conversion of wetlands through enforcement of the Drainage Ordinance.

Groundwater Aquifers

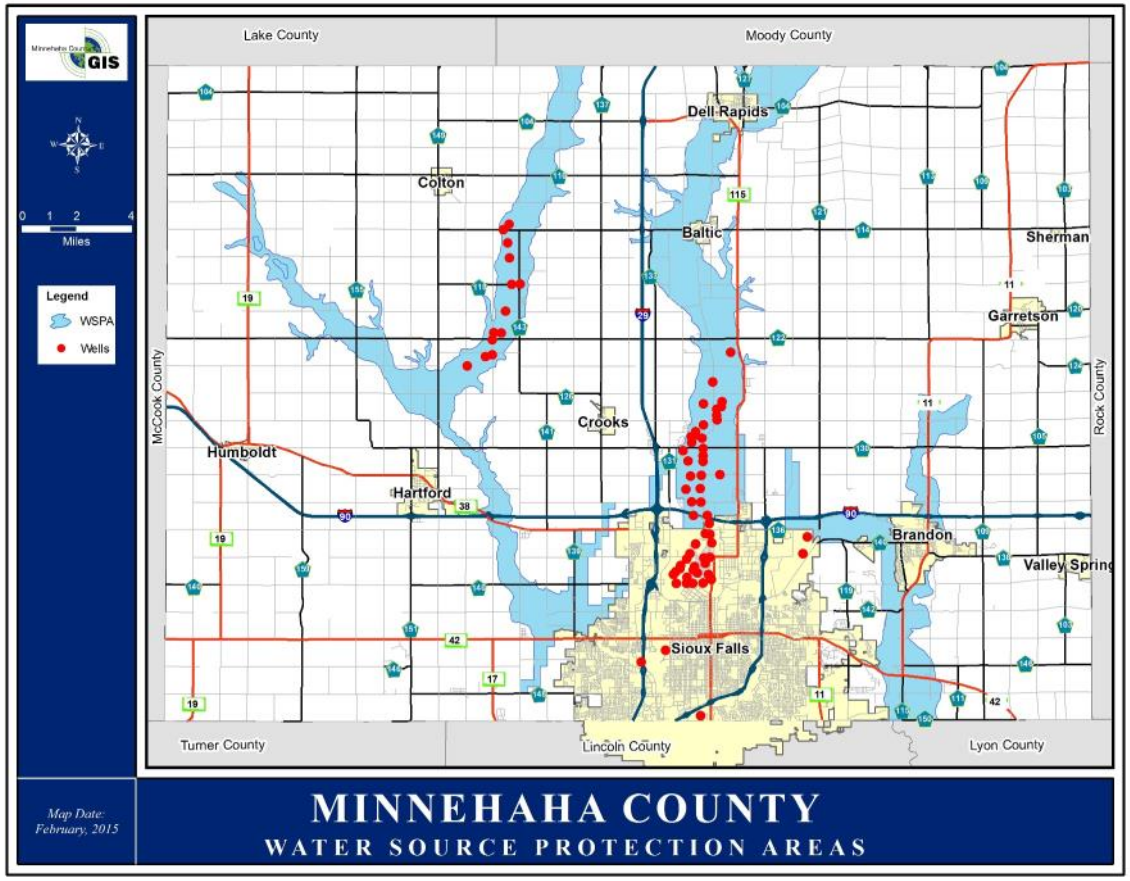
There are nine major glacial aquifers in the county. The Big Sioux and Skunk Creek are water sources for Minnehaha County and its incorporated municipalities. The Split Rock aquifer has a substantial storage capacity consisting of 855,000 acre-feet. Hydrologic studies have identified the interrelationship of ground and surface waters where a stream is in contact with an aquifer, as is the case with the Big Sioux River and the outwash deposits along the Big Sioux valley. Depending on the relative water levels, water may move into or out of a stream. An influent stream supplies water to an aquifer while an effluent stream receives water from the aquifer. Groundwater discharge from aquifers into the Big Sioux forms the base flow of the river. This base flow is a significant part of the total flow during periods of low surface runoff but becomes a same fraction of the total flow when high surface runoff occurs. A comprehensive management program is important not only above the aquifer, but within the entire drainage basin because of the connection between ground and surface waters.

Map 5.4 - County Aquifers



Shallow aquifers and streams are at risk of contamination by a variety of sources—inadequate wastewater treatment and disposal attributed to both on-site and municipal sources, mismanagement of waste from livestock facilities, overuse of fertilizers and pesticides, solid waste disposal sites, and sites for the storage and manufacture of regulated substances. To assist in the protection of the county's aquifers and streams, a water source protection overlay district was established in the zoning ordinance to prohibit uses which pose a high risk of contamination to groundwater resources and regulate potentially damaging uses so that adverse environmental impacts are minimized. The overlay district protects 56,734 acres, of land located over these aquifers. There are a large number of public wells located over these aquifers. The Sioux Falls well field is concentrated within a five-mile segment of the Big Sioux aquifer north of the city along with an expansion into the Middle Skunk Creek aquifer southeast of Colton.

Map 5.5 - Water Source Protection Areas



Agricultural Drainage

Agricultural drainage is the removal of excess water from fields through the use of ditches and subsurface pipe often called "drainage tile". The installation of tile drainage is a very common land improvement practice in Minnehaha County. Corrugated plastic tubing, clay and concrete drain tile are installed beneath the surface of agricultural land to drain excess water from the crop root zone. If soils are too wet, there are more risks of soil compaction and reduced plant growth and crop yields. The relief of these problems through tile drainage increases crop productivity, farm efficiency, and protection of roads and property.

The South Dakota Legislature assigned the responsibility for drainage matters to counties in 1985. Drainage is governed by the Minnehaha County Drainage Board and administered by the Planning Department under the policies and regulations established by the Drainage Plan and the Drainage Ordinance. A community taskforce was enlisted to rewrite the ordinance in 2010.

Overall, the requirement for drainage permits has been well accepted by the agricultural community. Notification requirements prevent the outlet of water onto neighboring properties without warning and encourages adjacent landowners to work together on drainage problems. Coordination between landowners has led to many new tile projects that drain hundreds of acres. The chart, below, shows a dramatic decline in the amount of drainage permits obtained for the previous two years, which might be correlated with a drop in crop yield prices and/or fewer remaining acres that have yet to be drained.

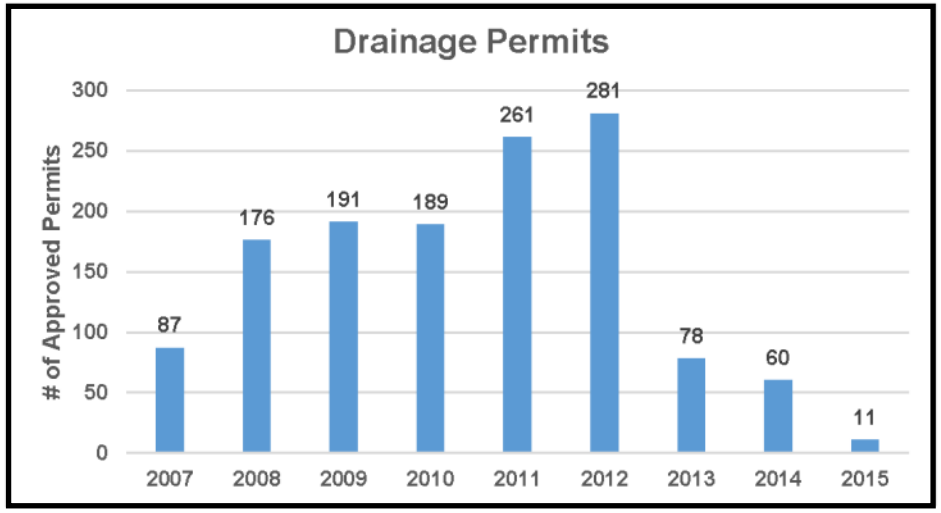


Figure 5.1 - Total Number of Drainage Permits Issues (2007—2014)
Source: Minnehaha County Planning Department

* Includes approved Drainage Permits up to April 15, 2015

Wastewater Treatment & Disposal

Central wastewater collection and treatment facilities serve municipal residents and limited rural population located within the four sanitary districts. A majority of rural residents and businesses utilize an on-site wastewater treatment (septic) system. Rural commercial and industrial uses, churches, and park facilities dispose of sewage by individual means, usually by septic system or holding tank in which the contents are routinely pumped and disposed off-site.

Much of the rural residential growth will continue to be served by individual systems with an importance on maintaining safeguards to protect public health and the environment. New central sewer facilities should not be proposed in the rural agricultural areas of the county because the residential densities associated with this growth are higher than density zoning allows; however, existing on-site systems are expected to be replaced as annexation occurs. Existing sanitary sewer districts should be encouraged to expand capacity of facilities to meet the demands of growth within their territories.

On-site wastewater systems pose the least risk to human health and the environment when used in low density, large acreage type settings. A system must be located where soils have an acceptable percolation rate, the seasonally high water table and bedrock are more than four feet below the drain field. A test hole should be dug in the area of the proposed absorption field at least four feet below the bottom of the trench. If the soil profile indicates a seasonally high water table, then adjustments to the trench depth are necessary.

Since soil type can change within the building site, percolation tests must be taken at the proposed location of the system to accurately calculate the proper sizing of the absorption field. Soils where the effluent is absorbed slowly will require a larger drain field. On the other hand, soils with a very rapid absorption rate are not acceptable because effluent will reach the groundwater before proper filtration occurs.

*

Stormwater Management

Stormwater Management Program
Minnehaha County was identified as meeting the Environmental Protection Agency's requirements for needing to address stormwater. Stormwater discharges are often a significant contributor to local water quality impairments as they can carry high levels of sediment, oil, toxins, pesticides, trash, and other pollutants that flow into local waterways.

As a result of this need to address stormwater, Minnehaha County is expected to develop a Stormwater Management Program (SWMP) by 2019, which should include milestones for implementing each aspect of the program and by the end of the first five-year MS4 permit term the program will need to be fully developed and implemented. The area of concern identified is located in one or more counties with unincorporated populations serving less than 100,000. The Clean Water Act, through development of national stormwater regulations, establishes an MS4 stormwater management program. The process for establishing the program is to select Best Management Practices (BMPs) including but not limited to vegetated filter strips, permeable pavement, riparian areas, and open space design that prevent stormwater pollution from entering our waterways.

Although overall awareness and interest in environmental protection exists at the local government and citizen level, the County's water resources continue to experience degradation from stormwater runoff. A concerted effort to establish a Stormwater Management Board, made up of citizens and trained MS4 operators, will be vital in protecting water resources.

Municipal Separate Storm Sewer (MS4)

Conveyance or system of conveyances

- Designed or used to collect or convey stormwater that discharges to waters of the state.

MS4 (Six Minimum Control Measures)

1. Public Education and Outreach
2. Public Participation and Involvement
3. Illicit Discharge Detection and Elimination
   *detect/eliminate illicit discharges
4. Construction Site Runoff Control
   *site plan review/inspections
5. Post Construction Runoff Control
   *Best Management Practices (BMPs)
6. Good Housekeeping
   *pollution prevention guidelines

Management of stormwater runoff and its contaminants constitute one of the major problems we face in development practices. While surface runoff has been controlled through the conventional ditch, gutter, and pipe method this approach is not entirely as effective as utilizing ecosystem services to the maximum extent. Stormwater Best Management Practices (BMPs) should be a major consideration in all land use planning and development decisions to fully balance economic development with the natural environment.

Water quality and the intensity, timing, and velocity of runoff events are closely related to stormwater management. Vegetated surfaces slow or capture runoff, but runoff is substantially increased when these are replaced by impervious surfaces such as roofs, driveways, parking lots, and streets.

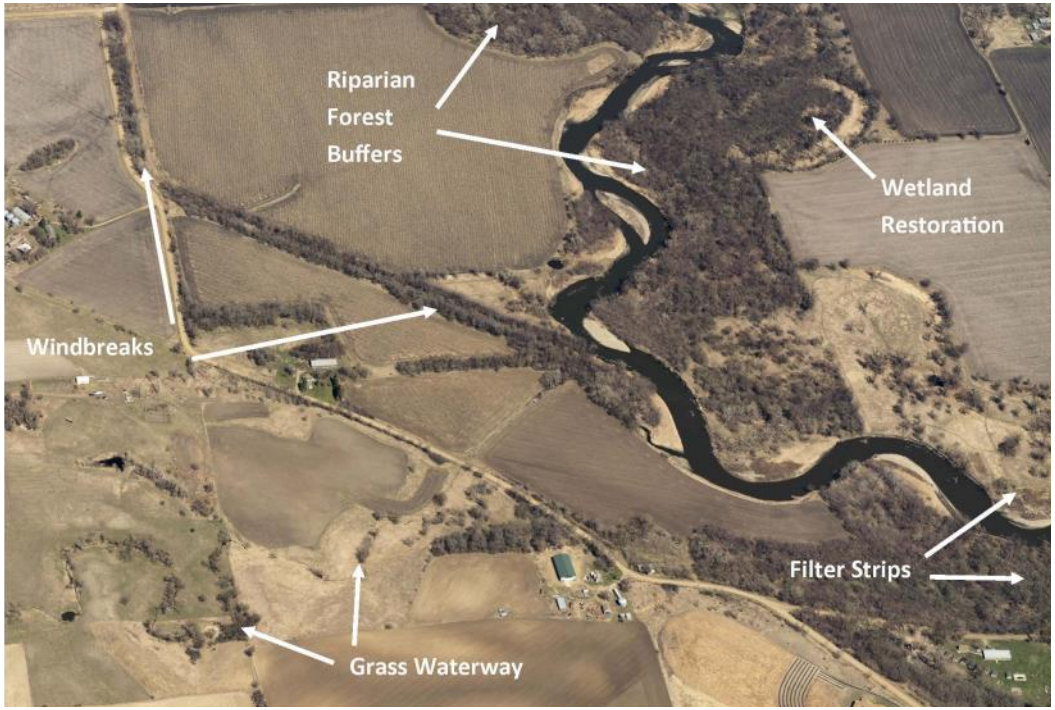


Figure 5.2 - Best Management Practices Diagram: Big Sioux River Watershed

Image Source: Pictometry, 2015

Development should not be allowed prior to completion of a drainage plan which defines natural drainage corridors and identifies the number and location of detention facilities needed to accommodate additional runoff from impervious surfaces. Developers should be encouraged to use natural areas for aesthetic, open space, wildlife habitat, and recreational purposes.

Low Impact Development (LID) offers several strategies to minimize the impact of surface runoff on downstream property owners, reduce the risk of flooding, and restore the hydrologic and ecological functions of our waterways.

