

Koochiching County Comprehensive Land Use Plan

November 2001

ARDC ARROWHEAD REGIONAL
DEVELOPMENT COMMISSION
Planning...Success

CREDITS

Prepared by:

Steering Committee Members

Ray Anderson
Ruth Anderson
Rod Bergstrom
Catherine Crawford
Henrietta Davis
Reg Emmert
Etta Erickson

T. Lynn Hoffman
Allen Linder
Paul McLaughlin
Brenda Nicholson
Marty Nosie
Allan Nygaard
Marty Schoewe

✓ Keith Sutherland
✓ David Trompeter
✓ Bobby Whitefeather
✓ Bill Whiteman
✓ Marc Windsnes
✓ Mike Zemek

Technical Advisory Committee Members

Nolan Baratano, MPCA
Jeremy Fauskee, Boise
Cascade Corp
Doug Grindall, County
Highway Engineer

✓ Dennis Hummitzsch, Land
Commissioner
✓ Mark Nelson, Soil and Water
Board
✓ Frank Swendsen, DNR

✓ Roger Andrascik, Voyageurs
National Park
✓ Tom Toratti, Soil and Water
Conservation District
✓ Dan Haig, NRCS
✓ Rick Swatek, KEDA

Planning Commission

Susan Baratono
Carol Dalton
Steve Earley
James Hebner

Michael Lemeux
Ralph Lewis
Don Lukenball
Bruce Sampson

Einar Sundin
Eldon Voigt

County Commissioners

Larry Chezick
Mike Hanson
Chuck Lepper
Tim McBride
Wade Pavleck

Koochiching County Environmental Services Staff

Dale Olson
Steve Blair
Richard Lehtinen

Assisted by:

Arrowhead Regional Development Commission

Vicki Spragg
Rudy Schoolderman
Andrew Bramson
Chris Johnston

Brandon Kohlts
Dave Yapel
Leah Reese

The Northspan Group

Randy Lasky
Bob Palmquist

TABLE OF CONTENTS

KOOCHICHING COUNTY COMPREHENSIVE LAND USE PLAN

| | |
|----------------------------------------------------------------------------------|------------|
| Introduction | 1 |
| Land Use | 9 |
| Natural Resources | 31 |
| Transportation | 49 |
| Community Facilities and Services | 67 |
| Economic Development | 87 |
| Housing | 105 |
| Implementation | 131 |
| Appendices | |
| Appendix A: Framework Goal Review Summary | |
| Appendix B: Land Use Maps | |
| Appendix C: Koochiching County Recreational Facilities | |
| Appendix D: Transportation Maps and Five Year County Capital Improvement Program | |
| Appendix E: Implementation Schedule | |
| Appendix F: Written Response to Comments | |
| Appendix G: Glossary | |

LIST OF FIGURES, TABLES, AND MAPS

FIGURES

| | |
|------------------------------------------------------------------------------------------|-----|
| Figure 2.1: Building Permits 1990-99..... | 11 |
| Figure 3.3: Koochiching County Accommodations | 41 |
| Figure 4.1: Value of Cargo Crossing the International Falls Border by Truck | 57 |
| Figure 4.2: Value of Cargo Crossing the International Falls-Ranier Border by Train | 58 |
| Figure 4.3: Duluth, Winnipeg, Pacific Railroad..... | 58 |
| Figure 4.4: Minnesota, Dakota & Western..... | 59 |
| Figure 4.5: Koochiching County Transit Providers | 61 |
| Figure 5.1: Water Sources for Koochiching County Housing Units | 68 |
| Figure 5.2: Sewage Disposal for Koochiching County Housing Units | 70 |
| Figure 5.3: Tons of Waste Landfilled or Processed and Recycled, 1991-1998..... | 73 |
| Figure 5.4: County-Wide Recycling Rates, 1992-1998 | 73 |
| Figure 5.5: School Enrollment and Type of School | 80 |
| Figure 6.1: Per Capita Income, 1996-2000 | 89 |
| Figure 6.2: Percent of County Employment By Industry, 2000 | 91 |
| Figure 6.3: Job Distribution for the Arrowhead Region..... | 94 |
| Figure 7.1: Estimated Population Changes 1995-2025..... | 109 |
| Figure 7.2: Median Year of Construction..... | 110 |
| Figure 7.3: Age of Housing as a Percentage of the Total Housing Stock..... | 110 |
| Figure 7.4: Origin of Housing Mobility Between 1985 and 1990 | 113 |
| Figure 7.5: Homeowner Vacancy Rate in Koochiching County and its Cities..... | 116 |

| | |
|-----------------------------------------------------------------------------|-----|
| Figure 7.6: Homeowner Vacancy Rates in Selected Counties | 116 |
| Figure 7.7: Rental Vacancy Rates for Koochiching County and its Cities..... | 117 |
| Figure 7.8: Rental Vacancy Rates in Selected Counties..... | 117 |
| Figure 7.9: Median Gross Rent..... | 118 |
| Figure 7.10: Median Household Income..... | 121 |

TABLES

| | |
|-------------------------------------------------------------------------------|----|
| Table 1.1: Population Data, Koochiching County | 6 |
| Table 1.2: Koochiching County Population Estimates and Percentage..... | 7 |
| Table 1.3: MN Demographer Population Forecasts and 2000 Census | 8 |
| Table 1.4: MN Demographer Number of Household Forecasts and 2000 Census | 8 |
| Table 2.1: Building Permits in Koochiching County | 12 |
| Table 3.1: Area of Timberland by County and Forest Type | 37 |
| Table 3.2: Area of Timberland in Koochiching County Ownership Class | 38 |
| Table 3.3: Koochiching County Accommodations..... | 41 |
| Table 4.1: Highways Maintained by Koochiching County | 54 |
| Table 5.1: Part I Offenses..... | 75 |
| Table 5.2: Part II Offenses | 76 |
| Table 5.3: Total Part I Offenses, Rates, and Arrests..... | 76 |
| Table 5.4: Total Part II Offenses, Rates, and Arrests | 77 |
| Table 5.5: Part I and Part II Offence Rates, State of Minnesota | 77 |
| Table 5.6: School District Enrollment Comparisons | 80 |
| Table 5.7: 1997-1998 Average Daily Membership | 81 |

| | |
|-----------------------------------------------------------------------------------------------|------------|
| Table 5.8: Healthcare Personnel within Koochiching County, 1998 | 83 |
| Table 6.1: Per Capita Income Estimates, Koochiching County and State of Minnesota..... | 89 |
| Table 6.2: Unemployment Rates, 1996-2000 | 90 |
| Table 6.3: County Employment by Major Industry Group | 90 |
| Table 7.1: General Demographic Changes Between 1980 and 1990 | 108 |
| Table 7.2: Housing Units by City and as a Percentage of the County Total | 109 |
| Table 7.3: Change in Housing Types, 1980 to 1990 | 111 |
| Table 7.4: County Building Permits (New Housing Units) 1990-1999 | 111 |
| Table 7.5: Tenure by Year Householder Moved into Unit..... | 112 |
| Table 7.6: Percent Change in Total Market Value of Residential Homesteads..... | 114 |
| Table 7.7: Housing Growth as a Percentage of Change in the Number of Homesteads | 114 |
| Table 7.8: Change in Average Market Value Per Homestead 1990-2000 | 115 |
| Table 7.9: Residential Homesteads as a Percentage of County Total 1990-2000..... | 115 |
| Table 7.10: Description of Surveyed Senior Facilities in Koochiching County | 119 |
| Table 7.11: Demand for Senior Facilities in Koochiching County..... | 120 |
| Table 7.12: 1990 Income and Price Matrix for Koochiching County | 121 |

MAPS

| | |
|------------------------------------------------------------------|-------------------|
| Map 2.1: Land Cover Koochiching County | Appendix B |
| Map 2.2: Land Cover Distribution Koochiching County | Appendix B |
| Map 2.3: Zoning Koochiching County..... | Appendix B |
| Map 2.4: Land Ownership | Appendix B |
| Map 2.5: Land Cover Northeast Koochiching County | Appendix B |

| | |
|--------------------------------------------------------------|-------------------|
| Map 2.6: Zoning Northeast Koochiching County..... | Appendix B |
| Map 2.7: Koochiching County Land Use Categories | Appendix B |
| Map 3.1: Scientific and Natural Areas..... | Appendix C |
| Map 4.1: Koochiching County Trunk Highway Data | Appendix D |
| Map 4.2: Improvement Projects..... | Appendix D |

INTRODUCTION

I NTRODUCTION

Planning Process

The Koochiching County comprehensive planning process began in earnest in February of 1999 with the development of the Koochiching County Framework Plan (Biko, 1999). The comprehensive planning process, undertaken by Koochiching County, can be broken down into two interrelated planning efforts. The initial planning effort resulted in the development of a concept level, Countywide Framework Plan. The Framework Plan identified the land use issues and opportunities in the County and outlined the process for developing the comprehensive land use plan. Biko Associates, Inc., a private consulting firm, was hired to complete the Framework Plan. This plan was completed July 1999. The Framework Plan developed nine goals in three categories. These three categories included Natural Resources, Economic Growth and Diversity, Community Growth and Livability.

- **Natural Resource** goals touch on all elements in the comprehensive plan. Forest management, wildlife and habitat diversity, tourism and recreation opportunities, transportation and land use patterns are all affected by the natural resource goals set in the plan.
- **Economic Growth and Diversity** goals shape several elements in the comprehensive plan. The key areas include: land use, transportation, telecommunication and related community service needs, natural resource management, tourism and recreational points of interest.
- **Community Growth and Livability** goals crossover issue areas affecting land use, housing needs, community services, and transportation needs

For the second planning effort, Koochiching County retained the services of the Arrowhead Regional Development Commission (ARDC). This planning effort was broken down into three planning phases. The first phase consisted of a series of Framework Plan goal review sessions with the Steering Committee. In three sessions, Steering Committee members were asked to comment on each framework goal, identify stakeholders in relation to the goal, and to identify opportunities and barriers to reach each goal. This exercise allowed the consultant team to better understand the Framework Plan as well as identify a direction for formulation of more detailed objectives and implementation strategies. A summary of the outcomes of this exercise is included in Appendix A.

The second phase consisted of a series of focus group meetings intended to identify issues, formulate objectives, and discuss alternatives. The focus groups consisted of members of the Steering and Technical Advisory Committees as well as local experts on the topics covered that included, natural resources, recreation,

The comprehensive planning process began in 1999 with the development of a Framework Plan. A Citizens Steering Committee and a Technical Advisory Committee guided the planning effort.

Nine goals were formulated for natural resources, economic growth and diversity and for community growth and livability.

The development of the Comprehensive Plan was done in three phases. The planning process started with a review of the Framework Plan Goals followed by a number of focus groups on plan topics. During the final phase draft chapters were presented to the Steering and Technical Advisory Committee for review.

transportation, housing, economic development, community services and land use. This phase of the planning process was crucial to the plan's content in that it allowed local interests and perspectives to influence the direction of the planning process and ensure that the content of the plan reflected the issues and desired outcomes of Koochiching County and its residents.

Through the discussions and background studies a number of general planning themes arose. These include:

- Recognize the need for economic diversification.
- Maintain and enhance the County's high quality of life.
- Maintain and strengthen where possible local control of the County's resources and promote intergovernmental cooperation in this arena.
- Recognize the opportunities and limitations of the County's natural resources to support economic activity and development.
- Address changing needs in services related to the projected declining and aging population and if possible curbing this population decline.
- Recognize slow growth as an opportunity to plan and guide development to promote growth sensitive to the County residents' needs and to strengthen the County's tax-base.

These general planning themes are reflected in the goals and objectives of the plan.

During the final phase, draft chapters of the plan were written. These were disseminated to Steering and Technical Advisory Committees' members, County Commissioners, Members of the Planning Commission, and local experts for comment. They were formally presented to the Steering Committee for discussion. The final steps included public presentations of the draft plan at various locations throughout the County to generate further comments, recommendation of the plan to the County Board of Commissioners by the Planning Commission, and the formal adoption of the plan by the County Board of Commissioners.

To guide the development of the comprehensive planning process, a project Steering Committee of thirty County residents, representing all geographic areas of the County and various perspectives and interest groups, was invited. In addition to the Steering Committee made up of County residents, a Technical Advisory Committee consisting of County employees from various departments and representatives from state agencies was created to provide information and review and comment upon the plan.

Purpose

This comprehensive land use plan is the policy guide Koochiching County will use to set forth its land use activities over the next 25 years. It identifies issues that need further study or resources. Planning is an ongoing attempt to guide future development or redevelopment, in order to solve and avoid problems, meet future needs, and create new opportunities to enhance community life, the region's economy, and its environmental quality. The comprehensive planning process represents an opportunity for citizens and local government to discuss issues of concern and to reassess the direction the community wishes to pursue.

The comprehensive plan assesses and inventories current conditions, local resources, plans, regulations, and programs. It is intended to guide local government policy and zoning decisions and provide guidance to citizens, developers, and anyone concerned with the development of the County. It also communicates the direction the County is heading. Furthermore, it is an initial step in helping the County and local areas within the County qualify for federal or state grants to address issues identified in the plan.

The plan provides an overview of existing plans and policies and a set of goals that reflect the desired outcomes to be achieved during the lifetime of the plan. A set of objectives, intermediate steps undertaken to achieve the goals, are included for each goal. Finally, implementation strategies are identified for each objective. Background studies included natural resources, land use, housing, community facilities and services, transportation, and economic development. These background studies provide statistical information about the County, a discussion of issues and problems, and maps displaying existing and future land use.

Authority

The Koochiching County Comprehensive Plan is the legal basis for the County's land use controls. The Comprehensive Plan was developed in accordance with Minnesota Chapter 394, the County Planning Enabling Act. Minnesota Chapter 394 provides counties with the regulatory authority to promote the "health, safety, moral and general welfare of the community" through the development and implementation of a comprehensive plan. Implementation of a comprehensive plan may take a variety of forms including the adoption of official controls, such as zoning and other ordinances, an official zoning map, incentive programs, application for state and federal assistance, and changing spending priorities. Land use ordinances and programs must be consistent with the adopted comprehensive plan. Many implementation strategies are included in this plan. Implementation tools are discussed in more detail in the plan implementation chapter.

The comprehensive land use plan is the policy guide that will set forth land use and identify issues that need further attention. The planning process is an opportunity for citizens and local government to discuss issues and set a direction for the Community.

The plan encompasses existing plans and policies and provides a set of goals that reflect the desired conditions to be achieved during the lifetime of the plan.

The Comprehensive Land Use Plan is the legal basis for the County's land use controls. Minnesota Chapter 394 provides the County with the regulatory authority to develop a Comprehensive Land Use Plan.

The Plan is intended to be the foundation upon which land use decisions and regulation rests. The plan also identifies issues that need further attention.

Use

This plan is the end result of a process that has taken a little over one year to complete. The goals, objectives, and strategies included in the plan are the result of input from the Steering and Technical Advisory Committees and local experts. County decision-makers and staff should familiarize themselves with the plan and should seek its guidance in making decisions and setting priorities. New members of the County Board and Planning Commission should be given copies of the plan as part of the orientation process. The plan should be cited or referenced when appropriate in support of land use decisions made by County officials. It is important that County decision-makers and staff connect land use decisions with the Plan whenever appropriate. The Plan is intended to be the foundation upon which subsequent land use decisions and regulation rest.

Plan Organization

The various topics covered in the comprehensive plan are inter-linked. For example, goals developed for economic development may have impacts on transportation and community infrastructure needs as well as natural resource management in relation to the area's timber industry. Trends in demographics, such as an aging and declining population, also have an impact on a variety of policy areas such as housing needs, community services, and transportation. These trends also have economic implications such as impacts on available labor force and the County's tax-base.

Each of the topic areas in the plan provides background information as well as discusses other plans and government programs that may impact each topic where appropriate. At the end of each background study the connections with the other plan topics are highlighted and two scenario's are given creating a vision of what Koochiching County could look like 25 years from now. Scenario one is a do nothing scenario and scenario two is the desired outcome upon which the goals and objectives are based. Also, throughout the plan, key findings are highlighted in the sidebar, providing the reader an opportunity to get a general understanding of the key issues without having to read the complete text and allowing for location of topics for further reading in the main text.

Plan elements are inter-linked. Each chapter will provide a summary of linkages to other topic areas and provide 2 scenario's for each topic area.

Koochiching County Profile

Koochiching County is located in north central Minnesota approximately 300 miles north of the Minneapolis/St. Paul Metropolitan area and 150 miles north of Duluth. Koochiching County is the second largest county in the State of Minnesota. Consisting of some 3,200 square miles of land, it has a population of approximately 14,355 people, according to the 2000 census. Koochiching County borders Ontario, Canada to the north, Beltrami and Lake of the Woods Counties to the west, Itasca County to the South, and Saint Louis County to the East. The County is sparsely developed with bogs and forests dominating the County's landscape.

The following historical sketch of Koochiching County is based in information from: *Taming the Wilderness: The Northern Border Country, 1910-1939* by Hiram Drache, 1992, and *Koochiching: Pioneering Along the Rainy River Frontier* by Hiram Drache, 1983.

Through archeological research some information of the inhabitants of Koochiching County dating back over a thousand years is known. Sometime between 200 BC and 1000 AD the area was the home to a group known as the Laurel Culture. The Laurel Culture left artifacts in the form of large burial mounds and associated burial objects. The burial grounds at Grand Mound History Center, on the Rainy River, originated from this period. The area was controlled up to about 1700 by the Cree and Assiniboiné who were then displaced by the Chippewa who had been moving westward from the east coast as a result of pressure from European settlers. The County's name is derived from a Cree word thought to mean neighbor of the lake or river.

The first Europeans to visit the area were French explorers and trappers who arrived during the mid-seventeenth century in search of a Northwest Passage to Asia and pelts for the fur trade. Europeans were drawn to the area over the years for a variety of reasons including furs, gold, timber, and farming. The most enduring and financially rewarding of these pursuits over the years has been timber. Most early settlers arrived in the area from the north due to its ease of accessibility, by use of Rainy River and connecting rivers, relative to the south. It was not until the last part of the nineteenth century that settlers began arriving from the south. By 1900 only a handful of European's had settled in the area.

The major influx of settlers into the area occurred during the early twentieth century, up to about the mid-1930's. Magazine and newspaper advertisements of the era touted the area was as a potential agricultural heaven; once the vast wetlands were drained. Urged by these optimistic predictions, many people acquired land through the various Homestead Acts and began arriving in the area to begin farming. Between 1913 and 1919, massive ditching projects were undertaken to begin the process of draining the land. When it became clear that these project were failures, many people abandoned their land. Many others abandoned their land once the tax obligations from the ditching project came due.

A number of Native American cultures resided in Koochiching County. A number of archeological sites exist within the County.

French explorers and trappers were the first Europeans to arrive. By 1900 the area still remained largely unsettled.

The major influx of settlers into the area took place between 1900-1930. This influx was in part driven by massive farmland development projects.

The timber industry and tourism now dominates the economy. Agriculture plays a minor role.

Koochiching County's population has been declining and is now at 14,355 according to the 2000 Census, an 11.9 percent decline compared to 1990.

The population is projected to decline over the next 25 years to 13,580.

The massive abandonment of land by disillusioned would be farmers created a large amount of tax forfeited land that came under State and County control.

The timber industry and tourism now dominate the County's economy. Agriculture plays a minor role in the economy and is dominated by livestock farming. Because of the importance that natural resources play for Koochiching County's economy it is likely that topic will dominate the discussion on future land use in the County.

Demographic Profile

Koochiching County's population has been declining over the last 20 years. As shown in Table 1.1 the County's population has declined 18.3 percent between 1980 and 2000. Between 1990 and 2000 the County's population declined by 11.9 percent. The decline between 1990 and 2000 may be somewhat exaggerated due to an over count during the 1990 Census when a high number of temporary laborers were working in the County on the expansion of the Boise Cascade Paper Mill. The state demographer's projection for 2000 was a population of 15,620. According to the 2000 Census, the actual population of 14,355 fell short of the projections by 1,265 people.

Table 1.1: Population Data, Koochiching County

| Area | 1980 | 1990 | 2000* | Percent Change 1980-2000 | Percent Change 1990-2000 |
|--------------------|--------|--------|--------|-----------------------------|-----------------------------|
| Koochiching | 17,571 | 16,299 | 14,355 | -18.3% | -11.9% |

*Source: 2000 US Census *This data has not yet been adjusted based on accuracy and coverage evaluation.*

At the time of this writing no detailed 2000 Census demographic data had been released. Forecasts from the state demographer that have not yet been adjusted to take into account the latest census information. Based on historic and forecast migration trends, the state demographer projects a continued drop in population through 2025. The state demographer estimates that Koochiching County's population will decline by 2,331 people from 1995 to 2025, a 15 percent decrease. The projected total population in 2025 is 13,580 (see Table 1.2).

**Table 1.2: Koochiching County Population Estimates and
Percentage of Total Population by Age Group**

| Age Group | 1995 | 2000* | 2005 | 2010 | 2015 | 2020 | 2025 |
|---------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Total Pop. | 15,911 | 15,620 | 15,320 | 15,000 | 14,640 | 14,200 | 13,580 |
| 19 and Under | 4,493 (28%) | 3,940 (25%) | 3,280 (21%) | 2,810 (19%) | 2,510 (17%) | 2,410 (17%) | 2,220 (16%) |
| 20 to 44 | 5,496 (35%) | 5,190 (33%) | 4,880 (32%) | 4,460 (30%) | 4,300 (29%) | 4,050 (29%) | 3,640 (27%) |
| 45 to 64 | 3,519 (22%) | 3,980 (25%) | 4,530 (30%) | 4,860 (32%) | 4,700 (32%) | 4,250 (30%) | 3,800 (28%) |
| 65+ | 2,403 (15%) | 2,560 (16%) | 2,680 (17%) | 2,880 (19%) | 3,150 (22%) | 3,490 (25%) | 3,920 (29%) |

Source: Minnesota State Demographer *This number has not yet been adjusted to reflect the 2000 Census.

As described in Table 1.2 the population of people of working age (20-64) is project to decline over the next 25 years by 1,730 people a 19 percent decline. The number of children (age 19 and under) is projected to decline by 1,530 a 44 percent decline. The senior citizen population (65 and older) is the only population segment projected to increase by 1,360 people, or a 53 percent increase.

This shift in population make up will have significant implications for Koochiching County and will affect a number of policy areas. The growing senior population will likely result in an increased need for medical services as well as changes in housing needs and preferences. Fixed incomes of people that are retired may also have tax implications for the County. A declining population of children of school age combined with a low density settlement pattern in much of the County is likely to have significant impacts on the County's school system and distance children will have to travel to schools. Finally a decline in the population of people of working age can influence the attraction of new business as it relates to the limited labor force. These issues will be discussed in more detail in the background chapters.

As depicted in Table 1.3, the state demographer's population forecasts appeared to be too high. Cities have realized a decline in population as has the rest of the County.

Koochiching County's population is aging. The number of children and people of working age are projected to further decline in numbers.

The population change will impact County services, tax base and land use.

All cities in the County have experienced a population loss between the 1990 and 2000 census.

Table 1.3: Minnesota Demographer Population Forecasts and 2000 Census

| | 1980 | 1984 | 1988 | 1990 | 1992 | 1994 | 1996 | 1998 | 1999 | 2000 Census* |
|-----------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------------|
| Big Falls | 490 | 496 | 372 | 341 | 333 | 334 | 332 | 328 | 329 | 264 |
| International Falls | 5611 | 5344 | 7836 | 8301 | 7813 | 7811 | 7810 | 7704 | 7638 | 6,703 |
| South I-Falls** | 2806 | 2874 | | | | | | | | N.A. |
| Littlefork | 918 | 844 | 765 | 838 | 846 | 862 | 878 | 878 | 874 | 680 |
| Mizpah | 129 | 116 | 104 | 100 | 94 | 93 | 95 | 91 | 90 | 78 |
| Northome | 312 | 299 | 284 | 283 | 287 | 293 | 296 | 286 | 280 | 230 |
| Ranier | 237 | 220 | 226 | 199 | 202 | 196 | 196 | 196 | 195 | 188 |
| Koochiching County (Unorganized) | 6967 | 6566 | 5942 | 6087 | 6232 | 6233 | 6340 | 6343 | 6273 | 5,615 |
| County Total | 17571 | 16867 | 15637 | 16299 | 15807 | 15822 | 15947 | 15826 | 15679 | 14,355 |

Source: Minnesota State Demographer, 2000 Census *This data has not yet been adjusted based on accuracy and coverage evaluation. ** South International Falls was added to International Falls in 1988

The number of households remains relatively stable due to a decrease in household size.

The average household size is also declining, in part as a result of an aging population (see Table 1.4). The decline in the number of households is estimated at 7.7 percent, between 1990 and 2000, which is a significantly lower rate of decline than that of the overall population. The number of households has important implications for housing needs in the County and will be further discussed in the housing chapter.

Table 1.4: Minnesota Demographer Number of Households Forecasts and 2000 Census

| | 1980 | 1984 | 1988 | 1990 | 1992 | 1994 | 1996 | 1998 | 1999 | Census 2000 |
|-----------------------------------------|-------|-------|-------|------|------|------|------|------|------|-------------|
| Big Falls | 171 | 183 | 142 | 156 | 153 | 154 | 154 | 153 | 154 | 102 |
| International Falls | 2,191 | 2,230 | 3,140 | 3116 | 3145 | 3155 | 3173 | 3144 | 3134 | 2598 |
| South I-Falls** | 933 | 1,003 | | | | | | | | N.A. |
| Littlefork | 331 | 319 | 289 | 303 | 308 | 311 | 316 | 317 | 317 | 264 |
| Mizpah | 39 | 35 | 38 | 34 | 32 | 32 | 33 | 32 | 32 | 30 |
| Northome | 120 | 115 | 100 | 103 | 100 | 102 | 104 | 102 | 101 | 89 |
| Ranier | 76 | 74 | 73 | 76 | 77 | 75 | 76 | 77 | 77 | 73 |
| Koochiching County (Unorganized) | 2,233 | 2,198 | 2041 | 2179 | 2246 | 2253 | 2301 | 2311 | 2300 | 2176 |
| County Total | 6,131 | 6,197 | 5871 | 6025 | 6061 | 6082 | 6157 | 6136 | 6115 | 5564 |
| Average Household Size | 2.9 | 2.7 | 2.7 | 2.7 | 2.6 | 2.6 | 2.6 | 2.6 | 2.6 | 2.6 |

Source: Minnesota State Demographer Census *This data has not yet been adjusted based on accuracy and coverage evaluation **South International Falls was added to International Falls in 1988

LAND USE

L AND USE

Introduction

The purpose of this chapter is to describe the existing pattern of land use in Koochiching County, identify existing land use issues, and delineate desired land use outcomes. It will serve as a guide for County decision-makers as they review development proposals and make decisions concerning the location of public facilities, housing, commercial and industrial development, and recreational infrastructure. This document lays the foundation for zoning and subdivision regulations that put the goals and objectives of the land use section into action. The chapter will begin with a description of the existing land use patterns and trends that are likely to influence future land use. It will then discuss and describe in more detail trends and issues for different land use categories. The chapter will conclude with the identification of 14 land use categories and formulate guidelines for each of the land use categories that will guide future land use decisions.

The land use chapter describes existing land use and describes 14 land use categories with guidelines that will guide future land use.

Koochiching County, the second largest county in the State of Minnesota, consists of some 3,200 square miles of land located mostly within the Rainy River drainage basin and partially within the Red River drainage basin and has a population of 14,355 people according to the 2000 census. The County's natural resources can be thought of as the canvas upon which the pattern of land use is painted. Although the distribution of human activity is not solely determined by the natural environment, Koochiching County's current land use pattern has been influenced by the opportunities and constraints offered by its natural resources, as will be its future land use patterns. The large area that is classified as wetland, 68 percent, creates development constraints throughout the County, particularly in the western part of the County. A number of state and federal governmental entities influence land use in Koochiching County with approximately 73 percent of its land base in public ownership. Other factors such as housing needs and preferences, economic development, cost and availability of community services such as water, sewer, and transportation affect land use as well.

Koochiching County is the state's second largest County and has a population of 14,355 people. 68 percent of the County is wetland and 73 percent of the County is public lands. Other factors influencing land use include availability of public services, housing needs and preferences and economic development.

Existing Land Use

The following section represents a discussion of existing land use in Koochiching County. First, an introduction and description of the land use analysis conducted as part of the planning process will be presented. Second, some general trends that affect land use in the County will be identified. Finally, the current land uses within the County and their associated trends and issues will be described. In doing so, the official zoning categories that are currently in use by the County will be discussed in the context of the following generalized land use categories:

cities, public lands, residential, airport, commercial, industrial/manufacturing, agriculture, open space, and recreation.

Land Use Analyses

The purpose of a land use inventory is to quantify the existing development and land use within the County. From this inventory, along with the background information that is compiled in other plan chapters, general development trends can be determined which can provide direction for future development. The inventory can also help identify areas that should remain unchanged or preserved. The results of the land use inventory are graphically displayed in on Map 2.1 (Appendix B) and includes the acreage and percentage of land cover within each category. Map 2.2 (Appendix B) displays the land cover distribution of wetlands, forest patterns, grasslands, and farmstead and cultivated land locations.

The large area, sparse population, and development pattern of the County render a comprehensive field based land use inventory problematic. For the purpose of this comprehensive plan, a land use analysis was conducted using Geographic Information System (GIS) land cover data, along with County land ownership data, and a digital version of the County's zoning map as a surrogate for a more comprehensive land use inventory. However, the level of detail available to the GIS is such that some over or under estimations may be unavoidable.

Map 2.3 (Appendix B) depicts the existing land use classifications in Koochiching County. This map is a generalization from the zoning map's land use classifications that was digitized as part of the comprehensive planning effort. The map includes a table describing the amount of acreage and percentage of the total land available within each zoning category. These numbers exclude municipalities that are not under Koochiching County's zoning jurisdiction. The table also includes information on the percentage of wetlands within each land use category. For the land use analyses the information from the land cover inventory is compared to the amount of land zoned for each use to determine available land for development. Appendix B includes a summary of the zoning district descriptions.

General Trends Affecting Land Use

A number of general trends can be identified that have an impact on future land use in Koochiching County. The majority of the County population and development is concentrated in the International Falls-Rainy Lake area in Northeastern Koochiching County. This area is the region's main employment and service center and will continue to have this function into the foreseeable future.

The existing land use inventory reveals development patterns, densities and trends for future development.

Geographic Information System data is used to estimate land use and ownership patterns.

The majority of the population and development is concentrated in Northeast Koochiching County.

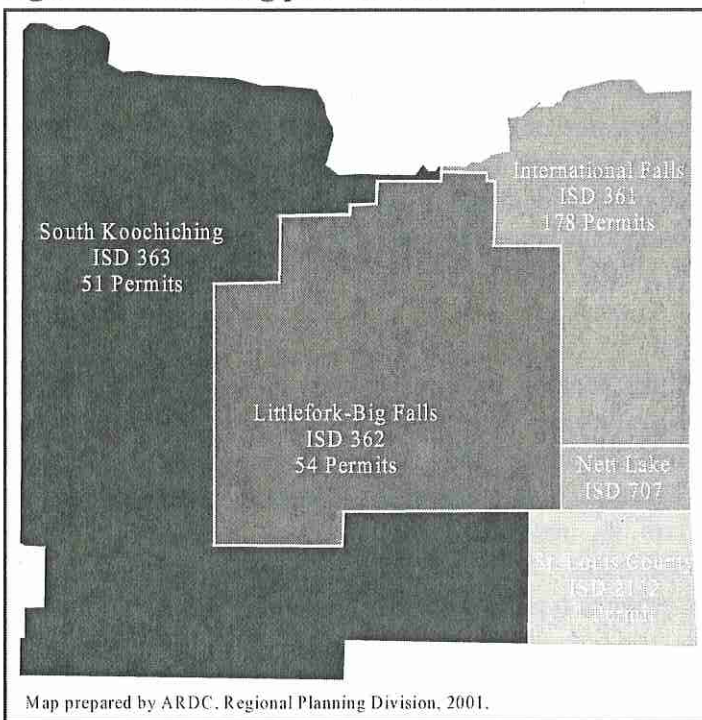
Rural residential development is outpacing new development within the cities by 2.5 times (284 rural developments compared to 111 within the cities between 1990-99). The bulk of the rural residential development, 178 of the 284 new units, took place in the International Falls-Rainy Lake area (See figure 2.1). The development within the cities is concentrated in International Falls with 73 of 111 new units being constructed there.

As discussed in the plan introduction, the Minnesota State Demographic Center estimates Koochiching County's population is anticipated to decline from 15,911 people in 1995 to 13,580 in 2025, a reduction of 2,331 or 14.7 percent. The average household size is expected to drop as the number of people age 65 years and older is expected to increase in this time period. The total number of households in Koochiching County has remained stable over the past ten years and is expected to do so as average household sizes continue to become smaller. New development is anticipated to maintain the same level as it is currently.

Rural residential development outpaced development in cities by 2.5 times between 1990-1999.

Koochiching County's population is projected to decline, the number of households is projected to maintain stable. New development is expected to maintain the same level.

Figure 2.1: Building permits 1990-99



Source: Koochiching County Assessors Office

Table 2.1: Building Permits In Koochiching County (New Housing Units)

| | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | Totals |
|------------|------|------|------|------|------|------|------|------|------|------|--------|
| Big Falls | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 2 |
| I-Falls | 6 | 8 | 5 | 6 | 8 | 7 | 10 | 8 | 9 | 6 | 73 |
| Littlefork | 1 | 2 | 1 | 5 | 3 | 4 | 2 | 0 | 3 | 4 | 25 |
| Mizpah | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Northome | 0 | 0 | 1 | 0 | 0 | 3 | 0 | 1 | 1 | 1 | 7 |
| Ranier | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 4 |
| Totals | 9 | 10 | 7 | 12 | 11 | 15 | 12 | 11 | 13 | 11 | 111 |
| ISD 361 | 16 | 17 | 23 | 15 | 20 | 21 | 12 | 16 | 24 | 14 | 178 |
| ISD 362 | 5 | 4 | 5 | 5 | 9 | 4 | 5 | 5 | 5 | 7 | 54 |
| ISD 363 | 4 | 3 | 5 | 4 | 5 | 7 | 5 | 4 | 11 | 3 | 51 |
| ISD 2142 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| Totals | 25 | 24 | 33 | 24 | 34 | 32 | 22 | 25 | 41 | 24 | 284 |

Source: Koochiching County Assessor's Office

Soil limitations provide a challenge to find adequate locations for development that can provide for septic systems. A Countywide soil survey is expected to be completed by 2006.

The severe development restrictions in much of Koochiching County provide a challenge to find adequate locations for development. As shown on the table on map 2.3 (Appendix B), large areas zoned for development may have severe limitations due to wetland limitations. An inventory of land suitable for development can provide an important tool to determine where new development should be directed and which areas should be secured to allow for future development. Although it does not exist at the time of writing, a countywide comprehensive soil survey is expected to be completed by 2006. This soil information will provide a valuable tool in identifying areas suitable for development and should be used as it becomes available.

60 percent of the population lives within cities. Six cities administer their own zoning.

Cities

There are six independent cities located in Koochiching County that have their own zoning authority. Those cities are International Falls, Big Falls, Littlefork, Northome, Mizpah, and Ranier. Although these six cities comprise a very small percentage of the County's acreage, 6,418 acres or .3 percent, they are home to approximately 60 percent of its residents and a large percentage of the commercial and industrial businesses. Most of the developed area in the County that is not in one of these six cities is typically located very near them.

The County's public lands provide a vital resource for the region's timber industry as well as provide a variety of recreational opportunities.

Public Lands

Public lands are those lands managed by government entities. Although Koochiching County is the second largest County in the state, encompassing some 3,200 square miles or over two million acres, only a small percentage is available for development. The Federal, State, County and Tribal governments own approximately 73 percent or 1.5 million acres of the County's land. This significant public land ownership is of concern to the County because it limits the land available for taxable land development, and it limits local control over land management decisions. However, much of the public land does serve a vital role as a resource for the area's forest industry and provide an important resource for

recreational activities. Map 2.4 (Appendix B) depicts the land ownership patterns and provides information on the acreage and percentage of land within each ownership. The different public landowners are described below:

- *Federal Government*

The Federal Government controls 33,597 acres of land within Koochiching County or approximately 1.6 percent of the County's total land acreage. This acreage is located within Voyageurs National Park and in close proximity to Indus and Loman. In 1992, 98.9 percent of Voyageurs National Park was recommended for designation as federal wilderness. Awaiting congressional approval, federal policy requires that potential wilderness be managed in such a way as to protect its suitability for wilderness. The park allows various forms of recreation, such as hiking, house boating, snowmobiling, canoeing, and fishing. A general management plan for the Park is currently under review.

The federal government controls 1.6 percent of the County. 98.9 percent of Voyageurs National Park is recommended for designation as federal wilderness.

- *State Government*

The State controls 1,108,958 acres or 55 percent of the County's total land acreage. A large amount of the state forest is located in the former Glacial Lake Agassiz lakebed on the western side of Koochiching County. Large scale tax delinquencies in the thirties and a transfer of land to the state in repayment of a debt left by the failure of an extensive ditching effort undertaken in the early 1900's left Koochiching County with a large area of land under State control. The State manages its lands for timber, wildlife, and recreation. The State forestlands make up over 51 percent of the County's productive timberlands and are of great importance as a resource for the local timber industry.

The state controls 55 percent of the County as a result of large-scale tax delinquencies in the thirties and debt repayment for a failed ditching effort. These lands are an important timber resource and provide recreational opportunities.

- *Koochiching County*

The County manages approximately 287,424 acres or 14 percent of the County's total land acreage as tax-forfeit land. The County manages the timber, gravel and peat resources on those tax-forfeit lands that are adequate for such use. The County has a land sale policy based upon its management plan for tax-forfeit land that generally recognizes the need to sell property that is better used for development and to manage those areas for forestry in which timber values exceed other values.

The County manages 14 percent as tax-forfeited lands. These lands are managed for timber, gravel and peat resources and provide recreational opportunities.

- *Tribal Lands*

Tribal lands make up 55,877 acres in Koochiching County, or 3 percent. The 1866 Treaty with the Boise Forte Band of Chippewa established Nett Lake reservation. The Treaty of 1863 established the Red Lake reservation tribal lands. The tribes manage these lands for their band members.

Tribal lands make up 3 percent of the County.

Residential

Koochiching County currently has four zoning districts in place specifically designed for residential development. These districts are R-1, R-2, R-3, and RR-1. The R-1 district is designed for low-density rural residential development on large lots with a 2.5 acres minimum lot size in areas not requiring public water and sewer. This district also allows for limited commercial use as well as forestry and agricultural uses. The R-2 district allows higher densities of development with a minimum lot size of one acre and allows the same uses as the R-1, except it does not allow livestock. The R-3 residential district allows the highest densities of residential development, however it requires access to public sewer and in some case water. The RR-1 or Residential/Recreational District is established to allow for seasonal and year round residential development and recreational services in areas of high recreational value.

As was previously mentioned, approximately 60 percent of the County's population lives in one of the six municipalities (International Falls, Northome, Mizpah, Littlefork, Big Falls and Ranier). The remaining 40 percent of the population is concentrated in close proximity to the developed areas and along the shorelands of Rainy Lake and the Rainy, Rat Root, Big Fork and Little fork Rivers.

Rural residences and farmsteads make up 613 acres or 0.03 percent of the County's total land area. Residential development that is located outside of the cities is typically located on large lots of at least one acre in size all the way to homesteads on 40 acres or more. A total of 45,087 acres is currently zoned residential, or 2.2% of the County's total land area. Taking into account the declining population and stable number of households projected for Koochiching County, there appears to be a sufficient amount of land available to meet the needs for future residential development. In addition, 262,724 acres or 13 percent of the County is zoned as Agricultural/Forestry allowing for large lot residential development.

The majority of the rural development is situated in close proximity to municipalities, and in areas that have developed historically as small rural farming communities or as communities associated with railroad and river related activities along County and State trunk highways, and river shores. Since traffic numbers are low on County and State trunk highways there are few traffic congestion problems associated with this development pattern. The County has an informal policy allowing residential development on properties not zoned residential in rural areas when there is adequate access to a roadway and in proximity to existing development. Increased rural development however can lead to additional costs in the provision of services such as fire and ambulance services and police protection, as well as increased costs related to school busing and road maintenance.

Koochiching County has adequate land available zoned for residential use to meet future needs for residential development.

Rural development is typically clustered or located along highways and river shores. Most rural development is in close proximity to existing communities.

Between 1990 and 1999 a total of 284 new housing units were constructed in Koochiching County. Rural residential development outpaced development within cities by 2.5 times (284 rural compared to 111 urban 1990-1999). This trend may be driven in part by a consumer preference but could also be a result of a lack of attractive housing options and building sites within the cities. A housing study could provide more information on what is driving this trend. Rural development may have a negative impact on the cities' tax-base and could lead to additional costs to city residents who must pay for the provision of public services. The International Falls-Rainy Lake area (ISD 361), received the bulk of the new rural development with 178 of the 284 new units. ISD 362 and 363 each received 53 and 51 building permits for new construction, respectively (See Table 2.1).

Map 2.5 (See Appendix B) provides a detailed overview of land cover in Northeast Koochiching County. Map 2.6 (See Appendix B) provides a detailed overview of zoning for Northeast Koochiching County. Within this area 19,223 acres, or 6.7 percent of the total land area, is zoned for residential development. Of this area, 4,874.4 acres, or 25 percent of the area zoned residential, is wetland. Currently 1,327 acres or 6.9 percent of the area zoned residential has development on it. This indicates that there is currently adequate land available in Northeastern Koochiching County to accommodate rural residential development. However, Approximately 75 percent of new construction in Northeast Koochiching County takes place along the Highway 11 east corridor between International Falls and Island View. Expansion of sewer services in the Jackfish Bay area could provide an opportunity to allow higher density residential development in this area if desired to accommodate growth occurring in this area.

Low-density rural residential development could lead to increased costs for the County. A study done by the American Farmland Trust that examined 1994 and 1995 data from 46 communities in fourteen states primarily across the Midwest and Northeast indicates that low density rural development typically lead to increased costs for services relative to the amount of taxes that are generated by these developments. The study considered the cost of rural development to the local tax base. According to this study, farmland required \$.27 to \$.77 in community services for each dollar generated in tax revenue. Residential development required \$1.02 to \$1.67 in services for each dollar of tax revenue it generated. The County and cities could work together on the development of a strategy to promote new residential development that limits costs for services and ensures a strong tax-base.

Virtually all of the homes outside of Big Falls, International Falls to Point of Pines for water and to 19th hole for sewer, Northome, Ranier and Littlefork, are on private septic systems and wells. Poor soil conditions and high water tables pose problems for siting and maintaining an effective septic system for wastewater treatment. Although there is no clear data on the number of septic systems that are currently failing throughout Koochiching County, the siting of septic systems

Rural development outpaced development within cities by 2.5 times. Rural development may lead to increased costs for provision of services.

Approximately 75 percent of the new development in Northeast Koochiching County takes place along the east highway 11 corridor.

Low density rural development could lead to increased cost in services relative to the amount of taxes generated from development.

Poor soil conditions pose problems for siting septic systems throughout the County. The Rainy Lake area has been identified as the County's highest priority to address septic system failure.

is likely to continue to pose problems throughout the County. Approximately 30 percent of the land zoned residential is designated wetland according to the land use analyses. The County is currently working on the development of an alternative septic treatment systems ordinance, which will allow the use of alternative treatment systems in areas where traditional systems would not be sufficient. Because of its high-density development and shallow soils, the area near Rainy Lake is identified in the County's Water Management Plan (Koochiching County, 2000) as the most critical area of concern for addressing septic system failure. It is estimated that approximately 90 percent of the existing septic systems in this area are failing. Funding is currently being pursued to connect housing units in the Jackfish Bay area to a central sewer.

Future residential development is likely to be concentrated in Northeast Koochiching County and along shoreland property. River plans and shoreland ordinances will guide these developments.

New residential development is likely to continue to concentrate in the International Falls-Rainy Lake area, where the main economic base and the regional service industry are located. As Koochiching County's population ages, more senior citizens are likely to move to urban areas closer to medical services and public transportation. The shoreland areas are also likely to experience increased development pressure. A relatively large amount of shoreland is zoned for residential development and is privately owned. The scenic qualities of shoreland property are a great draw for development as well. The various river management plans and shoreland ordinances regulate development within the shoreland areas. Key concerns with shoreland development include maintaining the rivers' water quality, which may be affected by failing septic systems and erosion due to vegetation clearing, and maintaining the aesthetic quality of the shoreline.

There is a significant amount of seasonal development scattered throughout the County. Between 1995 and 2000 the total number of improved seasonal recreational properties increased by 16 percent from 780 to 905. Some of these seasonal residences may be converted into a year round dwellings in the future as baby boomers buy up these cabins with the idea of keeping them as a second home or as a place to retire. The number of agricultural homesteads increased by two percent between 1995 and 2000 from 653 to 667.

The Falls International Airport has a safety overlay zone in place outlining three safety zones with different restrictions depending on proximity to the end of each runway.

Falls International Airport

The use of airport property is governed by the Airport Zoning Ordinance and by federal and state laws and regulations. The airport has a safety overlay zone in place (See map 2.3, Appendix B). This zoning ordinance outlines three safety zones at the end of each runway and is administered by the County Zoning Administrator. Differing restrictions are placed on each of the zones, depending on proximity to the end of each runway. The three safety zones are described as follows:

- *Zone A*

This zone is the one closest to the runway, no structures are allowed and very strict height requirements are in place. Some buildings that were in existence before the adoption of the Airport Zoning Ordinance remain in that zone, but no new structures are permitted. The Airport Commission's policy is to purchase any existing homes in Zone A if the owner opts to sell.

- *Zone B*

Residences are allowed in zone B, but this zone also has height limitation and there are restrictions on the type of activity that is permitted. The purpose of these restrictions is to prevent large gatherings of people in a high-risk, low fly-over area.

- *Zone C*

Safety zone C is farthest removed from the runway and is subject primarily to height restrictions.

The Airport Commission has voted to include in its new Master Plan a possible future extension to the southeast of the main runway if needed to accommodate larger aircraft. A possible runway extension in the Master Plan means that the Airport Zoning Ordinance must now be adjusted to reflect that change so that development will not be encouraged in areas that may later be added to the A or B zone classifications.

As part of its fiscal year 2000-01 federal capital improvement programs, the Airport Commission is planning to install new safety lighting and instrument landing systems at the northern end of the main runway. This project requires the acquisition of six privately owned properties and additional height restrictions within the affected area. Because of the equipment installation and federal regulations governing instrument runways, and because of a possible runway extension and related zoning changes in the future, any proposals for development the future safety zones of the airport need to be carefully examined. Also, because the area bordering the northern end of the runway is already developed, which makes growth in that direction difficult or impossible, any development at the southern end of the runway could reduce or eliminate the airport's ability to grow if future needs arise. Therefore, it would be advisable that zoning requirements at the northern end of the runway remain at least as restrictive as they are currently and that zoning changes at the southern end expand restricted areas to allow for future airport expansion.

Proposed new development within proximity of the airport will need to be evaluated based on a possible future runway expansion and regulations relating to the new instrument landing systems.

Commercial

Koochiching County currently has two zoning districts in place specifically designed for commercial use. These districts are C-1 and C-2. The C-1 district is intended to provide for retail, offices, and similar commercial establishments. C-2 provides for the same use but requires a conditional use permit for all uses,

Commercial development in rural parts of the County is limited and mostly concentrated along highway intersections and areas with tourism. Future development is likely to continue to follow this pattern.

Industrial activities are limited in rural areas and mostly natural resource related.

The acreage of agricultural lands has increased in recent years. Farming is recognized as an important basic industry that diversifies the County's economy.

allowing the County the opportunity to have a public hearing on a proposed development in this district.

Outside of the cities, there is very little commercial development in the County. A total of 1,284 acres is zoned commercial or 0.06 percent of the County. Three hundred twenty-one acres or 25 percent of the area zoned commercial is wetland. The land use analysis does not separate commercial from other rural developments, therefore a determination of the amount of land currently in use for commercial development cannot be made. Rural commercial development serves tourism and recreation oriented needs as well as local convenience items for rural residents. Commercial land use includes restaurants, resorts, gift shops, and gas stations. These commercial establishments tend to be concentrated along intersections of major highways or in areas with concentrations of tourism activity or close proximity to towns. The Rainy Lake area has a concentration of resorts and tourism related commercial development. Along with the growth in the tourism industry, Koochiching County may experience an increase in rural commercial development. This growth is most likely to concentrate in the Rainy Lake area and in proximity to trailheads.

Industrial/Manufacturing

Koochiching County has two zoning districts in place to accommodate industrial development. These districts are M-1 and M-2. The M-1 district allows for manufacturing, warehousing, transportation, and repair shop activities. The M-1 district requires a minimum lot size of one acre. Permits in the M-1 district are contingent upon an evaluation of potential impacts such as smoke, dust, and noise for the surrounding developments. The M-2 district allows for major industrial uses not covered in the M-1 district. The M-2 district requires a minimum lot size of two acres.

As with the commercial category, there is very little industrial development in the areas outside of the cities. A total of 2,679 acres or 0.13 percent is zoned for industrial use. Approximately 733 acres or 27 percent of this area is wetland. Most of the industrial uses are located close to the municipalities. Rural industrial development is mainly made up of timber related operations taking advantage of highway access and space for the storage of timber. The County recently prepared a site for industrial use just inside the city limits of Northome as part of a bio-mass-electricity project that also could accommodate additional industrial development.

Agriculture

Koochiching County has one Agriculture-Forestry district in place. The AF-1 district applies to areas that are most suitable for agricultural and forestry uses. This district allows for residential development and also allows for recreational development compatible with forestry and agricultural activities

According to the 1997 Agricultural Census, 76,000 acres, approximately 3.8 percent of Koochiching County's land base, were used for farming. The acreage in farmland increased between 1992 and 1997 by 8,000 acres. A total of 13 percent or 262,724 acres is zoned agriculture-forestry. The potential for agriculture in Koochiching County is limited due to climate, soils and distance to markets. However, farming is recognized as an important basic industry that diversifies the economy of Koochiching County.

Open Space

The Open Space district is intended to prevent the destruction of natural or manmade resources. Koochiching County has two zoning districts in place for open space. The O-1 district allows for seasonable development and is the largest zoning district covering 84 percent of the County. The O-2 district does not allow any development. The open space district maintains large tracts of permanent open spaces that are unsuitable for development and provides for forest resources as well as a variety of environmental benefits. The Open Space district allows for recreation and seasonal recreational dwellings.

1.48 million acres or 73 percent of Koochiching County is public land. In addition to the 73 percent of land controlled by public bodies, the timber industry manages 204,123 acres or over 10 percent of Koochiching County's land area for forestry purposes. The large amount of wetland in Koochiching County, approximately 68 percent, poses severe restrictions to development for much of the County. For this reason a large amount of land in Koochiching County is zoned as Open Space. A total of 1,697,429 acres or over 84 percent is zoned as O-1. This land provides an important function as a resource for the area's timber industry. In addition 449 acres are zoned as O-2.

The O-1 district allows for seasonal dwellings. Seasonal unimproved properties have seen an increase of over nine percent between 1995 and 2000 from 796 to 870. Many of the rural properties are used for recreational purposes such as hunting and fishing, and are likely to remain managed as open space and will, thus, continue to provide for wildlife, forestry and recreational uses. As property values rise in surrounding counties and shoreland becomes scarcer, some of this open space may come under pressure to be developed. The majority however will be managed for multiple use and will see no significant development for the foreseeable future.

Recreation

Much of Koochiching County's land allows for recreational use. The RR-1 district is specifically designed for seasonal and year round residences and allows for recreation oriented services. The AF-1 district allows for recreational development as well. Much of the O-1 district allows for seasonal dwellings and recreational activities such as hiking, hunting and fishing as well as motorized

Open space districts are made up of mostly environmentally sensitive lands with severe development constraints. This district provides important resources for the County's timber industry. 84 percent of the County is zoned as open space of which 74 percent is wetland. Much of the Open Space District is public land.

Much of Koochiching County's land base is available for recreational use.

Tourism related service industry is most likely to continue to be concentrated in Northeast Koochiching County and in proximity to trailheads.

Fourteen land use categories with general policy guidelines have been developed and will allow development of specific land use policies to guide future land use by the Planning Commission.

The cities' current municipal boundaries are assumed to be sufficient to meet future land use needs. A change of boundary needs to be amended in the land use plan map.

use such as four wheelers and snowmobiles. The County's water bodies also provide an important recreational resource. Public agencies and the private timber industry control most of the area used for recreation.

Due its undeveloped character and large amount of public land, much of Koochiching County's land base is available for recreational activities. The County also has a number of developed recreational facilities in place such as an extensive trail system for snowmobiles, improved campsites, and a number of public water access points are maintained by the State, County and National Park Service. The forest road system provides important access to public land for hunting fishing and other recreational activities. Recreational cabin leases exist on County and timber industry land. As previously discussed development of seasonal recreational properties have seen an increase over the last five years. The majority of the tourism related service industry is concentrated in the International Falls and Rainy Lake area. This area may experience some growth in recreational development over the coming years as tourism grows as an industry. Recreational development may also take place in the proximity of trailheads.

Land Use Categories and Guidelines

The following section introduces 14 land use categories that are recommended to be used to refine the existing categories in the County's zoning ordinance. The land use categories have been developed in order to allow the County to develop specific land use policies that apply to each category to guide future land use. The planning commission will refine these land use classifications and develop minimum lot sizes and land use policies for these land use categories. Map 2.7 depicts the areas covered by each of the land use categories. The land use categories include city, commercial, industrial, recreation/visitor-serving, residential development, agriculture, natural resource, timber-industrial, and public lands.

City

This category sets the year 2025 urban boundary or city limit for each of the six cities. Any land use inside the City boundary is consistent with the Land Use Plan because the City determines its own land uses.

The County will use the following guideline regarding land use in relation to cities:

- The urban boundaries currently in place are assumed to be sufficient to meet the community's needs for growth. Any change in the boundary would be based on the city's land use plan describing its future land use needs and would require an amendment to the Land Use Plan map.

Commercial

This category includes land that has existing or planned retail or wholesale commercial use. Residential use is consistent with this category only if it is secondary to a commercial use. Institutional uses are consistent with this category.

The County will direct future commercial development based on the following guidelines:

- New commercial businesses should be located near existing municipalities such as International Falls, Northome, Littlefork, and Big Falls, in areas with significant recreational use such as the Rainy Lake area, and should have adequate access to water and sewer or have adequate space for wastewater treatment and drinking water provision.
- Commercial development should have adequate access to the transportation network and should preferably develop in a clustered manner located near highway interchanges or other appropriate access points rather than strip development.
- Recreational commercial development should be well planned and located in the proximity of their targeted recreational resource. They should have adequate provisions for drinking water and wastewater treatment, adequate access to the transportation network, and should be well screened from adjacent residential areas.

Industrial

This category applies to lands with existing or planned fabrication or assembly of materials to produce a product or uses requiring the use, storage or repair of heavy equipment. Such uses as airports, junkyards and lumber mill, have an industrial designation.

The County will direct future industrial development based on the following guidelines:

- New large-scale industrial development should be located near urban areas with access to public water and sewer infrastructure. Smaller industrial development can be located in areas with adequate room for the development of a septic treatment system and well. New industrial development should have adequate access to the transportation network.
- Timber related industrial operations such as sawmills could be located in the rural areas close to the source of raw materials, with adequate access to the transportation network.

New commercial development should be located near existing municipalities or located near highway interchanges.

Large scale industrial development should be located near urban areas with adequate access to public infrastructure and transportation. Timber related operations can be located in rural areas.

- Land use other than industrial should be discouraged from locating in industrial areas.
- Industrial development within close proximity of the airport should take safety concerns and building restrictions into account.

Recreation/Visitor-Serving

This category is broken down into developed and undeveloped recreation/visitor-serving areas. The developed recreation/visitor-serving area is reserved for such uses as resorts, marinas, island retreats or recreation areas, campgrounds/RV parks, and commercial uses supporting these facilities. Most of the land in commercial use in the Rainy Lake area have this designation as the commercial uses are oriented to tourists or other non-residents, e.g., Camp Koochiching.

Developed recreation/visitor serving areas:

The County will direct future commercial development for developed recreation/visitor-serving areas based on the following guidelines:

- The County will inventory areas with commercial recreational development potential and will consider these for rezoning to recreation/visitor-serving in order to promote commercial development that takes advantage of the recreational resource.
- Recreational development such as a resort, hotel, or R.V.-park could be appropriate for the Rainy Lake area now zoned for residential use. Requests for these types of development should be evaluated based on their compatibility with uses in their surrounding area. Traffic impacts as well as the possibility to provide for adequate public services such as sewer and drinking water should be taken into consideration.

Undeveloped recreation/visitor serving areas:

The County will use the following guiding principles for the management of recreational opportunities in Koochiching County:

- Koochiching County will have a pro-active approach to ensure adequate access is maintained to its public lands and water bodies for recreational use. Koochiching County will do this through strategic acquisition or exchange of property as well as through active communication and coordination with the DNR and Park Service regarding the management of public lands.
- Koochiching County will identify, where appropriate, areas for passive and active recreation, including areas for motorized recreation in order to prevent potential user conflicts in certain areas. The County will actively work with the DNR and Park Service to ensure a diversity of recreational opportunities that meet the residents', visitors', and local businesses' needs.

Commercial areas suited for recreation/visitor service use will be inventoried and considered for rezoning.

Expansion of recreational/visitor serving development could be appropriate for the Rainy Lake area.

Koochiching County will actively coordinate with land managers and recreational uses where appropriate to prevent user conflicts and to ensure a diversity of recreational opportunities.

- Koochiching County will limit the development of seasonal dwellings into year-round residential properties in areas that are not appropriate for residential use.

Residential Development

Residential development is divided into two categories based on availability of public services

Urban-Residential

This designation applies to land serviced by public sewer and, sometimes, public water that is residential in use. This category allows for densities as high as 10 units per acre or large lot development of up to two acres. The intent of this category is to differentiate between lands that do and those that do not have public sewer. Institutional, small scale recreational and other similar uses are consistent with this category.

- High-density residential development including apartments, senior housing, and multi-family housing should be located in urban residential areas with adequate access to public services and transportation.

Rural-Residential

This category includes existing or planned residential lands on septic systems and usually having an individual well. The minimum lot size for new parcels is 2 acres. Existing parcels are recognized as legal and have all development rights of parcels meeting the minimum lot size. Adjacent parcels in common ownership are subject to being combined. The primary uses are residential, although such uses as farming, greenhouses, mineral extraction, home occupations and others are consistent with this category.

Regarding rural residential development the County will use the following guidelines:

- Large lot residential units should be utilized for low-density development outside of urban areas that are appropriate for such use. New rural residential units should have the ability to provide for at least one on-site septic system and one back-up system. The costs of services and appropriateness of the location for development should be taken into consideration when allowing rural development.
- Residential development in areas not zoned for such use may be allowed in areas with adequate access to a roadway and in proximity to existing development. The County discourages the development of new public roads to service a new development. The County encourages the clustering of rural

The urban residential development category allows for high-density development with access to sewer and sometimes water.

Rural residential development requires two-acre minimum lot sizes with adequate space for septic and well and an alternative septic site. Some commercial operations are consistent with this category.

The County encourages clustering of new development in proximity of existing development.

Shoreland development should be guided by the existing river management plans and County and State shoreland ordinances.

development in order to minimize the cost for infrastructure and services to Koochiching County. The prime function of the rural areas zoned as open space or natural resource and agricultural areas, however, remains to provide for forest resources, agriculture, recreational opportunities, wildlife, and maintaining the environmental qualities.

- Commercial use of residences in rural areas is consistent with this category but should be limited to home occupations, farming, or other small scale natural resource based operations such as sawmills, and should be evaluated based on their compatibility with their surrounding residential area.
- Shoreland development should be guided by the existing river management plans as well as by the existing County and State shoreland ordinances. The County should continue to work with the river management boards and appropriate State agencies to ensure the river plans are being implemented and evaluate the appropriateness and effectiveness of policies and strategies identified in the river management plans. Key concerns regarding shoreland management are maintaining water quality that can be affected by failing septic systems, erosion through vegetation clearing, and maintaining the aesthetic quality of shoreline areas.
- Land uses other than residential or home based commercial activities should be discouraged from locating in residential areas.

Agriculture

The purpose of this category is to preserve the agricultural land base. A broad range of uses such as institutional, recreational, and others are consistent with this category as long as the agricultural use potential is not threatened in the area. The agriculture district allows for residential development on a 5 acres minimum lot size and is located generally in areas suitable for agricultural use.

The County encourages the preservation of its agricultural land base. Non agricultural use in this land category is consistent as long as it doesn't threaten the agricultural use of the area.

The County will direct future development in districts zoned for agriculture and forestry based on the following guidelines:

- Direct non-farm related residential development away from productive agricultural areas.
- Encourage through education and incentives the conversion of marginally productive agricultural land into agro-forestry land.
- Develop and adopt a county-wide policy on the location and design of animal feedlots that minimizes the impact of feedlots on neighboring land uses and protects natural resources.

Natural Resource

Privately owned land that is not agricultural. Such lands include forest, wetland, and brush land where natural resource use such as timber harvesting or hunting predominates over agricultural use. Many of these lands are interspersed in State and timber-company owned lands.

The County will use the following guidelines regarding the use of natural resource lands:

- Forest land within the natural resource category should be protected from development and should be managed as a resource for the timber industry as well as provide for recreational opportunities while preserving and enhancing the environmental qualities.
- Land use controls should ensure Koochiching County's natural resources are managed to ensure future use.
- Koochiching County will identify properties critical to the County's access to timberlands and gravel resources and will ensure adequate access to these resources through land easements, exchange and acquisition.

Timber-Industrial

These lands are managed forestlands owned by Boise Cascade, Potlatch or Blandin. They are privately owned but managed exclusively by the wood products companies. Primary use is managed forestland. No permanent dwellings are allowed but seasonal structures such as hunting shacks are a consistent use. All uses shall be consistent with forest management.

Public lands

Seventy three percent of Koochiching County's land base is public land. For the purpose of policy development for public lands, five categories will be used. These categories are tax-forfeit lands, state lands, tribal lands, National Park, and other federal lands.

Regarding the management of public lands the County will use the following guideline:

- Since the public lands are of vital interest to Koochiching County's economic wellbeing, it is vitally important that the County staff and elected officials work closely with the state, federal and tribal governments responsible for managing these lands. Koochiching County should be a partner in the decision making of land acquisition and any changes in the management of the public lands that may impact County residents, businesses, or recreational opportunities. The County strongly supports a no-net loss policy of private

Natural resource lands are privately owned lands with primarily forestry and recreational uses such as hunting.

Timber Industrial lands are managed by the forest industry. Use on these lands should be consistent with forest management.

Public lands are of vital interest to the County's economy. Koochiching County will coordinate with the various land managers to protect the County's interests. The County strongly supports a no-net-loss policy of private lands.

land. Koochiching County will work with these agencies to ensure that local economic and recreational interests and the County's way of life are protected. The county will do this through the development of forums that allow for meaningful input in the decision making process as well as promote active involvement of its citizens in providing input during the decision making process.

- *Tax-Forfeit*

These are state-owned lands managed by the County. The primary use of this category is forest management. In some cases, parcels are small and more residential in character. In such cases many of these parcels are sold to private landowners and the land use designations should be amended to conform to surrounding parcels.

Regarding the management of tax forfeit lands the County will use the following guideline:

- The plan for the management of tax-forfeit land should continue to guide the management of these lands and be updated as needed. Tax-forfeit land that may have potential for development should be put up for sale and placed back on the tax roles. The County will continue to manage the tax-forfeit land in a way that is beneficial for residents, visitors, business interest and protects the environmental qualities of these lands.

- *State*

This designation makes up about one-half the County's land area. For the most part these lands are managed by MnDNR. Many of these parcels are managed as forestland. Other areas are essentially open space in bog land. The County should participate in decisions that would alter the designation or use of these lands. Cooperative arrangements should be made with DNR to assure there is a local role for decision-making on these lands.

- *Tribal*

Tribal land owned by the tribe, i.e., Red Lake Chippewa or Bois Forte Chippewa, is under tribal jurisdiction. Much of the Nett Lake Reservation is under State or timber company ownership. Land use decisions on these lands are made jointly by the owner and the Bois Forte Tribe. The County should initiate joint or cooperative management activities with the Tribes where appropriate.

- *National Park*

The Voyageurs National Park boundary is designated as a separate category in the Land Use Plan map (See map 2.7 Appendix A). Any change of the boundary would require an amendment of the Koochiching County Land Use Plan map. Uses inside the Park are under the jurisdiction of the National Park. Provisions should be made for County participation in the Park's decision-making process to

The primary use of tax-forfeit land is forest management. The tax-forfeit management plan will guide management of these lands.

Land managed by the state is an important resource for the timber industry and provides recreational opportunities. The County will actively coordinate with DNR on the management of these lands.

assure that the Park and local community can co-exist in a mutually supportive environment.

- *Other federal*

These are federally owned lands that are neither tribal nor National Park. These lands have a separate land use category. The County should determine what the federal government wants to do with these lands and work with the appropriate agencies to manage these lands properly or to make them available for County administration or private ownership.

The county will actively coordinate with Voyageurs National Park regarding park management. Changes to the park boundary have to be amended in the land use plan.

Relationship of Land Use to other Plan Elements

The plan elements described in this document all influence, to a great extent, the County's existing and future land use. The County's environmental characteristics such as soils and wetlands greatly determine where development is suitable to occur. The County's natural resources have historically impacted land use patterns. Settlement historically concentrated along rivers and glacial outwash areas that provided agricultural opportunities and a means of transportation for the area's timber and agricultural products. This historic settlement pattern still persists to date. The river and lakeshore lands provide a great draw for residential and recreational development and are likely to attract much of the future development that will occur in the County. Development design and infrastructure, such as adequate provision for wastewater treatment and shoreland protection measures, is also likely to impact the environmental and aesthetic qualities of the County. Housing needs and preferences, such as large-lot, rural, residential living, will greatly impact land use patterns in the County. The location and characteristics of the County's land use pattern determine the need and cost of provision of public services, such as, water, sewer, transportation infrastructure and emergency services. Increasing low-density development can have long-term fiscal consequences due to the higher cost of service provision for low density development according to a number of nationwide fiscal impact studies. Finally, the availability of adequate land that is suitable for commercial and industrial activities play a great role in the County's ability to compete with other regions for economic development.

Twenty-Five Years Out

This document is intended to help guide the County in land use decisions and policy development on a variety of topics over the course of the next 25 years. The following scenarios represent two possible views of the County 25 years into the future. The first scenario is a worst case scenario that follows a static or declining approach towards land use policy related activities. The second, best case, scenario is the possible outcome of a more proactive approach to land use by County decision-makers. It reflects the implementation of the majority of the recommendations of this plan.

Scenario 1: Worst Case Scenario

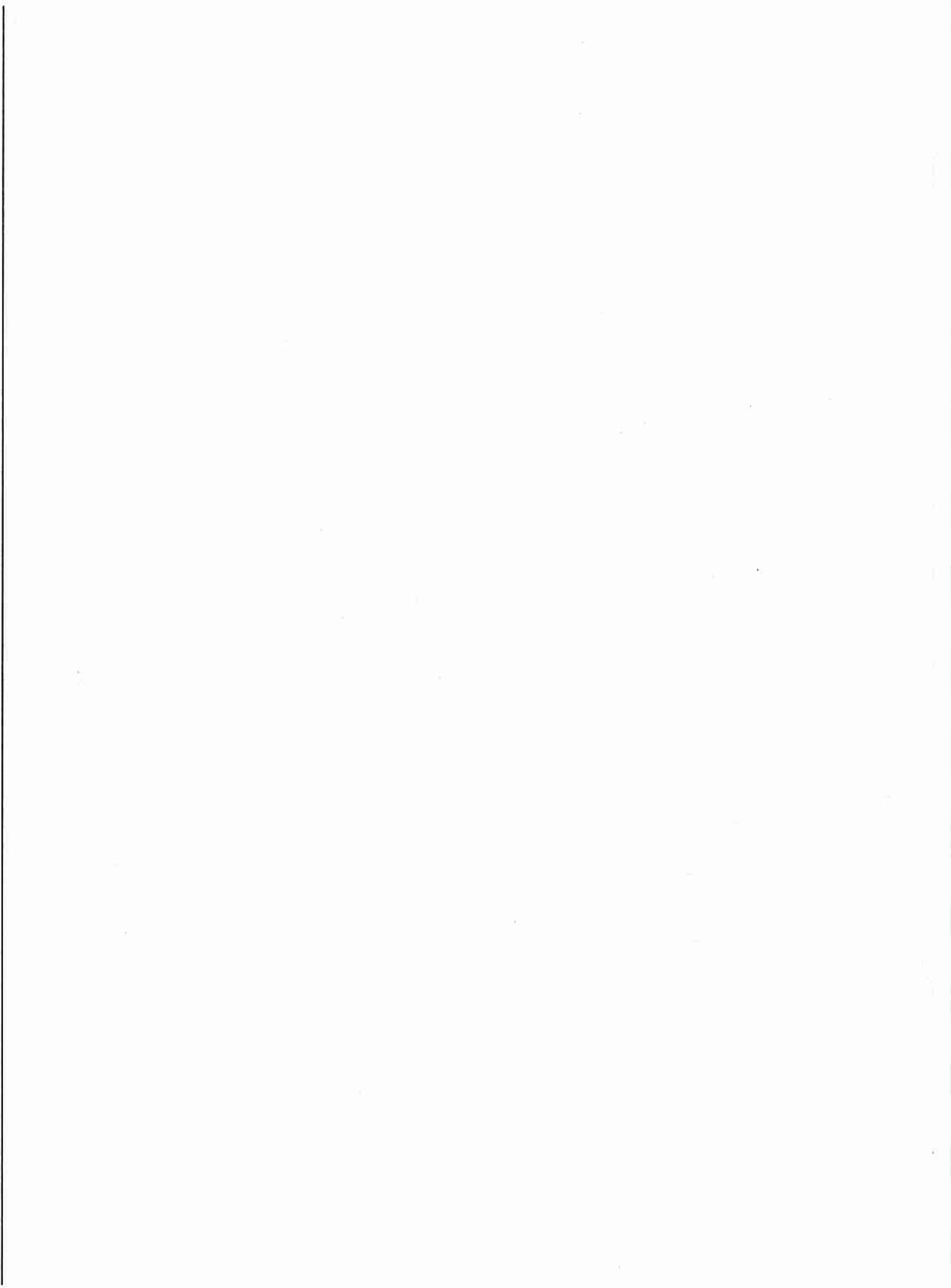
In the year 2025, what would the elements, covered in the land use chapter, look like if the County maintained a largely hands-off approach to the County's land use management? In this scenario much of Koochiching County would remain in public ownership and continue to provide an important resource for the region's timber and recreation industry. The County would continue to be concerned about the lack of local control over land use decisions, but due to a lack of resources there would be no structure in place that would allow for ongoing communication on public land management issues. New residential construction would be dominated by large lot rural development. This trend would take place in part because of consumer preference and also because the County failed to work with the municipalities in addressing the housing needs within the incorporated areas. The majority of the new development would occur in the Rainy Lake and other shoreland areas. Provision of septic systems on some of the smaller half and acre and one acre lots would prove to be problematic. Septic system failures would continue to cause water quality problems. Low-density rural development would also be driving up the County's cost of providing public services. Costs and demand for emergency services would increase due to a growing number of senior citizens living in remote rural areas. Availability of transportation to medical facilities would become more and more an issue for this segment of the population as well. The number of seasonal properties would increase and would be likely to be converted into year-round residences. The County would have limited properties available that are suitable for industrial and commercial development. The County would continue to have many areas zoned for commercial and industrial use that have wetland constraints, no services in place, and that do not meet the needs of business interests in locating in the region, thus the County could miss out on critical economic development opportunities.

Scenario 2: Best Case Scenario

In the year 2025, what would the elements covered in the land use chapter look like if the County would decide to take a more proactive approach to land use? The County would have improved communication with State and federal land managers through the development of forums to discuss land use issues on public lands and actively participated in the various planning efforts undertaken at the State and federal level. The County would continue to experience rural residential development, in particular in the shoreland areas, due to consumer preferences. However, this development would be closely reviewed in order to ensure that there will be adequate long-term capacity for wastewater treatment. Rural development would also be encouraged to occur in a more clustered fashion in proximity to existing development, limiting to a certain extent, the cost of service provision. Shoreline protection, through vegetation management and strict setback enforcement, would lead to shoreline development with limited erosion and maintain river aesthetics.

The County Planning Commission would review the County's zoning map and ordinance, existing land uses, soil inventories, and land use guidelines, allowing

for the evaluation of the appropriateness of the current land use classifications. Changes in the zoning map and ordinance would ensure that land use occurs in those areas that are appropriate for such use and prevent land use conflicts. The use of GIS, as part of the County's land management system, would allow the County to conduct a more detailed land analysis, incorporate soil inventory data to evaluate development suitability, and track development trends. The County would conduct an inventory, in cooperation with the County's municipalities, of commercial and industrial lands and develop a strategy with the economic development agencies to ensure adequate land would be available to meet the needs in this realm.



NATURAL RESOURCES

NATURAL RESOURCES

Introduction

The purpose of this chapter is to describe the overall physical environment of Koochiching County and use of the environment. Topics covered include geology, water and wetlands, forest resources and ownership patterns, recreation, agriculture, and mining. Many of the natural resource issues included in this chapter overlap with land use and economic development. A good understanding of the area's natural resources and the key issues is a basis for formulation of goals and strategies for management of the County's natural resources.

The natural resources and physical features of an area often determine the type and intensity of land use. The characteristics of the natural environment create both opportunities and constraints for development and economic activities. Koochiching County's natural resources are of vital interest for the region's well-being. The forest industry is the major economic force in the County. The area's natural assets also provide ample opportunity for recreation, which adds to the economic diversity of the region. The soil conditions and wetlands, however, pose severe challenges for development in most of Koochiching County.

Natural resource planning is a complex arena and regulation is done at many levels of government. Therefore, it is necessary to identify the various players and coordinate the planning that is done at the various administrative levels. All of these planning efforts allow an opportunity for County and public input. The intent of this comprehensive plan is not to rewrite existing plans, but to acknowledge that natural resources are a complex arena with many players and plan elements in place. This chapter provides an overview of issues identified in these plans and makes recommendations where appropriate to follow up on or support plan elements, and identifies areas that need future attention or resources

With the large amount of state and federal public lands in Koochiching County many of the management decisions are not controlled locally. Because of the great importance of natural resources for the County's economy, ongoing monitoring of new policies and coordination between the various management entities is key in order to ensure desired outcomes for the County's residents. This chapter will therefore conclude with a discussion on intergovernmental cooperation in natural resource management.

Koochiching County's natural resources are of vital interest for the region's economic well-being and provide ample opportunity for recreation.

Natural resource planning is done at many levels of government, requiring ongoing coordination and monitoring by the County to ensure County interests are represented.

Geology, Topography, and Soils

The topography and soils of Koochiching County are shaped largely by glacial activity. The Wisconsin Ice Age created large glacial lakes such as Glacial Lake Agassiz, which covered much of the County. As the lake disappeared, a plain of silts, sediments, and tills was created, covering most of the area within the County. While an official County soil survey has not been completed yet, those portions of the County found in the nearly level lake plain are comprised of mainly poorly drained silts and clays. On the moraines and outwash plains, sands and gravel dominate the soil characteristics. Areas in the eastern portion of the County outside the lake plain contain gravel, sands, and exposed bedrock and are somewhat better drained. As a result of the poorly draining soils, peat lands cover approximately 68 percent of the total land area of Koochiching County. (*Inventory of Peat Resources Koochiching County, Minnesota Department of Natural Resources (MnDNR), 1980*)

Glacial Lake Agassiz covered large parts of Koochiching County leaving poor draining soils. As a result approximately 68 percent of the County is wetland.

Wetlands

Due to the soil characteristics, wetlands are the dominant feature in Koochiching County. According to the *Koochiching County Wetland Flexibility Plan (1999)*, approximately 1.35 million acres of water and wetlands exist countywide. Using this figure, Koochiching County would be approximately 68 percent wetlands and comprise 16 percent of Minnesota's wetland base. Ninety-eight percent of the pre-settlement wetlands still remain. The MnDNR has designated eight extensive wetland areas as Scientific and Natural Areas (SNA) because, although common in this area, they represent a unique plant and animal community that once flourished in other parts of the State. These include the Myrtle Lake, South Black River, Red Lake, Lost River, North Black River, the West and East Rat Root River, the Caldwell Brook Cedar Swamp, and the Nett Lake SNA's. These wetlands have a total surface area of 182,464 acres (*See Appendix C, Map 3.1 Koochiching County Scientific and Natural Areas*).

The Koochiching County Wetland Flexibility Plan regulates wetland use and allows for a more local approach to wetland management.

The passage of the Minnesota Wetland Conservation Act (WCA) in 1991 placed local government in the role of regulating wetland impacts. As counties in northern Minnesota began to implement the WCA, counties such as Koochiching determined that changes to implementation of the WCA were necessary to make the WCA more responsive to their wetland dominated landscape conditions. In 1996, the Legislature amended the Wetland Conservation Act allowing local governments to develop a local comprehensive wetland management and protection plan. The *Koochiching County Wetland Flexibility Plan (1999)* provides policies, procedures, implementation strategies, and regulations to address local functions related to public values as provided for in Minnesota Rules 8420.0650.

The Koochiching County Board of Commissioners entered into an agreement with the Minnesota Board of Water and Soils Services (BWSR), MnDNR, and the Minnesota Pollution Control Agency (MPCA) to develop a local wetland plan that could be implemented by the County. As part of the effort, the U.S. Army

Corps of Engineers was also asked to participate in hopes of reducing regulatory duplication wherever possible. The management plan's purpose is to protect the County's wetland values while recognizing the need for land uses that may impact wetland resources and allow for a more local approach to wetland management. The plan will be reviewed every two years to ensure plan implementation meets the desired plan outcomes. The Environmental Services Department is responsible for administering the Wetland Conservation Act. The department works with the Soil and Water Conservation District (SWCD) and state and federal agencies to properly delineate jurisdictional wetlands and address technical issues regarding wetlands in the County.

Water Resources

The following represents an overview of Koochiching County's water resources. First, a discussion on surface water will be presented. Second, groundwater issues will be discussed. This section will conclude with an analyses on key water resources issues.

Surface Water

Koochiching County lies north of the Laurentian Divide. This is a divide between two continental watersheds. Waters north of the Divide, including those in Koochiching County, flow north and then westward eventually emptying into Canada's Hudson Bay. Waters south of the Divide flow eventually to Lake Superior and the Atlantic Ocean or the Mississippi and the Gulf of Mexico.

The *Koochiching County Comprehensive Water Management Plan (2000)* identifies five major watersheds in the County:

- *Little Fork*, running from the southeast corner of the County along the Little Fork River, including Nett Lake.
- *Big Fork*, including the south central areas of the County and running north along the Big Fork River.
- *Lake of the Woods*, encompassing the northwest corner of the County, including the Rapid River, and the west end of the Rainy River.
- *Rainy Lake*, the northeast corner of the County, including the Rat Root River, Rainy Lake, and the Rainy River through the International Falls area.
- *Red Lake*, including the Tamarack and Cormorant Rivers, starting in the southwest corner of the County and flowing west into Red Lake in Beltrami County.

The *Koochiching County Comprehensive Water Management Plan* identifies a total of 14 rivers and 15 lakes in the County. Open water covers approximately 50,000 acres of the County, about two percent of the total County surface area. The most significant lake in Koochiching County is Rainy Lake. Approximately 162 miles of Rainy Lake shoreline lie in the County. Of this, 100 miles are on the main land and 62 miles are on islands. Local River Management plans are in place for five of the 14 rivers. These include the Big Fork River Local

Koochiching County has five major watersheds, 14 rivers, and 15 lakes. Five rivers have management plans in place. River management boards oversee the implementation of the river management plans.

Management Plan (1992, ARDC), A Local Management Plan for the Rainy and Rapid Rivers (1993, Foresight Consulting Group), and A Local Management Plan for the Rat Root and Little Fork Rivers (1994, Foresight Consulting Group). These five rivers have river management boards in place overseeing the implementation of the river management plans. The remaining rivers' shore management is regulated by a Countywide shoreline ordinance adopted in 1993. Uncontrolled use of shoreland may adversely affect water quality, visual amenities, fish and wildlife habitat, and public recreational use. Shoreland ordinances regulate activities such as the location of dwellings in relation to a riverbank, installation of septic systems, and construction of boathouses and docks. All the major rivers in Koochiching County are classified by the MnDNR as protected waters. However, this designation applies only to activities that occur below the ordinary high water mark and structures that cross the affected water body. (For an overview of protected waters and shore land classifications see *Koochiching County Water Management Plan, 2000, page 37*)

Water levels on Rainy Lake, Namakan and Kabetogama are regulated by the International Joint Commission (IJC), a joint powers board of the Canadian and U.S. Governments. Fluctuations in the Rainy River water levels are of concern for the river's biology and fisheries.

The Koochiching County Water Management Plan addresses water quality and quantity and enables the County to apply for funding to protect its water resources.

The *Koochiching County Comprehensive Water Management Plan* deals with water quality and quantity of surface and groundwater and efforts to preserve both for the future of Koochiching County. The development of a water management plan enables the County to apply for funding sources to protect and improve the area's water resources. The Koochiching County Comprehensive Water Management Plan was developed in 1994 and was updated in 2000. The County Water Plan has been in place for five years and will need to be updated in 2005. Key priorities regarding water management identified in the plan include shore land protection in order to reduce erosion and sedimentation, the need to update sewer systems throughout the region, and work towards a sewer extension to the Jackfish Bay area on Rainy Lake.

The Rainy River Basin Plan is part of the MPCA's basin planning effort. The plan will serve as a bridge between the local and state water management plans.

The *Rainy River Basin Plan* is currently in the planning phase and is part of the Minnesota Pollution Control Agency (MPCA) Basin Planning effort. In the fall of 2001, committees will be formed with local government and basin management agencies. The formal planning process will begin in January 2002. The function of this plan is to serve as a bridge connecting local water management plans to the State water management plan. The second function of the basin plan is for basin residents to provide a listing of their water quality concerns, and appropriate ways to address those concerns, to the MPCA. The plan must conform to federal and State law and exhibit good science and common sense, but the plan can also recommend changes to existing law or make recommendations for further scientific study where appropriate.

Groundwater

Koochiching County has three aquifers available for use, the bedrock aquifer and the confined and unconfined glacial drift aquifers. The confined glacial drift aquifer is the most commonly used in the County. The depth of good water is not predictable from one quarter section to the other. No comprehensive information is available on the quantity of groundwater available and recharge rates of aquifers in Koochiching County. The largest and most readily available source of groundwater quality information is private water supply testing records. The Koochiching County Extension Service and the County Health Department routinely test water quality for rural County residents who want to know the quality of their domestic water supply. While this is not a scientific comprehensive study, of the 496 tests done between 1996 and 1998, 37.7percent did not meet State standards for potable water. (*Koochiching County Water Management Plan, 2000*). Water tested included both well and surface water. While inconclusive, these results may warrant a more comprehensive study regarding the quality of private drinking water supplies in the County.

Part of the groundwater protection at the State level focuses on public water supplies, or wellheads. Protecting these supplies from contamination is an essential part of the County's groundwater program. The Department of Health identifies, prioritizes, and ranks Wellhead Protection Areas (WPA's) in the State so that assessments and protection plans can be implemented. Koochiching County has four WPA's identified by the Minnesota Department of Health that could begin receiving assistance in the next five years. These facilities are ranked as follows according to State priority for the development of a wellhead protection plan.

| <u>Facility Name</u> | <u>State Priority Rank</u> |
|-----------------------------|-----------------------------------|
| Indus School | 254 |
| Littlefork | 519 |
| Northome | 547 |
| Big Falls | 554 |

Water Resources Issue Analyses

The timber industry is a major source of industrial water pollution according to the *Water Management Plan (2000)*. Two wood processing plants use the Rainy River for the discharge of their wastewater: Boise Cascade in International Falls and the Fort Francis based Abitibie. However, major improvements in water quality have been made over the last decade. Boise Cascade is planning to expand its pulp processing capacity. The MPCA is the permitting entity working with Boise to assure that wood processing wastes do not adversely impact the Rainy River's water quality.

Soil erosion and sedimentation seem to have a minimal effect on the overall water quality or quantity in Koochiching County. Localized erosion, however, does

Private water supply testing records indicate a significant number of water supplies not meeting state standards. This may warrant a more comprehensive study of the quality of private drinking water supplies.

Soil erosion and sedimentation seem to have minimal effect on the overall water quality. However, shoreland protection should be given a high priority to maintain water quality and river aesthetics.

occur and has lead to a high demand for KSWDC assistance in addressing erosion problems. The "*Water Management Plan*" indicates a considerable demand for cost share dollars by landowners along waterways and lakeshores to treat natural shore land erosion. Erosion and subsequent property damage are considered a problem. Discussion among Steering Committee members identified concerns regarding the enforcement of shore land protection ordinances. Setback violations and vegetation removal should be strictly enforced to protect water quality and river aesthetics as well as to protect homeowners from property damage.

Non-point source pollution, due to obsolete or ineffective Individual Sewage Treatment Systems (ISTS), is one of the greatest potential sources of water quality degradation in Koochiching County. This problem is of particular concern in the more densely populated northeastern part of Koochiching County where part of the population draws their drinking water from Rainy Lake. Major settlements and activity are located along shore land throughout the County, making each private system a potential source of non-point pollution. The *Water Management Plan* (2000) also indicates that because of the low-density population throughout the County, it is difficult to assist residents through preventative or corrective programs.

Because of its high-density development and shallow soils, the area near Rainy Lake is identified in the *Water Management Plan* as the most critical area of concern. It is estimated that about 90 percent of existing septic systems in that area are malfunctioning. To address this problem, the *Rainy Onsite Sewage Systems* (ROSS) study was initiated in 1996. Provision of a centralized sewer to Jackfish Bay, the creation of a water quality cooperative, and the testing of alternative technologies may all play a role in addressing this problem on Rainy Lake. The economic feasibility of implementing sewer treatment solutions will depend in a large part on the availability of State and federal assistance.

The ISTS Act of 1994 addresses the need for septic system inspection and ordinance requirements for each Minnesota County. Minnesota Chapter 7080 describes minimum design, construction, and maintenance criteria for septic systems. Koochiching County is implementing the Minnesota Chapter 7080 rules, is currently in the process of developing performance standards for ISTS, and will adopt these performance standards in an ISTS ordinance. Further, certification of septic system compliance is required when applying for building permits for additions in shore land areas and for any addition of bedrooms in upland areas. Funding is required to expedite the process of updating non-conforming systems in the *Water Management Plan* (2000).

Adequate space to accommodate a septic system and an alternative site for septic under the current minimum lot size requirements were identified as a concern during steering committee discussion. The half acre minimum lot size may be rendered undevelopable because a septic area and an alternative site cannot be

Non-point source pollution from ISTS can lead to water quality degradation. This is of particular concern in Northeast Koochiching County where an estimated 90 percent of existing septic systems are failing and part of the population draws its drinking water from Rainy Lake.

Minnesota Chapter 7080 describes minimum design and construction criteria for ISTS. Funding is identified as an issue to update non-conforming systems. Minimum lot-size requirements need to be reviewed to ensure a septic system and alternative site can be accommodated.

accommodated in such a small area unless the soil conditions are favorable. Alternative treatment systems may be an option, but are often costly and require monitoring.

Forest Resources

The following section represents a discussion of Koochiching County's forest resources. First, a discussion on forest types will be presented. Second, timberland ownership and management will be discussed. This section will conclude with a discussion on forest as an economic resource.

Forest Types

Koochiching County has a total land area of approximately two million acres. Of this, 87 percent, or 1,732,800 acres, is classified as forestland according to the U.S. Forest Service Inventory Assessment (FIA) in 1990. The predominant forest types are the black spruce, found primarily in lowland areas, and aspen, found in the upland area. Koochiching County has a high percentage of the State total of lowland conifers (black spruce, tamarack, and cedar). Table 3.1 describes the area of timberland in Koochiching County by forest type.

Table 3.1: Area of Timberland by County and Forest Type
(Area in thousands of Acres)

| White-red jack pine | Spruce-fir | Oak | Elm-ash-cottonwood | Maple-birch | Aspen-birch | Non-typed | Total Acres |
|---------------------|------------|------|--------------------|-------------|-------------|-----------|-------------|
| 38.1 | 757.1 | 1.3 | 129.3 | 19.9 | 466.6 | 11.6 | 1,423.9 |
| 2.7% | 53.2% | 0.1% | 9.1% | 1.4% | 32.8% | 0.8% | 100% |

Source: North Central FIA, 1990

Timberland Ownership

Timberland, which is land capable of producing a crop of industrial quality wood, accounts for 1,423,900 acres or 71 percent of the County's landbase. Koochiching County's timberlands are owned and managed by a variety of owner groups (See Table 3.2). The State owns Fifty-one point six percent of the timberland in the County, the County manages 19.6 percent (State Tax-forfeit lands), and the forest industry owns 14.3 percent. Tribal ownership accounts for 2.5 percent and two percent is federally owned. Private landowners own 6.8 percent of the timberlands.

71 percent of Koochiching County is timberland, capable of producing industrial quality wood.

Approximately 75 percent of the timberlands are in public ownership. 51.6 percent is managed by the state and 19.6 percent is managed by the County.

**Table 3.2: Area of Timberland in Koochiching County Ownership Class
(Area in Thousands of Acres)**

| State | Federal | County/ Municipal | Tribal trust | Forest Industry | Farmers | Private Corp. | Private Indiv. | Total Acreage |
|-------|---------|----------------------|-----------------|--------------------|---------|------------------|-------------------|------------------|
| 734.4 | 29.6 | 278.8 | 35.3 | 203.1 | 28.5 | 17.1 | 97.1 | 1423.9 |
| 51.6% | 2% | 19.6% | 2.5% | 14.3% | 2% | 1.2% | 6.8% | 100% |

Source: North Central FIA: St. Paul, MN

The various land managers have different management styles creating a variety in forest landscapes.

These various landowners, as described in table 3.2, have different management styles in place for their respective landholdings. This variety in management strategies results in a diversity of forest landscapes that benefit a broad range of wildlife. The timber industry will continue to emphasize the maximization timber harvest for their landholdings. The MnDNR has a number of management objectives that shape the forestlands under their management. These management objectives include timber production, providing for fish and wildlife, and recreation. With bio-diversity being part of the MnDNR management objective, according to the statewide extended rotation guidelines, a minimum of ten percent of the forest, at a landscape level, should be managed for older growth, and longer rotations than optimal should be employed to maximize timber harvest. The Koochiching County Land and Forestry Department manages for a long term availability of a sustainable yield of timber.

A number of DNR forest management planning efforts will allow for County and public input in forest management in Koochiching County.

The MnDNR develops management plans on a landscape level. These management areas are based on ecological characteristics of each area. This means that management units cross jurisdictional boundary lines. Koochiching County is made up of three different landscape subsections, these include the Agassiz Lowland, the Littlefork-Vermilion Upland, and the Border Lakes subsections. The subsection management plans are updated on a seven-year rotation. These plans set up allowable harvest levels on MnDNR lands for each region and include general planning regarding forest cover types. The planning process allows for input from the general public, industry interests, and environmental organizations. The Agassiz Lowland plan is scheduled to be completed June of 2001. The Border Lakes subsection is currently in the planning stage as well. The Littlefork-Vermilion Upland subsection is scheduled for planning starting 2001 to 2002.

Coordination of forest management is an important strategy to ensure sustainable forest management and promote the economic health of the forest industry. The Forest Council's Landscape Planning process can provide a vehicle for this.

Because of the various entities involved in forest resource management, coordination of resource management practices and regular communication is an important strategy to ensure sustainable forest management and promote the economic health of the area's timber industry. The Minnesota Forest Resources Council is required by the Sustainable Forest Resources Act of 1995 to establish a system that defines how landscape based forest resource planning and coordination activities will be implemented. For this effort Minnesota has been divided in landscape units that overlap with a number of the MnDNR landscape classifications. Participation in the MnDNR landscape level forest management

planning and participation in the Forest Resource Council's Landscape Planning Process can be vehicles to coordinate timber management on a more long-term basis as well as to plan and advocate for the economic health of the region's timber industry.

Approximately 284,000 acres are State owned, tax-forfeited land administered by the Koochiching County Land and Forestry Department. The Land and Forestry Department manages these lands for long-term availability of a sustainable yield of timber and to provide for the multiple uses the land offers such as recreation, wildlife habitat, soil and water quality, and scenic value. The Land and Forestry Department holds surplus sales of land periodically to dispose of assets not critical to timber supply. However, in order to ensure a sustained flow of forest products, a stable land base is critical.

Since 1992 the Land and Forestry Department has undertaken a public planning process using a Citizen Advisory Committee. Through this planning process a set of general policies for the management of the tax-forfeit land have been developed. The Plan for Management of Tax-Forfeited Land and Forest Resources was reviewed in 1995 and 1998. In addition, the Land and Forestry Department has a long term (50-100 years) management plan in place to ensure it meets its goals of a sustained timber supply. A short-term 10-year plan sets targets for harvest by cover type based on the long-term management plan. Harvest amounts per type may vary due to changes in the market and what is available on the land. Every five years an evaluation takes place to ensure the Department meets its long-term goals.

The County Land and Forestry Department has adopted water quality Best Management Practices (BMP's), Visual Quality BMP's, and State timber harvesting guidelines. The Land Department has also applied to be licensed through the Sustainable Forestry Initiative, joining St. Louis, Itasca, Carlton and Lake County as well as Boise Cascade. The Sustainable Forestry Program is a program and service trademark created by the American Forest and Paper Association. There are over 15 million acres enrolled in this licensing program nationwide. This licensing promotes a broad range of sustainable forestry practices that are in line with Koochiching County's current forest management practices, which require an annual review of timber harvesting practices.

Income derived from the forest management programs and investments pay for Land and Forestry Department functions and offset County and unorganized township tax-levies. A portion of the timber sale revenues also is distributed into six school districts and cities having sale transactions.

Forest as an Economic Resource

Because Koochiching County is economically dependent on the forest industry, it is important to ensure that an adequate timber supply is available year round. The

The Koochiching County Land and Forestry Department manages for long term availability of a sustainable yield of timber. The department uses a public planning process with a Citizens Advisory Committee to develop policies for management of the tax-forfeited lands.

Policies regarding management of the forest resources should take into account the long-term economic viability of the area's timber operations through sustainable levels of harvest while maintaining the existing diversity of natural landscapes.

high stumpage prices and the relative low prices for finished wood products could pose a threat for smaller timber operators in the area. Policies regarding management of the forest resources should take into account the long-term economic viability of the area's timber operations. The natural resources goal formulated in the Framework Plan (Biko, 1999) stresses sustainable levels of harvesting and maintaining the existing diversity of natural landscapes. Through the planning process the following elements were identified as desired outcomes that should be part of evaluating a sustainable use of natural resources in relation to forestry:

- Ensure a long-term sustainable harvest level to provide for a consistent supply of timber for the area's timber industry
- Provide for water quality
- Maintain the existing diversity of landscapes
- Provide for wildlife
- Ensure no net-loss of timberland for fiber production and continued access for multiple use recreation
- Promote forest management that increases productivity

The current forest management practices by the various management entities address these elements. Future forest management planning efforts will provide opportunities for public input to ensure these elements are incorporated into the forest management plans.

Trails and Recreation

Koochiching County offers its residents and visitors a broad range of recreational opportunities. The amenities and recreational opportunities that increase the quality of life for Koochiching County residents are also attractive to people from outside the County. The Land Department has inventoried the County's recreational opportunities and developed a countywide recreation map with an inventory of all the trails, parks, campsites, and public water access points. The large amount of public land and "good neighbor" policy allowing access on lands owned by Boise Cascade provide ample recreational space. The County plays an active role in providing recreational opportunities. The Koochiching County Land and Forestry Department manages 255 recreational cabin leases on tax-forfeit lands and a variety of recreational sites, camping sites, and public water access points. Appendix C provides an overview of recreational facilities and existing amenities in place. Other recreational assets include the Grand Mounds Historic Site, the Waters of the Dancing Skies State Scenic Byway, and the Franz Jevne State Park.

The private market plays an important role in developing and taking advantage of the commercial opportunities that recreation and tourism offers by providing the services necessary for a thriving tourism industry. The County can promote recreational opportunities through the development of partnerships and by identifying resources to stimulate tourism and recreation. Recreation and tourism

Public lands and private industrial lands offer recreational opportunities. The County plays an active role by providing recreational facilities and cabin leases on public land.

Recreation and tourism development should be sensitive to the resources that attracted visitors in the first place. New tourism development should also take local needs into account.

development should be sensitive to the resources that attracted the visitors in the first place and new tourism development should take local needs into account.

Koochiching County offers a variety of recreational trails. An expansive snowmobile trail system made up of MnDNR Grant in Aid trails and the Arrowhead State Trail provides snowmobiling opportunities throughout the County. The forest road network provides riding opportunities for Off-Highway Vehicles (OHV's). The MnDNR has developed a plan for OHV use, which will be available for public comment in the Fall of 2001. The Blue Ox trail, which runs from Bemidji to International Falls, is currently being developed into a multiple use trail for snowmobiles and All Terrain Vehicles (ATV's). A bike trail runs from International Falls to Island View. Ski trails and hunter/hiking trails have been developed on public lands. Many of the trails have been developed and are maintained with the assistance of MnDNR in cooperation with the County and local area recreational organizations.

Most water-based recreation, such as fishing, canoeing and boating, takes place in and around Rainy River, Rainy Lake, and Voyageurs National Park. The Little Fork and Big fork rivers are State designated canoe routes. Recreational activities associated with the County's lakes and rivers range from primitive canoe camping to full-service resort vacations. The Park Service is currently finalizing the development of a management plan for Voyageurs National Park, which includes management of visitor use activities of the Park and sets forth a basic management philosophy that will provide a framework for decision making. In order to ensure local interests are taken into account for the management of the park, regular communication between the County and the Park Service will be key. Development of a taskforce of County and Park officials to discuss park related management issues will provide a tool to ensure the area's interests are represented on an ongoing basis.

The majority of tourism activity is concentrated in the International Falls-Rainy Lake area. The proximity to the County's main recreation areas, location along Highway 53, and the International border with Canada draw a high number of visitors. The tourism infrastructure such as lodging and outfitting services are concentrated in the International Falls area (See figure 3.3). Visitation has increased in the last three years according to the International Falls Convention and Visitors Bureau (CVB). Fiscal year 1999 (May '99-April'00) saw a 3% increase in lodging taxes from \$126,125.68 in 1998 to 129,927.33 in 1999. Fiscal Year 2000 shows a trend for continued increase in lodging taxes, for the area.

Forest roads and multiple use trails offer opportunities for snowmobiling and OHV use and provide access to public lands. Many of the designated trails are developed in partnership with the MnDNR.

The majority of the tourism activity is concentrated in NE-Koochiching County. This area has a service industry in place and is likely to experience increased visitation in the coming years.

Figure 3.3 Koochiching County Accommodations

| Location | Total indoor units | Campsites | Total Accommodations |
|---------------------|--------------------|-----------|----------------------|
| International Falls | 454 | 108 | 562 |
| Littlefork | 6 | 21 | 27 |
| Ranier | 8 | 23 | 31 |

Source: MN Office of Tourism, 1999

Currently there is no system in place with the MnDNR or the County to keep track of recreational facilities use. The MnDNR tracks maintenance and improvements. However, they do not track recreational activity. Because of this lack of baseline information, decision making is based on experience from the managers in the field and requests for initiatives and improvements by the public.

Key Trails and Recreation Issues

Based on the background information and steering committee input the following discusses the key issues that have been identified. Tourism and recreation offer an opportunity to diversify the County's economy. The International Falls area has experienced significant growth in tourism over the last three years and is likely to continue to be the main tourism draw in the County because of its location along Highway 53, proximity to Rainy Lake/Voyageurs National Park, and the service industry in place. This area is most likely to experience growth in visitation compared to other parts of Koochiching County. The County offers recreational opportunities in some areas such as the Little Fork and Rat Root Rivers, but typically are found in a more remote wilderness setting, have a short season, and attract more independent and local travelers. The recreational activities in the areas outside the International Falls and Rainy Lake area are less likely to support an extensive service industry.

- ***County Parks and Recreation Staffing***

The Land and Forestry Department currently manages the County's recreational facilities. A designated staff person could identify needs and coordinate with the various stakeholders in the planning, development, and management of Koochiching County's recreational assets as described below

- ***Trails***

Koochiching County has a comprehensive ski and snowmobile trail system. Many segments of this trail system are not suitable for summer trail use, such as hiking, biking, or OHV use, due to the wetness of the terrain and easement restrictions on private properties. Opportunities for development of summer trail use are limited to the higher, well-drained, areas. Increased opportunities for horseback riding in the County was identified as a potential need. Most OHV use is restricted to forest roads and the newly developed Blue Ox Trail.

The current MnDNR policy is that all forest roads are open to OHV use unless posted. OHV riding can cause user conflicts with non-motorized users and some areas may be designated off-limits for OHV use. The Koochiching County Land Management and Forestry Department has identified a number of Hunter/Hiking Trails off-limits for OHV use. Damage to trails and forest roads especially in wet areas is another concern related to OHV and four wheel-drive vehicle uses. The forest road system in Koochiching County is sensitive to wear during wet periods because of clay soils. It is anticipated that Boise, the County, and the State will increasingly close roads for public off-road vehicles in order to limit maintenance

Tourism provides an opportunity for economic diversification. Future growth in tourism is most likely to occur in NE-Koochiching County where a service industry is in place.

Summer trail and horseback riding opportunities are limited. In some cases motorized use can conflict with non-motorized use. Some hunter/hiking trails have been designated off-limits for OHV use.

Roads may be closed for OHV use during wet periods to prevent damage. Development of clear road closure standards and coordination with land managers can increase public support and understanding while ensuring continued access to public lands.

costs and to prevent erosion problems. Development of clear standards for road closure and public education explaining the need for these measures are strategies that could increase support and understanding with the OHV public.

- *Water Based Recreation*

Water recreation in Koochiching County is mainly concentrated on the Rainy River, Rainy Lake, and Voyageurs National Park. The Big Fork, Little Fork, and Rat Root River offer opportunities for canoeing and some motorized use and have, in general, a remote and wilderness character. MnDNR receives most of their inquiries for information by the public for river trips in the early spring and fall. The short season, due to the large number of biting insects in the summer, is a limiting factor for river related tourism business on these smaller and more remote rivers. This short season combined with relatively self-sufficient users limit the opportunities for economic activities such as an outfitting and canoe shuttle business. Most campsites along the Big Fork and Little Fork accommodate three tents. However there is a demand for larger group sites that can accommodate five to six tents. Adequate parking is a concern for some of the boat landings. The river plans that are in place form a good framework in guiding what type of development of recreational facilities are needed along the Big Fork, Little Fork, Rat Root, and Rainy River.

Water recreation is concentrated in the Rainy River and Voyageurs National Park area. The rivers offer recreational opportunities as well. The River Plans provide a framework to guide future recreational development.

International Falls could take better advantage of the Rainy River as a resource for tourism and recreation. Partnerships between International Falls and the County could further improve recreational opportunities for local residents and bring economic benefits to the area. Some efforts to this effect are underway. The City of International Falls and the County are developing plans to cooperate on the development of a beach along the Rainy River. The International Falls Convention and Visitors Bureau has developed a plan for a summer Recreational Vehicle (R.V.) park along the Rainy River.

- *Wildlife Viewing*

Wildlife viewing, such as birding and wildflower and butterfly watching, offers an opportunity to expand the region's tourism product. Partnerships with the MnDNR and Park Service could help in identifying areas attractive for wildlife viewing and for developing informational brochures for area visitors. The development of interpretive trails could expand wildlife viewing opportunities as well.

Agriculture

The promise of productive farmland attracted many settlers to Koochiching County between 1900 and 1930. However, many of these settlers soon found that the land was not as productive as once thought and that they could not effectively compete with other areas in the State and the nation. As a result agriculture is not as prominent as it was during the early settlement of Koochiching County.

Agriculture is limited in Koochiching County. Livestock farms and forage crops dominate the farming industry.

The number of full-time farms declined in recent years. However, farming is seen as an important diversifying element of the County's economy and should be supported.

Agriculture in Koochiching County is limited because of climate, soils, and distance to markets. The County's cultivated land tends to be concentrated on the glacial moraines and outwash plain areas and near the major rivers, similar to other areas in the State. The County's agricultural land is best suited for raising beef cattle and forage. Livestock operations accounted for 70 percent of the County's 1997 farm-product value. Wheat and oats yield well where the soils are suitable. However, other counties in the State and areas outside the State can produce these crops more economically.

The number of full-time farms decreased by 28 during a 15-year period between 1982 and 1997. However, the average size of farms increased over this time period from 328 acres in 1982 to 360 acres in 1997, in keeping with national trends. As a result the acreage of farmland increased by 11 percent, or by almost 8,000 acres. In 1997, the agricultural census counted a total of 82 full-time farms and 130 part-time farms in Koochiching County, covering more than 76,000 acres, or approximately 3.8 percent of the County's land base.

In terms of economic viability of agricultural operations, an increasing number of farm operators need additional sources of income to supplement their farm income. A total of 142 farms had a total value of sales of less than \$9,999 in 1997. Only nine farms had a value of sales of more than \$50,000. This additional income is often derived through a second job for either the farmer or his or her spouse. Other types of farms in Koochiching County are hobby farms. Hobby farms may be strictly for the owners' enjoyment, or they may be small-scale specialty farms, such as organic farms for, example.

Even though agriculture's contribution to the overall economy in Koochiching County is limited, farming remains an important part of the County economy in terms of maintaining a diversity of industry in the region. Continuation of agricultural activities in the County should therefore be supported.

Mining/Extractive

The MnDNR, Division of Minerals, describes Koochiching County as having resources of base, precious, and platinum group metals. Much of the County is underlain by bedrock of Archean age and volcanic origin. This formation may contain some potential for ore of economic value. The Northwestern and Northeastern areas of Koochiching County are the most promising areas regarding mineral resources. Although some mineral exploration companies have been interested in potential deposits in Koochiching County, no reserves were located that would be economically feasible to mine. Currently, with the low prices for precious metal, there is no interest in mineral exploration in Koochiching County. However, a change in market prices for precious metals could lead to an interest resurfacing. *(Personal communication with DNR Minerals, D. Dahl, 12-28-00)*

Other mineral resources include gravel pits and hard rock mining. Gravel pits and open mines account for less than 484 acres of the County's land area.

Koochiching County has limited mining potential. Current market prices are too low for mining to be economically feasible.

(*Koochiching County Framework Plan, Biko, 1999*). Gravel resources are scarce throughout Koochiching County. Careful management of these gravel resources is important in ensuring that a local and economical source of material is available for projects throughout the County.

Peat lands make up 56 percent of the landbase of Koochiching County. Twenty-two percent of the peat land is considered “deep peat” which is classified as having a depth greater than five feet. The remote locations of Koochiching County’s peat resources limit the economic feasibility of developing this resource. However, a peatmining project is currently being developed for the Pine Island peat land, approximately 28 miles northwest of Bigfalls to extract peat for horticultural uses.

Intergovernmental Cooperation

State, federal, and local government interests as well as the private industry shape natural resource management decisions in Koochiching County. With the large amount of State and federally owned land, the County plays an important role coordinating with the various governments and, advocating for its interests in natural resource management decisions. Regular communication with resource managers, clear goals and objectives, and a pro-active approach of early involvement rather than at the end of a decision making process gives the County a stronger voice on natural resource issues. The *Koochiching County Wetland Flexibility Plan (1999)* is an example of an approach offering a framework for a more streamlined, locally directed approach for the management of the County’s wetlands. It deals with the various regulating government entities. Establishment of workgroups of County, State, and federal officials can provide a tool to ensure ongoing communication takes place and issues are identified at an early stage.

Planning processes conducted by the various State and federal agencies, such as the MnDNR, MPCA, and Voyageurs National Park, offer opportunities for public input and involvement at the County level. A number of planning efforts such as the MnDNR landscape level planning efforts, the MPCA led Rainy River Basin Plan, and the Forest Resources Council North-Central Minnesota forest management plan, create opportunities for intergovernmental cooperation.

For the development of recreational facilities a number of partnerships offer opportunities. These include partnerships between the County and municipalities as well as partnerships with the MnDNR and the Minnesota Department of Transportation (MnDOT).

Gravel resources are limited throughout the County. Careful management of these resources ensure future availability.

Peat mining for horticultural use is being developed. The remote location of peat resources, however, limit the economic feasibility of developing this resource.

Coordination and communication with resource management entities will give the County a stronger voice on resource management issues.

Relationship of Natural Resources to the Other Plan Elements

The characteristics of the County's natural resources affect many other plan elements and provide both opportunities and constraints for development and economic activities. The County's soil characteristics and large amount of wetlands have significant impacts on the land use pattern and determine the type of development the land can sustain. Soil characteristics and wetlands also influence the costs of infrastructure development and maintenance needs. In addition, the County's limited resource of gravel, affects the cost of road construction and maintenance. The need and costs for community services are, to some extent, determined by the characteristic of the natural environment. An example of community services being impacted by the County's natural environment can be found in the Rainy Lake area. Poor soils there have lead to septic system failure and development of a centralized wastewater treatment system designed to address water quality problems. The County's water quality is, to a great extend, affected by the County's land use pattern, forest management, and private and industrial wastewater treatment. Koochiching County's economy depends greatly on the County's natural resources. Both the timber industry and the tourism industry rely heavily on the natural amenities the County has to offer. Future natural resources management decisions regarding timber management and access to public lands will determine to a great extend the economic and environmental health of Koochiching County.

Twenty-Five Years Out

This document is intended to help guide the County in land use decisions and policy development on a variety of topics over the course of the next 25 years. The following scenarios represent two possible views of the County 25 years into the future. The first scenario is the possible outcome of worst case or no action approach to natural resources. In the worst case scenario, the County's involvement in natural resources issues remains static or decline. The second, best case, scenario is the possible outcome of a proactive approach to natural resources by County decision-makers. It reflects the implementation of the majority of the recommendations of this Plan.