LID Strategies to Minimize the Impact of Land Development

- Riparian area buffers (river/stream setbacks)
- Bioretention facilities (rain garden/bioswale)
- Vegetated filter strips (grass waterways)
- Permeable surfaces (porous concrete/gravel)

Existing riparian area buffer protection along the Big Sioux River

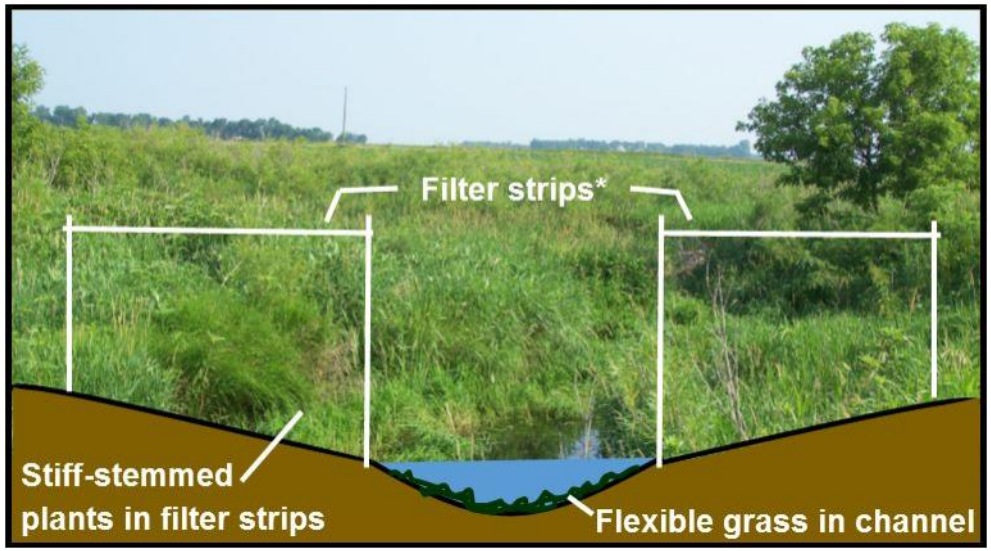


Figure 5.3 - Vegetated Filter Strip Diagram (Filter strips* trap sediment and slow down surface water runoff)

Natural Resources and Open Spaces - Goals & Actions

Goal 1. Preserve the quality of natural resources.

Action 1.1 Enact setbacks to create buffers from development around water bodies and wetland areas.

Action 1.2 Develop a joint program with the Game, Fish and Parks Department to enforce their permit requirement for repair or changing of shorelines.

Action 1.3 Add setbacks to the zoning ordinance that distance residential houses from Game, Fish and Parks land.

Goal 2. Promote sustainable use of natural resources.

Action 2.1 Preserve contiguous and connected open spaces through setbacks and greenways.

Action 2.2 Encourage and support the restoration of degraded areas.

Action 2.3 Utilize County Parks to educate and demonstrate sustainable land uses and ecological services.

Goal 3. Limit development in floodplains and above aquifers.

Action 3.1 Enforce the requirements and restrictions of the Floodplain Development Ordinance.

Action 3.2 Preserve the quality and quantity of water resources through enforcement in the Water Source Protection Area.

Action 3.3 Promote the use of land in riparian areas to be used as greenways to prevent development and allow for flooding to take place naturally.

Goal 4. Maintain and enhance public access to public lands.

Action 4.1 Support Federal, State, and County public lands and parks.

Action 4.2 Utilize rivers as greenways for natural connections and public uses such as multi-use trails.

Action 4.3 Ensure continued access to waterways and public lands through the subdivision and platting process.

Goal 5. Recognize that sand and gravel deposits within the County are an un-renewable natural resource and beneficial to the economy of the County and the welfare of its people.

Action 5.1 Require new mining operations to hold a public meeting with surrounding land owners.

Action 5.2 Require that appropriate post- excavation land uses be consistent with the County's land planning process.

Action 5.3 Minimize conflicts with existing neighbor hoods from the impacts of adjacent extraction operations and the transporta tion of extracted mineral resources.

Action 5.4 Protect the natural environment from all sources of pollution resulting from mineral extraction.

Goal 6. Implement the Municipal Storm Sewer System (MS4) program.

Action 6.1 Develop and implement a Stormwater Management Program.

Action 6.2 Coordinate policies and procedures with the Department of Environment & Natural Resources, County Highway Department, and municipalities.

Action 6.3 Initiate education and outreach campaign.

Goal 7. Encourage the use of Low Impact Development (LID) strategies.

Action 7.1 Develop educational materials to promote the installation of Best Management Practices (BMPs) for stormwater management.

Action 7.2 Coordinate with Minnehaha Conservation District to seek funding opportunities to provide landowners with technical assistance and financial cost share to implement BMPs.

Goal 8. Support the use of drain tile in areas of agricultural production.

Action 8.1 Update the Minnehaha County Drainage Plan and Drainage Ordinance.

Action 8.2 Develop and maintain a database of installed drain tile in the county.

Goal 9. Collaborate with other agencies concerning drainage law and practices.

Action 9.1 Support actions to simplify codified drainage law.

Action 9.2 Coordinate with various entities to manage water resources effectively.

Action 9.3 Promote the use of best management practices to reduce the impact on downstream property owners.

Transportation

Introduction

Transportation plays a vital role in providing for the needs of the general public through moving goods, resources, and people. The transportation system, a critical component of Minnehaha County's development pattern and backbone of the economy, exerts a strong influence on the placement of land uses such as agricultural, residential, commercial and industrial, and institutional facilities.

The transportation system consists of a variety of roadways which serve different functions. These functions include varying degrees of access and mobility, which are further grouped into formal functional classifications.

A functional classification system groups roadways into a logical series of decisions based upon the character of travel by distinguishing between the function and service provide. This classification process is heavily influenced by the intensity and distribution of land development patterns. Thus, the interplay between land use and transportation is symbiotic.

While most roadways offer both "access to property" and "travel mobility" services, it is the roadway's primary purpose that defines the classification category to which a given roadway belongs.

Other important but related factors include efficiency of travel, connectivity, access points, speed limits, route spacing, average annual daily traffic and vehicle miles traveled, number of lanes, and the significance of the route on a regional or statewide basis as well as system continuity.

Minor Arterial - SD Hwy. 19

Major Collector - Co. Hwy. 148

Minor Collector - Co. Hwy. 143

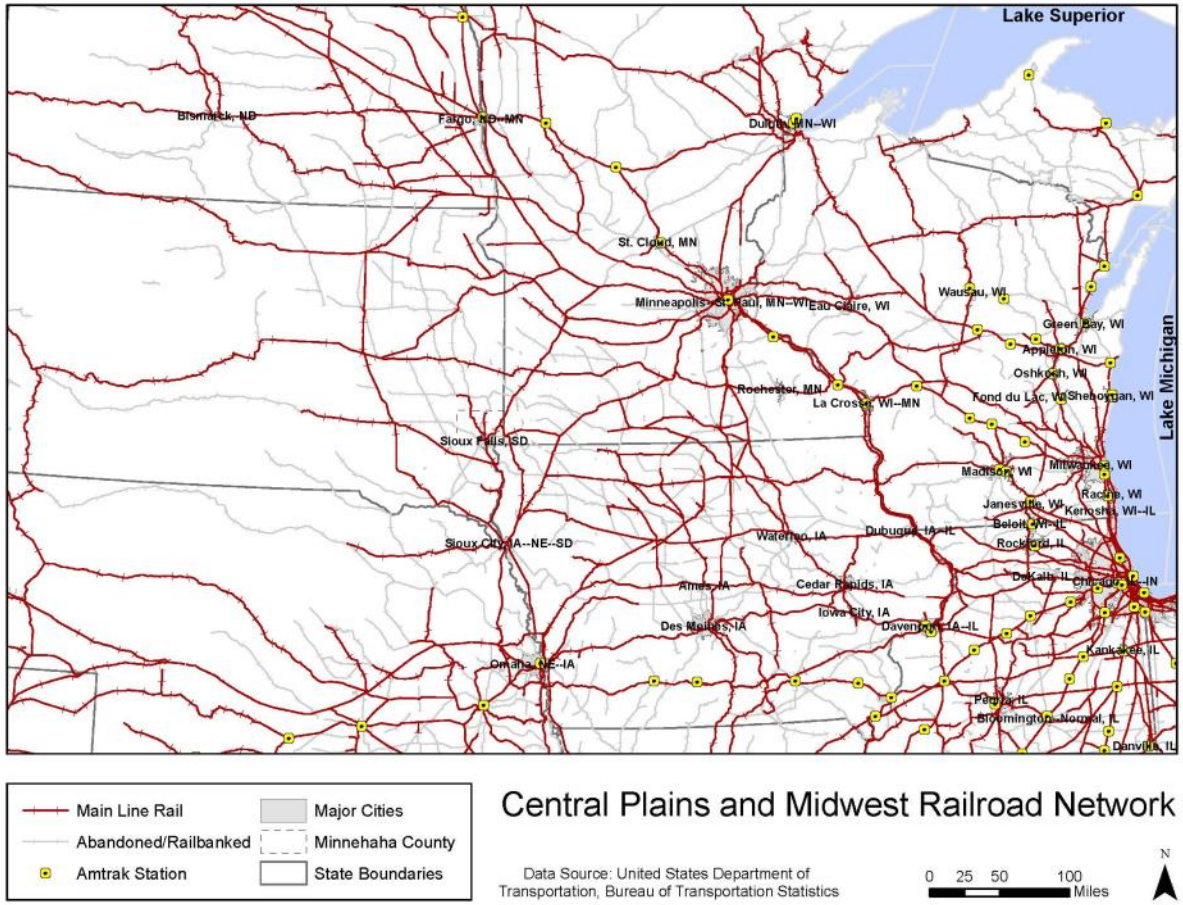
Local Roads - East 264th Street

Rail

Rail transportation has served a variety of industries in delivering shipments of goods, materials, and humans contributing to the livelihood of economic centers in the region. The significance of freight rail transportation within Minnehaha County will remain an integral part of both the regional and national system. According to the South Dakota State Rail Plan, passenger rail service along the Minneapolis-Willmar-Sioux Falls Corridor on the Burlington Northern Santa Fe (BNSF) railroad was proposed by the National Association of Rail Passengers (NARP) in setting a vision for a complete national passenger train network (SD State Rail Plan, 2010).

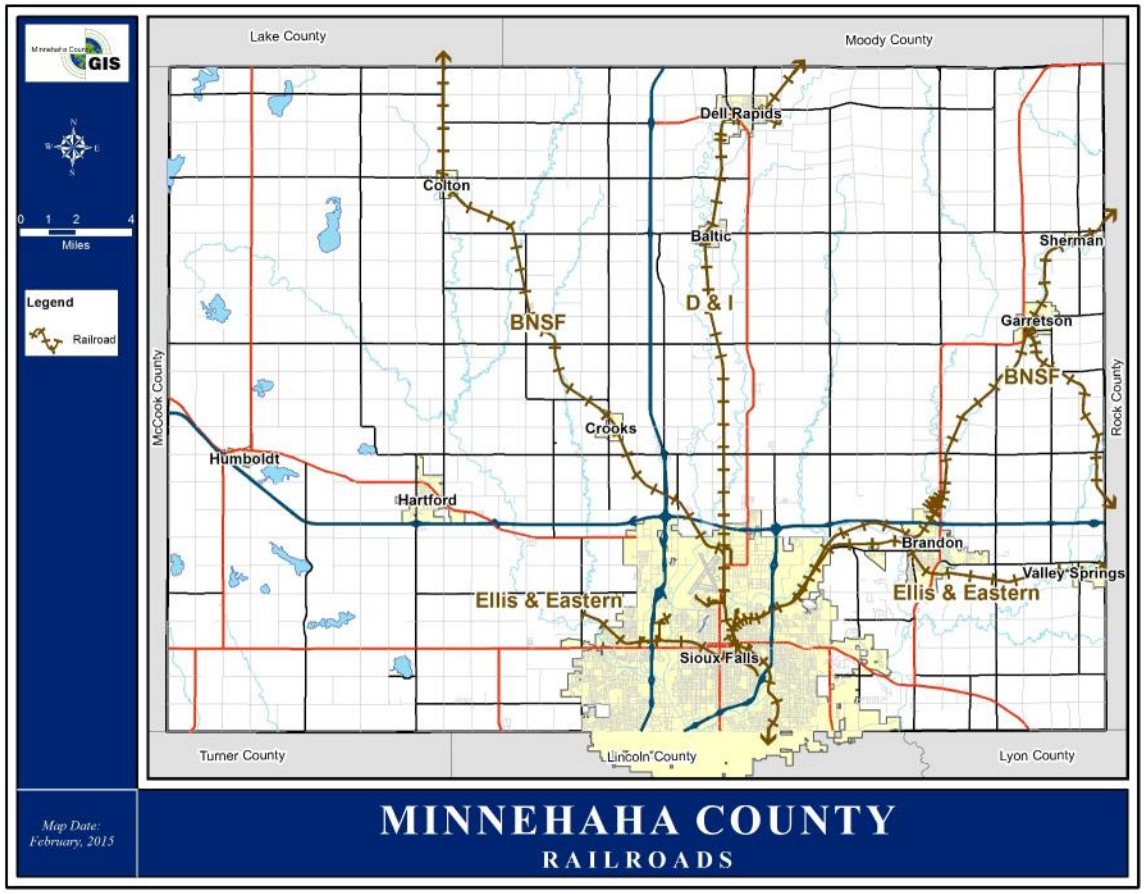
The potential of a passenger rail connection would be costly with significant upgrades projected along the Willmar-Sioux Falls corridor, but should be explored over the long term as the region continues to experience economic growth.

Map 6.1 - Central Plains and Midwest Railroad Network



BNSF operates a majority of the rail lines that run through Minnehaha County with connections to the national freight rail transportation system. In particular, these lines move a variety of agricultural products and industrial materials both domestically as well as abroad. Track extends from downtown Sioux Falls to Garretson for 17.4 miles and continues for 4.6 miles in the County leading to Willmar, Minnesota before connecting with the regional and in some cases, the national system. Track also runs south from Garretson towards Sioux City. There is an approximately 6 mile railroad spur off of the main BNSF track through Garretson that heads southeast towards Manley, MN and travels through Iowa cities such as Sioux Center before traveling to Sioux City. The largest stretch of BNSF track runs out of Sioux Falls for 24 miles towards the northwest through Crooks, Lyons, and Colton along the way to Madison, South Dakota.

Map 6.2 - County Railroads



L.G. Everist, Inc. owns and operates quarries in Minnehaha County as well as operates its' own portion of railroad, D&I Railroad (DAIR). They have 18.8 miles of track that run between Sioux Falls and Dell Rapids and leases two other railroads from the State of South Dakota comprising 89.6 miles of track in the Big Sioux River Valley (South Dakota State Rail Plan, 2010). The DAIR has interchange connections with the BNSF railway and Ellis and Eastern Company in Sioux Falls. In addition to hauling rock, gravel, and quarried stone, the railroad also transports farm products.

The Ellis & Eastern (E&E) railroad was formed as a subsidiary of the Sweetman Construction Company for the primary purpose of transporting aggregate products for Concrete Materials. The railroad has 14.3 miles of track stretching from Brandon, SD through downtown Sioux Falls to North La Mesa Drive. This line not only carries aggregate products and raw materials for the Sweetman Construction Company; it serves several outside customers located on the line. Chemicals and scrap metal are also transported on this railroad.

According to the 2010 South Dakota State Rail Plan 2040 Rail Volumes by Direction chart, at right, a majority of the rail system demand statewide will consist of through movements at about 84 percent while outbound movements are expected to comprise 12 percent. These estimates represent a growth of about 1.2 and 1.5 percent each year, respectively. Inbound and intrastate movements make up a small percent of total projected demand (2010). The SD State Governor set a major priority for improving rail transportation access in other areas of the state, which will provide numerous benefits for freight movements and businesses in the region.

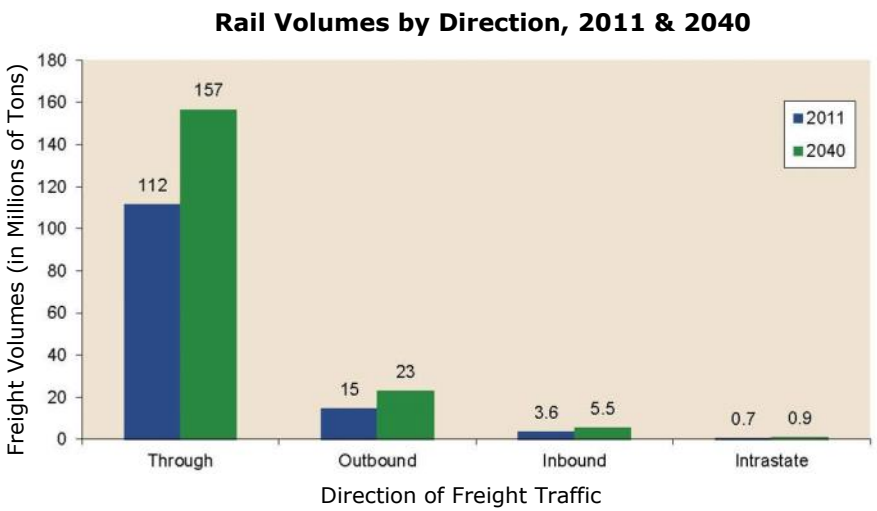


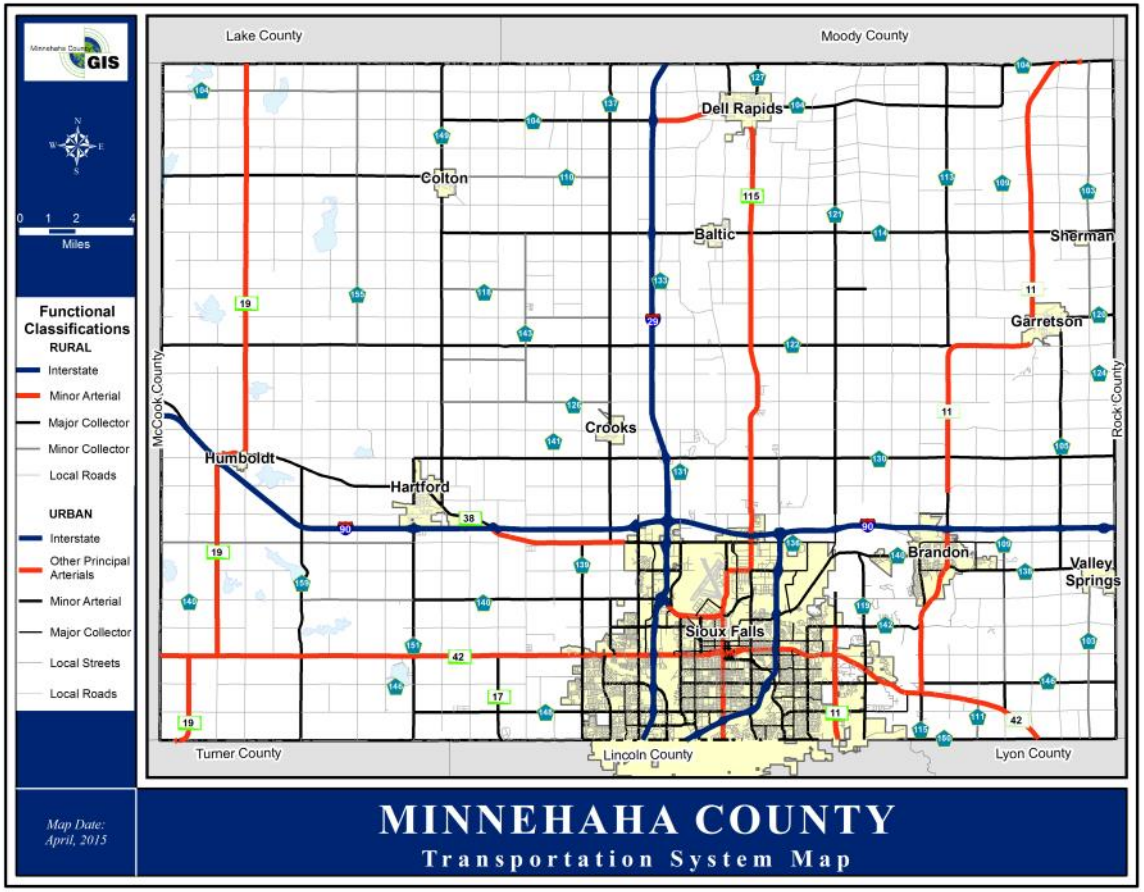
Figure 6.1 - Rail Volumes by Direction, 2011 & 2040

Source: 2010 SD State Rail Plan

Highway

The transportation system is linked to land use patterns in a way that needs to be collaboratively addressed in order to prevent future conflicts and achieve the goals of this plan. Particularly near large economic centers, projected population growth and changes in land use and density will necessitate changes to the highway system. The South Dakota Department of Transportation (SDDOT) and County Highway Department routinely conduct traffic counts to provide helpful information on traffic patterns. According to the SDDOT Long Range Transportation Plan, the projected shipment volumes by weight from 2002 to 2035 on trucks could see a 91% change within the state, 201% from the state, and 125% to the state (SDDOT, 2010). It should be expected that a majority of commercial freight traffic will occur on State Highways, but the collectors will be utilized to reach rural service areas where commercial and industrial land uses are encouraged to locate.

Map 6.3 - Transportation System Functional Classifications



Transportation Improvements

Regional transportation planning is a coordinated effort of the Sioux Falls Metropolitan Planning Organization (MPO), the South Eastern Council of Governments (SECOG), SDDOT, Municipalities, Counties, the Federal Highway Administration (FHWA), and the Federal Transit Administration (FTA). Direction 2035, the Sioux Falls Metropolitan Area Long-Range Transportation Plan, was developed to guide multi-modal transportation planning activities through 2035. Potential corridor projects identified through the transportation planning process within the MPO area include the following:

- Tea-Ellis Road
- 268th Street
- SD Highway 115 & 11
- SD 38/60th Street North
- EROS Rd. Interstate Interchange (Highway 100)

Potential improvements that can be accomplished in the near term and aid in all roadway users' safety could include the strategic design of wide shoulder widths in conjunction with rumble strips. Rumble strips have proven to be a helpful tool in the prevention of traffic fatalities on roadways across the country. The images, at right, provide some examples from the United States Department of Transportation: Federal Highway Administration on designing rumble strips to provide all roadway users with the comfort of a safe and convenient route to their destination. Implementation of rumble strips should only be installed where data projections can quantitatively show a significant increase in roadway user safety and where there is a four foot minimum shoulder width, not including rumble strip.

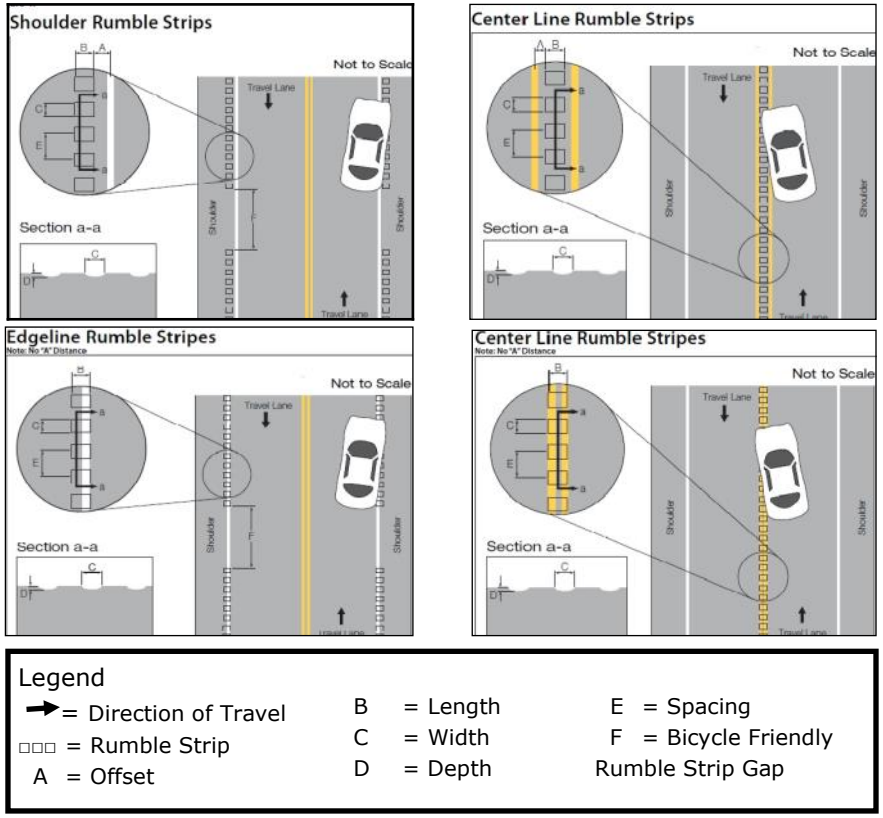


Figure 6.2 - Rumble Strip Design
Source: FHWA Highway Safety Improvement Program (HSIP)

Non-motorized

The Sioux Falls MPO Bicycle Plan identifies SD Hwy. 38, 115, and 11 as well as Rice St./Holly Blvd and Madison St. as primary bicycle routes. The secondary routes are County Hwy. 121, 133, 137, and 139/Ellis Rd. These suggestions were made in conjunction with the American Association of State Highway and Transportation Officials (AASHTO) Guide for the Development of Bicycle Facilities, which notes that "adding or improving paved shoulders often can be the best way to accommodate bicyclists" as well as motorists and other road users (Sioux Falls MPO Bicycle Plan, 2009).

The following list is a highlight of a few guidelines for shoulder design in the MPO Bicycle Plan and should be major consideration in road maintenance operations:

- A shoulder below 4 feet should not be designated or marked as a primary bicycle facility.
- Consider 4 foot minimum shoulder widths (not including space treated with rumble strips) to accommodate bicycle travel and other road users.
- Frequent shoulder sweeping of any debris when rumble strips are installed is crucial on all bicycle routes to ensure roadway user safety.

Currently, the Sioux Falls MPO is in the planning process stage of updating its Long Range Transportation Plan. Non-motorized transportation and recreation routes should be planned carefully paired with opportunity for citizen involvement throughout the entire process. Specifically, the routes planned for improvements consist mainly of roads with a combination of low average daily traffic volumes and speed limits. Motorists should be aware that non-motorized transportation and recreation users have the same rules and responsibilities on the public right-of-way, except where prohibited.

On March 11, 2015, Governor Dennis Daugaard signed House Bill 1030 which sets forth certain provisions regarding the passing of a bicyclist. Upon its' effective date in a few months, H.B. 1030 allows a minimum six foot passing distance on roads with posted speeds of greater than 35 miles per hour and a minimum three foot passing distance on roads with posted speeds of less than 35 mph for motorists overtaking a bicyclist. This represents an opportunity to implement a statewide public awareness campaign for sharing the road amongst all transportation mode users.

The image, above, is for informational purposes only.

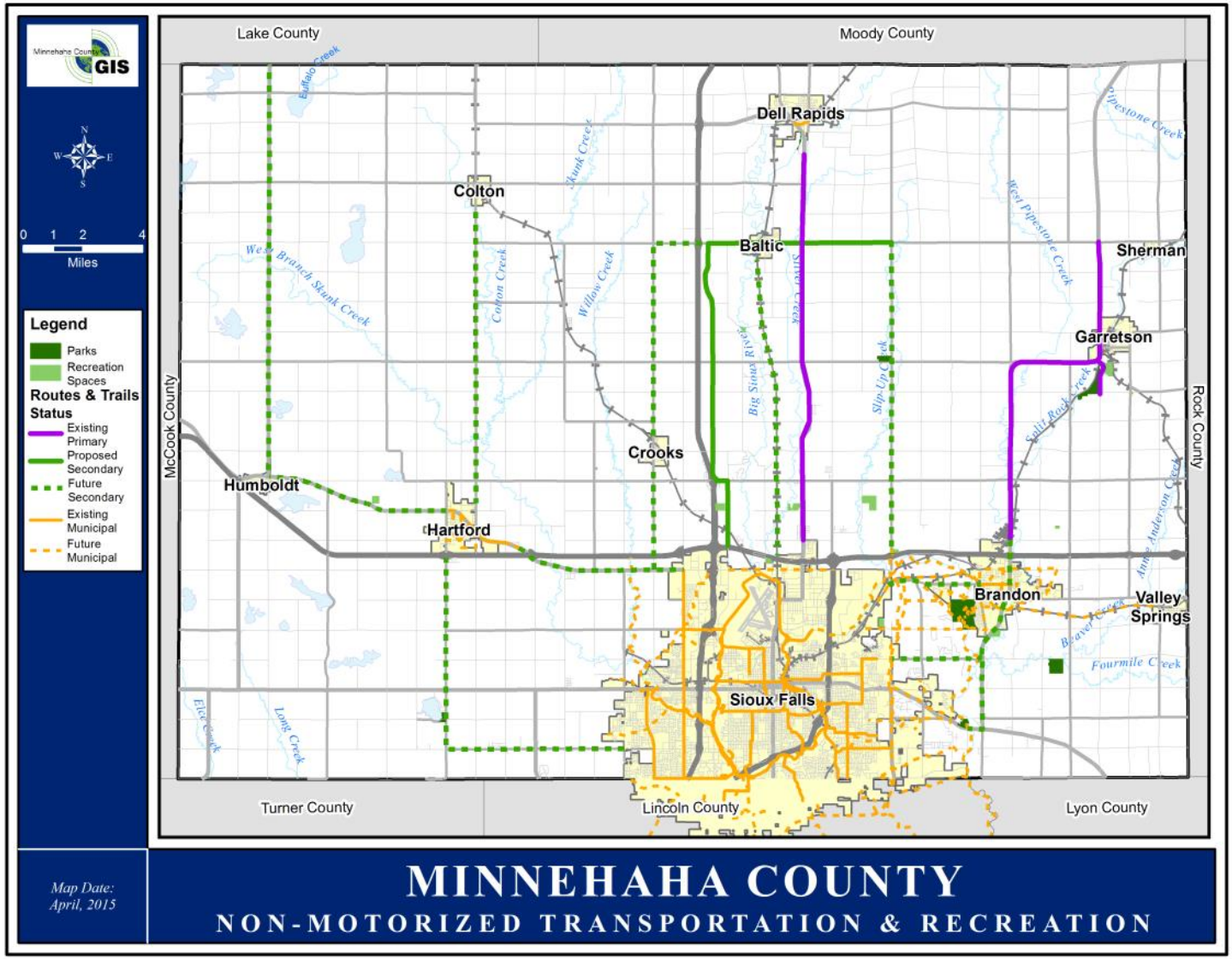
Four foot wide shoulder (Six Mile Rd.) - Accommodates all transportation and recreation modes on a minor arterial with a relatively low posted speed limit

Eight foot wide shoulder with rumble strip (SD 11) - Accommodates all transportation and recreation modes on an other principal arterial, designated bicycle route

There is an emerging trend nationwide casting focus on the importance of maintaining healthy lifestyles, reducing the strain on personal finances, lessening our overall ecological footprint, minimizing traffic accidents, or a desire to spend more time outside on one of the oldest means of transportation. A majority of citizens in the Sioux Falls MPO area have recognized that bicycles should be ridden on county roads and almost the entire percentage of this population feels that paved multi-use trails are the best place for bicyclists. The City of Sioux Falls multi-use trail system provides a safe route for both commuter and recreational bicyclists among other forms of non-motorized transportation linking many destinations. Sioux Falls is currently in the process of expanding this network to include on-street and multi-use pathway facilities to better promote bicycling and walking as a viable means of transportation.

Other cities in the county that have expanded multi-use trail opportunities for residents include Hartford, Brandon, and Dell Rapids. Minnehaha County should explore a multitude of alternatives for safe, convenient, and accessible transportation and recreation. These potential routes should connect to existing and proposed facilities to promote the use of non-motorized transportation. These connections will help create opportunities for more positive lifestyle choices, better economic stability, and overall quality of life in the county. Minnehaha County should identify opportunities to retrofit existing county roads with four-foot minimum shoulder widths or implementation of a share-the-road campaign, see image at left, to accommodate for the safety and convenience of all transportation modes. Although the routes identified on the following page were selected as the most bicycle friendly, it should be recognized that every road within the transportation system will be used by bicyclists, walkers, runners, joggers, motorists, agricultural producers, etc.