Scenario 1: Worst Case Scenario

In the year 2025, what would the elements covered in the natural resources realm look like if the County maintained a largely hands-off policy concerning natural resources and allowed the various players, such as State and federal government, timber industry, and the general public, make decisions on natural resource management? In this scenario, water quality may be degraded as a result of an increasing number of failed septic systems throughout the County. Shoreland development that is not sensitive to best management practices might have lead to increased erosion and degradation of the aesthetics of the County's rivers. The timber industry would continue to play an important role in the region's economy, however, local timber supplies could become less due to more stringent environmental regulations and limited availability of timber from state land. This

could further drive up timber prices and affect the area's timber industry. Trails and recreational opportunities would remain more or less the same. However, water access points could experience more congestion in some of the more popular recreation areas. Off-road recreation may become more and more limited due to environmental concerns, maintenance costs, and user conflicts with non-motorized users. Agriculture could further decline as a result of nationwide agricultural crisis and more farms may convert to hobby farms, residences, and seasonal residences. The County's current effort in development of a peat mining industry could result in some economic development for the region. Gravel resources may become scarce due to limited availability of gravel resources on public lands and a lack of a pro-active approach to protect gravel resources for public use.

Scenario 2: Best Case Scenario

In this scenario, the County opted to implement a pro-active approach regarding natural resource management issues. The County improved communication with State and federal land managers through the development of forums for discussion of natural resource management issues and participation in the various planning efforts undertaken at the State and federal level. Even though some of the natural resource decisions made at the State and federal level are influenced by State and nationwide interests, compromises can be developed that are sensitive to the County's local needs. A proactive program that addresses failing septic systems and provides financial assistance programs for replacement of these systems would lead to improved water quality throughout the County. The County's active use of the river management plans to guide development in these corridors and constructive working relationships with the River Management Boards ensure shoreline development is balanced, maintaining the high water quality and aesthetics of the rivers. The development of a Countywide recreation management plan, that inventories the County's recreational resources and coordinates facility maintenance and expansion needs, would ensure that the County's recreational assets are properly protected. The recreation management plan and responsible staff person would also coordinate with State and Federal land managers and develop partnerships for further improvement of the County's recreational assets. The County's trails and forest roads would remain open to the public and road closures would be kept to a minimum as a result of a successful public awareness campaign related to problems of unpaved road use during the wet season. The County's recreational infrastructure would be widely recognized. It would increase tourism and provide a significant economic benefit to the County. Agriculture would maintain its presence in the County and would expand into niche markets such as berry and hazelnut farming through active support of the County's economic development agencies. Cooperative efforts for the application of Canadian cold climate agricultural research would lead to future advances in the industry. The County's gravel resources will remain limited, however, a proactive land acquisition approach would ensure the adequate resources are available for use.



TRANSPORTATION

T RANSPORTATION

Introduction

The primary purpose of a transportation system is to move people and goods in a safe and efficient manner. Good transportation access is of vital importance for the County's economic well-being. It allows County residents to go about their daily activities. The movement of people and goods involves various transportation modes, including vehicular, transit, pedestrian, bicycle, rail, and air. The availability and accessibility of these transportation modes provide for a high degree of mobility that meets the broad range of transportation needs in Koochiching County.

The primary purpose of a transportation system is to move people and goods in a safe and efficient manner.

The transportation element in the Koochiching County Comprehensive Land Use Plan is designed to analyze the transportation system currently in place and identifies a course of action to ensure that a transportation system will meet the needs of Koochiching County into the future. Since transportation improvement funding is limited, it is important to identify which transportation needs have the highest priority for Koochiching County residents.

This chapter uses transportation plans in place and community input to describe the existing situation and identify future needs.

Extensive studies have been completed which involved Koochiching County's transportation system. These studies include the Trunk Highway 53 Long Range Improvement Plan (ARDC, 1999), Northeast Minnesota Freight Study (ARDC, 1999), Scenic Routes of the Arrowhead, Northeast Minnesota Bikeways Plan (ARDC, 2000), and the Long Range Trunk Highway Plan for Northeast Minnesota (ARDC, 1999). The "Move It!" study was completed in 1999 (Minnesota Department of Transportation, Mn/DOT). This study followed a community driven approach and focuses specifically on Koochiching County's State trunk highway and transit systems. The background data in this chapter, as well as the goals and strategies developed for transportation in Koochiching County, used these plans as guidance throughout the planning process.

Data Collection

In order to understand how transportation is currently provided within the County, an inventory of existing system elements was conducted. The existing transportation system was inventoried through a variety of sources, including the Mn/DOT road and bridge inventories, a review of the various studies involving Koochiching County, and steering committee comments. For the purpose of this plan the analyses of the road system is broken down by the road jurisdiction be it State, County, or city.

Koochiching County is served by nine Mn/DOT administered highways. Map 4.1 shows state highway data.

State Highways

Nine highways administered by Mn/DOT serve Koochiching County. These highways include State Highways and US highways. These routes are heavily used, primarily for long distance trips and commercial use. They are of great importance for the County's transportation needs. Map 4.1 shows the Koochiching County State Highway data. The following are common abbreviations used to describe roadway characteristics.

- **Average Daily Traffic (ADT):** The total number of vehicles passing a certain point in both directions in a 24-hour period. ADT's play an important role in prioritizing road improvements.
- **Heavy-Commercial Average Daily Traffic (HCADT):** The total number of large commercial trucks passing a certain point in both directions in a 24-hour period.
- **Pavement Quality Index (PQI):** The pavement quality index rates the surface quality of the road. This index is being used to prioritize road maintenance projects. When the PQI drops below a rating of 2.9, a road receives a high ranking as it relates to the need for maintenance work.

The following is a description of each major trunk highway in Koochiching County. For each, the trunk highways that intersect the highway are indicated as well as the communities served. A range is given of the ADT/HCADT at various points along the highway. The location of the ADT/HCADT can be found on map 4.1 (Appendix D).

State Highway Funding

The Northeast Minnesota Area Transportation Partnership (NEMN-ATP) is responsible for the identification, prioritization, expenditure measurement, and effectiveness of the use of federal and State transportation funds for Mn/DOT Northeast Minnesota. The NEMN-ATP is made up of local elected officials, planners, engineers, modal representatives, tribal governments, and other agencies, such as the DNR. Roughly 50 percent of the funding for Trunk Highways come through federal dollars and 50 percent is from the State. Of this funding approximately two thirds is being used for preservation of the existing road system and one third is allocated for reconstruction, expansion, and bridge replacements. Long-range (20 year) transportation plans are developed by Mn/DOT district offices with input from local citizens and government representatives. The Transportation Improvement Program (TIP) contains a list of proposed projects to be carried out over the next three years. Projects that appear in the TIP should be consistent with the long-range plan. Map 4.2 (Appendix D) indicates the highway improvement projects that have been scheduled. Much of the funding allocation is based on need, such as a low rating on the PQI, and the condition of bridges.

The Northeast Minnesota Transportation Partnership is responsible for the distribution of highway funds. Two thirds of the available funding is used for road preservation and one third for reconstruction, expansion, and bridge replacements.

U.S. Highway 71

Highway 71 connects Koochiching County to the Bemidji area. It runs northeast from the southwest corner of the County to the Canadian Border where it terminates at International Falls. Highway 71 is 73.95 miles long within Koochiching County and has a 10-ton spring load. Preservation projects, major highway maintenance projects such as resurfacing the road, are planned along its entire length from 2005-2009.

| Intersecting Trunk Highways in County | Communities Served | ADT/HCADT |
|----------------------------------------------|--------------------------------------------------------------------------------------------|------------------|
| 1, 6, 65, 217, 11, 332, 53 | Big Falls, Little Fork, International Falls, Mizpah, Gemmell, Morgie, Grand Falls, Pelland | 800-3250/50-299 |

State Highway 65

In Koochiching County, Highway 65 originates in the southeast corner. It travels northwest through the County until it terminates in Little Fork. This section of Highway 65 is 53.50 miles long within the County and has a 5-ton spring load restriction. Highway 65 in Koochiching County is scheduled for six bridge reconstructions in 2003 and 2007. In addition, the northern segment of the roadway is scheduled for resurfacing in the year 2006.

| Intersecting Trunk Highways in County | Communities Served | ADT/HCADT |
|----------------------------------------------|--------------------------------------------------------|------------------|
| 71, 217 | Rauch, Little Fork, Silverdale, Bois Forte Reservation | 90/0-49 |

State Highway 6

State Highway 6 runs in a north-south manner from the southern border of Koochiching County to its termination point in Big Falls. This highway has only 23.49 miles of road within the County and has a 7-ton spring load restriction. This stretch of road is scheduled for resurfacing in 2007.

| Intersecting Trunk Highways in County | Communities Served | ADT/HCADT |
|----------------------------------------------|---------------------------|------------------|
| None | Big Falls | 365/50-149 |

Highway 53 is the County's main north-south connection and has the highest ADT and HC-ADT. The highway has received federal designation as a high priority trade corridor. A four lane expansion has been proposed for Highway 53.

U.S. Trunk Highway 53

Highway 53 is the main connecting point to the Range Cities of Minnesota and the Canadian Border for Koochiching County and has been named a High Priority Trade Corridor by the United States Congress, making it eligible for special highway funding. Highway 53 has 23.26 miles of roadway in Koochiching County and has some of the highest ADT's, as well as HCADT's, in the County. Highway 53 is used extensively by trucks hauling timber products south through Minnesota. Highway 53 has been recommended for widening to a four-lane highway in the *Trunk Highway 53 Long Range Improvement Plan (ARDC, 1999)*. The Trunk Highway 53 Long Range Improvement Task Force will continue to work on promoting the widening of Trunk Highway 53 to four lanes. Mn/DOT will finalize an environmental scoping decision document by 2002 for the Highway 53 segment between Cook and International Falls. This document determines alternatives for expanding the highway. Following this scoping decision document an Environmental Impact Statement will be developed for the proposed alternatives once construction funding is in place. Funding for construction of the segment in Koochiching County is being pursued. At this time, this section of road is not currently scheduled for any improvement projects.

| Intersecting Trunk Highways in County | Communities Served | ADT/HCADT |
|----------------------------------------------|-------------------------------------|------------------|
| 332,11,71 | International Falls, Ray, Ericsburg | 2750/300-599 |

State Highway 11

State Highway 11 runs across Koochiching County following the United States and Canadian border and provides the main east-west connection for Koochiching County. Near its east end Highway 11 is a gateway to Voyageurs National Park. The highway has been designated the Waters of the Dancing Sky State Scenic Byway, making it eligible for federal scenic byway funding. The section between Pelland junction to Indus currently has a spring load restriction of 7-ton. In the "Move It!" (Mn/DOT, 1999) study, Highway 11 received the highest priority ranking to upgrade to a year-round 10-ton road. The Mn/DOT is planning on initiating a corridor study to determine the need for improvements and the feasibility of upgrading the road in the summer of 2001.

Highway 11 is scheduled for a number of improvement projects in the upcoming years. Multiple sections of Highway 11 west of the Highway 71 intersection are planned for reconditioning and resurfacing in 2006-2007. The eastern end of Highway 11 is scheduled to receive a bike trail in the year 2002. Highway 11 has a total of 60.81 miles of road within the borders of Koochiching County. The western portion of the highway has an ADT of approximately 860, while the eastern section receives ADT's upwards of 1600. The HC-ADT's for this section are between 50 and 149.

State Highway 11 is a state designated scenic byway that provides an important east-west connection. A corridor study will be completed in the winter of 2001 to identify needs for safety improvements and study the feasibility of upgrading the road to 10-ton year-round.

| Intersecting Trunk Highways in County | Communities Served | ADT/HCADT |
|----------------------------------------------|--------------------------------------------------------|------------------|
| 71, 53, 332 | International Falls, Ranier, Birchdale, Loman, Pelland | 860-1600/50-149 |

State Highway 1

State Highway 1 runs through a small portion of the southwest corner of Koochiching County. This highway contains 30.39 miles of road in the County and has a 7-ton spring load restriction. This stretch of road has low ADT volumes of approximately 125. HCADT's for Highway 1 are between 0 and 149. Highway 1 is not currently scheduled for any future road improvement projects.

| Intersecting Trunk Highways in County | Communities Served | ADT/HCADT |
|----------------------------------------------|---------------------------|------------------|
| 71, 46, 6 | Northome, Wildwood | 125/0-149 |

State Highway 46

This portion of highway is located in the southwest corner of Koochiching County. Highway 46 has only 2.26 miles of roadway within the borders of the County. Highway 46 is a main connector for Koochiching County to the City of Grand Rapids in Itasca County.

| Intersecting Trunk Highways in County | Communities Served | ADT/HCADT |
|----------------------------------------------|---------------------------|------------------|
| 1, 71 | Northome | 960/0-149 |

State Highway 217

State Highway 217 runs east to west in Koochiching County between U.S. Highway 53 and 71. This segment of highway has an ADT of approximately 390 with an HCADT of between 0 and 49. Highway 217 has 17.36 miles of road within Koochiching County and has a 7-ton spring load restriction. The roadway is scheduled for reconstruction through Littlefork in 2001.

| Intersecting Trunk Highways in County | Communities Served | ADT/HCADT |
|----------------------------------------------|---------------------------|------------------|
| 53, 71 | Little Fork, Ray | 390/0-149 |

State Highway 332

The main function of State Highway 332 is to serve as a truck bypass around the City of International Falls. ADT's for this stretch of road are approximately 1500 with HCADT's between 300 and 599. Highway 332 has 7.21 miles of roadway within Koochiching County.

| Intersecting Trunk Highways in County | Communities Served | ADT/HCADT |
|---------------------------------------|---------------------|--------------|
| 53, 71, 11 | International Falls | 1500/300-599 |

County Highway System

The County highway system provides for the local connections in Koochiching County. The County maintained highway system totals 547 miles. This system can be broken down into three categories, County state-aid highways (CSAH's), County roads, and unorganized township roads. Table 4.1 describes the breakdown of County maintained highways and provides an overview of the total maintenance costs per mile for fiscal year 2000.

Table 4.1: Highways Maintained By Koochiching County

| | Miles | Total Miles | Maintenance-Costs (FY 2000) | Cost Per Mile (FY 2000) |
|-----------------------------|-------|-------------|-----------------------------|-------------------------|
| CSAH-blacktop | 194 | 249 | \$ 733,331 | \$2956 |
| CSAH-Gravel | 55 | | | |
| County-blacktop | 44 | 176 | \$ 592,279 | \$3365 |
| County-gravel | 132 | | | |
| Unorganized Township-gravel | 117 | 123 | \$ 269,438 | \$2190 |
| Unorganized Township- Paved | 6 | | | |
| Totals | 548 | 548 | \$1,595,048 | N.A. |

Source: Koochiching County Highway Department

The County's ability to construct new roads and improve existing roads depends on available funding. The Koochiching Highway Department has a five-year Capital Improvement Program (CIP) in place for road construction. Appendix D shows the scheduled construction in the 2001-05 construction program. The County Highway Department recently completed a 50 year needs study. The County would need, on an annual basis, an additional \$300,000 to reconstruct the existing CSAH system once every 50 years to its existing conditions. The County would need an additional \$700,000 to accomplish the same for the County and township road system. This additional funding does not address the desired improvements to the system, (i.e. - most residents on a gravel road want it black topped). The land use pattern impacts the amount of miles traveled on these

The County Highway system totals 548 miles of road and is made up of County State Aid, County, and Township roads. State Aid roads are eligible for state and federal funding.

A five-year Capital Improvement Plan determines priorities for maintenance and construction projects for the County road system and is developed with citizens and County Commissioner input.

County roads and with that the needs for repair and maintenance. Low-density, scattered development can increase the cost of road maintenance and demand for new roads because of increased automobile use.

County State Aid Highway (CSAH) System

This system consists of approximately 194 miles of bituminous surfaced roads and 55 miles of gravel roads. Most bituminous surfaced CSAH's are constructed to a 7-ton design standard. The County Highway Department's goal is to upgrade these roads to 9-ton design standard in the future. The CSAH system is generally resurfaced on a 20-year rotation. The County Highway Department has a five-year State-AID Highway Construction Plan in place to guide its expenditures for major construction projects. Priorities for CSAH projects are based upon identified needs (maintenance problems) and input from the County Board and area residents.

The CSAH system is funded through the Highway Users Distribution Fund, which receives its funding primarily from state gas tax and motor vehicle license fees. Funding allocation is based upon a county's number of motor vehicle registrations, mileage of CSAH, needs to reconstruct its system, and 10 percent of the available funding is distributed equally among to the 87 County's within Minnesota. This state funding amounts to approximately \$2,200,000 for construction and \$1,500,000 for maintenance per year. CSAH projects are also eligible for federal funding through the Area Transportation Partnership funding process. However, this is a very competitive process and funding is limited.

County Road and Unorganized Township Road System

The County road system consists of approximately 44 miles of bituminous surfaced roads and 132 miles of gravel roads. The unorganized township road system consists of six miles of bituminous surfaced roads and 117 miles of gravel roads. This system receives between \$800,000 to \$1,200,000 in funding per year from the County Board, funded through property taxes and other sources. In addition, the County receives approximately \$40,000 per year from the State for reconstruction of township roads and another \$40,000 per year for replacement of township bridges. The majority of the available funding from the County is used for road maintenance and equipment replacement. Only \$150,000 per year is expended for overlaying bituminous surfaced County and township roads and financing the local match for bridge replacement projects. County and township bituminous surface roads generally have to be overlaid every 10 to 15 years instead of the 20 years for CSAH blacktop roads. This is due to inadequate gravel base on these roads, leading to more wear. The County seldom completely reconstructs roads on this system due to lack of funding and time.

The County has a policy to participate in the cost of bituminous surfacing of County and townships roads if the neighboring property owners pay 50 percent of the project cost, the road has adequate width and gravel base, the project is in the

The State Aid system totals 249 miles and receives approximately \$3.7 million in State Funding.

The County road and Unorganized Township system totals 50 miles of paved and 249 miles of unpaved roads and receives approximately \$2 million in County funding and \$80,000 in state funding for reconstruction and bridge replacements of township roads.

public's best interest, and the project serves a larger public than just the adjacent residents. The County does not construct new roads in platted areas. However, the County will maintain such a road if it is in the public's best interest and is constructed to County standards so it will not pose a future maintenance problem.

City Street System

City streets serve local needs, between and within neighborhoods in a municipality, and are typically short in length and usually paved. The County maintains a total of 18 miles of municipal roads in municipalities where population is under 5,000. The City of International Falls has a population over 5,000, which makes it eligible to designate up to 20 percent of its street system as Municipal State-Aid (MSA). This designation provides the City with an apportionment of State funding each year to upgrade and reconstruct its existing streets, thereby meet MSA standards. The City can use a small amount of the funding for routine maintenance as deemed necessary. Fifty percent of the apportionment of funding is based on population and the other 50 percent is based on the estimated cost of construction, as determined in the City's MSA plan.

Transportation Modes

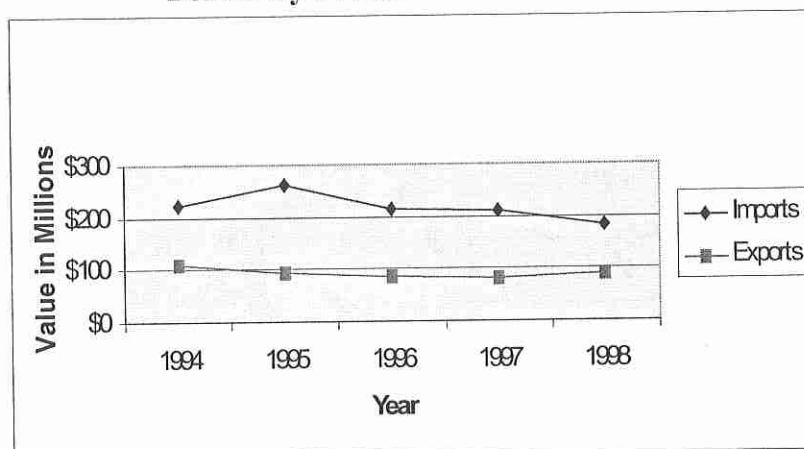
Koochiching County's transportation system accommodates several modes of transportation. Some depend on the highway system, such as trucking and transit, while others, such as railroads and airports, do not involve the use of roads. These various modes of transportation will be discussed on the pages that follow.

Trucking

Heavy Commercial Average Daily Traffic counts (HCADT) indicate which roadways in Koochiching County accommodate freight transportation needs. Map 4.1 displays HCADT's for major roads in the County. Highway 53 is the most important commercial traffic corridor and provides a vital connection between Koochiching County and other markets in the U.S. and Canada. In 1997 a total of 47,196 trucks crossed the border from Canada transporting goods valued at about \$30 million a month. Figure 4.1 describes the value of cargo crossing the International Falls border with Canada by truck. Carriers hauling timber and finished wood products dominate the trucking industry in Koochiching County. Recent expansions in the wood product businesses have increased commercial traffic by 17 percent on Highway 53 in Koochiching County. The Minnesota Timber Producers Association estimates that from 1998 to 2000 trucks hauling timber on Highway 53 increased by 29 percent.

Highway 53 is the most important trucking route in Koochiching County, providing a vital connection to Canadian and U.S. markets. Truck traffic is dominated by carriers hauling timber and wood related products.

Figure 4.1: Value of Cargo Crossing the International Falls Border by Truck



Source: Bureau of Transportation Statistics

The other Trunk Highway routes in Koochiching County receive relatively less commercial traffic than Highway 53. However, these routes provide important infrastructure for local trucking companies hauling timber for the area's timber industry. The spring weight limits on Highway 11, 217, and 6 have significant impacts due to the inability to haul freight during this spring weight restriction period. This adds significant operation costs due to longer routes or less efficient use of equipment. Raising spring weight limits was identified as one of the highest priorities for Koochiching County's Trunk Highway system in the "Move It!" study (Mn/DOT, 1999) and has been identified as the highest priority route to upgrade to a 10-ton year-round road through the comprehensive planning process.

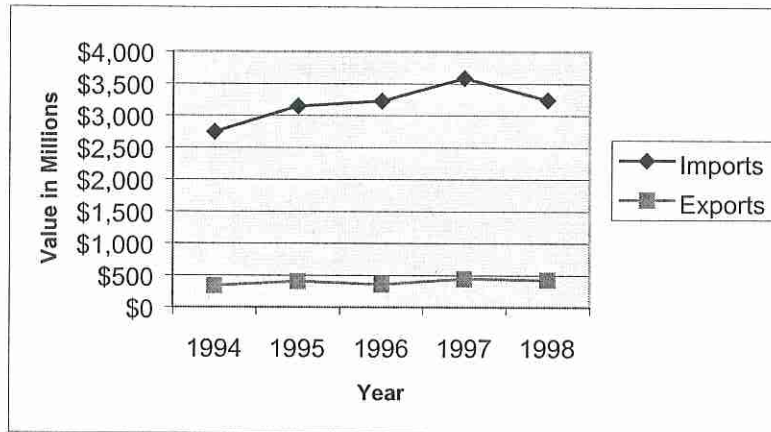
Spring weight limits on Highway 11, 217 and 6 have significant impacts on operating costs during the spring weight restriction period. Raising spring weights was identified as one of the highest priorities in the Mn/DOT Move It Study.

Railroads

Two railroad companies provide rail services in Koochiching County. They are the Duluth, Winnipeg and Pacific (DWP) Railroad and the Minnesota, Dakota, and Western (MDW) Railroad. They are described as follows:

- *Duluth, Winnipeg and Pacific Railroad (DWP)*

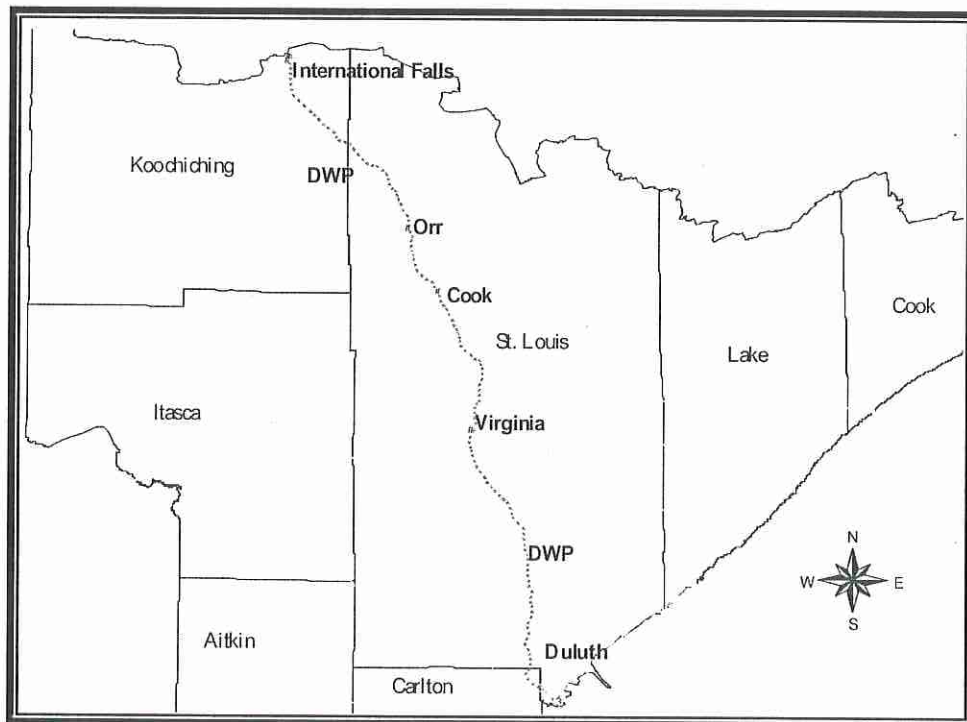
The Duluth, Winnipeg, and Pacific Railroad is the third largest railroad in terms of track mileage in the Arrowhead Region. The DWP line runs between Rainier in Koochiching County and the Twin Ports of Duluth and Superior. It provides an important rail connection with Canada (See Figure 4.3). Trains using the DWP line typically carry timber related products. In addition, the DWP line carries grain, steel, fertilizers, potash, lumber, and occasionally motor vehicles. The value of cargo crossing the International Falls border by train has seen a steady increase in recent years (See Figure 4.2). From January of 1994 to December 1997 the border crossing averaged \$300 million in worth of goods crossing the border by train per month. This railroad track has an average volume of approximately 16 trains per day and a speed limit of 49 miles per hour. The DWP railroad has 157.13 miles of track in the Arrowhead Region of which 26.08 miles are located in Koochiching County.

Figure 4.2: Value of Cargo Crossing the International Falls-Ranier Border by Train

Source: Bureau of Transportation Statistics

DWP Railroad

| Total Miles | Miles by County | Track Speed | Passes Through |
|--------------|-------------------------------------------------------------|-------------|----------------------------------------------------|
| 157.13 miles | St. Louis – 125.35 Koochiching – 26.08 Carlton – 5.70 | 49 m.p.h. | Duluth, Virginia, Eveleth, Cook, Orr, Ranier |

Figure 4.3: Duluth, Winnipeg, Pacific Railroad

Source: ARDC Regional Transportation Plan

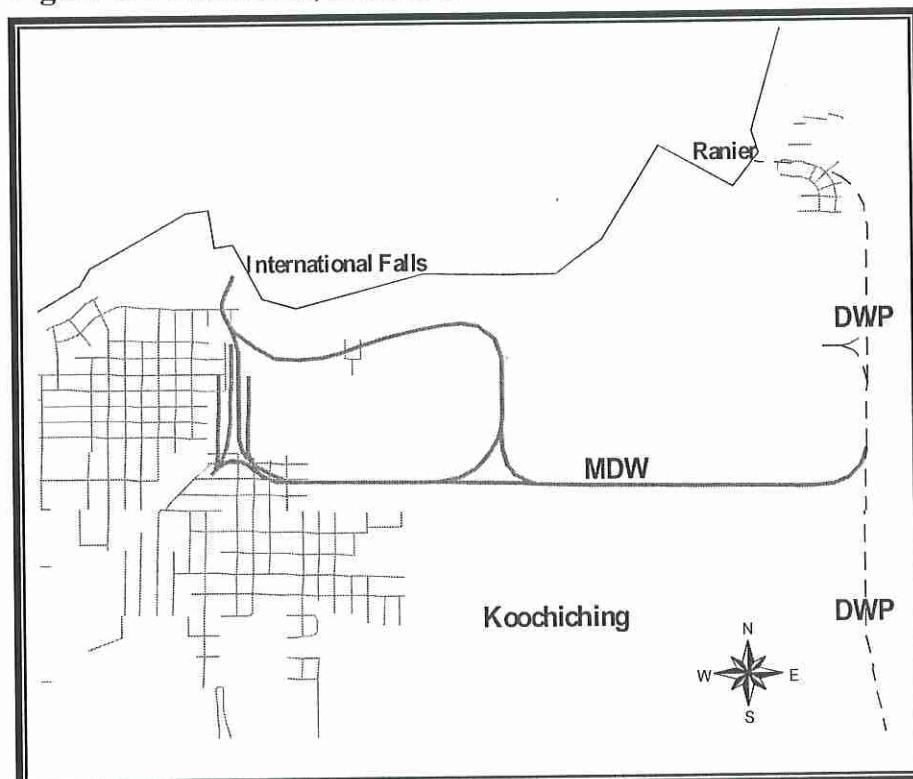
- *Minnesota, Dakota, and Western*

The Minnesota, Dakota, and Western Line (MDW) has 13 miles of track (See Figure 4.4). The line serves the Boise Cascade Company in International Falls as a switching rail and remote engine operator which prepares cargoes for the DWP and Canadian National Railroads. The MDW line contains six rail crossings, two of which are signalized. This line has a speed limit of five miles per hour.

MDW Railroad

| Total Miles | Miles by County | Track Speed | Passes Through |
|-------------|---------------------|-------------|---------------------|
| 13.00 miles | Koochiching – 13.00 | 5 m.p.h. | International Falls |

Figure 4.4: Minnesota, Dakota & Western



Source: ARDC Regional Transportation Plan, 2000

Transit

The utilization of public transit offers many benefits such as energy conservation, reduction in pollution, and individual cost savings. Public transportation was ranked as one of the highest priorities in the "Move It!" study. Providing public transportation in a remote rural area with an aging population and an increased demand for public transportation due to the Welfare-to-Work program, creates significant challenges with the limited funding available.

Transit was ranked as one of the highest priorities in the Mn/DOT Move It study. Limited funding and low population densities in the rural areas create challenges in providing adequate transit service.

According to the 1990 Census, 524 households in Koochiching County have no car.

The 1990 U.S. Census data shows that in Koochiching County, 524 households have no car available to them. Of the 524 households 346 households were located within International Falls, 178 households were located in the remaining incorporated municipalities and 70 households were located within rural Koochiching County. In some cases, this may prohibit people from seeking or maintaining employment, which in turn makes purchasing an automobile extremely difficult. For this group public transit provides an important means of transportation.

High operation costs and low utilization are identified as the basis for problems to provide an adequate level of service. Pooling of resources and better marketing of services are identified as strategies.

The Move It! study identified declining ridership, poor County-wide coverage, and limited hours of service as some of the key issues with public transit. The high cost of operating a public transportation system in a rural area and low rider utilization were identified as the basis for the problems. The Move It study identified the need to find ways to pool resources and promote collaboration among various transportation providers in the region. The study also recommends to incorporate use of volunteers, such as RSVP drivers for medical care and the disabled, more strongly into the program. Better marketing and upgrading of services based on customer and market identification was identified as a strategy to improve transit use. As a result of the recommendations of the Move It study, bus service in the International Falls area has been extended and marketing efforts have been increased.

The following public transportation services are available in Koochiching County:

- *Arrowhead Transit*

The Arrowhead Economic Opportunity Agency (AEOA), through Arrowhead Transit, provides varying levels of public transit in the seven-County region of northeastern Minnesota. Arrowhead Transit provides service in International Falls as well as in rural Koochiching County. Monthly service is also provided to Grand Rapids and Bemidji.

Arrowhead Transit further extends its coverage, if notified in advance, by allowing vehicles to travel two and one half miles off of their regular routes to pick up passengers. Service is also extended a total of five miles from these routes to pick up or drop off people with disabilities. This flexibility allows Arrowhead Transit to be more responsive to the transportation needs of people in these corridors, while still maintaining their regular route service.

Arrowhead Transit is the lead regional agency for coordinating ride-sharing arrangements.

- *Greyhound Bus Service*

In 1998 Greyhound was awarded a demonstration grant by the Department of Transportation to reinstate daily bus service between International Falls and Duluth. This grant will end in July of 2001. Greyhound has participated with Arrowhead Transit in a joint marketing campaign to increase ridership on this

route. Greyhound did receive demonstration funding to continue to provide service between International Falls and Virginia for one more year. This segment receives relatively low ridership and therefore needs to increase use to become economically viable.

- *Other Transit Providers*

Seven other private and public organizations provide transit services, catering to the needs of select individuals. Figure 4.5 describes these providers.

- *Section 5310 Program Transportation*

The Section 5310 Program, is a process where Mn/DOT grants buses to eligible applicants on a competitive basis. This is funded through a federal program that requires a 20 percent local match. Applicants that take advantage of this program serve elderly and the disabled. Those who are awarded a bus are encouraged by Mn/DOT to share the vehicle with other groups in the community as needed. Figure 4.5 includes Section 5310 transportation providers.

Figure 4.5: Koochiching County Transit Providers

| Organization | Description of Service | Service Area |
|-----------------------------|-------------------------------------------------------------------|---------------------------------------------------|
| Koochiching County Veterans | Provides transportation to veterans hospitals | Northeastern Minnesota |
| Northome Healthcare | Provides medical transportation services for elderly and disabled | Koochiching County, also transportation to Duluth |
| Littlefork Medical Center | Section 5310 participant | Littlefork |
| Nett Lake Reservation | Section 5310 participant | Nett Lake Reservation |
| City Cab | Commercial taxi service | International Falls/ Koochiching County |
| North Air Van Services | Commercial taxi service | International Falls/ Koochiching County |
| Northland Services | Commercial taxi service | International Falls/ Koochiching County |

Source: Mn/DOT and ARDC-SAIL Coordinator

Airports

A number of Airports serve Koochiching County. The Falls International Airport provides domestic and international air service for the region. In addition the Falls International Airport provides services for private aircraft and has a number of private aircraft hangars on its premises. The airport also has a cold weather testing facility on its grounds. The Falls International Airport has a 6500-foot runway and a smaller crosswind runway, both of which are paved. This airport serves as a major player in the northeast region's airport system by serving as a customs airport of entry, and by providing commercial service and military assistance. About one-third of the general aviation activity is local, with the main commercial flights stemming from Mesaba Airlines which functions as a commuter/feeder service for Northwest Airlines providing connections to all

The Falls International Airport is the Main Airport facility serving Koochiching County. Mesaba Airlines provides connections to all Major Northwest Airline hubs.

The Falls International Airport is governed by the International Falls Airport Commission, a joint powers board of the City of International Falls and Koochiching County.

The Airport Commission has voted to include a possible, future extension to the southeast of the main runway to accommodate larger aircraft.

A number of bike facilities are in place. According to the Northeast Minnesota Bike Plan, many of the County roads are rated as adequate for use by experienced bicyclists.

major Northwest Airline hubs. Mesaba Airlines enplanes an average of 20,000 passengers per year. The Falls International Airport receives approximately 1,500 commercial flights per year.

The Falls International Airport is governed by the International Falls-Koochiching County Airport Commission, a joint powers board of the City of International Falls and Koochiching County. The City and the County jointly own all airport property. The City of International Falls acts as the fiscal agent for the Airport Commission. The annual airport budget for maintenance and operations is generally between \$180,000 and \$200,000. Funding comes from three sources. About one-third of the airport budget comes from equal City and County grants, one third comes from Mn/DOT grants that specifically earmarked for maintenance and operations, and one third comes from airport generated income. The airports capital improvement budget varies from year to year depending on need. Funding for airport capital improvements comes from federal grant funds, usually requiring ten percent local match. State funds typically require a 40 percent local match. Ticket taxes paid by airline passengers form a third source of revenue for capital improvement projects. This source of revenue is typically used to reimburse the local share of federal grant funded capital improvements. Each year, the Airport Commission updates its five-year Capital Improvement Program, which is on file with Mn/DOT and is used as the basis for receiving federal grant funds. The Airport Commission has recently completed their master plan for future improvements of the airport facility. The Airport Commission has voted to include in its new Master Plan to allow for a future extension to the southeast of the main runway if needed to accommodate larger aircraft. This expansion will have some land use implications for the surrounding area, which is further discussed in the Land Use Chapter.

Two smaller airport facilities serve Koochiching County. They are the Littlefork-Hanove, Bigfalls, and the Northhome Municipal Airports. The Littlefork airport consists of a turf runway and is located northwest of Littlefork along U.S. Highway 71. This airport is closed during the winter months. The Northhome Municipal Airport consists of a turf and crosswind runway. The crosswind runway is closed during the winter months. The City of International Falls also owns and operates a seaplane port. Customs is available at this location.

Bicycle and Pedestrian Facilities

Bicycling and walking offer an environmentally friendly alternative mode of transportation. The bicycle can play an important role in the overall transportation system if adequately planned and designed for. Ensuring availability of bike and pedestrian facilities provides a transportation alternative for children and low-income families and increases their mobility and independence. The availability of bike and pedestrian facilities also offer recreational opportunities and can provide health benefits to the local population.

Bike facilities that are in place in Koochiching County include a combination of a highway shoulder and separate trails connecting International Falls to Island View. This trail receives significant pedestrian use. In the future it may be into Voyageurs National Park, as part of a partnership with the Park Service. The City of Northome recently received funding for the development of a bike/pedestrian trail in town and within International Falls a trail facility is in place, connecting the high school with the golf course.

The Northeast Minnesota Bikeways Plan (ARDC, 2000) ranks most of Koochiching County's trunk and CSAH highway system as either good or adequate for bike use. This rating assumes an experienced bicyclist is using these roads, one who is comfortable with maneuvering in some traffic. The rating of these roads was based on the ADT and the availability of paved shoulders. In order to continue to improve the safety of the shared use of roadways by bicyclists, it is recommended, if feasible, to include improvements such as paved shoulders as part of road improvement projects. Paved shoulders also improve highway safety for motorists.

Funding for bicycle and pedestrian improvements is available through a variety of resources at the state and federal level. These funding sources often require a 20 to 50 percent local match. Funding sources include Mn/DOT's Enhancement Program and the DNR trails program. Bicycle improvements can be more cost effective if incorporated in the State and County's capital improvement plans and scheduled as part of a road construction or maintenance project. More information on funding for bike facilities can be found in the Northeast Minnesota Bikeways Plan.

Telecommunications

Access to telecommunications infrastructure will play an important role for future economic development in Koochiching County. Growth in natural resource based industries is limited and economic diversification is likely to rely on the availability of telecommunications infrastructure. Access to telecommunication infrastructure can eliminate the disadvantage of the County's distance to major population centers. Communication infrastructure allows Koochiching County to attract economic development that takes advantage of data-transmission technology and relies less on being close to clients.

At this point the County has limited access to bandwidth. The amount of available bandwidth determines the speed of the internet connection and the amount of data that can be transmitted. Bandwidth can come from a variety of sources such as wireless, fiber optics, or Digital Subscriber Lines (DSL). Currently, only the International Falls and Northome areas have access to high speed (T-1) infrastructure according to a Minnesota Department of Commerce inventory conducted in 1999. The remainder of Koochiching County depends on regular telephone infrastructure for its internet access. In addition, limited local calling

Shared road use can be improved by paved shoulders.

Incorporating bike improvements as part of highway maintenance projects can be a cost-effective way to improve bike safety.

Funding for bike and pedestrian improvements are available at the state and federal level, often requiring a 20 to 50 percent local match.

Telecommunications infrastructure will play an important role for future economic development.

Koochiching County is in danger of falling behind in telecommunications services due to low returns on investment for service providers resulting from the County's remote location and low population densities.

The Koochiching County Telecommunications Initiative is developing a proactive approach to ensure County residents and businesses have adequate access to telecommunication infrastructure.

areas in rural parts of the County are a concern and can lead to high costs for internet access.

The Koochiching Economic Development Authority sponsored a telecommunications workshop as part of the Koochiching County Telecommunications Initiative in the fall of 2000. According to the comments from this workshop, generally, the public sector has excellent levels of service, though there were some concerns that without state funding and subsidies, affordability would be an issue. Small businesses and residents generally rate their Internet service as too slow. Purchase of service to a dedicated connection, where available, is considered too expensive. High-speed wireless Internet service provides an opportunity to offer Internet access in the more rural parts of the County where providing cable access may be too costly.

High speed Internet providers originally concentrated on larger markets to provide Internet service. Because of Koochiching County's low population densities the County originally was left behind in the level of services offered compared to the more populated areas in the State. As these larger markets become more and more saturated, Internet providers will be concentrating on smaller markets, such as Koochiching County. Great improvements in the level of available services have been made recently and it is expected that more progress will be made as part of the telecommunications initiative. Development of public private partnerships between the County, State, and Internet service providers is identified as a key strategy to ensure Koochiching County has adequate access to telecommunications infrastructure. The Koochiching County Telecommunications Initiative will continue to work with network providers, community members, local officials, and State agencies to improve telecommunication infrastructure in Koochiching County.

Relationship of Transportation to the Other Plan Elements

The County's transportation system affects the efficiency of movement of people and goods. Transportation relates to the other plan elements in a number of ways. The most obvious relationship is that between transportation and economic activity in the County. The County's timber industry depends on reliable road and rail infrastructure for efficient transportation of raw materials and finished products. The accessibility of the County for visitors from the metropolitan areas such as the Duluth-Superior area and the Twin Cities are of importance for the tourism industry. The availability of an international airport is another asset that is beneficial for economic development in the region. Further, the County's transportation system also plays an important role in the provision and accessing of County services. The availability of public transportation that connects medical services to the community is especially important with an aging population. The transportation system also influences land use patterns. New housing development in rural areas often occurs in close proximity to an existing road. New development can also affects transportation needs, such as the need to

widen a road because of increased traffic, or implement safety improvements. Potential future road realignments for Highways 53 and 11 may have land use implications and may in some cases result in the relocation of housing and businesses. Finally, The County's natural environment affects the transportation system in a number of ways. For instance soil and wetland constraints increase the costs and maintenance for road infrastructure. The County's limited availability of gravel also drives up the costs of road maintenance and construction.

Twenty-Five Years Out

This document is intended to help guide the County in land use decisions and policy development on a variety of topics over the course of the next 25 years. The following scenarios represent two possible views of the County 25 years into the future. The first, worst case, scenario is the possible outcome of a no action approach to transportation. In the no action scenario, the County's activities toward transportation remain static or decline. The second, best case, scenario is the possible outcome of a proactive approach to transportation by County decision-makers that would take into account the Plan recommendations.

Scenario 1: Worst Case Scenario

In the year 2025, what would the transportation system look like if the County maintained a largely hands-off approach to transportation needs? For road infrastructure improvements, the upgrading of Trunk Highway 11 to a year round ten-ton road would be one of the key concerns. In order to implement this road upgrade, the County would need to work with Mn/DOT. The hands-off approach by the County would give Mn/DOT the impression that this improvement was not a high priority need. This hands-off approach could result in delays in the project or potentially no upgrade at all to a ten-ton road. By not addressing land use implications as a result of realignments of Highway 53 and 11, new development along these highway corridors could pose problems for future alignment alternatives. This could lead to increased cost of the construction project and project delays due to controversy about the preferred alignment. The provision of transit services in Koochiching County would continue to be a challenge due to the low-density population and the large size of the County. A lack of County involvement would contribute to the erosion of transit services and with that a further decline in ridership. This decline would make it increasingly difficult to provide adequate transit services in the rural parts of Koochiching County. Demand for medical related transportation is likely to increase over this time period. A hands-off approach could result in missed opportunities for collaboration among the various service providers. It also could cause a failure in accessing state assistance programs. By not clearly identifying bike and pedestrian needs as part of the overall highway improvement planning process, bike and pedestrian needs are not adequately addressed. Opportunities could be missed to incorporate improvements as part of road construction projects and to take advantage of federal funding through the enhancement program.

Scenario 2: Best Case Scenario

In this scenario the County has chosen a proactive approach towards transportation issues. The County's active involvement in the Highway 11 safety study lead to the development of a ten-ton highway that would be safe and provide opportunities to enjoy the scenery of the Rainy River. Incorporating possible future highway realignments into the zoning map resulted in minimal impacts on housing and businesses when Highways 11 and 53 were reconstructed with limited delays. The County's active involvement in the provision of public transportation would provide a flexible public transportation system. Adequate funding would provide a level of services that is acceptable considering the County's size and low population density. The County's approach resulted in a system of medical transportation services that provide those in need with transportation alternatives for medical appointments. Bicycle and pedestrian needs would increasingly be addressed as part of the overall transportation planning process. This would not only provide County residents with a transportation alternative, but also increase recreational opportunities throughout the County.

COMMUNITY FACILITIES AND SERVICES

C COMMUNITY FACILITIES AND SERVICES

Introduction

Community facilities and services is a collective term used to describe a variety of essential activities that sustain and enhance the quality of life for residents within a community. Community facilities and services include such things as drinking water, solid and sanitary waste disposal, education, emergency services, power, and health care. The provision of utility services, public safety programs, and facilities for public health and education are all issues that increasingly challenge local governments. Planning is essential to ensure that the provision of these services and facilities meet the future needs of the community.

The provision of adequate community facilities and services is fundamental to a community's health and wellbeing. It can also have a significant impact upon economic development because many families, businesses, and industrial companies look at the availability of community facilities and services as an important factor in deciding where to locate. Not only are such issues as access to safe drinking water and access to quality health care key elements in a community's quality of life, they are also paramount to its long-term viability.

The predominantly rural character of Koochiching County presents certain challenges to the provision of community facilities and services. For example, emergency response times may suffer because fire and ambulance services have large service areas, recycling drop-off facilities may be further away than people are willing to drive, or the distance to medical facilities may be a burden for elderly residents who must rely on others for their transportation needs. Furthermore, the prospect of a declining and aging population may create new challenges for the County in the years to come. The sharing of resource and the building of partnerships can play a key role in overcoming these challenges. This chapter provides an inventory of community facilities and addresses the provision of services within Koochiching County.

Utilities

Water Facilities

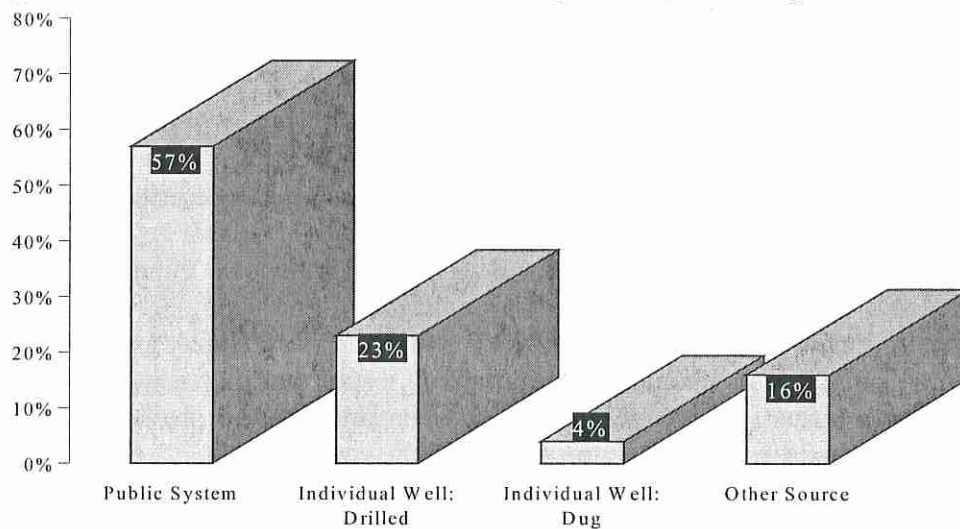
A safe, clean, and reliable supply of drinking water is essential to every community. A shortage of clean water is an impediment to economic development and, when the shortage is severe, can threaten the very survival of a community. Figure 5.1 indicates the percentage of County housing units that are served by public systems, individual wells that have been drilled, individual wells that have been dug, and other sources of water.

Community facilities and services is a collective term used to describe a variety of essential activities that sustain and enhance the quality of life for residents within a community.

The provision of adequate community facilities and services is fundamental to a community's health and wellbeing.

The predominantly rural character of Koochiching County presents certain challenges to the provision of community facilities and services.

A safe, clean and reliable supply of drinking water is essential to every community.

Figure 5.1: Water Sources for Koochiching County Housing Units

Source: 1990 U.S. Census

Generally speaking, people in larger cities drink water that comes from surface water sources, such as lakes, rivers, and reservoirs. People in small towns and rural areas are more likely to drink ground water that was pumped from a well.

Generally speaking, people in larger cities drink water that comes from surface water sources, such as lakes, rivers, and reservoirs. People in small towns and rural areas are more likely to drink ground water that was pumped from a well. This generalization holds true for the residents of Koochiching County; the source of the water for the International Falls public water system is Rainy Lake, the source of the water for the public water systems of Big Falls, Littlefork, and Northome are deep wells, and the source of water for most rural residents are private wells.

Most residents of the four largest municipalities in Koochiching County have access to public water supplies. The systems that serve the four largest municipalities vary in sophistication according to need and affordability. Each of the public water supplies that serve the four largest municipalities have capacities that adequately meet the current needs of the community, and each have varying degrees of excess capacity that may accommodate some future growth. Any upgrades or maintenance performed upon the municipal systems are solely the responsibility of the municipalities that own them. They are not the responsibility of the County. In addition, there are public water systems that supply area industry and schools. The location and description of the municipal public water systems that serve Koochiching County residents are as follows:

Big Falls

The Big Falls public water system serves all 341 residents who live within the City limits. The system was initially constructed in 1907 and upgraded in the early 1980's. The overall condition of the system is considered good. The source of the Big Falls public water system are two deep wells, one was drilled in 1965 and the other was drilled in 1975. The system's pumping capacity of 80 gallons per minute and storage capacity of 400,000 gallons are considered adequate. It has a normal flow rate of 30,000 gallons per day, an available flow rate of 75,000

gallons per day, and an available pressure of 42 pounds per square inch. The City currently is experiencing no problems with the system and has no plans to expand it. Systems have been updated in 2001.

International Falls

The International falls public water system is by far the largest system within the County, supplying over 8,000 residents with drinking water. The system was initially constructed in 1990 and upgraded in 2001. The system's overall condition is good. The source of the water that circulates through the International Falls public water system is Rainy Lake. The system has a pumping capacity 1,500 gallons per minute and a storage capacity of 1.5 million gallons. The system has a normal flow rate of .87 million gallons per day, an available flow rate of 2.16 million gallons per day, and an available pressure of 75 to 80 pounds per square inch. The City has recently completed an upgrade of its water facility and has no immediate plans for further improvements. Ranier draws water from International Falls and distributes drinking water to 360 residents. The water distribution system maintained by Ranier ends at Birchpoint.

Littlefork

Littlefork's public water system serves an area entirely within the City of Littlefork, east of the Littlefork River. Ninety-two percent of the City of Littlefork's 838 residents are served by the City's public water supply. The water system was initially constructed in 1937. The water treatment plant and water tower were built in 1969 and 1979, respectively. The water treatment plant was upgraded in 2000. The source of the Littlefork public water system are two deep wells, one was drilled in 1945 and the other in 1955. The system's pumping capacity of 80 gallons per minute and storage capacity of 160,000 gallons are considered adequate. It has a normal flow of 115,200 gallons per day and a high flow of 172,800 gallons per day at an available rate of 120 gallons per minute, and an available pressure of 60 pounds per square inch. Parts of the system will need to be replaced in the future due to deteriorating mechanical joints. The City has plans to replace five blocks of water main in 2001. Future expansion of water and sewer across the river is being explored to serve the residential and industrial areas west of town.

Northome

The Northome public water system serves all 112 units within the city limits and two units outside of the city limits. The water system was initially constructed in the early 1930's and was upgraded in 1979. Overall, the system is in fair physical condition. The Northome public water system currently draws its water from three deep wells, one of which was drilled in 1973 and has a pumping capacity of 50 gallons per minute, and two of which were drilled in 1979 and have pumping capacities of 55 and 120 gallons per minute. The system has a normal flow of 30,000 gallons per day and a high flow of 50,000 gallons per day at an available flow rate of 200 gallons per minute, and an available pressure of 55 pounds per square inch. The system's storage capacity of 44,000 gallons is considered adequate. Problems with the current system include the small diameter of its

Most residents of the four largest municipalities in Koochiching County, Big Falls, International Falls, Littlefork, and Northome, have access to public water supplies.

The systems that serve the four largest municipalities vary in sophistication according to need and affordability.

Each of the public water supplies that serve the four largest municipalities have capacities that adequately meet the current needs of the community, and each have varying degrees of excess capacity that may accommodate some future growth.

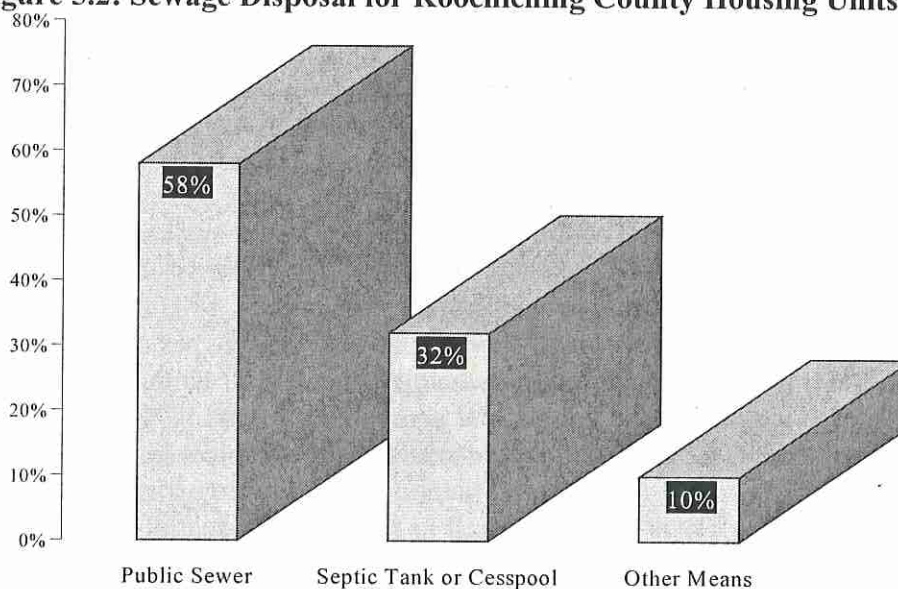
water mains, which are of cast iron construction and contain numerous lead joints and dead-ends. The water tower was constructed in 1949 and is considered to be too old. Needed improvements include the looping of the dead-end water mains, construction of a drinking water treatment plant (the City currently does not have one), and the replacement of the water tower. The City of Northome is planning to apply to the Minnesota Department of Trade and Economic Development (DTED) for Small Cities Development Program (SCDP) funds to address the needed improvements.

Wastewater Facilities

The three categories of wastewater treatment systems in Koochiching County include public sewer systems operated by sanitary districts and municipalities, cluster systems operated by homeowner associations, resorts, and parks, and individual sewage treatment systems. Figure 5.2 provides information concerning the percentages of County housing units that were served by public sewers, septic tanks or cesspools, or other sewage disposal means in 1990.