Map 6.4 - Existing & Future Trails and Routes



Existing and Future Trails & Routes

While a majority of the multi-use trail and bicycle route planning will be conducted in the Sioux Falls MPO area, it is important to pursue opportunities for safe and convenient access among the small towns in Minnehaha County as well as throughout the region. The routes identified on the map, pg. 75, are based on citizen input collected during the comprehensive planning process, the MPO multi-use trail study, and MPO bicycle plan in a coordinated effort to connect residents to a wide variety of recreation and transportation options.

Most of the routes on this map can be achieved with careful thought and consideration to accommodate motorists, agricultural producers, bicyclists, walkers, runners, etc. The future secondary routes shown on this map will be based on community need and regional coordination to develop safe routes and trails statewide as well as funding availability in connecting the community at large to destinations throughout the county.

It should be clearly pointed out that the Proposed Secondary Routes and Alternative Routes, as indicated on the map on pg. 77, do not meet AASHTO's 4-foot wide shoulder criteria. The purple and green lines have been identified through consultation with Sioux Falls' officials, bicycling organizations, and public citizens throughout the planning process.

Due to funding constraints, it may take 10 to 20 years before the Future Secondary Routes can be improved to the level whereby they may be officially adopted as formal bicycle routes having 4-foot wide shoulders. This is a pragmatic and opportunistic approach over which a non-motorized transportation and recreation plan can be successfully implemented. Improvements and widening will be phased in to accommodate all non-motorized transportation and recreation mode users during the design phase of future projects through major rehabilitation or reconstruction plans.

Access Management

Access Management is the proactive management of vehicular access points to land parcels adjacent to all manner of roadways. Good access management promotes safe and efficient use of the transportation network. Access Management encompasses a set of techniques that state and local governments can use to control access to highways, major arterials, and other roadways. These techniques include:

Access Spacing: increasing the distance between traffic signals improves the flow of traffic on major arterials, reduces congestion, and improves air quality for heavily travelled corridors. **Driveway Spacing:** Fewer driveways spaced further apart allows for more orderly merging of traffic and presents fewer challenges to drivers.

Safe Turning Lanes: dedicated left- and right-turn, indirect left-turns and U-turns, and roundabouts keep through-traffic flowing. Roundabouts represent an opportunity to reduce an intersection with many conflict points or a severe crash history (T-bone crashes) to one that operates with fewer conflict points and less severe crashes (sideswipes) if they occur.

Median Treatments: two-way left-turn (TWLTL) and nontraversible, raised medians are examples of some of the most effective means to regulate access and reduce crashes.

Right-of-Way Management: as it pertains to R/W reservation for future widenings, good sight distance, access location, and other access-related issues.

Access Management provides an important means of maintaining mobility. It calls for effective ingress and egress to a facility, efficient spacing and design to preserve the functional integrity, and overall operational viability of street and road systems. Access Management should address the following areas:

- Facility Hierarchy (Functional Classification)
- Intersection and Interchange Spacing
- Driveway Spacing
- Traffic Signal Spacing
- Median Treatments and Median Openings
- Turning Lanes and Auxiliary Lanes
- Street Connections

Commercial and industrial uses are encouraged to be arranged in or near compact centers, such as Lyons, Rowena, Corson, Ellis, and cities where services can be provided efficiently. Likewise residential growth should be encouraged to cluster development to reduce the number of access approaches along Township, County, and State roads. Scattered residential and commercial developments along roads identified for improvement will result in more difficult and costly right-of-way acquisition as well as design and safety problems with too many driveways along these roadways. Furthermore, land use strategies should be implemented to avoid a continuation of past development patterns such as strip commercial zoning and unrestricted access along major transportation corridors.

In areas of dynamic land development, it is important for jurisdictions to develop access standards that achieve a balance between property access and functional integrity of the road system. Studies show that implementing access management provides three major benefits to transportation systems:

- Increased roadway capacity
- Reduced crashes
- Shortened travel time for motorists

All of the three benefits cited above are essentially the result of minimizing or managing the number of conflict points that exist along a corridor. Imagine the two extremes of the same corridor. In the least intrusive example, no minor-street conflicts exist. Traffic flows freely down an unencumbered corridor "pipe" influenced only by density, weather, and integrity of the roadway. When minor-street conflicts (i.e. "laterals") in the form of driveways and streets are introduced, the mainline flow must adjust speeds and sometimes lanes to avoid all manner of delay and conflicts introduced by the myriad combination of slowing, turning, merging, entering, and stopped vehicles can even gain opportunity to enter the flow. In short, steady progression is interrupted, and often at uneven intervals.

Air

There are a few private airfields in the rural area operated by individual property owners. It is important to note that the number of private airfields has been increasing and adequate provisions will be set forth to ensure compatibility between all land uses.

Transportation - Goals & Actions

Goal 1. Invest in and maintain existing county highways and bridges.

Action 1.1 Preserve the life and vitality of infrastructure by implementing timely and consistent roadway management practices.

Action 1.2 Maintain drainageways/ditches to ensure a properly functioning system and reduce long-term costs and replacements.

Action 1.3 Pursue opportunities to partner with other agencies to maximize efficiency of maintenance operations.

Action 1.4 Enforce regulations to protect the highway system from overweight/oversize loads.

Goal 2. Maximize roadway system safety and efficiency for travel throughout Minnehaha County.

Action 2.1 Enhance the efficiency and design of intersections where increased traffic exists.

Action 2.2 Develop a plan to design minimum four (4) foot wide shoulders on designated routes.

Action 2.3 Develop and implement a formal access management policy.

Action 2.4 Encourage the use of edgeline and centerline rumble strips upon careful review of traffic safety data and consultation with roadway user groups to justify the costs where there is a minimum clear path of four (4) feet from the rumble strip to the outside edge of the paved shoulder.

Goal 3. Support efforts to improve the rail infrastructure network.

Action 3.1 Coordinate with all private sector rail partners to increase freight handling capacity and capabilities.

Action 3.3 Encourage rail investments that support economic development.

Goal 4. Link transportation decisions to land use impacts.

Action 4.1 Coordinate with cities and townships to identify and mitigate the impacts caused by development.

Action 4.2 Encourage all townships to enforce the new driveway or culvert permit requirement.

Action 4.3 Require shared driveways where possible to reduce the number of direct access points.

Action 4.4 Monitor changing traffic patterns and conduct traffic studies in response to significant changes.

Goal 5. Encourage non-motorized transportation and recreation within the unincorporated area.

Action 5.1 Support policies and programs that promote safe, convenient, and accessible recreational and non-motorized transportation use.

Action 5.2 Coordinate with municipalities and other key entities to identify opportunities for the expansion of existing non-motorized transportation systems (i.e. wide shoulders, multi-use pathways).

Action 5.3 Explore the development of citizen work groups to identify non-motorized transportation and recreation in Minnehaha County.

Action 5.4 Identify opportunities to develop organizational support for ongoing maintenance of parks, open space, and/or trail facilities.

Goal 6. Provide comprehensive transportation planning to encompass future needs.

Action 6.1 Review and update the Major Street Plan every three years.

Action 6.2 Work with area governmental authorities to integrate roadway systems.

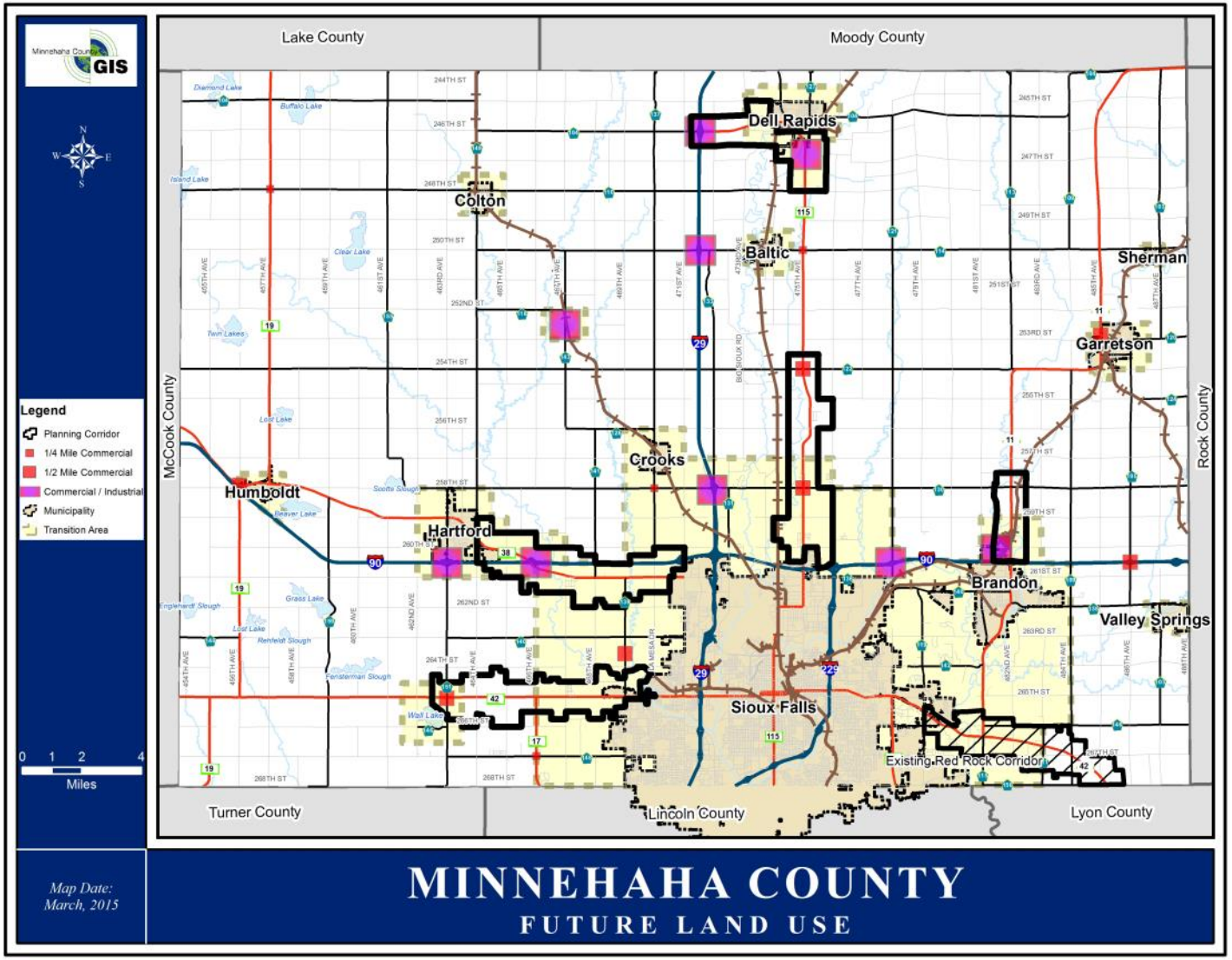
Action 6.3 Identify opportunities to incorporate technology in the provision of services.

Future Land Use Plan

Introduction

This chapter includes guidance for development for farming, housing, business, and industry in the unincorporated area. It is intended to guide day-to-day development decisions, as well as provide the standards and principles for updating the County's ordinances and other official development controls. The 2035 Future Land Use Map (Map on the next page) shows the geographic extent of specific planning areas within the county. The planning areas of agricultural production, transition, rural services, and development corridors are described in the following pages. The boundaries and descriptions are intended to be used as a guide for future development, but not necessarily concrete decision making. As development grows and changes considerations should be given to new trends and styles as for the appropriateness of individual planning requests.

Map 7.1 - Future Land Use



Agricultural Production Area

Agricultural production comprises the largest amount of land area within Minnehaha County. Even with urban expansion of Sioux Falls and other municipalities, the dominant land use of agriculture is expected to continue through 2035 and beyond. The land area that is not designated as transition or rural service area is considered agricultural production area, because it is likely to continue as primarily farm land through the duration of this plan.

Development Outlook
The purpose of this planning category is to protect, preserve, and promote agricultural uses and the economic viability of farming operations. Agriculture is recognized in this plan as an important part of the economy, history, and quality of life. As a result of the importance of agriculture as well as limited infrastructure in this area, non-agricultural development should be limited to suitable areas and residential development should likewise continue at the limited density of one residential building eligibility per 40 acres. Agricultural uses within this area should be allowed to continue and expand where little or no conflicts exist.

Typical Uses

- Larger-scale farms and related agricultural uses including feedlots, and livestock raising
- Small-parcel farms primarily for local food production and agricultural tourism
- Sand, gravel, and stone mining
- Single-family detached dwellings in agreement with density regulations
- Institutional/governmental uses
- Recreational open space uses

Since the Agricultural Production Area covers the largest portion of the county, it is also has the greatest opportunity for natural resource conservation efforts. Greenways and wetlands provide some of the greatest ecosystem services for the county from habitat linkages to recreational opportunities.

Transition Area

Municipal and urbanized areas will continue to expand, and the expected expansion areas will require planning for the transition from predominantly agriculture to urbanized uses. This planning area closely corresponds with the future land use plans of incorporated communities and certain areas of residential concentrations such as Renner, Lyons, and Wall Lake. Much of the transition area around Sioux Falls and Dell Rapids is also regulated by the County's joint planning jurisdiction with each municipality. These joint planning jurisdictions help facilitate development that is compatible for future annexation by either city.

Typical Uses

- Large-scale farms and related agricultural uses including small scale and existing feedlots, and livestock raising
- Small-parcel farms primarily for local food production and agricultural tourism
- Greenhouse and nursery type production
- Single-family detached dwellings in agreement with density zoning
- Existing Rural Residential developments
- Institutional/governmental uses
- Recreational open space uses

The Transition Area on the Future Land Use Map was created by accounting for relatively high density non-farm development and growth boundaries of municipal plans.

Development Outlook

The transition areas within the county have the primary purpose of maintaining the rural landscape until the eventual development of residential and/or municipal development. Large-scale farming will still be permitted, but additional considerations should be given to the expansion of certain types of agriculture such as large concentrated animal feeding operations and agri-businesses to ensure that large investments are not made in areas of impending development. It is likely that small-scale farms will grow in number in the transition areas to take advantage of market proximity and smaller parcel sizes. Residential development should be limited unless adequate sanitary sewer and other utilities are available.

Several different land uses including residential and agricultural businesses are located within close proximity of one another.

Rural Service Areas

Rural service areas are generally small unincorporated centers of development that provide various services and conveniences primarily for rural residents, agriculture, and light industries. Most rural service areas are located near major street intersections such as Interstate exits and intersections between state and county highways. This provides easy access for both industry and residents. Community type rural service areas differentiate themselves because of the inclusion of residential neighborhoods that form in a town-like development pattern. Corson, Ellis, Lyons, Renner, and Rowena started settlement as towns, but have since become unincorporated parts of the county. In addition to the former towns, the high density of houses in the Wall Lake area also creates a community type atmosphere.

Development Outlook

Limited unincorporated development is desirable within rural service areas in order to provide for the needs of rural residents and certain types of businesses. Major intersections that are designated rural service areas on the 2035 Future Land Use Map will receive growth pressure to expand with industrial and commercial uses through the duration of this plan. Expansion should be allowed and encouraged at these intersections, but limitations such as extent of area, storm water management, street access, and utilities should guide future growth. In some areas, mixed-use development can be considered as a way to minimize the development footprint and encourage growth of rural service areas. Community type rural service areas will experience growth in commercial, industrial, and residential uses. Planning for this growth should consider the existing land use, available utilities, and planning areas among other considerations. The availability of sanitary sewer has been and will be a primary concern for expansion of any rural service area.

The Future Land Use Map depicts rural service areas according to the projected areal size of the total development. A 1/4 mile commercial area will allow acceptable development in an area approximately 1/4 mile square or 40 acres.

Rural Service Areas-Communities

The following segments include some further analysis of the six community type rural service areas. These paragraphs include references to current conditions as well as consideration for future growth.

Typical Uses

- Agricultural support businesses
- Limited industrial
- Limited Convenience Commercial businesses
- Single-family detached dwellings in agreement with density zoning
- Rural residential developments where sanitary sewer and utilities are available
- Institutional/governmental uses
- Recreational and park type uses
- Small-parcel farms for local food production and ag-tourism
- Greenhouse and nursery type production

Corson (Above)
Much of the area of Corson is within the 2035 growth area of the City of Brandon. The Corson area is dominated by industrial land uses with some residential and commercial uses too. Its location near major highways and a railroad make it ideal for further industrial and commercial development; however this growth should not come at the expense of incompatibility with existing residences in the Corson area.

Wall Lake
The Wall Lake area currently has a small business presence at the corner of SD Highway 42 and 463rd Avenue. The primary residential areas encircle the lake and create a community feeling. The presence of this community, recreation opportunities, and a sanitary sewer district make this area a preferred location for future growth in the county. Even with prominent features, future growth of this area may be slow due to the lack of remaining lakefront property.

Lyons (Left)
Industrial and agricultural expansion has happened in Lyons and will likely continue. The additional employment opportunities in Lyons may attract other business and residential uses within the timeframe of this plan. As the Community of Lyons expands, considerations should be given for infrastructure improvements such as sanitary sewer, paved roads, and a drainage plan for all or part of the town.

Ellis
Ellis has traditionally been a railroad town that served the rural area as a place to bring product to market and buy supplies. Today, the services have changed slightly, but the nature of rural service of the town has not. The future growth of the community is limited because of the proximity of floodplain in nearly all directions from the town.

Rowena (Right)
Rowena has recently undergone supplementary planning because of its location within the Red Rock Corridor. Rowena's location midway between Sioux Falls and Grand Falls Casino makes it a prospective location for convenience type establishments; however, the lack or a sanitary sewer system will limit the growth of the community.

Renner (Right)
Renner is perhaps the most established of the unincorporated communities, because it has characteristic such as a baseball field and amateur team, an American Legion Hall, restaurants, and even an annual community celebration weekend called Renner Days. Part of the community is located within the boundaries of the floodplain, but it's location near Sioux Falls and along both a State and County highway makes Renner a consideration for future development. Expansion of Renner should be encouraged to infill existing land and parcels and develop in a contiguous manner with a modified grid pattern focusing growth as a compact center while practicing the access management principles mentioned on pages 78-79 for access onto state and county highways.

Development Corridors

Major transportation corridors surrounding Sioux Falls and nearby communities will continue to have development pressure that expands beyond municipal boundaries. Detailed planning of these corridors will assist in creating orderly and efficient growth patterns. Public participation of current residents, businesses, and property owners is paramount to the process of developing a plan for these corridors. This process will also require cooperation among various municipalities and agencies.

The development corridors are shown on the 2035 Future Land Use Map on pg. 82. These depictions are suggestions for corridor boundaries based on land parcels within 1/2 mile of the highway.

Development Outlook
Additional planning for development corridors will include public participation of area residents and interested citizens. Most corridor areas have some unique characteristics and land uses that will be identified and included in the planning process. Therefore, each corridor will be planned separately. A major goal of every development corridor plan is to avoid strip style development where all properties are accessed from the main street or highway.

A corridor plan may be accompanied by variations in the zoning code such as a zoning overlay district. This sort of overlay may direct development by including minor corridor-wide ordinance changes that will adjust the requirements of each corridor.

Typical Uses

Typical uses within each development corridor will depend on area designations as well as the completion of each specific corridor plan.

Future Land Use Plan - Goals & Actions

Goal 1. Develop a countywide land use pattern that ensures compatibility and functional relationships among jurisdictions and related land use activity.

Action 1.1 Build on Minnehaha County's strengths—such as prime farmland, recreation, industrial and commercial areas, quality local government, open space, and excellent school and park amenities in order to achieve the County's 2035 Vision.

Action 1.2 Utilize existing and future development policies and regulations in a consistent manner for similarly sited parcels in order to create fair and orderly development.

Action 1.3 Change land use designations and related zoning classifications only when it can be demonstrated that such modifications are in the best long-term interest of the County.

Action 1.4 Provide for and encourage ongoing opportunities for public participation including cities, township officials, stakeholders, property owners and residents in the planning and development process.

Goal 2. Coordinate growth and land use planning among Minnehaha County, Cities, Townships, and other relative organizations.

Action 2.1 Proactively communicate with other governmental organizations on mutual planning-related issues.

Action 2.2 Ensure that long range transportation and other infrastructure plans will support and direct future growth.

Action 2.3 Provide and encourage ongoing opportunities for public participation (i.e. county website, education, community outreach, public notices, email, and media relations).

Action 2.4 Support growth that is compatible to adopted municipal comprehensive plans.

Action 2.5 Promote cooperation between County, Cities, and Townships for planning and implementing strategies and land use procedures.

Goal 3. Protect, preserve, and promote agricultural uses and the economic viability of farming operations.

Action 3.1 Limit residential development in areas planned for long-term agriculture to low densities and clusters that preserve the majority of the land for agricultural purposes.

Action 3.2 Direct new non-agricultural development towards designated rural service areas.

Action 3.3 Support local, state, and federal programs designed to assist farming operations, support conservation and natural resource management programs, and provide educational and public information services.

Action 3.4 Support and encourage clustering of building eligibilities to protect prime agricultural lands.

Action 3.5 Evaluate potential constraints for operation and expansion of agriculture production such as separation criteria for concentrated animal feeding operations.

Action 3.6 Utilize Geographic Information Systems (GIS) to evaluate criteria for eligibility transfers and conditional use permits within the agricultural production area.

Goal 4. Promote the orderly development of unincorporated land that will likely be annexed into a municipality in both the short and long terms.

Action 4.1 Support infill development within existing city boundaries to maximize the use of existing infrastructure.

Action 4.2 Focus new growth and development within municipalities and areas adjacent to existing municipalities where infrastructure will be available.

Action 4.3 Encourage the annexation of residential subdivisions that are surrounded by or adjacent to city limits.

Action 4.4 Discourage haphazard and non-contiguous municipal annexations.

Action 4.5 Maintain existing agriculture while allowing specialty farms to utilize small lots within the transition area.

Goal 5. Support the orderly development of non-agricultural land uses.

Action 5.1 Support development around rural service areas and intersections that are delineated on the land use map and are compatible with existing land uses.

Action 5.2 Discourage commercial, industrial, and residential strip development of land along transportation routes, particularly along those that serve as a municipal gateway.

Action 5.3 Locate residential subdivisions in community type developments were adequate services are available including but not limited to sanitary sewer, utilities, and drinking water supply.

Action 5.4 Enforce the Minimum Road Improvements and Design Standards article of the Subdivision Ordinance.

Action 5.5 Utilize preliminary subdivision plan approval process to discourage strip development, create conformity among other development plans, and encourage joint access for subdivisions.

Goal 6. Plan ahead for additional growth along major transportation corridors that often act as gateways into and out of cities and towns.

Action 6.1 Define corridors that require special attention to encourage orderly and attractive growth.

Action 6.2 Encourage and utilize local participation for planning in order to better understand needs and desires of the residents in each planning area.

Action 6.3 Collaborate with all affected governments, organizations, landowners, and interested persons in developing and implementing new planning corridors.

Minnehaha County and Envision 2035

The revision and adoption of the comprehensive plan represents a step in a continually evolving planning process. Envision 2035 provides a framework consisting of goals and policies to assist in shaping the physical development of the county. The plan is intended to be a policy guide for decisions about the future spatial distribution of rural land uses and visualization of how these patterns should occur.

In 1862, Minnehaha County was established as a political subdivision of the State of South Dakota encompassing 810 square miles and is governed by ten elected officials—5 part-time Commissioners, an Auditor, a Treasurer, a State's Attorney, Register of Deeds, and Sheriff. Daily operations are managed by 19 full-time Department Heads.

The County employs over 500 full-time employees providing services such as the following: law enforcement, jail administration, highway construction and maintenance, property valuation, planning and zoning, emergency management, poor relief, juvenile detention services, election administration, official recording of deeds and documents, vehicle tax and licensing and property tax collection and administration.

In conjunction with the City of Sioux Falls, the County maintains the Siouxland Library system, the Siouxland Heritage Museum system, and dispatches police, fire, and medical personnel through the Metro Communications 911 Center. The County also maintains two rural parks: Wall Lake and Bucher Prairie. Both of which were created through the request and the thankful assistance of private landowners.

Envision 2035 is a cooperative effort to effectively balance Minnehaha County's historic and natural resources with municipal growth and development forces on the unincorporated area. The comprehensive plan is neither a beginning or an ending point, it is a continual public process to identify the needs of the community and its citizenry.

Zoning Ordinance

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 as well as maintains a joint (extraterritorial) zoning relationship with the cities of Dell Rapids and Sioux Falls, which the boundaries are depicted on the Zoning Map, pg. 116, in the appendix. Although three separate zoning ordinances regulate specific portions of the rural area, the regulations within each ordinance are similarly structured to promote uniformity throughout the county. The Minnehaha County Zoning Ordinance (MCZO) has undergone several revisions since it was first adopted in 1973. Most notably, density zoning requirements were added in 1988 in an effort to control scattered and haphazard nonfarm residential development within the rural area. The current zoning ordinance, the 1990 Revised Zoning Ordinance for Minnehaha County, was completely revised in text and format. Some major changes since then have included rules and standards regarding the Water Source Protection (WS), Planned Development (PD) Zoning, Earth Resources Observation and Science (EROS), and the Red Rock Corridor Overlay (RRCO) Districts. Other ordinance updates since the revised ordinance adoption include minor changes to strengthen and streamline the permitting process as well as additional conditional uses.

The RRCO District was adopted in late November 2011, which adds development standards and guidelines to the existing base zoning districts. Future corridor development plans should utilize the similar planning efforts and implementation styles as the Red Rock Corridor.

The 1990 Revised Zoning Ordinance for Minnehaha County with subsequent amendments worked well to regulate land use and zoning over the years. However, a review of the ordinance should accompany this comprehensive plan in order to update regulations to better reflect modern trends and mend ordinances that do not function as intended. Creating an entirely new zoning ordinance would create yet another date that separates existing and new land uses that can over complicate implementation of an ordinance. It is recommended that zoning changes be adopted into the existing ordinance for this reason.

One of the key aspects that makes an ordinance work is enforcement. Strong enforcement protects the public and creates fairness and predictability for business and land development. Only when the ordinance applies equally and fairly to all properties can the desired intent of an ordinance be realized. Conversely, problems grow when regulations are enforced haphazardly or intermittently.

Geographic Information Systems (GIS)

GIS technology provides a valuable tool to assist in implementing the comprehensive plan. In fact, much of the spatial information included in this plan has been entered into the GIS database.

GIS is a computer technology used to gather, store, manipulate, analyze, and display spatial information in digital format. Site suitability analyses can be performed to determine the impact of a proposed land use based on various combinations of elements in a dataset. Modeling can be performed to determine the impact of new highway construction or if hazardous materials will reach the groundwater.

GIS and aerial photography is already heavily used as a way to access information on individual sites and the areas around them in an organized and efficient manner. The use of GIS is essential to the implementation of and enforcement of County planning, regulations, and ordinances. Frequent updates of information and imagery allows for analysis of change over time throughout the county. Much of this reference information is also available for public viewing, including land parcels, zoning classifications, floodplains, aquifers, water resources, topography, and transportation systems.

Minnehaha County GIS

Intergovernmental Cooperation

A majority of the goals and policies set forth in this plan cannot be achieved without the support of many different partners across local, regional, and state boundaries. Leveraging a combination of efforts with knowledge and human power will create opportunities for increased collaboration among the different levels and branches of government.

Although Minnehaha County has the largest and fastest-growing populations in the state, there will be a much larger push to do more with less resources available. A growing population for the County represents the challenge to continue to seek innovative solutions that stretch funding further to provide all county residents with responsible public service.

South Dakota State Departments

State government is the legislative, fiscal, and administrative branch that provides important resources to maintain and support a thriving state economy. The State will continue to play an important role in providing helpful assistance and an overall big picture viewpoint of how different parts of the state are performing.

Minnehaha County

County government services play a key role administering local policies and assisting members of the public with questions regarding issues of concern in a timely manner. The County should explore alternative solutions to increase the effectiveness and efficiency of government services.

Municipalities

Municipal government plays a broader role in delivering vital services and providing adequate public facilities to the public. The widespread coordination among cities, small towns, and the County will be crucial to the growth and preservation of the rural area.

South Eastern Council of Governments (SECOG)

SECOG plays a significant role in assisting cities, small towns, and rural areas at the regional, multi-county level. It is important to note that SECOG will continue to be a critical link coordinating efforts for cooperation between the many different kinds of organizations.

Public Facilities and Services

Minnehaha County recognizes the benefits of having diverse services within the County. The County will continue to provide support and assistance to public facilities and services that enhance the quality of life of its residents.

County Buildings
Minnehaha County currently occupies 815,118 square feet of owned facility space. Although a number of the buildings are dispersed geographically, most services are headquartered in three locations: 1) Sioux Falls Downtown Campus; 2) Highway Department; and 3) other services located throughout the City of Sioux Falls.

The number and use of today's buildings have expanded the County's presence considerably since the first Courthouse was constructed in 1889. Since then, the County has outgrown the original Courthouse that is now the Old Courthouse Museum. The County campus in downtown Sioux Falls now contains the Administration Building, Courthouse, County Jail, Public Safety Building, and Law Enforcement Center.

County Highway Department
The Minnehaha County Highway Department supervises new construction and maintains all County highways including removing snow and ice, mowing, patching, and replacing signs. The Highway Department oversees various preparatory stages of construction including the acquisition of right-of-way, survey and design requirements, and the letting of contracts in addition to the actual supervision of construction. The Department also maintains all bridges on Minnehaha County and Township roads that are not part of the State or City Highway System.

Sheriffs Department

The Minnehaha County Sheriff, an elected position with a four -year term, is responsible for the operations of the Sheriff's Office. Within the Public Safety Building and Community Corrections Center, the Sheriff's Office is in charge of administration of the detention facilities for Municipal, State, and Federal prisoners for both Minnehaha County and several other surrounding counties as provided by contract. The office is also responsible for providing security to the S.D. Air National Guard as set forth in an annual contact.

All of the unincorporated area of Minnehaha County is served by the Minnehaha County Sheriff's Department. The Minnehaha County Sherriff's Department also contacts with nine municipalities (Baltic, Crooks, Colton, Dell Rapids, Garretson, Hartford, Humboldt, Sherman, and Valley Springs) to provide additional law enforcement services. The City of Sioux Falls and the City of Brandon are the only two municipalities within Minnehaha County that maintain its own police department.

Future development will have an impact on law enforcement services. When the population is concentrated in or around the incorporated areas rather than scattered across the rural area, response times can be maintained and the need to increase personnel is minimized. The Envision 2035 Comprehensive Plan should assist in maintaining efficient law enforcement services by encouraging compact development patterns.

Fire Protection Services

Minnehaha County is served by thirteen volunteer fire departments and one full-time fire department located within the City of Sioux Falls. Of the thirteen volunteer fire departments ten are located within the coinciding municipality. The remaining three volunteer fire departments are located in the unincorporated communities of Lyons, Renner and Split Rock Township. All of the volunteer fire departments within Minnehaha County are part of the Minnehaha County Fire Chief's Association. Minnehaha County Fire Chief's Association coordinates training for new members and is also dedicated to providing ongoing training for its current volunteers. The association has a dedicated training officer to assist the departments in finding and establishing training programs within their own department.