The three categories of wastewater treatment systems in Koochiching County include public sewer systems operated by sanitary districts and municipalities, cluster systems operated by homeowner associations, resorts, and parks, and individual sewage treatment systems.

Figure 5.2: Sewage Disposal for Koochiching County Housing Units



Source: 1990 U.S. Census

Each of the sewer systems that serve the four largest municipalities have capacities that adequately meet the current needs of the community, and each have varying degrees of excess capacity that may accommodate some future growth. As is the case with municipal water systems, any upgrades or maintenance performed upon the sewer systems are the responsibility of the municipalities that own them. Municipal public sewer systems that serve Koochiching County residents are described as follows:

Big Falls

The Big Falls sanitary sewer system serves all 341 residents who live within the City limits. The system consists of lagoon treatment and its effluent is discharged into the Big Fork River. The system was constructed in 1963 and has never received an upgrade. The system's normal flow is 30,000 to 35,000 gallons per day and its high flow rate is 40,000 gallons per day. The available system and water treatment capacities are unknown. The system experiences problem with infiltration. Although there are currently no scheduled improvements to the system, the City is actively seeking funds to correct the infiltration problem.

North Koochiching Sanitary District

The North Koochiching Sanitary District serves the City of International Falls, the City of Ranier, and East Koochiching, an area of approximately three square miles extending from the eastern edge of the City of International Falls. The system was constructed in 1955, with upgrades completed in 1985 and 1990. The system remains in good condition and serves over 8,000 residents at a rate of \$1.153 per 1,000 gallons. The annual average daily flow is 1.5 million gallons per day with an available system capacity of 2.3 million gallons per day. The North Koochiching Sanitary District has plans to expand service to Jackfish Bay.

Littlefork

Littlefork's sanitary and storm sewer system serves an area entirely within the City of Littlefork, east of the Littlefork River. Ninety-two percent of the City of Littlefork's 838 residents are served by these systems at a rate of \$6.00 per month. The sanitary sewer system consists of lagoon treatment and its effluent is discharged into Beaver Brook, which flows into the Littlefork River downstream. The collection system was initially constructed in the 1930's and added to since then. The ponds were constructed in 1974 and have not been upgraded. The system's normal flow and high flow are 60,000 gallons per day and 90,000 gallons per day, respectively. The available water treatment capacity is 23.5 million gallons per year. The collection system is in fair physical condition and the ponds are in good condition. There are no scheduled improvements for the ponds, but four blocks of the collection system are scheduled for improvement in 2001.

Northome

The Northome sanitary sewer system serves the 112 housing units located within the City limits and two housing units located outside of the city limits at a rate of \$30 per quarter. The system consists of Lagoon treatment and its effluent is discharged into the Caldwell Brook. The system, constructed in the early 1930's and upgraded in 1979, is considered to be in poor physical condition. The system has a normal flow of 25,000 gallons per day and a high flow of 75,000 gallons per day. One problem identified by the City of Northome is associated with the system of old clay tiles, which causes Inflow and Infiltration problems. The City of Northome is planning to apply to DTED for SCDP funds to address this problem.

Most residents of the four largest municipalities in Koochiching County, Big Falls, International Falls, Littlefork, and Northome, have access to municipal sewer systems.

Each of the sewer systems that serve the four largest municipalities have capacities that adequately meet the current needs of the community, and each have varying degrees of excess capacity that may accommodate some future growth

The three power companies that supply electricity to the residents and businesses of Koochiching County are the International Falls Power Company, Minnesota Power, and North Star Electric Cooperative.

Electricity

Power companies and cooperatives can have influence over land use, economic development, and other planning issues within the County. The three power companies that supply electricity to the residents and businesses of Koochiching County are the International Falls Power Company, Minnesota Power, and North Star Electric Cooperative. The International Falls Power Company is owned and operated by the Boise Cascade Corporation for internal use only. It is a hydroelectric facility consisting of a dam and seven hydroelectric generating wheels that power the company's paper mill. Minnesota Power transfers, distributes, and sells electricity to customers in northeastern Minnesota and northwestern Wisconsin. Minnesota Power has several large industrial customers, including taconite producers, paper and pulp mills, and pipeline firms. North Star Electric Cooperative has been a member of Minnkota Power Cooperative, Inc (MPC) since 1956. It serves 6,000 members with 1,280 miles of line in Lake of the Woods, Koochiching, St. Louis, and Roseau Counties. The North Star electric Cooperative office in Koochiching County is located in Littlefork. Recently, North Star has added telecommunications to its resume with DirecTV now in over 2,500 homes. North Itasca Electric Coop provides electricity for the southern part of Koochiching County.

There are currently no active municipal solid waste landfills in Koochiching County. Essentially all of the County's non-recycled residential solid waste is consolidated at the County transfer station and hauled to the Mar-Kit Landfill in Kittson County.

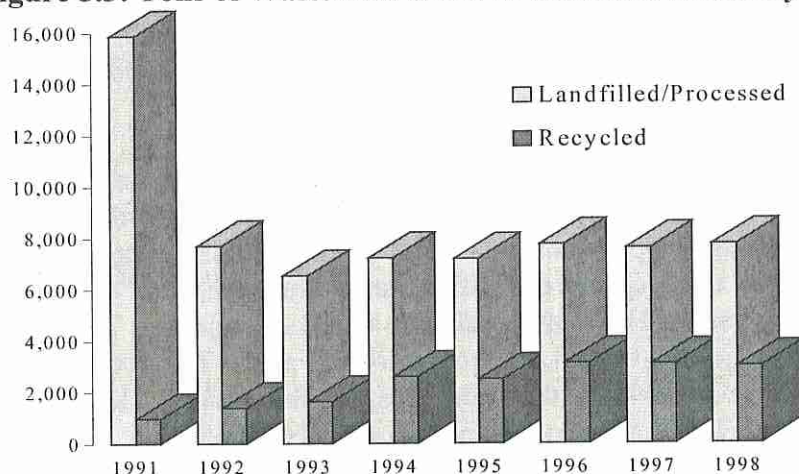
Solid Waste and Recycling

There are currently no active municipal solid waste landfills in Koochiching County. With the exception of a small amount from the Silverdale area, all of the County's non-recycled residential solid waste is consolidated at the County transfer station and hauled to the Mar-Kit Landfill in Kittson County. Koochiching County signed a 15-year contract with the Mar-Kit Landfill Board utilize to landfill. The County does not anticipate any problems associated with the completion of the contract in 2010 because it maintains a good relationship with the landfill Board, and the landfill has a capacity of at least 50 years. Furthermore, the County will consider other options as the contract termination date draws closer. The arrangement with the Mar-Kit landfill guarantees Koochiching a long term and dependable solution to solid waste disposal. It is also requires Kittson County to have a processing facility in place to separate recyclable material from incoming waste by October 1, 2001. The disadvantage of this arrangement is the distance from the Koochiching County Solid Waste Complex to the Mar-kit landfill; a 185-mile one-way route during most of the year, with additional distance added when spring weight restrictions for certain routes are in effect during the spring.

Figure 5.3 compares the number of tons of waste generated in the County that was landfilled or processed with the number of tons recycled in the County between 1991 and 1998. It indicates that the volume of waste landfilled or processed remained steady between 1992 and 1998 while the volume of recycled material increased. It also indicates that the number of tons of waste landfilled or processed decreased by about 50 percent between 1991 and 1992. This is likely due to the lack of accurate data concerning volume prior to 1992. The County

began shipping its waste to the Mar-Kit landfill in 1992 when its two landfills were closed. Prior to 1992, the County did not charge tipping fees and, thus, did not collect accurate data concerning volume

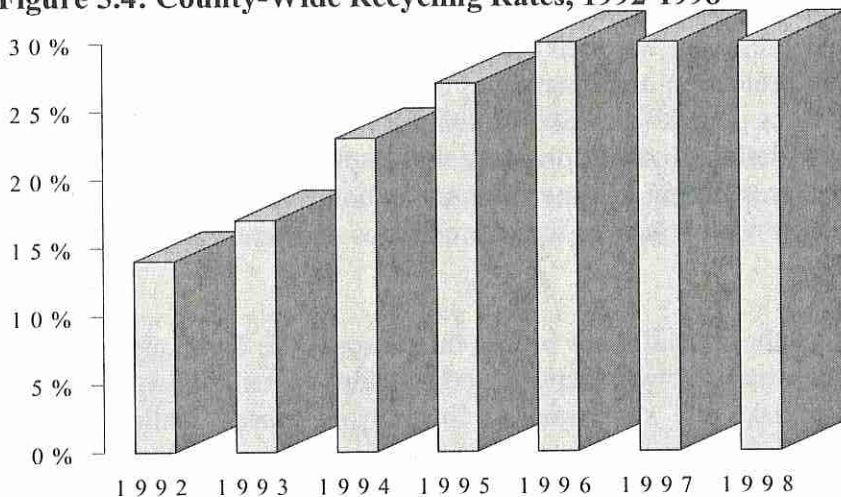
Figure 5.3: Tons of Waste Landfilled or Processed and Recycled, 1991-1998



Source: Office of Environmental Assistance.

Koochiching County provides its residents with a number of opportunities to recycle solid waste throughout the year. Curbside recycling programs serve more than half the population and are available in the cities of International Falls and Ranier. In addition, there are 14 drop-sites located throughout the County where residents can leave recyclable material. Most of the sites are unattended and open to the public 24 hours per day. All recyclable material is delivered to the Solid Waste Complex station where it is further processed before being shipped to end markets. In addition, large appliances, used motor oil, used oil filters, and lead-acid batteries are accepted from the general public at the Solid Waste Complex. Figure 5.4 graphs the rate of recycling for the entire County between 1992 and 1998.

Figure 5.4: County-Wide Recycling Rates, 1992-1998



Source: Office of Environmental Assistance

Curbside recycling programs serve more than half the County's population and are available in the cities of International Falls and Ranier. In addition, there are 14 drop-sites located throughout the County where residents can leave recyclable material.

There are four demolition landfills and seven small transfer stations located throughout the County.

The county holds nine Household Hazardous Waste collection events each year, eight residential and one commercial.

Emergency services, including disaster relief and coordination, law enforcement protection, fire protection, and emergency medical response, are considered to be essential services.

The provision of emergency services may be confronted with increasingly serious challenges in future years as a result of demographic changes.

There are four demolition landfills and a series of seven small transfer stations or canister sites located throughout the County. The canister sites are open between ten and 21 hours per week and offer residents a variety of disposal options. Canister sites near Birchdale, Loman, Ray and Silverdale are minimal use sites that offer disposal options for garbage and recyclable material. A canister site near Littlefork also accepts yard waste. Canister sites located near Big Falls and Mizpah have added tires, appliances, automotive batteries, used oil, oil filters, and demolition material to their acceptable item list.

In 1992, the county entered into an agreement with the Western Lake Superior Sanitary District (WLSSD) for the purpose of providing residents with household hazardous waste (HHW) opportunities. The county holds eight residential collection events and one commercial collection event each year to meet the growing demand for proper HHW disposal. The business collection and two of the residential collections are held in International Falls. The six remaining residential collections are held in the rural areas of the county. Koochiching County has the eventual goal of opening a permanent HHW facility.

Emergency Services

Emergency services, including disaster relief and coordination, law enforcement protection, fire protection, and emergency medical response, are considered to be essential services. The provision of emergency services is also important to a community's quality of life. Although the provision of emergency services can currently be characterized as very good, there are current and future challenges that must be met. Current issues include response times, equipment shortages, problems with emergency communication, and the recruitment and retention of personnel. These issues are generally more significant in rural areas where service areas are larger, equipment shortages are more acute, and personnel are exclusively volunteer.

The provision of emergency services may be confronted with increasingly serious challenges in future years as a result of demographic changes. At issue will be a smaller pool of people, those between the ages of 18 and 65, from which to draw volunteers for fire protection and emergency response services. This will likely be compounded by a general increase in demand for emergency services by a growing senior population. In addition, there will likely be an increase in demand for emergency services during summer months as both recreational tourism and the number of people who winter in warmer climates and return home during the summer increase.

The ability to meet these challenges before they impact the level and quality of emergency service provision will depend upon actions taken sooner rather than later. In order to take the steps needed to confront these challenges, it is recommended that a comprehensive needs assessment be undertaken to clearly identify the scope and severity of any current and future problems. The outcome of such an assessment will be a strategy that will effectively address those

problems and allow for the continued provision of quality emergency services. The following paragraphs identify the emergency services located within the County.

Red Cross

The Red Cross provides disaster relief by meeting people's immediate emergency disaster-caused needs. When a disaster threatens or strikes, the Red Cross provides shelter, food, and health and mental health services to address basic human needs. In addition to these services, the core of Red Cross disaster relief is the assistance given to individuals and families affected by disaster to enable them to resume their normal daily activities independently.

The Red Cross also feeds emergency workers, handles inquiries from concerned family members outside the disaster area, provides blood and blood products to disaster victims, and helps those affected by disaster to access other available resources. Assisting victims of house and apartment fires accounts for the majority of Red Cross disaster responses

Law Enforcement Protection

The role of Law enforcement protection is to ensure public safety through the protection of people and their property. Fair and effective law enforcement has the outcome of enhancing a community's quality of life. Furthermore, the perception of a low crime rate and an adequately funded and efficient law enforcement community can help to make a community an attractive place for businesses and families to locate.

The number of reported crimes, crime rates, and arrests are presented in the tables that follow. Table 5.1 identifies the number of Part I Offenses reported for the entire County between 1987 and 1997. Part I Offenses, considered to be more serious crimes, are defined by the Federal Bureau of Investigation (FBI) as including murder, rape, robbery, aggravated assault, burglary, larceny, motor vehicle theft and arson.

Table 5.1: Part I offenses

| Type of Offense | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 |
|-------------------------------|------|------|------|------|------|------|------|------|------|------|------|
| Murder | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 1 |
| Negligent manslaughter | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Rape | 3 | 4 | 9 | 7 | 3 | 18 | 19 | 16 | 6 | 10 | 14 |
| Robbery | 2 | 2 | 1 | 3 | 1 | 1 | 7 | 1 | 0 | 2 | 1 |
| Aggravated assault | 16 | 28 | 29 | 41 | 30 | 16 | 14 | 17 | 9 | 9 | 26 |
| Burglary | 160 | 113 | 107 | 166 | 148 | 139 | 140 | 153 | 106 | 131 | 148 |
| Larceny | 356 | 338 | 402 | 466 | 413 | 350 | 377 | 379 | 325 | 305 | 332 |
| Motor vehicle theft | 58 | 43 | 29 | 34 | 35 | 37 | 56 | 41 | 33 | 33 | 27 |
| Arson | 2 | 5 | 9 | 10 | 11 | 9 | 3 | 16 | 4 | 6 | 7 |

Source: Minnesota Planning Criminal Justice Statistics Center.

The ability to meet these challenges before they impact the level and quality of emergency service provision will depend upon actions taken sooner rather than later.

In order to take the steps needed to confront these challenges, it is recommended that a comprehensive needs assessment be undertaken to clearly identify the scope and severity of any current and future problems.

Part I Offenses, considered to be more serious crimes, include murder, rape, robbery, aggravated assault, burglary, larceny, motor vehicle theft and arson.

Part II Offenses are all offenses other than Part I crimes, juvenile offenses and traffic violations

The rates of Part I and Part II offenses in Koochiching County remained relatively stable over an 11 year period between 1987 and 1997.

Table 5.2 identifies the number of Part II Offenses reported for the entire County between 1987 and 1997. Part II Offenses are identified by the FBI as all offenses other than Part I crimes, juvenile offenses and traffic violations. Part II Offenses include forgery and counterfeiting, fraud, embezzlement, buying, receiving or possessing stolen property, vandalism or destruction of property, weapons violations, prostitution and commercialized vice, sex offenses, narcotics offenses, liquor law violations, gambling violations, offenses against family and children, driving under the influence, disorderly conduct, vagrancy, and all other offenses.

Table 5.2: Part II offenses

| Type of Offense | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 |
|-------------------------------------|------|------|------|------|------|------|------|------|------|------|------|
| Other assaults | 81 | 101 | 152 | 182 | 164 | 210 | 198 | 199 | 171 | 184 | 152 |
| Forgery and counterfeiting | 7 | 6 | 8 | 11 | 16 | 7 | 6 | 8 | 10 | 10 | 7 |
| Fraud | 23 | 18 | 14 | 16 | 21 | 16 | 16 | 23 | 18 | 14 | 23 |
| Embezzlement | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| Stolen property | 8 | 5 | 4 | 5 | 3 | 2 | 10 | 4 | 4 | 3 | 6 |
| Vandalism | 256 | 179 | 411 | 606 | 324 | 271 | 259 | 317 | 254 | 230 | 272 |
| Weapons offenses | 24 | 26 | 35 | 33 | 8 | 4 | 11 | 7 | 9 | 11 | 16 |
| Prostitution | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| Other sex offenses | 33 | 36 | 21 | 31 | 27 | 17 | 26 | 14 | 8 | 18 | 9 |
| Narcotics offenses | 27 | 137 | 209 | 87 | 53 | 47 | 41 | 45 | 41 | 57 | 95 |
| Gambling offenses | 0 | 0 | 0 | 2 | 0 | 0 | 1 | 1 | 0 | 0 | 0 |
| Offenses against family or children | 21 | 33 | 16 | 32 | 20 | 23 | 30 | 22 | 33 | 47 | 37 |
| Driving under the influence | 61 | 81 | 112 | 179 | 98 | 88 | 93 | 76 | 71 | 80 | 91 |
| Liquor laws | 59 | 79 | 42 | 54 | 42 | 52 | 49 | 84 | 61 | 71 | 56 |
| Disorderly conduct | 295 | 291 | 525 | 560 | 394 | 141 | 139 | 214 | 184 | 235 | 212 |
| Other offenses (except traffic) | 192 | 152 | 191 | 226 | 169 | 245 | 154 | 149 | 155 | 145 | 151 |

Source: Minnesota Planning.

Tables 5.3, and 5.4, provide the aggregate number of Part I Offenses and Part II Offenses, their rates, and the number of arrests made for each of the years between 1987 and 1997. The rates of Part I and II Offense have remained stable during that period, except of an increase in Part II Offenses during 1989 and 1990.

Table 5.3: Total Part I Offenses, Rates, and Arrests

| Year | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 |
|-----------------------|------|------|------|------|------|------|------|------|------|------|------|
| Total Part I Offenses | 597 | 534 | 586 | 727 | 642 | 570 | 616 | 623 | 484 | 496 | 556 |
| Part I Offense Rates | 3.8% | 3.4% | 3.7% | 4.5% | 4.1% | 3.6% | 3.9% | 3.9% | 3.0% | 3.1% | 3.5% |
| Arrests | 156 | 122 | 113 | 168 | 154 | 112 | 142 | 159 | 107 | 93 | 137 |

Source: Minnesota Planning and Minnesota State Demographic Center.

Table 5.4 indicates that there was a considerable increase in Part II Offenses during 1989 and 1990. This increase may be attributed to union-non-union

activities surrounding a major construction and expansion project for Boise Cascade during that period.

Table 5.4: Total Part II Offenses, Rates, and Arrests

| Year | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 |
|-------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Total Part II Offenses | 1,087 | 1,144 | 1,740 | 2,024 | 1,340 | 1,123 | 1,034 | 1,163 | 1,019 | 1,105 | 1,128 |
| Part II Offense Rates | 6.9% | 7.3% | 11.0% | 12.4% | 8.5% | 7.1% | 6.5% | 7.4% | 6.4% | 6.9% | 7.1% |
| Arrests | 338 | 468 | 714 | 717 | 382 | 450 | 491 | 582 | 554 | 578 | 702 |

Source: Minnesota Planning and Minnesota State Demographic Center.

Table 5.5 indicates the rates of Part I Offenses and Part II Offenses for the entire State of Minnesota. The rate of Part I Offense for Koochiching County were lower than those of the State as a whole for all years between 1987 and 1997, inclusive. However, the rate of Part II Offenses for the County were higher than those of the State as a whole during the same period for all years except 1995.

Table 5.5: Part I and Part II Offense Rates, State of Minnesota

| Year | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 |
|------------------------------|------|------|------|------|------|------|------|------|------|------|------|
| Part I Offense Rates | 4.7% | 4.3% | 4.4% | 4.6% | 4.6% | 4.6% | 4.4% | 4.4% | 4.5% | 4.5% | 4.4% |
| Part II Offense Rates | 5.4% | 5.4% | 5.6% | 6.2% | 6.1% | 6.4% | 6.3% | 6.7% | 6.8% | 6.8% | 6.7% |

Source: Minnesota Planning and Minnesota State Demographic Center.

There are three locally controlled law enforcement organizations that operate at three administrative levels within the County. The Koochiching County Sheriff's Department is administered at the County-level, the International Falls Police Department is administered at the City-level, and the Nett Lake Reservation Police Department is administered at the reservation level. The level and quality of law enforcement provided by these organizations appears to meet the needs of County residents and businesses. These Law enforcement organizations are described as follows.

International Falls Police Department, International Falls

The International Falls Police Department employs fourteen full-time personnel. Thirteen part-time officers are on staff, as well. The department has a school liaison and certified instructors in firearms, chemical agents and defensive tactics. Specialized areas of training include K-9, Combined Response Team, Boundary Water Drug Task Force, latent print technicians, and electronic closed circuit surveillance. The International Falls Police Department serves approximately 8,000 residents. However, there is an increased need for law enforcement during the summer months due to tourism, increased international commerce through the local port of entry, and returning residents who winter in warmer climates. An issue facing the International Falls Police Department is the difficulty attracting new personnel to International Falls because it is such an isolated community.

The rate of Part I Offense for Koochiching County were lower than those of the State as a whole for all years between 1987 and 1997, inclusive. However, the rate of Part II Offenses for the County were higher than those of the State as a whole during the same period for all years except 1995.

There are three locally controlled law enforcement organizations that operate at three administrative levels within the County.

The Koochiching County Sheriff's Department is administered at the County-level, the International Falls Police department is administered at the City-level, and the Nett Lake Reservation Police Department is administered at the reservation level. In addition, there are other law enforcement organizations active within the County that operate at differing administrative levels.

Adequate fire protection and emergency medical response are essential services within any community, often saving lives and property.

Issues facing both fire protection and emergency medical response services include response times, large service areas, equipment, emergency communications, and the recruitment and retention of volunteer personnel.

Koochiching County Sheriff

The Koochiching County Sheriff's Department currently maintains a force of 10 full-time and 10 part time officers. In addition to providing law enforcement protection for the rural portions of the County, the Sheriff's Department provides law enforcement for all of the small towns within the County. Emergency calls received by the Department through the 911 system and calls reporting crimes have increased in recent years. The Department currently receives at least 300-350 calls a month, about 100 of which relate to medical and fire emergencies.

Nett Lake Reservation Police Department

The Nett Lake Reservation Police Department services the Nett Lake Reservation with a force of five officers. The number of calls that the Department receives has remained stable over recent years, averaging about 1,500 calls per year. The Department no longer uses the reservation jail. Instead, suspects taken into custody are sent to Koochiching, Itasca, and Saint Louis County jails.

In addition, there are other law enforcement organizations active within the County that operate at differing administrative levels. Those operating at the state-level include the Minnesota State Patrol and the Minnesota Department of Natural Resources (MDNR). Those operating at federal-level include the National Park Service, the United States Border Patrol, the United States Customs Service, and the Immigration and Naturalization Service.

Fire Protection Services

Adequate fire protection is an essential service within any community, often saving lives and property. Manpower, equipment, and a good emergency response system are important considerations, not only for current Koochiching County residents but also for prospective residents and businesses. Koochiching County residents are served by seven fire departments within the County, one professional, five volunteer, and one reservation, and several from outside of the County. Key issues for fire protection services include response times, large service areas, equipment, emergency communications, and the recruitment and retention of volunteer personnel. The fire departments located within Koochiching County are in Big Falls, Birchdale, International Falls, Littlefork, Loman, Nett Lake, and Northome.

Emergency Medical Response

According to the Koochiching County Health Department, the three ambulance services within the County are located in International Falls, Littlefork, and Northome. In addition, the Big Falls Fire Department has an EMS division. Parts of rural Koochiching County are served by ambulance services located outside the County in Blackduck, Baudette, Forte Frances, and Orr. EMT's and first responders serve most of Koochiching County. Issues facing emergency medical response includes a lack of first responders in the Island View Lake area, response times, large service areas, emergency communications, and the recruitment and retention of volunteer personnel. A critical issue facing the provision of

emergency medical response in coming years will be an anticipated decline in the pool of residents from which to draw volunteers and an anticipated increase in demand due to an increase in the number of seniors.

Public Education

Public education represents the heart of a community. No other institution so symbolizes the notion of community as does the local public school. Public education transmits knowledge to new generations and displays the achievements of society. A strong public education system can prepare young people to be productive citizens and enable them to enter college, community college, or the general workforce. Public schools are key determinants of the quality of life and are valued symbols of community identity and achievement. The entire community benefits from its public schools and is often evaluated on the basis of their quality. The availability of quality Public education in Koochiching County ranges from preschool to post-secondary.

Public education in Koochiching County is likely to face difficult challenges in the next 25 years. As was identified in the introduction (see Table 1.1), the population of people 19 years of age and under is projected to decline by over 50 percent between 1995 and 2025. This will result in a significant decline in public school enrollment. During the same period, there will be a decline in the number of people between the ages of 20 and 65. This may have consequences regarding the availability of funding for public education. Although decisions regarding public education are made by the local school boards, it is important for the County and its residents to be aware of these future challenges. The following paragraphs briefly describe public education in Koochiching County.

Pre-School

Head Start

There are currently three Head Start programs operating in Koochiching County, two in International Falls, and one in Northome. Head Start is a federal and State funded anti-poverty program focused on school readiness. The goal of Head Start is to assist low-income families break the cycle of poverty by improving the health and social competence of preschool age children and by promoting economic self-sufficiency for parents. Head Start provides a comprehensive program of health, education, parent involvement and social services, all of which are coordinated with community-based service systems.

Early Childhood Family Education

Early Childhood Family Education (ECFE) programming addresses the needs of families with children up to age five by offering programs that teach parenting skills, school readiness, and socialization. The programs are funded with a combined local levy and State aid formula that may be supplemented with registration fees and funds from other sources. ECFE programs are available to

Public education represents the heart of a community. No other institution so symbolizes the notion of community as does the local public school.

Public education in Koochiching County is likely to face difficult challenges in the next 25 years due to demographic changes that may bring declining enrolment.

Public pre-school programs available to residents of the County include Head Start programs and Early Childhood Family Education Programs.

County residents through each of the County's school districts. The school readiness component of the ECFE program is a public school program open to all County children aged three-and-a-half to four years and their families. ECFE programs are located in International Falls, Littlefork, Mizpah, and Nett Lake.

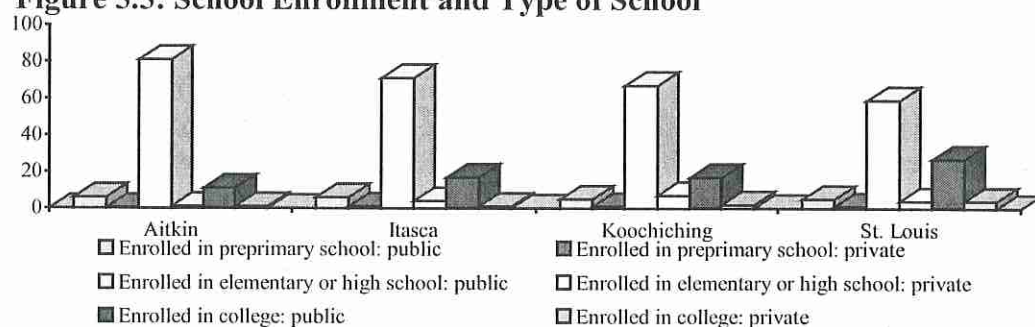
Elementary and Secondary

Enrollment

Koochiching County has an open enrolment policy for elementary and secondary students, meaning that parents can send their children to the school they feel has the most desirable attributes. The County's rate of school enrollment was comparable to that of surrounding counties in 1990. The highest percentage by type of school was the enrollment of students in public elementary and high schools. Koochiching County's rate of enrollment in public schools in 1990 was 67 percent.

Koochiching County has an open enrolment policy for elementary and secondary students, meaning that parents can send their children to the school they feel has the most desirable attributes. The County's rate of school enrollment was comparable to that of surrounding counties in 1990.

Figure 5.5: School Enrollment and Type of School



Source: 1990 U.S. Census

According to the Minnesota Department of Children, Families, and Learning, all School Districts within Koochiching County have experienced a decrease in enrollment between the 1996/1997 school year and the 1997/1998 school year, with the exception of South Koochiching which had an increase in enrollment of 0.4 percent. Table 5.6 illustrates the total enrollment numbers for each of the County's school districts for the 1996/1997 school year as well as the 1997/1998 school year.

Table 5.6: School District Enrollment Comparisons (All Schools)

| School District | School Year 1996/1997 | School Year 1999/2000 | Enrollment Change | Percent Change |
|------------------------------|-----------------------|-----------------------|-------------------|----------------|
| ISD 361 International Falls | 1,858 | 1,692 | -166 | -8.9% |
| ISD 362 Littlefork—Big Falls | 409 | 324 | -85 | -20.8% |
| ISD 363 South Koochiching | 447 | 422 | -25 | -5.6% |
| ISD 707 Nett Lake | 62 | 56 | -6 | -9.7% |
| Totals | 2,776 | 2,494 | -282 | -10.2% |

Source: MN Department of Children, Families & Learning, 1996-2000.

All School Districts within Koochiching County have experienced a decrease in enrollment between the 1996/1997 school year and the 1997/1998 school year, with the exception of South Koochiching.

Average daily membership is also an important factor to examine when analyzing a school district. Table 5.7 indicates the average daily membership of students in the County's school districts for the 1997-1998 school year.

Table 5.7: 1997-1998 Average Daily Membership

| School District | Elementary K-6 | Secondary 7-12 | Total | Percent Attendance | Total Staff | Pupil/Staff Ratio |
|--------------------------|-------------------|-------------------|--------------|-----------------------|----------------|----------------------|
| 361 International Falls | 905 | 858 | 1,763 | 95.0 | 111 | 16:1 |
| 362 Littlefork-Big Falls | 160 | 169 | 329 | 93.8 | 27 | 12:1 |
| 363 South Koochiching | 208 | 233 | 441 | 94.4 | 49 | 9:1 |
| 707 Nett Lake | 49 | NA | 49 | 92.6 | 12 | 4:1 |
| Totals | 1,322 | 1,260 | 2,582 | 94.0 | 199 | 13:1 |

Source: MN Department of Children, Families & Learning, 2000.

The State of Minnesota conducts standardized tests that help communities measure the success of their public schools. Two such tests are the Minnesota Comprehensive Assessments (MCA) and the Basic Standards in Reading and Mathematics. The MCA is a snapshot measurement of students' achievement against Minnesota's High Standards. The MCA are composed of third and fifth grade tests that measure how well a student has mastered State math, reading, and writing standards. All third and fifth grade students are tested in reading and math. In addition, fifth graders take a written composition test. Students do not pass or fail these tests. These tests are part of the educational accountability system in Minnesota. Schools will use these results to make curricular and instructional decisions for all students. Identifying strengths and weaknesses early can help districts make the best decisions about curriculum and instruction so that they are better able to prepare students to meet the Graduation Standards.

The Basic Standards in Reading and Mathematics are one part of the Minnesota Graduation Standards. Students from the class of 2000 and beyond must pass these tests in order to be eligible to graduate from a Minnesota public high school. Statewide tests are given to measure each student's achievement of the Basic Standards. The reading and mathematics tests are first given in the eighth grade and the written composition test is given in the tenth grade.

The MCA and Basic Standards in Reading and Mathematics can help chart the progress of schools and districts over time, generate information for school improvement and school accountability, and allow for comparison of schools and districts in Minnesota. The Minnesota Department of Children, Families and Learning maintains detailed information concerning MCA and Basic Standards in Reading and Mathematics results for all school districts. Those interested in the results of these tests for the County's school districts and how they compare to other districts and the State as a whole can contact the Minnesota Department of Children, Families and Learning.

The State of Minnesota conducts standardized tests that help communities measure the success of their public schools.

Two such tests are the Minnesota Comprehensive Assessments (MCA) and the Basic Standards in Reading and Mathematics.

The Minnesota Department of Children, Families and Learning reports test results for the County's school districts and how they compare to other districts and the State.

Post-Secondary

Rainy River Community College

Rainy River Community College is a two-year institution that offers traditional Associate and transfer degrees, technical programs, customized training and continuing education, and two-plus-two programs with four-year institutions.

Located in International Falls, Rainy River Community College is a two-year institution that offers traditional Associate and transfer degrees, technical programs, customized training and continuing education, two-plus-two programs with four-year institutions such as Bemidji State University, and numerous community and cultural activities. The college is a member of the Minnesota State Colleges and Universities and the Northeast Higher Education District. There is also a dormitory facility with full living accommodations for student needs.

The college is funded by a combination of State appropriation and tuition receipts. Both are based on enrollment, which has declined over the last few years. Changes in demographics have prompted the college to expand its recruiting efforts outside of the State of Minnesota. The resultant increase in students from outside of the area provides a positive economic impact for the International Falls area.

Libraries

Library resources provided residents with opportunities for personal cultivation, literary and cultural pursuits, internet access, continuous development of knowledge and personal skills, and lifelong learning.

Library resources are an important part of the community base; they provided residents with opportunities for personal cultivation, literary and cultural pursuits, internet access, continuous development of knowledge and personal skills, and lifelong learning. Public libraries are located in Big falls, International falls, and Northome. Public school libraries offer opportunities for residents to use the facilities during specific times, in addition to the regular hours during which they are available to students. The Rainy River Community College Library, or Learning Resource Center, provides a variety of academic resources to both students and non-students. The Arrowhead Library System (ALS) serves rural residents of the County. Through its Bookmobile service ALS provides high quality library access to residents who live outside member library communities and its Mail-A-Book program offers service to housebound residents.

Medical Facilities and Services

Access to quality health care is a critical element in the quality of life for County residents.

Access to quality health care is a critical element in the quality of life for County residents. The current and future availability of quality health care can play an important role in the location calculus of businesses and families. Furthermore, the projected increase in the number of people 65 years of age and older will likely create an increased demand for physicians and nursing professionals in future years. Table 5.8 provides information concerning the number of health care personnel that were working within Koochiching County in 1998.

Table 5.8: Healthcare Personnel within Koochiching County, 1998

| | |
|------------------------------------------|-----|
| Total Number of Physicians | 15 |
| Physicians per 10,000 population* | 9.6 |
| Number of Physician Assistants | 2 |
| Number of Dentists | 8 |
| Number of Dental Assistants | 14 |
| Number of Dental Hygienists | 3 |
| Number of Pharmacists | 11 |
| Number of Respiratory Care Practitioners | 2 |
| Number of Physical Therapists | 3 |

* (Physicians per 10,000 population for the State of Minnesota as a whole is 22.4)

Source: Minnesota Planning Land Management Information Center

The County currently has a policy and management decision-making tool in the form of the *Aitkin-Itasca-Koochiching 2000-03 Community Health Plan & Assessment*. It provides the County with “a system for assessing community [health care] needs, establishing priorities and allocating limited resources based on these needs.” County decision-makers should refer to this decision-making tool whenever considering health related issues.

The Falls Memorial Hospital, located in International Falls, is the only hospital located in Koochiching County. Other Hospitals that serve Koochiching County residents include the Rainy River Hospital, Rainy River, Ontario, the Lakewood Health Center in Baudette, which serves the northwestern portion of the County, the North Country Regional Hospital in Bemidji, which serves the southwestern portion of the County, the Northern Itasca Health Care Center Bigfork Hospital, which serves the southern portion of the County, and Duluth area hospitals, which serve people with specialized needs throughout the County.

According to the Koochiching County Public Health Department, important health-related issues facing the County include a shortage of physicians and a growing shortage of nursing staff. Littlefork is currently served by a physician and a physician assistant. Saint Mary's Duluth Clinic (SMDC) fulfills outpatient overflow needs. Two physicians are needed in International Falls. While there is a general shortage of physicians in the rural areas throughout the County, there is a particular shortage of specialists. A continued shortage of specialists may represent a challenge to the provision of health care as the senior population continues to grow. Nursing staff needed in the County include both professionals and paraprofessionals such as Licensed Practical Nurses, Registered Nurses, and Personal Care Attendants. It is important to recognize that physician shortages are a severe problem in rural areas of the US and shortages of nursing staff are a nation wide phenomenon.

In addition to the Falls Memorial Hospital, the medical facilities located within the County include the Duluth Clinic-International Falls, the Littlefork Medical Center and Nursing Home, the Nett Lake Health Care Facility, the Northome

The projected increase in the number of people 65 years of age and older will likely create an increased demand for physicians and nursing professionals in future years.

According to the Koochiching County Public Health Department, important health-related issues facing the County include a shortage of physicians and a growing shortage of nursing staff

Clinic, and Planned Parenthood. In addition to the Rainy River Hospital, the Lakewood Health Center, the North Country Regional, and Duluth area hospitals, other health care facilities that serve County residents include the Altru Clinic in Baudette and the Blackduck Medical Clinic in Blackduck. In addition to the medical facilities, there are mental health, dental, eye care, chiropractic, physical therapy, and holistic therapy facilities available to County residents. Those interested in further information concerning health care options available to County residents should refer to the Health and Wellness section of the Koochiching County Resource Directory.

Relationship of Public Facilities and Services to the Other Plan Elements

The provision of community facilities and services can be divided into two important elements. The first element includes the buildings and services, such as hospitals, schools, police, and fire protection that serve the public. The second element includes the essential skeleton for servicing the community – solid waste and recycling, water, sewer, and power generation and distribution. Together, these elements are part of the County's infrastructure. The County's infrastructure can be thought of as the basic framework that supports other plan elements. This basic framework plays a significant role in the pattern of housing, business, and industrial development in the County because private development tends to follow the location, quantity, and quality of community facilities and services. It influences public policy and land use decisions because greater densities and certain uses are more appropriate in areas that have a concentration of community facilities and services than in areas that do not. The location, quality and quantity of public facilities and services, such as centralized sewer, also plays an important role in relative protection or degradation of the natural environment.

Twenty-Five Years Out

This document is intended to help guide the County in land use decisions and policy development on a variety of topics over the course of the next 25 years. The following scenarios represent two possible views of the County 25 years into the future. The first scenario is the possible outcome of worst case or no action approach to community facilities and services. In the worst case scenario, the County's involvement in community facilities and services issues remains static or decline. The second, best case, scenario is the possible outcome of a proactive approach by County decision-makers. It reflects the implementation of the majority of the recommendations of this Plan.

Scenario 1: Worst Case Scenario

In the year 2025, what would the elements, covered in the community facilities and services chapter, look like? In this scenario, first responder and volunteer fire services would have suffered from recruitment problems and a lack of equipment upgrades due to funding shortages. Some public schools could have been closed

and districts would need to be consolidated due to declining enrolment. The quality of medical services would have declined and would have not been able to keep up with the increased demand for specialists. County residents could experience delays in obtaining emergency medical or fire protection services if the need should ever arise. Children could experience extremely long school bus rides to and from school. Elderly citizens living in the rural parts of the County could have difficulty finding reliable transportation to and from regular doctor appointments because the distance to the nearest clinic has increased substantially since the local clinic closed. This erosion of availability and quality of public services could affect the County's residents' quality of life and Koochiching County's attractiveness as a place to live and raise a family.

Scenario 2: Best Case Scenario

In this scenario the County opted to undertake a comprehensive study to determine the adequacy of emergency service provider staffing, equipment, and partnerships. This study identified important staffing and funding needs and identified a set of goals, strategies, and funding sources to address them. As a result of actively pursuing those goals, strategies, and funding sources, fire stations in the rural parts of the County would be adequately staffed with firefighters and first responders and would be able to upgrade equipment as needed. The County decided to undertake an outreach and education program concerning need to fund the local school districts. As a result, bonding initiatives were successful and schools remained open. The County also provided financial assistance to local clinics in order to help them meet their operating costs, attract specialists, and remain open. Children would be able to attend a local school. The elderly would be able to make regular doctor appointments because the clinic is nearby and public transportation is available to travel to a clinic. There would be sense of security in Koochiching County and the positive impacts of these efforts on the County's quality of live would provide a great incentive for people to stay or relocate to Koochiching County.

ECONOMIC DEVELOPMENT

ECONOMIC DEVELOPMENT

Introduction

The purpose of this chapter is to describe the current state of Koochiching County's economy, identify assets and barriers for economic development, and to discuss areas that provide opportunities for economic development. The chapter concludes with a discussion on economic development assistance.

Economic development has been a major concern for Koochiching County for a number of reasons. A vibrant local economy provides a stronger tax base to finance better public services and schools. A strong local economy also increases opportunities for entrepreneurs, provides more opportunity for young adults to remain in the County, and offers residents a choice of a wider range of goods and services. The County recognizes that in order to maintain a vital local economy it is important to maintain the community's existing economic base as well as attract new businesses.

Population projections indicate a decline in people of working age over the next 25 years and an increase in retirees. This decline could impact the economic opportunities for County residents and affect the economic base that allows provision of a wide range of services, which could negatively impact the overall quality of life in Koochiching County.

The County's economy is influenced by many public and private entities and trends at a local, regional, national, and even global level. The County can play an important role in economic development through funding, coordination, public investments, political influence, and other incentives. This chapter will start with a discussion of the County's current economic profile and performance in comparison to the rest of the State. This will be followed by a discussion of the County's assets and barriers for economic development. The chapter will conclude with a discussion of factors influencing location decisions and the identification of opportunities and strategies for maintaining and expanding the County's economic base. A number of economic development assistance organizations and potential funding sources are described at the end of the chapter. Through the planning process goals, objectives, and strategies are developed to work towards a healthy local economy. These are included in the implementation chapter.

Economic development is a key concern. A vibrant economy provides opportunities for the County's residents and improves the fiscal health of the County.

Economic Base

This section will analyze Koochiching County's current economic situation. Economic indicators used for this analysis include income, unemployment rates, workforce, and job growth. Comparisons of these indicators over time and with other communities will show how economic trends in Koochiching County compare with other locations. These indicators can be used to evaluate the effectiveness of the economic strategy. This section will be followed by a discussion of basic industries in Koochiching County.

Population

As was described in the introduction, Koochiching County is experiencing a declining population. Of special concern to economic development are the population projections made by the Minnesota State Demographer. The projections indicate that County's population will become increasingly older between now and 2025. Significantly, the traditional working age population, the number of people between the ages of 18 and 65, is projected to decline while the senior population is projected to increase. According to State Demographer projections, the number of people between the ages of 19 and 65 will decrease from 9,015 in 1995 to 7,520 in 2025, a decrease of about 17 percent. When this age group is further divided, and the number of people who are under age 20 are taken into account, it is clear that further projection would indicate a continued decline in the working age population beyond 2025. Such a decrease in the County's working age population would mean that the County's workforce in 2025 and beyond will be considerably smaller than it is today. A shrinking workforce has implications regarding the viability of existing businesses and the ability of the County to attract new business. It is important for the County to take steps to meet the challenges of a shrinking workforce.

Income Levels

Income information is considered an indicator of a community's economic health. According to the U.S. Census Bureau, median household income in Koochiching County was \$23,411 in 1990, 24 percent lower than that of the State as a whole at \$30,909. The County's per capita income in 1990 was \$11,732, 18 percent lower than the State as a whole at \$14,389. More recent income estimates show that the County's per capital income continues to lag behind that of the State as a whole. Table 6.1 indicates that the estimated per capita income for Koochiching County in 2000 was almost half that estimated for the State. However, the County's per capita income increased by 33 percent compared to 23 percent statewide between 1990 and 2000.

The County's projected population decline is expected to impact the County's workforce and availability of services.

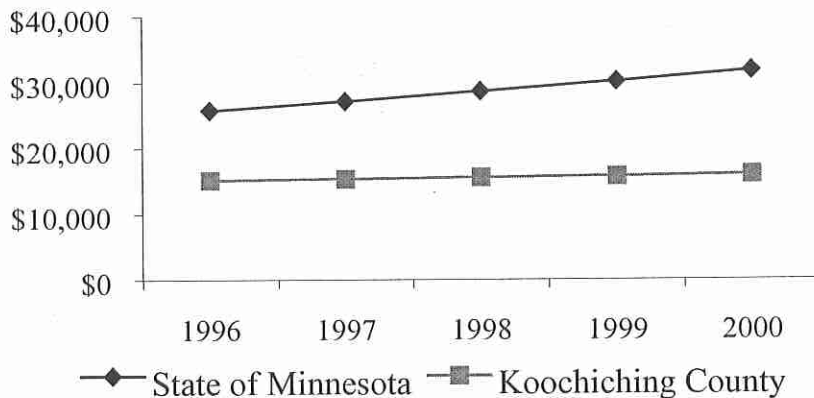
Koochiching County's income levels lag behind the State as a whole by an estimated 50 percent.

Table 6.1: Per Capita Income Estimates, Koochiching County and the State of Minnesota

| | 1996 | 1997 | 1998 | 1999 | 2000 |
|--------------------------------------------------------|----------|----------|----------|----------|----------|
| State of Minnesota per capita income | \$25,700 | \$27,100 | \$28,600 | \$30,100 | \$31,700 |
| Koochiching County per capita income | \$15,100 | \$15,300 | \$15,500 | \$15,700 | \$15,900 |
| State per capita income less County | \$10,600 | \$11,800 | \$13,100 | \$14,400 | \$15,800 |
| County as percentage of State per capita income | 59% | 56 % | 54% | 52% | 50% |

Source: Minnesota Planning

Figure 6.1 displays the per capita income estimates for Koochiching County and the State of Minnesota between 1996 and 2000 in graphic form.

Figure 6.1: Per Capita Income, 1996-2000

Source: Minnesota Planning

Employment

Although Koochiching County's unemployment rate has declined throughout the 1990's, it has remained high compared to the State as a whole. In January of 2001, the unemployment rate for the County was 6.6 percent while that of the State was 3.3 percent. Table 6.2 provides annual average unemployment rate information for Koochiching County and the State of Minnesota for the years 1996 through 2000 along with the average rates for that time period.

County per capita income increased 33 percent compared to 23 percent statewide between 1996 and 2000.

The County's unemployment rates have been four percent above state average over the last five years.

Table 6.2: Unemployment Rates, 1996-2000

| Year | Koochiching County | State of Minnesota |
|---------|--------------------|--------------------|
| 1996 | 8.0% | 4.0% |
| 1997 | 7.1% | 3.3% |
| 1998 | 6.7% | 2.5% |
| 1999 | 6.8% | 2.8% |
| 2000 | 6.6% | 3.3% |
| Average | 7.0% | 3.2% |

Source: Minnesota department of Economic Security

Koochiching County experienced a 44.5 percent increase in employment between 1996 and 2000.

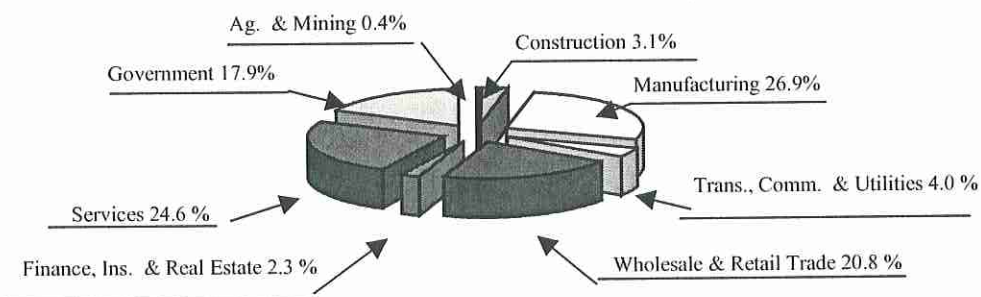
The Minnesota Department of Economic Security tracks covered employment and wages by County in Minnesota. Table 6.3 indicates that the number of people employed in all major industry groups increased between 1996 and 2000. Table 6.3 indicates that most job growth is currently taking place in government. Overall, employment has declined county wide by 1.5 percent.

Table 6.3: Annual Average Employment by Major Industry Group, 1996-2000

| Industry Group | 1996 | 1997 | 1998 | 1999 | 2000* | Change 1996 - 2000 | |
|----------------------------|--------------|--------------|--------------|--------------|--------------|--------------------|-------------|
| | | | | | | Number | Percent |
| Agriculture & Mining | 15 | 11 | 21 | 20 | 17 | 2 | 13.3 |
| Construction | 198 | 181 | 181 | 183 | 189 | -9 | -4.5 |
| Manufacturing | 1,557 | 1,602 | 1,579 | 1,567 | 1,525 | -32 | -2.1 |
| Trans. Comm. Util. | 200 | 220 | 237 | 221 | 211 | 11 | 5.5 |
| Wholesale & Retail Trade | 1,191 | 1,276 | 1,222 | 1,173 | 1,170 | -21 | -1.8 |
| Finance, Ins., Real Estate | 148 | 146 | 138 | 128 | 120 | -28 | -18.9 |
| Services | 1,540 | 1,502 | 1,443 | 1,413 | 1,377 | -163 | -10.6 |
| Government | 992 | 1,067 | 1,050 | 1,066 | 1,147 | 155 | 15.6 |
| Total | 5,841 | 6,005 | 5,871 | 5,771 | 5,755 | -86 | -1.5 |

*At the time of writing, average monthly data available for the year 2000 only include monthly averages through June. Source: MN Department of Economic Security and Northspan Group, Inc.
Source: Minnesota Department of Economic Security

Figure 6.2 illustrates the percentage of the County's employment each of the major industry groups accounted for in 2000.

Figure 6.2: Percent of County Employment By Industry, 2000

Source: Minnesota Department of Economic Security

Woods and Poole Economics, a reputable private data and economic forecasting resource, provides county-level economic and demographic forecasts across the nation. Woods and Poole forecasts future economic growth in Koochiching County using current local and regional trends. The Woods and Poole historic data indicate that manufacturing is the County's economic engine. The Woods and Poole forecast indicates that manufacturing will continue to dominate the County's economy.

Basic Industries

Basic industries are typically businesses of which the markets generally lie outside the local economy; basic industries export goods and import dollars into the local economy. This is in contrast with non-basic industries that generally do not bring dollars into the local economy but circulate dollars within it. The following economic base analyses is incorporated from the *Framework Plan* (Biko, 1999).

Manufacturing

Manufacturing is the most prominent basic industry in Koochiching County. However, economic growth is occurring more rapidly in other sectors of the economy. Koochiching County's industrial economic base is closely linked to the Boise Cascade facility in International Falls. Of the estimated 1,600-1,800 manufacturing jobs in the County, approximately 1,200 are associated with the Boise Cascade.

The paper products industry in northern Minnesota, including the Boise Cascade facility, is an industry with fully developed markets, technologies, and infrastructure. Given the potential political risks associated with expanding sustainable harvest levels of forest resources, and the shrinking age diversity of existing aspen stands in northern Minnesota, the industry is not likely to realize substantial growth. The *Overall Economic Development Program for the Arrowhead Region* (ARDC, 1998 Update) placed increases in paper and wood products manufacturing as a secondary economic development strategy, behind other manufacturing development. Strong economic growth in the existing forest-

Manufacturing is the County's economic engine and is expected to fulfill this role into the foreseeable future.

Basic industries import dollars into the local economy. Non-basic industries circulate dollars within the economy.

The paper products industry is not likely to realize substantial economic growth under the current market conditions.

based industry in Koochiching County could occur, however, given one or more of the following:

- greater access to new sources of wood fiber;
- improvements in forest productivity that allow sustainable harvest levels to increase;
- re-tooling for greater efficiency and to allow use of a wider range of fiber; and/or
- creating new value-added production lines.

Tourism and Recreation

Tourism and recreation also serve a basic industry function in Koochiching County, similar to manufacturing. The tourism and recreation businesses comprise a significant portion of Koochiching County's service and retail industry. Hotel and eating/drinking sales generated approximately \$24 million of the \$138 million in gross retail sales in 1996. When added to the tourism-related purchases of general merchandise, gas, and food, the tourism and recreation industry accounts for as much as 25% of total retail and service sales in the County.¹

Prospects for economic growth are, however, uncertain. Hotel and lodging employment are declining, while employment in eating and drinking businesses is growing. Furthermore, average wages in the tourism and recreation industries are not likely to approach manufacturing wages. The tourism and recreation business provides important diversity to the Koochiching County economy, helping to mitigate economic ebbs and flows associated with industries that depend on natural resources.

Agriculture

Agriculture is the final basic industry in Koochiching County. The value of farm products can vary considerably from year to year, and estimates of farm income are imprecise. The Minnesota Department of Agriculture estimated 1996 farm cash receipts in the County to be approximately \$4.3 million. The 1997 Agricultural Census estimated the market value of agricultural products to be approximately \$3.4 million.

Tourism and recreation serve as a basic industry and account for an estimated 25 percent of the total retail and service sales.

Agriculture contributes a limited amount to the County's economy but is seen as an important component that diversifies the economic mix.

¹ Data from the Minnesota Department of Revenue. The sales data includes sales information only from businesses that pay sales or use taxes, and consequently understates the total retail and service sales activity in the County. Total tourism spending is estimated from lodging sales - lodging accounts for approximately 28% of total tourist spending in the Arrowhead Region (Overall Economic Development Program 1998 Update, ARDC, p. 46)

While agriculture is a small component of the County economy, it lends diversity to the County's economic mix. The potential for supplying local markets with cold weather crops such as cabbage and berries still exists. With economic development efforts in coordinating producers and markets, agriculture could increase its economic role. The increase in the number of part-time farms between 1992 and 1997 (about five percent) indicates that farm income may be adding income diversity to Koochiching households with farming acting as a supplement to household income from other industries.