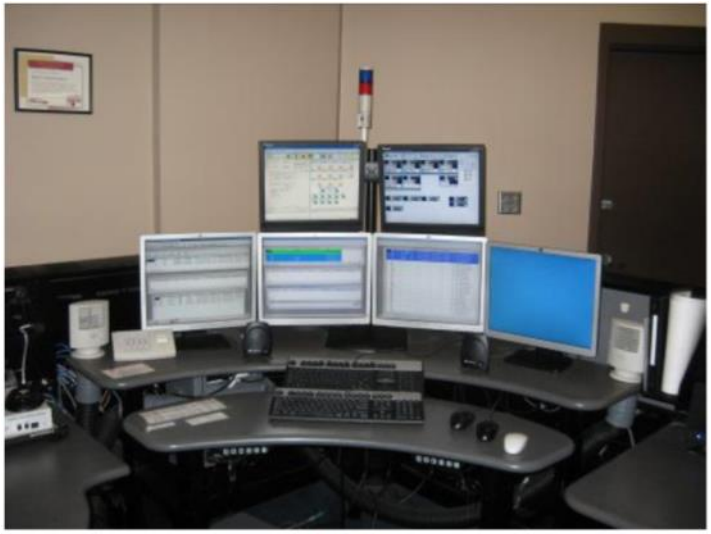
The City of Sioux Falls maintains a full-time fire department with 194 members and ten fire stations throughout the City. Sioux Falls Fire Rescue not only fights fires but also answers to emergency medical calls that make up half of their emergency responses. The Fire Rescue team has one of the larger Public Access Defibrillator programs in the County, and also provides regular CPR classes. They are committed to the safety of Sioux Falls and it residents.

Metro Communications

Metro Communications was formed in 1980 as a joint department with Minnehaha County and the City of Sioux Falls. Before this joint department was established dispatch was provided solely by the Sioux Falls Police Department. This department is responsible for coordination and dispatching emergency services throughout the area, such as emergency response personal, law enforcement, fire and ambulance services and emergency management. A rural addressing system was developed in 1993 that allowed Metro Communications to fully implement its E-911 (Enhances 9-1-1) services within the county. The E-911 system allows the dispatcher to see the location and phone number of the incoming calls.

Metro Communications operates under the direction and supervision of the Metro Management Council (MMC) to plan, organize, control and manage all communications systems used by Minnehaha County and the City of Sioux Falls for emergency services.

The MMC has five board members that include the Mayor of Sioux Falls, two members of the Sioux Falls City Council, and two members of the Minnehaha County Board of Commissioners.



Dispatch Console

Ambulance Services
In Minnehaha County there are six ambulance districts or PSA's (Primary Service Areas) that include Brandon, Dell Rapids, Garretson, Humboldt, Jasper and Sioux Falls. The ambulance districts provide EMT (Emergency Medical Technicians) support and ambulance services within the County.

Emergency Management
The Emergency Management Department provides practical and effective plans to the Federal , State and Local governments during times of disaster or extreme emergency. In addition to responding to these extreme events, the department also conducts hazard analysis and develops and updates plans for emergency preparedness, response, recovery, and hazard mitigation. The Emergency Management Department more specifically, establishes, implements, maintains, tests, and evaluates operational systems for responding to natural disaster and severe emergencies.

In times of emergency the department is called upon to coordinate response and recovery activities and provide specialized emergency services. The department also coordinates and guides a large number of volunteers who assist in providing these services. The volunteers who volunteer there time are often specialized in the areas of reserve law enforcement, rescue squad, diver search, and severe weather.

Schools

The County's education facilities provide a significant contribution to the overall quality of life and economic strength in the area. In addition to how these education facilities affect our families they also have an influence on land use and traffic patterns.

Twelve public school districts retain jurisdiction over portions of Minnehaha County. Of these twelve school districts, seven are headquartered within Minnehaha County, while the remaining five districts are based in adjacent counties. The majority of the schools within the public school systems are located in municipal settings with the exceptions of two schools that occupy property within the rural area of Minnehaha County. The Tri-Valley School District facilities are located three miles south of Colton and the Renberg Elementary serves the northern most portion of the Sioux Falls School District.

A map of school district boundaries can be found in the appendix on page 113.

Minnehaha County School Districts
Fall Enrolment (K – 12)

School District	2000	2012
Baltic 49-1	333	411
Brandon Valley 49-2	2,533	3,458
Chester 39-1*	374	565
Dell Rapids 49-3	860	905
Garretson 49-4	499	518
Lennox 41-4*	1,608	1,002
Montrose 43-2*	230	222
Parker 60-4*	484	365
Sioux Falls 49-5	19,066	22,342
Tea Area School District 41-5*	-	1,449
Tri-Valley 49-6	797	829
West Central 49-7	1,163	1,291

* School District has main school located outside of Minnehaha County

Figure 8.1 - School District Enrollment

Libraries
Libraries located throughout Minnehaha County are a valuable asset for lifelong learning and enrichment through open access to ideas, information, services and experiences for all residents to enjoy. These facilities are places where people of all ages can read, learn, connect and discover new and exciting things.

The Siouxland Library system serves the City of Sioux Falls and Minnehaha County residents who live outside of the Dell Rapids city limits. The Siouxland Library system has twelve branches and one Children's Bookmobile. These branches are located in Baltic, Brandon, Colton, Crooks, Garretson, Hartford, Humboldt, Valley Springs and five locations in Sioux Falls. In 1995 the Siouxland Library system was formed by a merger of the Sioux Falls Public Library system and the Minnehaha County Rural Public Library system. The Siouxland Library system now provides its services to the citizens of Sioux Falls and Minnehaha County with the exception of Dell Rapids.

The City of Dell Rapids operates its own public library system at the Dell Rapids Historic Carnegie Library. Carnegie Library opened in 1910 and has since served the community for many years. The Dell Rapids Library has expanded the current facility by constructing a sizeable addition to the original building on the property. The new expansion complements the original architecture while serving the modern demands of the 21st Century. The addition includes accessibility and more shelf space for an expanding collection.

Implementation - Goals & Actions

Goal 1. Provide quality services and facilities to the residents of Minnehaha County.

Action 1.1 Continue to plan for the future needs of Minnehaha County facilities and services by monitoring population trends and demographic changes.

Action 1.2 Ensure high quality services are provided in a cost-effective manner.

Goal 2. Create safe, healthy, and livable communities in Minnehaha County.

Action 2.1 Follow the goals and policies for land use, economic development, rural conservation, parks and open space, natural resources, and transportation.

Action 2.2 Enforce the ordinances of Minnehaha County in a predictable and equitable way.

Action 2.3 Consider impacts of signs, landscape buffer areas, opaque fences, and lighting on visual aesthetics to protect the natural character of Minnehaha County.

Goal 3. Manage the challenges and opportunities derived from growth and development.

Action 3.1 Plan and provide essential resources for education, health, human services, public safety, and justice to meet mandates and prioritize community needs.

Action 3.2 Promote the use of technology to make the most efficient use of scare resources.

Goal 4. Maintain the County's excellent financial health and economic profile.

Action 4.1 Share resources across jurisdictional lines.

Action 4.2 Engage the business community in promoting common interest economic development.

Goal 5. Incorporate sustainable principles into the operation of Minnehaha County facilities and services.

Action 5.1 Provide education on sustainable practices for Minnehaha County residents.

Action 5.2 Incorporate sustainable principles into County plans and programs.

Action 5.3 Consider the ecological and economic benefits of utilizing sustainable materials and resources on new projects.

Action 5.4 Collaboration with local, regional, state, and national agencies to provide technical and financial assistance on conservation best management practices.

Goal 6. Maintain and enhance the accuracy and efficiency of GIS and its use.

Action 6.1 Update information and imagery for GIS on a regular basis.

Action 6.2 Continue and enhance collaboration of the GIS department and data among Minnehaha County, municipalities, neighboring counties, and State entities.

Action 6.3 Create new data layers for information that is useful but not presently available such as County Highway lots and easements.

Goal 7. Support and plan for public services within Minnehaha County.

Action 7.1 Collaborate with schools and public services in the planning and siting of future development.

Action 7.2 Enforce development setbacks around schools and sensitive areas.

Action 7.3 Plan and consider sustainable principles into operation and growth of county funded public services.

County History

The area of land known today as Minnehaha County was part of the Louisiana Purchase by the United States in 1803. The County was formed in 1862 and reorganized four years later. During this same year, the Homestead Act of 1862 encouraged settlers to stake claims in this part of the country.

Although economic depression, drought, and grasshoppers plagued expansion, the development of land offices, railroad expansion, and changing crop conditions contributed to the population growth.

Historic images courtesy of the Siouxland Heritage Museums

Immigration Begins.
Sioux Falls, S. D., March 3. – A. F. Pilber, local agent of the Burlington, Cedar Rapids & Northern railway, received word yesterday that a train, consisting of thirty-two cars of immigrant goods and fifty immigrants, would leave Eastern Iowa today over his road for new homes in Eastern South Dakota and Northwestern Iowa. Two cars of immigrants arrived in this city, having previously purchased their homes near Dell Rapids, twenty miles north of this city. Railroad officials predict an unparalleled rush for South Dakota land this year.

Source: Faulk County Record, Thursday, March 8, 1894, Page 2

Natural features within Minnehaha County have attracted people for both materials and for recreation since the early years of settlement. The area along the Big Sioux River was quarried for quartzite as early as the 1860s. The business of quarrying rock continues today; although modern quarries rely less on manual labor. East Sioux Falls (below) was the center of the mining activity.

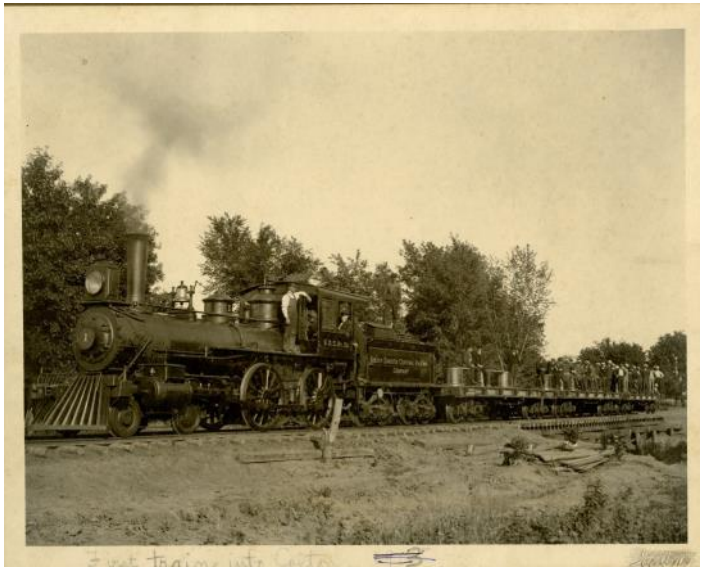
Historic images courtesy of the Siouxland Heritage Museums

Rapid growth in population helped push the U.S. Congress to approve the division of the Dakota Territory, creating the states of North Dakota and South Dakota in 1889. With that division construction began on the first Minnehaha County Courthouse the same year.

The building is constructed of native Sioux Quartzite stone, a popular local building material of the late 19th century. When completed in 1893 the architect, Wallace Dow, claimed the structure would be the "largest courthouse between Chicago and Denver."

Historic image courtesy of the Siouxland Heritage Museums

The Chicago, St. Paul, Minneapolis & Omaha railroad (formerly part of the Chicago & North-Western Railway System) was the first rail line to come into the county. The initial train reached Valley Springs on June 1, 1878, Brandon on July 15 and Sioux falls on August 1. Currently, this line is owned by Eastern & Ellis and is mostly abandoned except for the portion running from Brandon to the western boundary of Sioux Falls. Sioux Falls soon became the hub for rail transportation in the state. Other rail lines include the Chicago, Milwaukee & St. Paul, the Burlington, Cedar Rapids & Northern, the Illinois Central, the Willmar & Sioux Falls, and the South Dakota Central.



Historic images courtesy of the Siouxland Heritage Museums

Planning & Zoning History

The county's planning efforts began in 1966 with the appointment of a planning commission. Their task was to work with a consultant to prepare a comprehensive plan. This work culminated in 1968 with the completion and adoption of the Minnehaha County Comprehensive Plan; this plan included zoning and subdivision regulations.

The Planning Commission worked several years without staff support until a planning department was formed in 1972. Legal problems were encountered in 1973 when the county refused a request to rezone property. The applicant commenced court action to strike down the comprehensive plan and zoning regulations on the basis of improper adoption. The court ruled that the plan had been adopted as an emergency measure, limited by statue to a period of two years, and struck down the plan. In late 1973 the county took action to adopt a permanent plan, including zoning and subdivision regulations. In 1974, the Uniform Building Code was adopted to regulate building construction in the rural area.

By the mid-1970's significant growth was occurring in the rural area as houses spilled outside of the cities onto agricultural land. While the plan warned of this phenomenon more than half a decade before, the zoning regulations failed to keep pace with development pressure. By 1978, elected officials recognized the need for change in order to more effectively manage residential densities in the rural area but the new zoning ordinance failed to be sustained by the electorate in a referendum election.

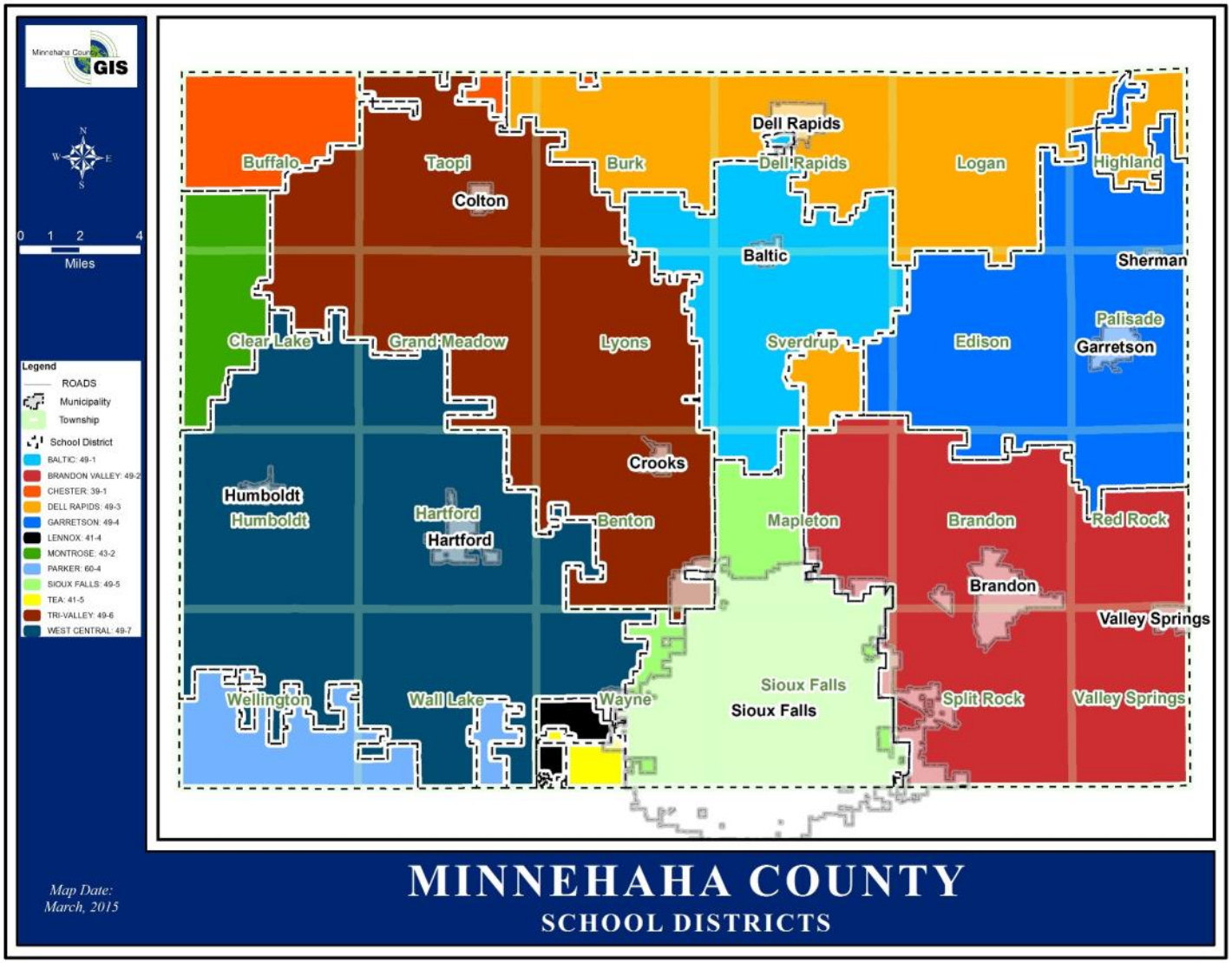
In 1980, the zoning regulations were amended to require property to be rezoned for residential subdivisions. Prospective homeowners were also required to obtain a conditional use before building permits could be issued on isolated nonfarm residential acreages. The Density Zoning Ordinance that was passed in 1988 significantly slowed the development of rural subdivisions by only allowing one residential dwelling on every quarter-quarter section of land or lot of record.