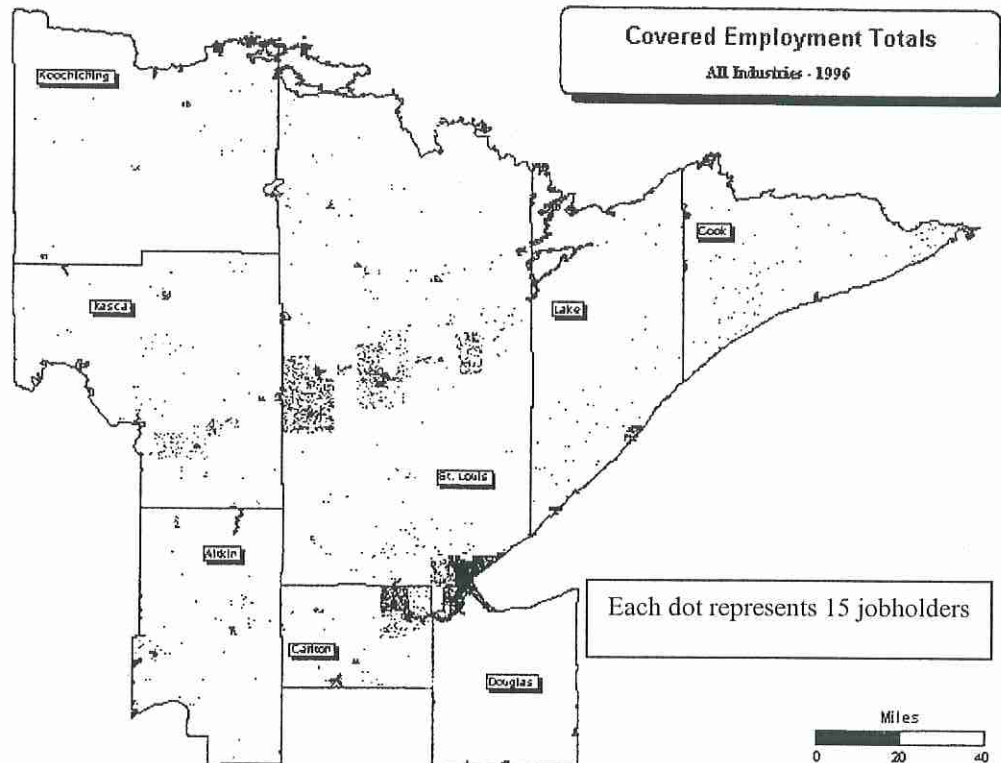
Retail Businesses

Retail is generally considered a non-basic industry. However, with tourism the retail industry is able to import dollars into the region. As discussed above in the Tourism and Recreation section, approximately 25 percent of total retail sales and service sales are accounted for by the tourism and recreation industry. As is the case with other rural areas in Minnesota, Koochiching County has been negatively impacted by the development of regional retail centers (i.e., Bemidji, Grand Rapids, Hibbing, Virginia and Duluth) having a strong presence of large national discount retailers. Discount retailers have a devastating effect on local retail businesses. Consumer profile changes show more emphasis on lower pricing than on the level of service provided. Local retailers are also likely to face increasing competition from e-commerce on the Internet. This trend has a negative impact on local retailers and leads to a loss of retail opportunities offered within the County. Development of a business retention effort to support existing businesses and by offering resources to keep them viable and financially stable could be a strategy to retain and possibly expand available services in the County.

Koochiching County's retailers have been impacted by competition from large regional discount retail centers.

Economic Geography

Jobs are not evenly distributed across the County. The International Falls area and developed areas along the Rainy River and Rainy Lake are the location for a large portion of the economic activity in the County. Several other job centers exist with both basic and non-basic activity: Littlefork, Northome, Big Falls and Kabetogama provide local retail, manufacturing, and service jobs. The County's distribution of jobs reflects the County's population distribution.

Figure 6.3: Job Distribution for the Arrowhead Region.

Source: Minnesota Department of Economic Security/Biko Framework Plan (1999)

Koochiching County is relatively isolated from the U.S. and the Northeastern Minnesota regional economy. The location on the border with Canada can be considered an asset.

Koochiching County is relatively isolated economically from both the U.S. and the Northeastern Minnesota regional economy. The Department of Economic Security (DES) divides the state into six economic regions. DES includes Koochiching County in the Northeast Region, along with Cook, Lake, St. Louis, Itasca, Aitkin, and Carlton counties. DES data shows the economic activity in Koochiching County to be quite small in relation to other northeast region counties. The Arrowhead Regional Development Commission noted, in its 1998 update of the *Arrowhead regional Overall Economic Development Program*, (ARDC, 1998), that the Koochiching County labor force comprised only four percent of the total Arrowhead labor force.

The isolation of Koochiching County's economic center (International Falls) makes it difficult to attract regional dollars to the County. International Falls is 150 miles away from the nearest metropolitan area (Duluth) and 300 miles from the Minneapolis/St. Paul regional area. International Falls' proximity to Canada provides a link to a regional economy not shown in DES or ARDC analyses. The Canadian influence on the Koochiching economy is greatly affected by the exchange rate. The geographic and transportation links to Canada remain, however, a unique asset that mitigates for the County's isolation from the regional Minnesota economy.

Assets and Barriers for Economic Development

In order to define a direction for economic development activities it is important to identify what assets the County has to build upon and what barriers may need to be overcome. As indicated in the economic base analyses, Koochiching County's economy has historically relied on the natural resources of the area for the wood products industry, tourism, and agriculture. These industries have some growth potential and will remain important for the regional economy in the coming years. However, economic growth in these traditional areas may be limited as a result of availability of resources for the timber industry and relatively low wages in the tourism industry compared to manufacturing jobs. Agriculture is under at a disadvantage given marginal land and yield, and national trends which favor the larger, high tech farming industry of the future. Other natural resource based opportunities that are being pursued by the County include peat harvesting and the Northome bio mass electric generation project.

The natural resource industry will remain an important part of the County's economy. However, growth potential in this area may be limited.

Assets:

A number of assets have been identified that could benefit economic development activities in Koochiching County. These include:

- The County's transportation infrastructure (Highway, Air, and Rail) and international port facilities can be considered an asset. The Falls-International Airport has experienced some growth in recent years as a result of active marketing and attractive fares. This facility could experience future growth as an aviation related manufacturing facility site and related complementary activities such as expanded cold weather testing.
- The County's climate creates opportunities for cold weather testing. Efforts to design and develop a major new cold weather testing facility within the County are being pursued on a state level and could have significant long term impacts on this economic growth opportunity.
- The County's natural amenities such as its forests, rivers and lakes offer a great resource for tourism and recreation related economic opportunities. This includes both traditional tourism such as fishing, snowmobiling, and family vacations and niche markets such as birding, wildlife and wildflower watching.
- The community infrastructure in place has adequate capacity to accommodate growth.
- The County's good bond rating and low levels of debt are positives in the areas of taxes and the ability to offer incentives for economic development such as financing, workforce training, and provision of infrastructure.

Koochiching County has a number of assets that could benefit economic development activities:

- *Transportation infrastructure*
- *Favorable climate for cold weather testing*
- *Natural resources*
- *Community infrastructure*
- *Good bond rating*
- *Community College.*

- Rainy River Community College provides an important workforce building asset and offers opportunities for partnerships with businesses for workforce training.

Barriers

A number of barriers have been identified that may impact future economic development in Koochiching County. These include:

Barriers to Koochiching County's economic development include:

- *Regional competition for economic development*
- *Location*
- *Workforce*
- *Environmental limitations of the land*
- *Lack of available commercial sites*
- *Access to communication infrastructure.*
- Regional competition for businesses can create a barrier and affect success in attracting new businesses to the County. Koochiching County has strong competition from other counties and communities in Northern Minnesota that are vying to attract similar businesses. A clear example is the current situation with mine closings on the Iron Range. The Iron Range Resources and Rehabilitation Board (IRRRB) is providing large incentive packages to attract new businesses to make up for the loss in the mining industry.
- Location can be considered a disadvantage given the winter climate and geographic isolation from major manufacturing and population centers of the State and nation. The County can mitigate this by determining what type of industries are less influenced by geography such as data processing and technical support centers and working to attract these type of businesses.
- The availability of a skilled workforce needs to be assessed in order to determine if a new business can find an adequate number of skilled employees. Assessing the skills of the area's workforce would be valuable in providing information to attract new business prospects to the area. Koochiching County's unemployment rate, though higher than the state average, still amounts to a relatively low available labor pool. Companies may have to recruit labor from outside the area. Union presence also may be perceived as a barrier for some companies, manufacturers of durable goods in particular.
- The high percentage of wetlands (68 percent) in Koochiching County impacts a number of potential development sites. Approximately 30 percent of the existing commercial and industrial zoned properties have wetland constraints. The State's permitting process is slow and expensive for natural resource based projects.
- The County currently lacks commercial sites with infrastructure that are ready for development and buildings that could, on a short-term basis, accommodate new businesses. An inventory of available and desirable sites and facilities with infrastructure in place would be a good starting point for further assessment of needs in this area as well as offer a data base of information that could be used for recruitment purposes. The lack of a real estate multiple listing service is considered a barrier as well.

- Access to telecommunications and advanced technology is another potential barrier. The Koochiching County telecommunications initiative is actively working to understand, assess, and address this issue. As a result of this great progress in provision of services has been made.

Factors Influencing Location Decisions

When reviewing the assets and barriers to economic development in Koochiching County it is helpful to put in perspective how these may affect location decisions of prospective new businesses. The Paragon Decision Resources, Inc., a national site locations consultant, recently presented *Trends in Site Selection* in April of 2000 to Minnesota Power and regional recruitment professionals in Duluth. Paragon Decision Resources has been working with companies to determine the most important factors when choosing a new location. The following is a list of important attributes that a company typically examines in a community or area when determining the best location for their new facility.

- Labor conditions;
- Labor costs (wages and fringes)/labor relations;
- Utility costs and conditions;
- Accessibility/freight costs;
- Taxes (corporate/property) and business climate;
- Site/building availability/construction costs;
- Environmental permitting;
- Incentives (financing, training, infrastructure); and
- Relocation costs and pay back versus recurring operating costs.

Koochiching County's barriers to economic development impact three of the top four factors influencing a typical company's location decisions. The County's available skilled workforce may currently be a limiting factor for more technology and customer service oriented industries. The union presence in the County may also negatively relate to labor conditions and costs for some companies. Its location and distance from markets can negatively impact accessibility and freight costs for industries in which freight costs are an important part of the product cost. Site and building availability could also be impacted by the limited availability of commercial buildings and ready to develop commercial properties. The County's good bond rating and low levels of debt are

Important factors that may affect the County's competitiveness compared to other areas include the availability of a skilled workforce, location, and availability of sites for commercial activities.

The County's good bond rating and low levels of debt offer opportunities to provide incentive packages for economic development.

positives in the areas of taxes and the ability to offer incentives such as financing, training and infrastructure.

Some of these factors can be altered or influenced in a variety of ways including workforce training and recruitment programs, development of utility infrastructure on industrial and commercial sites, inventory of real estate needs and availability, and use of financial incentives. These factors should be considered in the goals and strategies for economic development.

Opportunities for Economic Development

A number of economic development opportunities have been identified through the planning process and are presented in the following paragraphs. For each of these opportunities several strategies are discussed to promote economic development. The economic development objectives and strategies in the implementation chapter build on these areas of opportunity.

Retention and expansion of existing businesses are an important element of the County's economic development strategy.

- *Support Existing Businesses (Retention & Expansion)*

It is important that existing businesses within the County are provided the same support and attention that would be given to a new business siting. The retention of existing business is a target for economic development that few communities can afford to ignore. Through the 1980's and 1990's, according to some surveys, 80 percent of all new jobs have been generated by smaller (less than 500 jobs) existing businesses.

A survey of existing businesses can be a tool to determine the current business climate of Koochiching County. If problems are identified, it may be an issue that the County's economic development organizations can and should address. Common forms of assistance that contribute to a good business climate for existing businesses include assistance in packaging of loans, federal procurement support, education and consulting on management and business development issues, and employee training assistance.

New business recruitment effort should be targeted towards businesses that match the attributes the County has to offer.

- *Targeting/Diversification*

Successful business attraction is based on targeting prospective businesses with needs that match the attributes the County has to offer. National and regional (Upper Midwest) business growth trends are initial indicators for potential target industries. The difficulty with this strategy is the availability of resources necessary to target, approach, and attract new businesses in a way that is both cost effective and achieves an acceptable return on such investment. The Arrowhead Business Connection (ABC) program can be a valuable resource in this effort. Another consideration is looking at key supplier businesses and relationships for both existing companies in Koochiching County and primary business attraction targets. Supplier relationships are a secondary targeting approach that can be

helpful and successful. A third consideration is relationship targeting. A well thought out and coordinated targeting effort should be looked at as one of the economic development strategies to pursue.

- *Telecommunications*

Technology and telecommunications based industries are likely to play a vital role for economic development and diversification in Koochiching County. Telecommunication offers opportunities for economic diversification because businesses can be located almost anywhere as long as adequate telecommunications infrastructure and a skilled workforce is in place. The locational and environmental disadvantages of Koochiching County are of less importance when competing for technology based businesses such as data processing and call centers. The development of the Koochiching County Telecommunications Initiative will provide direction to the County in improving access and bandwidth capacity for its telecommunication infrastructure. Future attraction targets should be based upon this new infrastructure.

Technology based industries are likely to play a vital role for the County's economic diversification.

- *Leadership*

The development of an economic development plan offers the County an opportunity to take on a leadership role. The Koochiching County Development Authority (KEDA), a joint economic development authority of the County and the City of International Falls, employs a full time economic development staff person. The County has the power and authority to mobilize resources to accomplish economic development goals and objectives that result from this planning process. Successful development and implementation of an economic development plan will strongly rely on County leadership in bringing the various interests and resources together and its ability to craft partnerships locally and regionally.

The development of an economic development plan offers the County to identify areas to provide leadership and resources to promote economic development.

Economic Development Assistance

In order to plan for the future, it is important to understand the economic development opportunities present within the County. There are numerous organizations in Koochiching County that work to protect and promote economic development. There are also a number of funding sources available to assist in economic development. The following is a brief description of each economic development organization and overview of funding sources.

A number of organizations within Koochiching County offer economic development assistance in the form of low interest loans, grants, and technical assistance.

- *Koochiching Development Authority (KDA)*

KDA is the County's development authority and the vehicle used to provide direct funding for infrastructure, business development and other financial incentives which promote business and economic development. The KDA has both housing and redevelopment authority as well as Port Authority Powers. This provides it

with a number of legal and financial tools to promote economic development in Koochiching County.

- *Koochiching Economic Development Authority (KEDA)*

KEDA is a joint County and City of International Falls authority created to assist communities with economic development within the County. The objective of the KEDA is to develop, encourage, promote and protect the business interests of Koochiching County.

- *Koochiching Economic Development Partnership (KEDP)*

The KEDP is an organization used to distribute grants to promote small scale economic development in Koochiching County. Every city gets an apportionment of the grant money that is available. Criteria used for grant distribution include: creation of jobs, expansion of taxbase, job retention, public service. The KEDP board has one representative from each city as well as two County Commissioners representing International Falls and one representing rural Koochiching County.

- *Kooch Co, Inc.*

Kooch Co Inc., is a private non-profit development organization that provides funding support to Koochiching County businesses. Kooch Co, Inc. has a loan program that is intended to provide loans for the creation and retention of permanent employment through the establishment of new businesses or the expansion of existing businesses in Koochiching County.

- *Small Business Development Center (SBDC)*

The SBDC located at the Rainy River Community College provides valuable technical assistance to new and existing businesses.

- *International Falls Area Chamber of Commerce*

The Chamber actively promotes and markets a positive business climate in International Falls and Koochiching County that encourages residents to support and carry out business within the City and County.

- *Convention and Visitor Bureau*

The Convention and Visitors Bureau (CVB) promotes tourism and recreation in the International Falls and Rainy Lake area. The CVB derives its funding from lodging taxes.

- *International Falls Main Street, Inc.*

The International Falls Main Street is a locally funded non-profit organization which mission is to revitalize the International Falls Main Street. The foundation of the program is historic preservation and the incremental approach to revitalization. The Main Street Program approach uses a four-point approach. The program focuses on organizing downtown businesses and civic groups, promoting a positive image for the downtown area, working towards visual

attractiveness of the downtown area, and strengthening the downtown's existing economic assets.

- *Regional Economic Development Organizations*

Other regional organizations which Koochiching County can leverage assistance includes such organizations as the Arrowhead Business Connection (ABC) in terms of regional targeted marketing and business recruitment program for the Arrowhead Region.

- *Funding Sources*

A number of funding sources offering primarily low interest loans and venture capital (equity investments) are available to promote economic development. These funding sources include:

- Arrowhead Community Economic Assistance Corporation (ACEAC)
- Arrowhead Regional Development Commission Revolving Loan Fund
- Kooch Co, Inc. Business Loan Program
- Koochiching County Enterprise Zone Credits
- Great River Energy (GRE) Business Financing Program
- Minnesota Business Finance Corporation SBA 504 Loan Program
- Minnesota Investment Fund through the Department of Trade and Economic Development (DTED)
- Minnesota Power Loan Program
- Northeast Entrepreneur Fund, Inc.
- Northeast Ventures, Inc.
- Northland Foundation Business Loan Program
- Northland Foundation Loan Guarantee Program
- Small Cities Development Program through DTED for community development

Relationship of Economic Development to Other Plan Elements

Economic development influences the other plan elements in a number of ways as do transportation, land use, natural resources, and housing influence economic development. Koochiching County's natural resources provide both opportunities and constraints for economic activities. The County's timber resources are one of the County's main economic engines. The abundant recreational opportunities provided by the County's natural resources provide economic benefits as well. The wetland constraints and related permitting is an example of some of the constraints the County's environment may pose for development. Land use needs are impacted by the demand for commercial and industrial sites to accommodate expansion and new economic activities. Availability of public services are an important component in the County's ability to attract economic development and will to a great extent determine where new economic development can and will be located. In addition, adequate access to the transportation network plays an important role whether a location is suitable for commercial development.

Availability of housing is important for economic development as well. Employees that may be relocating to the County will need a range of housing options from which to choose.

Twenty-Five Years Out

This document is intended to help guide the County in land use decisions and policy development on a variety of topics over the course of the next 25 years. The following scenarios represent two possible views of the County 25 years into the future. The first, worst case, scenario is the possible outcome of a no action approach to economic development. In the worst case scenario, the County's activities toward economic development remain static or decline. The second, best case, scenario is the possible outcome of a proactive approach to economic development by County decision-makers. It reflects the implementation of the majority of the recommendations of this plan.

Scenario 1: Worst Case Scenario

In the year 2025, what would the elements covered in the economic development chapter look like? In a no action scenario Koochiching County would continue to rely heavily on the natural resources based industry to drive its economy and would be vulnerable to the cyclical nature of this industry. Limited growth opportunities in the paper industry could lead to a status quo situation in available manufacturing jobs. The County's lack of an available, skilled labor force would prove to be a limiting factor for economic diversification in more technology based industries. Tourism would continue to play a significant role in the County's economy. The retail businesses in the County would continue to decline due to stiff competition from regional discount retail outlets. A continually declining population, would erode the overall available customer base. The County would miss out on a number of economic development opportunities because of a lack of available sites for commercial and industrial development.

Scenario 2: Best Case Scenario

In this futuristic scenario, the County opted to implement a proactive approach regarding economic development issues. The County's economic development agency, KEDA, would conduct a Countywide strategic planning process that would involve all economic development organizations and business interests. The County also would decide to develop a one-stop shop for economic development resources for prospective businesses. In response to the strategic planning process, workgroups would be developed that concentrated on improvement of the County's business climate. As a result of this, a business retention and expansion program would be developed and a targeted business recruitment program would be implemented. The more coordinated effort would identify industries that were a good match with the County's strengths and assets and would improve the amount of information available to the prospects, thus leading to more success in attracting new businesses. The economic development

strategy would ensure Koochiching County maintains its quality environment. The proactive approach would ensure adequate building space and build ready sites were available. This, combined with competitive incentive packages, could greatly improve the County's success in attracting new businesses. The County's active involvement in ensuring that the latest information technology would be available combined with an active workforce development program would enable the County to attract high-tech related industries. This proactive approach would result in successfully diversifying the County's economy and make it more resilient to economic downturns in the natural resources related industry sectors.



HOUSING

H OUSING

Introduction

This chapter addresses a topic that arguably has the most direct effect upon Koochiching County residents; the immediate environment in which they live and raise their families. The principal goal of the housing chapter is to identify the current and future housing needs of Koochiching County. The ability to obtain safe and affordable housing is an essential element in building a stable and thriving community. Toward that end, this chapter presents data, identifies trends and issues, and formulates goals for the County's housing environment. This chapter is intended as the initial step in a process that will culminate in a comprehensive understanding of the state of housing in Koochiching County.

The chapter begins by providing some general observations concerning the housing situation in Koochiching County. These general observations are based upon available data and conversations with housing professionals who work within the County. These observations are followed by an inventory of the County's existing housing conditions. The purpose in providing such an inventory is to establish a baseline of housing data for comparison with subsequent data gathering efforts. Next, a discussion of housing resources that are available to County residents, including a list of housing-related organizations and the services they offer, is provided. The professionals associated with the resources identified in this chapter represent a valuable source of information and insight for County decision-makers in addressing housing issues. The chapter will conclude with the identification of housing issues, the articulation of desired outcomes, and the recommendation of strategies that will help bring those desired outcomes to fruition.

General Observations

At first blush the demographic and housing data that follow would seem to suggest that there are enough housing units available in Koochiching County to meet current and future demand. After all, there were 7,825 housing units and 6,018 households in 1990, the County's population continues to decline, and the number of housing units continues to grow. However, the general consensus among housing professionals who work within the County is that a significant proportion of the County's housing stock is substandard or dilapidated. Of principal concern is the fact that substandard and dilapidated housing often contain health and safety hazards, placing their residents at risk, and they may have severe weatherization concerns, rendering them very expensive to heat. The substandard condition of much of the County's housing stock can be attributed primarily to its generally old age and to years of deferred maintenance.

It is important to consider the age of the housing stock when evaluating the overall quality of available housing. Because structures such as homes have a finite functional life span, communities that have older housing profiles may face

Housing may have the most direct effect upon Koochiching County residents because it is the immediate environment in which they live and raise their families.

Much of the County's housing stock may be substandard or dilapidated.

In 1990, much of the housing stock older; one-half was constructed before 1962 and one-fourth was constructed before 1939.

Substandard and dilapidated housing appear to be most critical in the International Falls and Northome areas. Of particular concern is a lack of rental housing for families with children.

housing shortages if steps are not taken to rehabilitate older housing units and construct new housing units. At the time of the 1990 U.S. Census, a full one-half of Koochiching County's housing stock was constructed prior to 1962 and nearly one-fourth was constructed prior to 1939. According to the U.S. Department of Housing and Urban Development (HUD), the average life span of a house without significant annual maintenance is 40 to 50 years. The fact that the County has a considerable number of homes that are more than 40 years old may indicate a need for housing rehabilitation in Koochiching County and its cities. Communities concerned about the age and condition of their housing stock should determine their need for housing rehabilitation and identify opportunities to address those needs.

While this generalization concerning the substandard and dilapidated condition of much of the County's housing stock can be made throughout Koochiching County, substandard and dilapidated housing conditions appear to be most critical in the City of International Falls and the area in and around Northome. Of particular concern is the condition of rental units within these two areas of the County.

In International Falls, there is a significant lack of rental housing suitable for families with children. Although numerous advertisements can be found for rental units in the International Falls area, most of them are for one-bedroom units that cannot accommodate a family with children. What is needed in the International Falls area are more rental units having three and four bedrooms. There is also concern that much of the rental housing that is available is substandard, contains health and safety hazards, and suffers from severe weatherization inadequacies.

There is a perception among housing professionals within the County that a shortage of rental housing suitable for families with children exists in the Northome area. The perception of a current housing shortage is compounded by the prospect of greater future demand for rental housing associated with two economic development projects proposed for the area, the Biomass Project and the Bear Center. The proposed Biomass Project would create between 20 and 25 new jobs and the Bear Center would create over 30 new jobs. People from outside the immediate area would likely fill many of the jobs created by these proposed projects. If either one of these projects comes to fruition, the housing shortage in the Northome area may quickly become a housing crisis.

Countywide, there was a significant reduction in the number of multi-unit buildings between 1980 and 1990. In absolute terms, the number of units located in buildings containing two or more units declined by 272, dropping from 1,008 in 1980 to 821 in 1990. During the same period, the number of mobile homes increased by 584 units, increasing from 687 in 1980 to 1,271 in 1990. Although it is impossible to draw an accurate conclusion from these data, they may indicate

A significant reduction in the number of housing units located in multiunit buildings, and an increase in the number of mobile home between 1980 and 1990 may indicate a reduction in rental housing options for County residents.

that there were fewer available rental housing options for County residents in 1990 than there were in 1980.

Population projections made by the Minnesota State Demographic Center indicate that while the County will experience an overall decline in its population over the next 25 years, that portion of the population age 65 and older will nearly double in both absolute and relative terms. It is the consensus among housing professionals that the future housing needs of the County's senior population will likely be met. Having said that, however, there is the expectation among these same professionals that there will be a high demand by seniors for middle-income single-level housing. The argument for an increase in demand for these types of units is that there will be an increase in the population of moderately well-off seniors who will seek to live independently. For this population, townhouse or condominium living will likely present a desirable housing option, as opposed to the more traditional senior center or high-rise apartment complex. Unfortunately, there currently does not appear to be enough of this type of housing in the County to meet the current demand, let alone the anticipated future demand.

In order to begin the process of addressing the concerns shared by the housing professionals who work within the County, data will need to be collected in order to confirm the legitimacy of those concerns, quantify the severity of any problems that are found to exist, and determine their geography. Data from the 2000 U.S. Census will begin to become available in 2001. Comparisons of the 2000 Census data with the baseline data provided in this document will allow for the detection of trends relevant to housing issues. However, in order to get beyond the limited analysis that this data allows, and to discover the existence, severity, and geography of any existing housing problems, a comprehensive housing needs analysis will likely have to be undertaken. A comprehensive needs analysis will establish the condition of the County's housing stock, determine the extent of any needed rehabilitation, identify the type and number of new housing units that need to be constructed now and in future years, and identify the strategies the County can pursue in an attempt to address these issues. Furthermore, the documentation of the current state of the County's housing situation, that a comprehensive needs analysis would provide, can offer substantial proof of need when pursuing funding opportunities to address any problems that have been identified. An ideal scenario for the conduct of a comprehensive needs analysis would include a partnership between the County and the various cities within it.

Although an overall decline in population is projected over the next 25 years, the population of seniors is projected to nearly double. As a result, there may be an increase in demand for middle-income, single-level housing.

A Comprehensive needs analysis can establish the current condition of the County's housing stock, determine the extent of any needed rehabilitation, identify the types and number of new housing that is needed now and in the future, and identify the strategies that can be pursued to address housing issues.

Inventory of Existing Housing Conditions

Census Data

Census Data provides a baseline of information for comparison with subsequent data gathering efforts, and can be utilized as control variables for the analysis of survey and field data during the course of a future comprehensive housing needs assessment. Census data can help to identify trends and provide insight into the patterns of change that have occurred within Koochiching County. However, the

census data available at the time of writing is ten years old and can only be used as an indicator of trends. Demographic projections have been calculated by the Minnesota State Demographic Center and are included in some of the following

tables and figures. Table 7.1 provides 1980 and 1990 census data for Koochiching County. This data indicates the general demographic trends that occurred during that period.

Table 7.1: General Demographic Changes between 1980 and 1990

| Koochiching County | 1980 (% County pop.) | 1990 (% County pop.) |
|--------------------------------------|----------------------|----------------------|
| Population | 17,571 | 16,299* |
| Persons 65 and Over | 2,046 (12%) | 2,437 (15%) |
| Persons Under 18 | 5,390 (31%) | 4,149 (25%) |
| Average Household Size | 2.8 | 2.58 |
| Persons in Poverty Status | 2,114 (12%) | 2,067 (13%) |
| Total Number of Housing Units | 6,684 | 7,825 |
| Number of Occupied Units | 6,131 | 6,025 |
| Owner Occupied Units | 4,868 (79%) | 4,695 (78%) |
| Renter Occupied Units | 1,263 (21%) | 1,330 (22%) |

Source: 1980 U.S. Census and 1990 U.S. Census.

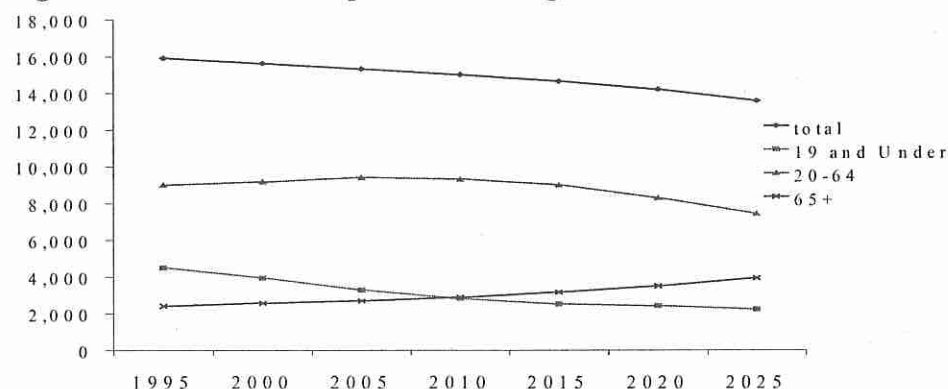
- The Minnesota State Demographic Center estimates the 2000 population at 15,620, a change of -4.2% from the 1990 population and a change of -11.1 from the 1980 Population.

Population and Households

Minnesota State Demographic Center population estimates indicate a rapidly aging population over the next 25 years (see Table 1.1). Overall, the County's population is anticipated to fall by 14.7 percent. In spite of this overall decline, the number of people age 65 years and older is estimated to increase steadily. The number of people age 19 years and under is expected to decline steadily between 1995 and 2025 while the number of people age 20 to 64 years is anticipated to experience an initial increase and then a sharp decline. These numbers suggest that the percentage and number of senior citizens in Koochiching County may influence the types of housing the County will need to provide in the future. Figure 7.1 graphically depicts these trends.

Total population, household size, and the number of occupied units declined between 1980 and 1990, while the number of seniors and the total number of housing units increased.

The Minnesota State Demographer has estimated that the total population, the populations of those 19 and younger, and the population of those between 20 and 64 years of age will all decline by 2025.

Figure 7.1: Estimated Population Changes 1995-2025

Source: Minnesota State Demographic Center.

The Minnesota State Demographic Center has also estimated that the number of households will decline over the next 25 years. However, the average household size is also anticipated to decline. This means that even though the population may experience a significant decline by 2025, the number of households will likely experience only a moderate decline. The implication for housing needs in the County is that the level of demand for housing will likely change very little over the next 25 years.

Because household size is also decline over the next 25 years, the number of households will not decline significantly. This means that the level of demand for housing will likely change very little over the next 25 years.

Housing Stock

In 1990, there were 7,825 housing units in Koochiching County, 6,025 (77 percent) of which were occupied. Of the occupied units, 4,695 (77.9 percent) were owner occupied and 1,330 (22.1 percent) were renter occupied. There were 1,800 vacant housing units, of which 1,335 were seasonal, recreational, or occasional units (cabins and resorts), 88 were for sale, 82 were for rent, 46 were sold or rented, but the new residents had not yet moved in, 2 were for migrant workers, and 247 were other types of vacant units.

Table 7.2: Housing Units by City and as a Percentage of the County Total

| Name of City | Number of Housing Units | Percentage of County Units |
|---------------------|-------------------------|----------------------------|
| Big Falls | 194 | 2.48% |
| International Falls | 3,306 | 42.25% |
| Littlefork | 324 | 4.14% |
| Mizpah | 49 | 0.63% |
| Northome | 114 | 1.46% |
| Ranier | 104 | 1.33% |
| Remainder of County | 3,977 | 47.71% |
| County Total | 7,825 | 100.00% |

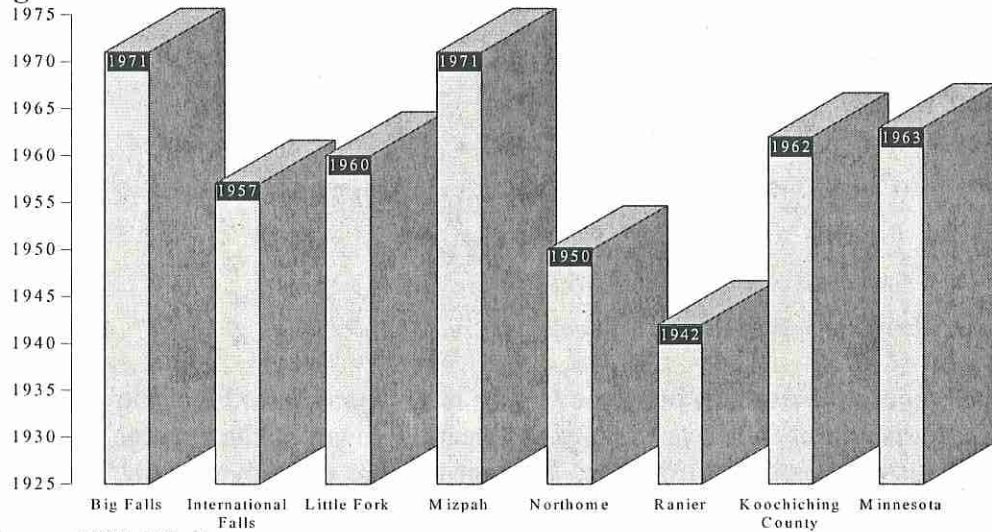
Source: 1990 U.S. Census

Age of the Housing Stock

As of 1990, the median date of construction for the existing housing stock in Koochiching County was 1962. In the cities within Koochiching County, the

median construction date for existing housing stock ranged from 1942 in Ranier to 1971 in Big Falls and Mizpah. Figure 7.2 compares the 1990 median year of construction data for Koochiching County, its cities and the State of Minnesota.

Figure 7.2: Median Year of Construction

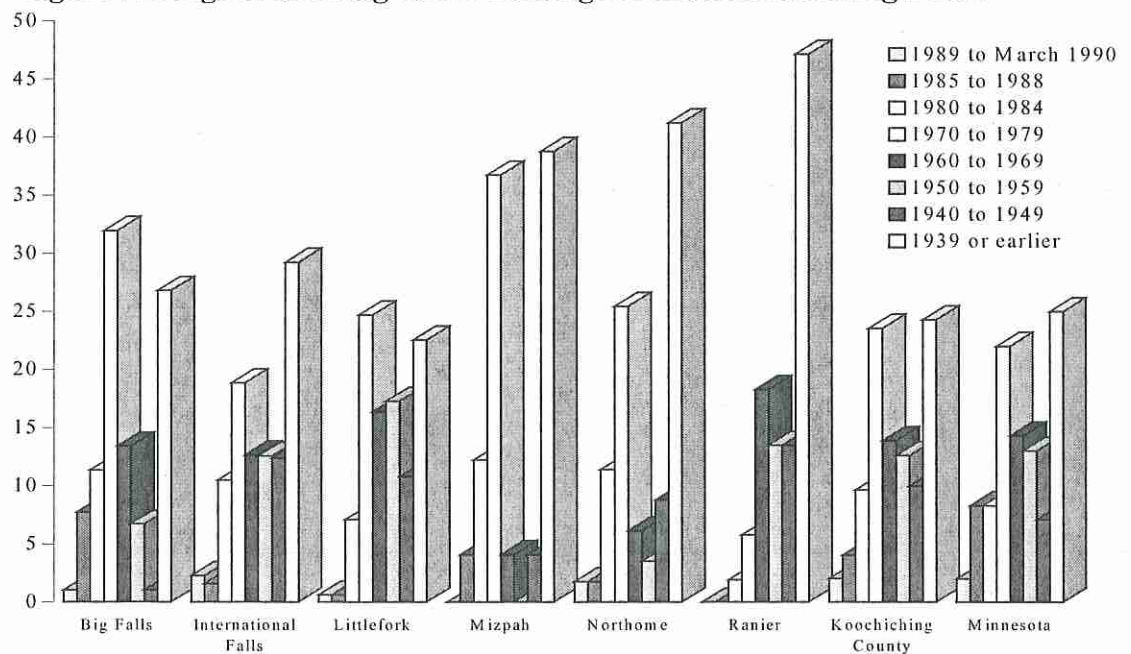


Source: 1990 U.S. Census.

As of 1990, the median date of construction for the existing housing stock for the County as a whole was 1962. In the cities, the median date of construction ranged from 1942 in Ranier to 1971 in Big Falls and Mizpah.

Figure 7.3 provides more detail about the age of the housing stock by indicating the percentage of the total housing stock that was constructed during various construction periods for Koochiching County, its cities, and the State of Minnesota.

Figure 7.3: Age of Housing as a Percentage of the Total Housing Stock



Source: 1990 U.S. Census.

Housing Change

Change over time is another important consideration in looking at the housing stock of communities. Changes in the housing stock are important to current residents as well as the resale market. Documentation of changes such as the relative increase or decrease of different housing types reflect actual changes that have taken place concerning housing options available to the area's population. Table 7.3 shows the pattern of change for Koochiching County between 1980 and 1990, based upon housing type. The figures in the fourth column represent the change of that type of housing as a percentage of the total between 1980 and 1990.

Table 7.3: Change in Housing Types, 1980 to 1990

| Koochiching County | 1980 Units (%) | 1990 Units (%) | % change |
|---------------------------------------|----------------|----------------|----------|
| 1 Unit | 4,916 (73.5%) | 5,742 (73.4%) | -0.1% |
| 2 to 9 Units | 650 (9.7%) | 410 (5.2%) | -4.5% |
| 10 or More Units | 434 (6.5%) | 402 (5.1%) | -1.4% |
| Mobile Home, Trailer, or Other | 687 (10.3%) | 1,271 (16.2%) | +5.9% |
| Total | 6,687 | 7,825 | - |

Source: The 1980 and 1990 U.S. Censuses

Another way of considering Housing change is in the aggregate. The overall housing growth rate in Koochiching County was 17.07 percent between 1980 and 1990. Between 1990 and 1999 there were 395 building permits issued Countywide. Because the County does not maintain demolition records, an accurate count of County-wide demolition is unavailable. However, the County Assessor has estimated that there are an average of about two demolitions each year in the unincorporated portion of the County and an average of about five demolitions each year in the City of International Falls, totaling an average of about seven demolitions each year County-wide. These data suggest that the number of housing units in the County may have increased by about 325 since the 1990 U.S. Census was completed. Table 7.4 identifies the number and location of the building permits issued between 1990 and 1999.

Table 7.4: County Building Permits (New Housing Units) 1990-1999

| Location | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | Total |
|----------------------------|------|------|------|------|------|------|------|------|------|------|-------|
| Big Falls | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 2 |
| International Falls | 6 | 8 | 5 | 6 | 8 | 7 | 10 | 8 | 9 | 6 | 73 |
| Littlefork | 1 | 2 | 1 | 5 | 3 | 4 | 2 | 0 | 3 | 4 | 25 |
| Mizpah | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Northome | 0 | 0 | 1 | 0 | 0 | 3 | 0 | 1 | 1 | 1 | 7 |
| Ranier | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 4 |
| Total for Cities | 9 | 10 | 7 | 12 | 11 | 15 | 12 | 11 | 13 | 11 | 111 |

The percentage of the county's housing stock that accounted for one unit buildings, two to nine unit buildings, and ten and more unit buildings declined between 1980 and 1990. The percentage of the County's housing stock accounted for by mobile homes and trailers increased during the same period.

The majority of new housing construction took place outside of the cities between 1990 and 1999.

(Table 7.4 continued)

| Location | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | Total |
|----------------|------|------|------|------|------|------|------|------|------|------|-------|
| ISD 361 | 16 | 17 | 23 | 15 | 20 | 21 | 12 | 16 | 24 | 14 | 178 |
| ISD 362 | 5 | 4 | 5 | 5 | 9 | 4 | 5 | 5 | 5 | 7 | 54 |
| ISD 363 | 4 | 3 | 5 | 4 | 5 | 7 | 5 | 4 | 11 | 3 | 51 |
| ISD2142 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| Non-City total | 25 | 24 | 33 | 24 | 34 | 32 | 22 | 25 | 41 | 24 | 284 |
| County Total | 34 | 34 | 40 | 36 | 45 | 47 | 34 | 36 | 54 | 35 | 395 |

Source: Koochiching County Assessor's Office

Mobility and Tenure

Household mobility is an important factor in the potential for units to be resold and re-rented in a community, and for accommodating future growth in a community. The mobility of current residents can be used to indicate trends in the types of housing that may become available in the future. In identifying housing tenure, the U.S. Census Bureau classifies all housing units as either "owner occupied" or "renter occupied." The latter category includes those in which no cash rent is paid, such as places where a relative or a caretaker is allowed to live free of charge. Table 7.5 shows tenure by the year a householder moved into a housing unit.

Table 7.5: Tenure by Year Householder Moved into Unit

| Tenure | Homeowners | Percent | Renters | Percent |
|------------------|------------|---------|---------|---------|
| Less than 1 Year | 465 | 9.9% | 623 | 46.8% |
| 2-5 Years | 1,028 | 21.9% | 412 | 31.0% |
| 6-10 Years | 588 | 12.5% | 199 | 15.0% |
| 11-20 Years | 1,073 | 22.9% | 45 | 3.4% |
| 21-30 years | 670 | 14.3% | 49 | 3.7% |
| Over 30 Years | 871 | 18.6% | 2 | 0.2% |
| Total | 4,695 | 100.0% | 1,330 | 100.0% |

Source: The 1980 and 1990 U.S. Censuses

The mobility data for Koochiching County indicates the following trends:

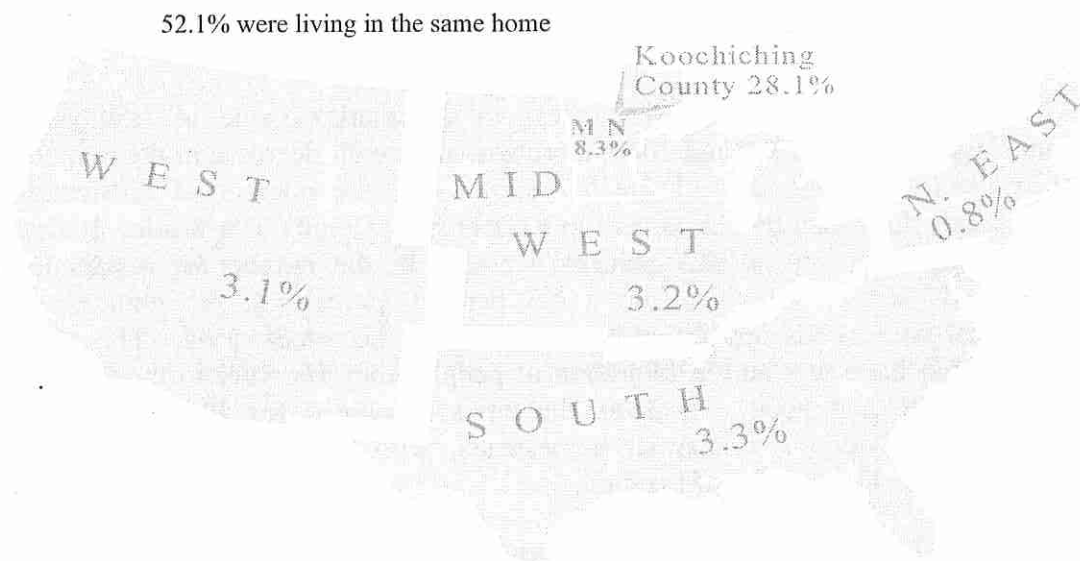
- Approximately 33 percent of the home owning households moved between 1985 and 1990.
- There is a high rental turnover rate, as 78 percent of the renting households moved between 1985 and 1990.
- Approximately 47 percent of the renting households lived in their place of residence less than one year.

The U.S. Census Bureau posed the following question concerning mobility to all households, homeowners and renters, in the population of the 1990 census. *Are*

There was a high turnover of rental units between 1985 and 1990. Seventy-eight (78) percent of renting households moved between 1985 and 1990, and 47 percent had been in their place of residence less than one year in 1990.

you currently living in the same home as you were in 1985? Overall, 47.9 percent of all people over the age of five (7,309) were not living in the same home in 1990 as they were in 1985. Overall, 52.1 percent of County residents lived in the same house as they did in 1985, 28.1 percent (4,296) came from another home in Koochiching County, 8.3 percent (1,274) came from elsewhere in Minnesota, 3.2 percent (484) came from elsewhere in the Midwest, 0.6 percent (92) came from the Northeast, 3.3 percent (506) came from the South, 3.1 percent (477) came from the West, and 1.2 percent (180) came from a foreign country.

Figure 7.4: Origin of Housing Mobility Between 1985 and 1990



In 1990, more than one-half of County residents lived in the same home as they did in 1985. The majority of County residents who did not live in the same home as they did in 1985 moved from another home within the County. Most of the remainder moved to the County from elsewhere in Minnesota.

Source: 1990 U.S. Census.

Market Value Analysis

Tables 7.6 through 7.9 provide an analysis of the market valuation of residential homesteads in Koochiching County, Big Falls, International Falls, Littlefork, Mizpah, Northome, and Ranier. In order to make a uniform analysis of home values and housing unit growth, residential homesteads were the only form of housing looked at in the County and cities. Farmsteads are assessed in a different way, as are multiple family units.

Table 7.6 indicates that there has been an increase in the total market value of residential homesteads for Koochiching County and all of the cities within it. The range of increase was from 23.5 percent in Big Falls to 114.6 percent in Littlefork. The increase in the County as a whole was 96.7 percent.

There was an increase in the total market value of residential homesteads Countywide between 1990 and 2000.

Table 7.6: Percent Change in Total Market Value of Residential Homesteads

| Area | Total Market Value 1990 | Total Market Value 2000 | Percent Change in Market Value 1990-2000 |
|----------------------------|-------------------------|-------------------------|------------------------------------------|
| Big Falls | \$2,861,650 | \$3,533,400 | 23.5% |
| International Falls | \$108,250,273 | \$209,842,700 | 93.8% |
| Littlefork | \$5,197,300 | \$11,153,700 | 114.6% |
| Mizpah | \$740,000 | \$921,900 | 24.6% |
| Northome | \$2,107,100 | \$3,108,400 | 47.5% |
| Ranier | \$2,884,900 | \$5,951,200 | 106.3% |
| City Totals | \$122,041,223 | \$234,511,300 | 92.2% |
| Non-City Totals | \$111,726,168 | \$225,217,194 | 101.6% |
| County Total | \$233,767,391 | \$459,728,494 | 96.7% |

Source: Koochiching County Assessor's Office (October 2000).

There was a 10.5 percent decrease in the number of residential homesteads within the cities and a 6.3 percent increase in the number of residential homesteads outside of the cities between 1990 and 2000. This may indicate that there was an out migration of people from the cities to the County between 1990 and 2000.

Although there was an overall increase in the market value of residential homesteads between 1990 and 2000, there was an overall decrease in the number of residential homesteads. Table 7.7 shows that the number of residential homesteads decreased by 3.2 percent in Koochiching County as a whole. It also shows that there was a 10.5 percent decrease in the number of residential homesteads within the cities and a 6.3 percent increase in the number of residential homesteads outside of the cities during the same period. This may indicate that there was an out migration of people from the cities to the County between 1990 and 2000. In 2000, the cities accounted for 52.5 percent of Koochiching County's residential homesteads, with International Falls alone accounting for 42.3 percent of the total.

Table 7.7: Housing Growth as a Percentage of Change in the Number of Homesteads

| Area | Number of Residential Homesteads | Number of Residential Homesteads | Percent Change in Number of Homesteads 1990-2000 |
|----------------------------|----------------------------------|----------------------------------|--------------------------------------------------|
| Big Falls | 143 | 117 | -18.2% |
| International Falls | 2,418 | 2,190 | -9.4% |
| Littlefork | 264 | 230 | -12.9% |
| Mizpah | 45 | 38 | -15.6% |
| Northome | 85 | 68 | -20.0% |
| Ranier | 80 | 74 | -7.5% |
| City Totals | 3,035 | 2,717 | -10.5% |
| Non-City Total | 2,317 | 2,463 | +6.3% |
| County Total | 5,352 | 5,180 | -3.2% |

Source: Koochiching County Assessor's Office (October 2000).

Table 7.8 indicates that there was an increase in the per homestead value of residential homesteads for Koochiching county and all of the cities in the County

from 1990 to 2000. The increases ranged from 47.5 percent in Mizpah to 146 percent in Littlefork. There was an increase of 103 percent in the per homestead value of residential homesteads for the county as a whole.

Table 7.8: Change in Average Market Value Per Homestead 1990-2000

| Area | Market Value Per Homestead 1990 | Market Value Per Homestead 2000 | Percent Change in Market Value Per Homestead 1990-2000 |
|-----------------------|---------------------------------------|---------------------------------------|--------------------------------------------------------------|
| Big Falls | \$20,012 | \$30,200 | 50.9% |
| Int'l Falls | \$44,769 | \$95,819 | 114.0% |
| Littlefork | \$19,687 | \$48,494 | 146.3% |
| Mizpah | \$16,444 | \$24,261 | 47.5% |
| Northome | \$24,789 | \$45,712 | 84.4% |
| Ranier | \$36,061 | \$80,422 | 123.0% |
| City Totals | \$40,211 | \$86,313 | 114.7% |
| Non-City Total | \$48,220 | \$91,440 | 89.6% |
| County Total | \$43,679 | \$88,751 | 103.2% |

Source: Koochiching County Assessor's Office (October 2000).

Table 7.9 shows that there was a 4.2 percent decrease in the percentage of Koochiching County homesteads that lie within the cities between 1990 and 2000. International Falls had the most significant decrease in the percentage of total county residential homesteads at 2.9 percent. Consequently, the unincorporated portion of the County experienced an overall increase in its share of residential homesteads during this period, from 43.3 percent of the total in 1980 to 47.6 percent of the total in 1990. This may also indicate that there was an out migration of people from the cities to the County between 1990 and 2000.

**Table 7.9: Residential Homesteads as a Percentage of County Total
1990-2000**

| Area | 1990 Percentage of County Homesteads | 2000 Percentage of County Homesteads | Change in Percent of County Total 1990-2000 |
|-----------------------|--------------------------------------------|--------------------------------------------|---------------------------------------------------|
| Big Falls | 2.7% | 2.3% | -0.4% |
| Int'l Falls | 45.2% | 42.3% | -2.9% |
| Littlefork | 4.9% | 4.4% | -0.5% |
| Mizpah | 0.8% | 0.7% | -0.1% |
| Northome | 1.6% | 1.3% | -0.3% |
| Ranier | 1.5% | 1.4% | -0.1% |
| City Totals | 56.7% | 52.4% | -4.3% |
| Non-City Total | 43.3% | 47.6% | +4.3% |
| County Total | 100.0% | 100.0% | 0% |

Source: Koochiching County Assessor's Office (October 2000).

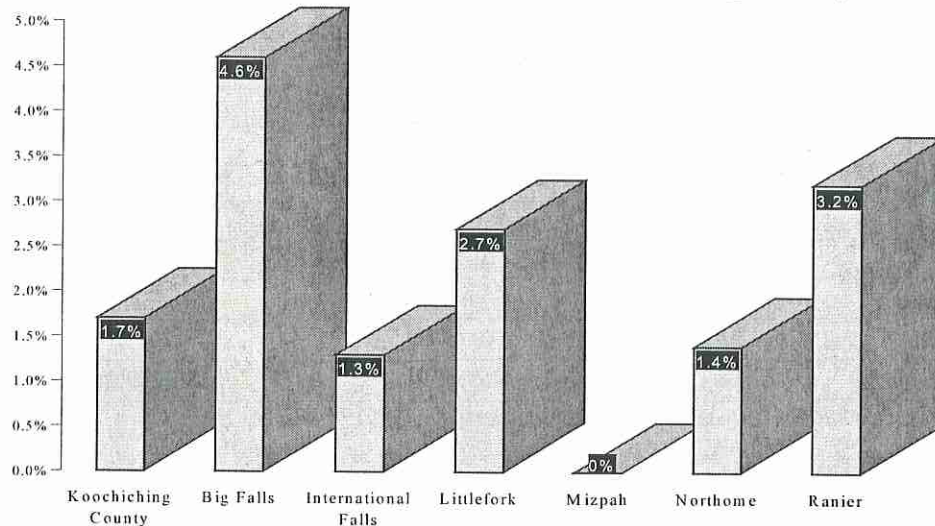
Vacant Housing

There was a 103.2 percent increase in the value of residential homesteads for the County as a whole between 1990 and 2000.

The number of non-city homestead grew relative to the number of homesteads located within the cities between 1990 and 2000. This may also indicate that there was an out migration of people from the cities to the County during that period.

The homeowner vacancy rate is the proportion of the homeowner inventory that is vacant for sale. The homeowner vacancy rate for Koochiching County as a whole was 1.7 percent in 1990. Figure 7.5 shows the homeowner vacancy rates for Koochiching County and the cities of Big Falls, International Falls, Littlefork, Mizpah, Northome, and Ranier.

Figure 7.5: Homeowner Vacancy Rates in Koochiching County and its Cities

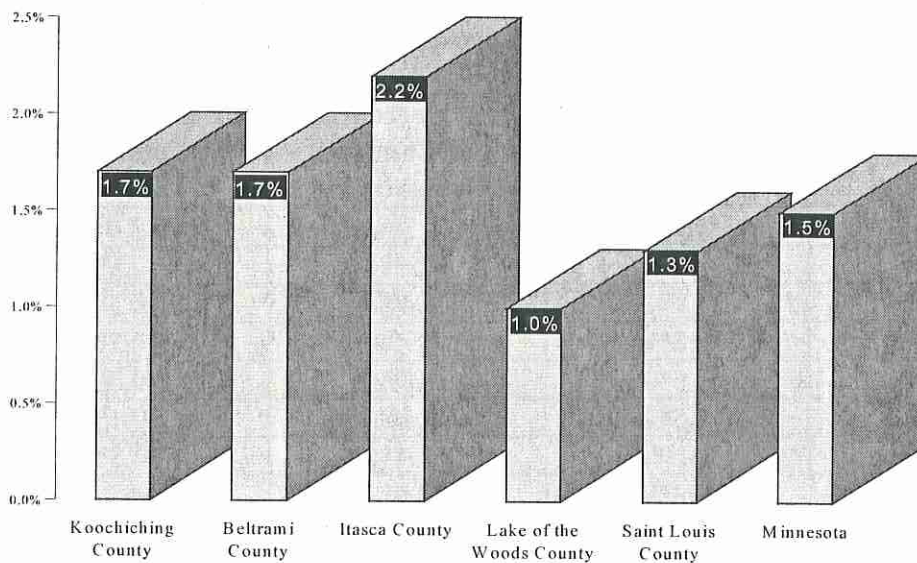


Homeowner Vacancy rates ranged from zero percent in Mizpah to 4.6 percent in Big Falls in 1990.

Source: 1990 U.S. Census.

Figure 7.6 compares the homeowner vacancy rate of Koochiching County with those of the surrounding Counties and the State of Minnesota.

Figure 7.6: Homeowner Vacancy Rates in Selected Counties

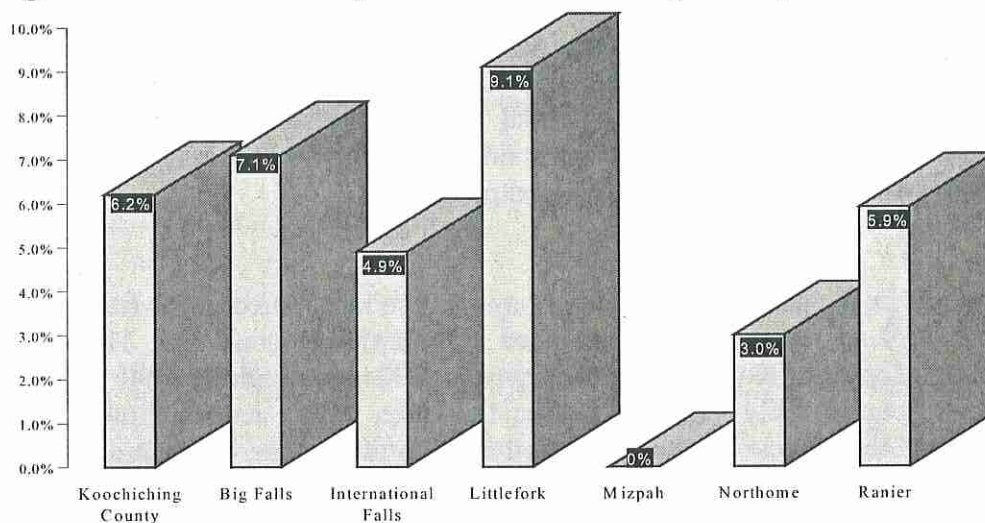


Koochiching County's Homeowner vacancy rate of 1.7 percent in 1990 was just above the State average of 1.5 percent, and fell within the range of homeowner vacancy rates for the surrounding Counties.

Source: 1990 U.S. Census.

The rental vacancy rate is the proportion of the rental inventory that is vacant for rent. The rental vacancy rate for Koochiching County as a whole was 6.2 in 1990. Figure 7.7 shows the rental vacancy rates for Koochiching County and the cities of Big Falls, International Falls, Littlefork, Mizpah, Northome, and Ranier.

Figure 7.7: Rental Vacancy Rates for Koochiching County and its Cities

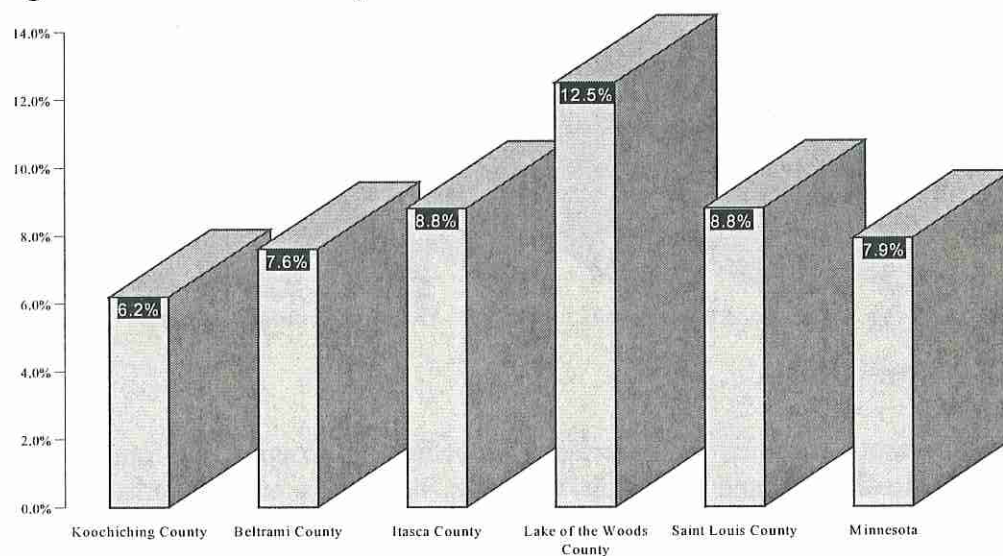


Rental vacancy rates ranged from zero percent in Mizpah to 9.1 percent in Littlefork in 1990.

Source: 1990 U.S. Census.

Figure 7.8 compares the rental vacancy rate of Koochiching County with those of the surrounding counties and the State of Minnesota.

Figure 7.8: Rental Vacancy Rates in Selected Counties



The County's rental vacancy rate of 6.2 percent in 1990 was lower than that of the State and the surrounding counties.

Source: 1990 U.S. Census.

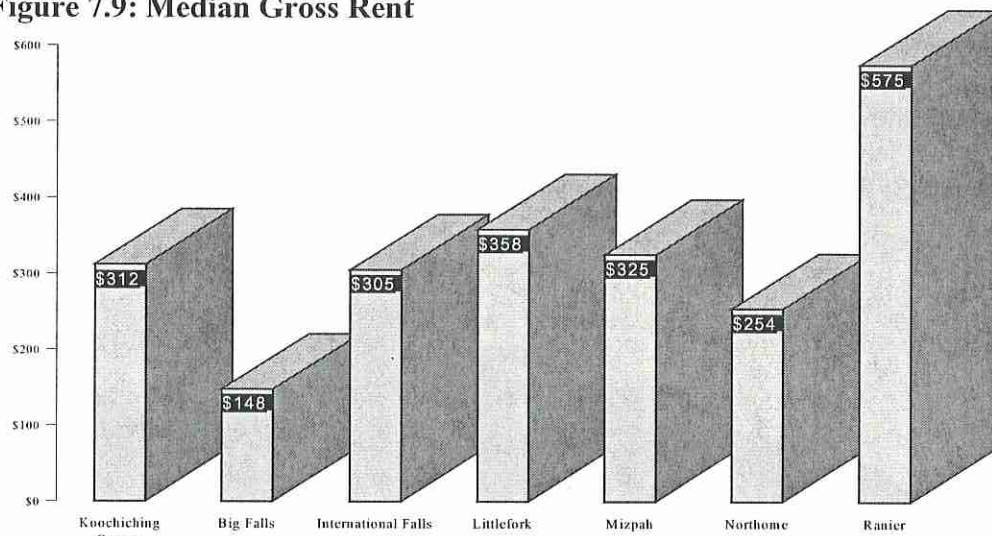
A rental vacancy rate of three to five percent is considered to be a desirable rental vacancy rate for a healthy market, with supply and demand factors balancing the price of housing and offering different choices in style and type.

A rental vacancy rate of three to five percent is considered to be a desirable rental vacancy rate for a healthy market, with supply and demand factors balancing the price of housing and offering different choices in style and type. Figure 7.7 indicates that in 1990, the cities of International Falls and Northome have rental vacancy rates that fell within that desirable range. The Cities of Big Fork, Littlefalls, and Ranier, as well as Koochiching County as a whole, had rental vacancy rates that were higher than 5 percent, which may occasionally require rental property owners to lower their rents in order to attract tenants. This in turn affects the cash flow of the property. Mizpah had a rental vacancy rate of zero percent in 1990. There is the potential for an increase in the average rent in markets with low rental vacancy rates since property owners may raise rents in order to take advantage of the tight rental market.

Rent

Gross rent is the amount a household pays to live in a rented unit. Rent paid to the landlord and all utilities are included in determining gross rent. The median gross rent for all of Koochiching County was \$312 per month in 1990. There is, however, considerable variation among the cities within Koochiching County. Ranier had the highest median gross rent at \$575 per month, while Big Falls had the lowest median gross rent at \$148 per month.

Figure 7.9: Median Gross Rent



Source: 1990 U.S. Census.

The median gross rent in 1990 ranged from \$148 per month in Big Falls to \$575 per month in Ranier. The median gross rent for the County as a whole, \$312 per month in 1990, fell within the range of median gross rent for the surrounding Counties.

The Minnesota counties that surround Koochiching County, Beltrami, Itaska, Lake of the Woods, and St. Louis Counties, had gross median rents of \$320, \$297, \$244, and \$291 per month in 1990, respectively. When compared to the surrounding counties, Koochiching County's median gross rent of \$312 per month lies in the upper part of their range.

Senior Housing Facilities

There are 11 senior housing facilities and three long-term care facilities in Koochiching County. The long-term care facilities include Falls Good Samaritan, a private nursing home located in International Falls, Littlefork Medical Center located in Littlefork, and Northome Health Care Center located in Northome. Falls Good Samaritan and Northome Health Care Center have recently reduced the number of beds offered to Seniors due to decreased demand and Littlefork Medical Center currently has space available.

The 11 senior housing facilities range in size from four units in Papermakers Place to 80 units in Woodland Park Apartments. A telephone survey of seven facilities was conducted in order to determine their size, the services they offer, the range and basis of their monthly rental charge, and the demand for them. Both market rate and subsidized senior housing facilities were surveyed. Table 7.10 provides information concerning pricing and services offered obtained during the surveys of the seven facilities surveyed.

There are 11 senior housing facilities and three long-term care facilities in Koochiching County.

Table 7.10: Description of Surveyed Senior Facilities in Koochiching County

| Name of Facility | Location (City) | Type of Housing | Number of Units | Monthly Rate Based on* | Av. Range of Rent | Services Included** |
|-------------------------------------|---------------------|--------------------------------|-----------------|--------------------------------------------------|---------------------------|---------------------------------------|
| Big Falls-Sunview Apartments | Big Falls | Subsidized Low Income | 20 | 30 percent of adjusted income | \$61-\$417 per month | 1, 3, 6, 10, 13 |
| Crabtree Senior Home | International Falls | Market Rate | 4 to 5 | Type of bedroom | \$1,200 per month | 3, 4, 5, 6, 7, 9, 10, 11, 12 |
| Papermakers House | International Falls | Intermediate Nursing Care Home | 4 | MN Case Mix, A-D | \$1,300-\$1,700 per month | 1, 3, 4, 5, 6, 7, 9, 10, 11, 12 |
| West Falls | International Falls | Subsidized Section 8 | 60 | Income—Medical Adjusted Gross Income | \$950 per month | 1, 6, 10, 13 |
| Woodland Park Apartments | International Falls | Low Income Senior Housing | 80 | 30 percent of adjusted income | \$120-\$495 per month | 1, 2, 3, 6, 9, 10, 13 |
| Rainier Roost | International Falls | Assisted Living Plans | 14 | Level of care: Screening similar to Nursing Home | \$1,800-\$2,900 per month | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 13 |
| River's Edge Villas | International Falls | Housing with Services | 26 | Size of apartment and amount of services | \$950 per month | 3, 6, 9, 10, 11, 12, 13 |

*Monthly Rate means based on income and varies by type of bedroom (private or shared) and the percent of adjusted income.

**List the following services included with rent by indicating the appropriate number: 1=community room, 2=public restrooms, 3=laundry, 4=all meals, 5=bathing hygiene, 6=activities, 7=24-hour care, 8=nurse on call, 9=hair care, 10=transportation, 11=housekeeping, 12=emergency call system, 13=utilities.

Source: ARDC Telephone Survey, October 2000.

Although most facilities do offer some level of transportation to their residents, most seniors need additional transportation than is currently available.

Transportation is the most pressing need for the senior community.

Most senior facilities, whether subsidized or market rate, offer at least a few services as part of the monthly rent. Although the majority of facilities do offer some level of transportation to their residents, most seniors need additional transportation than is currently available. In fact, professionals who work with seniors on a regular basis indicate that transportation is the most pressing need for the senior community. The transportation needed by the County's senior population ranges from local transportation in order to run day-to-day errands to longer distance transportation in order to get to doctor's office and outpatient hospital appointments outside of the county.

The number of people on senior housing waiting lists is a key element in determining if there is a need for additional senior housing in the area. A waiting list with a large number of people on it suggests that there is a shortage of that particular type of senior housing in the area. Conversely, a large number of vacancies in a particular type of senior housing may suggest that there is not much demand for that type of senior housing. Table 7.11 indicates that three of the seven senior housing facilities surveyed have waiting lists totaling 18 people.

Table 7.11: Demand for Senior Facilities in Koochiching County

| Name of Facility | Location (City) | Waiting List (yes or no) | Number on Waiting List | Number of Openings |
|-------------------------------------|---------------------|--------------------------|------------------------|--------------------|
| Big Falls-Sunview Apartments | Big Falls | No | 0 | 0 |
| Crabtree Senior Home | International Falls | No | 0 | 1-2 |
| Papermakers House | International Falls | No | 0 | 0 |
| West Falls | International Falls | Yes | 13 | 0 |
| Woodland Park Apartments | International Falls | No | 0 | 3 |
| Rainier Roost | International Falls | Yes | 2 | 0 |
| River's Edge Villas | International Falls | Yes | 3 | 0 |

Source: ARDC Telephone Survey, October 2000.

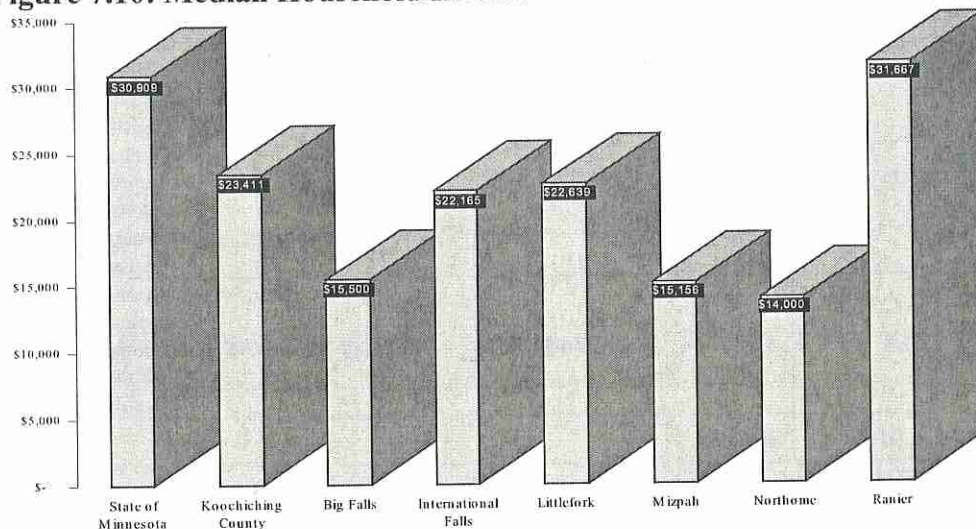
Household Income

The median annual household income in Koochiching County was \$23,411 in 1990. This is an amount bellow the established median household income of \$30,909 in 1990 for the entire State of Minnesota. One city in the county, Ranier, was above the established county median in 1990, having a median household income of \$31,667.

Of the seven senior housing facilities surveyed, three have waiting lists totaling 18 people. This may indicate a demand for certain types of senior housing.

Figure 7.10 shows the median household incomes of for the State of Minnesota, Koochiching County, and the cities within Koochiching County

Figure 7.10: Median Household Income



Median household income ranged from \$14,000 in Northome to \$31,667 in Ranier during 1990. The median household income for the County as a whole, \$23,411, was well below that of the State at \$30,909.

Source: 1990 U.S. Census

Housing Affordability

The maximum affordable housing cost represents the generally accepted standard of spending not more than 30 percent of adjusted gross income on housing costs. Table 7.12 presents the 1990 household income distribution, affordable gross monthly housing costs for each income range, and price ranges for owner occupied housing. Development strategies that can be used to construct affordable housing are identified for each income range.

Table 7.12: 1990 Income and Price Matrix for Koochiching County

| Income Group | Number of Households | Percent of Households | Affordable Monthly Housing Costs with Utilities | Price ranges for Owner Occupied Housing | Appropriate Housing Types and Strategies |
|--------------------------|----------------------|-----------------------|-------------------------------------------------|-----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Under \$15,000 | 1937 | 32.2% | \$0-375 | Less than 27,500 | <ul style="list-style-type: none"> Public Housing Section 8 Certificates and Vouchers Section 42 tax credit rental development Existing housing / rehabilitation |
| \$15,000-24,999 | 1222 | 20.3% | \$375-625 | \$27,500-52,500 | <ul style="list-style-type: none"> Section 42 tax credit rental development Mobile home / manufactured housing Existing housing / rehabilitation |
| \$25,000-\$34,999 | 932 | 15.5% | \$625-875 | \$52,500-80,000 | <ul style="list-style-type: none"> Existing housing / rehabilitation Market rate rental development Affordable Single-Family development |

More than one-half of the households in the County had a household income of less than \$25,000 in 1990.

Because the under \$25,000 household income group account for more than one-half the households in the County, the variety and type of housing choices available to this group should be taken into consideration by decision-makers when pursuing housing strategies.

(Table 7.12 continued)

| | | | | | |
|--------------------------|-------|-------|---------------|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| \$35,000-\$49,999 | 854 | 14.2% | \$875-1,250 | \$80,000-111,000 | <ul style="list-style-type: none"> • Market rate rental development • Affordable Single-Family development • Subdivision development with infrastructure finance |
| \$50,000-\$74,999 | 805 | 13.4% | \$1,250-1,875 | \$110,000-170,000 | <ul style="list-style-type: none"> • Market based single-family development • Subdivision development with infrastructure finance |
| \$75,000 and Over | 268 | 4.5% | Above \$1,875 | Over \$170,000 | <ul style="list-style-type: none"> • Market based single-family development • Subdivision development |
| Total | 6,018 | 100% | - | - | - |

Source: 1990 U.S. Census/ARDC

More than one-half of the households in the County had a household income of less than \$25,000 in 1990. Because of this, the variety and type of housing choices available to this group should be taken into consideration by decision-makers when pursuing housing strategies

Housing Resources

Affordable Housing Programs

Affordable housing programs are programs that assist lower-income households purchase a home, fix up a home, or both. Affordable housing programs often have requirements such as income limits, purchase price limits, and first time homebuyer qualification, among others.

Affordable housing programs are programs that assist lower-income households purchase a home, fix up a home, or both. Affordable housing programs often have requirements such as income limits, purchase price limits, and first time homebuyer qualification, among others. These programs may offer lower interest rates, smaller down payments, and special underwriting requirements that may make it easier for an applicant to qualify for a home loan. The money that lenders use for affordable housing programs may come from nontraditional sources and, as a result, may run out of funds from time to time.

Most of the organizations listed below offer standard affordable housing programs such as conventional loans, Federal Housing Administration loans (FHA), FHA 203(k) loans, Rural Development loans, and Veterans Administration (VA) loans. Conventional loans are any loans that are not insured or backed by the federal government. Conventional loans can be either insured or uninsured, though most are insured. Insured loans are backed by a private mortgage insurance company allowing a lender to lend money with lower down payment requirements than normal (usually about five percent). Uninsured loans usually require at least a 20 percent down payment.

The FHA provides insurance to private lenders on mortgage loans so those lenders will make loans with lower down payments than normal. Loans that are insured by the FHA provide very low down payments (usually about three percent). The FHA 203(k) program is a special type of FHA mortgage loan. It provides the same type of insurance to lenders as do other types of FHA loans and thus has a low down payment. What is special about the FHA 203(k) is that it can be used to finance both the purchase and remodeling of a home in one loan. A 203(k) loan can be used either to buy a property and fix it up or to refinance current property and fix it up.

Rural Development is a U. S. Department of Agriculture agency (formerly the Farmers Home Administration, or RECD) that provides a variety of loans and loan guarantees with zero down payments. There are two types of Rural Development loans; guaranteed loans made available through local lenders and direct loans available through Rural Development offices. Rural Development loans are available in communities and areas of 25,000 population or less.

The VA is a department of the federal government that provides a guaranty to private lenders so those lenders will make loans with lower down payments than normal (usually zero down payment). To be eligible for a VA loan, the borrower must be a veteran or a surviving spouse of a veteran who meets certain requirements of service in the U.S. armed forces.

Housing Rehabilitation Programs

Affordable housing rehabilitation programs are programs that have been specially designed to help lower-income households obtain financing to improve their homes. Affordable housing rehabilitation programs often have special requirements such as income limits, contractor requirements, and limits on the amount and use of funds, among others. They also feature lower interest rates, smaller down payment or equity requirements, special repayment plans, and special underwriting requirements that may make it easier for an applicant to qualify for a loan. Funding for housing rehabilitation programs may come from nontraditional sources. Because of this, some programs may run out of funds from time to time, or may have a waiting list of people already established. Standard affordable housing rehabilitation programs include the Energy Assistance Program, FHA 203(k) Loans, the Minnesota Housing Finance Authority (MHFA) Accessibility Loan Program, the MHFA Rehabilitation Loan Program, the MHFA Great Minnesota Fix-up Fund, the MHFA Home Energy Loan Program, the MHFA Revolving Loan Program, Rural Development Home Improvement Loans and Grants, and Weatherization.

The Energy Assistance Program is a federally funded program that has three main components: Primary Heat, Crisis Assistance and Energy-Related Repair. Primary Heat helps lower-income households pay for home heating costs with grant funds. Crisis Assistance also uses grant funding to help lower-income households keep their utility service from being disconnected and obtain a delivery of fuel. Energy-Related Repair allows lower-income households to make

Affordable housing rehabilitation programs are programs that have been specially designed to help lower-income households obtain financing to improve their homes. Affordable housing rehabilitation programs often have special requirements such as income limits, contractor requirements, and limits on the amount and use of funds, among others.

repairs or replace heating systems to cut energy consumption. All of these programs are available from CAPs, local governments, or social service agencies.

The MHFA Accessibility Loan Program provides deferred payment loans (monthly payments do not have to be made) to lower-income homeowners so they can rehabilitate their home to make it more accessible for a physically disabled household member. There is an income limit and an asset limit for this program. The loan must be repaid if the applicant sells the home within five years. After five years, the loan is forgiven. Funds for this program are limited, so there may be a long waiting list.

The MHFA Rehabilitation Loan Program provides deferred payment loans (monthly payments do not have to be made) to very low-income homeowners so they can make home improvements related to the safety, energy efficiency, accessibility, or livability of their homes. There is an income limit and an asset limit for this program. The loan must be repaid if the applicant sells the home within ten years. After ten years, the loan is forgiven. Funds for this program are limited, so there may be a long waiting list.

The MHFA Great Minnesota Fix-up Fund provides home improvement loans to assist current homeowners improve the livability and energy efficiency of existing housing. The program is offered by local lenders, HRAs, or CAPs. There is an income limit for this program. The interest rate on the loan is between two percent and eight percent, depending on income. The maximum loan amount is \$25,000. Funds are usually available for this program.

The MHFA Home Energy Loan Program is a home improvement program that provides financing only to increase the energy efficiency of existing homes. The program is offered by local participating lenders and there is no income limit. The minimum loan amount is \$1,000, the maximum loan amount is \$8,000 and the interest rate is eight percent. Funds for this program usually are available.

The MHFA Revolving Loan Fund is a home improvement program that provides home rehabilitation financing to low- and moderate-income homeowners who are unable to qualify for other types of home improvement loans. There is an income limit and an asset limit. The maximum loan is \$10,000. Funds for this type of financing are usually available.

To be eligible for Rural Development home improvement loans and grants, an applicant must live on a farm, in the open country, or in a town of less than 10,000 people. There are income limits for most programs and some require that you be unable to qualify for other types of financing from commercial lenders. Loans are available with interest rates between one and three percent. Very low-income families or people over 62 years of age may qualify for grants that do not have to be repaid.

Weatherization is a federally funded program that assists low-income households in reducing their energy costs. It is available to homeowners as well as renters.

Priority is given to the elderly, people with disabilities, high-energy consumers, and households where a safety hazard exists. The program can offer applicants energy education, can help them with energy audits, the addition of wall or attic insulation, and the improvement of ventilation. The program is administered by CAPs and local government agencies.

Home Buyer and Financial Counseling Programs

Homebuyer education and financial counseling programs are programs that can help people learn about the home buying process, what is involved in maintaining a home and some of the financing options that are available to lower income households. Home buyer education is usually done in a group setting and covers a variety of topics, including how to find and buy a home, how to finance a home, how to maintain a home, general budgeting, and how to deal with problems after purchasing a home, among others. Financial counseling is usually done in a one-on-one setting. The person seeking counseling will meet privately with a counselor to talk about his or her specific financial situation.

Housing Contacts for Koochiching County Residents

Friends Against Abuse
318 Eighth Avenue
International Falls, MN 55649
Phone: (218) 285-7220

Services Offered:

- Safe-Housing for Victims of Domestic Violence
- Phone Counseling and Resource Information
- General Crime Information

Housing and Redevelopment Authority of Koochiching County
Box 466
Northome, MN 56661
Phone: (218) 897-5242
Contact Person: Peggy Olson

Programs and Services Offered:

- Section 8 Housing Assistance Payment Program
 - Certificate Program
 - Voucher Program

Koochiching County Community Services
1000 Fifth Street
International Falls, MN 56649
Phone: (218) 283-7026
Contact Person: Ann Coulombe

Homebuyer education and financial counseling programs are programs that can help people learn about the home buying process, what is involved in maintaining a home and some of the financing options that are available to lower income households.

There are a number of Housing contacts available to Koochiching County Residents.

Services Offered:

- Referrals
- Help Line

Koochiching County Coordinator on Aging

Senior's Agenda for Independent Living (SAIL) Community Organizer

Suite 210

100 Fifth Street

International Falls, MN 56649

Phone: (218) 283-7030 or Toll Free at (800) 950-4630

Contact Person: Diane Windsnes

Services Offered:

- Information
- Referrals

Kootasca Community Action, Inc.

2232 Second avenue East

P.O. Box 44

International Falls, MN 56649

Phone: (218) 283-9491 or (800) 559-9491

Fax: (218) 283-9855

Contact Person: Julie Schumacher

Programs and Services Offered:

- Homeless Services
 - Homeless Prevention and Assistance
 - Services for those at Risk for Becoming Homeless
- MHFA Deferred Loan Program
- MHFA Revolving Loan Program
- Buy, Rehab and Sell Program
- Minnesota Urban and Rural Homesteading Program (MURL)
- Homebuyer Program
 - Kootasca Community Action, Inc. offers the Home Stretch home buyer training program in collaboration with the Minnesota Housing Finance Agency (MHFA) and local housing professionals. Home Stretch workshops cover the topics potential homebuyers need to know and are offered periodically. In addition, housing counselors are available to meet individually with homebuyers.
 - Individual financial counseling and down payment and closing cost assistance.

Wells Fargo
419 Third Street
International Falls, MN 56649
Phone: (218) 283-9876 or (800) 470-8699
Contact Person: Shannon Arnold

Programs and Services Offered:

- Wells Fargo offers several in-house programs as well as a range of programs through USDA Rural Development and MHFA.

Salvation Army
1301 Third Avenue West
International Falls, MN 56649
Phone: (218) 283-3394
Contact Person: Captain Robin Jones

Programs and Services Offered

- Homeless Prevention Program
- Single-Night Crisis Housing for the Homeless
- Rental Deposit Assistance Program

USDA Rural Development
505 Twelfth Avenue West
Virginia, MN 55792
Phone: 218-741-3929 (Virginia Office)
Available the first Thursday of every month for 3 hours in the Koochiching County Courthouse Phone: (International Falls) 741-3929 extension 4
Contact Person: Jan Siebert

Programs and Services Offered:

- Rural Development Loans
- Rural Development Home Improvement Loans and Grants

Relationship of Housing to the Other Plan Elements

The current housing pattern is the result of a complex relationship between the historical development of the County's economy, its ever changing demographic profile, its pattern of land use, its transportation infrastructure, and the opportunities and constraints presented by the natural environment. The housing pattern in Koochiching County historically followed rivers and glacial outwash areas that provided agricultural opportunities and a means of transportation for the area's timber and agricultural products. New housing development in the rural areas now often takes place in close proximity to road infrastructure. Soil conditions and the ability to provide for a septic system and private well limits where rural development can occur. The level and cost of community services are influenced, to a great extent, by the development pattern. The availability of

adequate housing can be an important element as part of the economic development strategy. New and expanding businesses require an adequate range of housing options to accommodate their employees that may be relocating to the County.

Twenty-Five Years Out

This document is intended to help guide the County in land use decisions and policy development on a variety of topics over the course of the next 25 years. The following scenarios represent two possible views of the County 25 years into the future. The first scenario is the possible outcome of worst case or no action approach to housing. In the worst case scenario, the County's involvement on housing issues remains static or declines. The second, best case, scenario is the possible outcome of a proactive approach to housing by County decision-makers. In the best case, or more proactive scenario, the County seeks to assess the state of its housing stock. In doing so, it sets goals and identifies strategies and potential funding sources to help reach those goals.

Scenario 1: The Status Quo

In the year 2025, what would the County's housing landscape look like if the County maintained a largely hands-off policy concerning housing and allowed the market to identify and address housing needs? In this scenario, new housing development will continue to take place between now and the year 2025. However, most of the new development would be in the form of single family homes located in the unorganized portions of the County along important transportation routes and adjacent to International Falls. Little or no effort would be put into the rehabilitation of existing housing, much of which would have deteriorated into substandard and dilapidated conditions by 2025. The housing market would be dominated by older housing stock in and directly adjacent to the cities. Surrounding this core of older housing, the observer could find a number of newer single family homes set within a diffuse grid of older single family homes. The older homes would be in a general state of disrepair due to years of deferred maintenance. The housing choices for County residents would continue to diminish over the years. The poor condition of much of the County's housing stock and the general lack of housing choices could negatively impact economic development because the availability of adequate housing, to accommodate employees, is an important factor for businesses that are planning to locate or expand in an area.

Scenario 2: The Proactive Approach

In this scenario, the County opted to begin an ongoing and critical review of its housing supply. Significantly, it completed a comprehensive housing needs assessment in partnership with its cities that identified the physical state of the housing stock and a number of important issues. From the identification of these issues it set goals and identified strategies and funding sources that enabled the County to begin the process of improving its housing situation. A series of

housing rehabilitation projects were undertaken in various portions of the County, effectively preserving the integrity of the County's housing stock. From the needs analysis, the county learned what types of housing development would best serve the needs of the changing population and provided incentives for developers to construct them. With this scenario the County would offer a variety of housing types. The mix of older and newer housing would appear to be well maintained and attractive and a variety of housing choices for all income and age ranges would be available. The housing improvement efforts greatly the quality of life of its citizens and strengthened the community. The efforts to invest in the housing and its community would make Koochiching County an attractive choice for a business to locate or expand.



IMPLEMENTATION

I MPLEMENTATION

Introduction

The comprehensive plan was developed over a 14 month period. However, the work of the Plan does not stop here. Planning is an ongoing process because the County will continually change in the years to come. The Plan must be reviewed and updated periodically to ensure that goals and policies contained in this Plan remain relevant. With implementation and regular updating, the time and effort involved with the development of this Plan will have a lasting impact.

This chapter will outline general implementation tools that can be used to work towards the goals and objectives contained in this Plan. A discussion of roles and responsibilities for Plan implementation and a discussion of Plan priorities will follow this section. The implementation chapter will conclude with a discussion of a Plan review schedule and overview of the goals, objectives, and strategies developed for each Plan topic.

Plan Implementation Tools

A variety of tools are available for Plan implementation. These tools include the following:

Zoning and Subdivision Ordinance

Zoning is the primary tool used by local government to implement land use policies. It consists of the zoning map and supporting ordinance text. The legal basis for zoning is to protect the health, safety and welfare of the citizens. Zoning also protects property values by minimizing incompatible land uses and providing clear standards on what type of development can occur where.

The County should review their zoning maps with the adopted goals and strategies included in this Plan to identify and reconcile areas of discrepancy. When reviewing requests for rezoning the land use categories, guidelines and map should form the basis for decision making. Any changes in municipal boundaries, National Park boundaries, or airport safety zones will need to be amended in the land use map.

Subdivision regulations are another regulatory tool that may be utilized for the implementation of this Plan. The subdivision ordinance regulates the development of land and the provision of public infrastructure within. Properly enforced subdivision regulations, coupled with zoning, can help ensure that the proper physical development and the provision of adequate public infrastructure are available to areas of growth. Standards for easements and right-of-ways, street improvements, lot setbacks and layouts, and utility infrastructure are normally prescribed through subdivision regulations. They can also ensure that

Zoning is the primary tool used by local government to implement land use policies. The County should review their zoning maps with the adopted Plan and reconcile areas of discrepancy. Subdivision regulations are another regulatory tool that may be utilized for the implementation of this plan.

the costs of public improvements within growth areas are assessed to the developer and new residents, rather than paid for by the established community.

Intergovernmental Cooperation

Intergovernmental cooperation can be another tool to work on implementation of the goals and objectives contained in this Plan. A variety of state and federal agencies provide financial and technical assistance through various programs. Coordination of initiatives can be a tool to pool resources and technical expertise to work towards a common goal.

A large amount of land is managed by the state, federal, and tribal governments. It is important to continue to coordinate with these entities to ensure the local interests regarding the management of these lands are represented. A variety of planning initiatives provides an opportunity for input. In some cases it may be beneficial to set up a specific forum that allows ongoing discussion on land management issues.

Additional Studies or Development of Workgroups for Specific Topic Areas

The comprehensive land use Plan provides a broad guide and vision for future development in Koochiching County. As part of this planning process specific topic areas have been identified that would benefit from further study in order to develop more specific recommendations. Examples of these studies could include conducting a housing needs assessment, technology and telecommunications study, an economic development Plan, and a long range emergency and medical services needs assessment. Information collected from these studies may require amendments into the comprehensive Plan.

Capital Improvement Programs

A Capital Improvement Program (CIP) establishes schedules and priorities for capital improvements and usually identifies projects five years out. Projects included in a CIP typically include larger projects such as roads, recreational facilities, community structures, and utilities.

The County's financial resources are limited and therefore competition exists for funding among various projects. The CIP allows the County to provide the most critical public improvements while staying within budgetary constraints.

Staff and Resources Allocation

The Plan identifies a number of Plan implementation policies and initiatives that require resources and staff time to coordinate and work on. Suggested timelines have been included for these implementation strategies. The County Planning Commission, Board, and staff will need to review the recommended strategies and priorities and determine which initiatives can be accommodated based on available staff and resources.

Intergovernmental cooperation provides another tool towards Plan implementation and provides an opportunity that local interests are heard at the State and federal level.

Additional studies to further explore needs and issues are warranted for housing, economic development, telecommunications, and emergency and medical services needs.

A Capital Improvement Program establishes schedules and priorities for capital improvements and allows the County to provide the most critical public improvements while staying within budgetary constraints.

Staff and resource allocation will determine which strategies can be implemented.

Implementation Roles and Responsibilities

This Comprehensive Land Use Plan touches on a broad list of topics and issues to direct future growth and development that have been identified to be of importance for Koochiching County over the next 25 years. These topics include, land use, natural resources, housing, community services, transportation, and economic development. The Citizen's Steering Committee has driven the planning process, identified many of the issues, and provided direction for desired outcomes. The background studies and discussions contained in this Plan identify plans and players that have an impact on these issues and that will need to be considered as the County starts with Plan implementation. The Comprehensive Land Use Plan should be viewed as a guide for the Koochiching County Board, Planning Commission, and staff on land use decisions and a range of other topics.

The Planning Commission, County Board, and staff should familiarize themselves about the Plan after its adoption and should review this Plan on a regular basis. New members should receive copies of the Plan as part of an orientation packet. In working with the Planning Commission and County Board on land use issues, the County staff should explicitly connect recommendations directly to goals and objectives in the Plan. The land use categories, guidelines, and future land use map provide a framework for decision making on land use issues.

In addition to land use, this Plan intends to provide a framework to coordinate goals and objectives regarding housing, economic development, natural resources, transportation, and community services. These various topics involve different departments within the County and are influenced as well by state and federal government and private and non-profit organizations. This Plan recognizes the role these various entities play and the need to coordinate their efforts. These topics are not under the direct influence of the Planning Commission, with the exception of cases that have a direct relationship to land use, but are part of the broader responsibilities of County policymaking. This element of the comprehensive Plan intends to identify a vision for long term needs and to provide a basis for the County to coordinate both within the County between departments, and externally with the various municipalities, state and federal agencies, and private and non-profit organizations.

Plan Review and Updating

The Plan must be reviewed and updated periodically to ensure that land use categories, goals, and implementation measures reflect current conditions and that the Plan is achieving its stated goals. The County Board should adopt a review Plan with a schedule and procedure for reviewing and updating the Plan. The review should assess the successes and challenges of implementing the Plan, and any changes in public opinion. The Plan reviews and updates should involve the general public as well as elected officials and County staff. Local units of government within the County and other appropriate interest groups should be involved in this process as appropriate.

The Comprehensive Land Use Plan will guide land use policy and a range of other topics. The Planning Commission is responsible for overseeing the implementation of the land use element of the plan and to take into account the impact land use may have on transportation, housing, natural resources and community services.

The plan also intends to provide a framework to coordinate goals and objectives regarding housing, economic development, natural resources, transportation, and community services.

The Plan must be reviewed periodically. The review should assess the successes and challenges of implementing the plan and any changes in public opinion.

The review process should include:

- *A training session for County Board, Planning Commission and staff.*
- *Development and tracking of short term plan implementation goals.*
- *A yearly progress report.*
- *An ad-hoc citizens committee to assist in the yearly review of the Plan.*
- *Regular review and update of the background information contained in the Plan.*
- *Outreach efforts to educate other governmental entities on the County's Plan.*

This Plan review process should include:

- An initial training session and yearly training, and strategic planning sessions thereafter, on the content and implementation of the Comprehensive Plan for the County Board, Planning Commission and staff of all major county departments.
- Development and tracking of short-term implementation goals. A yearly strategic planning session can be used to identify available resources and opportunities to work on strategies as identified in the Plan, as well as, identify new initiatives that work towards achieving the Plan's goals and objectives.
- A yearly progress report on Plan implementation presented by staff to the County Board, Planning Commission, and other appropriate committee's
- Establishment of an ad hoc citizens committee, with some members of the original steering committee, convened by the Planning Commission and County Board on a yearly basis to assess Plan progress and ensure accountability.
- Regular review of adequacy of background information. Much of the demographic data contained in the background materials were based on 1990 U.S. Census data. As new Census data becomes available, it should be analyzed and compared with the Plan's assumptions that were based on the 1990 data. As more in-depth studies are being developed for issue areas identified in the Plan, such as housing, economic development and a community services needs assessment, more detailed information will become available for decision-making and can be amended into the Plan.
- The County will develop outreach efforts to educate cities, joint powers boards, and other governmental entities on the goals of the Comprehensive Plan. The goal of this effort is to promote intergovernmental cooperation in the implementation of the Plan.

Plan Priorities

This plan provides background information and paints desired outcomes for a 25 year planning horizon. The objectives and strategies in the Plan are intended to provide direction towards these outcomes. The Plan review process will provide a forum to discuss priorities and propose amendments to the Plan as needed. It is recognized that resources are limited and that not every proposed study or policy can be immediately implemented. Projects will need to be prioritized. Appendix E provides worksheets that list all of the strategies included in this Plan. Each strategy has a suggested timeline for implementation and is identified as an ongoing, short-term (0-3 years), mid-range (3-10) or a long-term (ten years and

beyond) need. Some strategies are recommended to be started short term, however they may represent an ongoing effort that goes beyond the three-year horizon. In addition, the implementation schedules identifies the players involved and desired outcomes are indicated for each strategy. This provides a tool for project prioritization and review of Plan progress.

The priorities set for Plan implementation may change based upon resources or change in perceived need. Regular review of the Plan will provide an opportunity to evaluate and identify what resources are available and which strategies should receive priority.

Projects that need to be considered short term are:

- Review and revision of the County Zoning Maps and Ordinance to reflect the comprehensive land use Plan's recommendations.
- Conduct a housing needs assessment.
- Conduct an emergency services needs assessment.
- Conduct a Countywide economic development strategic planning effort that takes into account land use public infrastructure needs.
- Update census information contained in the Comprehensive Plan, as it becomes available.

Goals, Objective, and Strategies

For each issue area, the Plan presents goals that reflect the desired conditions to be achieved during the time span of the Plan. A set of objectives, intermediate steps undertaken to achieve the goals, are included for each goal. Finally, implementation strategies are identified for each objective and, where appropriate stakeholders that need to be involved. The goals and objectives can typically be characterized as policy statements describing more long-term outcomes. The strategies are more concrete and action-oriented. The strategies are more likely to change over time as needs change and new opportunities arise. The goals and objectives provide a more long-range vision and are less likely to be subject to change.

The Koochiching County Framework Plan (Biko, 1999) identifies nine goals. The Comprehensive Land Use Plan incorporates these nine goals and through the planning process objectives and strategies were developed towards implementing these goals. In addition, six new goals were developed addressing areas that were not incorporated in the Framework Plan.

The Plan review process will provide a forum to discuss priorities and propose amendments to the Plan as needed. For each of the strategies included in the plan an implementation timeline has been suggested.

For each issue area a number of goals, objectives and strategies have been developed. The goals and objectives can be characterized as describing more long term outcomes. The strategies are more concrete and action oriented.

LAND USE GOALS, OBJECTIVES, AND STRATEGIES:**Goal #1**

Support the compact, efficient and orderly growth of all County development, including residential, commercial, and industrial areas using the guidelines included in the Land Use Plan for each land use category.

Goal #2

Respect and built upon the existing residential settlement pattern in Koochiching County in order to maintain its character and minimize costs for services and infrastructure.

Land Use Objective:

Update zoning and subdivision ordinances to reflect the land use categories, plan recommendations and changes in existing land use. Reclassify zoning districts were appropriate.

Land Use Objective:

Update zoning and subdivision ordinances to reflect the land use categories, Plan recommendations and changes in existing land use. Reclassify zoning districts were appropriate

Land Use Strategies:

1. Review the existing zoning maps and evaluate the appropriateness of current zoning classification and suitability for development using the guidelines included in the land use categories.
2. Review the existing subdivision ordinance and evaluate changes needed to reflect the land use Plan's goals and objectives.
3. Use appropriate land management tools to ensure availability of land to meet future development needs.
4. Use the guidelines contained in the land use Plan as the basis for evaluating requests for zoning changes.

Intergovernmental Cooperation

Objective: *Promote intergovernmental cooperation to implement Koochiching County's Land Use Goals.*

Intergovernmental Cooperation Objective:

Promote intergovernmental cooperation to implement Koochiching County's Land Use Goals

Intergovernmental Cooperation Strategies:

1. Continue to work with local municipalities to promote orderly and efficient development throughout the County that meets the County's needs for housing, commercial, and industrial land.
2. Continue to work with the State of Minnesota, the United States Government, Tribal Governments, and Industrial land owners using the guidelines contained in the land use plan to ensure Koochiching County's land use goals are met.

NATURAL RESOURCES GOALS, OBJECTIVES, AND STRATEGIES**Goal #3**

Encourage the long-term stewardship of Koochiching County's natural resources by maintaining sustainable levels of harvest or use of natural resources, and maintaining the existing diversity of natural landscapes.

Goal #4

Provide a diversity of recreational opportunities to County residents and visitors.

Goal #5

Promote intergovernmental cooperation to ensure the sustainability of Koochiching County's economy, a diversity of natural resource management goals, and future development options.

Goal #6

Encourage the expansion of forest-products and agricultural industries in Koochiching County.

Water Quality Objective:

Maintain the High water quality of Koochiching County's rivers, lakes, and wetlands and protect the County's groundwater resources

Water Quality Strategies:

1. Support the water management goals formulated in the Koochiching County Water Management Plan.

Action Step:

- *Ensure resources are available to implement, review, and update the Water Management Plan.*
- *Work with the KSWCD in addressing water quality issues*

2. Support the goals and policies formulated in the Koochiching County's Wetland Flexibility Plan.

Action Step:

- *Ensure resources are available to implement, review, and update the Wetland Flexibility Plan.*

3. Support and enforce the goals and policies formulated in the River Management Plans.

Action Step:

- *Ensure an active working relationship with the River Management Boards.*
- *Allocate adequate resources to ensure the County will continue to meet its River Management Plan responsibilities.*

Water Quality Objective:

Maintain the High water quality of Koochiching County's rivers, lakes, and wetlands and protect the County's groundwater resources.

Water Quality**Objective:**

Maintain the High water quality of Koochiching County's rivers, lakes, and wetlands and protect the County's groundwater resources.

Water quality strategies continued:

4. Inspect and encourage replacement of failing septic systems.

Action Step:

- *Identify resources to create a low-interest loan and/or grant program to help landowners upgrade individual septic systems.*
- *Develop and adopt a countywide ordinance for use of alternative Independent Septic Treatment Systems (ISTS) in areas where standard ISTS do not work.*

5. Review the minimum lot size requirements in order to ensure they can accommodate an ISTS and an alternative ISTS site.

Action Step:

- *Change minimum lot sizes as appropriate.*

6. Continue the ROSS study and pilot project.

7. Extend sewer service to the Jackfish Bay area on Rainy Lake.

Action Step

- *Identify and pursue State and Federal funding or low interest loans for the development of this sewer service.*

8. Strictly enforce setback requirements for shore land development and require the use of natural methods and native vegetation to stabilize shoreline when feasible. If possible, avoid hardened erosion control structures.

Action Step

- *Identify resources and personnel to be responsible for enforcement.*
- *Develop an outreach program on shore land best management practices for development, agriculture, and industry along lakes and streams.*

Forest management Objective:

Encourage the sustainable management of forestland to protect timber resources and encourage the long-term viability of forest-product industries.

Forest management**Objective:**

Encourage the sustainable management of forestland to protect timber resources and encourage the long-term viability of forest-product industries.

Forest Management Strategies:

1. Support the Koochiching County Management Plan for Tax-Forfeited Land and continue to support its forest management planning process.

Action Step:

- *Continue to allocate adequate resources to review and update the Management Plan for Tax-Forfeited land on a regular basis*

Forest management strategies continued:

2. Participate in the DNR subsection planning efforts.

Action Step:

- *Designate a County representative to represent County interests in the planning process.*

3. Participate in the Forest Resources Councils landscape-level planning efforts.

Action Step:

- *Designate a County representative representing County interests in the planning process.*

4. Coordinate timber sale activities with other agencies and private forest industry so that the diversity of landscapes is maintained.

5. Promote a no net-loss policy of wood fiber production and multiple use access on timberland in Koochiching County

Action Steps:

- *Control development that encroaches on valuable forestland. Both public and private forestlands are important for timber supply.*
- *Actively work with the state to ensure timberlands remain available for timber supply.*

7. Study opportunities for the economic potential of underused species by the timber industry.

Action Step:

- *Work with the timber industry, NRRI, and local economic development organizations on funding and executing this study*

8. Ensure increased wood fiber yield forest management.

Action Step:

- *Work with all landowners towards an increased sustainable yield of wood fiber on timberlands.*

Forest management Objective:

Encourage the sustainable management of forestland to protect timber resources and encourage the long-term viability of forest-product industries.

Recreation Objective:

Provide a diversity of recreational opportunities to Koochiching County residents and visitors.

Recreation Objective:

Provide a diversity of recreational opportunities to Koochiching County residents and visitors.

Recreation Strategies

1. Develop a comprehensive recreation plan in cooperation with all County recreation providers.

Action Step:

- *Allocate resources for the development of a recreation plan.*

2. Coordinate recreation development and develop partnerships with other providers.

Action Steps:

- *Identify resources for staff time to coordinate and plan for recreation facilities throughout the County.*
- *Work with the DNR and Park Service to ensure continued access to a diversity of recreational opportunities on public lands.*

3. Develop clear standards and a public outreach program regarding forest road closures during the wet season.

Action Step:

- *Coordinate with State and private landholders on the development of road closure standards and a public outreach program.*

4. Expand opportunities for trail based recreation during the summertime.

Action Step:

- *Work with Mn/DNR Trails and Waterways program on identifying opportunities for summer trail use expansion.*

5. Invest in maintenance and improvement of existing facilities, based on current use and identified need before investment in new facilities.

Action Step:

- *Develop a five year capital improvement program for recreational facilities maintained by the County.*

6. Support the development of the Waters of the Dancing Sky State Scenic Byway.

Action Step:

- *Take advantage of the National Scenic Byway Program.*
- *Take advantage of the Mn/DOT Enhancement program for improvements.*

7. Develop a coordinated promotional effort to market the County's resources for recreation.

Action Step:

- *Support the region's chambers of Commerce and Convention and Visitor Bureau on the development of a region wide marketing strategy.*

Mineral Resources Objective:

Support the development of an extractive industry in Koochiching County.

Mineral Resources Strategies:

1. Support the development of a commercial peat-mining project.
2. Identify and protect the County's gravel resources for public use.
3. Maintain options for future mining activities in areas of high mineral potential.

Agriculture Objective:

Recognize and support existing agriculture as a valuable basic industry that diversifies the economy of Koochiching County.

Agriculture Strategies:

1. Support the diversification of agricultural production and the development of niche markets.

Action Step:

- *Develop partnerships with research institutes to identify opportunities for agricultural diversification.*
2. Encourage through education and incentives, the conversion of marginally productive agricultural land into agro-forestry land.

Wildlife Objective:

Protect the native wildlife, plants, and their communities found in Koochiching County and manage them for their intrinsic values and long-term benefits for the people.

Wildlife Strategies:

1. Cooperate with public agencies and the forest industry in developing plans to manage wildlife.
2. Participate in Mn/DNR subsection planning.

Mineral Resources Objective:

Support the development of an extractive industry in Koochiching County.

Agriculture

Objective: *Recognize and support existing agriculture as a valuable basic industry that diversifies the economy of Koochiching County.*

Wildlife Objective:

Protect the native wildlife, plants, and their communities found in Koochiching County and manage them for their intrinsic values and long-term benefits for the people.

**Intergovernmental
Cooperation**

Objective: Promote
intergovernmental
cooperation in the
management of natural
resources.

Intergovernmental Cooperation Objective:

Promote intergovernmental cooperation in the management of natural Resources.

Intergovernmental Cooperation Strategies:

1. Participate in the Forest Resource Council Planning initiative.

Action Step:

- *Designate a County representative representing County interests.*

2. Participate in the DNR Subsection Planning process.

Action Step:

- *Designate a County representative representing County interests.*

3. Participate in the Rainy River Basin Plan planning process.

Action Step:

- *Designate a County representative representing County interests in the planning process.*

4. Develop a taskforce to discuss Voyageur National Park management issues on an ongoing basis.

Action Step:

- *Allocate resources to review and comment on park policies as it relates to Koochiching County's interests.*

5. Work with the Canadian Authorities on international natural resource management issues.

6. Coordinate maintenance, development, and access to recreational facilities and areas with Mn/DNR, Park Service, and Mn/DOT.

7. Assist prospective businesses with coordination of environmental permitting with the various state and federal agencies.

TRANSPORTATION GOALS, OBJECTIVES, AND STRATEGIES**Goal #7**

Ensure that Koochiching County residents, visitors, and businesses have reasonable access via transportation networks and communication technology to services, public facilities, retail centers, export markets, and manufacturing resources.

Goal #8

Provide a transportation network that facilitates the efficient flow of people and goods throughout the County.

State Highway Objective:

Ensure the countywide highway system meets the needs of Koochiching County residents, businesses and industry.

State Highway Strategies:

1. Work with the Minnesota Department of Transportation to incorporate local needs and preferences in Mn/DOT's plans for improvements and new roadways.

Action Steps:

- *Continue working with Mn/DOT on the implementation of the recommendations in the "Move It" study.*
- *Work with Mn/DOT to address the lack of shoulders along Trunk Highway 217.*
- *Work with Mn/DOT to address narrow shoulders along Trunk Highway 6.*

2. Work with Mn/DOT on upgrading Highway 11 to a year round ten-ton road.

Action Steps:

- *Actively participate in the development of a corridor safety study for Highway 11.*
- *Work with Mn/DOT on the implementation of the recommendations coming out of a corridor safety study.*

3. Support the efforts of the Highway 53 Long Range Improvement Task Force to upgrade Highway 53 into a four-lane road.

State Highway Objective:

Ensure the Countywide highway system meets the needs of Koochiching County residents, businesses and industry.

Railroad Objective:

Provide safe at-grade railroad crossings.

Transit Objective:

Continue working on the improvement of public transportation services to meet the need of transit-dependent populations such as the elderly, disabled, and low-income households.

Bicycle and**Pedestrian Objective:**

Promote the development of bicycle and pedestrian facilities for transportation and recreational use.

Transportation Strategies (Continued):**Railroad Safety Objective:**

Provide safe at-grade railroad crossings

Railroad Strategies:

1. Actively participate in the DWP-Railroad safety study
2. Use recommendations from the DWP-Railroad safety study to improve railroad safety by upgrading warning systems or closing unnecessary crossings

Action Step:

- *Work with railroads and proper jurisdictions to implement recommended solutions*

Transit Objective:

Continue working on the improvement of public transportation services to meet the need of transit-dependent populations such as the elderly, disabled, and low-income.

Transit Strategies:

1. Support and continue working on implementing the transit recommendations from the "Move It!" study.
2. Promote and support collaboration and pooling of resources among public transit service providers.
3. Continue to provide financial support for public transportation.

Bicycle and Pedestrian Objective:

Promote the development of bicycle and pedestrian facilities for transportation and recreational use.

Bicycle and Pedestrian Strategies:

1. Identify needs for bicycle and pedestrian improvements as part of the overall County wide highway improvement planning process.
2. Incorporate bicycle and pedestrian improvements into roadway improvement projects and the highway department's capital improvement plan.
3. Take advantage of State and federal funding for the development of trails and bicycle and pedestrian facility improvements.

Transportation Strategies (Continued)**Airport Objective:**

Encourage the use of the Falls International Airport for personal travel and Commercial Transportation.

Airport Strategies:

1. Work with air carriers to provide adequate and affordable opportunities for air travel to larger airport hubs from the Falls International Airport.
2. Support the Airport Commission in implementing the airport master plan.

Land Use Objective:

Coordinate transportation development so that it is consistent with the County's land use goals.

Land Use Strategy:

1. Consider transportation impacts before approving subdivisions, rezoning, and new development plans.

Action Step:

- *Ensure new development along the Highway 53 and Highway 11 corridor does not conflict with potential future realignments of these highways.*

Airport Objective:

Encourage the use of the Falls International Airport for personal travel and Commercial Transportation.

Land Use Objective:

Coordinate transportation development so that it is consistent with the County's land use goals.

COMMUNITY SERVICES GOALS, OBJECTIVES, AND STRATEGIES:**Goal #9**

Provide and maintain exceptional public facilities in Koochiching County in order to preserve and enhance the health, safety and welfare of County residents.

Goal #10

Encourage viable existing community institutions and reasonable new opportunities for Koochiching County residents to extend their education, pursue creative ventures, and enjoy others' creative efforts.

Water and Wastewater Facilities Objective:

Ensure adequate drinking water and wastewater treatment facilities throughout the County.

Drinking Water and Wastewater Facilities Strategies:

1. Work with communities as needed to ensure the effectiveness and efficiency of existing infrastructure on the environment, and the health and welfare of residents in the County.
2. Continue to work on Jack Fish Bay area wastewater services expansion.

Wellhead Protection Objective:

Ensure adequate drinking water and wastewater treatment facilities throughout the County.

Wellhead Protection Strategies:

1. Support public water supplier's efforts to develop wellhead protection plans.
Action Step, assist as needed with the following:
 - *Delineate drinking water supply management areas*
 - *Inventory potential sources of contamination*
 - *Develop management strategies*
2. Support public water supplier's implementation of wellhead protection management strategies.
Action Step:
 - *Utilize knowledge and regulatory powers of Koochiching County Environmental Services Department in implementation and regulation.*
3. Support local public education efforts regarding wellhead protection and safe drinking water.
4. Conduct a comprehensive study of the safety of private drinking water supplies.

Water and Wastewater Facilities

Objective: *Ensure adequate drinking water and wastewater treatment facilities throughout the County.*

Wellhead Protection Objective:

Ensure adequate drinking water and wastewater treatment facilities throughout the County.

Community Services (Continued):**Public Safety Objective:**

Continue to serve the County's residents with effective law enforcement, fire protection, and ambulance service.

Public Safety Strategies:

1. Conduct a comprehensive study to determine the adequacy of emergency service provider staffing, equipment, and identify partnerships to meet the long-term needs of the County.
2. Encourage participation in volunteer fire departments and ambulance services.

Action Steps:

- *Support activities that promote participation in volunteer fire departments and EMT activities.*
3. Support where possible efforts to secure funding for staff training and equipment.

Library Objective:

Maintain a public library system that meets the needs of Koochiching County.

Library Strategy:

1. Support efforts to keep library materials and services accessible to all residents.

Education Objective:

Encourage high quality educational opportunities for students throughout the County.

Education Strategy:

1. Work with the School Boards as appropriate to support high quality learning facilities and curriculum in all school districts.

Waste Management Objective:

Provide opportunities for every resident to participate in solid waste management and recycling.