The zoning ordinance was overhauled and updated in 1990, and these regulations still govern land use in the county with several additions and amendments through the years. The last comprehensive plan was adopted in 1998. A joint jurisdiction boundary, not to exceed three miles beyond corporate municipal limits, was drafted a few years later in the early 2000s. Zoning regulations for each joint zoning jurisdiction, Dell Rapids and Sioux Falls, were adopted in harmony with the respective comprehensive plans to provide regulatory authority for the municipalities in land use and zoning matters within three miles of the outer municipal boundaries.

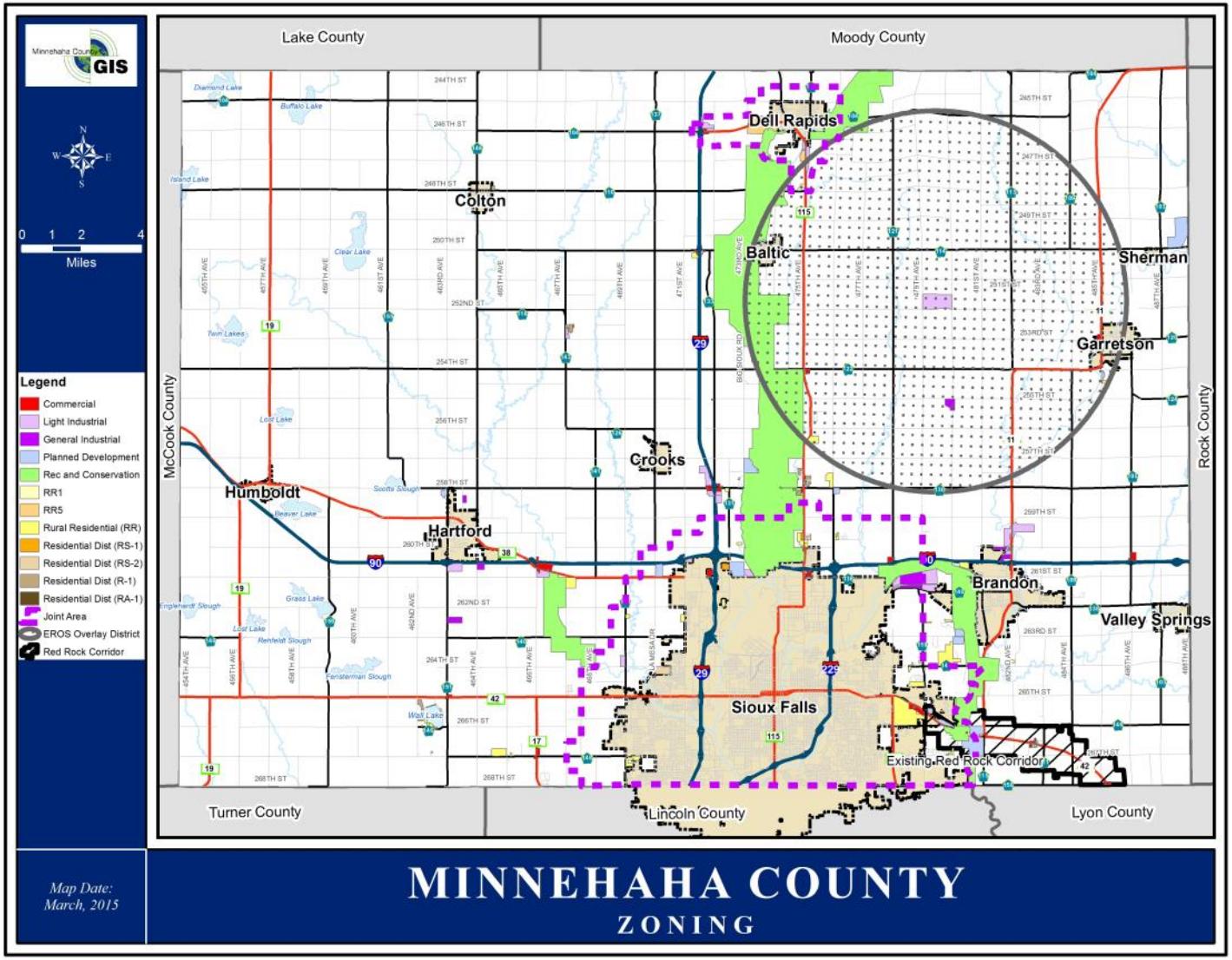
The responsibilities of the Planning Department have increased since its inception. Today, the department also manages building inspections, onsite wastewater treatment systems, agricultural drainage, code enforcement, solid waste disposal, rural addressing, road vacations, GIS, county-wide recycling and clean-up projects, floodplain management, and the county parks.

MOVING FORWARD
Planning Ahead

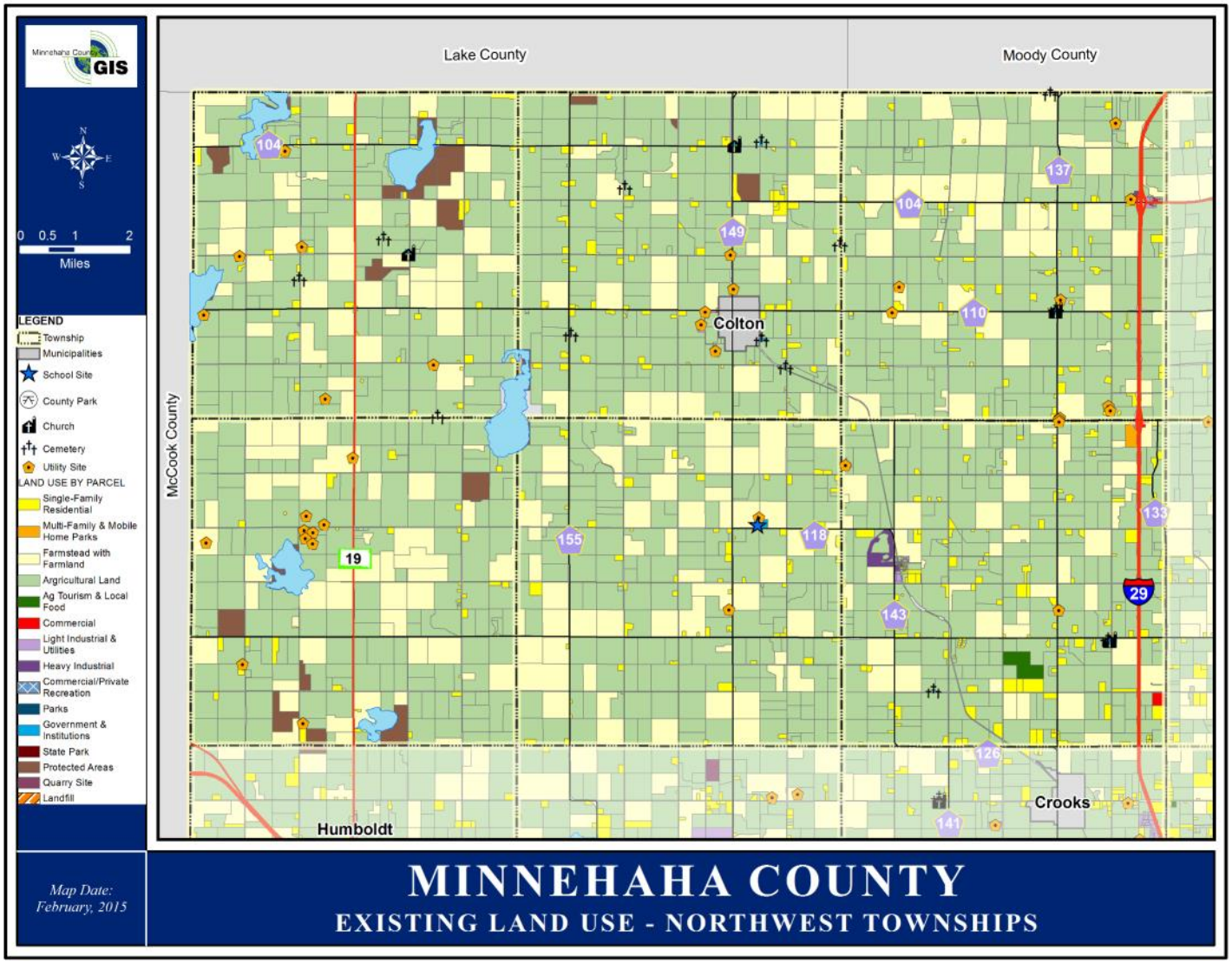
School District Boundaries Map



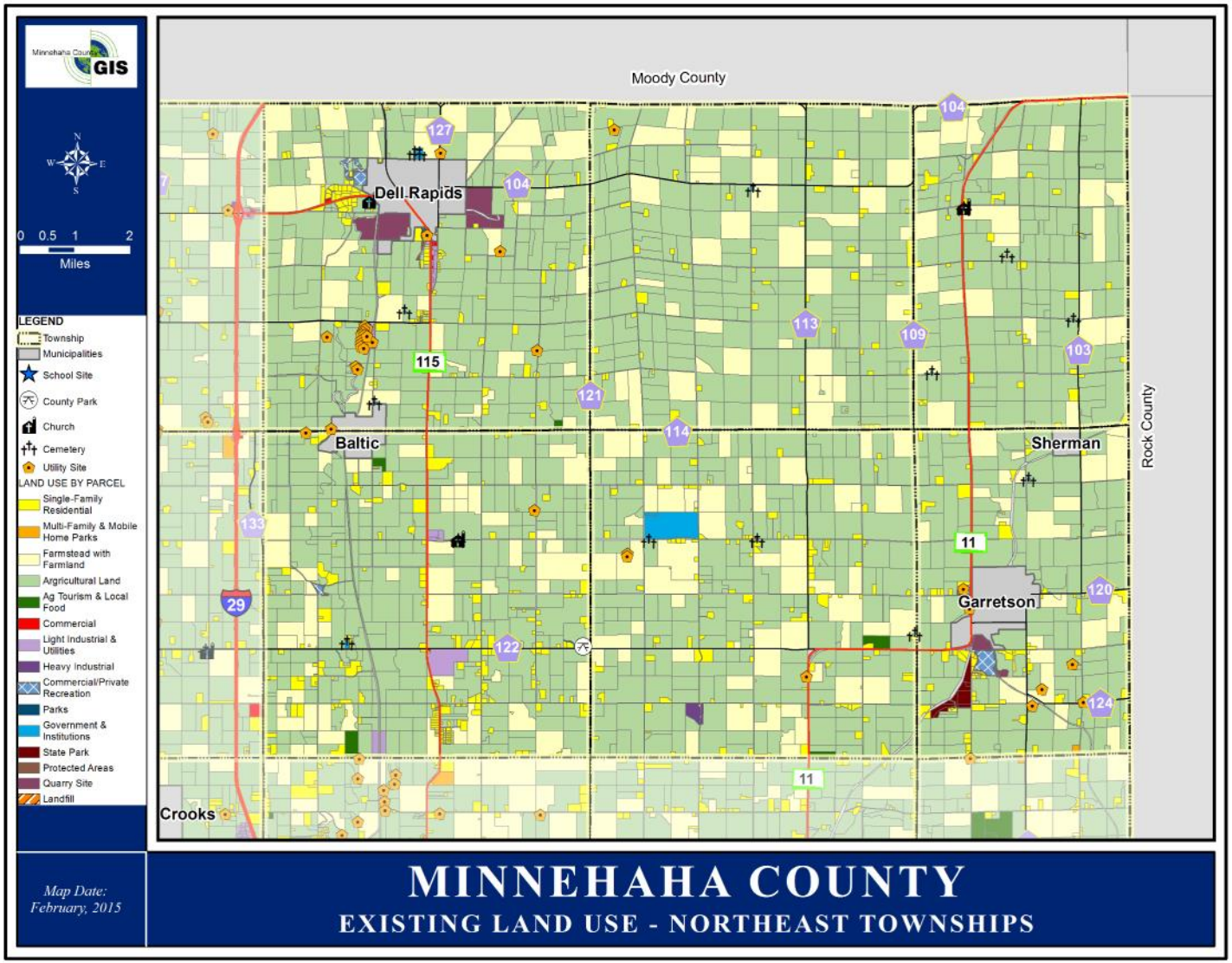
Zoning Map


Minnehaha County GIS
Miles
Legend
Commercial
Light Industrial
General Industrial
Planned Development
Rec and Conservation
RR1
RR5
Rural Residential (RR)
Residential Dist (RS-1)
Residential Dist (RS-2)
Residential Dist (R-1)
Residential Dist (RA-1)
Joint Area
EROS Overlay District
Red Rock Corridor
Lake County
Moody County
McCook County
Rock County
Turner County
Lincoln County
Lyon County
Dell Rapids
Colton
Baltic
Sherman
Garretson
Crooks
Humboldt
Hartford
Brandon
Valley Springs
Sioux Falls
Existing Red Rock Corridor
Map Date:
March, 2015
MINNEHAHA COUNTY
ZONING

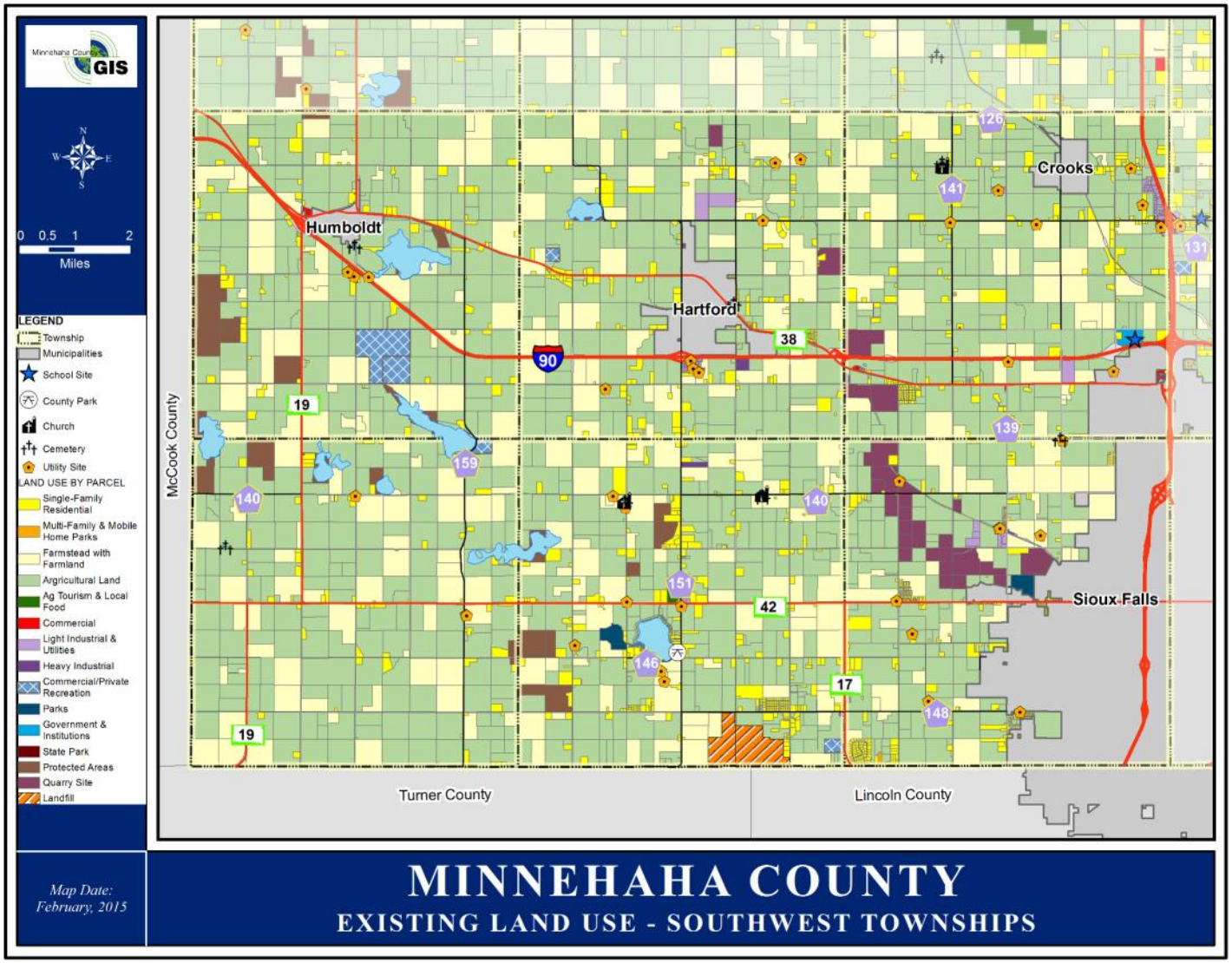
Existing Land Use Quadrant Maps - Northwest Townships



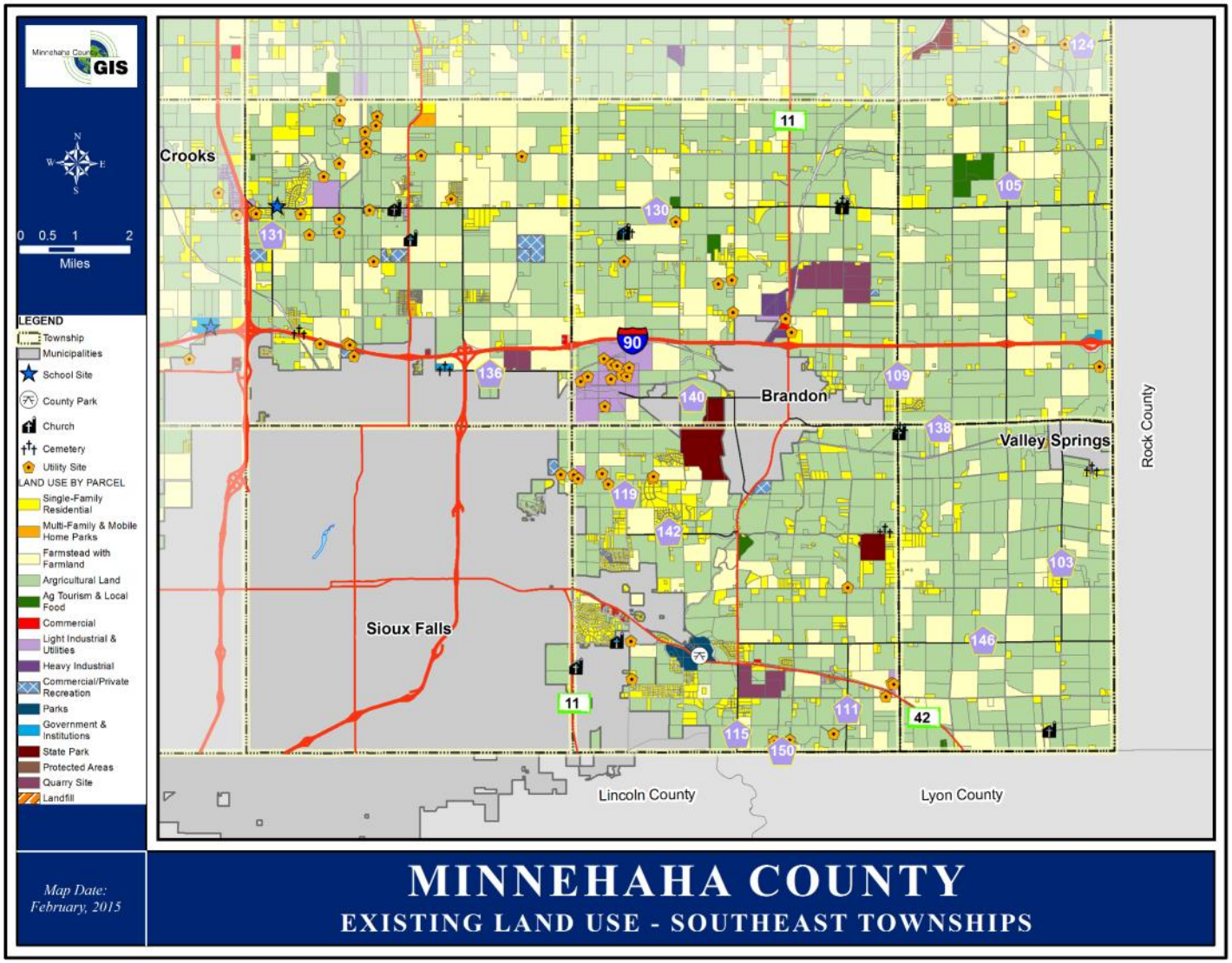
Existing Land Use Quadrant Maps - Northeast Townships



Existing Land Use Quadrant Maps - Southwest Townships



Existing Land Use Quadrant Maps - Southeast Townships



Public Comment - Agricultural Survey & Results

AGRICULTURAL SURVEY

Agriculture is an important part of Minnehaha County's economic health and regulations supporting the preservation of agriculture should be required in this plan.

Strongly Agree Agree Neutral Disagree Strongly Disagree

Current regulations allow one single family dwelling per quarter-quarter (40 acres). I think this regulation should allow:

1 house per 10 acres 1 house per 80 Acres 1 house per acre No change

People who want to build a house in the county should not be allowed to build within ___ of an existing Concentrated Animal Feeding Operation (Feedlot).

As close as they want 1/8 mile 1/4 mile 1/2 mile 1 mile

Large corporate farming operations should be allowed in Minnehaha County.

Strongly Agree Agree Neutral Disagree Strongly Disagree

Some agricultural operations, such as a dairy, need employees on site 24/7. I think that these operations should be allowed to construct bunkhouses or other types of living quarters on their property.

Strongly Agree Agree Neutral Disagree Strongly Disagree

Run-off from farm fields and other agricultural uses cause environmental problems.

Strongly Agree Agree Neutral Disagree Strongly Disagree

The following best describes me:

Farmer Hobby Farmer Rural Acreage Resident Subdivision Resident

Tri-Valley	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Preservation	1	3			
	1/10 Acres	1/80 Acres	1/1 Acre	No change	
dwelling per acre	1			2	
	no limit	1/8 mile	1/4 mile	1/2 mile	1 mile
CAFO setback	2				2
	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Corporate Farms		2	2		
	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
bunk-houses		2	2		
	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
run-off		2		2	1
	Farmer	Hobby	Acreage	Subdivision	
personal description	1	1	2		

HARTFORD	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Preservation	12	4			
	1/10 Acres	1/80 Acres	1/1 Acre	No change	
dwelling per acre	3	2		11	
	no limit	1/8 mile	1/4 mile	1/2 mile	1 mile
CAFO setback	4		1	6	5
	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Corporate Farms	2	6	1	3	3
	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
bunk-houses	1	7	3	3	2
	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
run-off	4	7	3	2	1
	Farmer	Hobby	Acreage	Subdivision	
personal description	6	4	6		

DELL RAPIDS	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Preservation	5				
	1/10 Acres	1/80 Acres	1/1 Acre	No change	
dwelling per acre				5	
	no limit	1/8 mile	1/4 mile	1/2 mile	1 mile
CAFO setback				3	2
	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Corporate Farms			1	3	
	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
bunk-houses		3	2		1
	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
run-off	1	2	1		1
	Farmer	Hobby	Acreage	Subdivision	
personal description	3	1	1		

TOTAL	**Strongly Agree**	Agree	Neutral	Disagree	Strongly Disagree
Preservation	**26**	10	1	0	0
	1/10 Acres	1/80 Acres	1/1 Acre	**No change**	
Dwelling per acre	6	2	0	**29**	0
	no limit	1/8 mile	1/4 mile	1/2 mile	**1 mile**
CAFO setback	6	0	4	14	**15**
	Strongly Agree	Agree	Neutral	**Disagree**	Strongly Disagree
Corporate Farms	6	8	8	**10**	6
	Strongly Agree	**Agree**	Neutral	Disagree	Strongly Disagree
bunk-houses	5	**16**	8	3	6
	Strongly Agree	**Agree**	Neutral	Disagree	Strongly Disagree
run-off	11	**15**	5	7	3
	Farmer	Hobby	**Acreage**	Subdivision	
personal description	**13**	8	**13**	5	

BRANDON	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Preservation	8	3	1		
	1/10 Acres	1/80 Acres	1/1 Acre	No change	
dwelling per acre	2			11	
	no limit	1/8 mile	1/4 mile	1/2 mile	1 mile
CAFO setback			3	5	6
	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Corporate Farms	4		4	4	2
	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
bunk-houses	4	4	1	2	3
	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
run-off	6	4	1	3	
	Farmer	Hobby	Acreage	Subdivision	
personal description	3	2	4	5	

Public Comment - Open Ended Comments from Open Houses

	TRI-VALLEY
1	Jake breaking from trucks at feedlot located at 459th/249th Avenue
2	Scott Again. Terminal dust control on road? Have not seen water down attemps yet with traffic. Looks like gravel base to me and not aggregate as was said.
3	Thanks for taking time to ask for ideas and opinions.
4	Stop sign at 257th & 465th leaning to the left.
5	RR Crossing on HWY 130, 1/10 mile east of Hwy 11, is very rough
6	running 57th street east to the casino would be very helpful
7	keep county as it is, no more people
8	hold a meeting for all rural county bike riders to focus on developing trails
9	there is enough land owned by the government; support private industry and ag
10	No building structures in a wetland unless a land mitigation is purchased (example 2 to 1 ratio). Wetland determination should be needed before building any type of structure. Just as it is needed for drainage.

	HARTFORD
1	We got a post card invitation. Some got a post card invitation and a 3 page letter of invitation.
2	Will Ellis Road area be another major route around west Sioux Falls off I-90 exit?
3	Regrade and blacktop Madison street to Ellis Road.
4	Support commercial/industrial development along railroads. Do not place residential growth along the railroads.
5	Environmental protection is critical. For example, water quality, landscaping buffers, farm/livestock run off should be monitored.
6	Very poor construction an reworking of Highway 38. Speed limits, passing lane markings. Extremely poor resurfacing job.
7	Bridge conditions on 253rd Street, 1/2 mile east of Highway 19
8	Sign of notify Highway 122 at the intersection of Hwy 133 & Hwy 122
9	Road condition 268th Street from Big Sioux River to the Casino was damaged by the Lewis & Clark project and is in bad shape in spots
10	Road condition Highway 100 west and east side of Sioux falls
11	Need lighted intersection at Hwy 42 and Hwy 19- very dark and dangerous at night
12	Humboldt needs a grocery store
13	As highways are upgraded, add bike lanes. Consider bike paths in northwest part of the county
14	Have a canoe launch on the east side of the Big Sioux River across from the F.O.P. and west of Iverson's crossing on Hwy 42. Have public access on both sides of the river.
15	The more development for businesses or places of people to live - leaves less land to grow food for people and livestock. This should be considered.

	DELL RAPIDS
1	Thanks for your time. Great discussion.
2	Cities/Municipalities need adequate treatment systems
3	Industrial use at I-29 Dells exit is needed. Land is already zoned for light industrial.
4	More commercial uses in Dell Rapids - grocery and businesses
5	Commercial use on the north side of Sioux Falls - grocery and drug store
6	Highway 154 - speeding over I-29 bridge at Dells exit. Poor visibility over bridge
7	255th Street from 478th Ave to 480th Ave needs to be hard surfaced to Nordstrom's
8	272nd Avenue - speeding but there is minimal enforcement. Posting signs could help. Bridge closure has made it worse.
9	Bridges on EROS road - all county roads in general
10	Dust control needed by Nordstrom's due to all the truck traffic. Pave the access. Township should not bare the costs of this part of the road

	BRANDON
1	Please supply information door to door or in Shopping News about wind energy for homeowners - such as permits
2	Allow poultry in subdivisions
3	Allow more pets per home in subdivisions than are allowed in Sioux Falls
4	Pave roads in subdivisions
5	Drain tile is a HUGE issue affecting downstream properties. This needs to be addressed. The amount of tile installed over the last few years has dramatically increased. Flooding downstream is a result along with a dramatic affect on wildlife habitat.
6	There has been a visible decrease in wildlife because of tiling "farmable/seasonal wetlands" and removal of large shelter belts. With the dry year, areas that have very seldom been farmed have now been tile affecting downstream drainage and wildlife.
7	Need more environmental protection
8	Water quality needs to be checked
9	Saddle back
10	Trail Access
11	Sweep old Brandon RD #140
12	Build some roads through the hills southeast of Rice St. between Cleveland Ave. and Six Mile Road. This area is a barrier to economic activity due to no traffic corridors. Also prevents ease of access for emergency response vehicles
13	Reconstruct SD HWY 42 east of Sioux Falls
14	RR crossing on 70th Street in Swanson Tracts is in need of repair
15	70th Street needs to be paved
16	Move traffic away from 26th St (between Hwy 42 & Hwy 11) residential area with too much heavy traffic now.
17	Would like hard surfacing at West Chestnut Blvd to Redwood Blvd and Redwood Blvd to North Chestnut Blvd
18	Pave Maple St. from 6- Mile Rd east to Brandon (Sioux River Bridge)

Public Comment - Parks & Recreation Assessment Survey

	Playground	Bike Trails	Picnic Shelters	Walking Trails	Parks	Snowmobiling	Kajak/Canoe	Hunt/Fishing	Camping	Cross Country	Ball Fields
TRI VALLEY	1	12	3	7	2	1	3	2	3	0	0
HARTFORD	9	37	22	13	25	12	30	12	12	8	3
DELL RAPIDS	0	2	1	0	7	0	0	0	0	1	0
BRANDON	5	14	15	8	4	2	5	2	2	8	0
TOTAL	**15**	**65**	**41**	**28**	**38**	**15**	**38**	**16**	**17**	**17**	**3**

Image Source: SD Game, Fish, & Parks

Image Source: SD Game, Fish, & Parks

Image Source: SD Tourism

The Minnehaha County Planning Department would like to thank this group of citizens and community leaders for their time and efforts.

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MOVING FORWARD

Planning Ahead

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