Waste Management Strategy:

1. Provide solid waste management and recycling education and services to all residents as financially feasible.

Public Safety Objective:

Continue to serve the County's residents with effective law enforcement, fire protection, and ambulance service.

Library Objective:

Maintain a public library system that meets the needs of Koochiching County.

Education Objective:

Encourage high quality educational opportunities for students throughout the County.

Waste Management Objective:

Provide opportunities for every resident to participate in solid waste management and recycling.

Medical Services**Objective:**

Ensure adequate availability of and access to medical services for Koochiching County residents.

Community Services (Continued):**Medical Services Objective:**

Ensure adequate availability of and access to medical services for Koochiching County residents.

Medical Services Strategy:

1. Actively work with healthcare providers and assistance organizations to ensure adequate healthcare is available in the region for an increasingly aging population.
2. Ensure adequate and affordable transportation options are available for rural residents to access medical services.

ECONOMIC DEVELOPMENT GOALS, OBJECTIVES, AND STRATEGIES**Goal #11**

Promote intergovernmental cooperation to ensure the sustainability of the Koochiching County economy, a diversity of natural resources management goals, and future development options.

Goal #12

Diversify and expand the economy of Koochiching County to meet resident's needs through job and business creation in non-forest product manufacturing, in value-added businesses in the natural resource based industries, in tourism, and recreation, and in retail and service businesses.

Goal #13

Increase the range of services and goods available in Koochiching County to County residents and visitors

Intergovernmental Cooperation**Objective:**

Foster strong intergovernmental cooperation to promote economic development.

Intergovernmental Cooperation Objective:

Foster strong intergovernmental cooperation to promote economic development.

Intergovernmental Cooperation Strategies:

1. Develop a Countywide "one stop shop" for economic development resources for prospective businesses while recognizing the different needs for rural Koochiching County and the more urbanized areas such as International Falls.

Action Steps:

- Establish a single point of contact for basic business information.
- Establish and maintain a baseline of information on County assets (i.e. workforce, sites, buildings, infrastructure costs, incentives etc.).
- Provide adequate resources to support the economic development activities of the KEDA.

Economic Development (Continued):

2. Support a Countywide economic development strategic planning process that involves all economic development organizations.

Business Climate Objective:

Maintain and improve a favorable climate for ongoing business development activities and economic diversification efforts.

Business Climate Strategies:

1. Develop a business retention and expansion program.

Action Steps:

- *Develop and maintain a business retention and expansion program for existing businesses.*
- *As part of a business retention and expansion program survey County businesses.*
- *Gain feedback from businesses and address issues.*
- *Assist local development organizations in retaining and expanding existing businesses.*

2. Develop a targeted business recruitment program.

Action Steps:

- *Identify and target acceptable and compatible industries to locate in the County (primary and secondary targeting).*
- *React to business needs in an effective and timely manner.*
- *Develop assistance packages, such as tax increment financing, other funding development programs and employee training assistance.*

3. Recognize tourism and recreation as a viable part of a diversified economy.

Action Steps:

- *Continue to market the County's tourism and recreation assets.*
- *Partner with other regional and statewide marketing efforts to leverage marketing dollars and impact.*

4. Promote adequate availability of build-ready commercial and industrial sites with infrastructure in place.

Action Steps:

- *Inventory suitable commercial industrial properties within the County.*
- *Identify properties suitable for development but not currently zoned commercial.*
- *Redevelop abandoned or vacant industrial lands within municipal service areas.*
- *Identify needs to upgrade and expand City and County infrastructure in order to support and promote continued commercial and industrial development (Business Park).*
- *Actively market the county's real estate assets.*

Business Climate Objective:

Maintain and improve a favorable climate for ongoing business development activities and economic diversification efforts.

Business Climate Objective:

Maintain and improve a favorable climate for ongoing business development activities and economic diversification efforts.

Economic Development (Continued):

5. Actively promote commercial and industrial development within the County.

Action Steps:

- *Participate in the Arrowhead Business Connection Program.*
 - *Continue to provide funding support for new and expanding businesses.*
 - *Identify and market the County's assets.*
 - *Use the County Comprehensive Plan as a marketing tool for business development throughout the County.*
6. Continue to move forward with the Koochiching County Telecommunications Initiative to upgrade communication and data transmission technology within the County.

HOUSING GOALS, OBJECTIVES, AND STRATEGIES**Goal #14**

Provide quality housing and living conditions for all people in Koochiching County.

Diversity and Affordability Objective:

Promote an affordable range and diversity of housing types to accommodate current and future County residents.

Diversity and Affordability Objective:

Promote an affordable range and diversity of housing types to accommodate current and future County residents

Housing Diversity and Affordability Strategies:

1. Conduct a housing study to determine the type of housing needs for single people, families and seniors.
2. Collaborate with local municipalities in addressing the County's housing needs.
3. Support improvement of existing housing and construction of new housing.

Housing Preservation Objective:

Promote the preservation of the character and integrity of the existing housing stock.

Housing Preservation Objective:

Promote the preservation of the character and integrity of the existing housing stock.

Housing Preservation Strategies:

1. Determine the level of assistance that homeowners need to maintain their homes.
2. Identify and pursue funding for housing rehabilitation programs.

PLAN IMPLEMENTATION GOALS, OBJECTIVES, AND STRATEGIES:**Goal #15**

Establish a flexible plan that guides land use in Koochiching County and provides a framework of goals and policies coordinating a variety of policy areas in a way that reflects the traditions, values and customs of the Koochiching County residents.

Plan Implementation Objective:

Promote the implementation of a comprehensive Plan that provides a framework for coordinating land use, natural resources, transportation, community services, economic development and housing within Koochiching County.

Implementation Strategies:

1. Review, update, and amend the Comprehensive Plan as necessary, using the review process described in the implementation chapter, to ensure the that the plan maintains current and is achieving its stated goals.
2. The County's official Zoning Map and Ordinances shall be consistent with the Comprehensive Plan, in instances in which they are inconsistent, the Comprehensive Plan shall be the guiding document or amendments should be made to the Plan.
3. Promote intergovernmental cooperation through actively developing outreach efforts to educate cities, tribal governments joint powers boards, and other state and federal governmental entities on the goals of the Comprehensive Plan.

Plan Implementation Objective:

Promote the implementation of a comprehensive Plan that provides a framework for coordinating land use, natural resources, transportation, community services, economic development and housing within Koochiching County.

Appendix A

Table of Contents

| | Page |
|-------------------------------------------|------|
| Introduction and Process Description..... | 1 |
| Natural Resources | |
| Key themes..... | 2 |
| Goal 1..... | 3 |
| Goal 2..... | 4 |
| Goal 4..... | 5 |
| Intergovernmental Cooperation | |
| Goal 3..... | 6 |
| Economic Diversification and Development | |
| Goal 5..... | 7 |
| Goods and Services | |
| Goal 6..... | 9 |
| Transportation and Communication | |
| Goal #7..... | 10 |
| Housing | |
| Goal #8..... | 12 |
| Culture and Education | |
| Goal #9..... | 14 |

INTRODUCTION AND PROCESS DESCRIPTION

From June through August, the Koochiching County comprehensive land use plan Steering Committee met three times to review the nine goals that were formulated as part of the Koochiching County Framework Plan (Biko, 1999). The purpose of this series of meetings was to ensure the goals were still valid, for the consulting team to gain a better understanding of how the steering committee arrived at these goals, and to learn more about issues to be addressed in Koochiching County's comprehensive land use plan.

At the three meetings the participants were asked to respond to four questions for each goal:

1. What is your initial reaction or interpretation to this goal?
2. Which players need to be involved to work towards this goal?
3. What opportunities do you see with this goal?
4. What reality checks or obstacles do you see regarding accomplishing this goal?

This report documents the discussions that took place at the three goal review meetings and attempts to identify the major themes that need to be addressed in more detail in the comprehensive land use plan. This document will serve as a filter for the planning process. The goal review sessions were a starting point for discussion. The process identified issues and opportunities for the different topics such as natural resources, land use, and transportation. However, no attempt was made through this process to build a consensus around the different themes that were identified by the steering committee members. The goal review summary also functioned as a tool to ensure that the future plan will reflect the goals formulated in the Framework Plan. Further, the process identified stakeholders that should invited to the process.

The next step in the planning process after this goal review session will be a series of focus group meetings. These meetings will deal with specific topics such as land use, transportation, natural resources, and economic development. For each of these meetings consulting team members will prepare a white paper which discuss background information related to each topic and incorporate issues that were brought up at the goal review meetings. Through these meetings detailed goals, objectives, and strategies will be developed for each of the plan elements. These will incorporate the framework goals.

NATURAL RESOURCES

Introduction

Goal one, two, and four all relate to natural resource issues in Koochiching County. The key themes identified in relation to these three goals have been combined.

Key themes regarding natural resources:

- The forest industry is an important component of the area's economy. Ensuring long-term adequate access to forest resources is one key issue to be addressed, and will contribute to a healthy economy in the area.
- The forest industry is dominated by Boise Cascade. This may limit opportunities for diversification in the timber-based industry. A dependence on a single large employer may be a concern and may make the area more vulnerable to economic cycles in the paper industry.
- There is a general desire to diversify the economy. Opportunities in natural resources should be further explored. However development of more technology based industry should be studied as well.
- Tourism could be an area of economic diversification. Recreational opportunities may contribute to the region's quality of life and lead to economic development.
- There is a general consensus about the need to balance forestry, recreation, and wilderness. This balance requires cooperation among a large number of players. A list of strategies and goals should be developed that will help guide the County in balancing the needs of the various areas and cooperating with the other players.
- Once adopted a strong local comprehensive plan will be an important tool for guiding the County's decision-making process and identifying areas of local concern.

NATURAL RESOURCES--GOAL #1

Encourage the long-term stewardship of Koochiching County's natural resources by maintaining sustainable levels of harvest or use of natural resources and maintaining the existing diversity of natural landscapes.

Initial reaction

Natural resource goals affect all areas of the comprehensive plan. The steering committee's members general response to this goal was that it is so broad you can't really disagree with it. The committee feels the idea behind the goal is good but it needs more detail. There seems to be support for maintaining the existing diversity and a balance among forestry, wilderness, and recreation. Issues of concern included no net loss of forestry land, the need for local control, and expansion of wilderness areas.

Players

The management of natural resources involves many players. Large tracts of land are owned and managed by the state and federal governments. Two Indian Reservations, Nett Lake and Red Lake, are located within the County's boundaries. Boise Cascade is one of the largest private landowners in the area and also has a great interest in what happens with public lands regarding timber management. Koochiching County manages approximately six percent of the County as tax forfeit land. Coordination and cooperation among these landowners will be addressed as key issue in sustainable management of natural resources.

Opportunities

The steering committee identified opportunities in relation to this goal such as researching potential alternative uses of the available resources, research ways to intensify silviculture, and looking for opportunities to increase non-consumptive use (birding and wildflower watching). A strong land use plan was seen as an opportunity to manage and support the overall goal. Education on natural resource management was identified as important for good stewardship.

Reality checks

Reality checks identified with this goal indicated that to a great extent, this goal is already being accomplished. However, the group members also indicated the need to monitor how the county is doing and identify checks and balances to ensure the county keeps on track. A need for local control of natural resource management issues was identified. The group raised concerns related to the state and federal government limiting activities on public lands. The committee identified a concern for pressure from environmental groups on land use on state and federal lands.

NATURAL RESOURCES--GOAL #2

Provide a diversity of recreational opportunities to County residents and visitors.

Initial reaction

This goal has a strong relationship with natural resources because the majority of the recreational activities in Koochiching County are natural resource based. There was a general consensus that Koochiching County has many recreational opportunities already and that this is a realistic goal. The steering committee's reaction to this goal generally focused on promoting what is already there and enhancing existing resources. The group also identified the need to change negative attitudes towards tourism among residents and entrepreneurs.

Players

The steering committee identified a long list of players. The need for public and private sector partnering was suggested for development of recreational opportunities in the area.

Opportunities

The ability to refine, enhance, and guide development of tourism in the area was identified as an opportunity. The County has much to offer in terms of winter and summer recreation as well as space, peace, and quiet. All of these are potential selling points for the County.

Reality Checks

The local population may not have a great desire to further develop tourism in the region. There is some apprehension regarding attracting visitors to the area, meaning some people don't like to see more people come up to the area who may take advantage of recreation opportunities. The committee questioned what potential tourists are looking for compared to what the area has to offer. There is a need to select carefully what type of tourism should be pursued and to guide development carefully. The group indicated there is a need for project champions and volunteers to develop festivals and tourism activities.

NATURAL RESOURCES--GOAL #4

Encourage the expansion of forest products and agricultural industries in Koochiching County.

Initial reaction

A general reaction to this goal centered around whether or not there is room for expansion of the forest products based industry in Koochiching County. According to some committee members, Boise Cascade dominates the market buying large amounts of timber in the area. Additional timber-based companies can lead to higher stumpage prices that may limit opportunities to operate a business in the area.

Players

Players, that were identified in relation to this goal included Boise Cascade, farmers, economic development agencies, universities, and business service providers such as insurance companies and investors.

Reality checks

The steering committee identified the use of business byproducts/waste in developing secondary market products as an opportunity. Forest industry waste products can be used for energy production or products such as pallets. Peat harvesting offers possibilities. Development of niche markets in high value forest and agriculture related products are opportunities as well. Development of more diversified finished products and industries that use timber waste products could provide ways to diversify the region's economy while using its natural resources. For agriculture there may be opportunities to tap into research that has been done in Canada where climate compares more to the short growing season in Koochiching County.

In the discussion of reality checks the lack of financing for start-up, local entrepreneurship, and expertise were identified as major constraints to developing businesses that could utilize the aforementioned by-products. Access to markets may pose limitations as well. There are currently approximately 25 wood consuming businesses operating in Koochiching County. The group voiced a concern that the region's forest industry is dominated by Boise Cascade due to the high volumes of wood it consumes. If the company experiences a downturn, this may make the area more vulnerable to economic cycles in the paper industry. Some group members also pointed out that there is little or no profit in traditional agriculture. An aging and declining population was identified as a constraint related to workforce development.

INTERGOVERNMENTAL COOPERATION-- GOAL #3

Promote intergovernmental cooperation to ensure the sustainability of the Koochiching County economy, a diversity of natural resource management goals, and future development options.

Key themes regarding intergovernmental cooperation

- Identify through the planning process the issues and areas in need of inter-governmental cooperation and the appropriate players.
- Develop strategies for intergovernmental cooperation.

Initial reaction

The group widely recognized the need for intergovernmental cooperation in effective implementation of the comprehensive plan. Conflicts among state, federal, and local governments, as well as the Canadian government need to be addressed and partnerships need to be identified and formed. Partnerships in the pooling and sharing of resources, with Koochiching County's currently declining county population, may be necessary to continue providing the current and or an improved level of services to citizens. Partnerships can also be a successful strategy to obtain grants. The group supports a pro-active approach of early involvement of appropriate government entities rather than just at the end of a decision-making process.

Players

Players identified needed to address this goal include the various governmental entities at the state, federal, local and international governmental entities, the business community, and the general public.

Opportunities

Opportunities related to this goal include cost-savings through sharing of resources and expertise, and the benefit of clear policies on a local level and working on common goals. Other opportunities identified relate to cooperation on economic development for cold weather testing, peat and mineral exploration, and opportunities to bring in new and sustain existing businesses.

Reality checks:

Group members pointed out the fact that different organizations may have different objectives and currently a strategy is lacking to get all the groups working together. Members also identified the need for sufficient resources for coordination efforts and partnerships. Politics and personal grudges were identified as potential barriers for cooperation as well.

ECONOMIC DIVERSIFICATION AND DEVELOPMENT--GOAL #5

Diversify and expand the economy of Koochiching County to meet resident's needs through job and business creation in non-forest-product manufacturing, in value-added businesses in the natural-resource-based industries, in tourism, and recreation, and in retail and service businesses.

Key themes

Many of the issues that came up under this goal reflected similar concerns that were voiced within the other goals' discussion as to their relationship to economic development. They included suggested activities for the County as follow:

- Identifying ways to better market and capitalize on the county's assets.
- Studying what type of economic development is promising and desirable.
- Identifying partnerships to create economic development opportunities.
- Maintaining and enhancing quality of live, pursuing grants, developing partnerships for economic development (tourism, manufacturing, service industry), and developing incentive packages.
- Serving as an active voice for the community

Initial response

This goal has broad support from the Steering Committee members. Diversification of the economy is seen as a key element to keep up with changing economic times and a way to keep (young) people in Koochiching County. The steering committee recognizes that Koochiching's economy currently has a limited diversity and relies heavily on the natural resources industry. Some group members also pointed out that diversification is easier said than done.

Players

Players that were identified to help address this goal were educational organizations, business groups, Koochiching Economic Development Authority (KEDA), Manpower services/job training, all residents, lenders, and planners.

Goal #5 (continued)

Opportunities

Opportunities the steering committee identified to accomplish this goal include employing good and hard working labor force, focussing on the quality of life, continuing to build on recreational opportunities, and selling what Koochiching County has to offer. The County and KEDA should continue to pursue grants and create incentives for businesses to locate in Koochiching County. Opportunities in agriculture should be further addressed. A large number of steering committee members see tourism as an important economic development opportunity.

Reality Checks

The remoteness of the region from major markets may negatively affect the county's ability to capitalize on the opportunities above. A declining and aging population and the size of county population could also limit economic viability. Many citizens are not in favor of economic development according to steering committee members. Some local residents don't want too many people in the area to compete for recreational opportunities. Some members also voiced concerns regarding the restrictions imposed by Voyageurs National Park and the need to work with the Park in a cooperative manner.

GOODS AND SERVICES--GOAL #6

Increase the range of services and goods available in Koochiching County to county residents and visitors.

Key themes

- Address upgrading of the existing communication system and identify needs for upgrading data-transmission technology as part of the economic development strategy.
- Study quality and potential improvements of county service delivery to residents.
- Acknowledge that population may be declining or remain stable and address impacts this trend may have on future service delivery. What strategies need to be developed?
- Identify partners and leadership within the community to work on this issue.

Initial reaction

A number of Steering Committee members' reactions to this goal related to the need to upgrade communication services in the area and keep up with technological developments. Committee members also pointed out the need for a strong customer market in order for the service providers to sustain a viable business. One concern of local businesses is the large number of residents that leave the area to do their shopping. The lack of shopping opportunities in the County creates a downward spiral of less supply and thus even lower demand. A concern regarding the quality of emergency services was brought up as well.

Players

Players to be involved in addressing this goal include the various boards of organizations that deliver services to area residents, local, state, and federal governments, the private sector, and citizens of Koochiching County.

Opportunities

The steering committee identified promoting the use of teleconferencing for county services as a way to reduce the need for traveling long distances in International Falls. Steering committee members also identified the need to improve telecommunications and reduce the local rate calling.

Reality checks

The steering committee identified an eroding customer base, a declining or stable population, and people shopping out of the area, as a concerns in the reality check. A need for economic development to prevent a loss in population was identified. However, many people are content with the current status quo. The group identified a need for leadership in economic development as well.

TRANSPORTATION AND COMMUNICATION—GOAL #7

Ensure that Koochiching County residents, visitors, and businesses have reasonable access via transportation networks and communication technology to services, public facilities, retail centers, export markets, and manufacturing resources.

Key themes

- Ensure an adequate overall transportation system.
- Ensure an adequate communication system and develop strategies for improvement of communication infrastructure.
- Analyze needs and opportunities for infrastructure improvements in relation to economic development.

Initial reaction

This goal focuses on transportation networks and communication technology and they have implications on Koochiching County's economic health. Group members pointed out Koochiching County's low population densities and lack of overcrowded roads. Future economic development has to be technological in nature because there is limited opportunity for development of additional natural resources based industry. The County needs to look at cable and high-speed internet connections to accommodate technology based industry. The Falls International airport was seen as another important asset to the transportation infrastructure that could be further developed. International Falls is also one of the busiest border crossings between Minnesota and Canada for goods and people.

Players

Players associated with road infrastructure efforts include county, state, and federal roadway authorities. Those linked to telecommunications include phone/cable companies such as North Star. The general public and business community also plays an important role in demonstrating the need for transportation and communication services.

Opportunities

The group identified partnerships with government entities as an opportunity. Congressman Oberstar's position on the Congressional Transportation Committee is viewed as beneficial. Members of the group also recognized the positive impacts infrastructure improvements can have on the County's business climate.

Goal #7 (continued)

Reality checks

Reality checks brought up the question of whether or not the population will expand and whether there is a sufficient demand to justify infrastructure improvements. Average Daily Traffic (ADT) numbers determine to a great extent what improvements will take place on roads. Funding and capital costs were identified as potential obstacles as well for infrastructure improvements. Other potential obstacles are a lack of gravel in the county and the social and environmental impacts of road construction projects.

HOUSING--GOAL #8

Promote a range of quality housing options to meet Koochiching County residents' lifecycle needs, a range of affordability, and recreational options.

Key themes

Steering committee members did not bring up any particular concerns regarding housing in this discussion. However based on the discussion that took place the following themes should be looked into throughout the planning process:

- Ensure adequate housing as part of the county's overall economic development strategy
- Seasonal housing and transient population
- Housing quality versus quantity

Initial response

The first reaction to this goal was a general agreement by the Steering Committee that it is important to have a range of housing available that meets the county residents needs. The group acknowledged that need and subsequent availability of quality housing is created through economic development. One concern raised by some Steering Committee members was the increasing number of seasonal residents in the area. This seasonal increase creates a transient community, which may be less involved in decision-making on community issues. Other comments touched on the fact that the market will determine what housing will be build and that this goal may have a low-income bias

Players

The players the group identified in relationship to this goal were the County planning and zoning board and staff, and County board who will regulate what is being built. Other players involve government organizations such as the office of Housing and Urban Development (HUD) that have funding available, and developers and lenders.

Opportunities

The Steering Committee saw taking stock of what Koochiching County has and removal of eyesores as an opportunity. New housing development creates an economic opportunity for construction jobs and could increase in the county's tax base. Vacant land and a stable population create an opportunity to develop carefully through the use of zoning.

Goal #8 (continued)

Reality checks

The group identified the fact that due to a declining population, housing may be adequate in quantity. However, Steering Committee members were not certain if the right type of housing is available. Members also identified that development of rural housing and lakeshore property increases the demand for services, thereby leading to higher taxes for county residents. It was suggested the County examines the tax structure in the for rural and lakeshore properties.

CULTURE AND EDUCATION-- GOAL #9

Encourage viable existing community institutions and reasonable new opportunities for Koochiching County residents to extend their education, pursue creative ventures, and enjoy others' creative efforts.

Key themes

While no particular issues were identified for the county to play a clear role in reaching this goal, the group primarily felt that many of the creative endeavors are likely to be more grassroots driven and that the county has the opportunity to play a more supportive role where possible.

Initial reaction

The Steering Committee's first reaction to this goal was the need to invest in cultural aspects of society and embrace existing culture. Members also suggested including cultural resources in this goal. The local schools and community college offer opportunities for the County's residents.

Players

The Steering Committee identified a wide variety of groups to be included in working toward this goal, ranging from schools, to sports clubs, to Native Americans, and churches.

Opportunities

Opportunities that were identified were the development of a downtown theatre in International Falls and the establishment of arts festivals and an arts colony. The community college offers an opportunity for students to start college locally and continue for a BA at one of the main colleges. Steering committee members brought up the need for cooperation between different groups as well.

Reality checks

Committee members identified a lack of funding and interest in the arts as a reality check. It also may be hard to find champions. The group felt the population may be too small to support an increased effort and stressed the need to identify what people's interests are.

Appendix B

1975 KOOCHICHIING COUNTY ZONING DISTRICT DESCRIPTIONS

| DISTRICT CODE | DISTRICT NAME | MINIMUM SETBACKS | | MINIMUM LOT WIDTH | MINIMUM LOT SIZE | MAX % LOT COVERAGE | EXCEPTIONS OR CONDITIONS |
|---------------|--------------------------|------------------|-------|-------------------|------------------------|--------------------|------------------------------------------------------|
| | | SIDE | REAR | | | | |
| R-1 | Low Density Residential | 25 ft | 50 ft | 200ft | 2.5 acres | 20% | |
| R-2 | Med Density Residential | 10 ft | 45 ft | 100 ft | 1 acre | 25 % | |
| R-3 | High Density Residential | 15 ft | 40 ft | 100 ft | 1/2 acre | 25 % | ON-SITE SEWER/PRIVATE WATER |
| | | 15 ft | 40 ft | 100 ft | 1/3 acre | 30 % | UTILIZING JUST PUBLIC WATER |
| | | 10 ft | 35 ft | 75 ft | 1/4 acre | 35% | UTILIZING BOTH/PUBLIC WATER & SEWER |
| RR-1 | Residential/ Recreation | 10 ft | 45 ft | 200 ft | 1 acre | 20 % | |
| AF-1 | Agricultural/ Forestry | 50 ft | 75 ft | 300 ft *200 ft | 10 acres *2.5 acres | 10 % | *IF DIRECT ACCESS TO STATE OR COUNTY MAINTAINED ROAD |
| C-1 | Commercial | 10 ft | 35 ft | 200 ft | 1 acre | 50 % | |
| C-2 | Limited Commercial | 25 ft | 35 ft | 200 ft | 1 acre | 50 % | |
| M-1 | Manufacturing | 20 ft | 40 ft | 200 ft | 1 acre | 50 % | |
| M-2 | Manufacturing | 30 ft | 60 ft | 200 ft | 2 acre | 50% | |
| O-1 | Open Space | 25 ft | 50 ft | 200 ft | 5 acre | 20 % | SEASONAL DWELLINGS ONLY |
| O-2 | Open Space | 25 ft | 50 ft | 200 ft | 5 acre | 20 % | NO DWELLINGS ALLOWED |
| CA-1 | Critical Areas | 50 ft | 75 ft | 300 ft | 10 acres | 10 % | |

MINIMUM REQUIRED HIGHWAY AND COUNTY ROAD SETBACKS: (*whichever is greater)

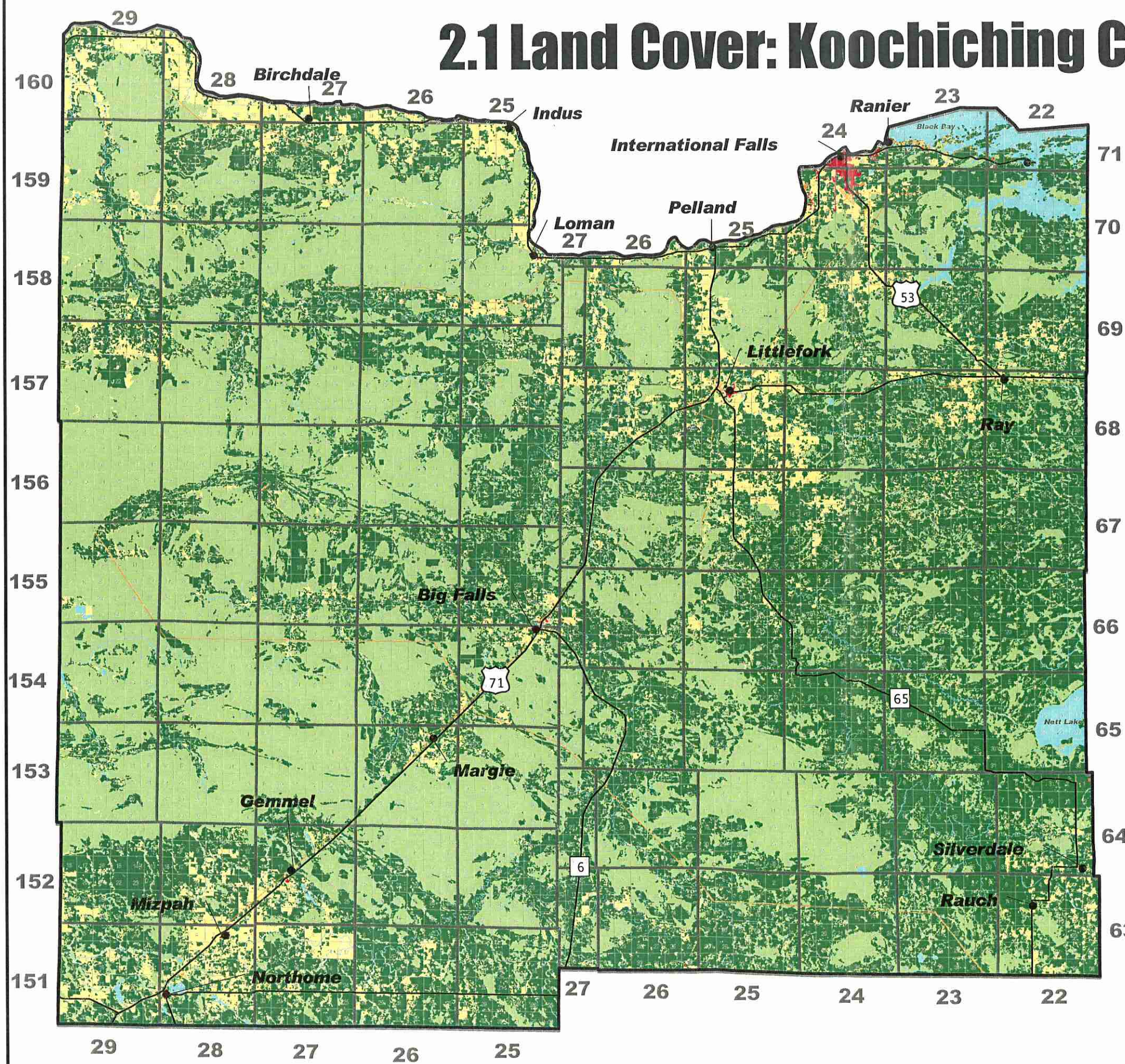
Class A – all state and federal highways *from centerline 130 ft, from right-of-way 66 ft

Class B – all county state aid highways *from centerline 75 ft, from right-of-way 42 ft

Class C – all public roads not classified A or B *from centerline 63 ft, from right-of-way 30 ft

Shoreland – right-of-way setback from State, Federal and County Highways is 50 ft and all town and public roads is 20 ft

2.1 Land Cover: Koochiching County



Land Cover Classification

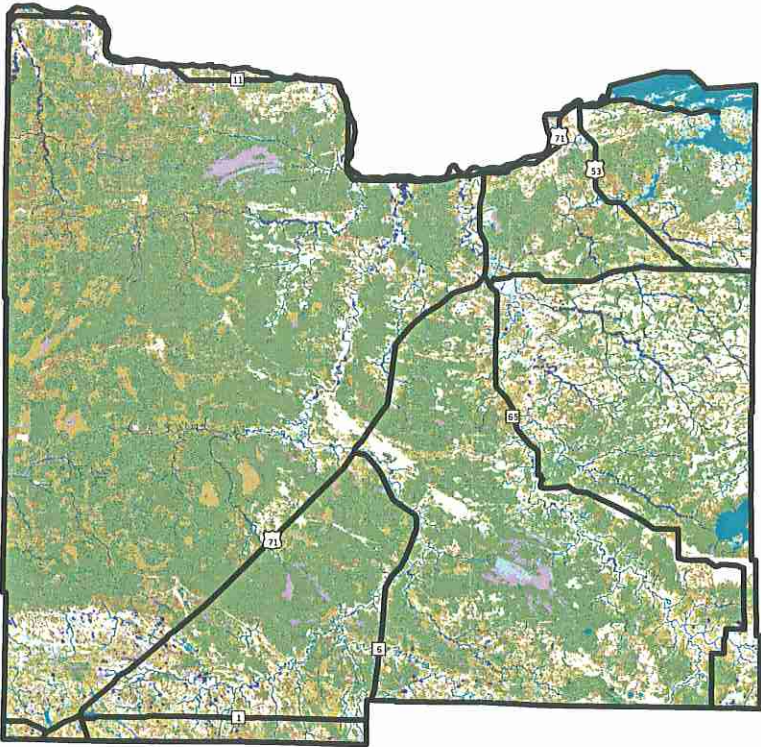
- Agricultural
- Bare Rock
- Forested
- Gravel Pits and Open Mines
- Open Water
- Rural Residential
- Urban/Industrial
- Wetland

Land Cover Statistics

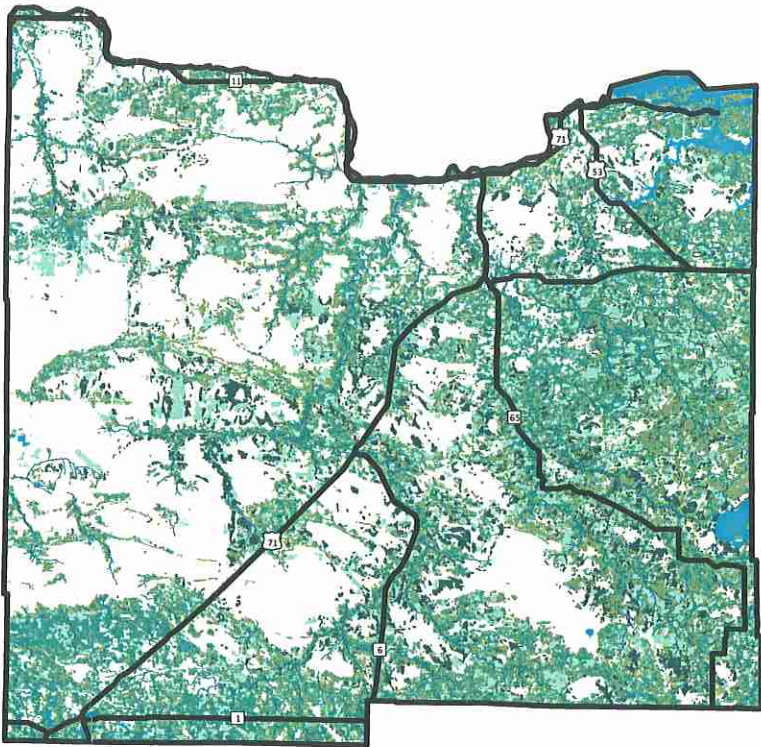
| Land Cover | Acres | Percent |
|----------------------------|-------------|---------|
| Agricultural | 186011.426 | 9.224 |
| Bare Rock | 62.714 | 0.003 |
| Forested | 840476.459 | 41.67 |
| Gravel | 44451.699 | 2.204 |
| Open Water | 3573.931 | 0.177 |
| Rural Residential | 2512.965 | 0.125 |
| Urban/Industrial | 938954.951 | 46.56 |
| Gravel Pits and Open Mines | 510.382 | 0.025 |
| Other | 2.051 | 0.001 |
| Total | 2016556.578 | 100% |

The information on this map is a compilation of data from various federal, state, county, regional, and municipal sources. Geographic information has limitations due to the scale, resolution, date and interpretation of the original source materials. Users should consult available data documentation (metadata) to determine limitations and the precision to which the data depicts distance, direction, location or other geographic characteristics. These maps and/or data are not legal survey documents to be used for describing land for the purpose of ownership or title.

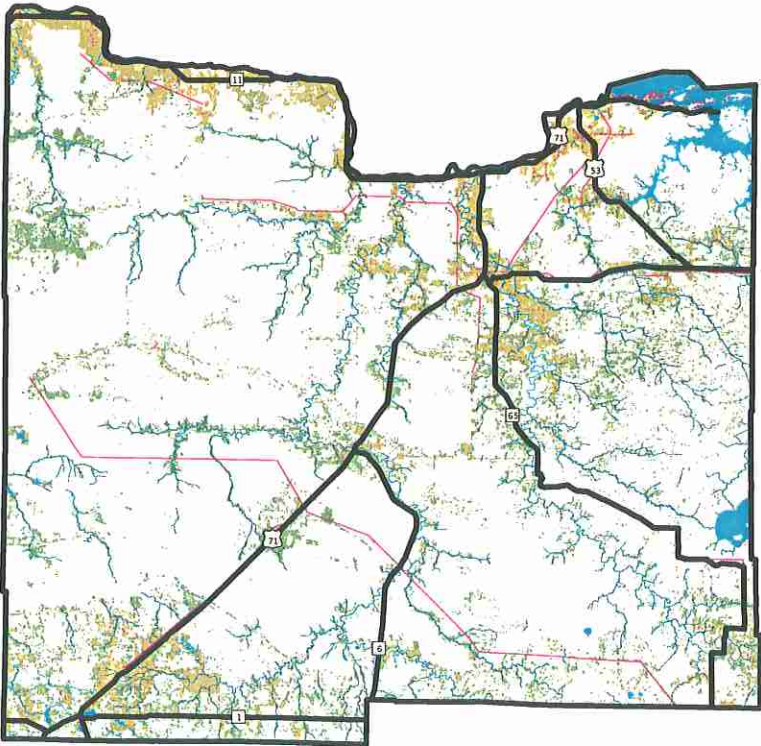
2.2 Land Cover Distribution - Koochiching County



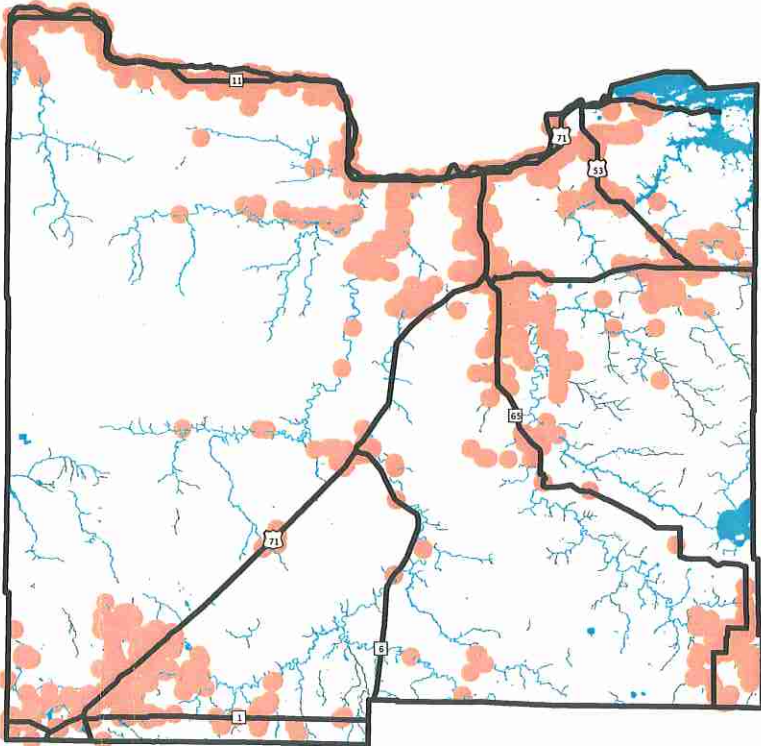
- Wetlands
- Seasonally Flooded
 - Wet Meadow
 - Shallow Marsh
 - Deep Marsh
 - Shallow Open Water
 - Shrub Swamp
 - Wooded Swamp
 - Bogs



- Forests
- Coniferous forest
 - Deciduous forest
 - Forest cut-overs
 - Mixedwood forest
 - Open water



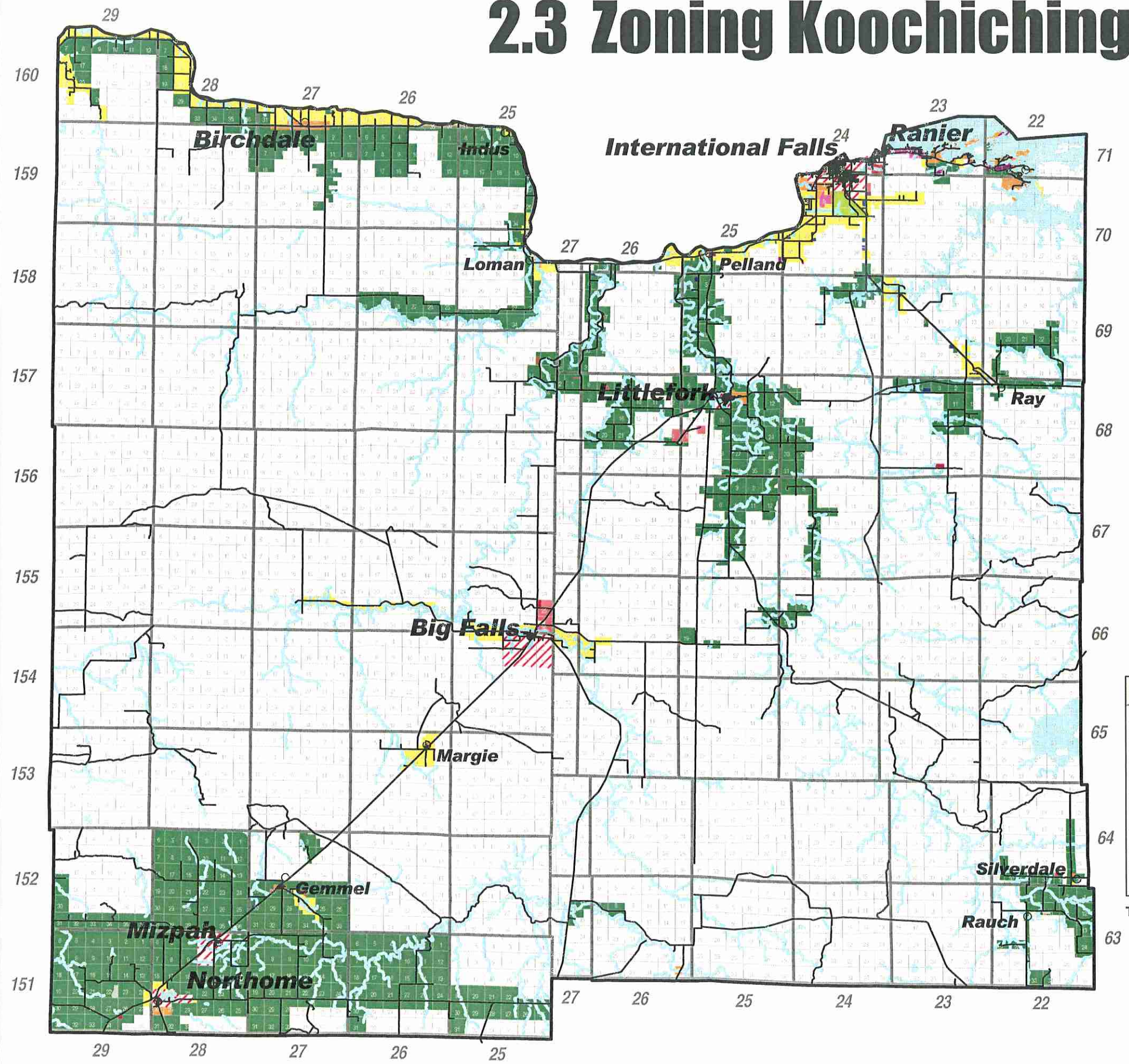
- Agriculture
- Farm Land
 - Rural residences
 - Grassland
 - Open water
 - Shrubby grassland



- Farmsteads
- Farmstead Locations
 - Open water

The information on this map is a compilation of data from various federal, state, county, regional, and municipal sources. Geographic information has limitations due to the scale, resolution, date and interpretation of the original source materials. Users should consult available data documentation (metadata) to determine limitations and the precision to which the data depicts distance, direction, location or other geographic characteristics. These maps and/or data are not legal survey documents to be used for describing land for the purpose of ownership or title.

2.3 Zoning Koochiching County



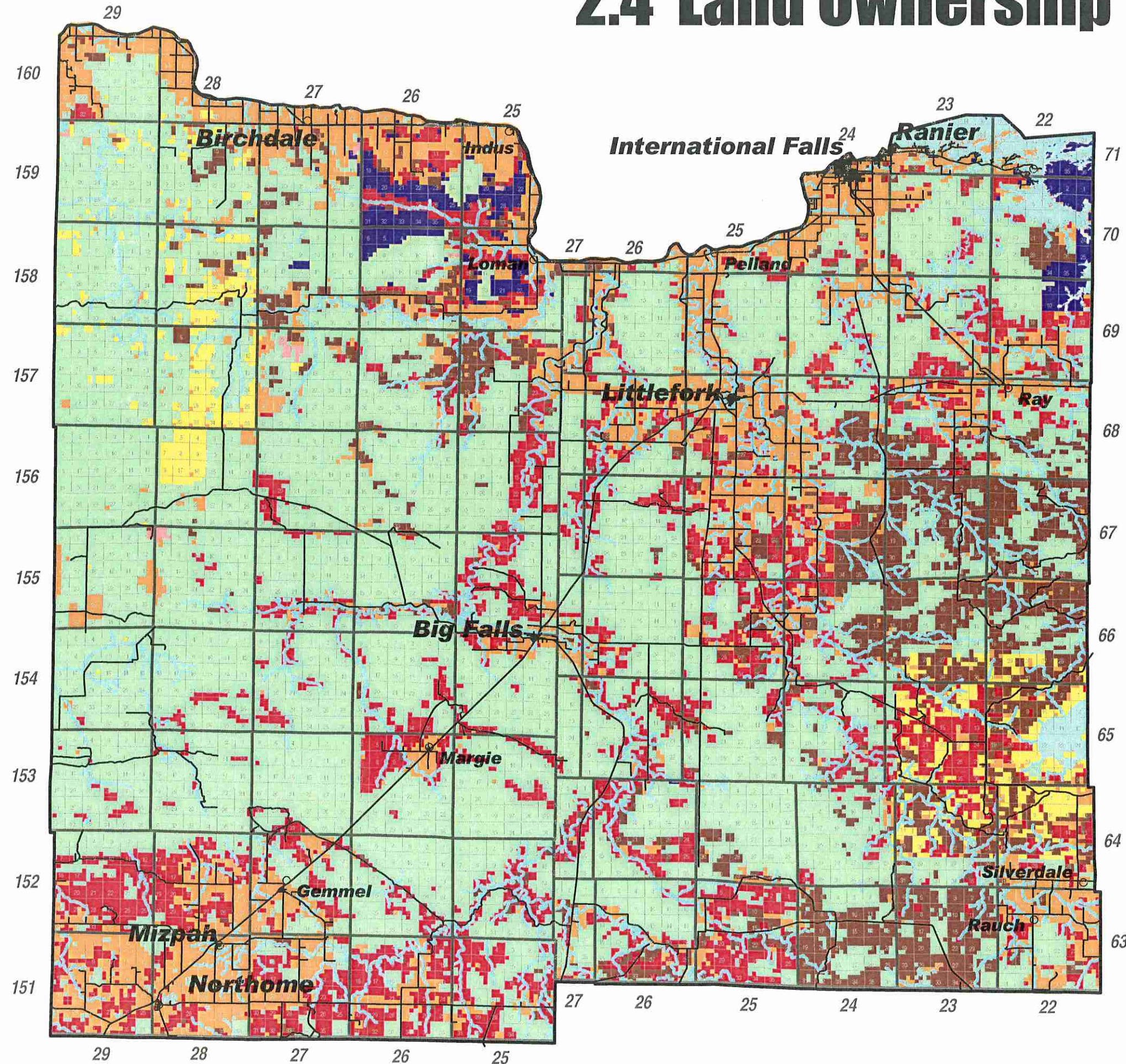
Zoning Classification

| | | |
|--|------|----------------------------|
| | AF-1 | Agriculture / Forestry |
| | C-1 | Commercial |
| | C-2 | Limited Commercial |
| | M-1 | Industrial Manufacturing |
| | M-2 | Manufacturing |
| | R-1 | Low Density Residential |
| | R-2 | Medium Density Residential |
| | R-3 | High Density Residential |
| | RR-1 | Residential / Recreational |
| | O-1 | Open Space |
| | O-2 | Open Space |
| | OUT | Other Zoning Authority |
| | | Airport Overlay |

| Zoning and Wetland Statistics | | | | |
|-------------------------------|-------------|-------------|---------------------|-----------------------|
| Code | Total Acres | % Land Area | Acres Zoned Wetland | Percent Zoned Wetland |
| AF-1 | 262724.565 | 13.025 | 93843.240 | 35.719 |
| C-1 | 492.608 | 0.024 | 147.443 | 29.931 |
| C-2 | 791.796 | 0.039 | 174.259 | 22.008 |
| M-1 | 1868.738 | 0.093 | 524.386 | 28.061 |
| M-2 | 810.331 | 0.040 | 208.992 | 25.791 |
| O-1 | 1693449.925 | 83.957 | 1259256.773 | 74.360 |
| O-2 | 449.517 | 0.022 | 168.676 | 37.524 |
| OUT | 10398.593 | 0.516 | 1137.685 | 10.941 |
| R-1 | 37861.790 | 1.877 | 11927.754 | 31.503 |
| R-2 | 6799.535 | 0.337 | 1626.007 | 23.914 |
| R-3 | 960.826 | 0.048 | 252.323 | 26.261 |
| RR-1 | 425.959 | 0.021 | 145.825 | 34.235 |
| Totals | 2,017,034 | 100 | 1,369,413 | 100 |

The information on this map is a compilation of data from various federal, state, county, regional, and municipal sources. Geographic information has limitations due to the scale, resolution, date and interpretation of the original source materials. Users should consult available data documentation (metadata) to determine limitations and the precision to which the data depicts distance, direction, location or other geographic characteristics. These maps and/or data are not legal survey documents to be used for describing land for the purpose of ownership or title.

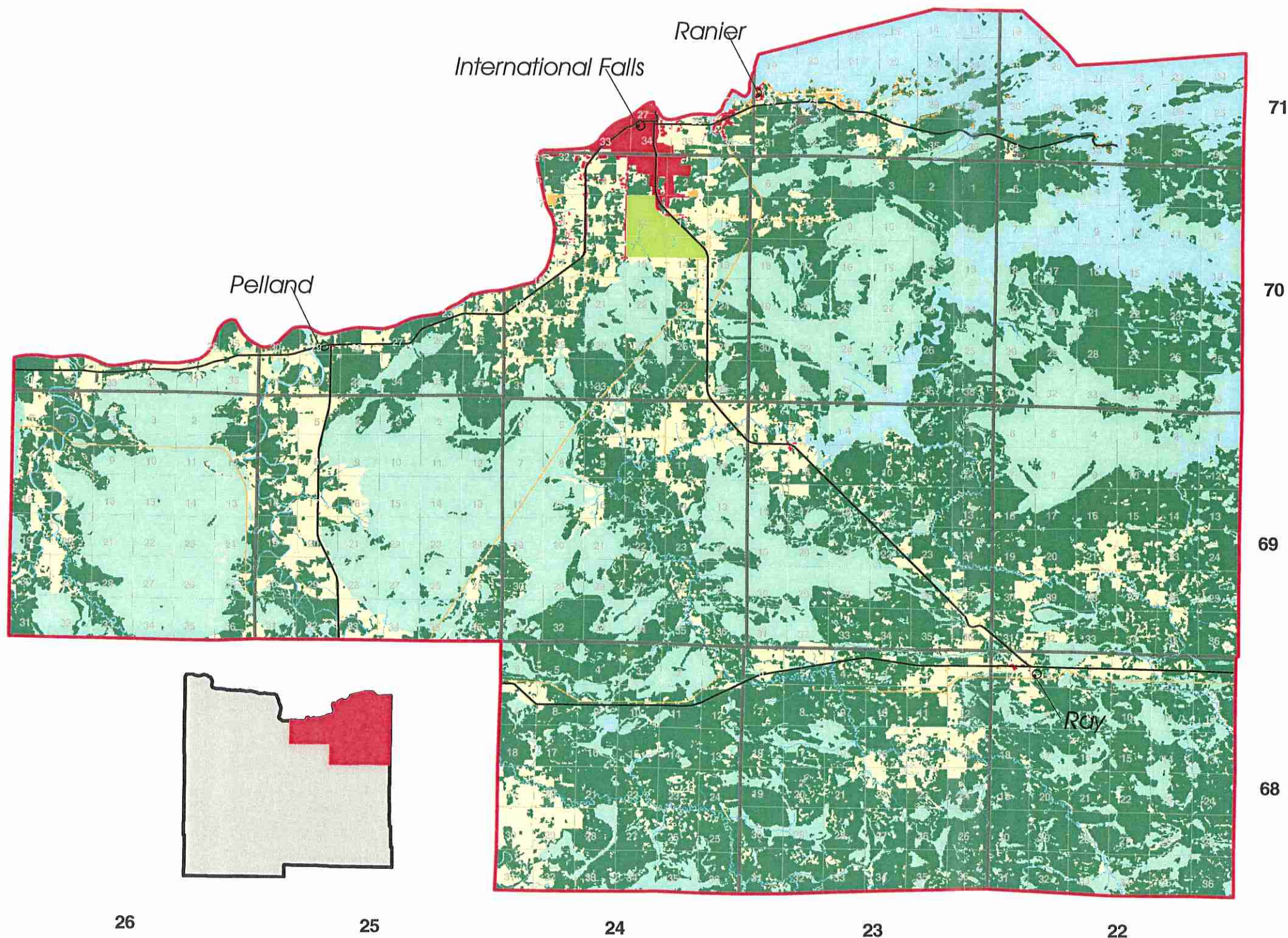
2.4 Land Ownership



| Classification | Sum_Acres | Percentage |
|--------------------|--------------|------------|
| County | 287424.9040 | 14.249 |
| Federal | 33597.1730 | 1.666 |
| Other Private | 325294.8960 | 16.126 |
| Private Industrial | 204123.2710 | 10.119 |
| Private Trust | 1920.1970 | 0.095 |
| State | 1108958.6690 | 54.975 |
| Tribal | 55877.0010 | 2.770 |
| | 2017196 | 100% |

The information on this map is a compilation of data from various federal, state, county, regional, and municipal sources. Geographic information has limitations due to the scale, resolution, date and interpretation of the original source materials. Users should consult available data documentation (metadata) to determine limitations and the precision to which the data depicts distance, direction, location or other geographic characteristics. These maps and/or data are not legal survey documents to be used for describing land for the purpose of ownership or title.

2.5 Land Cover: Northeast Koochiching County

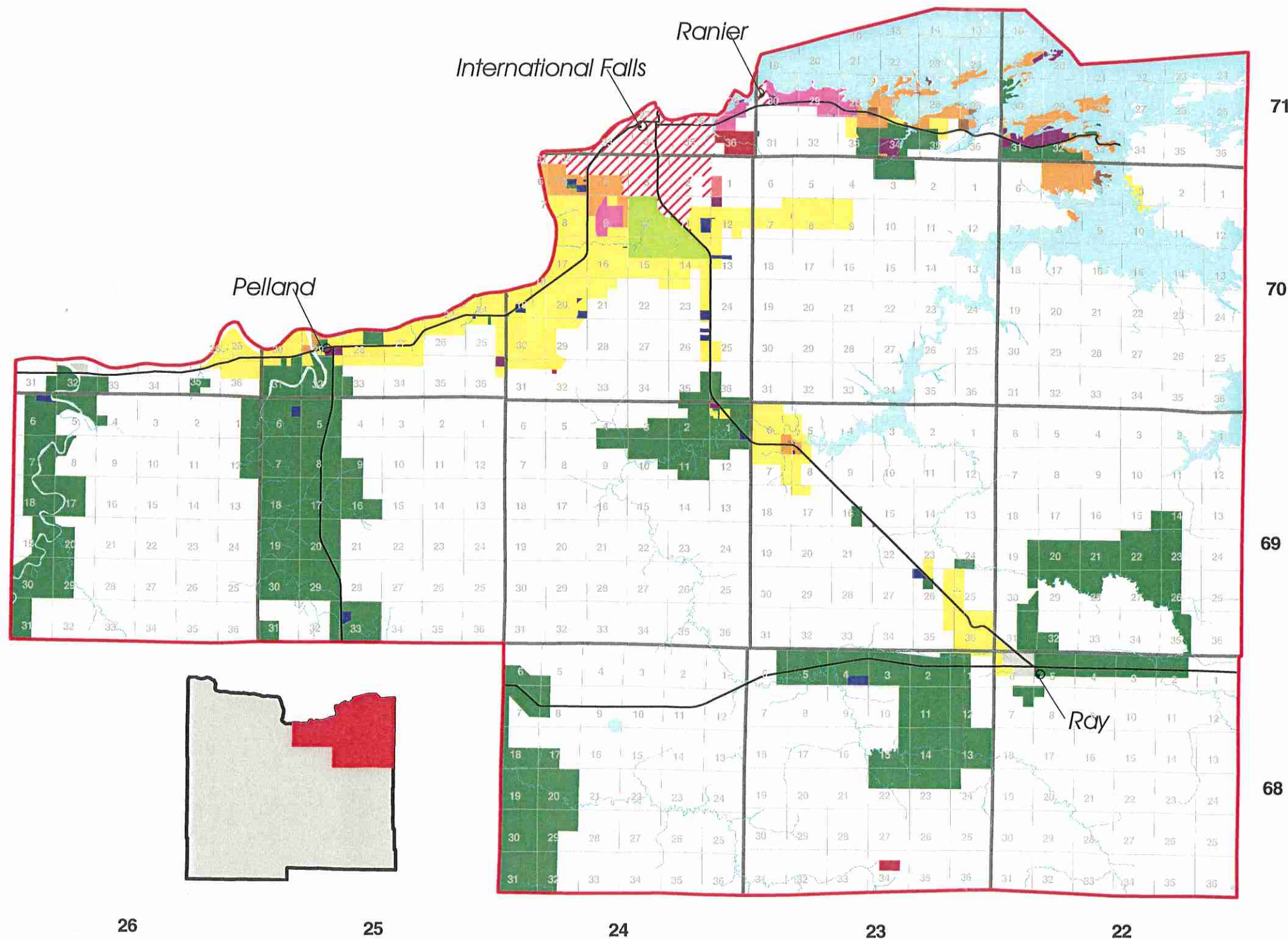


| Class | Total Acres | Percent Area |
|----------------------------|-------------|--------------|
| Forested | 130083.375 | 48.778 |
| Wetland | 92031.463 | 34.509 |
| Bare Rock | 50.987 | 0.019 |
| Agricultural | 37210.987 | 13.953 |
| Gravel Pits and Open Mines | 232.170 | 0.087 |
| Rural Residential | 1311.102 | 0.492 |
| Open Water | 3724.522 | 1.397 |
| Urban/Industrial | 2041.500 | 0.766 |
| Totals | 266,686 | 100 |

The information on this map is a compilation of data from various federal, state, county, regional, and municipal sources. Geographic information has limitations due to the scale, resolution, date and interpretation of the original source materials. Users should consult available data documentation (metadata) to determine limitations and the precision to which the data depicts distance, direction, location or other geographic characteristics. These maps and/or data are not legal survey documents to be used for describing land for the purpose of ownership or title.



2.6 Zoning: Northeast Koochiching County



Zoning Classification

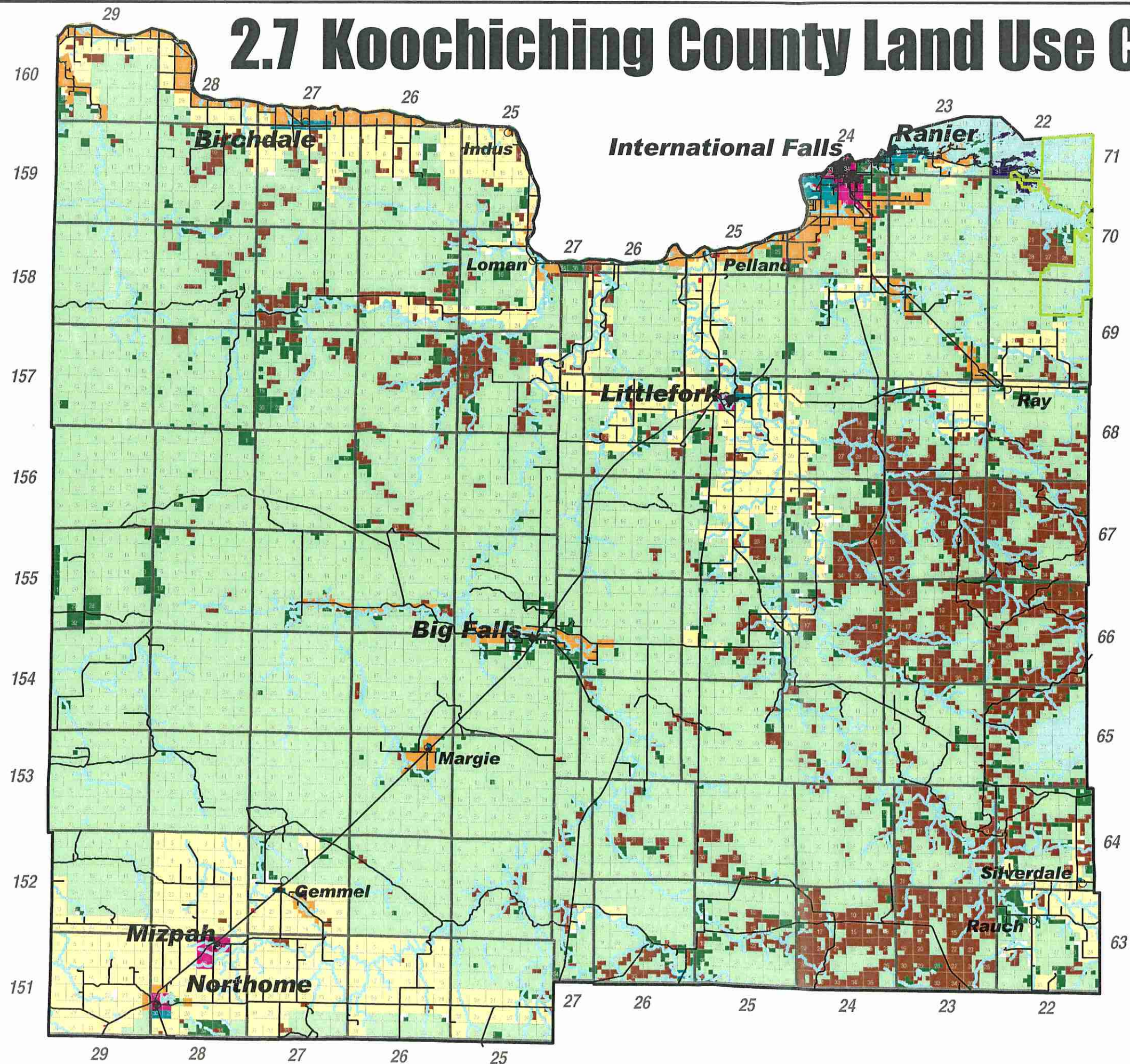
| | | |
|--|------|----------------------------|
| | AF-1 | Agriculture / Forestry |
| | C-1 | Commercial |
| | C-2 | Limited Commercial |
| | M-1 | Industrial Manufacturing |
| | M-2 | Manufacturing |
| | R-1 | Low Density Residential |
| | R-2 | Medium Density Residential |
| | R-3 | High Density Residential |
| | RR-1 | Residential / Recreational |
| | O-1 | Open Space |
| | O-2 | Open Space |
| | OUT | Other Zoning Authority |
| | | Airport Overlay |

| Zoning and Wetland Statistics | | | | |
|-------------------------------|-------------|-----------|---------------------|-----------------|
| Code | Total Acres | % of Area | Acres Zoned Wetland | % Zoned Wetland |
| AF-1 | 35995.195 | 12.567 | 10035.502 | 27.880 |
| C-1 | 471.194 | 0.165 | 131.405 | 27.888 |
| C-2 | 614.102 | 0.214 | 138.195 | 22.504 |
| M-1 | 142.306 | 0.050 | 37.016 | 26.012 |
| M-2 | 687.417 | 0.240 | 199.837 | 29.071 |
| O-1 | 228567.913 | 79.797 | 146175.054 | 63.953 |
| O-2 | 300.437 | 0.105 | 129.721 | 43.177 |
| OUT | 3134.574 | 1.094 | 352.059 | 11.231 |
| R-1 | 13783.847 | 4.812 | 3517.102 | 25.516 |
| R-2 | 4287.407 | 1.497 | 1032.761 | 24.088 |
| R-3 | 943.735 | 0.329 | 252.323 | 26.737 |
| RR-1 | 208.933 | 0.073 | 72.210 | 34.561 |
| Totals | 286,437 | 100 | 162,073 | 100 |

The information on this map is a compilation of data from various federal, state, county, regional, and municipal sources. Geographic information has limitations due to the scale, resolution, date and interpretation of the original source materials. Users should consult available data documentation (metadata) to determine limitations and the precision to which the data depicts distance, direction, location or other geographic characteristics. These maps and/or data are not legal survey documents to be used for describing land for the purpose of ownership or title.



2.7 Koochiching County Land Use Categories



Land Use Plan

- VNP Boundary
- Streams
- Lakes
- Major Roads
- Cities / Towns
- County Boundary
- City
- Commercial
- Industrial
- Urban Residential
- Rural Residential
- Timber - Industrial
- Recreation / Visitor-serving
- Natural Resource
- Agriculture
- Public Land

The information on this map is a compilation of data from various federal, state, county, regional, and municipal sources. Geographic information has limitations due to the scale, resolution, date and interpretation of the original source materials. Users should consult available data documentation (metadata) to determine limitations and the precision to which the data depicts distance, direction, location or other geographic characteristics. These maps and/or data are not legal survey documents to be used for describing land for the purpose of ownership or title.

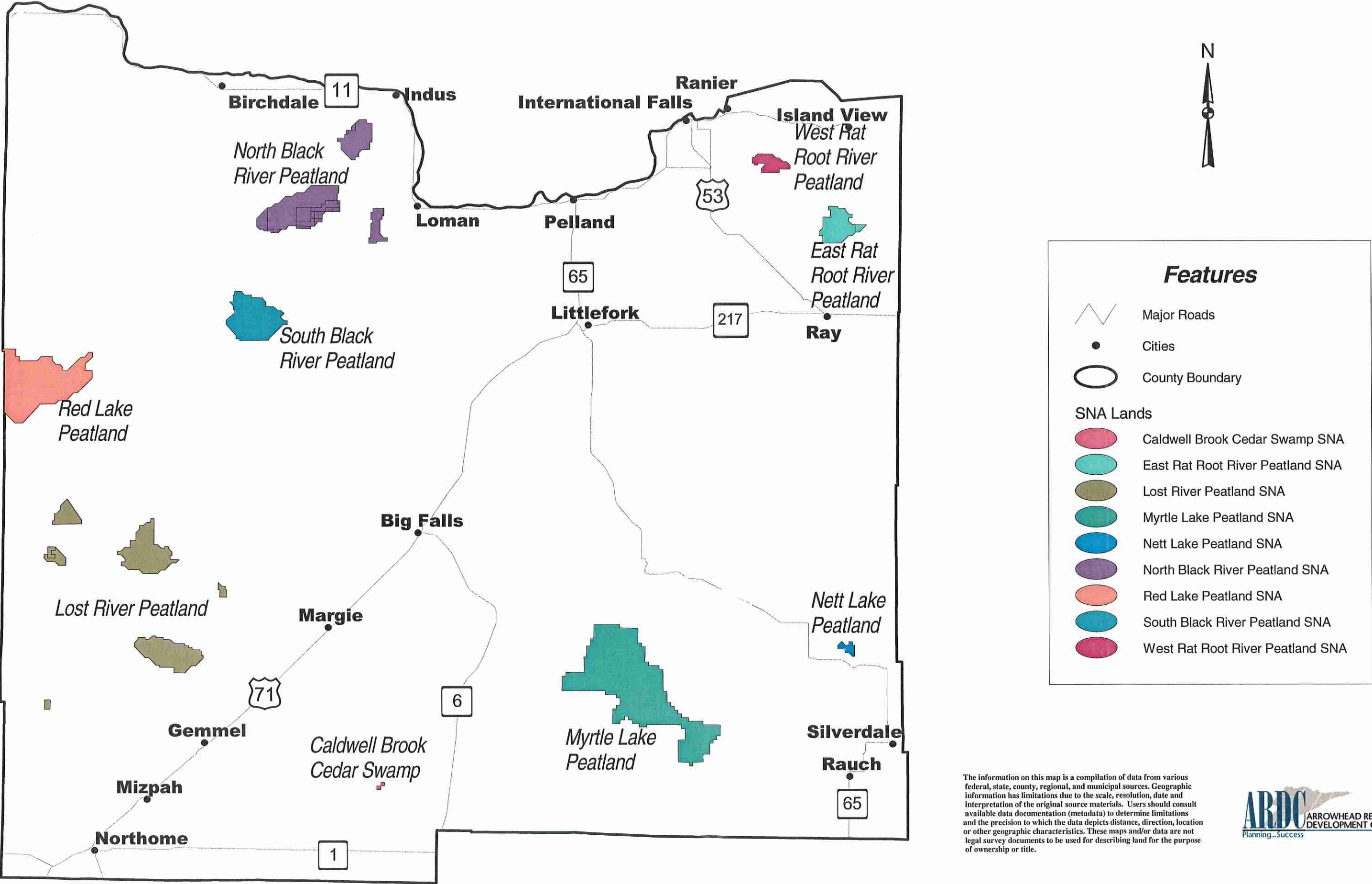
Appendix C

County Managed Recreation Facilities

| Facility | Acres | Improvement* |
|---------------------------------|--------------|---------------------|
| Birchdale Access and Campground | <1/4 | 1, 2, 3, 4, 5, 7, 8 |
| Black Crappie Campsite | | 3 |
| Bobber Bay Campsite | | 3 |
| Clear Lake Access | <1/4 | 1, 2, 4, 5 |
| Cormorant Campsite | | 3 |
| Dark Lake Access | < 1/4 | 1, 4, 5, 6 |
| Dentaybow Access | < 1/4 | 4 |
| Fish Camp Campsite | | 3 |
| Frontier Access | < 1/4 | 1, 2, 3, 4, 5, 7, 8 |
| Ivan Crawford Access | < 1/4 | 1, 4, 5 |
| Kueffner's Landing | ½ | 1, 2, 4, 5 |
| Little American Falls | 2 | 1, 2, 3, 5 |
| Loman Park | 4 | 1, 2, 4, 5 |
| Rainy River Wayside | ½ | 1, 2, 5 |
| Rat Root River Access | ¼ | 4 |
| Rat Root Picnic Site | ¼ | 1 |
| Samuelson Park | 5 | 1, 3, 5 |
| Seretha Lake Access | ½ | 1, 2, 4 |
| Shelter Rock Campsite | <1/4 | 3 |
| Teufer Lake Access | ¼ | 1, 2 |
| Upper Sault Access | ¼ | 1, 2, 4 |
| Vidas Access | ½ | 1, 2, 4 |
| Watson Landing | ¼ | 4 |

*Improvement codes: 1=picnic facilities, 2=toilets, 3=campground, 4=boat ramp, 5=fishing access, 6=fishing piers, 7=water, 8=playground

3.1 Scientific and Natural Areas



The information on this map is a compilation of data from various federal, state, county, regional, and municipal sources. Geographic information has limitations due to the scale, resolution, date and interpretation of the original source materials. Users should consult available data documentation (metadata) to determine limitations and the precision to which the data depicts distance, direction, location or other geographic characteristics. These maps and/or data are not legal survey documents to be used for describing land for the purpose of ownership or title.

Appendix D

Draft five year Koochiching County CSAH Construction Program

| | LOCATION | TYPE OF WORK |
|--------------------------|------------------------------------------------|------------------------------------------------------------------|
| Year 2001 CSAH Regular | | |
| CSAH 138 | Gold Shores | Grading, Rock Excavation, Base, & Bituminous |
| CSAH 85 | Franz Jevne State Park Road | Grading & Base |
| CSAH 118 | Birchdale Access Road | Grading & Base |
| Year 2002 CSAH Regular | | |
| CSAH 30 | Gates Corners to 8.0 miles east | Bituminous Surface & Aggregate Shoulders |
| CSAH 85 | Franz Jevne State Park Road | Bituminous Surface & Aggregate Shoulders |
| CSAH 118 | Birchdale Access Road | Bituminous Surface & Aggregate Shoulders |
| CSAH 18 | Clementson Area | Bit. Surf. & Agg. Shldrs. - 0.25 miles, Bit. Overlay - 2.8 miles |
| CSAH 45 | 17 th Street in International Falls | Mill & Overlay |
| CSAH 48 | 11 th Street in International Falls | Mill & Overlay |
| CSAH 29 | From TH 53 to Haney Road | Bituminous Overlay |
| Year 2002 CSAH Municipal | | |
| CSAH 40 | Northome Street | Grading, Curb & Gutter, Storm Sewer, Base, & Bituminous |
| Year 2003 CSAH Regular | | |
| CSAH 2 | TH 11/71 to TH 332 | Shldr. Widening & Ditch Reconstruction |
| CSAH 24 | TH 53 to TH 332 | Shldr. Widening & Ditch Reconstruction |
| CSAH 20 | City Beach Road | Minor Reconstruction, Base, & Bit. Surf. |
| Year 2004 CSAH Regular | | |
| CSAH 2 | TH 11/71 to TH 332 | Bit. Overlay & Bit. Shldrs. |
| CSAH 24 | TH 53 to 3.0 miles east of TH 332 | Bit. Overlay & Bit. Shldrs. |
| CSAH 15 | Gravel Section | Grading & Base |
| CSAH 17 | Gravel Section | Grading & Base |
| Year 2005 | | |
| CSAH 1 | TH 71 to Lindford Bridge | Bituminous Overlay |
| CSAH 31 | Dentaybow Road - Center 8.4 miles | Bituminous Overlay |
| CSAH 15 | Gravel Section | Bituminous Surface & Agg. Shldr. |
| CSAH 17 | Gravel Section | Bituminous Surface & Agg. Shldr. |

Map 4.1

Koochiching County Trunk Highway Data


Source: Minnesota Department of Transportation 1996


 County state-aid highways


Road Data
 1300 ADT

Heavy Commercial ADT

 0 - 49

 50 - 149


 150 - 299


 300 - 599

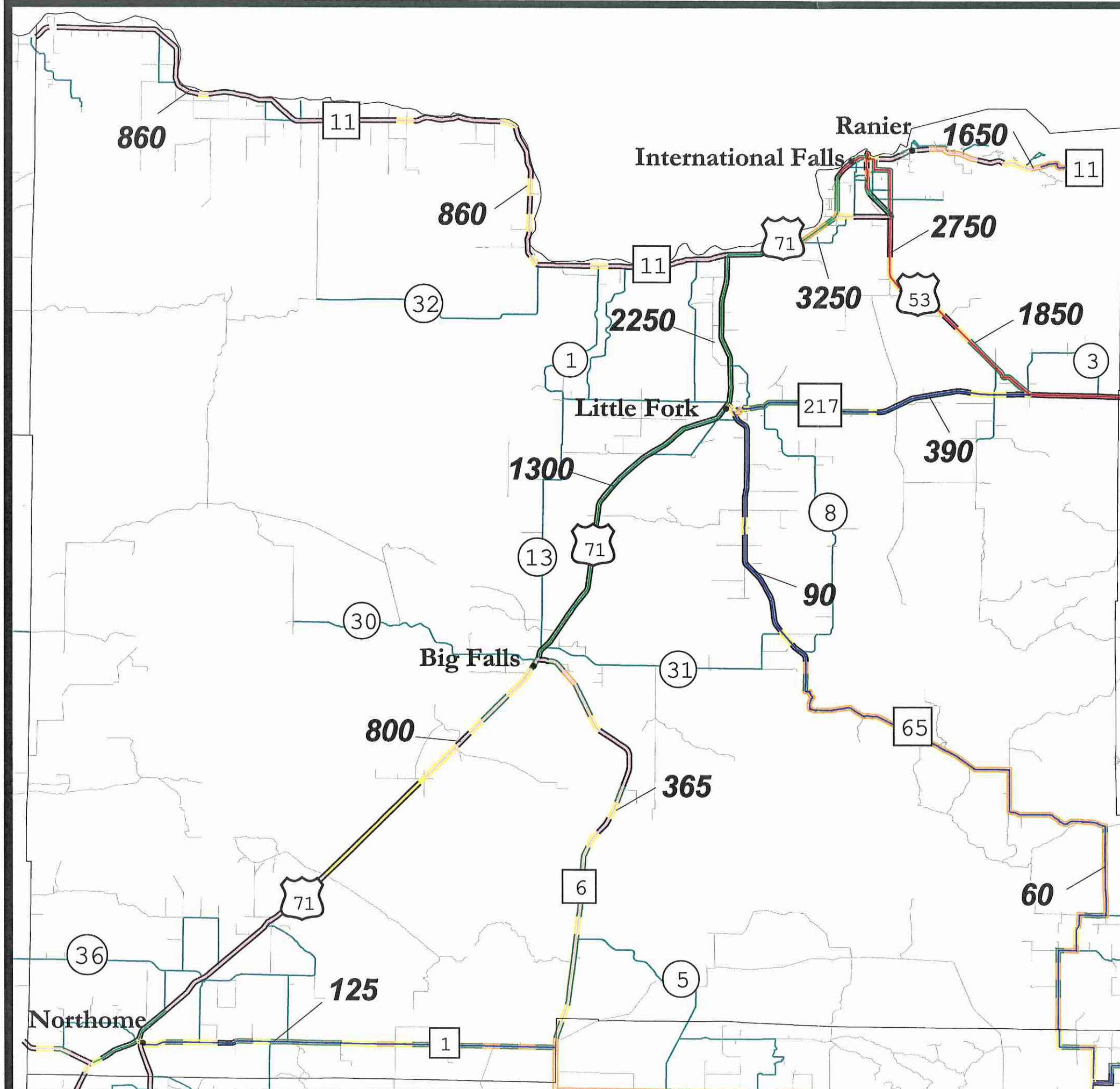
Pavement Quality Index

 0.1 - 2.4

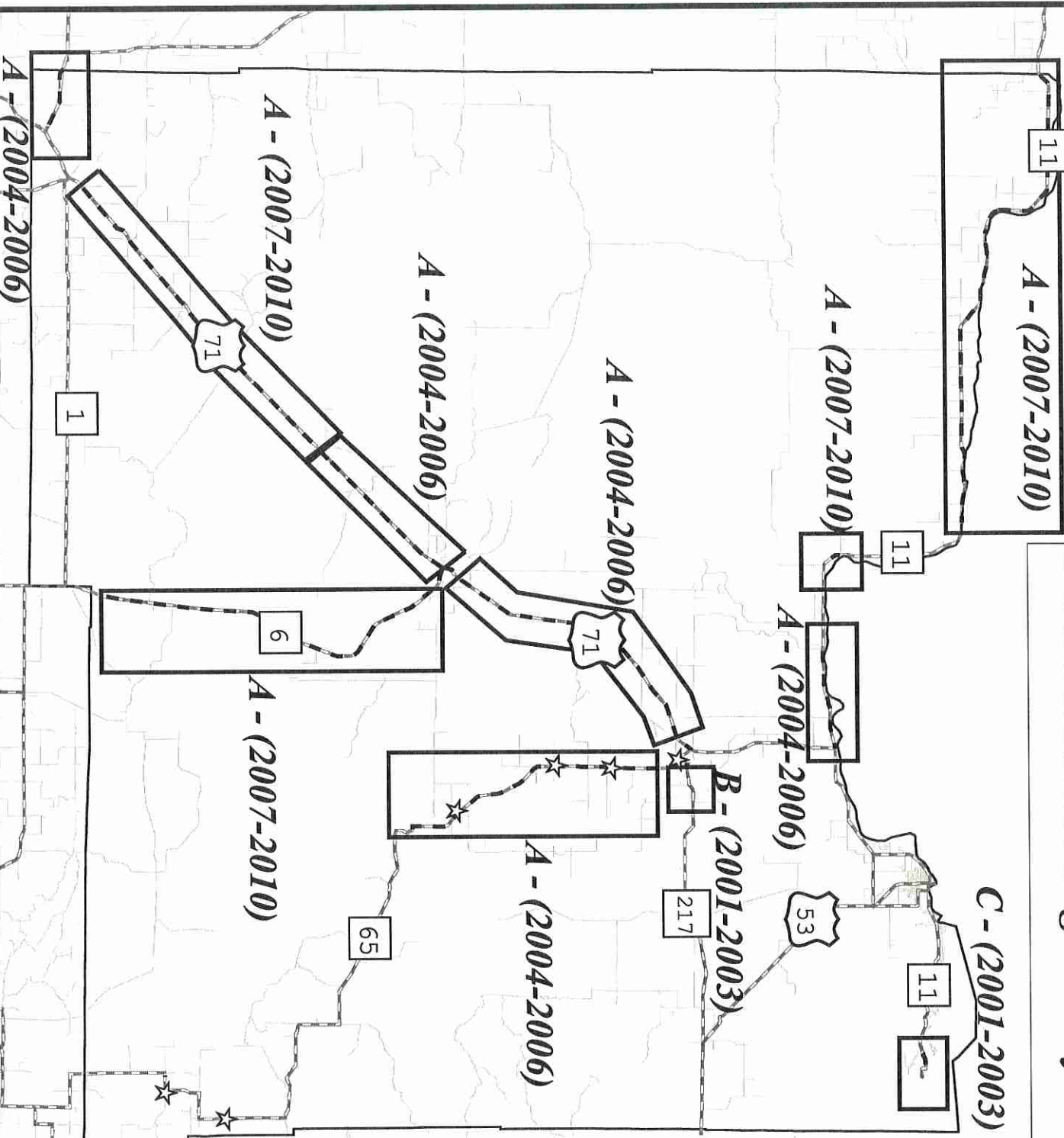
 2.5 - 2.8

 2.9 - 3.1

 3.2 - 4.2



Future Koochiching County Improvement Projects



Map 4.2
Improvement Projects

- A - Preservation
- B - Reconditioning
- C - Bike Trail

★ Bridge Reconstruction

Project Timeframe
(2004-2006)

Source:
Minnesota Department of
Transportation

Appendix E

Land Use Strategies

| Strategy | Timeframe | Responsible Party | Outcome |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| Land Use: <ul style="list-style-type: none"> Review the existing zoning maps and evaluate the appropriateness of current zoning classification and suitability for development using the guidelines in the land use categories Review the existing subdivision ordinance and evaluate changes needed to reflect the land use plan. | <ul style="list-style-type: none"> Short Term Short Term | <ul style="list-style-type: none"> County Planning Commission/ Environmental Services County Planning Commission/ Environmental Services | <ul style="list-style-type: none"> Updated Zoning map and Ordinance Updated Subdivision ordinance |
| <ul style="list-style-type: none"> Continue to work with the local municipalities to promote orderly and efficient development throughout the County that meets the County's needs for housing, commercial and industrial land. | <ul style="list-style-type: none"> Ongoing | <ul style="list-style-type: none"> County Environmental Service/ Local Municipalities | <ul style="list-style-type: none"> Coordination of new development |
| <ul style="list-style-type: none"> Identify properties critical to the County's access to timberlands and gravel resources | <ul style="list-style-type: none"> Short Term | <ul style="list-style-type: none"> County Land Department | <ul style="list-style-type: none"> Continued County access to its gravel and forest resources |
| <ul style="list-style-type: none"> Develop a pro-active approach to ensure access to public lands and water bodies for recreational use | <ul style="list-style-type: none"> Short Term | <ul style="list-style-type: none"> County/DNR/Park Service | <ul style="list-style-type: none"> Continued public access to recreational lands |
| <ul style="list-style-type: none"> Identify areas for motorized and non-motorized recreation | <ul style="list-style-type: none"> Short Term | <ul style="list-style-type: none"> County | <ul style="list-style-type: none"> Designated user areas preventing potential user conflicts |
| <ul style="list-style-type: none"> Develop a Countywide policy on the location and design of animal feedlots that minimizes the impact of feedlots on neighboring land uses and protects natural resources | <ul style="list-style-type: none"> Short Term | <ul style="list-style-type: none"> County Environmental Services/MPCA | <ul style="list-style-type: none"> Countywide feedlot policy |
| <ul style="list-style-type: none"> Work with State, Federal, Tribal and industrial land managers on land management decisions | <ul style="list-style-type: none"> Ongoing | <ul style="list-style-type: none"> County/State/Federal/Tribal/ Industry | <ul style="list-style-type: none"> Development of forums for input on land management decisions |

Natural Resource Strategies

| Water Quality: | | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|-------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> Support the water management goals formulated in the Koochiching County Water Management Plan | <ul style="list-style-type: none"> Ongoing | <ul style="list-style-type: none"> County/Environmental Services | <ul style="list-style-type: none"> Improve water quality |
| <ul style="list-style-type: none"> Support the goals and policies formulated in the Koochiching County's Wetland Flexibility Plan | <ul style="list-style-type: none"> Ongoing | <ul style="list-style-type: none"> Environmental Services/Soil-Water | <ul style="list-style-type: none"> Implementation of Wetland Flexibility Plan |
| <ul style="list-style-type: none"> Support and enforce the goals and policies formulated in the River Management Plans | <ul style="list-style-type: none"> Ongoing | <ul style="list-style-type: none"> County/DNR | <ul style="list-style-type: none"> Implementation of the River Management Plans |
| <ul style="list-style-type: none"> Inspect and encourage replacement of failing septic systems | <ul style="list-style-type: none"> Ongoing | <ul style="list-style-type: none"> Environmental Services | <ul style="list-style-type: none"> Maintain and improve Water quality |
| <ul style="list-style-type: none"> Review the minimum lot size requirements in order to ensure they can accommodate an ISTS and an alternative ISTS site | <ul style="list-style-type: none"> Ongoing | <ul style="list-style-type: none"> County Environmental Services | <ul style="list-style-type: none"> Maintain and improve Water quality |
| <ul style="list-style-type: none"> Continue the ROSS study and pilot project | <ul style="list-style-type: none"> Short Term | <ul style="list-style-type: none"> County | <ul style="list-style-type: none"> Address water quality concerns |
| <ul style="list-style-type: none"> Extend sewer service to the Jackfish Bay area on Rainy Lake | <ul style="list-style-type: none"> Short Term | <ul style="list-style-type: none"> County/North Koochiching Sanitary District | <ul style="list-style-type: none"> Build sewer extension |
| <ul style="list-style-type: none"> Support the development of wellhead protection plans, including the identification of areas within watersheds where development should be limited due to potentially negative impacts on water quality | <ul style="list-style-type: none"> Long Term | <ul style="list-style-type: none"> County/State Department of Health | <ul style="list-style-type: none"> Wellhead Protection Plan |
| <ul style="list-style-type: none"> Strictly enforce setback requirements for shore land development and require the use of natural methods and native vegetation to stabilize shoreline when feasible. If possible, avoid artificially engineered and hardened erosion control structures. | <ul style="list-style-type: none"> Ongoing | <ul style="list-style-type: none"> County/Soil and Water/River Management Boards | <ul style="list-style-type: none"> Protect water quality and shoreline aesthetics reduce erosion |

Natural Resource Strategies

| Strategy | Timeframe | Responsible Party | Outcome |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Forest Management: <ul style="list-style-type: none"> Support the Koochiching County Management Plan for Tax-Forfeited Land and continue to support its forest management planning process Participate in the DNR subsection planning efforts Participate in the Forest Resources Council's landscape-level planning efforts Coordinate timber sale activities with other agencies and private forest industry so that the diversity of landscapes is maintained Promote a no net-loss policy of wood fiber production and multiple use access on timberland in Koochiching County Study opportunities for the economic potential of underused species by the timber industry. Ensure increased wood fiber yield forest management | <ul style="list-style-type: none"> Ongoing Short Term Short Term Ongoing Ongoing Mid-Range Long Term | <ul style="list-style-type: none"> County/Land Department County/DNR County/forest Resource Council County/Timberland Managers County County/Economic Development Organizations/Timber Industry County/DNR/Timber Industry | <ul style="list-style-type: none"> Long term sustainable timber supply from County Lands Intergovernmental Cooperation Intergovernmental Cooperation Maintain diversity of landscape Maintain strong resource base for the Timber Industry Determine opportunities for expansion of resources for Timber Industry Maintain a strong resource base for the Timber Industry |

Natural Resource Strategies

| Strategy | Timeframe | Responsible Party | Outcome |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Mineral Resources: <ul style="list-style-type: none"> Support the development of a commercial peat mining project Identify and protect the county's gravel resources for public use. | <ul style="list-style-type: none"> Short Term Mid Range | <ul style="list-style-type: none"> County County | <ul style="list-style-type: none"> Commercially viable Peat Mining Operation Ensure future supply of local gravel for construction projects |
| Agriculture: <ul style="list-style-type: none"> Support the diversification of agricultural production and the development of niche markets Encourage through education and incentives, the conversion of marginally productive agricultural land into agro-forestry land | <ul style="list-style-type: none"> Ongoing Ongoing | <ul style="list-style-type: none"> County/Agricultural Community/Extension Service County/Agricultural Community/Timber Industry | <ul style="list-style-type: none"> Maintain presence of Agriculture in the County as part of the rural economy Provide alternative source of income for farmers and promote strong timber resource base |
| Wildlife: <ul style="list-style-type: none"> Cooperate with public agencies and the forest industry in developing plans to manage wildlife | <ul style="list-style-type: none"> Ongoing | <ul style="list-style-type: none"> County/DNR/Park Service/Private Land Owners | <ul style="list-style-type: none"> Protect the wildlife heritage of Koochiching County |
| Intergovernmental Cooperation in Resource Management: <ul style="list-style-type: none"> Participate in the Forest Resource Council Planning initiative Participate in the DNR Subsection Planning process Participate in the Rainy River Basin Plan planning process Develop a taskforce to discuss Voyageur National Park management issues on an ongoing basis Work with the Canadian Authorities on international natural resource management issues Coordinate maintenance, development access to recreational facilities and areas with MnDNR, Park Service, and MnDOT | <ul style="list-style-type: none"> Short Term Short Term Short Term Short Term Ongoing Ongoing | <ul style="list-style-type: none"> County, State, Tribes, industry County, State, Tribes, Industry Basin Counties, State County/Park Service County/Ontario County/DNR/Park Service | <ul style="list-style-type: none"> Forest management cooperation Forest management cooperation Improved intergovernmental cooperation Improved intergovernmental Cooperation Improved intergovernmental Cooperation Improved intergovernmental Cooperation |

Transportation Strategies

| Strategy | Timeframe | Responsible Party | Outcome |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------------------------------|------------------------------------------------------------------------|
| State Highway: <ul style="list-style-type: none"> • Work with the MnDOT to incorporate local needs and preferences in MnDOT's plans for improvements and new roadways • Work with MnDOT on upgrading Highway 11 to a year round ten ton road • Support the efforts of the Highway 53 Long Range Improvement Task Force to upgrade Highway 53 into a four-lane road | • Ongoing | • Mn/DOT/County Highway Department | • Adequate Trunk Highway System |
| | • Long Term | • Mn/DOT/County | • Highway 11 Corridor Safety Study and long term improvements |
| | • Long Term | • Mn/DOT/County | • Upgrade of Highway 53 to four lanes |
| Railroad: <ul style="list-style-type: none"> • Actively participate in the DWP-Railroad safety study • Use recommendations from the DWP-Railroad safety study to improve railroad safety by upgrading warning systems or closing unnecessary crossings | • Short Term | • Mn/DOT/County/DWP | • Provide input on DWP railroad safety concerns and solutions |
| | • Mid-Range | • Mn/DOT/County/DWP | • Improve safety of railroad crossings |
| Transit: <ul style="list-style-type: none"> • Support and continue working on implementing the recommendations regarding transit from the "Move It!" study • Promote and support collaboration and pooling of resources among public transit service providers • Continue to provide financial support for public transportation | • Ongoing | • Mn/DOT/County/Transit Providers | • Maintain and improve public transit options throughout the County |
| | • Ongoing | • Mn/DOT/County/Transit Providers | • More efficient public transportation |
| | • Ongoing | • County | • Continued availability of public transportation for County residents |

Transportation Strategies

| Strategy | Timeframe | Responsible Party | Outcome |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Bicycle and Pedestrian: <ul style="list-style-type: none"> Identify needs for bicycle and pedestrian improvements as part of the overall countywide highway improvement planning process Incorporate bicycle and pedestrian improvements into roadway improvement projects and the highway department's capital improvement plan Take advantage of state and federal funding for the development of trails and bicycle and pedestrian facility improvements | <ul style="list-style-type: none"> Ongoing Ongoing Ongoing | <ul style="list-style-type: none"> County Highway Department Mn/DOT County Highway Department Mn/DOT County Highway Department Mn/DOT | <ul style="list-style-type: none"> Bicycle and pedestrian needs assessment Bicycle and pedestrian safety improvements Bicycle and pedestrian safety improvements |
| Airport: <ul style="list-style-type: none"> Work with air carriers to provide adequate and affordable opportunities for air travel to larger airport hubs from the Falls International Airport Support Airport Master Plan | <ul style="list-style-type: none"> Ongoing Ongoing | <ul style="list-style-type: none"> Airport Commission/ County/International Falls Airport Commission/ County/ International Falls | <ul style="list-style-type: none"> Maintain adequate and affordable air connections Implementation of Airport master plan |
| Land use: <ul style="list-style-type: none"> Consider transportation impacts before approving subdivisions, rezoning, and new development plans | <ul style="list-style-type: none"> Ongoing | <ul style="list-style-type: none"> County Planning Commission/Environmental Services | <ul style="list-style-type: none"> Limit fiscal impacts of new development for the County |

Community Services Strategies

| Strategy | Timeframe | Responsible Party | Outcome |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Drinking Water and Wastewater Facilities: <ul style="list-style-type: none"> • Work with communities as needed to ensure the effectiveness and efficiency of existing infrastructure on the environment, and the health, safety and welfare of County residents. • Continue to work on Jack Fish Bay area wastewater services expansion. | <ul style="list-style-type: none"> • Ongoing • Mid range | <ul style="list-style-type: none"> • County • County/North Koochiching Sanitary District | <ul style="list-style-type: none"> • Adequate utility infrastructure • Address inadequate septic treatment systems and improve water quality |
| | <ul style="list-style-type: none"> • Mid Range • Long Range • Mid-Range • Mid-Range | <ul style="list-style-type: none"> • Public water suppliers/ Department of Health/ County Environmental Services • Public Water suppliers/ County Environmental Services • Public Water suppliers/County Environmental Services Department of Health • County Environmental Services | <ul style="list-style-type: none"> • Wellhead Protection Plan • Implementation of wellhead protection measures to ensure safe drinking water • Outreach program • Inventory of area's with well contamination problems |
| Wellhead Protection: <ul style="list-style-type: none"> • Support public water supplier's efforts to develop wellhead protection plans. • Support public water supplier's implementation of wellhead protection management strategies. • Support local public education efforts regarding wellhead protection and safe drinking water. • Conduct a comprehensive study of the safety of private drinking water supplies. | | | |
| Public Safety: <ul style="list-style-type: none"> • Conduct a study to determine the adequacy of emergency service provider staffing, equipment, and partnerships to meet the long term needs of the County • Encourage participation in volunteer fire departments and ambulance services. • Support where possible efforts to secure funding for staff training and equipment. | <ul style="list-style-type: none"> • Short Term • Ongoing • Ongoing | <ul style="list-style-type: none"> • County Health and sheriff's department/ Local fire and EMT Services/Local police departments • County/Local Fire and EMT Services • County/Local fire and EMT services | <ul style="list-style-type: none"> • Emergency Services needs assessment • Adequate Emergency Services Staffing • Ensure adequate Emergency Services |

Community Services Strategies

| Strategy | Timeframe | Responsible Party | Outcome |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| Library: <ul style="list-style-type: none"> Support efforts to keep library materials and services accessible to all residents. | <ul style="list-style-type: none"> Ongoing | <ul style="list-style-type: none"> County/Arrowhead Library System | <ul style="list-style-type: none"> Continued access to Library Services |
| Education: <ul style="list-style-type: none"> Work with the School Boards as appropriate to support high quality learning facilities and curriculum in all school districts. | <ul style="list-style-type: none"> Ongoing | <ul style="list-style-type: none"> School Board/County | <ul style="list-style-type: none"> Maintain quality educational opportunities |
| Waste Management: <ul style="list-style-type: none"> Provide solid waste management and recycling education and services to all residents as financially feasible. | <ul style="list-style-type: none"> Ongoing | <ul style="list-style-type: none"> County Environmental Services/ Minnesota Office of Environmental Assistance | <ul style="list-style-type: none"> Ensure proper waste management for Koochiching County Residents |
| Medical Services: <ul style="list-style-type: none"> Actively work with healthcare providers and assistance organizations to ensure adequate healthcare is available in the region for an increasingly aging population. | <ul style="list-style-type: none"> Ongoing | <ul style="list-style-type: none"> County Public health and Social Services/Healthcare Providers | <ul style="list-style-type: none"> Identification of needs and strategies to provide healthcare for County Residents |
| <ul style="list-style-type: none"> Ensure adequate and affordable transportation options are available for rural residents to access medical services. | <ul style="list-style-type: none"> Ongoing | <ul style="list-style-type: none"> County / Public and medical transit providers | <ul style="list-style-type: none"> Address needs for medical transportation for county residents |

Economic Development Strategies

| Strategy | Timeframe | Responsible Party | Outcome |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Intergovernmental Cooperation in Economic Development <ul style="list-style-type: none"> Develop a county wide “one stop shop” for economic development resources for prospective businesses while recognizing the different needs for rural Koochiching County and the more urbanized areas such as International Falls. | <ul style="list-style-type: none"> Short Term | <ul style="list-style-type: none"> KEDA/KEDP/County other business groups | <ul style="list-style-type: none"> A single point of contact who can answer basic questions for prospective businesses. Maintenance of baseline information on County assets (i.e. workforce, sites, buildings, incentives, infrastructure cost) |
| Business Climate and Economic Diversification: <ul style="list-style-type: none"> Actively promote commercial and industrial development within the County. Develop a business retention and expansion program Develop a targeted business recruitment program Recognize tourism and recreation as a viable part of a diversified economy Promote adequate availability of build ready commercial and industrial sites with infrastructure in place. Support a Countywide economic development strategic planning process that involves all economic development organizations Continue to move forward with the Koochiching County Telecommunications Initiative to upgrade communication and data transmission technology within the County | <ul style="list-style-type: none"> Ongoing Short Term/ongoing Short Term/ongoing Ongoing Short Term/Ongoing Short Term Short Term | <ul style="list-style-type: none"> Economic Development Organizations/County Economic Development Organizations/County Economic Development Org./ABC program CVB/Resort Associations/County Economic Development Organizations/County/Municipalities Economic Development Organizations/Business Groups/County Economic Development Organizations/County | <ul style="list-style-type: none"> Attract new business and diversified economy Maintain and improve business climate and expand existing businesses Identify target businesses and develop incentives packages Continued marketing of the region as a vacation destination Needs assessment and inventory of build ready site and available buildings and address needs Development of a coordinated economic development effort A strategy to improve communication and data transmission infrastructure |

Housing Strategies

| Strategy | Timeframe | Responsible Parties | Outcome |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|-------------------------------|---------------------------------------------------------|
| Housing Diversity and Affordability: <ul style="list-style-type: none"> • Conduct a housing study to determine the type of housing needs for single people, families and seniors • Collaborate with local municipalities in addressing the County's housing needs • Support improvement of existing housing and construction of new housing | • Short Term | • County/Municipalities | • Housing needs assessment |
| | • Mid-Range | • County/Municipalities | • Collaborate on housing improvement initiatives |
| | • Ongoing | • County/Municipalities | • Adequate housing supply for different lifecycle needs |
| Housing Preservation: <ul style="list-style-type: none"> • Determine the level of assistance that homeowners need to maintain their homes • Pursue funding for housing rehabilitation. Programs | • Short Term | • County/Local Municipalities | • Housing Needs Assessment |
| | • Mid Range | • County/Local Municipalities | • Rehabilitation Grants |

Appendix F

**Responses to Written Comments on the
Comprehensive Land Use Plan**

September 28, 2001

Richard Lehtinen

Arnold Johnson, June 6, 2001, Letter

1. Comment: Littering is a big problem, especially on out-of-the-way forest roads and trails. Suggests three pronged attack: 1) enforcement of anti-littering laws; 2) volunteer clean up efforts; 3) education program.

Response: The County is currently updating its Solid Waste Management Plan. The issue of littering and illegal solid waste disposal on forest roads and trails will be addressed in this plan.

Doug Grindall, Koochiching County Highway Department, July 2, 2001 Letter

1. Page 46, second and third sentences, move these sentences to page 47 under the heading, "County State Aid Highway (CSAH) System" and revise the second sentence to read: "The Koochiching County Highway Department has a 5 Year County State-Aid Highway Construction Plan in place to guide its expenditures for major construction projects."
2. Page 47, 2nd paragraph under "County State Aid Highway (CSAH) System", delete "...among the Counties within the District." And replace with, "...to the 87 Counties."
3. Raises the issue of development in remote areas leading to expensive improvements at the County's expense and whether the Plan ought to more thoroughly address this issue. After discussion with the Steering Committee, it was decided that the issue was already sufficiently addressed in the Plan.

Mark Nelson, Board of Water and Soil Resources, June 21, 2001 Letter

1. Page 14, paragraph 1, questions whether 2.5 acre minimum on well and septic is a large enough lot size minimum.

Response: The discussion on page 14 is a description of the existing zoning categories and not a policy discussion of what minimum lot sizes should be. In working on a new zoning ordinance for the County, Strategy 5 on page 130 will be used.

2. Page 15, paragraph 2, 4,8779 is incorrect and will be corrected in the Final.

3. Page 16, three comments: 1) appreciates frankness of noting 90 percent septic failure on Rainy Lake (comment noted); 2) paragraph 2, 2nd sentence “were” to “where” (change will be made in Final); 3) “Key concerns with shoreland development is well-written” (thank you).
4. Page 23, asks how does the 2 acre minimum on this page correlate with the 2.5 acre minimum on page 14?
Response: The 2.5 acre minimum on page 14 is the minimum lot size for the R-1 zoning category in the existing zoning ordinance. The 2 acre minimum on page 23 is a policy recommendation pertaining to shoreland areas on Rainy Lake on well and septic where the current minimum lot size, according to the Shoreland Ordinance, is one-half acre.
5. Page 24, notes that the River Boards are more active than he thought. (the River Boards are active)
6. Page 25, asks if “seasonal structures” are defined somewhere and suggests using Lake County’s definition. Comment noted.
7. Page 29, suggests adding a sentence under Best Case Scenario: “The Koochiching Wetland Flexibility Plan will provide for reasonable land use on the drier or low priority wetland areas.” (Comment noted)

Under “Natural Resources”

8. Page 24, the Plan states peat covers 68% of Koochiching County while the same percentage is used for all of Koochiching County’s wetlands.

Response: This surely shows the discrepancies among sources. The 68% figure on page 24 is derived from the 1980 DNR inventory of peatlands in Koochiching County. Since that is the source cited, the figure will remain while acknowledging that the officially accepted figure for total wetland in Koochiching County is indeed 68%.

9. Pages 25 and 26, appreciates mention of County Water Plan and Basin Plan. (comment noted)
10. Page 28, 1st sentence, change SWDC to KSWCD.

Response: This suggested change will be made.

10. Page 37, notes that the 56% peatland figure is closer to the 49% that Mark calculated. (Comment noted: this is again a discrepancy due to differences among sources).
11. Page 44, suggests mentioning that Mn/DOT is currently planning to build 4-lane segment between Virginia and Cook. Comment noted.

12. Page 88, asks if the statement in the 4th bullet under Barriers, "The State's permitting process is slow and expensive for natural resource based projects." is referring to wetland permitting?

Response: No, it is referring to the peat mining project proposed in the Pine Island Bog area. The process for that project has taken more than 3 years and is still not finished.

13. Page 94, suggests adding that Koochiching County will have a quality environment. (This change will be made in the Final)

14. Page 123, suggests having a specific Plan update timetable. Comment noted.

15. Page 129, Water Quality Strategies, add reference to the Soil and Water Conservation District as an agency that assists in addressing many water quality issues.

Response: Good suggestion. Text will be amended to add reference to the work of SWCD.

16. Page 140, Intergovernmental Cooperation Strategies, suggests the County could assist prospective businesses with environmental permitting.

Response: Good suggestion. Text will be amended to incorporate this recommendation.

**Comments and Responses to Letter from Voyageurs
National Park on the Comprehensive Land Use Plan**
September 27, 2001 by Richard Lehtinen, ESD

- Page 13: Delete from sentence 3 to end and replace with: "Of the 15,095 acres of Voyageurs National Park in Koochiching County, approximately 7,635 acres were in 1992 determined to be suitable and are proposed wilderness. Areas proposed for wilderness are administered in accordance with both the Wilderness Act and NPS Management Policies for wilderness preservation and management. Recreational activities in the park include fishing, motor boating, houseboating, aircrafting, snowmobiling, backpacking, hiking, canoeing, kayaking, cross-country skiing, nature study, and photography. The park's Final General Management Plan/Environmental Impact Statement and the Visitor Use and Facilities Plan will be released for public review at the end of September 2001.
- Page 22: Undeveloped recreation/visitor serving area. Comment noted.
- Page 25: Public lands. Comment noted.
- Page 27: The National Park Service has no plans to expand. Comment noted.
- Page 28: Water Resources Issue Analysis. Comment noted.
- Page 33: paragraph 2, sentence 3, delete "...regulation of visitation of the park..." and replace with "...management of visitor use activities..."
- Page 35: Water Based Recreation. Comment noted.
- Page 35: Wild Life Viewing. Comment noted.
- Page 36: Mining/Extraction. Comment noted.
- Page 37: Intergovernmental Cooperation. Comment noted and appreciated.
- Page 44: 1st paragraph under State Highway 11, insert new, additional sentence 2, "Near its east end Highway 11 is a gateway to Voyageurs National Park."
- Page 48: Transportation Modes. The provision of ferry service would appear to be a recreational use and as such would not be considered a separate mode of transportation.
- Page 54: Bicycle and Pedestrian Facilities. Comment noted.
- Page 87: Assets and Barriers to Economic Development. Comment noted.

Page 125: Implementation Roles and Responsibilities. Comment noted.

Page 128: Goals, Objectives and Strategies. Comment noted.

Appendix B: 2.6 Zoning Map. The Zoning Map is of existing zoning and there is Low Density Residential R-1 zoning on private land within the National Park boundary. This is an existing situation. There is no attempt to judge whether the existing zoning is "good" or not.

Appendix G

Glossary of Terms

Adequate: Meets the needs of the County's citizens.

Agriculture/Agricultural: The production, keeping, or maintenance, for sale, lease, or personal use, of plants and animals useful to people.

Community: Any single jurisdiction or combination of jurisdictions.

Comprehensive Land Use plan: A document that contains a vision of how the community will grow and change and a set of plans and goals to guide land use decisions and meet community needs.

Continue: Follow past and present procedures to maintain desired goal, usually County staff involved at all levels from planning to implementation.

Coordinate/Cooperate: Act or work together to achieve a common goal or objective.

County Board: Elected officials who share the responsibility for the operation of the County government, including adopting plans and ordinances that govern land use, appointing various boards, making final decisions regarding zoning district designations and setting the budget.

Create: Bring about the desired goal, usually with County staff involved at all levels from planning to implementation.

Density: The number of buildings or housing units on a particular area of land.

Economic Development: Development or enhancement of the system for production, distribution, and consumption of goods and services within the County.

Encourage: Foster the desired goal through County strategies.

Enhance: Improve current state through the use of strategies and County staff at all levels of planning.

Environmentally Sensitive Areas: Land where vegetation and wildlife, or other ecological or natural factors cannot tolerate the proposed site development; or land where development cannot be planned and carried out so as to keep disturbance of such natural factors at a minimum. These areas include, but are not limited to, trout streams, rare species habitat, critical breeding or migratory habitat, lands with certain soil types, topography, or drainage characteristics, and areas with special geological significance.

Easement: A grant of one or more of the property rights by the owner to, or for the use by, the public, a corporation, or another person or entity.

Goal: A statement that describes the desired future condition toward which programs, activities and decisions are directed.

Identify: Catalogue and confirm resource of desired item(s) through the use of County staff and actions.

Incorporate: Work to form something into a functioning or unified whole.

Infrastructure: Facilities and services needed to sustain industry, residential, commercial, and all other land use activities. Includes waster, sewer, and other utilities, streets and roads, communications, and public facilities such as firehouses, parks and schools.

Land Use: A description of how land is occupied or utilized.

Maintain: Keep in good condition the desired state of affairs through the use County strategies and staff. Financial assistance should be provided, if needed.

Marginal Land: Land that is close to the lower limit of function for the purpose for which it was or is intended for use. This land could include areas that were once agriculture, but have now grown over with undesirable plant species.

Mitigation: Practices that alleviate or correct problems that arise.

Native: Any species that was originally prevalent in a given area, such as certain species of wildlife and plants.

Natural Resources: Natural elements relating to land, water, minerals, air, plant and animal life of an area or a community, including soils, water bodies and watersheds, geology, topography, vegetation, and fauna.

Objective: A statement that describes the intermediate steps that work towards a goal.

Open Space: Undeveloped lands or natural landscape features with scenic, esthetic, or conservation value, including woodlands, grasslands, wetlands, and agricultural areas, intended to be left in their natural undeveloped state.

Planning Commission: A board appointed by the County Board that conducts all public hearings pertaining to requests for amendments to the County Zoning Ordinance, zoning district changes, conditional use permits and platting of property. The Planning Commission makes recommendations or final action to the County board.

Promote: Advance the desired state through the use of County policies and staff activity at all levels of planning. This may include financial support.

Protect: Guard against a deterioration of the desired state through the use of County policies, staff and, if needed, financial assistance.

Provide: Take the lead role in supplying the needed financial and staff support to achieve the desired goal. The County is typically involved at every stage, from planning, to implementation to maintenance.

Recognize: Acknowledge the identified state of affairs and take actions or implement policies to preserve or change them.

Recreation, Developed: Areas designed for recreation which have been altered from their natural state to accommodate recreational activities.

Recreation, Undeveloped: Areas designed for recreation which have been minimally altered from their original state.

Settlement Patterns: The historic and current patterns created by the location of housing.

Stewardship: Conducting, supervising, or managing something, especially the careful and responsible management of something entrusted to one's care, such as natural resources.

Support: Show favorable approval toward actions taken to reach the County's Goals and Objectives.

Sustainable: Sustainable management encourages methods of harvesting or using a resource so that the resource is not depleted or permanently damaged. Sustainable Communities meet the needs of the present without compromising the ability of future generations to meet their own needs.

Transportation Network: The collective elements that allow for and facilitate all types of transportation within a geographic area.

Urban Growth Boundary: A boundary that defines an area to accommodate growth for a given period of time. The boundaries guide decisions on infrastructure development.

Watershed: The drainage basin, catchment, or other area of land that drains water, sediment, and dissolved materials to a common outlet at some point along a stream channel.

Zoning District: An area which is subjected to specified land use controls.

Zoning Ordinance: Part of an adopted local government code which establishes the type and amount of development that is permissible within defined zoning districts.

